



City of Renton
Kennydale Lake Line Sewer System Evaluation

Report No. 1
PHASE 2B AND 3 COMBINED
SUMMARY

FINAL | July 2019





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Chapters 4, 5, 6, & 9

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Abbreviations

ANSI	American National Standards Institute
APPS	Aquatic Protection Permitting System
AWWA	American Water Works Association
BMC	Ballard Marine Construction
C.O.	change order
Carollo	Carollo Engineers, Inc.
CCTV	closed-circuit television
CDF	Cumulative Distribution Function
City	City of Renton
CRM	customer relationship management
Ecology	Washington State Department of Ecology
ESA	Endangered Species Act
FOG	fats, oils, and greases
gpm	gallons per minute
HDPE	high-density polyethylene
HGL	hydraulic grade line
HPA	Hydraulic Project Approval
in.	inch(es)
in./yr.	inches per year
JARPA	Joint Aquatic Resource Permit
Lake Line	Kennydale Lake Line
LF	linear foot
LS	lump sum
MH	manhole
NMFS	National Marine Fisheries Services
NWP 12	Nationwide Permit 12 covering Utility Line Activities
O&M	operation and maintenance
pct.	percent
Project	Kennydale Lake Line Sewer System Evaluation
psi	pounds per square inch
PVC	polyvinyl chloride
RCW	Revised Code of Washington
RUL	remaining useful life
SEPA	Washington State Environmental Policy Act
SSO	sanitary sewer overflow
State	State of Washington
USACE	US Army Corps of Engineers
USFWS	US Fish and Wildlife Service
UT	ultimate tensile
UTM	universal testing machine
V&A	V&A Consulting Engineers
WAC	Washington State Administrative Code
WDFW	Washington State Department of Fish and Wildlife
WSDOT	Washington State Department of Transportation
yr.	year

Chapter 1

INTRODUCTION

1.1 Purpose of This Report

In 2018, the City of Renton (City) completed a condition assessment and conducted emergency cleaning of the Kennydale Lake Line (Lake Line) System. This report documents the results of the construction, inspection, and cleaning conducted on the Lake Line. It includes revised estimates of the Lake Line's remaining useful life (RUL) based on updated information. It also documents and evaluates potential methods to access and clean the remaining Lake Line segments that were not reached in the 2018 efforts, considering both on-land and in-water access.

In addition, this report investigates potential Lake Line replacement alternatives to help the City make informed decisions regarding long-term planning for the Lake Line replacement. On-land and in-lake options were considered independently to highlight the benefits and challenges associated with each.

1.2 Background

The Lake Line is an 8-inch line in Lake Washington that serves two small residential neighborhoods along the lake in the City. The 4,700-foot-long line begins at a flush station at the north end of Gene Coulon Park and ends at the lift station and force main near North 40th Street. The original construction did not install in-line maintenance access points to the Lake Line. Where the pipe is buried, the depth of cover typically does not exceed three feet. The top of the pipe is exposed above the lake bed along portions of the alignment. Boaters and contractors have snagged the pipe multiple times resulting in pipe breaks.

Because of these maintenance challenges and uncertainty regarding the pipe's condition, in 1999, the City prepared a predesign to upgrade or replace the Lake Line. For this, ultrasonic thickness testing was performed on exposed portions of the pipeline, dye testing was performed from the flush station, and a geotechnical assessment was conducted on the lake bed adjacent to the pipe. The analysis evaluated Lake Line system replacement through in-lake and on-land alternatives (Tetra Tech/KCM, 2000).

According to the predesign report, nothing definitively indicated that the Lake Line system would reach the risk of failure in the next 20 years; however, it was noted only part of the pipeline was not accessed and tested.

Interim cleaning solutions were recommended to maintain the existing Lake Line for the rest of its service life. Recommendations included installing new maintenance access points, implementing a new cleaning program, repairing a hole in the Lake Line, tagging docks over the Lake Line to mark its location for future surveys, and launching a community information program to inform residents about the Lake Line, its location, and operational best practices to extend its longevity.

In 2004, three new maintenance access manholes were installed: two offshore from the LaValley residence at 3713 Mountain View Avenue North, and one near 3713 Lake Washington Boulevard. Improvements to the flush station were implemented in 2005.

Through a risk-based repair and replacement program for City Lift Stations, the City identified the Lake Washington No. 2 lift station as a high-risk facility and the flush station as a moderately high-risk facility (Carollo Engineers, Inc. [Carollo], 2016). Given the uncertainty in the Lake Line system's service life and difficult maintenance conditions, the City elected to conduct a comprehensive condition assessment before implementing risk mitigation measures.

1.3 Historical Documentation

The following plans and studies provide a detailed account of the development of the existing Lake Line system:

- Sanitary Sewer L.I.D. 270, Construction Drawings, and Technical Provisions (City of Renton, 1972).
- Kennydale – Lake Washington Lake Front Sanitary Collection Sewer As-Built Survey and Study Project (Horton Dennis & Associates, Inc., 1988).
- City of Renton 1992 Lift Station Improvements, Schedule B Lake Washington No. 2 Lift Station, Record Drawings (RH2 Engineers, Planners, Scientists, 1994).
- Kennydale Lakefront Sewer Predesign Report (Tetra Tech/KCM, Inc., 2000).
- Kennydale Lakefront Sewer Improvement (Tetra Tech, 2003).
- City of Renton 2004 Lift Station Rehabilitation (Flush Station) Record Drawings (RH2 Engineers, Planners, Scientists, 2006).
- City of Renton Existing Force Main Condition Assessment and Lift Station Evaluation System Technical Memorandum – System Inventory and Risk Assessment Summary (Carollo, 2016).
- City of Renton Kennydale Lake Line Sewer System Evaluation Phase 1 Existing Conditions Technical Memorandum 1 (Carollo, et al., 2017).
- City of Renton Kennydale Lake Line Sewer System Evaluation Phase 2 Condition Assessment Report (Carollo, et al., 2018).

1.3.1 Sewer System Evaluation

The Kennydale Lake Line Sewer System Evaluation (Project) began in 2016 and has consisted of the following phases:

- Phase 1 gathered data on the existing system. As part of this effort, the Consultant team worked with City crews' biennial maintenance on the Lake Line was documented and analyzed. Phase 1 also included a condition assessment of the flush station and lift station.
- Phase 2A collected additional existing system data on the condition and location of the pipeline, the connecting sewer laterals, and bulkheads.
- Phase 2B, documented in this Report, completed further condition assessment in 2018 and added two temporary manholes and cleaned the Lake Line.
- Phase 3, documented in this Report, recommends further cleaning and analyze alternatives for the eventual replacement of the Lake Line (Documented in this report).

1.3.1.1 Phase 1 and Phase 2A

During Phase 1, the sites and structures of the flush station and lift station were surveyed, and then, in Phase 2A, an additional survey better defined the Lake Line's profile and alignment. A survey team then confirmed the Lake Line's alignment and surveyed properties served by the Lake Line including docks, bulkheads, building finished floors, sewer cleanouts, and lateral alignments.

More specifically, the Phase 2A condition assessment included the following:

- Closed-circuit television (CCTV) inspection of all accessible laterals. Limited sections of the Lake Line were captured as part of the lateral inspections.
- Pipe coupon collection and testing: A partial sample of the Lake Line pipe, referred to as a coupon, was taken adjacent to the flush station after excavation to the pipe. However, this pipe segment may have been replaced during a water main rehabilitation in 2001 and as a result may not be representative of the rest of the Lake Line.
- Ultrasonic thickness testing: This testing was conducted at exposed locations on the Lake Line and two laterals. Wall thickness measurements were used to estimate the RUL of each pipe segment tested, and corrosion rates were calculated according to the installation date of 1972 and measured pipe wall thickness at that time.
- Visual inspection of bulkheads: A geotechnical engineer completed this inspection to provide input on potential sewer system vulnerabilities associated with bulkheads. All but two properties were found to have a low bulkhead failure risk.
- Development of a hydraulic simulation model to investigate the hydraulics of the Lake Line system. The model assessed the existing conditions, as well as evaluate future alternatives.

1.3.1.2 Partial Blockages Identified

During Phase 2B, a hydraulic model was used to evaluate differences between conditions observed in the field and the theoretical hydraulic capacity of the Lake Line system. With the flush station offline, model results generally matched the field-estimated hydraulic grade line (HGL). However, with the flush station running, the model did not match higher HGL observed in the field. This indicated that there are likely restrictions in the Lake Line due to a combination of sediment; fats, oils, and greases (FOG); and pipeline structural defects.

The model matched the field-estimated HGL data when the flush station ran with two simulated partial blockages. Though the number and locations of actual partial blockages were unknown, this evaluation modeled two partial blockages: one near 3009 Mountain View Avenue North and one near 3711 Lake Washington Boulevard North. It was recognized that a combination of multiple partial blockages could have a cumulative effect equal to that of the two partial blockages modeled.

Because of the risk of interruption of service to the properties if partial blockages were to worsen, the City pursued hydro-jet cleaning of the entire Lake Line system in 2018.

1.3.1.3 Phase 2B

A full cleaning of the Lake Line was pursued to address the partial blockages identified in Phase 2A. This effort is documented and evaluated in this Report. In 2018, the City declared an emergency, secured permits, and contracted out the cleaning of the Lake Line using in-water manhole access. The Lake Line was cleaned from two temporary manhole locations and

three existing in-water manholes. Hydro-jetting was performed from a vacuum truck loaded on a floating barge. According to post-cleaning CCTV inspection, the Lake Line was free of major debris where it was cleaned. However, due to obstacles in the Lake Line, this cleaning did not reach the entire Lake Line.

In parallel to the cleaning, additional condition assessment of the Lake Line and lateral was performed from removed pipe segments and coupons collected during the 2018 construction work.

This report documents the planning, design, construction, condition assessment, and cleaning effectiveness of Phase 2B activities. The report also reviews multiple options to address sections of the Lake Line not reached in the 2018 cleanings to remove potential remaining partial blockages, referred to as Sites A and B in this report. Three general approaches are assessed:

- Hydro-jet cleaning at two sites.
- High-velocity flushing of the entire Lake Line.
- Pipe replacement at identified segments with partial blockages.

1.3.1.4 Phase 3

Phase 3 investigates Lake Line replacement alternatives to aid in long-term City planning for the pipeline replacement, including securing easements and financial resources. The conceptual alternatives analysis considered replacing the Lake Line in-place, as well as moving it further offshore in the lake and multiple options for on-land sewer service. For each alternative, the report includes a description, conceptual sizing, and a high-level budgetary placeholder.

1.4 Report Content

This report is an overview of the work completed in 2018. Major tasks are documented in the following chapters:

- Chapter 1 – Introduction.
- Chapter 2 – Phase 2B Public Involvement.
- Chapter 3 – Phase 2B Permitting.
- Chapter 4 – Phase 2B Design Activities.
- Chapter 5 – Phase 2B Construction Activities.
- Chapter 6 – Condition Assessment.
- Chapter 7 – Cleaning Effectiveness.
- Chapter 8 – Near-Term Options for Uncleaned Sections.
- Chapter 9 – Phase 3 Lake Line Replacement Alternatives.
- Appendices:
 - Appendix A Public Outreach Materials.
 - Appendix B Permit Documents.
 - Appendix C Contract Documents.
 - Appendix D Submittal / Request for Information.
 - Appendix E Construction Daily Reports / Water Quality Monitoring.
 - Appendix F V&A Consulting Engineers Report.

1.5 Report Contributors

This report compiles work from City staff and the consulting team, which included the following firms:

- Carollo Engineers, Inc.: Project Lead.
- Tetra Tech: Technical Lead.
- Confluence Environmental: Environmental Assessment and Permitting.
- EnviroIssues: Public Outreach and Communication.
- V&A Consulting Engineers (V&A): Pipe Condition Assessment.

City staff was instrumental in completing the Project. We commend the following staff members and thank them for their assistance:

- Richard Marshall: Surface Water / Wastewater Special Operations Service Manager.
- Stan Job: Surface Water / Wastewater Special Operations Service Supervisor.
- Rocky Sittner: Lead Maintenance Worker.
- Travis Hamblin: Maintenance Services Worker III.
- Kevin Hiatt: Maintenance Services Worker III.
- Jacob Lundquist: Maintenance Services Worker III.
- Reed Pagel: Maintenance Services Worker II.
- Roger Rowland: Maintenance Services Worker II.
- Shane Couty: Lift Station Technician.
- Jayson Gallaway: Lift Station Technician.
- Dave Christensen: Utility Engineering Manager Waste Water.
- Michael Benoit: Civil Engineer III.
- John Hobson: Civil Engineer III.
- Don Ellis: Engineering Specialist III.

Chapter 2

PHASE 2B PUBLIC INVOLVEMENT

In 2018, Phase 2B construction and condition assessment activities were performed directly offshore of residences. To engage and involve the Lake Line customers, the City conducted extensive public outreach. This chapter outlines the activities performed for public involvement.

2.1 Public Involvement

Public outreach for the Project's Phase 2B (summer and fall 2018) built on outreach efforts completed over the last several years. During those efforts, the City partnered with property owners and residents to access properties to maintain the Lake Line and completed a condition assessment.

The goal of the 2018 outreach efforts was to keep all Lake Line residents and interested parties informed about the Project's activities and progression. In addition, outreach focused on reaching out to residents and property owners closest to the concentrated work, specifically those near the manhole installations, cleaning access sites, flush station, and lift station. The outreach was meant to proactively communicate with residents directly affected by the project of upcoming work, address questions, and continue to build productive relationships.

Public involvement consultant Envirolssues led these outreach efforts. From June to July 2018, Envirolssues updated the public involvement plan for Phase 2B efforts, which included updating key messaging and developing outreach materials. The following example outreach materials are attached in Appendix A:

- Phase 2B Public Involvement Plan, including key messaging.
- Frequently asked questions from the project website.
- Letters sent to Lake Line neighbors and nearby residences.
- A door hanger for public notification activities.
- Back-pocket cards for crew members to give to members of the public who had questions.

2.2 Mail Notifications

To keep residents informed, notifications were sent to all Lake Line residents on August 2, 2018. Two versions of the letter, along with an enclosed project area map, were sent out. The first letter was general, showing an overview map with areas where work would be concentrated, and mailed to most residents within the project area (54 addresses). The second letter was sent to the 11 properties adjacent to manhole sites and included property-specific images with the potential location of work barges adjacent to work sites.

2.3 Door Hanging

Door hangers were delivered prior to specific work efforts:

- June 4, 2018: Door hangers were delivered to six properties before survey work was done from June 7 to 8.

- October 4, 2018: Door hangers were delivered to nine properties before condition assessment fieldwork began.
- October 26, 2018: Door hangers were delivered to three properties to notify about weekend work done from October 27 to 28.

2.4 Website Updates

In addition to mailing notifications to Lake Line residents, the project website was updated at the beginning of the 2018 work and refreshed periodically to keep it current. The website also hosted a “Frequently Asked Questions” document that was updated for the 2018 work.

Specifically, the website updates were submitted to the City on July 25, September 20, October 11, and October 25 of 2018.

2.5 Calls and Emails

To reach the residents and property owners closest to the concentrated work, the project team contacted specific property owners and gave them advance notice of work. Individual communication via phone and email occurred on August 12, September 7, October 6, and October 11 of 2018.

The City also met with the owners of one property on October 1, 2018, to provide updates and answer questions in person.

2.6 EnviroLytical Database

Project communications were maintained in the EnviroLytical database, which is provided in Appendix A, along with a copy of the EnviroLytical customer relationship management (CRM) database to date. The database holds the following four types of data recorded, with a file for each type:

1. Contacts: the people contacted during the project.
2. Communications: communications with contacts, including fieldwork notes from 2017.
3. Activities: outreach efforts, including mailings, phone calls, site visits, and door hanging.
4. Parcels: properties in the project area.

2.7 Lessons Learned

Project outreach in 2018 went smoothly, thanks largely to the City’s successful engagement in previous years. The population of Lake Line neighbors was mostly familiar with the project, was well-educated, could access online project updates, and was open and receptive to project outreach. In fact, some crew members reported happy and satisfied comments from community members they encountered during work.

The City understands the value of public outreach and makes diligent efforts to stay connected with its customers and community members. However, because many of these connections were developed without involving the outreach consultant, certain interactions were not recorded in the outreach database in as much detail.

Chapter 3

PHASE 2B PERMITTING

3.1 Permitting

This chapter addresses the environmental permits associated with the Phase 2B of the project, which cleaned the pipeline and evaluated pipeline conditions at multiple locations in Lake Washington. For the condition evaluation, pipeline coupons were collected and temporary access was created at several existing in-water manholes to clean the Lake Line.

As shown in Table 3.1, the Project required several natural resource and land use permits from local, state, and federal entities. Appendix B includes applications and approvals.

Table 3.1 Lake Line Permit Summary

Permit	Permit Submitted	Permit Issued	Application Duration
The City of Renton Shoreline Master Program and State Environmental Policy Act (SEPA).	April 20, 2018	June 8, 2018	49 days
Washington Department of Fish and Wildlife’s (WDFW) Hydraulic Project Approval (HPA) and Washington Department of Ecology’s (Ecology) 401 Water Quality Certification.	May 25, 2018	June 18, 2018	24 days
US Army Corps of Engineers’ (USACE) Nationwide Permit 12 covering Utility Line Activities (NWP 12) and Section 7 of the Endangered Species Act (ESA)	February 15, 2018	August 9, 2018	175 days

3.1.1 The City of Renton Shoreline and SEPA

Several City permits and administrative approvals were required, including compliance with SEPA and the Shoreline Management Act as defined by the City’s Shoreline Master Program.

3.1.2 City of Renton Shoreline Master Program

Work within 200 feet of State of Washington (State) shorelines must comply with the local jurisdiction of the Shoreline Master Program and often requires a Shoreline Substantial Development Permit. The Project qualified for an exemption from this permit, because it primarily consisted of normal maintenance and repair of existing structures or developments, according to Washington State Administrative Code (WAC) 173.27.040 (2)(b). The Shoreline Exemption was issued on June 8, 2018.

3.1.3 SEPA

SEPA identifies and analyzes the environmental effects associated with governmental decisions. In this case, the City’s issuance of a Shoreline Exemption required SEPA review. Thus, a SEPA checklist was prepared for the Project and submitted to the City.

On May 25, 2018, the City, which was the assessment agency, determined that the project would not likely adversely affect the environment and issued a Determination of Non-Significance.

3.2 WDFW HPA and Ecology 401 Water Quality Certification

The Project fell under several State regulations, primarily for the project's activities in Lake Washington. These reviews were completed and approval obtained. Under State regulation (Revised Code of Washington [RCW] 77.55), construction activities in or near State waters are required to obtain an HPA from the WDFW.

Ecology also has review and approval authority over certain aspects of the Project. Under Section 401 of the Clean Water Act, a Water Quality Certification was required to ensure that the Project complied with State water quality standards. Additionally, Ecology has review authority over local shoreline management act decisions.

3.2.1 WDFW HPA

The State Hydraulic Code and the HPA requirements are defined in RCW 77.55.011. A hydraulic project is defined as "the construction of performance of work that will use, divert, obstruct, or change the natural flow or bed of any of the salt or freshwaters of the state." In this definition, "bed" means "the land below the ordinary high water lines of state waters."

The Project included elements that changed Lake Washington's bed through in-water excavation, required to access the existing sewer line for coupon collection and new clean-out installations. Thus, the project required an HPA.

Application materials for the HPA were submitted to WDFW using the online Aquatic Protection Permitting System (APPS) on May 25, 2018. An HPA was issued on June 18, 2018. Because subsequent Project-required activities continued beyond the specified construction window, an extended in-water construction window was required. Two modifications were made to the HPA, issued on September 24 and October 11, 2018, respectively. With the modifications, the HPA was extended from September 31, 2018 to October 31, 2018.

3.2.2 Ecology 401 Water Quality Certification

The Project was required to comply with state water quality standards, which are typically satisfied through a 401 Water Quality Certification from Ecology. However, because the Project was approved under the USACE's NWP 12, an individual Water Quality Certification was not required so long as the project complied with additional State conditions.

Ultimately, additional review and approval by Ecology for NWP 12 were not required, since the Project met the State's conditions.

3.3 USACE NWP 12 and ESA Section 7

The Project area included locations within Lake Washington, which is considered a Water of the United States. As a result, it falls under the USACE's regulatory jurisdiction under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Thus, the Project required a Department of the Army permit covering these two statutes.

The issuance of a federal permit is considered a "federal action," which further requires the Project to be reviewed under Section 7 of the ESA. ESA Section 7 requires federal agencies to consult with the National Marine Fisheries Services (NMFS) and the US Fish and Wildlife Service (USFWS) to ensure their actions do not jeopardize the continued existence of species listed as threatened or endangered or otherwise adversely modify designated critical habitat.

3.3.1 NWP 12 Utility Line Activities

The Project activities conducted in Lake Washington required approval under USACE's NWP 12. NWP 12 authorizes activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in Waters of the United States, provided the activity does not result in the loss of greater than half an acre of Waters of the United States for each single and complete project.

The Project's activities complied with the NWP 12 requirements, and USACE issued a letter of verification on August 9, 2018 (Reference # NWS-2018-197).

3.3.2 ESA Section 7 Consultation

The Project was evaluated for potential effects to ESA's listed species and designated critical habitats in a project-specific Biological Evaluation prepared by the City, submitted to the USACE, and used for the ESA Section 7 consultation with NMFS and USFWS. The Biological Evaluation determined that the Project "may affect, but not likely to adversely affect" listed species and designated critical habitat.

On August 6, 2018, the USFWS provided a Letter of Concurrence for this finding (USFWS reference # 01EWF00-2018-I-13891). The NMFS provided a Letter of Concurrence for this finding on August 7, 2018 (NMFS reference # WCR-2018-10281). These concurrences satisfied the requirements under ESA Section 7.

3.4 Lessons Learned

This Project faced various challenges while the required permits and approvals were obtained. This section details some of the lessons learned from that experience, which may facilitate similar efforts in the future.

3.4.1 Project Definition and Description

To gain regulatory approvals, a clear and concise project definition and description must first be developed. This effort is the foundation of the required permit application documents (e.g., Joint Aquatic Resource Permit Application [JARPA], WDFW APPS information, Biological Evaluation, etc.).

The definition and description include project locations, methodologies, equipment used, and schedules, as well as quantifiable project effects on sensitive or regulated resources. By establishing the definition and description as early as possible during project design, permit application submittals can be submitted in a timely manner and application documents are more consistent.

The key challenge is identifying when to develop the definition and description. Specifically, enough design information must be available for its content, and future designs must not extensively change or update it.

Because an important part of the Project's early steps was to identify the Lake Line's condition and locations where sampling and cleaning were required, the Project presented some additional challenges in gaining the approvals.

To identify locations, the team first identified preferred locations from a technical standpoint and then reviewed those locations from a permitting standpoint to finalize them. The team wanted to describe the Project and its processes in adequate detail while giving the contractor some flexibility. To foster that flexibility, additional assessment locations were permitted in case

a location could not be accessed or additional funding became available to expand the assessments.

3.4.2 Project Schedule

The Project faced multiple challenges related to scheduling. Initially, permit applications were submitted with long lead times to allow regulatory agencies enough time to process the application and issue permits. While most of the permits at the State and local levels were issued within their expected timelines with no delays, staff resource challenges at the USACE contributed to the prolonged review process. Since the project qualified for NWP 12 and used methods consistent with a previously approved project in Lake Washington, the extended timeline was an unexpected hurdle.

Ultimately, the USACE's supervisory staff took over the project review, and the permit was subsequently issued rapidly. In the case that an agency's regulatory staff does not meet timeline expectations, future projects are recommended to elevate the review to supervisory staff early on.

The Project's schedule was also complicated by work windows for in-water construction. Within Lake Washington, several regulatory restrictions on in-water construction activities overlap. More specifically, ESA-listed species are protected by in-water work closures during key months associated with certain life-history stages (e.g., juvenile salmonid outmigration, adult salmonid spawning, etc.). The City's shoreline work windows associated with ESA-listed species allowed in-water work to begin only after July 15, 2018, and close work on September 30, 2018.

Fortunately, the Project's conservation measures planned ahead of time to isolate certain work areas. In the end, WDFW agreed to allow continued in-water work through October 31, 2018, in areas isolated from the rest of the Lake. Future projects are recommended to give the contractor a realistic schedule and to develop a detailed contingency plan that maintains in-water work schedules.

3.4.3 Emergency Activities

During the Project's early phases, the existing sewer line was indicated to be substantially obstructed and, without cleaning, might have overflowed and released untreated sewage into Lake Washington or backed up into shoreline homes. Thus, the team requested the associated permitting agencies to expedite the permit issuance.

All of these agencies agreed on the Project's state of emergency, except for the USACE. Though the USACE did not explain why it did not agree, it issued the required permit before this topic required additional consideration.

Future projects in similar situations are recommended to take these important matters to the USACE's supervisors early on and to request a permit issuance deadline that will appropriately deal with the emergency's risks.

3.4.4 HPA Permit

Future cleaning efforts on the permanent manholes may require an HPA, even if no excavation is performed. Installation of temporary access risers on the existing submerged manholes could be interpreted to "use, divert, obstruct, or change the natural flow" of Lake Washington. This interpretation is inconsistent with the City's current understanding of the permit needs to access their existing manholes. Therefore, the City is advised to consult with their attorney in coordination with state agencies for a more formal determination on this topic.

Chapter 4

PHASE 2B DESIGN ACTIVITIES

Temporary manholes installation and Lake Line cleaning were designed as part of the Phase 2B activities. The initial permanent precast manhole design approach was changed based on issues with pre-procuring the manholes and feedback from the contractor, Ballard Marine Construction (BMC).

This chapter outlines major design activities and summarizes lessons learned for future projects.

4.1 Design Activities

The following activities occurred during design:

- 90-percent design was completed (permanent manhole): June 8, 2018.
- An emergency order was issued: June 11, 2018.
- Request for price proposal for precast manhole supply received no bids: June 22, 2018.
- Decision was made to use a temporary manhole: July 5, 2018.
- Bid set was submitted: July 11, 2018:
 - Bid Addendum No. 1 was submitted: July 25, 2018.
- The pricing proposal was accepted: July 28, 2018:
 - Change Order No. 1 was made: July 28, 2018.
- The revised pricing proposal was accepted: July 31, 2018.

Appendix C includes design documents.

4.1.1 Pre-design

The pre-design considered multiple in-lake access structures for the Lake Line:

- Nautilus-style permanent manholes: Concrete manholes designed to match the existing manholes that allow access with aluminum caisson riser sections. Given the shallow depths in the southern reaches of the Lake Line, the manholes would have been buried after the work to avoid safety and navigation concerns.
- Temporary steel manholes: Steel column that connects to the Lake Line to act as a manhole. External weights extend from the temporary manhole to counter buoyancy.
- In-line cleanout: a length of Lake Line would be replaced with a combination of wye and tee joints to allow access from a variety of directions. Temporary riser pipes would be used to extend access from the cleanouts above the lake surface. External weights and bracing for the riser would be needed to counter buoyancy forces and other forces from cleaning. This was City operators' least preferred option due to concerns that the small diameter of the riser might be difficult to use during cleaning.

The City initially selected the nautilus-style manhole for design. However, the project team could not find a manufacturer that could make custom manholes in time for the scheduled work, so contract documents were modified to use temporary steel manholes.

4.1.2 Survey

As shown in the bid set, the two proposed locations for Manholes (MH) 4 and 5 were mapped and added to the Project's base map developed during Phase 2A. The proposed manhole locations were mapped with approximately 100 feet on either side. Prior to construction, surveyors staked manhole locations.

4.1.3 Emergency Order

On May 30, 2018, the City's mayor issued a written Declaration of Emergency to complete necessary improvements to the Lake Line sewer system. The declaration was made to prevent potential substantial sanitary sewer overflows into Lake Washington and the adjacent properties served by the system. The emergency declaration allowed more flexibility in bidding and contracting to make improvements in a timely manner.

The Renton City Council approved Resolution 4345, ratifying the Emergency Declaration on June 11, 2018.

4.1.4 Pre-Bid Tour

On June 8, 2018, a pre-bid tour of the existing manholes and proposed temporary manholes was conducted with representatives from the City, Carollo, Tetra Tech, and BMC. During the tour, measurements and dives were taken to investigate the condition of the existing manholes.

4.1.5 Contract Documents

Tetra Tech prepared the following contract documents: drawings, specifications, and a probable opinion of construction cost.

Initial sets of drawings and specifications were prepared assuming that permanent precast concrete manholes would be installed. As previously stated, the custom manholes could not be procured within the scheduled work window, so contract documents were modified to use temporary steel manholes.

The final contract documents were issued on July 10, 2018, and are detailed in the sections below.

4.1.5.1 Drawings

Eight drawings were prepared, including site plans, details, a sewer cleaning plan, and a sewer profile.

4.1.5.2 Specifications

Specifications were prepared based on Washington State Department of Transportation's (WSDOT's) *Standard Specifications for Road, Bridge, and Municipal Construction* (2016 edition). Special provisions were issued with additions or modifications to the standard specifications.

The City provided front-end specifications, including the pricing requirements, contract forms, conditions of the contract, and Division 1.

4.1.5.3 Probable Opinion of Costs

On July 18, 2018, Tetra Tech issued a total cost estimate of \$783,200.

On July 25, 2018, BMC issued an initial price proposal with a total estimated cost of \$790,185. Contract documents were modified to include steel temporary manholes before BMC submitted its price proposal. On July 28, 2018, an addendum was issued.

On July 30, 2018, a second proposal was submitted with a total estimated cost of \$910,030. The second proposal had an increased price that accounted for surveys, staking, as-built drawings, excavation safety systems, and pipe cleaning.

4.2 Bid Support

BMC was pre-selected as the contractor for the Project based on its strong qualifications for aquatic constructions work, experience with lake line repair for other municipalities in Lake Washington, and familiarity with the Renton Lake Line and qualifications, so no bid was held.

4.3 Lessons Learned

4.3.1 Impacts of Emergency Work on Contractor Risk

Due to the emergency declaration, BMC was pre-selected without a public bidding process. To encourage the contractor to use their standard rate sheet, bid items were typically on a “unit basis” (typically days). While this approach may have kept costs down, it also effectively reduced the contractor’s risk. In the future, the City would like to structure the bid to shift more risk of unanticipated issues to the contractor.

4.3.2 Impact of Preselecting Contractor

Future work is anticipated to occur through a public bid process, not the pre-selection used in 2018 activities. A public bid may result in more competitive pricing.

The prequalification language was relatively generic in the 2018 specifications. Thus, the City is recommended to consider a more specialized pre-qualification of bidders for future public bids, given the highly specialized nature of in-water work.

4.3.3 Long Precast Concrete Manhole Procurement Time

The initial design was for nautilus-style submerged manholes that would be accessed using King County caisson risers. Because this special-order structure took longer to procure than anticipated, the design was changed to a temporary manhole.

According to precast concrete manhole manufactures contacted, embedding the stainless steel elements and, to a lesser extent, using a custom framework were major factors in the long procurement timing. Therefore, if selected for future improvements a longer procurement period in advance of in-water work windows should be allowed. Given the normal work window starting on July 15, the City it is recommended to beginning pre-procuring custom manholes no later than January 1. Note that QCP constructed the existing manholes in 2003.

4.3.4 Seal on Existing Nautilus Style Manhole

The pre-bid tour showed a steel ring seat for the seal that was not in the existing manhole as-builts. This ring seat was beneficial in creating a smooth surface for sealing the King County Access Caisson in the 2018 cleaning activities. Thus, adding the steel ring seat in future nautilus-style manholes is recommended.

Chapter 5

PHASE 2B CONSTRUCTION ACTIVITIES

BMC was contracted to execute the 2018 field activities discussed in previous sections, and BMC subcontracted Bravo Environmental to conduct the cleaning activities. On-site construction activities were conducted between September 24, 2018, and October 28, 2018.

Chapter 5 describes key aspects of the construction activities and lessons learned. Information collected during the construction activities is used for the evaluation of pipe condition (Chapter 6) and to effectiveness of the cleaning (Chapter 7).

5.1 Construction Activities

During construction, the following activities occurred:

- Pre-construction meeting: August 21, 2018.
- Mobilization: September 4, 2018.
- Submittals: September 20, 2018.
- On-site construction began: September 24, 2018.
- On-site work ended: October 28, 2018.
- Demobilization was complete: November 2, 2018.

5.2 Pre-Procurement

The consultant team prepared cleaning contract documents while permits were being issued. While attempting to procure permanent precast concrete manholes, the team found that the manholes would not be available in time for the expected permit window due to the extremely busy construction market and special requirements for the watertight manholes.

Instead, the plan was changed to procure temporary steel manholes. Cleaning would be done from each of the two temporary manhole locations and from the three existing permanent manholes.

5.3 Emergency Response Plan

Prior to construction, an emergency response plan was completed (see Appendix E).

5.4 Construction Support Services

5.4.1.1 Submittals

The consultant responded to the following submittals:

- Pipe and fittings.
- Temporary manhole shop drawing.
- Fish-mix material.
- Dive operations plan.
- Emergency management plan.

The ductile iron pipes submitted by the contractor in compliance with the specification received no exceptions in the review process.

Due to supply constraints, the contractor mixed 1.5-inch gravel with 3/8-inch gravel in the field to meet the specification for the fish mix gravel. Submittals and Requests for Information are provided in Appendix D.

5.5 Construction Observation and Inspection

The Consultant team provided full time on-site construction observation, as well as specialty inspections. The Construction observations are provided in daily reports provided in Appendix D.

5.6 Water Quality Monitoring

Throughout construction, turbidity samples were taken at various locations outside the silt curtain at regular intervals, ranging from just outside the silt curtain to the point of compliance 150 feet away from the silt curtain. Turbidity never reached a point of non-compliance. Water quality samples are documented within the Daily Construction Reports in Appendix D.

5.7 Installation of Temporary Manholes

Temporary steel manholes were installed at two locations, MH-4 and MH-5. Temporary MH-4 was constructed offshore of 2905 Mountain View Ave North and MH-5 was constructed offshore of 3119 Mountain View Ave North. To contain turbidity, the work area was surrounded by a floating silt curtain. Then, excavation using a suction dredge was completed to the existing Lake Line, and measurements of the Lake Line's elevations were taken.

The temporary manhole locations were excavated, and manholes were placed with concrete blocks that control the buoyancy of the manhole and pipe. To allow the team to inspect and clean the pipeline, temporary connections to the manholes were also made.

The temporary manholes were disconnected after cleaning and inspection. New ductile iron spools were installed to replace the pipe segments removed during the manhole installation. The excavated areas were then backfilled with native material, and a fish-friendly spawning gravel mixture was spread across the work areas' surfaces.

5.8 Use of Existing Submerged Manholes

To allow the team to inspect and clean the pipeline, aluminum access caissons were temporarily placed on the existing in-water manholes and were removed afterward. The contractor was allowed to leave the caissons in place overnight given several conditions:

- Place a secure lid on the caisson when not in use.
- Provide visual beacons to alert nearby boaters.
- Restrict boating access to the caisson using the adjacent work barges to the extent possible.
- Conduct direct outreach to properties adjacent to the work areas to alert them of the caissons.

MH-1 and MH-2's conditions necessitated placing work barges on the lake side (west) of the manholes. With MH-3, the barge was placed to restrict boating access from the north. Access to the west was kept open to allow the adjacent property owner use of their boat and dock.

No issues arose from nearby boaters during construction.

5.9 Construction Cost

The final cost for the construction activities was \$949,168.37. A breakdown of construction costs is shown in Table 5.1.

The following is a breakdown of the construction elements:

Mobilization and Demobilization:

- Furnishing and installing complete and in-place work and all work and materials necessary to move and organize equipment and personnel onto the job site.
- Providing and maintaining all necessary support facilities and utilities.
- Obtaining all necessary permits, licenses, bonds, and insurance.
- Preparing all necessary submittals.
- Preparing the site for construction operations.
- Maintaining the site and surrounding areas during construction.
- Providing protection for the existing utilities.
- Conducting final clean-up of the site, all in conformance with the contract documents.

Minor Change: Described in Section 1-09.6 of the Specifications for Force Account.

Construction Surveying, Staking, and As-builts:

- Verifying and expanding the project control network provided by the owner.
- Staking proposed manhole locations.
- Measuring top of pipe elevations at connection points.
- Measuring final pipe elevations prior to backfill activities.
- Taking original grades to guide backfill activities.
- Providing settlement monitoring prior to, during, and after excavation and backfill activities.

Excavation Safety System: All labor, materials, hauling, planning, design, engineering, submittals, and equipment necessary to furnish, install, remove, and dispose of adequate shoring and support for all excavations to provide safe access for workers, prevent soil sloughing, soil loss, and damage to pavement, structures, utilities, and ground adjacent to the excavation.

Temporary Manhole and Installation: All labor, materials, equipment, manufacturing of one temporary access manhole, hauling, provision of silt curtain, excavation, pipe liquid level monitoring, bypass pumping, transportation of city/engineer/assistant/inspector to and from working platforms, placement and pipe connection of the manhole, pipe, fittings, joint restraints, salvage of the removed pipe segment to the City shops, removal of the manhole, placement of a new segment of ductile iron pipe, disposal of excess excavation soil, backfill, blasting/painting the access tube after construction, and return of the access manhole to the City shops.

Manhole Installation, Extra Days: All extra days of labor, materials, equipment, excavation, pipe/pipe connections, pipe and manhole connections, and other necessary work to complete that is not provided in temporary manhole and installation.

Pipe Cleaning: All labor, equipment, materials, cleaning, root cutting, internal removal of protruding laterals, removal of hanging gaskets, tankage, transportation, manufacture and installation of a rock catcher at the downstream pump station, daily cleaning of the rock catcher,

decanting of sewer liquids to the City's sewer system, and disposal of sewer solids to an approved upland disposal site.

Sewer Pipe Inspection by CCTV: All labor, equipment, materials for both pre- and post-cleaning CCTV inspection, provision of record DVDs and report to the City and Carollo.

Spawning Gravel: All labor, equipment, and materials necessary for placing a 6-inch layer of spawning gravel across the full limits of each temporary manhole work area and fine grading to return the areas to their original grade.

Bulkhead/Rockery Repair: All labor, equipment, and materials to reconstruct bulkheads/rockeries that have settled as a result of adjacent pipe or manhole excavation.

Table 5.1 Final Construction Cost

Project Element	Cost
Mobilization and Demobilization	\$80,200
Minor Change	\$25,000
Construction Surveying, Staking and As-Builts	\$31,800
Excavation Safety System	\$2,430
Temporary Manhole Installation	\$71,800
Manhole Installation, Extra Days	\$74,100
Pipe Cleaning	\$343,800
Sewer Pipe Inspection by CCTV	\$145,200
Spawning Gravel	\$11,750
Bulkhead/Rockery Repair	\$0
C.O #1 ⁽¹⁾	\$76,800.34
Subtotal	\$862,880.34
Total with 10% Sales Tax	\$949,168.37

Note:

(1) C.O.: change order.

5.10 Lessons Learned

5.10.1 Tidal Delays on Mobilization

At the time of mobilization, large tidal fluctuations at the loading site on the Duwamish River (Boyer Logistics) slowed barge loading. Because the work had to be done from barges and only lightweight materials could be delivered from land, the barges could not depart for the work site until nearly all materials were loaded.

5.10.2 Major Impacts from Shallow Water

The existing sewer pipe was in very shallow water at MH-5, the first location of the temporary manhole. The contractor had estimated the water depth at this location prior to mobilization; however, the lake level was regulated at the Ballard Locks and lowered nearly two feet with the later start to construction in late summer. The water was so shallow that the barges could reach only a point of 50 to 60 feet from the existing pipeline.

As a result, the temporary manhole was set near the barge and temporary piping was extended from the existing pipe to the manhole. Future projects should clearly document the anticipated range of water levels.

5.10.3 Limited Use of Excavator

The contractor mobilized an excavator on one of the two barges expecting to be able to use it to excavate the manhole sites, lift the temporary manholes into place, and backfill the sites. However, the excavator could not reach the MH-5 manhole location and was thus used to place and remove the temporary steel manhole in its adjusted location.

At the Site 4 location, the second temporary manhole location, the barge came close to the pipeline but not close enough to excavate parallel to the pipeline. As such, this equipment's use for excavation was limited, although it did place and remove the temporary manhole in line with the existing pipeline.

The contractor noted that, under those project conditions, a crane with more reach would be more helpful than an excavator. Specifically, a crane equipped for use with a clamshell excavator would be best.

5.10.4 Transient Hydraulic Conditions during Temporary Connections

There is a risk of an inrush of water during the cutting and installation of temporary connections to the Lake Line. This inrush of water has the potential to cause transient hydraulic conditions creating temporary surcharging that could cause a sanitary sewer overflow (SSO). However, no impacts from transient conditions were observed during construction. This may have been due to Contractor methods that reduced the inrush of water, including:

- Construction methods were used to quickly seal the exposed pipe and limit the volume of inrush water.
- Connections were made when the Lake Line was "empty" – the flush station had not been run in some time – providing a storage volume to effectively reduce or eliminate effects of the inrush.

Similar precautions are recommended during future construction.

5.10.5 Issues connecting the Temporary Manhole to the Lake Line

Because MH-5's location was adjusted, the connecting piping required multiple bends through which both the CCTV camera tractor and the cleaning nozzles had difficulty maneuvering. All bends were made with 8-inch polyvinyl chloride (PVC), 45-degree bends.

According to the contractor, in hindsight, using a maximum bend angle of 22.5 degrees would have greatly improved access. The contractor also recommended using high-pressure flexible hoses with flanges for any future offsets required for temporary access since they eliminate sharp bends and the flanges are much easier for divers to assemble in the water.

5.10.6 Improvements to the Temporary Manhole

The temporary manhole generally worked well. Several improvements were recommended for the structure after the construction effort:

- Flexible piping to connect the temporary manhole and the Lake Line would provide additional tolerance for both horizontal and vertical offsets. The initial connection at MH-4 leaked due to a horizontal offset in the Lake Line. The pipe segment removed included a deflected joint thought to have allowed the offset in the Lake Line. The contractor resolved this leak through repositioning the manhole; however, it took approximately a day to resolve the issue.

- The temporary manhole tended to shift slightly during the work effort, so additional stabilization was suggested for future work efforts. The contractor constructed a wooden bridge from the barge to the temporary manhole that limited movement and provided easier access for cleaning, but the construction barge had to remain in close proximity to the manhole. To provide more flexibility, the contractor suggested welding several plates outward (parallel to the bottom of the manhole) to provide a way for super sacks or other weights to directly stabilize the bottom of the structure.
- Anchor weights were thought to help counter buoyancy forces; however, in some cases, the available connection points restricted the anchors' use or effectiveness. The contractor suggested adding additional anchor connection points at both the top and middle of the temporary manhole to provide more options to place anchors.
- The contractor constructed an approximately 3-foot wooden deck around the manhole with a railing to provide a better work area for cleaning activities. Including a similar work area is recommended in future efforts. According to the contractor, bracing and connection points for the decking could be welded onto the temporary manhole to facilitate future installation.

5.10.7 Field Mixed Fish Mix

The fish-mix submittal initially proposed 3/8-inch pea gravel as fish mix. However, this mix was not accepted, since it was too small and too poorly graded to be effective. Nonetheless, when the submittal was returned, the Contractor's work boat had already left for the job site with pea gravel on board. Thus, as an improvised fish mix, the contractor proposed field-mixing the pea gravel with imported 1.5-inch gravel. The engineer could not verify whether 1.5-inch and 3/8-inch gravel were adequately mixed in the field.

5.10.8 Successful HPA Permit Extensions

Given the late start and variety of delays in the work's progress, the project required two extensions for the WDFW's HPA permit. The first granted an extension of approximately two weeks from the normal September closure of the fish window. A second extension was granted until the end of October and came with additional conditions.

5.10.9 Consider Annual Ballard Locks Closure

With the fish window closing at the end of October, all in-water work needed to be completed. Then, the annual inspection and cleaning of a fish barrier at the Ballard Locks imposed additional time constraints on the contractor.

In late October, the Contractor reported that the Ballard Locks would be closed for annual maintenance starting Monday, October 29, at 5:00 p.m. A subsequent notice changed this time to 5:00 a.m. The closure was scheduled to last approximately three weeks. This annual closure should be considered in future planning.

If the barges were not moved through the locks in time, the contractor would have been liable for three additional weeks of rental time for the barges and the excavator, and the cleaning sub-contractor would not have had access to one of its trucks.

5.10.10 Decanting Wastewater Worked Well

The contractor's second barge had a full-sized vacuum truck and two portable steel Baker-style tanks. When the vacuum truck was full of water, it was decanted to the two tanks. When the

two tanks were full, a manifold system was used to empty them together into the Lake Line at the same rate to maintain the barge's stability.

The manifold system collected water and sewage from the middle of the water column in the tank to retain FOG and other floatables, as well as heavy solids and sediment. The manifold system was then directed to the nearest Lake Line manhole available, from which clear water and sewage were discharged downstream. No problems or negative effects on the Lake Line or the work were noted with this configuration.

The Contract also called to cover the tanks for odor control. Two samples of sludge and solids removed from the tanks indicated that anoxic conditions predominated in the tanks. The contractor reported extreme odors when they were cleaned. However, no odor complaints were received from adjacent home owners.

5.10.10.1 Quantifying Solids Removed

Finally, the contractor reported that approximately 2 tons of pipe-cleaning debris were disposed of at the landfill. Assuming a fully saturated condition, this amount equates to 1 cubic yard of debris.

Chapter 6

CONDITION ASSESSMENT

6.1 Condition Assessment

The following chapter details Carollo and V&A's collaborative effort to conduct a condition assessment of the Lake Line for the City. The assessment of the Lake Line was performed in two phases, Phase 2A and Phase 2B, as described in the subsequent sections.

This report presents the results of both phases of the condition assessment to determine if the Lake Line has at least 10 years of RUL. Further information on the condition assessment is located in Appendix F, which contains the entire V&A Report.

6.1.1 Visual Observations/ Dive Video

V&A conducted qualitative visual assessments from shallow water depths, the shoreline, and the boat (to the extent possible). Where the pipe was in deeper water (greater than approximately three feet), V&A directed BMC to investigate conditions using a video monitor and audio communications from the dive boat.

Visual assessments focused on the condition of the metallic pipe surface, joints, and any fittings that were exposed. Defects, such as metallic corrosion, pitting, coating blisters, and coating failures were documented with digital photographs, as applicable (shown in Appendix F). Visual assessments are subjective in nature and made according to V&A's experience in evaluating metallic pipelines in water and soil environments.

As part of the 2018 construction activities and as part of the 2017 Phase 2a investigations, visual observations and dive videos of the Lake Line and its laterals were collected where they were exposed. Figure 6.1 shows example photographs and observations from the condition assessment. Generally, the top half or the off-shore side of the pipe were exposed at these locations. Given this exposure condition, electrolytic corrosion is likely occurring on the Lake Line's metal surface.

Lake Line laterals were assessed at two parcels, 3501 and 3717 Lake Washington Boulevard North. The lateral at 3501 had a bell and spigot joint exposed along its run and a mechanical joint at the connection to the Lake Line. The laterals exhibited minor to moderate surface corrosion. Most of the Lake Line joints between individual pipe segments appeared to be bell and spigot (push-on) joints. Meanwhile, observed lateral connections were joined to the mainline with mechanical joints, either with wye or tee fittings. The bolts and gland rings of these connections exhibited corrosion but, when corrosion and surface debris was removed, they were in fair to good condition. Figures 6.1-7 through 6.1-10 outline the joint conditions of the mainline. However, whether or not all lateral connections to the Lake Line have mechanical joints is unknown. Appendix F includes additional photos and information from the visual observations of the Lake Line.



Figure 6.1-1 As-Found Condition of Mainline with Minor Corrosion Tubercles



Figure 6.1-2 Area of Scaling and Tuberculation on Mainline; Large Rocks Around Mainline at 2811 Mountain View Avenue North



Figure 6.1-3 Surface of Mainline after Scaling and Corrosion Removed



Figure 6.1-4 Moderate Pitting and Graphitized Layer After Wire-Brushing Surface



Figure 6.1-5 Pitting and Graphitization



Figure 6.1-6 Typical Pipe Surface



Figure 6.1-7 Typical Bell and Spigot Joints Between Pipe Segments



Figure 6.1-8 Typical Mechanical Joints at Wye and Tee Fittings for Lateral Connections



Figure 6.1-9 Rip-Rap Directly Adjacent to and Above Lake Line at 2811 Mountain View Avenue North



Figure 6.1-10 Unsupported Bottom of Lake Line where Shoreline has Steep Drop-Offs

6.1.2 CCTV

Lake Line mainline was assessed using CCTV inspection by Bravo Environmental. A total of 3,211 feet of mainline CCTV video that was reviewed, approximately 50 percent of the video had poor visibility due to the camera being submerged at sags in the mainline. V&A reviewed the video files and reports and commented on the structural condition of the pipe.

Several cases of cement mortar lining delamination were found, some such areas appearing smooth and free of corrosion. This suggests that previous Lake Line cleaning may have removed some of the loose lining materials. At high points within the partial pipe flow, moderate to significant corrosion was observed; in these cases, sewer gases could have deteriorated the lining and corroded the metal substrate below.

Corrosion deposits were commonly observed near joints, even in areas where the lining appeared intact. This is because the lining was discontinuous or roughly applied at the pipe ends, creating weak spots allowed for corrosion. Meanwhile, some segments of the Lake Line saw partial joint separation, offsets, and deflections. Table 6.1 summarizes the limits of the CCTV inspection videos as reviewed by V&A.

Table 6.1 Limits of the CCTV Inspection Videos

Section No.	Upstream Manhole	Downstream Manhole	Direction of Survey	Length of Survey, feet
4	Flush Station	New MH-5	Upstream	329
6	New MH-5	New MH-4	Downstream	257
9	New MH-5	New MH-4	Upstream	565
12	New MH-4	MH-3	Downstream	484
15	New MH-4	MH-3	Upstream	509
17	MH-2	MH-1	Downstream	635
18	MH-2	MH-1	Upstream	210
22	MH-1	Pump Station	Downstream	222



Figure 6.2-1 Typical Lining Delamination with Smooth Metal Surface Behind



Figure 6.2-2 Debris and Sediment, Some of which Appears to be Chunks of Cement Mortar Lining Material

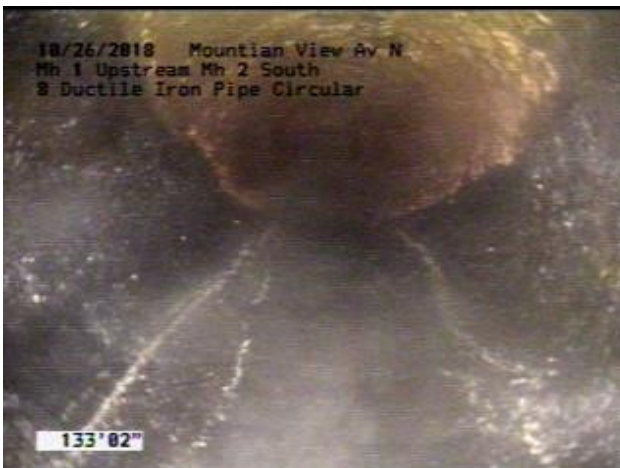


Figure 6.2-3 Typical Moderate to Significant Corrosion at High Point (Brown Area); Black Area Appears to be Stained Mortar Lining



Figure 6.2-4 Typical Moderate to Significant Corrosion at High Points (Brown Area)

6.1.3 Coupon Tests

6.1.3.1 Phase 2A (2017)

The City excavated and exposed the Lake Line at one on-shore location just outside of the Flush Station in 2017. One 3-inch-diameter pipe coupon was drilled from the top of the Lake Line and sent to a laboratory for analysis. The coupon was evaluated by the following laboratory procedures: visual examination, metallography, chemical analysis, mechanical testing – tensile test, mechanical testing – Charpy V-notch impact test, and Brinell hardness testing.

The results of the laboratory analysis indicate that the pipe coupon is made of a ductile iron material that meets the mechanical property requirements of American Water Works Association (AWWA) C151-81 (American National Standards Institute [ANSI] A21.51-81), Grade 60-42-10. The average wall thickness of the coupon was 0.349 inches.

6.1.3.2 Phase 2B (2018)

V&A received two mainline pipe samples and one lateral coupon from BMC. The samples and coupon are described below:

- MH-4 sample: 8-inch-diameter, 40-inch-long mainline sample cut from the 20-foot segment removed when constructing MH-4.
- MH-5 sample: 8-inch-diameter, 40-inch-long mainline sample cut from the 20-foot segment removed when constructing MH-5. This sample included a bell-and-spigot (rubber gasket) joint.
- Lateral coupon: 3-inch-diameter coupon from 6-inch-diameter lateral. The specific location is unknown.

Visual Inspection:

Qualitative visual assessments were conducted on the mainline pipe samples and lateral pipe coupon. Defects, such as metallic corrosion, pitting, and lining defects, were documented with digital photographs.

The mainline samples and lateral coupon exhibited a dimpling pattern on the exterior surface that is typical of pipes made of a ductile iron material (Figure 6.1-1); however, laboratory testing showed that the pipe was made of cast iron. Figures 6.3-1 – 6.3-8 shows additional examples of visual deficiencies found during Phase 2B while Appendix F includes additional descriptions.



Figure 6.3-1 Typical Dimple Pattern on Mainline Samples and Coupon; However, this Is Cast Iron Pipe



Figure 6.3-2 Graphitization on Interior Surface of Manhole 4 Sample



Figure 6.3-3 Exterior Surface of Manhole 4 Sample with a Few Scattered Minor Pits



Figure 6.3-4 Cement Mortar Lining on Interior of Manhole 5 Sample



Figure 6.3-5 Corroded Surfaces near Joint of Manhole 5 Sample; Lining Failed around Joint



Figure 6.3-6 Exterior Surface of Manhole 5 Sample with Scattered Minor Pitting



Figure 6.3-7 Deteriorated Cement Mortar Lining on Lateral Coupon



Figure 6.3-8 Exterior Surface of Lateral Coupon with Minor Pitting Corrosion

6.1.3.3 Joint Sample and Pull Test

Testing was performed on the MH-5 joint samples. The laboratory, Voss, performed a pull test to document the maximum load required to separate the bell end from the spigot end and to view the internal joint surface and gasket. Voss used a universal testing machine (UTM) to perform the test. The UTM reached 8,750 pounds when the spigot end of the pipe failed at one of the bolt holes used to hold the joint in the machine. The pipe joint pulled apart approximately 0.5 inches at the time of the failure. V&A believes that the excessive load was required to pull the joint apart because the internal joint surfaces were corroded.

6.1.3.4 Lab Analysis

Laboratory tests on the mainline samples and lateral coupon included microstructural examination (metallography), wall thickness measurements, pit depth measurements, chemical composition testing, Charpy impact testing, hardness testing, tensile strength testing, modulus of rupture testing, and secant modulus of elasticity testing. The samples and coupon were initially tested according to AWWA C151-81 (ANSI A21.51-81), which is mean for ductile iron pipes. However, optical micrographs (microstructural examination) and the Charpy impact tests indicated that the mainline samples and lateral coupon were made from gray cast iron. Therefore, Talbot strip tests, a strength test specific to cast iron pipes (per ANSI A21.6), were also conducted. Appendix F includes additional information on these tests.

The wall thickness of the specimens was measured using point micrometers. The interior and exterior surfaces of the specimens were also examined for corrosion pitting. Then, the RUL for the Phase 2B pipe samples was calculated from the wall thickness, results which are shown in Table 6.2.

Table 6.2 Remaining Useful Life for Pipe Samples

Pipe Sample	Min. Remaining Thickness, in.	Max. Measured Thickness, in.	Max. Thickness Loss, in.	Max. Thickness Loss, pct.	Corrosion Rate, in./yr.	Remaining Useful Life, yr.
Manhole 4	0.228	0.376	0.148	39%	0.0033	69
Manhole 5 spigot	0.353	0.398	0.045	11%	0.0010	353
Manhole 5 bell	0.301	0.376	0.075	20%	0.0017	181
Lateral coupon	0.373	0.420	0.047	11%	0.0010	357

Note:

(1) in./yr.: inches per year; pct.: percent.



(a) Outside surface



(b) Inside surface

Figure 6.4 Three-inch Diameter Pipe Coupon as Received by Laboratory

6.1.4 Revised Ultrasonic Thickness Testing Results

Ultrasonic Thickness (UT) testing was completed at exposed locations along the lake line as part of Phase 2a. UT testing provides a non-invasive method to measure wall thickness measurements from the exterior of the pipe. These measurements can be used to calculate the corrosion rate of metal if the thickness at a previous point in time (such as the time of installation) and the elapsed time are known. For this study, corrosion rates in inches per year were calculated using the installation date of 1972 and the year of construction for the Lake Line and laterals. The corrosion rate can then be extrapolated to determine when the pipe will reach the minimum required thickness for the given service conditions. Appendix F includes additional information on the assumptions made for this analysis.

The RUL analysis was revised according to the results of Phase 2B, which showed that the pipeline, except at the Flush Station, is probably made of cast iron, rather than ductile iron, as was assumed in Phase 2A. The UT analysis was revised to account for the change in material, which caused minor changes in RUL, typically less than two years difference.

Table 6.3 summarizes the field ultrasonic thickness measurements and RUL estimates. For the updates made in Phase 2B to these calculations, the "current year" was not updated, so the RUL runs from 2017. The minimum calculated RUL estimate is 18 years (from 2017) for the Lake Line test locations and 10 years (from 2017) for the test locations on the laterals.

These estimates are strongly influenced by the assumption that a 1/8-inch-deep pitting exists at each test location. The actual pit depth coinciding with low ultrasonic thickness measurements may be less. If the pitting were assumed to be negligible at each ultrasonic test location, the minimum calculated RUL estimates would be 46 to 66 years.

6.1.5 RUL Results

At the end of RUL, pipes are anticipated to leak from holes caused by corrosion, resulting in increased inflow and infiltration. Through these leaks, wastewater can exfiltrate to the Lake when under pressure, such as when the flush station runs. For this reason, any hole is considered by the City to be a pipe failure and, in this study, the RUL was defined by potential leaks, not a collapse of the pipe or other major defects.

RUL estimates from UT measurements and pipe coupons are summarized in Figures 6.5 and 6.6. Figure 6.5 shows the condition assessment sites geographically, where UT samples typically were measured closely together on exposed pipe sections. The map illustrates the variability in RUL in relatively short sections of pipe. Figure 6.6 provides a statistical summary of RUL independent of location. It can be used to estimate extent of the Lake Line and laterals that are likely to need to be repaired or replaced in any given time frame. For example, approximately 25 percent of the Lake Line and laterals will leak (reach the end of useful life) in 36 years and 50 percent in 50 years. While the graph is useful in conveying the RUL in general, the actual RUL of the Lake Line and laterals may vary from this relationship. Factors that could impact the actual RUL include:

- Relatively few lateral samples were considered; however, lateral RUL values were assumed to be similar to the Lake Line given the samples' similarities in age, material, construction technique, and environment.
- Sensitivity analyses identified the RUL measurements from UT tests (the majority of samples) were highly dependent on the assumed exterior pitting.
- Additionally, the estimated RUL values were calculated assuming a linear corrosion rate, but corrosion rates can slow over time, which would present a longer RUL.

Table 6.3 Ultrasonic Thickness Data and Remaining Useful Life Summary (Revised 2018)

Site/Street Number	Type	Year Taken	Measured Thickness Readings, in.				Assumed Pipe Data		Max. Thickness Loss, in. ⁽¹⁾	Max. Thickness Loss, pct. ⁽¹⁾	Max Corrosion Rate, in./yr. ⁽¹⁾	Min. Remaining Useful Life, yr. ^(1, 2)
			Min.	Avg.	Max.	Number	Class	Nom. Thickness, in.				
Main												
Flush Station	Pipe	2017	0.270	0.332	0.358	9	53	0.36	0.215	60%	0.0048	30
2811	Pipe	2017	0.338	0.404	0.428	13	23	0.44	0.227	52%	0.0050	42
3001	Pipe	2017	0.268	0.360	0.396	11	20 – 22	0.35 – 0.41	0.207	59%	0.0046	31
3411	Pipe	2017	0.260	0.305	0.362	11	20	0.35	0.215	61%	0.0048	28
3703	Pipe	2017	0.300	0.376	0.416	12	22	0.41	0.235	57%	0.0052	34
3703	Wye	2017	0.679	0.679	0.679	1	–	0.60	0.046	8%	0.0010	542
3719/3805	Pipe	2017	0.298	0.379	0.452	19	20 – 23	0.35 – 0.44	0.193	51%	0.0043	44
3719/3805	Wye	2017	0.622	0.622	0.622	1	–	0.60	0.103	17%	0.0023	217
3825/3827	Pipe (S)	2017	0.244	0.356	0.432	38	21 – 22	0.38 – 0.41	0.291	71%	0.0065	18
3825/3827	Wye	2017	0.658	0.658	0.658	2	–	0.60	0.067	11%	0.0015	358
3825/3827	Pipe (N)	2017	0.358	0.389	0.414	3	22	0.41	0.177	43%	0.0039	59
Laterals												
3501	Pipe	2017	0.192	0.280	0.388	15	21 – 22	0.35 – 0.38	0.313	82%	0.0070	10
3717	Pipe	2017	0.280	0.283	0.286	3	21	0.35	0.195	56%	0.0043	36

Notes:

- (1) Thickness loss includes 1/8-inch-deep pitting. The corrosion rate and remaining useful life were calculated from the resulting thickness loss values.
- (2) The remaining useful life estimates run from 2017, the year the testing was performed, not from the time of this Phase 2B update.
- (3) Thickness measurements based on cast iron pipe material.

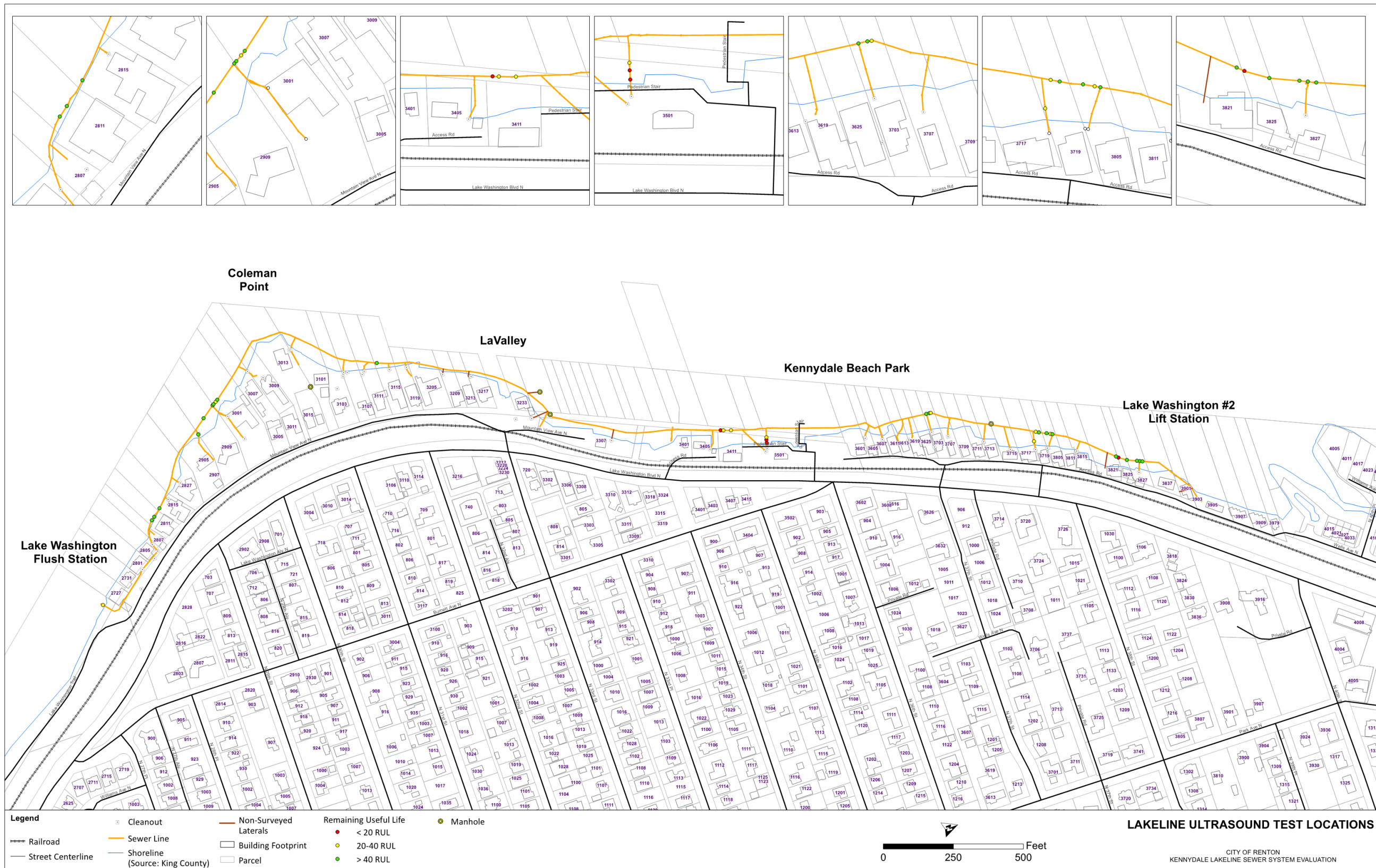


Figure 6.5 Lake Line Remaining Useful Life by Location

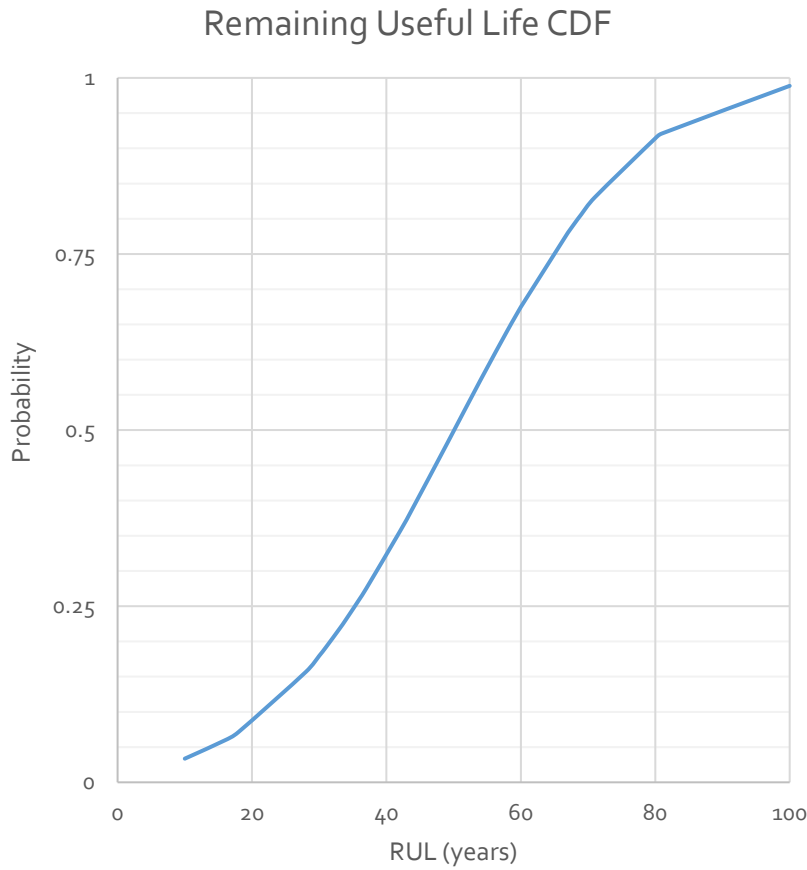


Figure 6.6 Remaining Useful Life Cumulative Distribution Function

6.2 Lessons Learned

6.2.1 Identifying the Location of Defects

In a typical gravity sewer, initial pipe defects in pipe segments that are reaching the end of their usable life would be identified through CCTV inspection and repaired or replaced through point repairs. To an extent this may be possible for the Lake Line, such as sections of de-lined pipe observed in the 2018 CCTV inspection. However, lack of access to and the submerged conditions in the Lake Line makes this approach difficult and likely not able to identify minor defects in many sections of the pipe. Alternatively, increasing defects and resulting leaks can be identified through increasing inflows to the lift station over time. However, this approach does not provide the location of specific leaks and may not enable the number and size of leaks to be distinguished.

Periodic condition assessment activities (i.e., CCTV Inspection, UT Testing, and coupon testing) can assist in identifying pipe defects. Based on the RUL, it is recommended additional condition assessment occur within 10 years. However, given the cost of condition assessment activities, the City may consider if conducting larger scale repair and replacement activities is more cost effective.

6.2.2 Measurement of External Pitting Depth

The RUL results were highly sensitive to the external pitting depth assumption. The RUL of UT samples were calculated using a direct pipe wall thickness measurement and an assumption of the depth of external pittings. In future assessments, the depth of external pitting should be measured for each sample location, when possible. Measurement of smaller pits may have limited accuracy due to their being underwater.

Given the resulting samples, additional statistical analysis should be conducted to determine the effect of the varying measurements on the overall pipe RUL.

6.2.3 Visibility in Submerged Sections

Operators from Bravo Environmental conducted CCTV inspections and noted that the clarity of submerged sections varies depending on the timing of the flows from the flush station, where flows from the flush station appeared to increase turbidity in submerged sections and obscure CCTV inspections. With that being said, operators reported a relatively-clear, submerged CCTV inspection in several afternoons when the flush station was run in the morning, allowing turbidity to settle. While clarity was increased, the inspection quality was still less in these areas than in dry sections, since. Additionally, increasing wastewater content in the pipe from prolonged periods without flushing also obscured CCTV inspections. The City is recommended to consider these findings when planning future Lake Line CCTV inspections.

Chapter 7

CLEANING EFFECTIVENESS

The Lake Line sewer is not self-cleaning, and, when City's crews clean it, they cannot reach the entire pipeline. While the City has cleaned over 90 percent of the Lake Line in recent years, observations of the HGL indicate partial blockages remain in the Lake Line; likely in the form of either thin, broadly-distributed layers of sediment or other material or thicker local partial blockages. The resulting reduction in Lake Line capacity could increase the risk of sewer overflows into Lake Washington and backups into homes.

This chapter evaluates the 2018 Lake Line cleaning practices and evaluates the nature of partial blockages in the pipeline.

7.1 Pre-Cleaning CCTV Inspection

A pre-cleaning CCTV inspection was conducted in 2018 to the extent possible. Because gravel and accumulated debris existed in the pipelines, much of the Lake Line could not be accessed for inspection. Figures 7.1 and 7.2 show the extent of the Lake Line's sections that could be seen via CCTV inspection:

- No Debris (orange line): Pipe sections free of major debris allowing CCTV inspection.
- Unknown sections (green line): Pipe sections that were not reached in 2018.
- Debris (blue line): Pipe Sections inaccessible due to debris, rocks, and encrustation or due to obstructions caused by pipe size, geometry, or infrastructure. Pipe beyond initial debris/obstruction cannot be assessed.

Where initial debris/obstructions prevented pre-cleaning CCTV the pre-cleaned condition could not be determined.

The City and Contractor agreed that operators implement caution in their inspections due to the extreme difficulty in recovering lost CCTV equipment in the Lake Line. More effort was placed in post-cleaning CCTV Inspections that were thought to have less risk of CCTV equipment loss.

Pre Cleaning

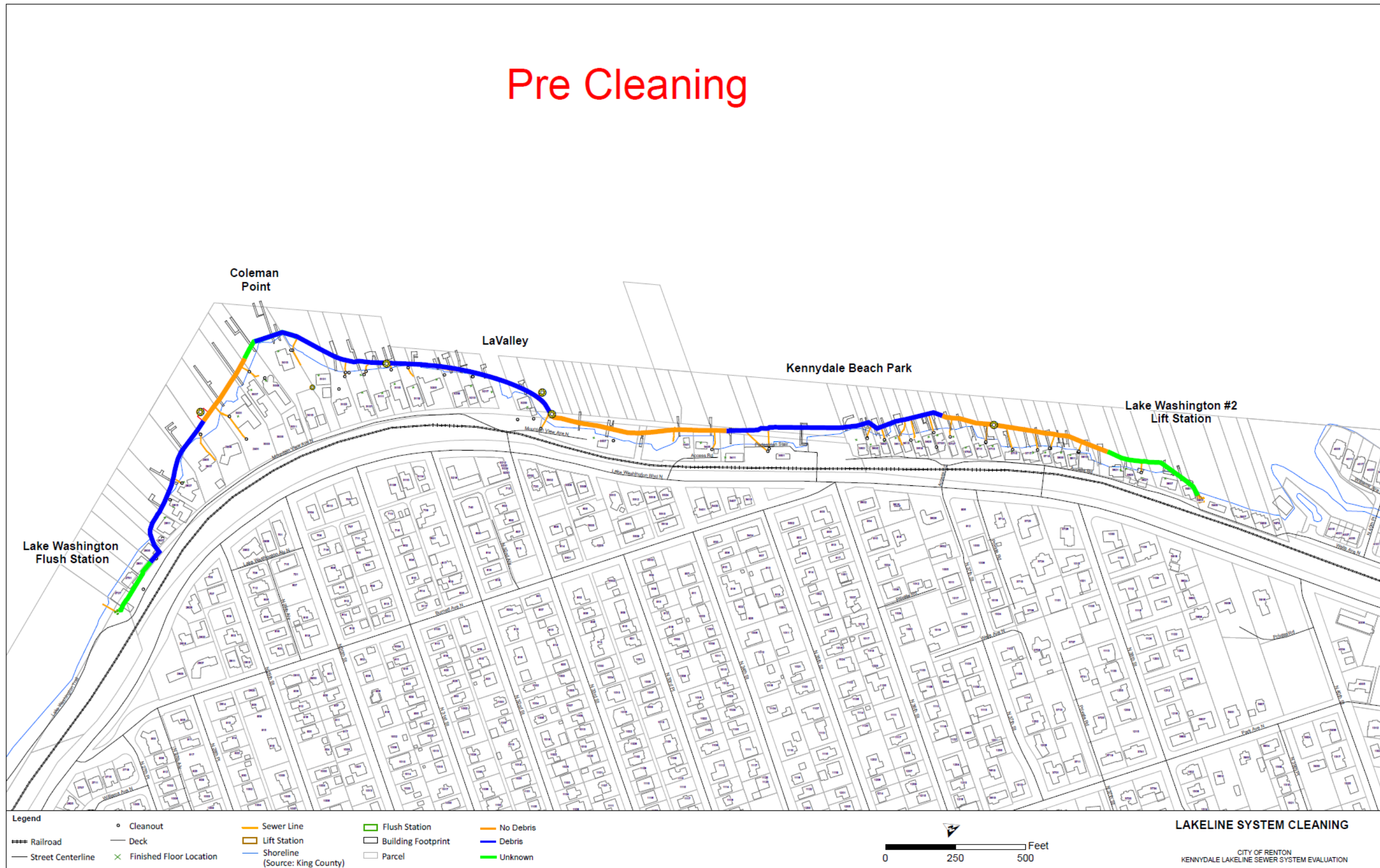


Figure 7.1 2018 Lake Line CCTV Pre-Cleaning Map Extent and Results

2018 Lakeline CCTV Pre-cleaning

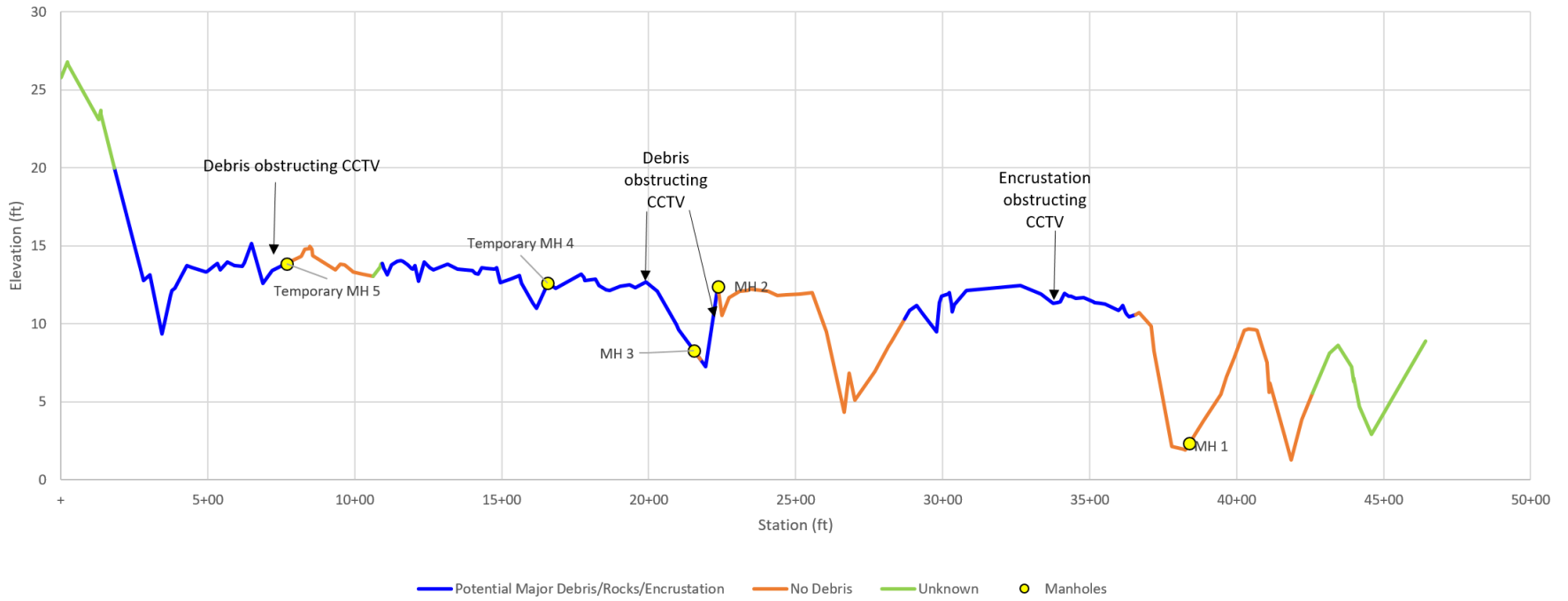


Figure 7.2 2018 Lake Line CCTV Pre-Cleaning Profile Extent and Results

7.2 Effectiveness of Land-Based Hydro-Jetting

The City periodically cleans the Lake Line using hydro-jetting from four land-based access points on the Lake Line, listed below. These activities are documented and evaluated in detail in the Kennydale Lake Line Sewer System Evaluation Phase 1 Existing Conditions Technical Memorandum 1 (Carollo, et al., 2017) and the Kennydale Lake Line Sewer System Evaluation Phase 2 Condition Assessment Report (Carollo, et al., 2018). The effectiveness of land-based hydro-jetting of the Lake Line was evaluated using pre-cleaning CCTV inspections from 2018 activities:

- The Flush Station.
- Lake Washington Lift Station No. 2.
- LaValley (3507 Mountain View Avenue North).
- Kennydale Beach Park (3501 Lake Washington Boulevard North).

Pre-cleaning inspections of CCTV showed substantial debris upstream of the LaValley (3507 Mountain View Avenue North) cleaning lateral, indicating that the City's previous land-based cleaning is likely not effectively removing freed solids at the LaValley site. Presumably, freed solids are not able to be moved up the cleaning lateral and are depositing between MH-2 and -3.

Prior evaluations cautioned solids loosened by land-based cleaning may not have been removed from the Lake Line, especially at LaValley and Kennydale Beach Park sites. These locations do not have in-line access to remove solids and crews noted in 2016 that little solids were being removed. At the Flush Station and Lift Station, where the pipe is accessed from a wet well or vault, water and solids are brought back to the access point and removed with a vacuum truck.

The Kennydale Beach Park location was not CCTV inspected in 2018 and debris deposits at that location cannot be confirmed.

7.3 Cleaning Activities

The Lake Line sewer was cleaned from the two temporary manhole locations and from the three existing in-water manholes. To clean the sewer, 600 to 700 pounds per square inch (psi) of water pressure was directed through a pipe-cleaning nozzle, first to pull the nozzle and hose into the pipe and then to suspend and pull sediments back to the insertion manhole.

At some locations, where the jet nozzle could not pass a bend or joint in the pipe, the water pressure was increased to move the nozzle along. After the nozzle passed the restriction, the water pressure was lowered again to prevent damaging the inside of the pipe and to reduce the chances of opening up pipe joints.

Figures 7.3 and 7.4 show the cleaning conducted in the CCTV-accessible areas:

- Cleaned sections (orange line) were verified to be cleaned and free of major debris by CCTV inspections in 2018.
- Unknown, non-inspected sections (green line) may have been cleaned in 2016 or 2018; however, CCTV inspections were not available to verify the cleaning's effectiveness.
- Non-cleaned sections (blue line) were not cleaned in 2016 or 2018. Specifically, in 2018, debris stopped CCTV inspections from proceeding into these areas. Conditions beyond the initial obstructions are unknown.

Figure 7.4 details the cleaning profile of this work. Approximately 80 percent of the Lake Line was accessible and debris-free (marked in orange) and showed significant improvements compared to pre-cleaning conditions, shown in Figure 7.2.

Though cleaning improved CCTV accessibility, assessing the pipe remained difficult. Significant portions of the debris-free and accessible areas were still submerged allowing limited assessment. Figures 7.4 and 7.5 show the various stationing and elevations of the pipe that 1) did not undergo CCTV inspection (marked in gray); 2) did undergo CCTV inspection and were visible (marked in orange); and 3) did undergo CCTV inspection, but were not visible under water (marked in blue).

Overall, the cleaning was successful where it reached. As discussed in Chapter 5, improvements in construction techniques may increase the extent of cleaning in subsequent work efforts.

Post Cleaning

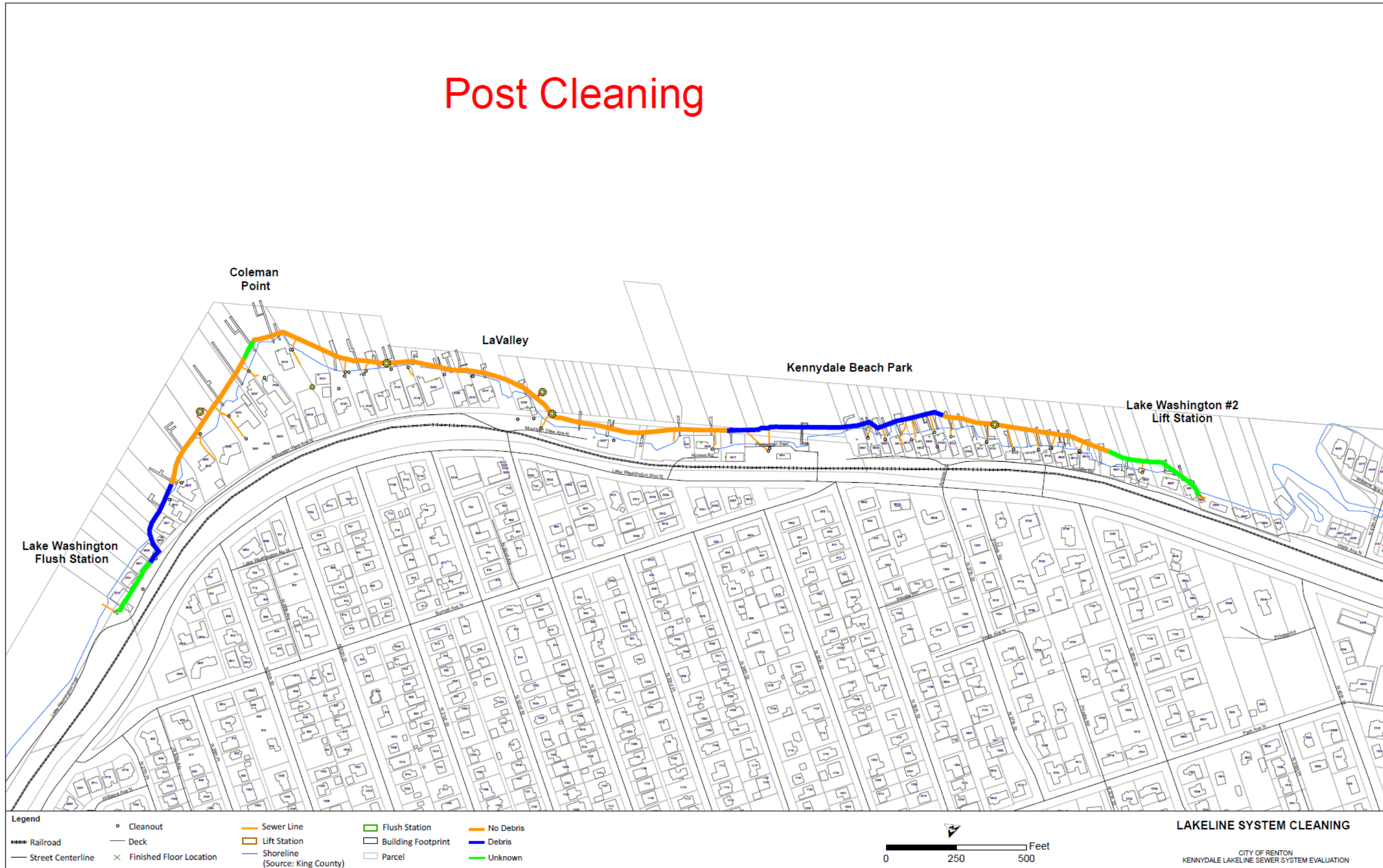


Figure 7.3 2018 Lake Line CCTV Post-Cleaning Map Extent and Results

2018 Lakeline CCTV Post-cleaning

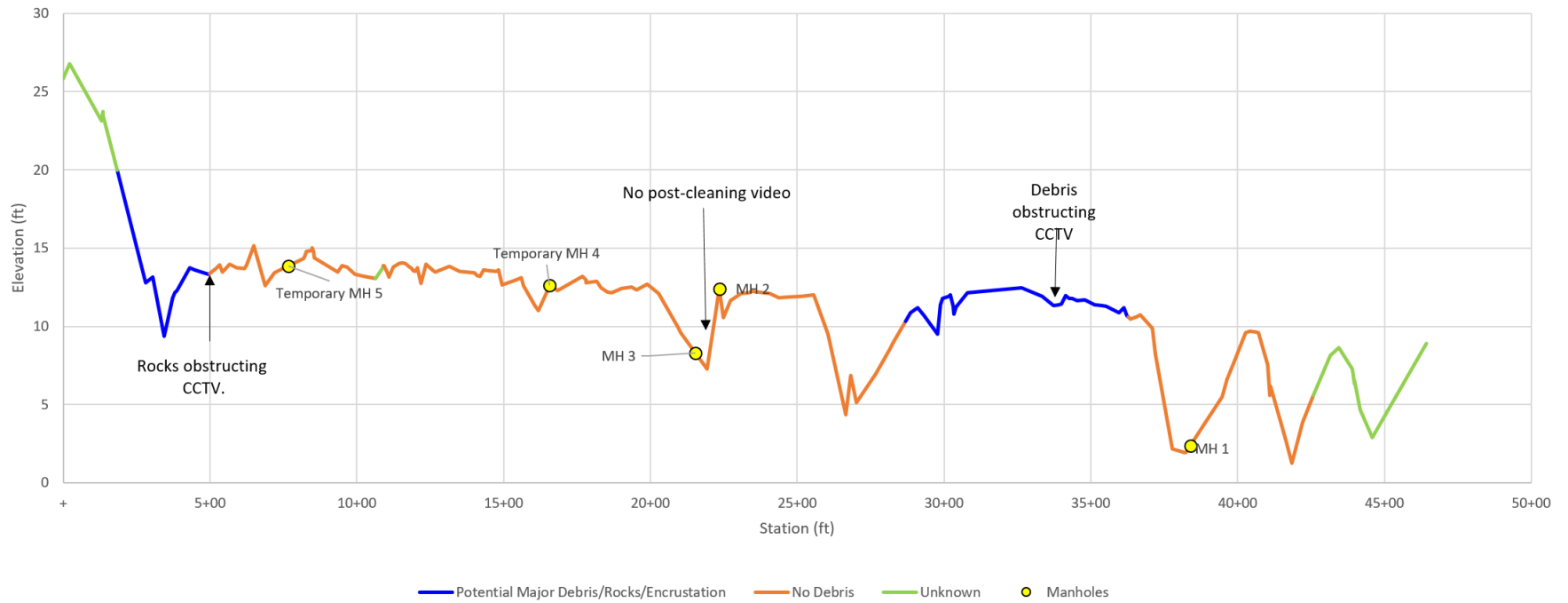


Figure 7.4 2018 Lake Line CCTV Post-Cleaning Profile Extent and Results

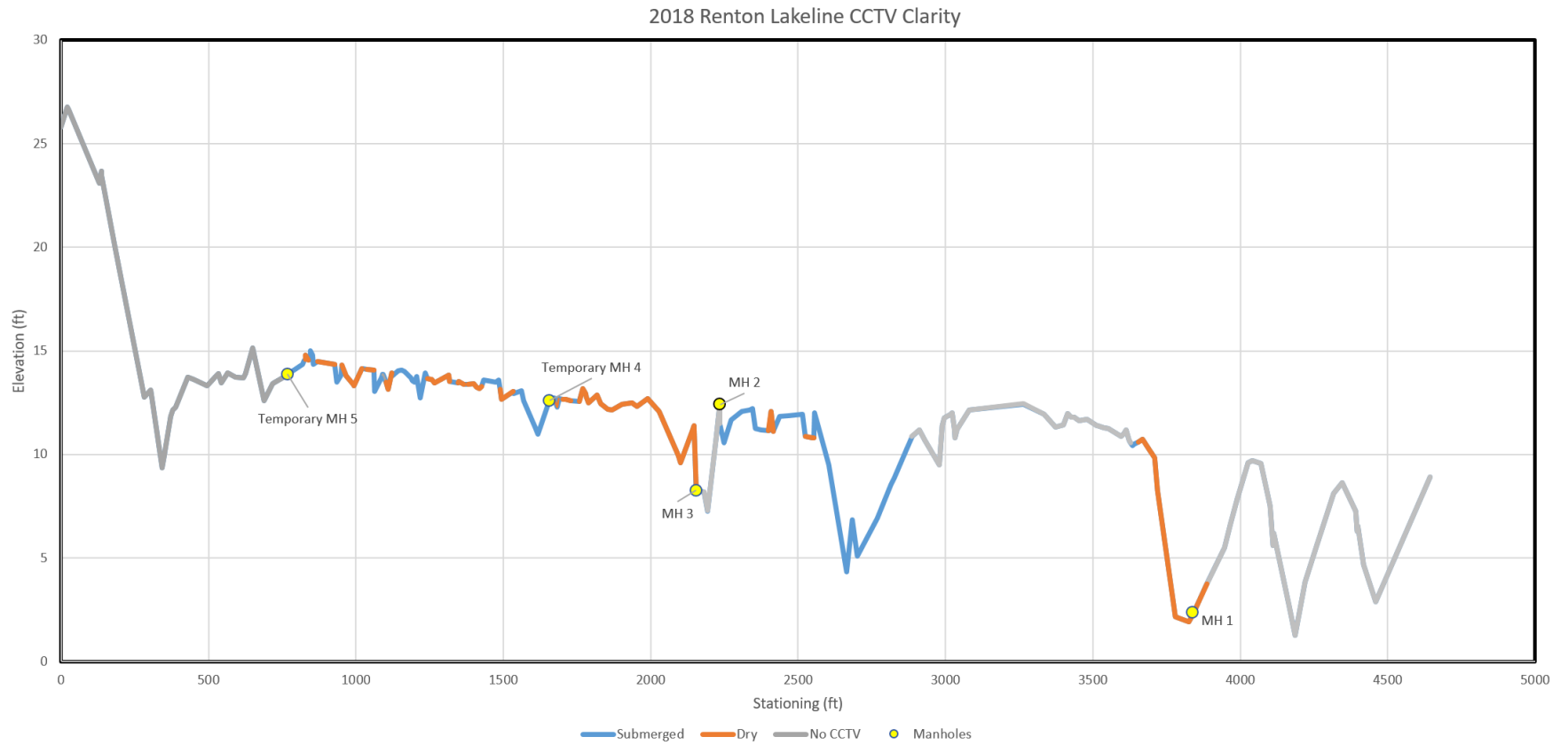


Figure 7.5 Visibility conditions encountered by CCTV

7.4 Evaluation of Partial Blockages

According to City staff's observations after the cleaning in 2018, the cleaning did not substantially affect the Lake Line's hydraulics. City staff made the following observations in late 2018 with the flush station running at approximately 60 gallons per minute (gpm):

- Laterals for residences from 2805 to 2809 Mountain View Avenue North appeared to be pressurized; City staff did not measure levels due to concerns of causing an SSO.
- Surcharging reached within about a foot of the surface at 3001 Mountain View Avenue North.
- Typical water levels were observed at Coleman Point (3013 Mountain View Avenue North).

These observations were consistent with the pre-cleaning Lake Line operations, which indicated that system hydraulics were influenced by one or more remaining partial blockages. Post-cleaning CCTV inspection showed cleaning was effective in sections reached; however, not all sections could be reached. The 2018 cleaning and CCTV inspection substantially narrowed the potential location of partial blockages; therefore, hydraulic analyses were updated to evaluate the severity and location of the partial blockages.

7.4.1 Partial Blockage Severity

To determine the potential severity of the partial blockage, varying degrees of partial blockage were modeled using the hydraulic model developed in Phase 2a to replicate the 2018 field observations of HGL. Three scenarios were considered:

1. Scenario 1, Clean pipe: No deposits or partial blockages.
2. Scenario 2, Deposits but No Significant Partial Blockages: Deposits filling up to one-third of the pipe in the Lake Line's uncleaned sections, but no additional significant partial blockages.
3. Scenario 3, Deposits and One or More Significant Partial Blockages: Deposits filling up to one-third of the pipe and one or more significant partial blockages (filling approximately 80 percent of the pipe) in the Lake Line's uncleaned sections.

The model simulated the HGL produced from potential deposits and partial blockages in the Lake Line conditions for the current Flush Station operations (pumping rate of 60 gpm). As shown in Figure 7.6, the results for the three scenarios were as follows:

- Scenario 1, Clean Pipe: The clean pipe scenario showed that the HGL would not surcharge above the highest point of the pipe, except in early sections, due to pressurization from the flush station. This was inconsistent with City staff's observations of surcharging.
- Scenario 2, Deposits but No Significant Partial Blockages: The model indicated that this scenario would cause surcharging but not as much as what has been observed in the field. This scenario was inconsistent with observed surcharging at 2805 and 3001 Mountain View Avenue North.
- Scenario 3, Deposits and One or More Significant Partial Blockages: This scenario simulated field-observed surcharging at 2805 and 3001 Mountain View Avenue North.

Thus, the hydraulic analysis indicated that at least one significant partial blockage is located in the northern, uncleaned Lake Line section and that lesser deposits have not been fully removed. However, multiple moderate partial blockages could also be creating the same effect.

Based on CCTV inspections, the Lake Line has greater than typical pipe roughness and minor losses from joints. Modeling indicates that these losses and other smaller deposits do not restrict the current low flow rates (60 gpm). However, they may have greater effects in the future if the Lake Line is operated at higher flow rates. As flows increase above 60 gpm, deposits and partial blockages will likely cause a large increase in HGL, which could cause SSOs and home backups.

7.4.2 Location of Partial Blockages

The 2018 activities cleaned both locations where partial blockages were assumed in the 2017 modeling, and post-cleaning CCTV inspection verified that no partial blockages were present at those locations. Therefore, the hydraulic model was updated to explore other possible locations of the partial blockages.

As shown in Figure 7.7, updated modeling assumed partial blockages at two locations in areas that were not cleaned:

- Site A, in the sag near 2805 Mountain View Avenue North:
Moderate debris stopped the CCTV inspection at 2815 Mountain View Avenue North, and a partial blockage could be located anywhere between 2805 and 2815 Mountain View Avenue North, where cleaning could not be verified in 2018. The location at 2805 Mountain View Avenue North was chosen for evaluation given the presence of a relatively large sag that likely has not been cleaned in recent cleanings.
- Site B, upstream of the cleaning lateral at Kennydale Beach Park (3501 Lake Washington Boulevard North):
To replicate the surcharging observed at 3001 Mountain View Avenue and Coleman Point, a partial blockage was simulated upstream at 3501 Lake Washington Boulevard North. The 2018 CCTV inspection showed the pipe between 3001 and 3411 to be free of deposits. The partial blockage could be anywhere in the uncleaned section between 3411 and 3703 Lake Washington Boulevard North. Site B was assumed for the following reasons:
 - CCTV inspection found substantial debris upstream of the LaValley cleaning lateral. Therefore, similar debris could have been deposited upstream of the Kennydale Beach Park cleaning lateral.
 - The site corresponds to the deepest sag in the uncleaned section.

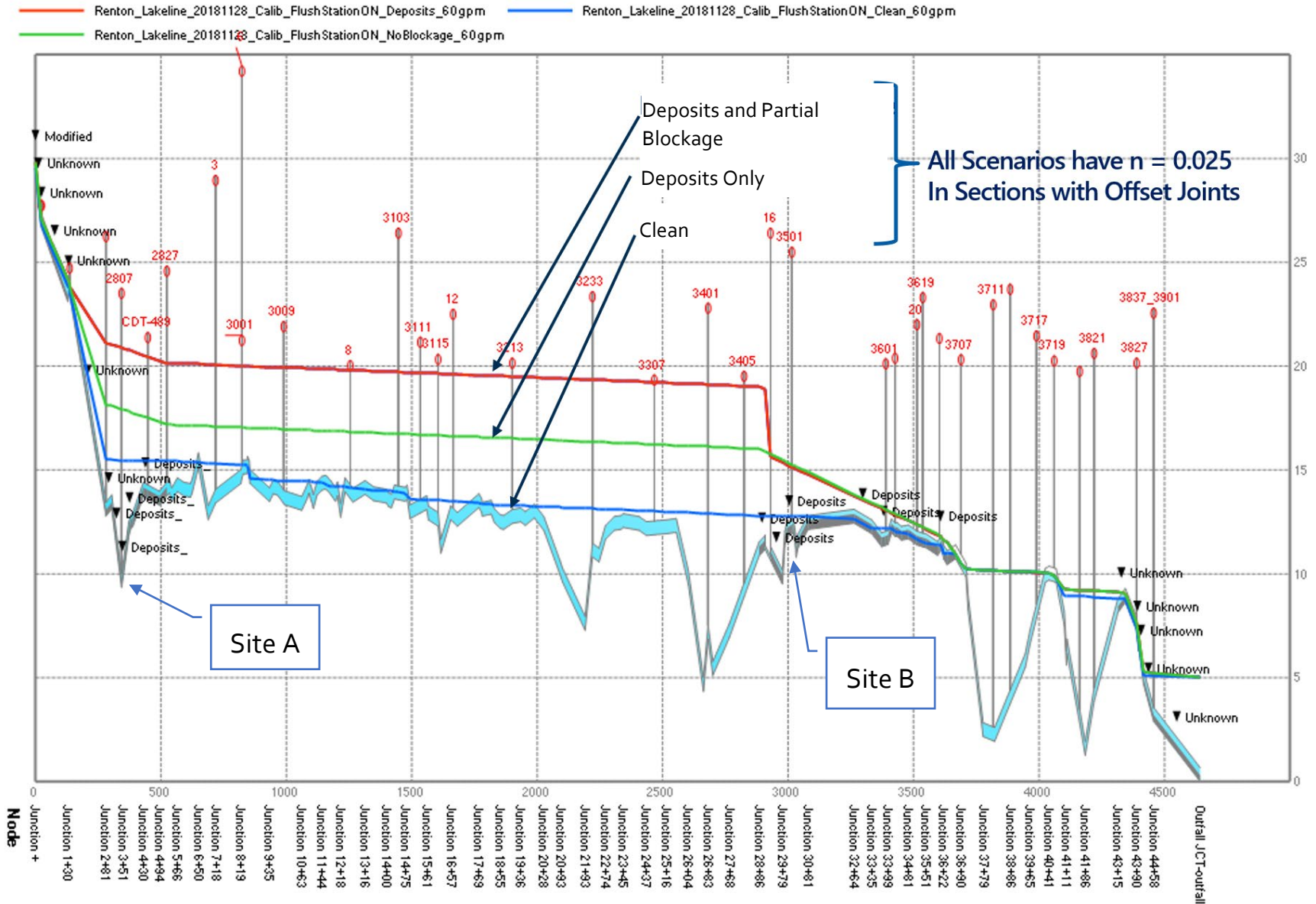


Figure 7.6 Model Results for Three Scenarios

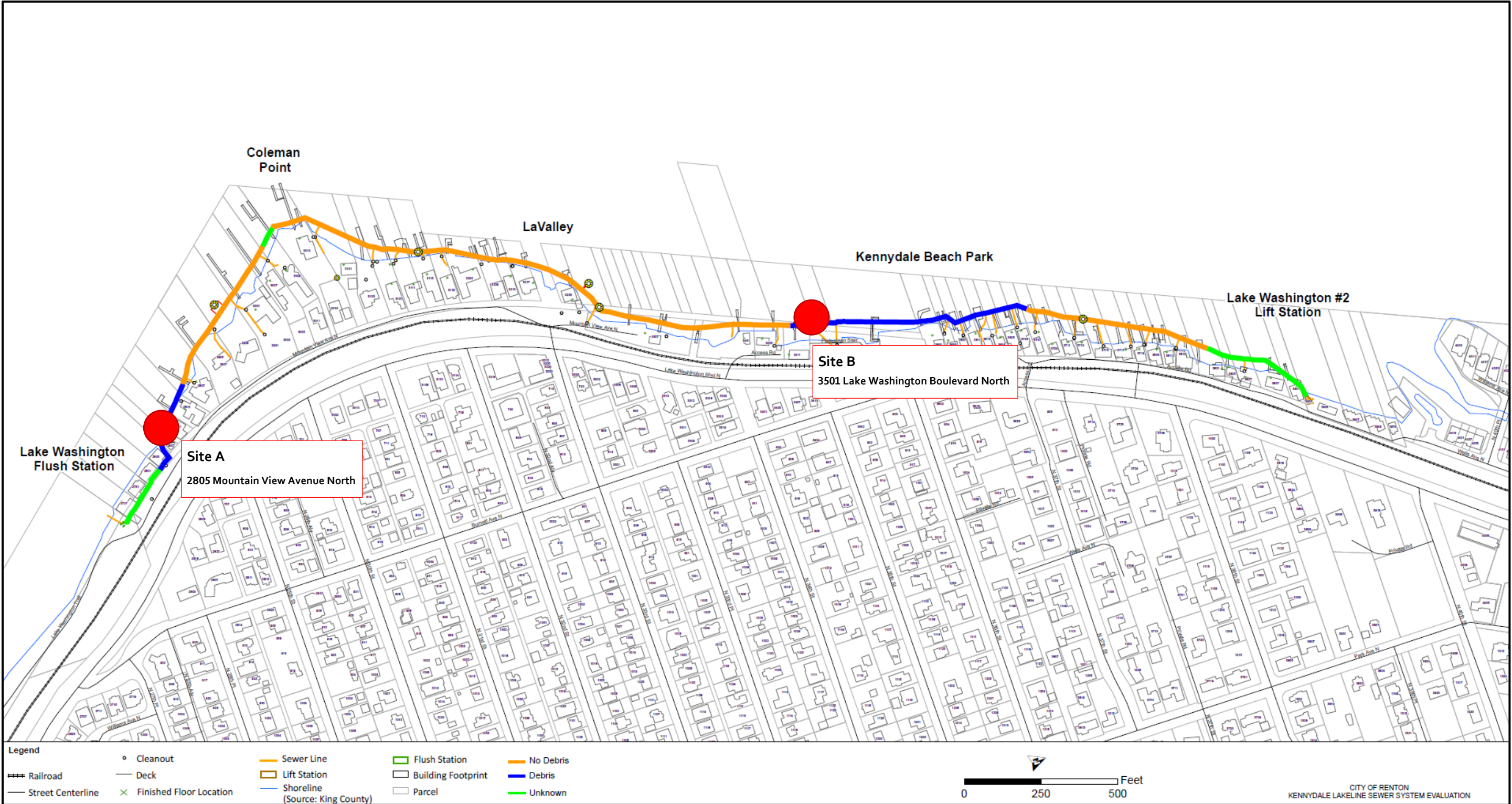


Figure 7.7 Site A and Site B Evaluated with Debris and/or Partial Blockage of Lake Line

The partial blockage modeled at Site A had a relatively minor effect on the model's results. Given the lack of HGL measurements at the location, the model's precision was limited and the presence of a partial blockage could not be determined at this location. However, partial blockage could also not be ruled out; therefore, cleaning is recommended at the location.

Most of the modeled surcharging resulted from Site B's partial blockage. Modeling of a partial blockage there generated results consistent with the limited field data. However, partial blockage locations further downstream could also produce these results. Additional measurements of HGL would be required to confirm sections further downstream are free of partial blockages, as discussed in the next section.

The City is strongly recommended to maintain the current, low-flushing rates in the Lake Line given the likely presence of deposits or a partial blockage. As flows increase above 60 gpm, the deposits and partial blockages can cause a large increase in HGL that could cause SSOs and home backups.

7.4.3 Field Verifying Location the Partial Blockage

Sufficient information is not available for the model to precisely locate partial blockages. As a result, this section presents various methods for field verifying the locations. It is recommended that the City field verify partial blockage locations to the extent possible to support near-term cleaning of uncleaned sections described in Chapter 8.

7.4.3.1 Identifying the Downstream End of Blockages

When the flush station is running, a partial blockage causes surcharging in the pipe. The downstream extent of the blockage can be identified by a drop in the hydraulic grade. Two general options are available to identify the hydraulic grade in the pipe:

- Estimate it using water levels in laterals, which are based on CCTV footage or other direct measurements.
- Install pressure gauges at regular intervals in the Lake Line, which would require the Lake Line to be uncovered.

Note that, in the field, the drop-off in HGL may be less pronounced than in the modeling, depending on the severity and extent of the partial blockages.

7.4.3.2 Identifying the Upstream End of Blockages

The upstream extent of the partial blockage may not be identified by measuring the HGL since the downstream extent of the partial blockage controls the hydraulics. Thus, the City will likely need to conduct CCTV inspections of the Lake Line to determine the upstream extent of the partial blockage. The City can attempt to gain CCTV access to the Lake Line from laterals.

Note: In 2017, the City conducted a CCTV inspection of laterals, showing push cameras typically becoming submerged near the Lake Line. Additionally, operators were generally unable to control the direction of travel in the Lake Line from the lateral, which was largely due to the configuration of the tie-in of the lateral and Lake Line.

As described in Chapter 5, the City is recommended to operate the flush station to improve visibility to the greatest extent possible and to use CCTV inspection technologies that may maintain the camera higher in the pipe. Even with these recommendations, the CCTV inspections may not provide the quality of information needed to identify the upstream end of

the partial blockage. Otherwise, the City will need to construct additional access points into the Lake Line.

Note that caution is strongly encouraged when conducting CCTV inspections of the laterals and Lake Line since access points are limited to help free or retrieve from obstructions.

Chapter 8

NEAR-TERM OPTIONS FOR UNCLEANNED SECTIONS

This chapter reviews options to address sections of the Lake Line not reached in recent cleanings (Site A and Site B), where partial blockages are believed to occur and increase the Lake Line's HGL. Three general approaches are assessed:

- Hydro-jet cleaning at Site A and Site B.
- High-velocity flushing of the entire Lake Line.
- Pipe replacement at identified sections with partial blockages.

The Chapter first discusses the general approaches in Section 8.1 and then details implementation at Sites A and B in Sections 8.2 through 8.4.

8.1 General Description of Methods

8.1.1 Hydro-Jet Cleaning

Hydro-jet cleaning is an industry-standard method for cleaning gravity sewers. Typically, 600 to 700 psi of water pressure is directed through a pipe-cleaning nozzle, first to pull the nozzle and hose into the pipe and then to suspend and pull sediments back to the insertion manhole. A vacuum truck is typically used to supply jetting water and collect jetting water and sediment to remove solids from the system.

Hydro-jetting has several benefits for the Lake Line:

- It generally removes solids and FOG from the pipeline with in-line access, such as a manhole.
- It does not interrupt sewer service.
- Access needed for hydro-jetting also usually provides CCTV Inspection access that can be used to verify the cleaning's effectiveness.

With that being said, hydro-jetting also has some disadvantages:

- It requires using existing and temporary in-water submerged access points, which requires expensive barge-based cleaning.
- At some locations, bends or joints in the pipe provide obstacles for jetting. This is more common in the Lake Line than in a traditional gravity sewer due to the Lake Line's profile and has, in past efforts, limited the length of hydro-jet activities to approximately 200 feet at some locations.
- It can be relatively damaging to pipe liners. There are indications that recent hydro-jetting of the Lake Line has removed loose pipe liner at multiple locations.

Sites A and B have not been hydro-jetted in previous cleanings due to lack of access to the pipe sections.

8.1.2 High-Velocity Flushing

High-velocity flushing is an option for cleaning without in-lake access. Pumping high flows into the Lake Line creates high velocities that are capable of scouring settled solids and other debris.

This approach would clean the entire Lake Line, with high flows being pumped from the flush station and collected at the lift station. The high-velocity flushing would require isolating laterals to prevent SSOs or home backups. Any home backups would likely result in large claims since they'd likely be on the first floor (kitchen, living room, etc.) of the lakefront homes.

Figure 8.1 shows a schematic of the flushing approach. For this approach, the steps are as follows:

- A City hydrant supplies flushing water to the flush station's wet well, and an air gap is provided to prevent the potential for a cross-connection.
- Temporary flush station pumps provide approximately 800 gpm of flushing flows to the Lake Line to reach a 5 feet per second scouring velocity.
- The City isolates laterals using either a gate valve or inflatable plug valve to prevent SSOs or home backups.
- Temporary pumps at the lift station convey the flushing flows to King County through the existing force main.

High-velocity flushing has several benefits for the Lake Line:

- It does not require in-lake work, substantially reducing the effort related to hydro-jetting.
- It is generally less damaging to the pipe lining than hydro-jetting.

However, it also has some disadvantages:

- Pipes and joints could move under high flows and pressure, creating new leaks. Severe pipe movement and deflection could result in causing sewage to discharge into the lake.
- Pipe movement due to higher pressure against bulkheads or dock pylons would pose a risk of damage to the Lake Line and laterals.
- It is generally less effective at removing FOG than hydro-jetting is. FOG may harden on pipe walls and resist removal by flushing.
- Lateral isolation would require constructing new infrastructure in the Lake Line customers' backyards. Furthermore, operators would need to access the laterals during flushing activities.
- Sewer service would be interrupted for 6 to 12 hours; bypass pumping may be required for some customers.
- Sediment, especially larger debris, could become piled at pipe offsets and other pipe obstructions during flushing.
- It doesn't provide access to the Lake Line to confirm the cleaning's effectiveness through CCTV inspection.

8.1.2.1 History of Causing SSOs

In 1986, the City attempted to perform a high-flow, high-velocity flushing of the Lake Line. The higher flows pressurized the Lake Line, requiring the laterals to be sealed to avoid potential SSOs and backups into homes. Ball valves were installed and used during the flushing; however, they did not seat effectively. Thus, during an initial attempt of high-velocity flushing of the line, a significant amount of sewage backed up into the basement of one home, and the process was not tried again.

The City of Bellevue has also attempted a similar high-velocity flushing of a Lake Line and experienced a SSO. The details of the City of Bellevue's flushing are not known; however, it does provide further antidotal evidence of lateral isolation being a key challenge in high velocity flushing of the Lake Line.

8.1.3 Pipe Replacement

Instead of conducting cleaning activities, the City could potentially replace in place the existing pipe with a new clean pipe. This could both address potential partial blockages and replace in poor condition. Replacing a specific segment of piping can be completed using open-cut methods. Past projects have cost-effectively replaced short segments of pipe using only a work boat, saving the costs associated with barges/equipment needed in other cleaning approaches. However, these cost savings are likely only available in certain conditions. Increased cost of pipe replacement is anticipated to be driven by two considerations:

- **Excavation Conditions:** The effort to excavate a pipeline varies widely based on water depth, excavation depth, surrounding sediment (ranging from loose sands/gravels to consolidated clays), and adjacent obstacles (i.e., bulkheads, dock piers, buried debris, etc.). Challenging conditions may result in less efficient excavation or require heavy equipment and staging/material barges.
- **Restoration of Disturbed Areas:** Permit Agencies will likely require all disturbed areas to be restored to the original grade and covered with sediment appropriate for salmonid spawning ("Fish Mix"). Restoration of larger areas may require expensive staging/material barges and potentially barge mounted heavy equipment.

For short segments of pipe in less challenging conditions, contractors may be able to use only a suction dredge from a work boat. Heavy equipment and staging/material barges may be required for more challenging conditions; resulting in much higher costs than using only a work boat. Due to the highly variability conditions in the Lake, longer pipe replacement projects will likely encounter more challenging conditions and require heavy equipment and staging/material barges.

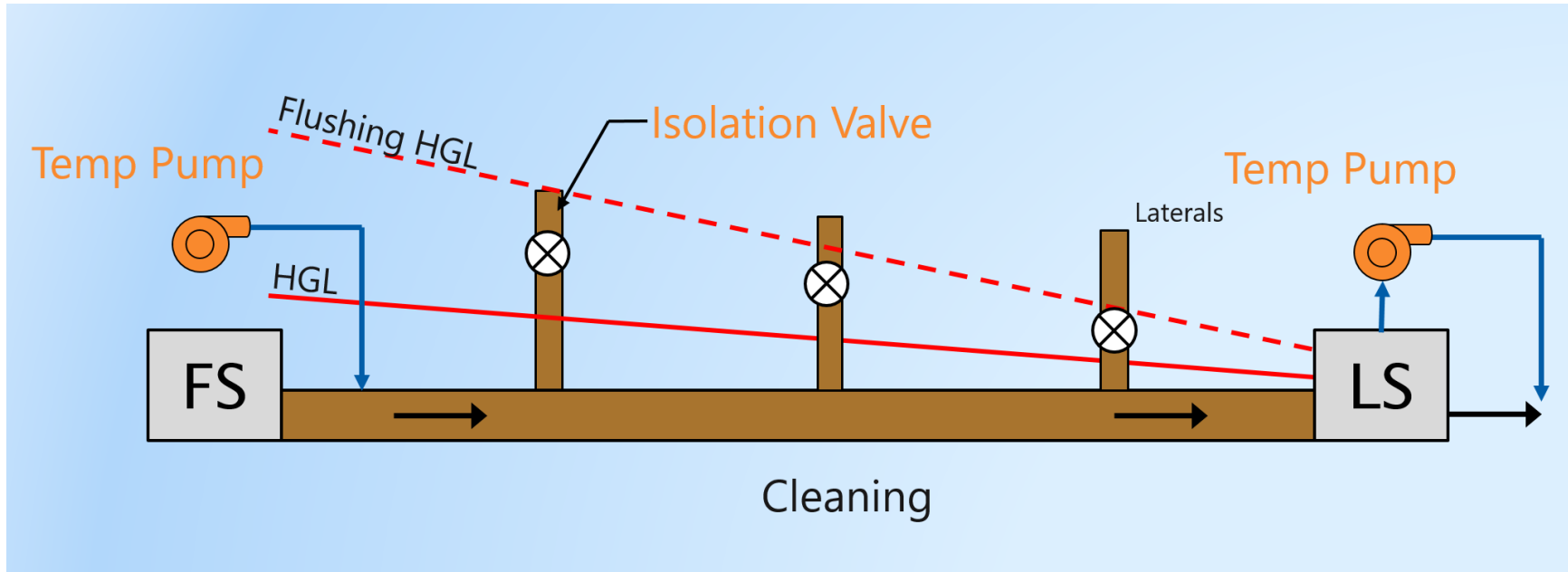


Figure 8.1 Cleaning Schematic for High Velocity Flushing

8.2 Hydro-Jet Cleaning at Individual Sites

8.2.1 Site A

The 2018 activities were unable to clean Site A from 2805 to 2811 Mountain View Avenue North. Reported cleaning lengths indicate that a single pass of the hydro-jet was made through some of this section; however, the effectiveness of this cleaning is unknown.

CCTV inspections were stopped at 2811 Mountain View Avenue North due to moderate sand and pea gravel deposits. Thus, no CCTV inspection information is available for the relatively large sag, which could contain additional deposits including a substantial partial blockage.

According to the City, the laterals at these homes are pressurized. Thus, the City is recommended to attempt a CCTV inspection at this pipe section, followed by cleaning, if required.

8.2.1.1 Access Options

Site A extends from 2805 to 2811 Mountain View Avenue North and, as shown in Figure 8.2, is directly downstream of where the Lake Line turns into the lake. Previous attempts to clean from the flush station were blocked by an obstruction near the lakeward turn. The following sections describe several options to access Site A.

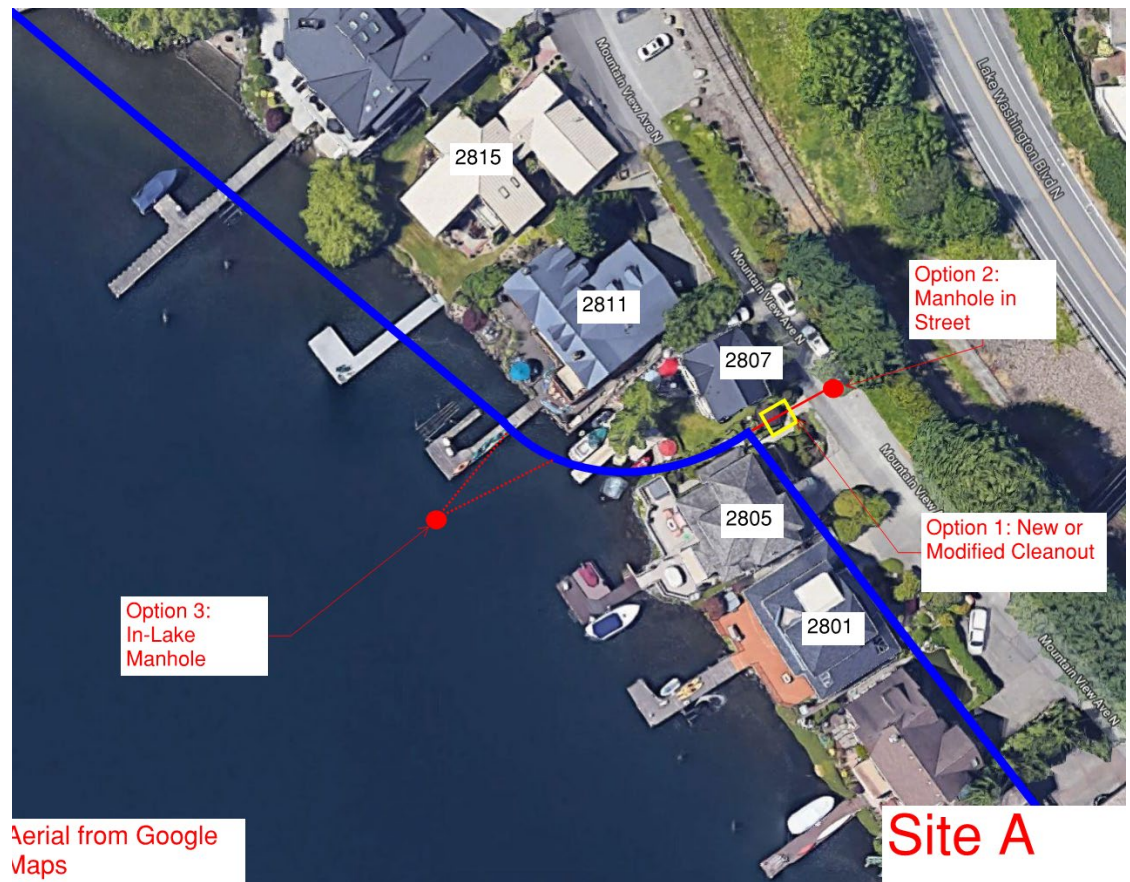


Figure 8.2 Lake Line at Site A

Option 1: New or Modified Cleanout

Installing an access point on land may allow the City to bypass the obstruction that previously limited CCTV inspection and hydro-jetting. According to City staff, two cleanouts on the site could be modified to serve as an access point. If required, a new cleanout could also be installed.

A new cleanout may create a dead end and should be valved off to prevent odor and maintenance concerns. In addition, a new easement may be required for a new cleanout and piping.

According to the profile of the pipe, the section downstream of 2801 Mountain View Avenue North has a relatively deep sag. The sag may make removing solids through hydro-jetting from land less effective. Still, on-land CCTV and cleaning are recommended, given the less relative effort required to create in-lake access.

Note that an approximately 50-foot section of the pipe was not located during survey activities in earlier phases. This pipe section could be under a bulkhead (likely built after the Lake Line was installed) or on land. However, even if found, this section is not anticipated to provide meaningful access due to limited access between houses and the likely restoration costs if accessed.

Option 2: Manhole in Street

To provide a larger access point, the City could install a standard manhole in the street that connects with the Lake Line, on land. Once constructed, this would allow crews typical access to the pipe without entering a customer's property. Similar to the cleanout, the manhole would create a dead end and should be valved off.

A new easement may be required for the proposed manhole and piping. Whether the manhole would be located in a City street or a private drive would require further research. Thus, the City should identify the need for an easement and potential restoration as part of project planning.

Option 3: In-Lake Manhole

Installing a submerged manhole would be difficult in this section of pipe. The Lake Line runs near or under bulkheads, which would likely require shoring or rebuilding a portion of the bulkhead after constructing the submerged manhole. Due to these constraints, attempting on-land access before in-lake access is recommended. Potential in-lake access locations can be identified based on Lake Line location, water depth, and bulkhead location and material.

8.2.1.2 Cost

On-Land

On-land access cleanouts or manholes may be installed by City staff or potentially through a small works contractor. The anticipated costs for construction are provided below.

- Cleanout: can be installed in a one to two-day period with \$4,000 or less in materials.
- Manhole: can be installed for \$12,000 or less, assuming the patching of asphalt.

Additional site restoration costs may be incurred, depending on the location of the cleanout or manhole. City staff could complete CCTV inspection and hydro-jet cleaning from an on-land cleanout or manhole in several hours.

In-Lake

Using in-lake access via a temporary manhole would take substantial effort. Based on the 2018 activities, the in-lake manhole would cost over \$400,000, not including potential substantial costs for excavation shoring, repair of bulkheads and docks, and property restoration. Furthermore, permitting and design may take up to two years with construction limited to the summer work window.

8.2.2 Site B

Site B’s uncleaned section of the Lake Line, believed to have a partial blockage, begins just south of the Kennydale Beach Park at 3411 Lake Washington Boulevard North and extends to 3703 Lake Washington Boulevard North. This section of pipe is a relative high spot in the Lake Line.

While the partial blockage could occur anywhere in this section, the City should focus initial efforts on Kennydale Beach Park (3501 Lake Washington Boulevard North). Prior cleanings may have inadvertently piled debris near the on-land cleaning lateral at this location, causing a partial blockage.

The Lake Line at Kennydale Beach Park is approximately 30 to 50 feet offshore, as shown in Figure 8.3, and is in approximately seven feet of water. The Lake Line crosses through the swim area and likely under the park dock. The site has two laterals: the southern cleaning lateral (no sanitary flow) and the northern lateral (sanitary flows from the park bathroom). The Kennydale Beach Park has vehicle access from a relatively narrow road from the north. Pedestrian access is through a stairway from Lake Washington Boulevard North. Note, the wastewater utility would need to obtain permission from the Parks Department for any construction and future cleanings in this park.



Figure 8.3 Distance from Lake Line to Kennydale Beach Park

Hydro-jet cleaning at Site B would require additional access to the Lake Line, which demands some in-water work. Because high costs were incurred when installing access from barges in 2018, the following alternative access methods were identified:

- Land-based installation of a temporary in-water manhole.
- Permanent in-water manhole on Kennydale Beach Park's dock.
- Permanent in-lake cleanout access.
- In-water, temporary manhole installation.

Using one of these access options, the City or its contractor would hydro-jet the uncleaned section of the Lake Line. Pre- and post-cleaning CCTV could be conducted to evaluate the effectiveness of the cleaning.

8.2.2.1 Access Options

Land-based installation of a temporary in-water manhole

Kennydale Beach Park provides an opportunity to install a temporary in-water manhole and hydro-jet from the equipment staged in the park, which would reduce overall costs for construction and cleaning. 30 to 50 feet from shore, the Lake Line may be reached with a truck-mounted boom crane with a boom length between 60 feet to 100 feet in length. A work boat and divers would be required for in-water construction, whereas a work barge may not be required.

This option presents several challenges:

- The work period would be limited to several weeks in September that meets both permitted work windows and is outside of swim season at the popular park (a likely request from the Parks Department).
- Heavy equipment may damage the access road, park surfaces, and retaining structures. Wide loads may not be able to access the location due to the narrowed access road.
- Additional geotechnical work may be required to support the crane or other heavy equipment.
- In 2018, a barge was used to stabilize the temporary manhole structure. Without the barge, the City would likely need to alter the temporary manhole to provide greater stability (See Chapter 5).

Hydro-jetting and solids removal would need to originate from a vacuum truck on the shore. This is not expected to be a major concern as long as the temporary manhole provides a stable area to conduct hydro-jetting from.

Note that a permanent submerged manhole outside the Park swim area, rather than a temporary manhole, could be installed as part of this alternative to reduce the effort of future cleanings. However, a permanent manhole in the lake would need to address navigation hazards and risks to visitors at the park.

Kennydale Beach Park Dock Manhole

A permanent manhole could be built in or directly adjacent to Kennydale Beach Park's dock. The sealed or locked manhole would extend above the lake level and be incorporated into the dock for safety and park aesthetics. The dock-based manhole would provide direct, land-based access, making future maintenance easier. Furthermore, the City could install level monitoring equipment in the manhole to better understand the Lake Line's operation.

This option would require approval from the Parks Department, and the wastewater utility would likely need to replace at least part of the dock when incorporating the manhole. Note, changes to the dock may require the entire dock to be brought up to current code.

A downside of the dock manhole is that it would be located in a relative high spot in the Lake Line. Cleaning effectiveness from that location may be reduced since the hydro-jet would need to pass through upstream and downstream sags if extended more than several hundred feet in either direction.

Permanent In-lake cleanout access

The City can install an in-line cleanout on a section of the Lake Line to provide access for hydro-jet cleaning from equipment staged in the Park. Figure 8.4 shows a diagram and pictures of a similar cleanout constructed for Mercer Island. The cleanout replaces approximately 20 feet of pipe with a variety of ports that can be accessed using risers to the surface, which can be customized to the City's preferences.

Note that the City chose not to use this type of cleanout for the 2018 cleaning due to concerns that it might cause pipe movement when hydro-jetting. This was a possibility because segments of the Lake Line were unconstrained due to being exposed or in loose soil. Additionally, operators were concerned they wouldn't be able to conduct hydro-jetting through a pipe riser with a relatively small diameter.

In-water Temporary Manhole Installation

In-water temporary manhole installation where both construction and cleaning are completed from barges is not recommended due to cost, unless on-land access or construction is not feasible. This effort would be similar to the 2018 activities described in Report No. 1 (Carollo et al., 2018).

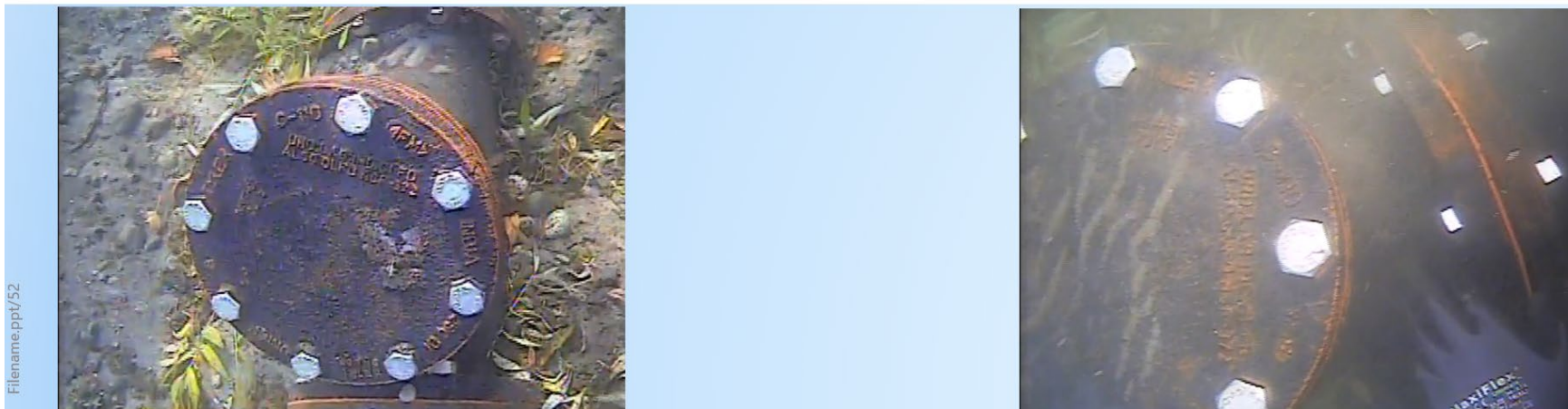
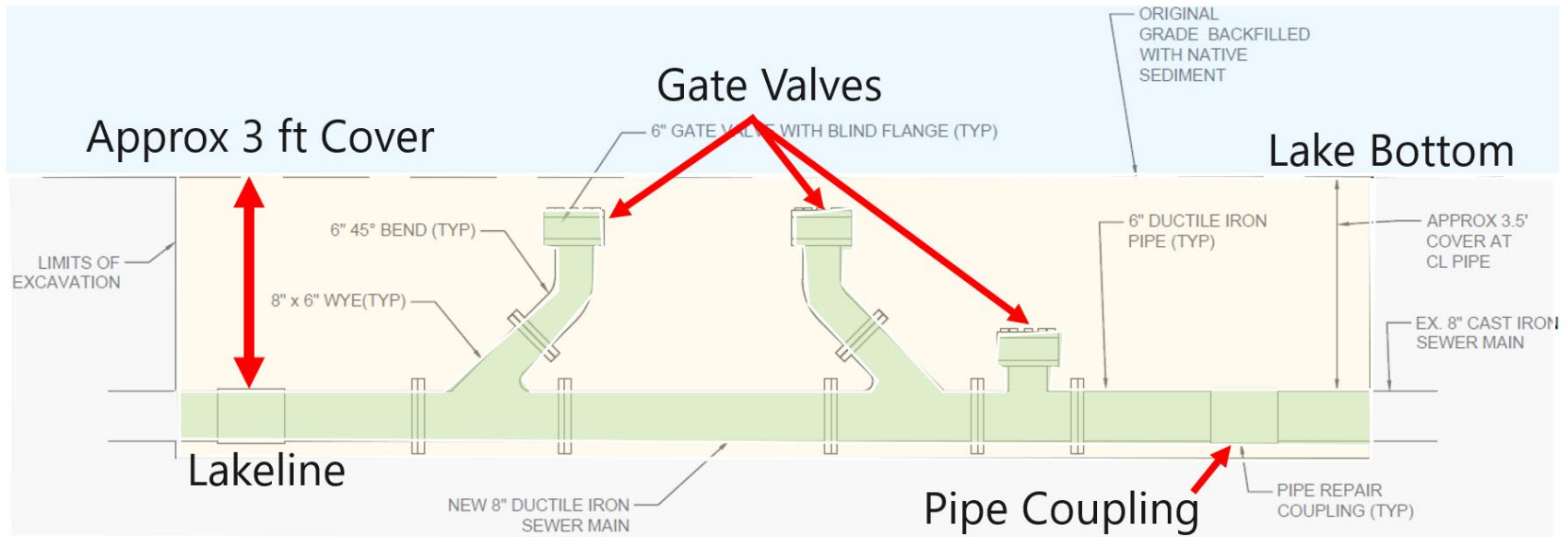


Figure 8.4 In-Lake Cleanout Installed in Mercer Island

8.2.2.2 Cost

Conceptual costs were developed for Site B’s hydro-jetting access options. These costs represent a budgetary placeholder and should be reevaluated during pre-design.

Soft cost estimates were made based on the 2018 cleaning. Depending on the scope and timing of the work, these soft costs may be substantially reduced. As a conceptual cost estimate, a 30 percent design contingency was included.

Land-based installation of a temporary in-water manhole

Table 8.1 presents conceptual costs to set up a temporary manhole and hydro-jet from Kennydale Beach Park.

Table 8.1 Cost for Land-based installation and hydro-jetting of a temporary in-water manhole

Description	Quantity	Unit	Unit Price	Total Cost
Contractor Mobilization/Demobilization	1	LS	\$20,000	\$20,000
Install Temporary Manholes	1	Manhole	\$130,000	\$130,000
Contractor Cleaning Effort	1	LS	\$50,000	\$50,000
Bulkhead Improvements	25	LF	\$1,000	\$25,000
Park Restoration	1	LS	\$20,000	\$20,000
Construction Subtotal				\$245,000
Contingency			30%	\$73,500
Construction with Contingency Subtotal				\$318,500
Sales Tax			10%	\$31,850
Construction Contract Amount (including Tax)				\$350,350
Permitting/Public Outreach			15%	\$47,775
Design/Bidding			20%	\$63,700
Construction Management			10%	\$31,850
City PM/Admin			10%	\$31,850
Soft Cost				\$175,175
Total Cost				\$525,525

Note:

(1) LF – linear foot; LS – lump sum.

Permanent in-water manhole on Kennydale Beach Park’s dock.

Table 8.2 presents conceptual costs to construct a dock manhole and hydro-jet from Kennydale Beach Park.

Table 8.2 Cost for Installation and hydro-jetting from a Permanent in-water manhole on Kennydale Beach Park's dock

Description	Quantity	Unit	Unit Price	Total Cost
Contractor Mobilization/Demobilization	1	Barge	\$20,000	\$20,000
Install Manhole	1	Manhole	\$200,000	\$200,000
Bulkhead Improvements	25	LF	\$1,000	\$25,000
Park Restoration	1	LS	\$20,000	\$20,000
Construction Subtotal				\$265,000
Contingency			30%	\$79,500
Construction with Contingency Subtotal				\$344,500
Sales Tax			10%	\$34,450
Construction Contract Amount (including Tax)				\$378,950
Permitting/Public Outreach			15%	\$56,843
Design/Bidding			20%	\$75,790
Construction Management			10%	\$37,895
City PM/Admin			10%	\$37,895
Soft Cost				\$208,423
Total Cost				\$587,373

Similar to the land-based construction, this option would reduce costs associated with mobilization and demobilization of construction barges. Construction of the dock manhole was conceptually budgeted at \$200,000, which includes \$130,000 for the manhole installation, \$20,000 for to-be-determined custom manhole features (exterior coverings, etc.), and \$50,000 to replace the existing dock.

The area of Kennydale Beach Park near the dock is a sand beach with a concrete bulkhead and a picnic shelter. The bulkhead improvements and park restoration were assumed to be required to tie in the potential new dock.

The costs were derived assuming that the City would conduct hydro-jet cleaning since the work effort would be similar to what has already been conducted at the Kennydale Beach Park lateral. Therefore, no costs for cleaning were included in this option.

Permanent In-lake cleanout access

Installing a cleanout would have significantly lower construction costs than installing a manhole. The Mercer Island cleanout had a construction cost of \$75,000 using only divers and a workboat. However, since the City did not prefer this option, costs were not estimated in detail.

In-Water Temporary Manhole Installation

Based on the 2018 work, the in-water installation of a single temporary manhole and cleaning cost, presented in Table 8.3, would be approximately 40 percent more expensive than on-land options.

Table 8.3 Cost for Installation and hydro-jetting from In-Water Temporary Manhole

Description	Quantity	Unit	Unit Price	Total Cost
Contractor Mobilization/Demobilization	2	Barges	\$90,000	\$180,000
Install Temporary Manhole	1	Manhole	\$130,000	\$130,000
Contractor Cleaning Effort	1	Manhole	\$100,000	\$100,000
Construction Subtotal				\$410,000
Contingency			30%	\$123,000
Construction with Contingency Subtotal				\$533,000
Sales Tax			10%	\$53,300
Construction Contract Amount (including Tax)				\$586,300
Permitting/Public Outreach			15%	\$87,945
Design/Bidding			20%	\$117,260
Construction Management			10%	\$58,630
City PM/Admin			10%	\$58,630
Soft Cost				\$322,465
Total Cost				\$908,765

8.3 High-Velocity Flushing of Entire Lake Line

This section evaluates the option to conduct a high-velocity flush of the entire Lake Line to scour settled solids and other debris. The advantages and disadvantages of this potential approach and conceptual costs are outline in Section 8.1.

8.3.1 Potential to Damage the Lake Line

According to construction specifications, the Lake Line should have been pressure-tested at construction; however, no record of such a test exists. Whether the laterals were pressure-tested is also unclear.

High pressures could cause pipes and joints to move thus creating additional leaks. Movement against bulkheads, especially for laterals, or dock pylons poses a greater risk of damage to the pipeline. Severe pipe movement and deflection could even result in sewage being discharged into the lake. Given the age and lack of information on pressure testing, determining the maximum pressure that can be used without causing damage is not possible.

Furthermore, the extent of issues that could result from pressurization is unknown. Overall, pressurizing the pipe likely would reduce the Lake Line’s remaining useful life.

8.3.2 Flushing Velocity

Given the representative solids collected during the 2018 cleaning, achieving a flow velocity between 5 and 7 feet per second is recommended when flushing. The collected solids were sent to a laboratory for sieve testing, which revealed sands and pea gravel.

To move these sizes of materials, typically, flushing velocities between 5 and 7 feet per second are required. To achieve 5 feet per second, the 8-inch Lake Line would require flushing flows of approximately 800 gpm. While this flow rate is recommended, the flow rates may not be able to be achieved

Standard practice for high-velocity flushing of potable water systems is to flush for a duration equivalent to three to five pipe volumes, while no standard practice exists for wastewater. Assuming five pipe volumes and 800 gpm, high-velocity flushing pumping would be required for

80 minutes. However, lateral isolation will likely be needed for at least three hours to allow time to isolate the system and the Lake Line surcharging to subside after the flushing.

8.3.3 Temporary Pumping at Lift Station and Flush Station

The existing lift station and flush station are unable to pump the 800 gpm needed to flush the Lake Line. Instead of upgrading the capacity of the stations, the City is recommended to rent temporary pumps. Temporary diesel pumps for non-potable water, such as the Godwin NC150S Dri-Prime Pump or comparable, are widely available and typically self-contained on a trailer or skid mount. Initial calculations show the existing force main can convey the flushing flows. Additionally, if necessary, temporary piping can be extended to the City's gravity system on the east side of Lake Washington Boulevard North.

The temporary pumps would need to be field-fitted to the flush and lift stations, as shown in Figure 8.5 and Figure 8.6. The flush station intake from the lake would need to be blocked to keep chlorinated water from discharging into the lake.

The City plans to upgrade the flush station and lift station in the coming years. For those projects, installing flushing ports is recommended to provide a dedicated connection for temporary pumps. These dedicated ports would reduce the time required for installation and the risk of poor field fittings.

8.3.4 Alternative Flushing Location

To reduce the logistical challenges of isolating the entire Lake Line for high-velocity flushing, the City could begin or end the flush at In-Lake Manhole #2, which is less than 20 feet offshore of 3411 Lake Washington Boulevard North in shallow water. Flushing at this location would split the system, where approximately 40 percent of the Lake Line (19 laterals versus 33 for the entire Lake Line) are upstream of the manhole (toward the Flush Station) and 60 percent are downstream (toward the Lift Station). A similar approach as flushing would be used with flows traveling from the Flush Station to the Manhole #2 or from Manhole #2 to the Lift Station. However, it would also present the following logistical challenges:

- Caisson risers or other means would be needed to access the manhole.
- Field fitting to create an isolating pressure seal on the inlet or outlet pipe may require alternations to the manhole.
- A small baker tank would likely be needed to provide an air gap between the hydrant and temporary pump.
- No publicly owned large staging area exists directly adjacent to the manhole. However, there is one near the right of way on Mountain View Avenue North, and there is publicly owned land on the County rail and trail directly uphill of the site.

These logistical challenges should be weighed against the benefits of the shorter flushing length. Thus, this alternative flushing location was not costed.

Finally, if the manhole is used to pump out flushing flows, they may be disposed of in the City-owned gravity sewer across Lake Washington Boulevard North. However, an additional investigation is needed to confirm the receiving sewer capacity. This would require placing the temporary pump and temporary piping across Lake Washington Boulevard North during the flushing activities.

8.3.5 Lateral Isolation

High-velocity flushing requires isolating customer laterals to prevent SSOs or home backups. The existing plug valves were not considered a feasible option due to their age and the failure of the 1986 high-velocity flushing activity.

Removing the existing valves and cleanouts would be a challenge since they have been encased in rebar and concrete. Additionally, homeowners have covered in some cases some cleanouts or valves with decking and other obstacles, which would require substantial costs to restore.

For these reasons, any lateral isolation effort is expected to avoid or minimize removal of the existing valves. Other options for lateral isolation are described below.

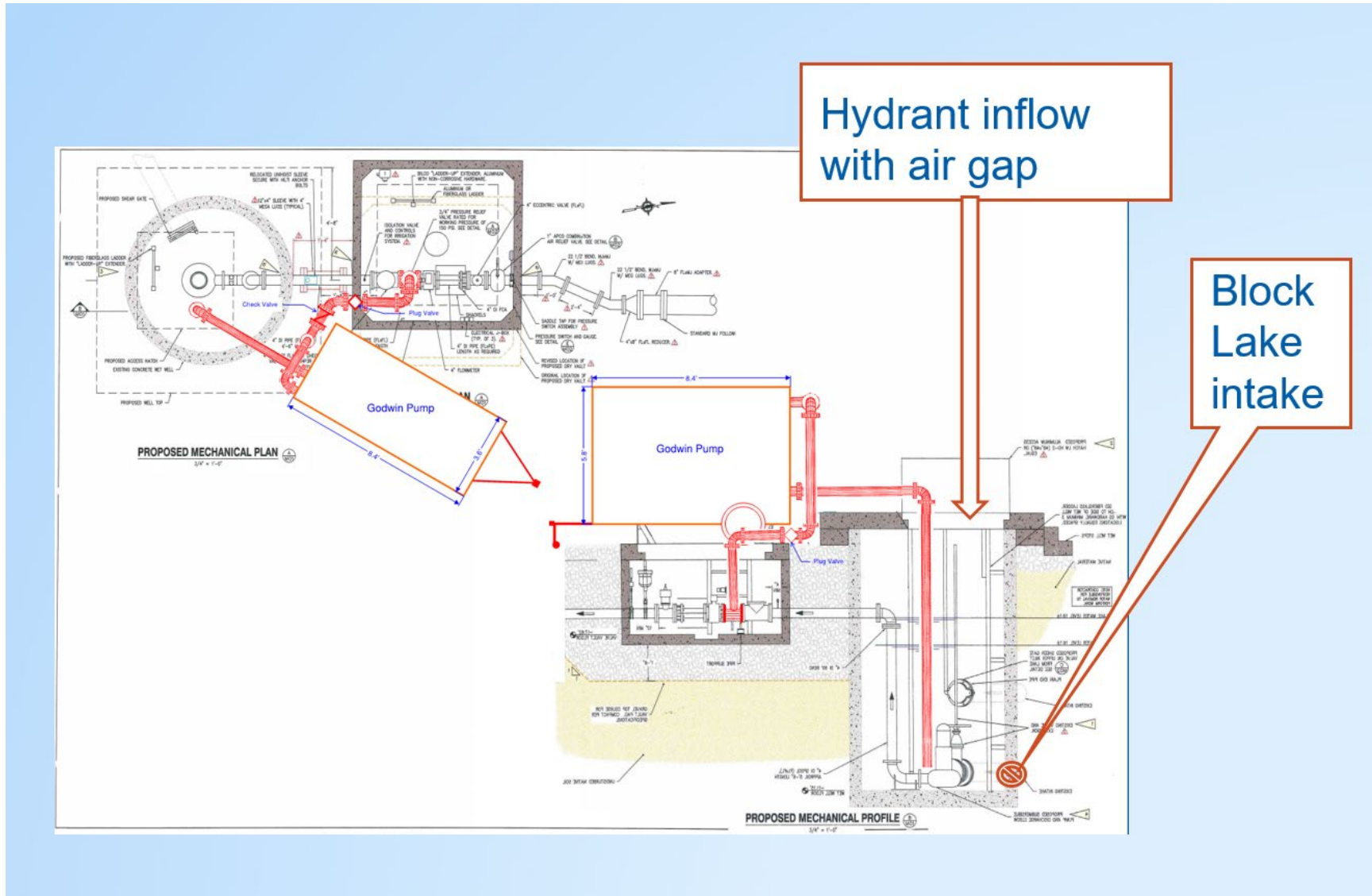


Figure 8.5 Flush Station with Temporary Pump Configuration for High-Velocity Flushing

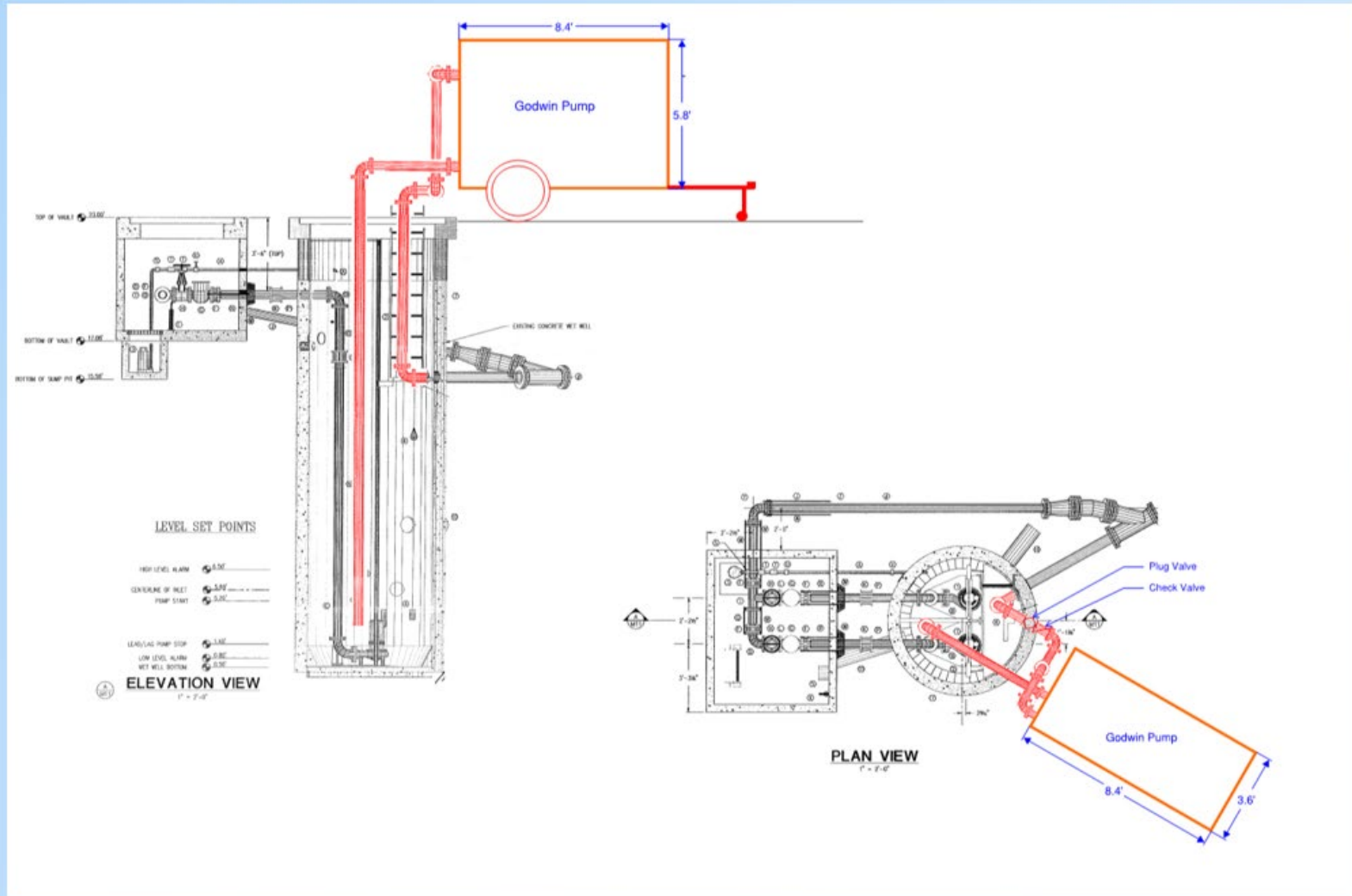


Figure 8.6 Lift Station with Temporary Pump Configuration to Support High-Velocity Flushing

8.3.5.1 Permanent Gate Valves

The City could install gate valves to reliably isolate the laterals. Gate valves would require excavation for installation of the valve vault, and vegetation restoration. Once installed, valves would also need to be periodically exercised to keep them in good working order for future flushing events. Since homeowners historically have buried or covered existing valves and cleanouts, this option's maintenance may be a challenge. As a result, City staff does not prefer this option.

8.3.5.2 Temporary Inflatable Plugs

Inflatable plugs could isolate laterals without a permanent valve at a cleanout in the lateral. A major advantage of this approach is that the cleanout could be sealed and potentially buried following the flushing effort. No ongoing efforts would be required between flushings, such as exercising valves. Additionally, the City would not need to alter or remove existing valves.

However, if the seal is ineffective, then SSOs and home backups could occur. Backup claims could be much larger than flushing costs since they would likely be on the first floor (kitchen, living room, etc.) of lakefront homes.

Concerns about backups could be somewhat mitigated with the following approaches:

- Replace a segment of pipe on each side of the cleanout with a new smooth plastic pipe to facilitate a tight seal. The roughness of the existing pipes may make a tight seal challenging.
- Install two temporary plugs per cleanout to provide redundant seals.
- Visually observe the seal at the cleanout during flushing and make corrections or use vacuum trucks to limit the volume of SSO or backup at a faulty seal.

When using inflatable plugs, the time required to install the plugs must be considered. At least eight workers would be needed to install and remove temporary plugs to flush the Lake Line in an eight-hour timeframe. This requires 33 total sites, a two to four-hour flush time, and temporary plug installation or removal at 20 minutes per lateral. The installation and removal time takes into account that operators would not be able to walk with multiple plugs from lateral to lateral due to weight of the temporary plugs and the required pump weigh (approximately 30 pounds).

Per discussions with the City, inflatable plugs were preferred and thus used to cost this alternative.

8.3.6 Lake Line Pressures during Flushing

Lake Line operation during flushing was evaluated using the hydraulic model to show likely pressures with a clean Lake Line (no partial blockages). At the desired 800 gpm flushing flows, pipe roughness and minor losses have a large effect.

According to initial pump sizing calculations, pressures between 60 psi and 80 psi at the flush station would be required to achieve the flushing rates. At 60 psi, flows between 600 gpm and 800 gpm may be achieved, depending on the headloss in the Lake Line. This range reflects the uncertainty in the current hydraulic capacity of the Lake Line, which has not been operated at these flow rates in decades. Lower flow rates and corresponding velocities may limit the scour and transport of larger materials.

The hydraulic model modeled a conservative amount of loss resulting in a 600-gpm flushing flow (which would achieve a velocity of only about 3.5 feet per second) with 60 psi at the flush station. The pressures shown for 600 gpm are considered applicable up to 800 gpm if the actual pipe has less roughness and minor losses than modeled.

According to the analysis, the vast majority of the Lake Line would surcharge and require isolating laterals against high pressures. Pipe pressures would decrease from 60 psi to 20 psi throughout the first approximately 2,600 of the Lake Line, as shown in Figure 8.7.

8.3.7 Risk of Unsuccessful High-Velocity Flushing in a Partially Blocked Lake Line

According to the hydraulic model, partial blockages significantly increase HGL as flows increase above the existing flushing rate of 60 gpm without increased pump discharge pressure. Theoretically, a partial blockage reduces the effective cross-sectional area in the pipe, achieving scouring velocities at lower flow rates than the clean pipe.

As the partial blockage is gradually reduced, flows can be increased to account for the increased pipe capacity. However, this may not occur in practice if the partial blockage is made from difficult-to-scour materials, such as FOG, partially cemented sediment, heavy debris. In this case, the City would not be able to increase flows, and the high-velocity flushing activity may fail to achieve its goals.

With a partial blockage, flows must be ramped up slowly to reduce the chance of transitory effects that could create high pressures. Installing pressure gauges on laterals throughout the Lake Line is recommended to monitor pipe pressures and ceasing activities when pressures increase unacceptably.

The temporary pump could be controlled according to downstream pressures so that pressures do not exceed the operating range deemed acceptable to the City (assuming no transitory effects). However, with a partial blockage, operations will be relatively hard to control initially as the reduction of the partial blockages impacts pipe capacities and pressures (creates a moving target).

High pressures, rather than decreasing as shown in Figure 8.7, will likely extend from the location of the partial blockage to the flush station until the partial blockage is cleared. This would increase the risk of pipe damage and movement versus a clean-pipe condition.

8.3.8 Debris in Manholes

The existing submerged manholes in the Lake Line would likely collect debris during flushing since velocities would decrease in the manhole chamber. At the proposed flow rates, water from the manhole inlet would likely jet through the manhole channel and, in theory, keep the channel free of debris.

Some flow will exit the channel into the manhole chamber and deposit any entrained solids in the manhole. These deposits may create odor issues as they decay. However, the amount of deposition cannot be estimated without more extensive analysis. Computational fluid dynamic modeling can be conducted as part of pre-cleaning efforts to estimate deposition, or the City may take a "wait and see" approach.

8.3.9 Cost

Table 8.4 shows the estimated cost of flushing. This conceptual estimate represents a budgetary placeholder to be reevaluated in pre-design. Soft costs are estimated based on the 2018 cleaning. Because the scope of private property restoration is uncertain, a 50-percent design contingency was included.

For this estimate, a contractor was assumed to conduct the flushing effort. However, City staff could lead and execute the Lake Line flushing given sufficient staff availability.

The City recommended a budgetary placeholder of \$200,000 for restoration, which is approximately 60 percent of the conceptual construction costs. The City may consider a performance-based specification or alternative project delivery mechanisms (design/build, construction manager at-risk, etc.) that may limit design costs associated with the restoration.

Table 8.4 Cost for High-Velocity Flushing

Description	Quantity	Unit	Unit Price	Total Cost
Lateral Tee Installation	33	Lateral	\$2,000	\$66,000
Temporary Plugs	33	Lateral	\$1,200	\$39,600
Temporary Pumps	1	LS	\$10,000	\$10,000
Installation of Pumps and Plugs	1	LS	\$20,000	\$20,000
Restoration	1	LS	\$200,000	\$200,000
Construction Subtotal				\$335,600
Contingency			50%	\$167,800
Construction with Contingency Subtotal				\$503,400
Sales Tax			10%	\$50,340
Construction Contract Amount (including Tax)				\$553,740
Permitting/Public Outreach			15%	\$83,061
Design/Bidding			20%	\$110,748
Construction Management			10%	\$55,374
City PM/Admin			10%	\$55,374
Soft Cost				\$304,557
Total Cost				\$858,297

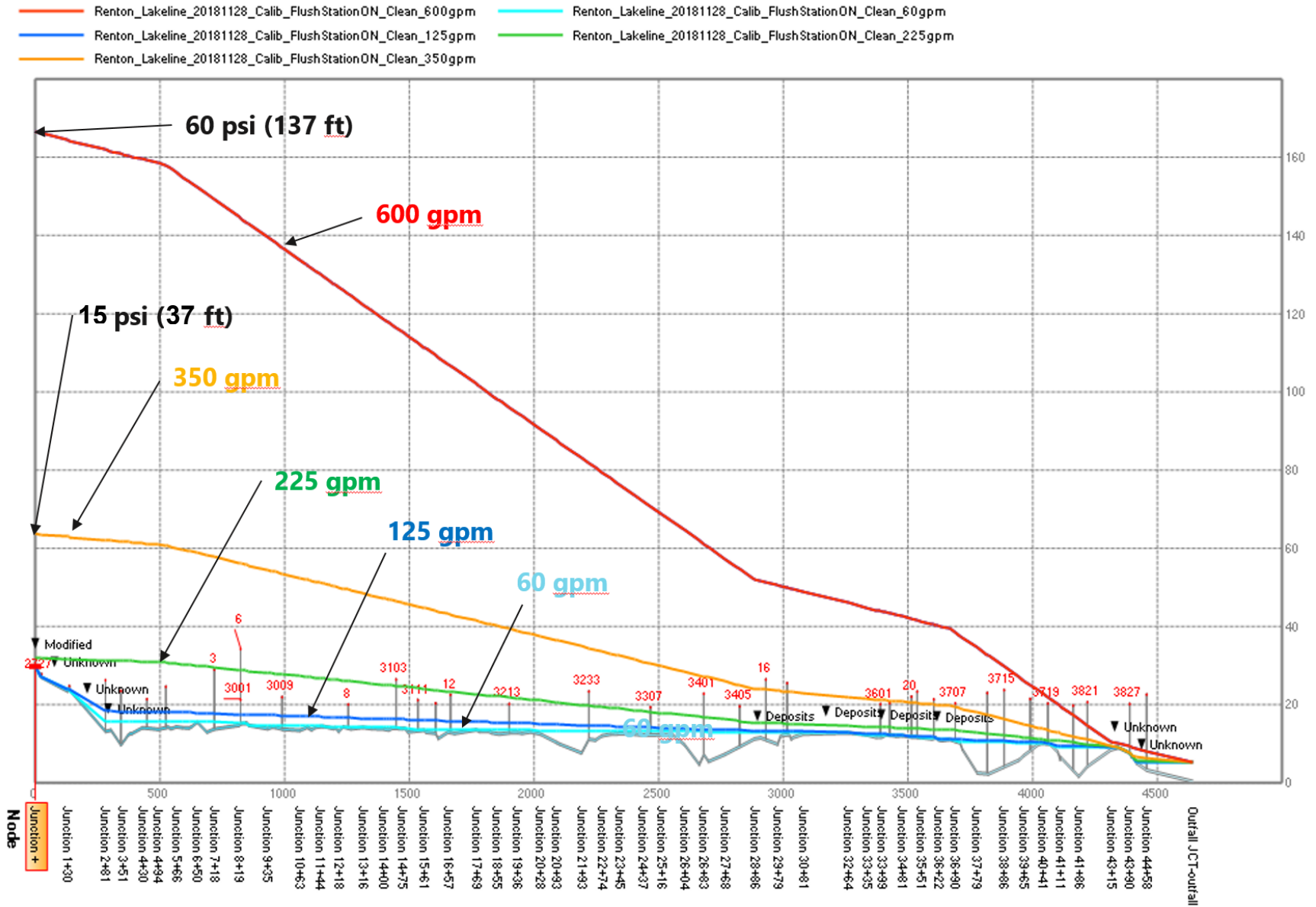


Figure 8.7 Pressures from Lake Line Flushing

8.4 Pipe Replacement for Identified Sections with Partial Blockages

According to the condition assessment, widespread, minor pipe failures (leaks) may occur in the Lake Line in 20 to 30 years. To provide a segment of clean Lake Line, the City could begin replacing short segments of the Lake Line rather than cleaning them. This alternative is particularly appealing if the City can identify a specific location for the partial blockage.

If the pipe is in poor condition, the new pipe would also address those condition issues.

8.4.1 Cost

Without knowing the location of partial blockage, the City may need to replace longer lengths of the Lake Line, which is anticipated to be challenging and potentially costly. Thus, given the uncertainty in scope, no costs were calculated for this option. In general, the estimated construction costs to replace Lake Line segments in-place were \$1,200 per LF. Replacing longer sections of Lake Line may provide some economies of scale, especially for soft costs (design, permitting, etc.).

Several challenges could have major effects on project costs:

- Permitting and design are anticipated to take up to two years, since permits may be required for geotechnical investigations during design and for construction.
- The effort required to excavate the Lake Line is highly variable, depending on the lake's sediment material and water depth. This makes estimating costs difficult for small pipe segments.
- Permit conditions and City standards may require the new pipe to be buried (2 to 3 feet). Where the pipe is exposed, this may add substantial excavation to the Project.
- The existing pipe exceeds modern standards for pipe deflections and depth of bury. The design would need to mitigate these issues and may require different pipe materials (i.e., ductile iron, PVC, high-density polyethylene [HDPE], etc.).
- The area north of Kenneydale Beach Park has closely spaced docks, likely limiting the equipment that can be used to replace the Lake Line in this area.

8.5 Cleaning Analysis Conclusion

Future cleaning options for Sites A and B of the Lake Line are provided below.

8.5.1 Site A Cleaning Analysis Conclusions

Site A is focused at 2805 Mountain View Avenue North and may extend to 2811 Mountain View Avenue North. This section is directly downstream of where the Lake Line turns into the lake. Previous attempts to clean from the flush station have been blocked by an obstruction near the lakeward turn.

Based on the analysis of options, the City is recommended to attempt a CCTV inspection of this pipe section to confirm the presence of debris or partial blockage, followed by cleaning, if required. The City is also recommended to first attempt land access of the Lake Line using a new or modified cleanout at 2811 Mountain View Avenue North or a new manhole in the street due to the anticipated difficulty of creating in-lake access.

A new easement may be required for these access points. If required, cleaning may be conducted using hydro-jetting from the land access point or system-wide, high-velocity flushing. In-lake access for hydro-jetting or replacement of pipe segments is anticipated to be difficult in this section and should be avoided if possible.

8.5.2 Site B Cleaning Analysis Conclusions

Site B is located at Kennydale Beach Park near 3411 Lake Washington Boulevard North where prior cleanings may have inadvertently piled debris near the on-land cleaning lateral, thus causing a partial blockage. However, a partial blockage could occur anywhere between Kennydale Beach Park and 3703 Lake Washington Boulevard North.

The Lake Line is approximately 30 to 50 feet offshore and is in approximately seven feet of water at the Kennydale Beach Park. As a result, some in-lake work effort will be required to access the Lake Line to perform hydro-jetting or pipe replacement. Three potential cleaning methods are provided below.

8.5.2.1 Hydro-jetting

Hydro-jet cleaning can be conducted through in-lake access to improve solids removal. The report identified three approaches to establishing access with construction staged from land or entirely in-water using barges, similar to the 2018 work effort:

- Kennydale Beach Park dock permanent manhole: Conceptual total cost of \$587,373.
- Land-based installation of a temporary in-water manhole: Conceptual total cost of \$525,525.
- In-water temporary manhole installation: Conceptual total cost of \$908,765.

A permanent manhole could be built into Kennydale Beach Park's dock or directly adjacent to the dock. If approved by the Parks Department, the manhole would provide direct land-based access for cleaning and other long-term O&M for a capital cost that is only slightly greater than that of a temporary manhole. Any manhole would need to be sealed and locked and address safety concerns and park aesthetics. Based on these O&M benefits, this option is expected to be explored further and is a viable alternative to temporary manhole installation options.

Installing the temporary in-water manhole by land or in-water will both equally clean and restore pipe. No major permanent improvements will be made to the Lake Line. Due to the substantially less total costs, the City is anticipated to first consider land-based construction before executing the in-water alternative.

Note that the conceptual total costs include those for construction, a construction contingency of 30 percent, sales tax, permitting and public outreach, design and bidding support, construction management, and the City's project management and administration.

8.5.2.2 High-velocity Flushing

As previously discussed, pumping high flows into the Lake Line will create high velocities capable of scouring settled solids and other debris. Temporary pumps will provide up to 800 gpm of flushing flows to the Lake Line and pump them to King County via the existing force main.

The main benefit of high-velocity flushing is that it can clean the entire line without in-lake access. However, this option has major challenges and risks that should also be considered:

- The high flow rate will increase pressure to approximately ten times the typical discharge pressure, requiring laterals to be isolated to prevent SSOs or home backups. Home backups, as mentioned before, would likely result in large claims.
- High pressures associated with flushing can cause pipe movement that, if severe, could cause sewage to be emitted into the lake. The extent of issues is impossible to know; however, pressurizing the pipe will likely reduce the Lake Line's RUL.
- Without prior hydro-jet cleaning or pipe replacement of suspected partial blockages, the flushing activity may not achieve the target velocity within the acceptable pressure ranges. Furthermore, partial blockages will likely make the flushing activities more difficult to control, causing rapid increases in pressure.

The anticipated conceptual total costs for high-velocity flushing are \$858,297, which may be higher than the costs for hydro-jetting Site A and B. Property restoration accounts for approximately 60 percent of the conceptual construction costs.

The City may consider a performance-based specification or alternative project delivery mechanisms (design and build, construction manager at-risk, etc.) that may limit the design and construction costs associated with the restoration.

8.5.2.3 Pipe Replacement

According to the condition assessment from earlier phases, the Lake Line and lateral near Kennydale Beach Park had a relatively low RUL between 10 and 30 years. Therefore, rather than cleaning the Lake Line, the City could replace-in-place the Lake Line to address condition issues and provide a segment of clean Lake Line.

This alternative is particularly appealing if the City can identify a specific location for the partial blockage based on future fieldwork. Without knowing the location of the partial blockage, the City may need to replace longer lengths of the Lake Line, which is anticipated to be challenging and potentially costly.

Given this uncertainty in scope, no costs were calculated for this option. In general, construction costs to replace the Lake Line segment in-place are anticipated to be approximately \$1,200 per LF. Replacing longer segments of Lake Line may provide some economies of scale, especially for soft costs (design, permitting, etc.).

Chapter 9

PHASE 3 LAKE LINE REPLACEMENT ALTERNATIVES

This section documents Phase 3 of the Lake Line Sewer Evaluation. The following Lake Line replacement alternatives were investigated to give the City enough information to conduct long-term planning for the pipeline replacement, including securing easements and financial resources:

1. Gravity sewer in lake.
2. Gravity sewer on land.
3. Replace-in-place in lake.
4. Replace in new shoreline.
5. Vacuum sewer on land.
6. Grinder pumps on land.

For each alternative, the chapter includes a description, conceptual sizing, and a high-level budgetary placeholder. All infrastructure alignments are conceptual and should be revised in future predesign activities.

9.1 Gravity Sewer in Lake

A true gravity Lake Line sewer would slope downward between the upstream and downstream ends to eliminate sags and be designed to maintain self-cleaning characteristics. Furthermore, the new Lake Line would follow lake bathymetry to minimize in-lake excavation.

According to lake bathymetry from King County's iMap, presented in Figure 9.1, lake bed slopes vary between north and south of Coleman Point. The northern portion of the lake bed has a shallower slope than the southern portion. Shallower-sloped portions may allow the Lake Line to be constructed outside of the inner harbor line, avoiding the need for private easements and minimizing effects on existing boat docks.

A new deep lift station would be constructed to pump the collected sewage to the City's gravity sewers east of Lake Washington Boulevard North. Laterals would need to be extended farther offshore to connect to the new Lake Line. If the flush station were retained, the Lake Line could be flushed to increase pipe velocities without raising the HGL enough to risk flooding homes.

9.1.1 Alignment

As shown in Figure 9.2 and Figure 9.3, the proposed alignment would be just offshore of the existing private docks. This location would allow bulk dredging without needing to work beneath and between docks and place the work in slightly deeper water. Pipelines would run from the north and south ends to a potential pump station at Kennydale Beach Park.

While the ideal pump station location would be about halfway along the Lake Line to limit depth, the park is the nearest publicly owned parcel to the halfway point. The proposed alignment is based on iMap bathymetry; a more detailed survey could push the alignment further offshore.

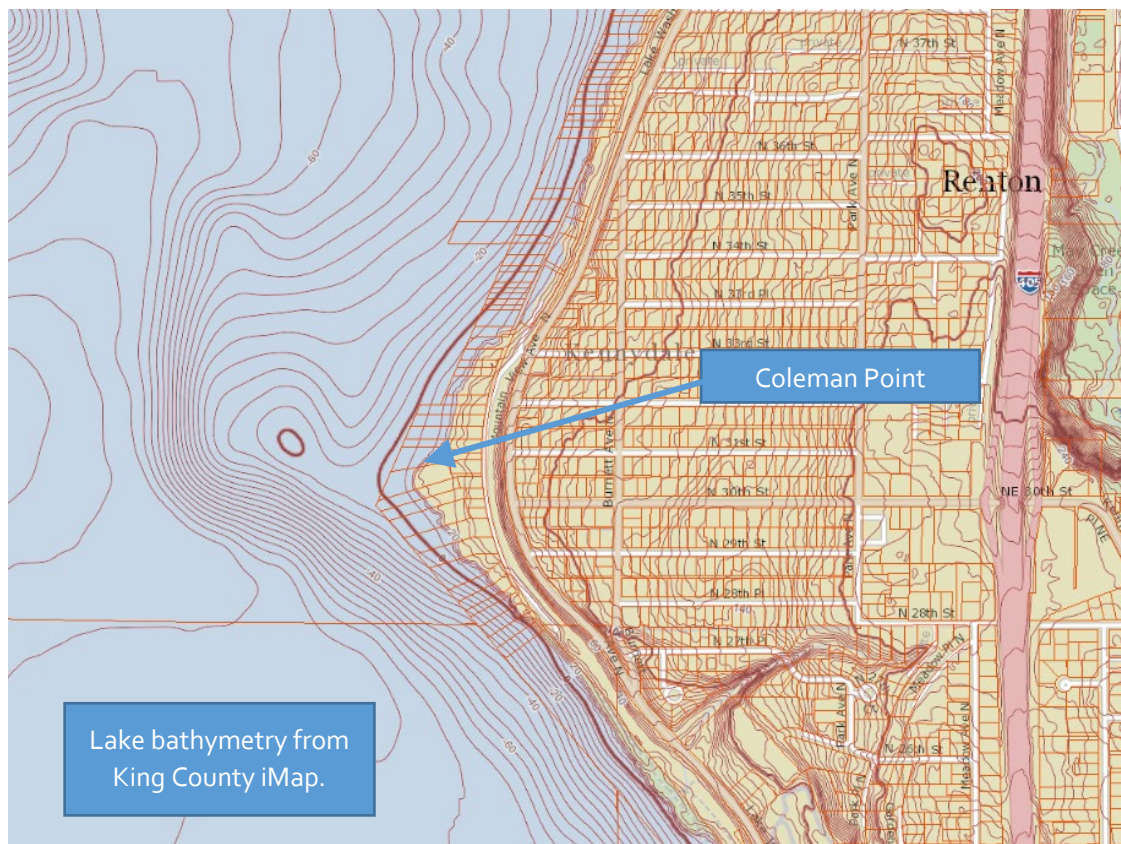


Figure 9.1 Lake Washington Bathymetry Offshore of the Kennydale Area

9.1.2 Profile

The pipeline would be designed for a minimum of 2 feet of cover. At the north end, this would be at an elevation of 0.0 feet or at about 18 feet of water depth. The pipeline would run south toward the pump station site at a minimum grade of 0.004 feet per foot (per Ecology’s Orange Book for 8-inch gravity sewers) for a distance of about 1,850 feet, ending at the pump station at an elevation of -9.0 feet.

From the south end, the pipe would start at elevation -5.0 feet to remain outside of the line of docks. The southern alignment is approximately 3,200 feet to the pump station site, so the wet well would be about elevation -20 feet. The elevation at the pump station site is approximately 25 feet. Allowing 5 feet of active storage depth, the required pump station would be 50 feet below the beach park’s ground surface.

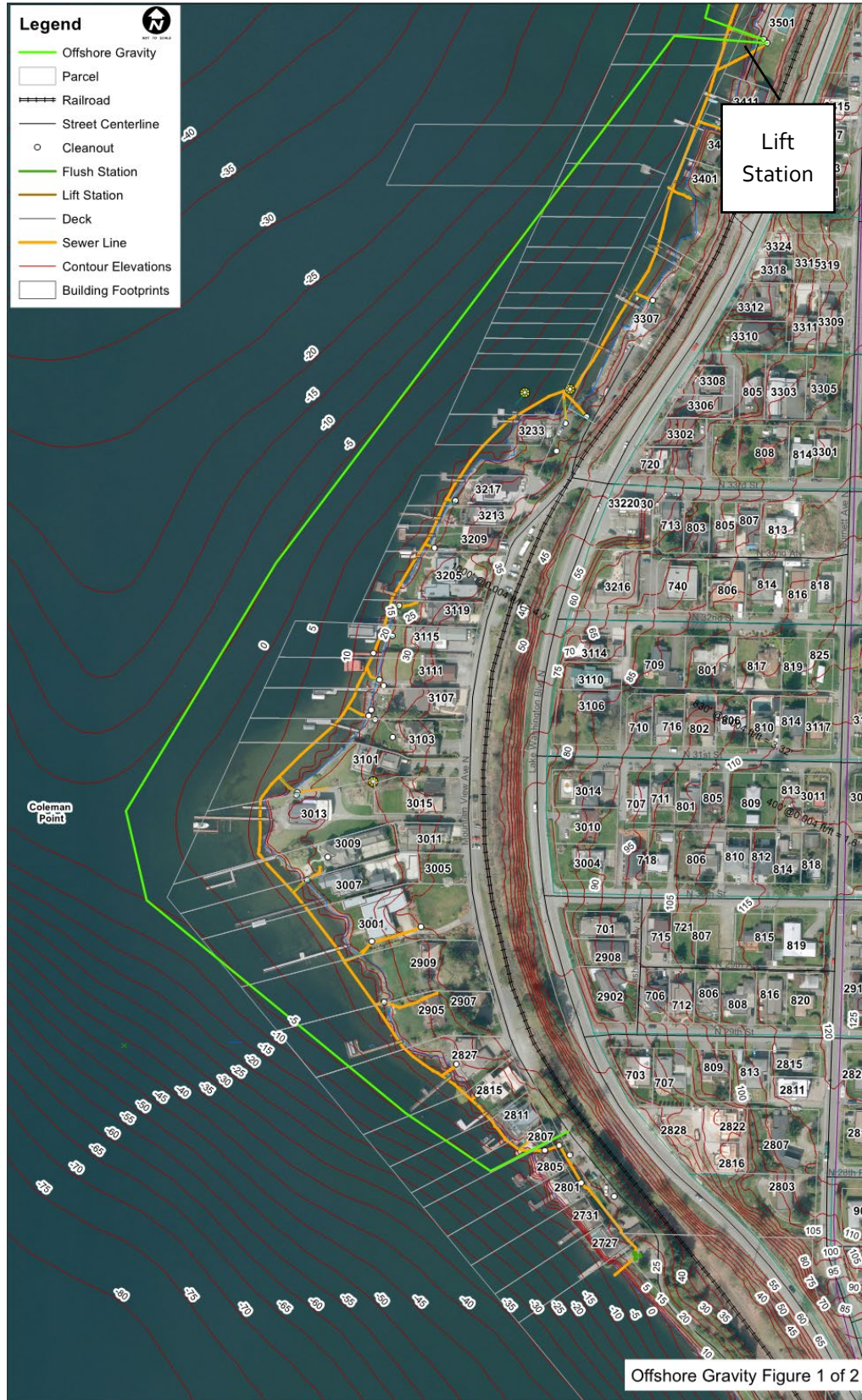


Figure 9.2 Southern Conceptual Lake Line Gravity Sewer Alignment Offshore in Lake Washington

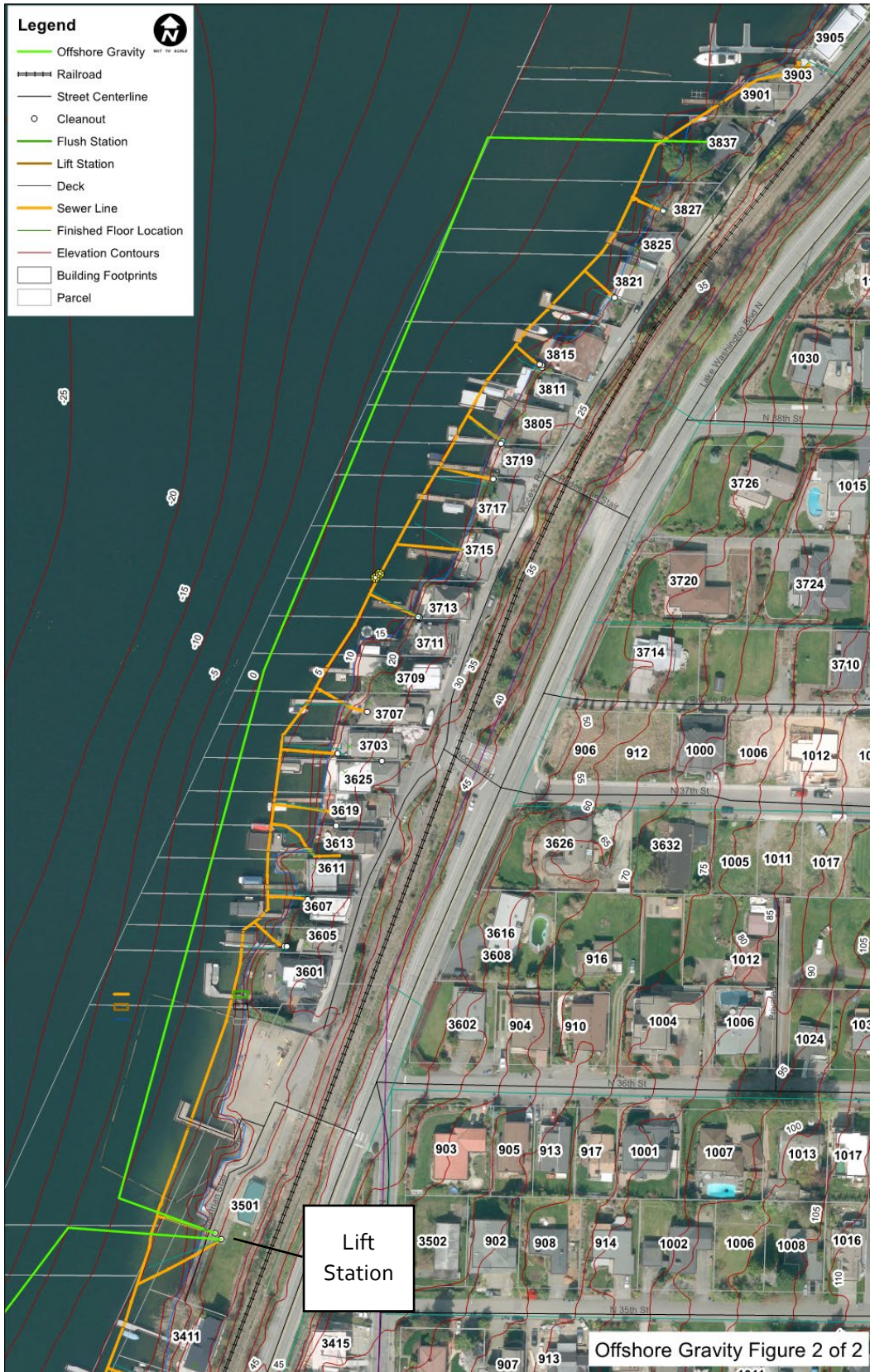


Figure 9.3 Northern Conceptual Lake Line Gravity Sewer Alignment Offshore in Lake Washington

9.1.3 Lateral Installation

Each of the existing 33 laterals would need to be connected to the new Lake Line at an average of 250 feet offshore. Laterals would be extended from the main to the existing lateral locations, assuming a connection and new cleanouts above the lakeshore or bulkheads.

Existing laterals would need to be rehabilitated or replaced to create a consistently new system. The flush station and the four southern-most homes on land are anticipated to also be connected in the current configuration.

9.1.4 Operation and Maintenance Considerations

The in-lake gravity sewer would provide operation and maintenance (O&M) benefits and challenges. For example, it could be self-cleaning given sufficient flow. Unlike the existing Lake Line, the gravity sewer could be designed to allow flushing flows with less risk of surcharging that causes SSOs and home backups.

However, due to the distance of the gravity Lake Line offshore (typically 250 feet), the sewer main would continue to be difficult to access. Additionally, the proposed lift station would be 50-foot deep, potentially creating difficult infrastructure to access and maintain.

9.1.5 Permitting

City, state, and federal permits would be required to construct and operate a new Lake Line. The existing Lake Line is under non-conforming land use, and there is no guarantee a new Lake Line would be allowed under the same land-use rules. Thus, if this option is selected, utility staff are recommended to meet with City planners early in the pre-design process to better understand this issue.

Federal rules mandate analyzing “practicable alternatives” to determine the lowest impact on the aquatic ecosystem. Therefore, practicable on-land alternatives would likely need to be ruled out to permit this alternative.

9.1.6 Environmental Risk Reduction

The proposed in-lake gravity sewer would not mitigate the environmental risk of having a sewer main in Lake Washington. With the new gravity main’s improved O&M, the City could better manage the risk posed by the facility.

9.1.7 Conceptual Planning-Level Budget

Based on the assumptions above, the Project would be similar to the 2011 Mercer Island Sewer Lake Line Project (Mercer Island Project). An estimate was developed by adjusting the lump sum quantities from Mercer Island according to the scale of that project and adjusting the pipe lengths to match the Project. Prices were escalated at 3 percent to 2019 dollars. Some amount of bulkhead restoration was included in the Mercer Island bid prices, but a specific allowance was made in this estimate.

A 50 percent scope contingency was applied to address currently unknown differences between the Mercer Island Project and the Lake Line gravity sewer option. Table 9.1 shows conceptual planning-level costs.

Table 9.1 Gravity Sewer In-Lake Estimated Budgetary Placeholder Cost

Description	Quantity	Unit	Unit Price	Total Cost
Offshore Pipeline, Cleanouts, and Laterals	1	LS	\$14,425,000	\$14,425,000
Bulkhead Replacements	660	LF	\$1,000	\$660,000
Pump Station	1	LS	\$4,900,000	\$4,900,000
Construction Subtotal				\$19,985,000
Contingency			50%	\$9,993,000
Construction with Contingency Subtotal				\$29,978,000
Sales Tax			10%	\$2,998,000
Construction Contract Amount (including Tax)				\$32,975,000
Permitting			10%	\$3,298,000
Design			20%	\$6,595,000
Construction Management			15%	\$4,946,000
City PM/Admin			10%	\$3,298,000
Soft Cost				\$18,137,000
Total Cost			\$51,112,000	\$51,112,000

9.2 Gravity Sewer on Land

To reduce the environmental risk of facilities in the lake, the Lake Line could be replaced with a gravity sewer on land. This alternative would construct a deep gravity sewer on the upland side (east) of the homes, likely in the public right-of-way, where possible.

New laterals would connect the existing cleanouts along the lakeshore to the new gravity sewer. Due to the lack of space between homes and the depth of the proposed gravity sewer, the new laterals would be installed using trenchless technologies.

A new deep lift station would be constructed at Kennydale Beach Park to pump the collected sewage to the City gravity sewers east of Lake Washington Boulevard North.

9.2.1 Alignment

Figure 9.4 shows the alignment of the on-land gravity sewer. The 8-inch gravity sewer could be aligned mostly along Mountain View Avenue North and the access road west of Lake Washington Boulevard North. Where no road is present (at 3307, 3401, 3405, 3411, and 3501 Lake Washington Boulevard North), the proposed gravity sewer may be placed east of the current homes. A County-owned trail (former railway) is approximately 10 feet higher in elevation in this section and, therefore, was not considered in conceptual planning.

The existing 33 Lake Line laterals would be re-routed east to the new gravity sewer alignment.

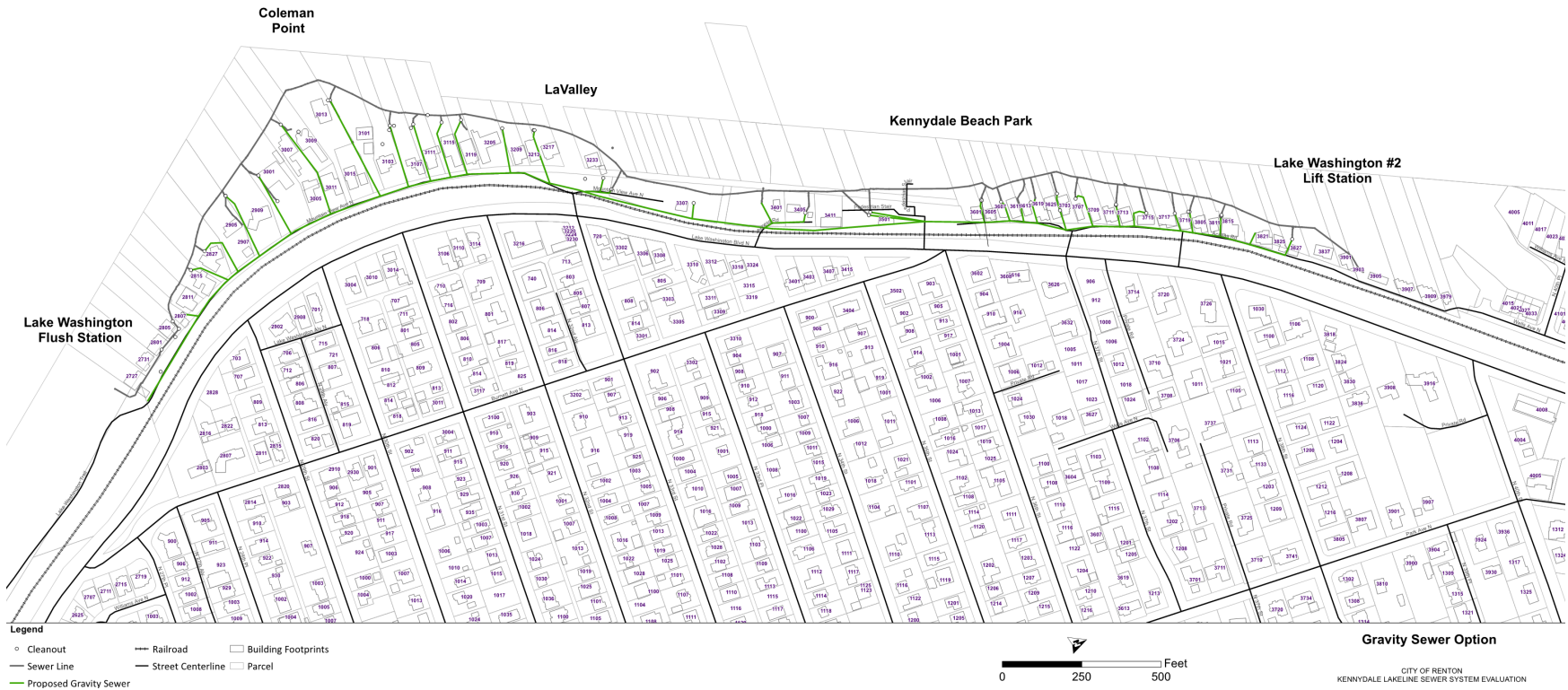


Figure 9.4 Conceptual Alignment of On-Land Gravity Sewer

9.2.2 Profile

As shown in Figure 9.5, the conceptual profile of the Lake Line's on-land gravity sewer replacement was developed using the above alignment. The land elevation for the alignment was generated in GIS from King County's 5-foot elevation contours, where elevations range from approximately 22 feet to 41 feet.

The existing lateral cleanouts would be located near the shoreline at an approximate elevation of 19 feet to 26 feet. The minimum upstream sewer depth of 11 feet was calculated assuming the following:

- A land elevation of 19 feet.
- Lateral depth of 3 feet.
- Assumed 200 foot lateral with a slope of 2.5 percent.

The gravity sewer depth was calculated assuming the following:

- Start at the minimum upstream depth.
- A shallow (0.5 percent) slope toward the Kenneydale Beach Park.
- Lift station at Kenneydale Beach Park.

The resulting gravity sewer would be mostly 20 feet to 40 feet in depth, likely requiring extensive shoring. The lift station would be approximately 25-feet deep, which is less than the in-lake option.

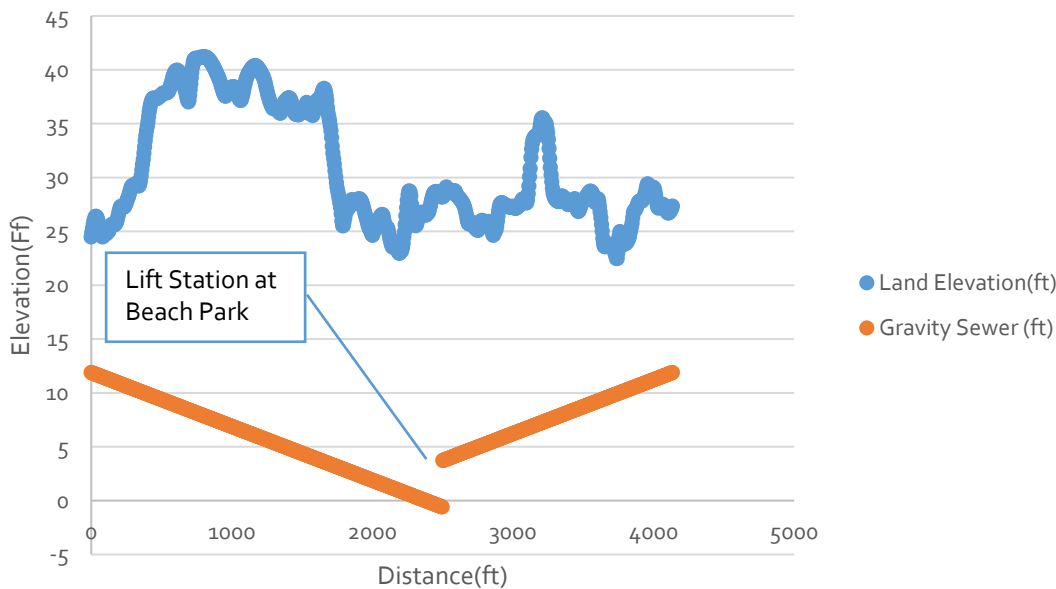


Figure 9.5 Profile of Conceptual On-land Gravity Sewer

9.2.3 Lateral Installation

At this time, the feasibility of installing laterals is unknown. Given the depth of the sewer, open-cut installation between homes would be infeasible. Trenchless installation from the upland side (access road) would require deep and long launch pits that are likely infeasible due to high costs.

This leaves the option of installing the lateral from the existing cleanout at the shoreline. However, in some cases, insufficient space exists between the cleanout and lake for trenchless lateral installation.

Conceptually, flows could be routed along the shoreline to locations where laterals could be installed without trenches, using fewer than the 33 existing Lake Line laterals. However, installing new side sewers would likely require deeper cleanouts and expanded launch pit requirements for trenchless installation. A detailed evaluation is required to determine if this approach is feasible.

9.2.4 Operation and Maintenance Considerations

The City is well equipped and has experienced staff to operate and maintain the gravity sewer. The on-land sewer would have the significant benefit of being on-land and, thus, offering easier access.

The combined low-flow and shallow-slope gravity main might not be self-cleaning, thus will likely require periodic cleaning. With appropriate safety precautions, the deep sewer could be accessed and cleaned like the rest of the gravity system.

Additionally, advanced technologies could be deployed to monitor the sewer and better time maintenance activities. Similarly, the lift station could be maintained similarly to other City facilities.

9.2.5 Environmental Risk Reduction

The on-land gravity sewer alternative would eliminate the environmental risk of a sewer in the lake. Additionally, as a gravity sewer, no special requirements would be needed for residents to avoid clogs and other maintenance concerns that may lead to SSOs.

9.2.6 Conceptual Planning-Level Budget

No estimate could be developed for this alternative since installing laterals may be infeasible. In general, this option was assumed to have costs similar in order of magnitude to the in-lake gravity sewer alternative, given the difficulty of installing deep gravity sewers, laterals, and a lift station.

9.3 Replace-in-Place in Lake

The existing Lake Line could be replaced in-place, likely through a combination of trenchless methods and open-cut replacement. The new pipe, likely HDPE, would provide the City with approximately 75 years of useful life and be resistant to corrosion. Lake Line operation would likely continue in a manner similar to current operations.

This alternative could provide additional access points to allow more periodic cleaning and maintenance; however, in-lake maintenance activities would continue to require relatively high effort. Furthermore, this alternative would likely not reduce the potential environmental risk of having a sewer in the lake, which is a major disadvantage.

9.3.1 Mainline Installation

The replace-in-place option would use a combination of open-cut and trenchless installation. Table 9.2 shows the length of the mainline and laterals. Due to the difficulty of in-water excavation, trenchless technologies would be less costly than open-cut replacement where appropriate. Additionally, trenchless replacement would likely allow construction to avoid some existing docks and other in-water obstructions.

Table 9.2 Length of Main and Lateral Replace-in-Place Lake Line Sewer Replacement

Description	Length (feet)	Properties with Restoration Required
Lake Line Replacement	4,800	5 (on-land section)
Laterals	2,900	33
Lift Station	NA	1

Various trenchless technologies may be employed:

- Slip-lining.
- Pipe-splitting.
- Cured-in-place pipe (particularly for laterals).

A smaller-diameter pipe (6-inch or 7-inch) could be used to allow slip-lining and reduce challenges in construction caused by potential ground heaving from pipe-splitting. Excavation would be required at each lateral tie-in and at locations that exceed the horizontal or vertical angle limits of the trenchless method.

Pipe-splitting is similar to slip-lining, except the existing pipe is physically split to allow slip-lining under a greater range of conditions. This technique may reduce the number of excavation locations required. The choice to pipe-split or slip-line may be driven by the depth of cover and buoyancy issues, where more depth of cover favors slip-lining.

Open-cut installation in the lake would likely be required where access for trenchless installation is not practical. Relatively long sections of the Lake Line are likely partially or completely unconstrained by the surrounding soil. These sections may benefit from being re-buried to reduce the risk of damage, address increased buoyancy of the HDPE pipe, and reduce the potential effects of construction. Additionally, minor shifts in alignment, likely using open-cut installation, may be required to avoid potential obstructions and hazards.

9.3.2 Lateral Installation

Laterals may be replaced using similar approaches as those used to install the Lake Line, especially in the lake. The transition from land to lake under the bulkheads is variable and presents a number of construction-related concerns, such as steep slopes of lateral piping.

For this study, the transition was assumed to be open-cut, and the entire property bulkhead would be replaced. This conservative assumption should be re-evaluated in pre-design, if this alternative moves forward.

9.3.3 Operation and Maintenance Considerations

New access points could be installed in the replacement Lake Line to help with future maintenance. As shown in Figure 9.6 and Figure 9.7, this idea was conceptualized as installing submerged manholes every 400 feet at lateral tie-in locations. Adding a manhole or other access point would require relatively little additional effort since excavation would already be required for the pipe replacement. During pre-design, this reduced effort should be weighed against the potential loss of efficiency in cleaning when not located in a sag.

9.3.4 Permitting

City, state, and federal permits are required to construct and operate a new Lake Line. The existing Lake Line is a non-conforming land use, and a replacement may not be allowed under future regulations. Thus, if this option is selected, utility staff is recommended to meet with City planners early in the pre-design process to better understand this issue.

Federal rules require analyzing “practicable alternatives” to determine a project’s lowest effect on the aquatic ecosystem. Therefore, practicable on-land alternatives would likely need to be ruled out to permit this alternative.

9.3.5 Environmental Risk Reduction

The replace-in-place alternative would address the risk of SSOs by increasing access for cleaning but would not change the environmental risk associated with having a facility in the lake.

9.3.6 Conceptual Planning-Level Budget

Table 9.3 shows a conceptual planning-level budget for the replace-in-place alternative. The cost estimate should be considered a budgetary placeholder, which will be updated during pre-design. Costs for open-cut construction were estimated according to the 2018 construction activities, during which approximately seven days of in-water work were required to remove, replace, and restore 40 feet of the Lake Line.

Lake Line pipe-splitting and lateral pipe-splitting costs are included as placeholders; more detailed designs are required to revise these estimates. Manhole installation and lateral tie costs were also estimated based on the 2018 activities.



Figure 9.6 Replace-In-Place Lake Line Sewer Infrastructure

Profile Renton Kennydale Lake line New Manhole Locations

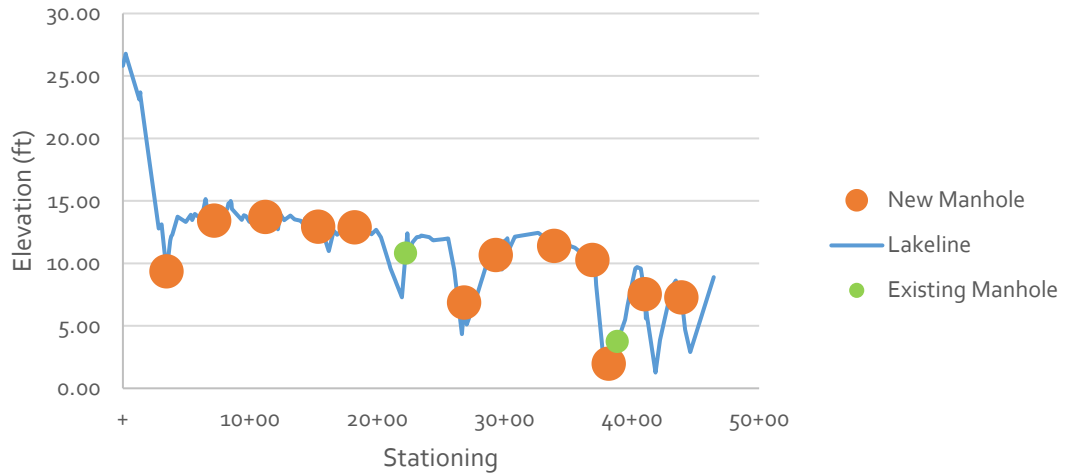


Figure 9.7 Location of Potential Access Manholes in Replace-in-Place Alternative

Table 9.3 Replace in Place Estimated Conceptual Planning-Level Budget

Description	Quantity	Unit	Unit Price	Total Cost
Open Cut Lake Line	1,000	LF	\$1,500	\$1,500,000
Lake Line Pipe Splitting	3,800	LF	\$200	\$760,000
Lateral Pipe Splitting	2,900	LF	\$200	\$580,000
Manhole Installation	11	Each	\$130,000	\$1,430,000
Lateral Tie In	24	Each	\$130,000	\$3,120,000
Lateral Cleanout Installation	33	Property	\$2,000	\$66,000
Restoration	1	LS	\$200,000	\$200,000
Bulkhead replacement	500	LF	\$1,000	\$500,000
Lift Station/Flush Station Renewal	1	LS	\$1,500,000	\$1,500,000
Construction Subtotal				\$9,656,000
Contingency			50%	\$4,828,000
Construction with Contingency Subtotal				\$14,484,000
Sales Tax			10%	\$1,448,400
Construction Contract Amount (including Tax)				\$15,932,400
Permitting/Public Outreach			15%	\$2,389,860
Design/Bidding			20%	\$3,186,480
Construction Management			10%	\$1,593,240
City PM/Admin			10%	\$1,593,240
Soft Cost				\$8,762,820
Total Cost				\$24,695,220

9.4 Replace in New Shoreline

Replacing the Lake Line in a new shoreline was an “outside-the-box” alternative conceived as a potential middle ground between in-lake and on-land alternatives. This alternative would create a new shoreline beyond the existing bulkheads that would contain the Lake Line and include habitat features and ecological enhancements.

This alternative was considered fatally flawed and was not developed in detail. Confluence Environmental, the Project’s permit specialist, believes that a new shoreline would not likely be permitted, although they couldn’t rule it out entirely. Furthermore, several permit conditions would likely be unacceptable to property owners, including large view-blocking vegetation and changes to existing dock structures.

9.5 Vacuum Sewer on Land

Vacuum sewers are commonly used to convey sewerage for flat areas, such as around lakes. These sewers use suction to pull sewage to a central vacuum and lift station, rather than pushing sewage, which is done with traditional pressure conveyance. Lateral flows collect in valve pits that regulate the intake of sewage into the vacuum line.

Vacuum valves do not require power and can serve up to four residential customers. However, they have limited capacity for elevation change, which limits their application in many locations.

Vacuum sewer mains use a “saw-tooth” profile when elevation increases, helping them maintain relatively shallow mains. This profile would require any laterals between the shoreline and access roads to be open cut, likely requiring extensive restoration.

9.5.1 Alignment

Vacuum sewer technology is typically limited to 13 feet of elevation gain. Figure 9.8 compares the land elevation profile along the alignment of the on-land gravity sewer alternative against the 13-foot elevation gain (assuming laterals at 16-foot elevation).

Due to excessive elevation gain, the vacuum sewer main cannot be placed on Mountain View Avenue North south of Kennydale Beach Park. Therefore, the vacuum main would need to run along the shoreline, which would require extensive easements and restoration. North of Kennydale Beach Park, largely acceptable elevation gain exists. Figure 9.9 shows the resulting alignment.

A combined vacuum and lift station could be constructed at Kennydale Beach Park. Flows would be conveyed to City gravity sewers on the east side of Lake Washington Boulevard North. Relatively low, existing Lake Line flow rates may allow a standard vacuum station and lift station design to be used.

9.5.2 Lateral Installation

Laterals would be installed using a saw-tooth profile to climb the slope between the shoreline cleanouts and the access road north of Kennydale Beach Park. According to a cursory review, some lateral slopes might exceed typical design requirements. The City is recommended to consider these slopes further in pre-design with a manufacturer if this alternative moves forward. If necessary, laterals might need to be extended to combine multiple homes in locations where laterals can be constructed.

9.5.3 Operation and Maintenance Considerations

Vacuum sewers require prompt maintenance since the loss of vacuum at one location can cause failure throughout the entire line. Vacuum valves also require regular maintenance to continue functioning properly. Although the valves are relatively robust, they can become stuck open by debris, which may lead to a loss of vacuum pressure.

Most manufacturers provide system monitoring to help identify and respond to these maintenance issues.

9.5.4 Environmental Risk

Given their system reliability features, vacuum sewers would reduce the environmental risk of discharges into the lake. Sewer infrastructure will be located on-land, rather than in the Lake. Furthermore, vacuum sewer valve pits typically include some emergency overflow storage in case of loss of vacuum or operational issues. In addition, vacuum stations have relatively low power demands and typically have small back-up generators to maintain sewer service during power outages.

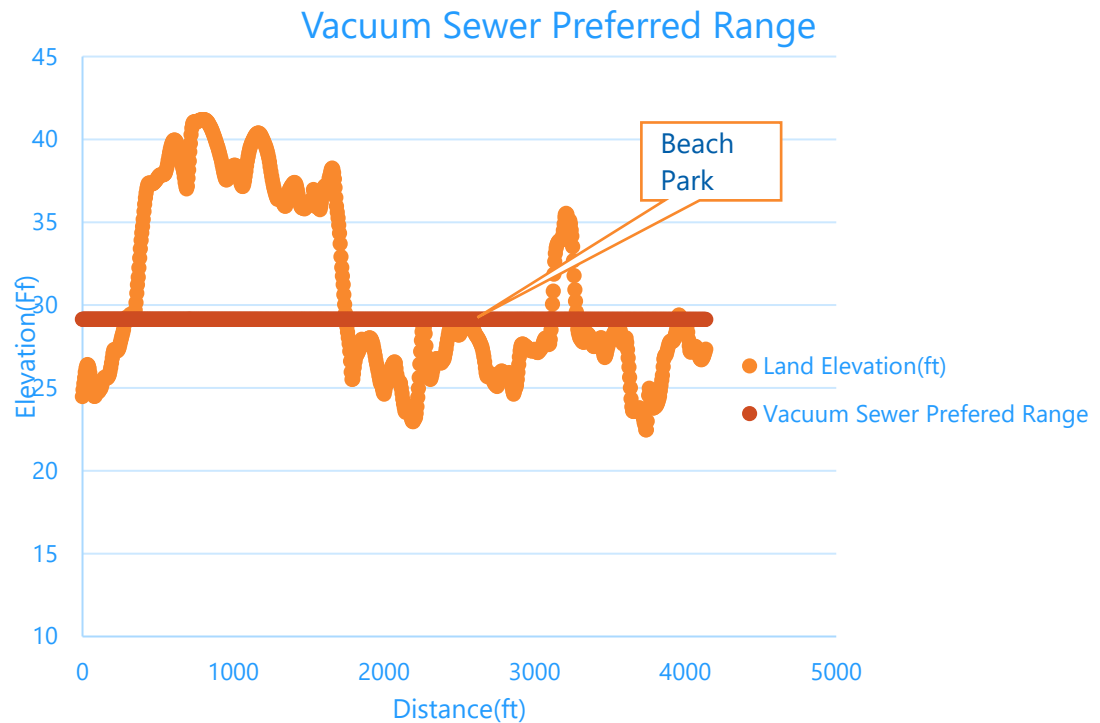


Figure 9.8 Vacuum Sewer Preferred Elevation Range



Figure 9.9 Vacuum Sewer Alternative Alignment

9.6 Grinder Pumps on Land

In King County, grinder pumps provide sewer service adjacent to many lakes and other low-lying areas. Grinder pumps would be installed at all 33 lateral locations, each one pumping through a small HDPE lateral to a mainline HDPE pipe in the street upland of the homes.

When included in new construction, grinder pumps often receive electrical power from the houses they serve. To avoid the complexities of connecting to private electrical panels especially if there are multiple instances of shared laterals, the proposed system would include an electrical distribution system that serves each grinder pump installation and a standby generator for the entire system.

9.6.1 Alignment

The mainline would be in three sections — north, center, and south — each with a separate discharge to the upland gravity sewer along Lake Washington Boulevard North, as shown in Figure 9.10. The north section would consist of two branches meeting at the northern-most roadway access. Meanwhile, the center section would serve four houses just south of Kennydale Beach Park. Finally, the south section would consist of a single branch leaving the lakefront roadway at the north end.

Mainlines would start at 1.5 inches and increase according to the number of homes connected. The south branch would include pipes up to 3 inches.

9.6.2 Profile

The mainline would be installed at a shallow depth, likely about 4 feet, to be beneath other utilities. To self-clean, it would operate at high velocities.

Grinder pumps have near-vertical pump curves, allowing high headlosses with a limited effect on the discharge rate. As such, the mainline profile can follow topography.

9.6.3 Lateral Installation

The profiles of the laterals can largely follow topography. Installation would be done through directional drilling and include both the lateral and a conduit for the electrical service, which would limit the excavation's footprint. Connections would be made to the grinder pump basin discharge and to the mainline.

9.6.4 Easements

New easements would likely be required to install the grinder pumps and the laterals. If easements cannot be obtained, this alternative may be infeasible.

9.6.5 Operation and Maintenance Considerations

Commercial grinder pump systems typically operate on simple level controls using a float or other simple device. Some systems have operational monitoring, alarms, and other warnings to help maintain the system. Typically, grinder pump systems have a number of operational safeguards, including a small overflow storage volume and dual check valves to limit the risk of surcharging into houses.

Grinder pumps would need periodic maintenance, such as pump inspection and cleaning, similar to, but on a smaller scale, than the City's lift stations. Because of the low cost of pumps, some utilities simply switch out pumps in the field and conduct all mechanical maintenance at the shop.



Figure 9.10 Grinder Pump Lateral and Force Main Alignment

Homeowner education on the pumps would be important since the pumps can be clogged by large materials, non-flushable wipes, etc. However, the grinding action and relatively high velocity in force mains make grinder systems less susceptible to clogging from FOG and normal sewage. The mainline could also be fitted with flushing ports at the end of each pipe section to allow the City to flush the sewer force main for periodic maintenance.

9.6.6 Conceptual Planning-Level Budget

Table 9.4 shows the conceptual planning-level budget for the grinder pump alternative. The cost estimate is a budgetary placeholder that will be updated during pre-design. Costs for grinder pumps were estimated using previous system designs.

The sewer force main costs include the purchase of the force main, installation, and road resurfacing. New laterals from the shoreline cleanouts to sewer force main in the upland access road were assumed to be installed using trenchless approaches.

The grinder pumps' cost represents the average cost of installing a pre-engineered system. The grinders are anticipated to be powered by a reliable electrical service independent of the customers, which is the second largest cost for the grinder pump system.

A budgetary placeholder was included for restoration costs, which are anticipated to be relatively high to incorporate the grinder pump systems into the lakefront yards.

A 50-percent scope contingency associated with the location and restoration of the grinder pump system was applied. Permitting costs are anticipated to be 5 percent of the construction cost, which is substantially lower than that of the in-water alternatives.

Note, no land or easement costs have been included in the cost estimate.

Table 9.4 **Grinder Pump Estimated Conceptual Planning-Level Budget**

Description	Quantity	Unit	Unit Price	Cost
Contractor Mobilization/ Demobilization	1	LS	\$300,000	\$300,000
Sewer Force Main	3,730	LF	\$171	\$638,418
Laterals	4,125	LF	\$75	\$309,375
Grinder Pump Assembly	33	Each	\$8,000	\$264,000
Electrical Service	1	LS	\$600,000	\$600,000
Restoration	1	LS	\$500,000	\$500,000
Construction Subtotal				\$2,611,793
Contingency			50%	\$1,305,897
Construction with Contingency Subtotal				\$3,917,690
Sales Tax			10%	\$391,769
Construction Contract Amount (including Tax)				\$4,309,459
Permitting/Public Outreach			5%	\$195,884.49
Design/Bidding			15%	\$587,653.47
Construction Management			15%	\$587,653.47
City PM/Admin			10%	\$391,768.98
Soft Cost				\$1,762,960
Total Cost				\$6,072,419

9.7 Alternative Summary and Conclusion

Three Lake Line replacement alternatives were found to be feasible. Thus, conceptual planning-level costs were developed for each one. Table 9.5 compares the three alternatives.

Table 9.5 Replace in Place Estimated Conceptual Planning-Level Budget

Alternative	Environmental Risk	Construction Challenges	O&M Considerations	Conceptual Planning-Level Cost
Gravity Sewer in Lake	Unchanged. <ul style="list-style-type: none"> Discharge into lake during pipe failure. Potential for SSO at lateral cleanout. 	<ul style="list-style-type: none"> Requires construction of deep pump stations on shoreline. Sewer main in lake. Laterals extended 250 feet into lake. 	<ul style="list-style-type: none"> Gravity sewer facilitates cleaning. Access manholes are offshore. 	~\$51 million
Replace-in-Place in Lake	Unchanged. <ul style="list-style-type: none"> Discharge into lake during pipe failure. Potential for SSO at lateral cleanout. 	<ul style="list-style-type: none"> In lake construction near shoreline and under docks. Trenchless methods in lake unproven. Exposed pipe segments may impact construction methods. 	<ul style="list-style-type: none"> Provides additional access. Requires periodic in-lake cleaning. Plastic pipe resistant to corrosion. 	~\$25 million
Grinder Pumps on Land	Reduced. <ul style="list-style-type: none"> SSO may occur at grinder pump. Stations include small volume of overflow storage 	<ul style="list-style-type: none"> Construction impacts on residents. Restoration requirements likely extensive. 	<ul style="list-style-type: none"> New easements required. New pumps for City to operate and maintain. Eliminates flush and lift station. Grinder pumps require regular maintenance. 	~\$6 million (No land or easement costs included)

The grinder pump alternative would have substantially lower costs than in-lake alternatives and would reduce environmental risk. However, it would pose new O&M challenges. New easements would likely need to be required to install the grinder pumps and laterals; without them, this alternative may be infeasible. Other on-land alternatives, such as vacuum sewer and gravity sewer, may not be technically feasible and would likely have greater costs.

While technically feasible, in-lake alternatives are anticipated to have high costs. Additionally, practicable on-land alternatives would likely need to be ruled out before the in-lake alternatives can be permitted.

The City is recommended to pre-design the grinder pump alternative to better understand its costs and requirements. If the grinder pump system appears implementable and at an affordable cost, the City may consider replacing the Lake Line rather than pursuing the near-term options presented in Chapter 8.

Appendix A

PUBLIC OUTREACH MATERIALS

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1.0 Introduction and project overview

The Kennydale Lakeline Sewer System is aging and may need to be repaired or replaced to ensure long-term service. In 2016, the City of Renton (City) hired a consultant team (led by Carollo Engineers) to evaluate the condition of the lakeline system in two phases.

- **Phase 1 – Initial Assessment (September through December 2016) – Complete:** Performed initial assessment activities to determine what additional evaluation efforts would be needed to perform the Condition Assessment in Phase 2.
- **Phase 2 – Condition Assessment (January 2017 through 2018):** The team will use information gathered during Phase 1 to develop an approach to evaluate the lakeline system’s condition more thoroughly. From this detailed assessment, the team will develop alternatives to address service maintenance and reliability in the lakeline system area. Phase 2 will be split into two parts:

- **Phase 2A Preliminary Condition Assessment (2017) – Complete:** Perform pilot testing at priority locations to ensure evaluation approaches (e.g., ultrasonic testing, closed-caption television) will work as anticipated and conduct detailed surveys along the lakeline to collect information on the condition of the system.
- **Phase 2B Comprehensive Condition Assessment (2018) – Focus of this plan:** Complete final technical work in selected locations as needed to fully inform the condition assessment. In addition, to address capacity constraints determined via the earlier phases of assessment, in 2018 the project will install two temporary access manholes in Lake Washington, clean the entire lakeline, and replace existing pumps at Lake Washington No. 2 Lift Station.

Condition assessment results will inform an alternatives evaluation process to determine the best way to repair or replace the lakeline in the future.

This public involvement plan focuses on Phase 2B of the Kennydale Lakeline Sewer System Evaluation Project, and as a living document will be updated as additional work phases are clarified.

2.0 Public involvement goals

The communication and outreach strategies identified in this public involvement plan are intended to meet the following communication goals:

2.1 Overall project goals

- **Identify** households directly impacted by Kennydale Lakeline evaluation work, **educate** them about the project and planned phases, and **alert** them to upcoming work and potential impacts.
- **Inform** residents and stakeholders within the Kennydale neighborhood about the project, including upcoming and potential activities.
- **Engage** interested stakeholders (especially residents connected to the lakeline) in developing project alternatives and sharing their perspectives and values to consider during decision-making.
- **Avoid project-related surprises** by ensuring that other city staff, elected officials, and decision-makers understand the project and hear directly from the project team about updates and issues.

2.2 Phase 1 (initial evaluation) goals

- Introduce the project to Kennydale residents connected to the lakeline, linking past assessment efforts and work to this project if needed.
- Build strong relationships with impacted residents by developing strategies and tools to effectively communicate and address any questions or concerns.

- Develop and share an outline of the overall lakeline project to help residents understand and anticipate upcoming work and potential impacts.
- Gather contact information for directly affected residents.

2.3 Phase 2A (condition assessment pilot study) goals

- Share results of Phase 1 efforts, and how they shape the work plan for Phase 2A.
- Verify contact information for affected residents and update database as needed.
- Develop or continue building productive relationships with directly affected residents so that the technical team can efficiently and effectively perform their work.
- Keep all lakeline residents – and additional interested parties, as appropriate – informed of project activities and next steps.

2.4 Phase 2B (condition assessment) goals

- Share results of Phase 2A efforts, and how they shape the work plan for Phase 2B.
- Continue to verify contact information for affected residents and update database as needed.
- Reach out to residents and property owners closest to concentrated work (manhole installation, cleaning access sites, pump station) to proactively inform them of upcoming work, address questions, and to continue building productive relationships with directly affected residents. Images showing the potential location of work barges will be shared with nearby neighbors during outreach.
- Keep all lakeline residents and interested parties informed of project activities and next steps.

3.0 Key messages

3.1 Project key messages

- The Kennydale Lakeline Sewer System is aging. This means that the system’s long-term viability is uncertain and that it poses a higher risk of potentially overflowing.
- The City wants to ensure that this important piece of public infrastructure can effectively provide reliable service to residents for years to come.
- To determine what repairs or upgrades the lakeline may need (and when), the City is working with a consultant team to evaluate the system and identify alternatives that ensure long-term viability.
- We will keep residents and interested parties informed about our progress, results (as they become available), and next steps.

3.2 Phase 2B key messages

Phase 2B key messages include the following:

- This project began in 2003, when the City conducted an early assessment of the lakeline system and determined that segments of the pipeline may require repair. In 2016, the City began a thorough evaluation of the lakeline’s current conditions to determine what, if any, upgrades or repairs may be needed.
- During Phase 1, the project team gathered data on the existing system during the City’s lakeline cleaning in September 2016, and assessed the condition of pumping facilities associated with the lakeline.
- During Phase 2A, the project team performed detailed surveys along the lakeline to collect information on the condition of the system. Work completed includes:
 - **Mapping the horizontal and vertical location of the entire lakeline system:** Mapping included the mainline pipe, laterals, cleanouts, and valves, as well as nearby docks, bulkheads, and homes.
 - **Developing a hydraulic model of the lakeline system:** The model helps the team better understand how the system currently works and identify options for improving operations and maintenance.
- During Phase 2B, the project team will:
 - **Complete a more thorough condition assessment:** The team is measuring the pipe wall thickness where feasible, analyzing the metal for corrosion, and investigating the structural integrity of associated bulkheads. Remaining work in 2018 is expected in multiple locations along the pipeline.
 - **Obtain local permits** needed to conduct near-term condition assessment work.
 - **Apply for federal, state, and local permits** required to conduct more extensive condition assessment work in the future.
 - **Install two temporary access manholes** in Lake Washington and **clean the entire lakeline from water and from land.** This work is needed to address capacity constraints determined during 2017 condition evaluation.
 - The existing pumps at Lake Washington No. 2 Lift Station were replaced in early June 2018.
- During construction and work in the field, the following impacts are expected:
 - The majority of the work installing the manholes will be performed **from work boats or barges located on the lake.**
 - **Cleaning will be conducted from two temporary and three existing submerged manholes and existing onshore cleaning locations.** To access the manholes in the

- lake for cleaning, work will be performed from work boats or a barge in Lake Washington, and a watertight barrier will be created using steel risers.
 - During cleaning, flows will be pumped out of the lakeline, temporarily stored in tanks on barges, and transmitted to the Lake Washington #2 Lift Station **using vector trucks**. Nearby neighbors may experience noise while the trucks are operating.
 - When work is completed, the temporary access manholes and **the lakeline will be restored to the current condition below the lakebed**.
 - Work barges may create temporary impacts to boat moorage in the immediate area. The project will contact property owners that may be affected prior to work beginning. Property owners requiring boat access are encouraged to contact the project team to coordinate.
 - Work hours are expected to be 7 a.m. to 5 p.m. Monday through Friday.
 - Construction is expected to begin in August be completed by fall 2018.
- The City and the project team will move forward with work in a way that is mindful of residents and the environment. We will appropriately coordinate efforts with other agencies in order to comply with all applicable regulations and guidelines.
 - We don't yet know what repairs the lakeline system will require. The condition assessment we complete in 2018 will help the project team identify alternatives to upgrade the system that the City will consider.
 - We will continue to provide you with updates as we learn more about what updates the system may need.

4.0 Key audiences

Phase 2B project work will continue to primarily occur near Lake Washington Blvd N and Mountain View Ave N. Roads and properties used to access the lakeline system by land are separated from the overall Kennydale neighborhood by topography and a railroad, and vehicular access to lakeline-connected homes is only through two or three entry points. Due to the isolated nature of the work area, primary outreach can be limited to only those areas directly impacted by survey crews and similar project-related activities.

During Phase 1, key stakeholders were divided into two tiers:

- **Tier 1** stakeholders (Table 1) will be most directly impacted by project work or will need to be informed of ongoing activities and plans (e.g., individuals who own structures connected to the Kennydale Lakeline, City decision-makers, etc.)

- **Tier 2** stakeholders (Table 2) are located in close proximity to the project area and may have questions about planned and ongoing work (e.g., Barbee Mill Community). These stakeholders may be contacted as a group or individually, as determined by their expressed interest or based on specific project needs.

Routine outreach efforts are only anticipated to engage Tier 1 stakeholders. The City and project team may engage Tier 2 stakeholders if specific outreach needs necessitate greater public involvement. Please note that permitting agencies will be engaged through a separate process, so are not listed here.

Table 1: Tier 1 stakeholders

Groups	Key stakeholders	Notes
Directly affected residents and public	<ul style="list-style-type: none"> • Residents connected to the Kennydale Lakeline (~53 single family homes; 11 properties close to the 5 manhole sites) • Barbee Mill Townhomes directly adjacent to the lakeline lift station (~4 properties) 	See Section 5 for outreach strategies and tools
Elected officials	<ul style="list-style-type: none"> • Renton Mayor Denis Law • Renton City Council 	City PM will lead this process, requesting consultant team support as needed

Table 2: Tier 2 stakeholders

Groups	Key stakeholders	Notes
Residents, public, and businesses (East of Lake Washington Blvd, west of I-405)	<ul style="list-style-type: none"> • Bella Vista Apartments • Pinnacle on Lake Washington • 2000 Lake Washington • Barbee Mill Townhome development (borders project area) • Boulevard Salon 	Project has limited visibility beyond directly affected residents. Communications will be more responsive than proactive.
Neighborhood/non-profit organizations	<ul style="list-style-type: none"> • Kennydale Neighborhood Association • Barbee Mill Community Organization • Griffin Home 	Project team offered to table at Sept. 2016 KNA picnic, which was politely declined due to limited relevance to membership
Recreation (agencies and users)	<ul style="list-style-type: none"> • Gene Coulon Memorial Beach Park • General shoreline recreation users • King County Department of Natural Resources and Parks (KC DNRP) • City of Renton Parks and Recreation • Kennydale Beach Park • Gene Coulon Park (north entrance near southern Flush Station) 	<ul style="list-style-type: none"> • City will lead coordination with internal and county parks departments, as needed • Notifications / signs will be used in Kennydale Beach Park to inform park users of work, as needed

5.0 Communication timeline and strategies

This section describes the overall project timeline, communications tools and strategies, as well as the more detailed sequencing to communicate with affected residents about fieldwork.

5.1 Project timeline (Phase 2B)

Week (2018)	Activities
April 2018	<ul style="list-style-type: none"> Confirm parcel data with King County database; update database (completed)
June 2018 into week of July 16	<ul style="list-style-type: none"> Meet with City team to review work plan, confirm roles and responsibilities, and identify next steps (completed) Draft/update letter to homeowners, project web page update, FAQs, door-hanger, backpocket card (completed) Update Public Involvement Plan (PIP) for 2018 (completed)
Week of July 23 and July 30	<ul style="list-style-type: none"> City reviews project notifications, materials, and PIP (completed) Supply mailing list to the City (completed) City posts project update and updated FAQ on City website (completed) City sends notifications to all lakeline residents (53) (completed)
August to October 15	<ul style="list-style-type: none"> Coordinate with each group of properties to be affected by upcoming work the week prior to work occurring Support in-field work as appropriate (e.g., coordinate access with residents if needed, call nearby neighbors to alert them to upcoming work and boat moorage restrictions, distribute door-hangers and information fliers (knock when distributing to provide information in person), provide backpocket cards for crews, etc.) Share updates via the web page and other methods, as appropriate
October and beyond	<ul style="list-style-type: none"> Support ongoing fieldwork, as directed by City and technical team Ongoing communication with property owners and interested parties

In addition to the public-facing activities noted in the table above, the team anticipates reconfirming the team’s approach to keeping other City departments, staff, and elected officials informed.

5.2 Communication and outreach tools (Phase 2B)

We anticipate the following potential materials may help support Phase 2B outreach:

- Project website
- Project map updated with Phase 2B areas of focus

- Phase 2B overview and update letter: Informational mailing and notification of upcoming work; the letter will be mailed to two different groups of property owners with different maps included:
 - Properties that will have the barges in front of their homes will get the manholes location map and the barge configuration map that is applicable for their property
 - The other property owners will get the manholes location map
- Doorhangers describing anticipated work
- Images showing the potential location of work barges to be shared with nearby neighbors during notifications; manhole locations and barge configuration figures/maps
- Frequently Asked Questions (FAQs)
- Backpocket informational cards for field crews
- Social media postings; the City will share project updates on social media platforms, including Twitter, Facebook and Next Door
- Press release from the City

5.3 Detailed notification strategy and sequence (Phase 2B)

The following communication activities will occur to inform potentially affected residents about fieldwork.

Timing	Activities
Late July	<ul style="list-style-type: none"> • All lakeline residents receive Phase 2B overview letter that: <ul style="list-style-type: none"> - Provides notification of upcoming work - Describes what can be expected in terms of project activities - Describes anticipated communication activities with directly affected residents - Explains the “emergency” determination on the project - Shares information about fats, oils, and grease • Phase 2B information posted to website
3-7 days before work	<ul style="list-style-type: none"> • If needed per prior request, EnviroIssues calls residents at and near parcels where work will occur to provide early notification and coordinate any access needs
2-4 days before work	<ul style="list-style-type: none"> • EnviroIssues distributes doorhangers and project information to affected properties • Notification teams knock when distributing to provide information in person • EnviroIssues calls affected residents to alert them of upcoming work and temporary impacts to boat moorage
Day of work	<ul style="list-style-type: none"> • Field crews carry backpocket cards to share with residents and passersby, should there be concerns or questions

Timing	Activities
Ongoing	<ul style="list-style-type: none"> • EnviroIssues provides project website updates to reflect current status; City updates website • City (with EnviroIssues support) uses social media platforms to inform residents and the public • City to field emails and calls from residents and share summaries/emails with EnviroIssues; EnviroIssues to support responses, as requested • EnviroIssues tracks communications in project database

6.0 Roles and responsibilities

The following communication roles and responsibilities are assumed for Phase 2B work on the lakeline. These responsibilities may need to be revisited, enhanced, or clarified as additional project phases are clarified.

Staff	Responsibilities
City of Renton Project Managers (Dave Christensen and John Hobson)	<ul style="list-style-type: none"> • Review and approve all final reports, documents, and public outreach materials • Serve as primary point of contact for project inquiries • Share relevant information about community contacts with EnviroIssues to track in the project database • Lead approach and strategy for addressing unwilling homeowners
City of Renton Web and Administration Support (Teresa Phelan)	<ul style="list-style-type: none"> • Review all materials and content to ensure alignment with City standards and protocol • Post web content
City of Renton Field Staff (Richard Marshall, Stan Job, Rocky Sittner)	<ul style="list-style-type: none"> • Serve as City point of contact for City-led work, as needed • Share relevant information about community contacts with EnviroIssues to track in the project database
Carollo Engineers (Lara Kammereck, Dan Reisinger, team)	<ul style="list-style-type: none"> • Provide information for communication materials as requested • Review outreach deliverables as appropriate
Tetra Tech (Dave Scott, Alexandra Der, Kevin Goss)	<ul style="list-style-type: none"> • Provide coordination of in-field work • Coordinate public outreach timing • Review outreach deliverables as appropriate

Staff	Responsibilities
EnviroIssues (Laura Treadway, Nicole Lobodzinski, team)	<ul style="list-style-type: none">• Prepare and maintain the project public involvement plan• Develop and maintain project communication database• Draft responses to community inquiries in conjunction with project team members• Draft materials, talking points, web updates, and notification strategies for project team review• Coordinate mailing of notifications and informational materials• Attend project meetings, as needed• Support additional communication, outreach, and engagement efforts, as needed

7.0 Measurement and evaluation

Phase 2B communication activities will be documented and evaluated by the project team as they occur. This draft plan will be updated and reviewed, as needed, and insights will help to inform outreach and engagement work for upcoming project phases.

Kennydale Lakeline Sewer System Assessment Project

Last updated: August 6, 2018

Frequently Asked Questions

- What is the goal of this project? 1**
- Where is the Kennydale lakeline? 1**
- What components does the Kennydale Lakeline Sewer System include? 1**
- How does the Kennydale Lakeline Sewer System work? 2**
- How old is the Kennydale Lakeline Sewer System? 2**
- What process is the City using to assess the lakeline’s condition? 2**
- What did the City accomplish during Phase 1? 3**
- What is the City doing during Phase 2? 3**
- What is the City doing in 2018? 3**
- Why is the City expediting the 2018 work? 4**
- Will work impact my yard or shoreline? 4**
- Will work impact my boat access or mooring? 4**
- Will work impact fish?..... 4**
- What repair or replacement options are being considered? 4**
- What will it cost to repair or replace the lakeline?..... 4**
- How will the City pay for lakeline repairs? Will my rates go up? 4**
- Who can I contact for more information?..... 4**

What is the goal of this project?

The Kennydale Lakeline Sewer System is aging and may need to be repaired or replaced to ensure long-term service. In 2016, the City of Renton hired a consultant team to evaluate the condition of the lakeline system. Condition assessment results will inform an alternatives evaluation process to determine the best way to repair or replace the lakeline.

Where is the Kennydale lakeline?

The lakeline extends along portions of Lake Washington Drive N and Mountain View Avenue NE. See the project map at rentonwa.gov/kennydalelakeline/.

What components does the Kennydale Lakeline Sewer System include?

The lakeline system consists of the 8-inch lakeline (in-lake portion), 8-inch shoreline (out-of-lake portion), 6-inch service laterals that convey sewage from homes to the lakeline, lateral cleanouts, lateral isolation valves, the Lake Washington Flush Station, the Lake Washington No. 2 Lift Station, and a 6-inch

force main. The total length of the 8-inch lakeline is approximately 5,200 feet. There are 31 lateral connections serving approximately 55 homes.

How does the Kennydale Lakeline Sewer System work?

The lakeline system collects sewage from lakefront residences and conveys flows to the lift station at the north end of the line, where it is pumped to King County's Eastside Interceptor. Sewage is conveyed to the lakeline from homes via smaller laterals. More than one home is connected to about a third of the laterals. The flush station, at the southern terminus of the lakeline, is run periodically throughout the day to help convey sewage to the lift station.

The flush station was originally intended to move (flush) sewage and solids through the lakeline; however, at this time flushing flows cannot be achieved without risking sewer backups at residences. Therefore, the flush station is run at a lower flow rate that "freshens" the line and helps convey sewage to the lift station. After installation of two new temporary access manholes in the lakeline and subsequent pipe cleaning in 2018, the lakeline is expected to have improved capacity that will allow more robust flushing.

Sewage from several lakefront homes to the north also discharge to the lift station wet well. Originally, the lift station also collected industrial sewage from Barbee Mill and other lakefront businesses. However, these flows were removed from the lakeline system during redevelopment of the area.

How old is the Kennydale Lakeline Sewer System?

The Kennydale Lakeline Sewer System was originally constructed in 1972 through Local Improvement District 270.

What process is the City using to assess the lakeline's condition?

The condition assessment will occur in two phases:

Phase 1 – Initial Assessment (September through December 2016) – Complete: Performed initial assessment activities to determine what additional evaluation efforts would be needed to complete a thorough condition assessment in Phase 2.

Phase 2 – Condition Assessment (Summer 2017 through 2018): The team will use information gathered during Phase 1 to develop an approach to evaluate the lakeline's condition more thoroughly. From this detailed assessment, the team will develop alternatives to address service maintenance and reliability in the lakeline system area. Phase 2 will be split into two parts:

- **Preliminary Condition Assessment (2017) – Complete:** Perform pilot testing at priority locations to ensure evaluation approaches will work as anticipated and detailed surveys along the lakeline to collect information on the condition of the system.
- **Comprehensive Condition Assessment (2018):** Complete final technical work in selected locations to fully inform the condition assessment.

What did the City accomplish during Phase 1?

The City's annual cleaning activities in September 2016 initiated Phase 1, when the project team began collecting data on the existing system and evaluated lakeline conditions, where possible. The City and project team:

- Initiated communication activities with residents connected and adjacent to the lakeline.
- Collected base map and survey information for infrastructure directly related to the routine flushing activities where property owners had granted access for crews.
- Tested the effectiveness of in-water survey methods.
- Characterized the environmental conditions to identify needed permits for future work efforts.
- Evaluated operation and maintenance practices for the lakeline system, and recommended modified or additional practices, where appropriate.
- Conducted a condition assessment of the Lake Washington Flush Station and the Lake Washington No. 2 Lift Station.

What is the City doing during Phase 2?

During Phase 2, the project team:

- **Mapped the horizontal and vertical location of the entire lakeline system:** Mapping included the mainline pipe, laterals, cleanouts, and valves, as well as nearby docks, bulkheads, and homes.
- **Developed a hydraulic model of the lakeline system:** The model will help the team better understand how the system currently works and identify options for improving operations and maintenance.
- **Completing a more thorough condition assessment:** The team is measuring the pipe wall thickness where feasible, analyzing the metal for corrosion, and investigating the structural integrity of associated bulkheads.
- **Replaced the existing pumps** at Lake Washington No. 2 Lift Station in early June 2018.
- **Obtaining local permits** needed to conduct near-term condition assessment work.
- **Applying for federal, state, and local permits** required to conduct more extensive condition assessment work in the future.

What is the City doing in 2018?

Through the assessment of the lakeline performed in 2017, the City of Renton learned that system capacity constraints need to be addressed. As a result, the project will install two new temporary access manholes in Lake Washington and clean the entire lakeline from water and from land. To access the manholes in the lake for cleaning, a watertight barrier will be created using steel riser sections. When work is completed, the temporary access manholes and the lakeline will be restored to the current condition below the lakebed. The majority of the work will be performed from work boats and barges located on the lake.

In addition, in 2018 the city will complete the thorough condition assessment described above.

Why is the City expediting the 2018 work?

Unforeseen pump issues that occurred in spring 2018 further reduced the volume of flow from the flush station to prevent sewer backups into residences. These unforeseen circumstances made completing the installation of the two new access manholes even more important. Further, in-water work must be completed between August and fall 2018 in order to not disturb salmon migrations in Lake Washington. These factors combined to lead the City of Renton to declare this an emergency project in order to expedite completion of the work.

Will work impact my yard or shoreline?

There is a small chance of settlement of the shoreline from installation of the temporary manholes. The City will monitor conditions before, during, and after the project and will correct any impacts.

Will work impact my boat access or mooring?

Work barges may create temporary impacts to boat moorage in the immediate area. The project team will contact property owners that may be affected prior to work beginning. Property owners requiring boat access are encouraged to contact the project team to coordinate.

Will work impact fish?

The project team will be working during an approved work window to eliminate impacts to fish. It is a natural occurrence for fish to die during spawning season so there may be some dead fish present in the lake while work is occurring.

What repair or replacement options are being considered?

We have not identified options to repair or replace the lakeline yet, because those solutions will depend on what we find during the condition assessment.

What will it cost to repair or replace the lakeline?

We don't know, as cost estimates will depend on the repair or replacement options we identify. Cost estimates will be prepared as part of the alternatives analysis process.

How will the City pay for lakeline repairs? Will my rates go up?

Any repairs or replacement of the lakeline will be funded through the City's Wastewater Capital Improvement Program. Any rate increase that may be required will be shared among the entire customer base.

Who can I contact for more information?

Please contact John Hobson, Project Manager, at jhobson@rentonwa.gov or 425-430-7279.

More information can also be found at: rentonwa.gov/kennedalelakeline/

Denis Law Mayor



Public Works Department - Gregg Zimmerman, P.E., Administrator

August 2, 2018

Name
Address
City, State Zip

RE: Kennydale Lakeline Sewer System Updates

Dear Name:

As you may know, the City of Renton has been reviewing the condition of the aging Kennydale Lakeline Sewer System to determine the best plan for long-term service. This lakeline is an 8" diameter sewer pipeline that runs parallel with the shoreline and is located anywhere from a few feet to 15 feet offshore in Lake Washington and serves more than 50 properties along Lake Washington Boulevard North and Mountain View Avenue North. Smaller service laterals convey sewage from the houses to the lakeline.

Work in 2018

Through in-depth surveys and assessment of the lakeline and its service laterals that began in August 2017, we learned that system capacity needs to be addressed. As a result, we plan to install two new temporary access manholes in Lake Washington and clean the entire lakeline from barges on the water and a Vactor truck from land. The maintenance project is expected to begin in August and be completed in fall 2018.

The majority of the work will be performed from barges located on the lake. The manhole installation will be supported by divers. Cleaning of the lakeline will be done from the two new temporary manholes, three existing submerged manholes and existing onshore cleaning locations. When work is completed, the temporary access manholes will be removed and the lakeline will be restored to the current condition below the lakebed.

The barges may create temporary impacts to boat moorage in the immediate area (see enclosed map). The project team will contact property owners that may be affected prior to work beginning. Property owners requiring boat access are encouraged to contact the project team to coordinate.

As always, we will contact you before coming onto your property, using methods like door hangers, phone calls, and mail to share information. We will also keep the project website updated with general information about our progress at: rentonwa.gov/kennydalelakeline/.

How to Help Care for the Kennydale Lakeline

The lakeline is a unique sewer system. The wastewater from the house that enters the Kennydale Lakeline Sewer System remains in the pipe until the city's flush station flushes water through it twice a day. Even though the main is flushed twice daily, the pressure used is not sufficient to fully remove all the materials in the sewer main, particularly fats, oil, and grease. This results in reduced capacity in the sewer main and can lead to blockages that will cause sewage backups into your home. The flushing pressure of the flush station cannot be increased without potentially forcing wastewater back up the lateral pipes and causing internal flooding to the houses.

Here are some ways to help ensure the lakeline continues to operate in good condition and protect your side sewer and home against sewer backups:

- For kitchen waste, scrape out or use paper towels to wipe pans and plates prior to washing them. Dispose of the scrapings or soiled paper towels in the yard waste cart.
- Never pour grease or cooking oil down the drain or garbage disposals. For large amounts of fats, oils, or grease, collect cooled oil in a sealable container and dispose in the trash.
- Only use the kitchen sink garbage disposal to clear away small food particles missed during the scraping process.
- Limit what is flushed down the toilets to human waste and toilet paper. Products labeled as "flushable" should NOT be flushed, as they do not break up fully as they enter the sewer system.

Please note:

- Garbage disposals do not keep grease out of the plumbing system.
- Hot water and detergents that claim to dissolve grease only pass it down the line and cause problems elsewhere.

Questions

If you have questions, please contact either John Hobson, Project Manager, at 425-403-7279 or by email at jhobson@rentonwa.gov or me at 425-430-7212 or by email at dchristensen@rentonwa.gov.

Sincerely,



David Christensen
Wastewater Utility Manager

Enclosure



TABLE A. PROPERTIES ADJACENT TO SEWER IMPROVEMENTS & CLEANING

CLEANING STRUCTURES	SITE 5 MANHOLE	SITE 4 MANHOLE	SITE 3 & 2 MANHOLE AND LAVALLEY CLEANOUT	SITE 1 MANHOLE
ADDRESS AT STRUCTURE	2905 MOUNTAIN VIEW AVE N	3119 MOUNTAIN VIEW AVE N	3307 MOUNTAIN AVE N	3715 LAKE WASHINGTON BLVD
PROPERTY TO NORTH	2909 MOUNTAIN VIEW AVE N	3205 MOUNTAIN VIEW AVE N	N/A	3717 LAKE WASHINGTON BLVD
PROPERTY TO SOUTH	2827 MOUNTAIN VIEW AVE N	3115 MOUNTAIN VIEW AVE N	3233 MOUNTAIN AVE N	3713 LAKE WASHINGTON BLVD





Public Works Department - Gregg Zimmerman, P.E., Administrator

August 2, 2018

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Address
City, State Zip

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The barges may create temporary impacts to boat moorage in the immediate area. Due to the location of the manholes, the barges will be in front of your property (see location maps enclosed). If you have any questions or would like to meet to discuss this project, please contact John Hobson.

As always, we will contact you before coming onto your property, using methods like door hangers, phone calls, and mail to share information. We will also keep the project website updated with general information about our progress at: rentonwa.gov/kennydalelakeline/.

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Sincerely,



David Christensen
Wastewater Utility Manager



Enclosures

H:\File Sys\WWP - WasteWater\WWP-27-04010 Kennydale Lakeline Sewer Improvement Ph II\Public Outreach\Phase 2B letter Group 2 merge.docx





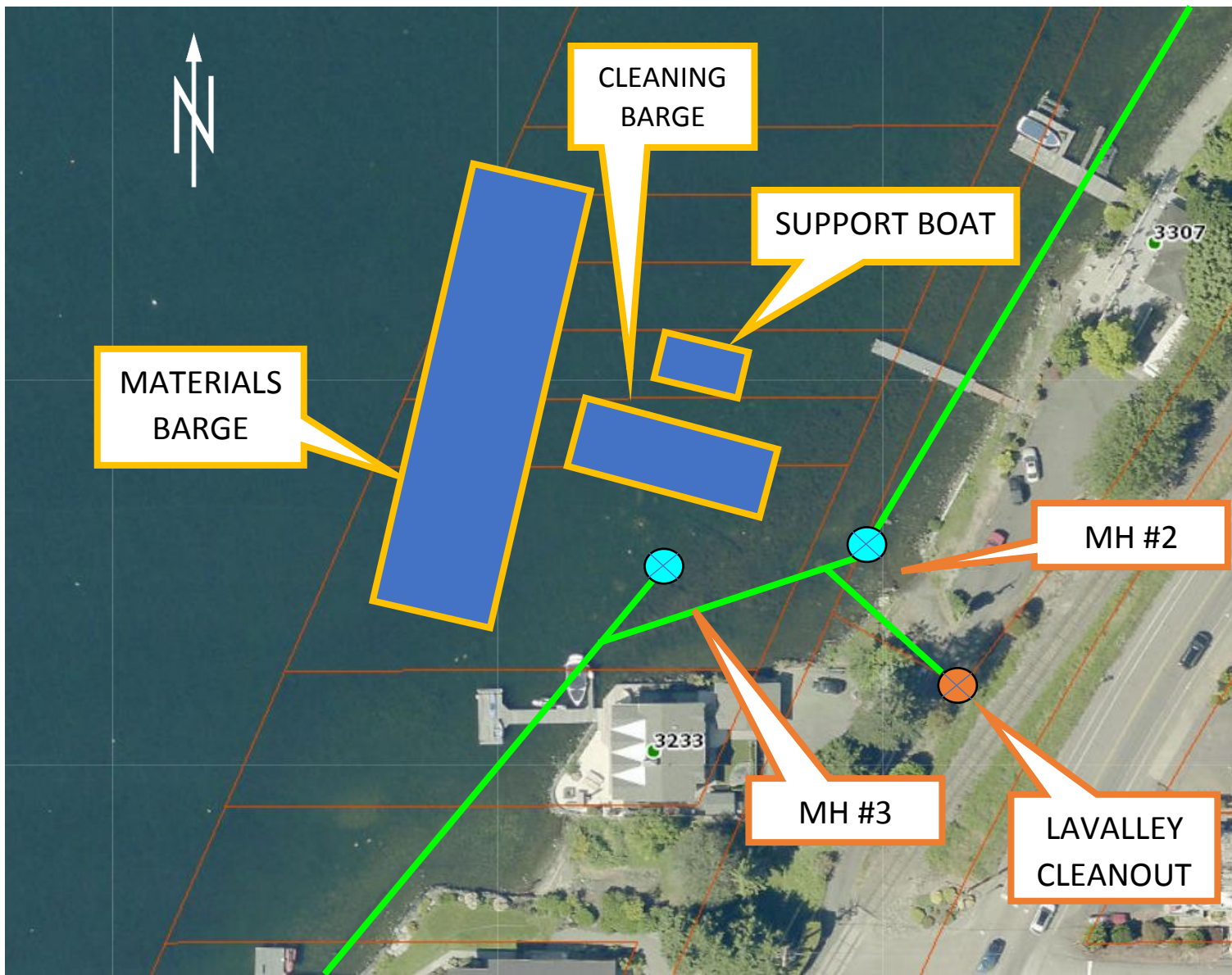
LEGEND

-  MANHOLE
-  SEWER MAIN




SCALE



KENNYDALE SEWER IMPROVEMENT AND CLEANING
FIGURE A. SITE 1 MANHOLE
APPROXIMATE BARGE CONFIGURATION



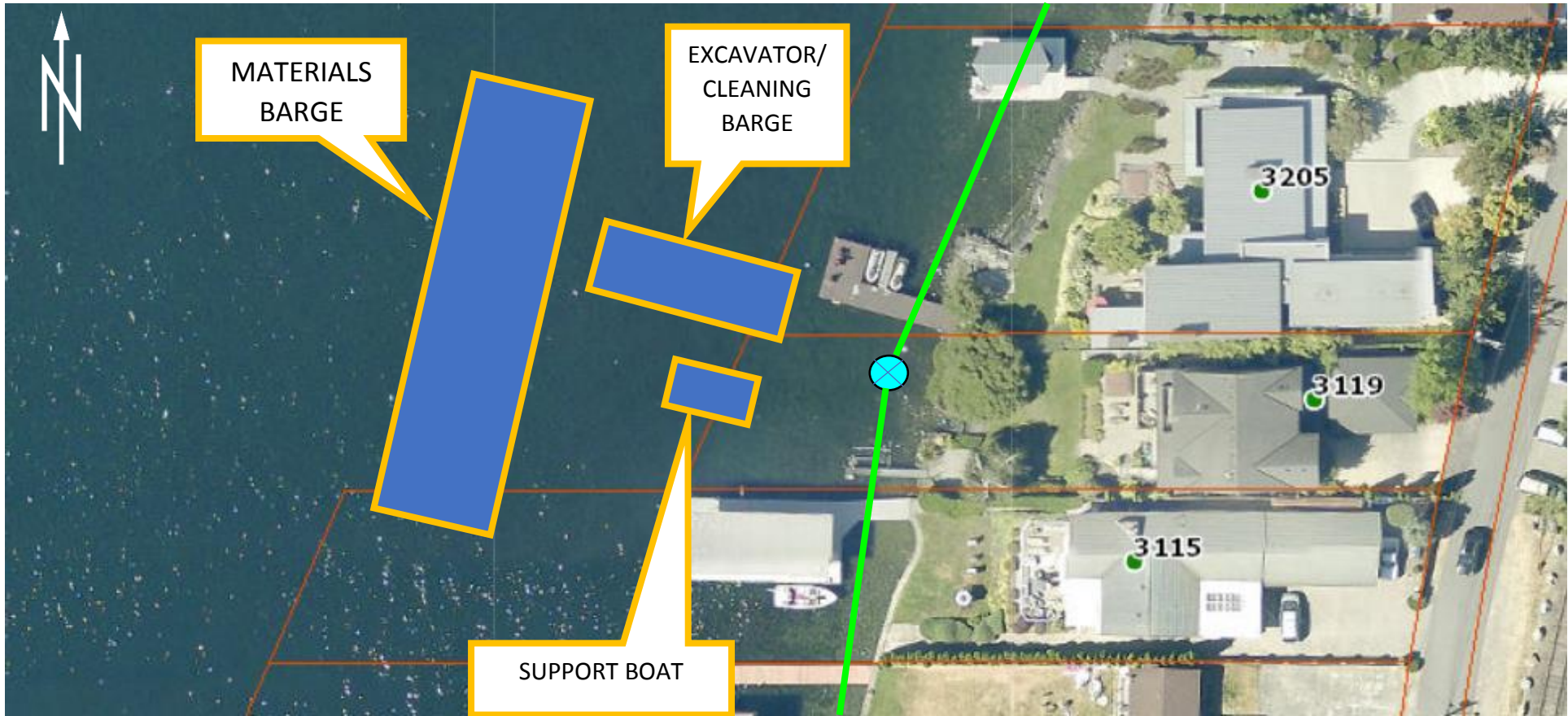
LEGEND

-  MANHOLE
-  CLEANOUT
-  SEWER MAIN



SCALE



KENNYDALE SEWER IMPROVEMENT AND CLEANING
FIGURE B. SITES 2 & 3 MANHOLES
APPROXIMATE BARGE CONFIGURATION



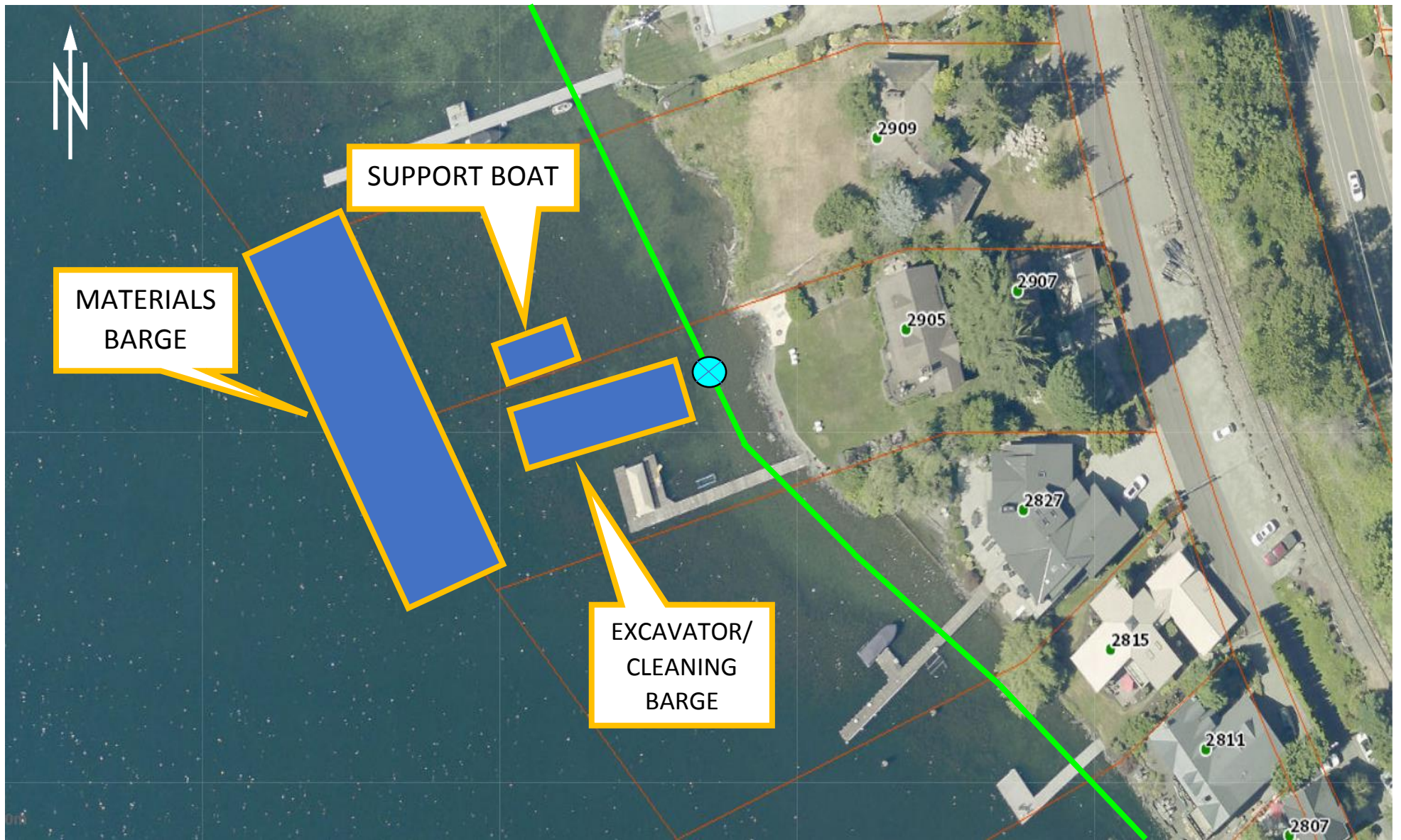
LEGEND

-  MANHOLE
-  SEWER MAIN



SCALE



KENNYDALE SEWER IMPROVEMENT AND CLEANING
FIGURE C. SITE 4 MANHOLE
 APPROXIMATE BARGE CONFIGURATION



LEGEND

-  MANHOLE
-  SEWER MAIN

SCALE



KENNYDALE SEWER IMPROVEMENT AND CLEANING
FIGURE D. SITE 5 MANHOLE
APPROXIMATE BARGE CONFIGURATION

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Kennydale Lakeline Sewer System Assessment

City crews and construction crews may be on or near your property starting on _____.

Project Update:

- Sewer system's maintenance work will include:
 - Installing two new temporary access manholes in Lake Washington
 - Cleaning the entire lakeline from barges on the water and a Vactor truck from land
 - Removing the temporary access manholes after cleaning
 - Restoring the lakebed and shoreline, as needed
- In-depth condition assessment will continue by:
 - Testing the pipeline in a few locations
 - Completing final technical work

What to Expect:

- Work may occur on or near your property.
- Barges may create temporary impacts to boat moorage in the immediate area. Please contact John Hobson to coordinate boat access.
- Construction is expected to begin in September and be completed by fall 2018.
- Work will occur between **7 a.m. and 5 p.m.**, Monday through Friday.
- Noise while trucks are operating.
- If the project team needs to enter your yard, they will knock on your door before proceeding as a courtesy.

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jhobson@rentonwa.gov

For project updates visit
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Kennydale Lakeline Assessment

The Kennydale Lakeline Sewer System is aging, and repairs may be needed to ensure that this crucial piece of public infrastructure can effectively serve residents in the coming decades. The City of Renton is continuing to thoroughly evaluate the lakeline system and determine what upgrades may be needed.

This summer and fall, the project team will install two new temporary access manholes in Lake Washington and clean the entire lakeline from water and land. Crews will continue testing the pipeline in a few locations as part of the condition assessments of the lakeline and service laterals, which convey sewage from houses to the lakeline. The City will then determine what actions may be needed to keep the system working well.

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If you have questions, please contact:

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Phone: (425) 430-7279
Email: jhobson@rentonwa.gov

For more information:
rentonwa.gov/kennydalelake



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Renton Kennydale Lakeline - Activities (31 Total)**Generated for Renton Kennydale Lakeline 12/14/2018 : 11:22 AM**

Total Activities: 31

Door-hanging: Weekend work near manhole 1

10/26/2018

Providing notification to three properties that work near manhole 1 will continue through the weekend.

Type: Flying**Contacts: 6**

DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
DOUGLAS HARWOOD	425-503-0242 (Cell) 425-455-0501 (Work)
MARJORIE HARWOOD	425-503-7092 (Cell)
KRISTI SUNDERLAND	
DAVID WILLIAMSON	206-399-4522 (Cell)

Door-hanging: 2018 Condition Assessment

10/11/2018

List to deliver door hanger notifications to six properties (seven addresses) re condition assessment work the weeks of Oct. 8 and Oct. 15.

Also included the three manhole 4 neighbors in this notification.

Type: Flyering

Contacts: 15

CHERYL L ATKINSON	425-898-9359 (Home) 301-379-2089 (Cell)
MICHAEL H ATKINSON	425-898-9359 (Home)
JOHN MICHAEL BROWN	206-240-0133 (Home)
THOMAS R DAHLBY	425-891-3775 (Cell)
LISA LEIGHTON	206-271-3233 (Home) 206-919-8776 (Cell)
STEVE LEIGHTON	206-919-8774 (Cell)
CHRIS OPPFELT	
HOLLY OPPFELT	425-891-4582 (Home)
NANCY A PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-601-3116 (Work)
STEPHEN C PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-604-3116 (Work)
BEVERLY REIMERS	206-898-8659 (Cell)
MILTON A REIMERS JR	
WILLIAM C STONEMAN	425-255-7972 (Home)
GARY F YOUNG	425-736-4787 (Home)
HELEN YOUNG	425-736-4787 (Home)

Renton Kenneydale Lakeline Cleaning Project Viewing

9/25/2018 9:00 am to 11:00 am

2909 Mountain View Ave N

Renton, WA98056

Meeting invitees: 'brianh@skywayws.org'; 'DHelling@Huit-Zollars.com'; 'achung@bellevuewa.gov'; Ellman, John (JEllman@bellevuewa.gov); Peckler, Richard E. (RPeckler@bellevuewa.gov); Duncan, Brett (BDuncan@bellevuewa.gov); Dickey, Nate (NDickey@bellevuewa.gov); Marcum, Tony (TMarcum@bellevuewa.gov); erich.fiedler@seattle.gov; Dennis.baker@mercergov.org; Mark.jones@mercergov.org; 'corinne.deleon@seattle.gov'; Goss, Kevin (Kevin.Goss@tetrattech.com); david.scott@tetrattech.com; Daniel Reisinger (DReisinger@carollo.com); Lara Kammereck (LKammereck@carollo.com); David Christensen (Dchristensen@Rentonwa.gov); Laura Treadway (ltreadway@enviroissues.com); Nicole Lobodzinski (nlobodzinski@enviroissues.com); Shane Couty (SCouty@Rentonwa.gov); Jayson Gallaway (JGallaway@Rentonwa.gov); Rocky Sittner (RSittner@Rentonwa.gov)

Meeting information:

The City's contractor (Ballard Marine Construction) is currently scheduled to begin cleaning on Tuesday, Sept 25th. I'll let you know if their schedule slips and we can reschedule if necessary. The viewing area will be on a currently vacant property (2909 Mountain View Ave N).

Type:

Mailer: Phase 2B Update

8/2/2018

Letter to properties about Phase 2B work update.

Type: Mailer

Contacts: 66

KING COUNTY-PARKS	
ANDREW T ALBERTSON	206-617-7511 (Cell)
MEGAN L ALBERTSON	
O LOWELL ANDERSON	206-772-6284 (Home)
CHERYL L ATKINSON	425-898-9359 (Home) 301-379-2089 (Cell)
MICHAEL H ATKINSON	425-898-9359 (Home)
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
TATYANA BARINOVA	
TONY BOYDSTON	206-999-3763 (Cell)
CRAG A BRAUFF	
GERALD F BRENNAN	425-271-2736 (Home)
JOHN MICHAEL BROWN	206-240-0133 (Home)
ROBERT H BURR	425-226-7114 (Home) 425-941-4004 (Cell)
BETSEY BURROUGHS	425-739-8698 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
REBECCA A BYUS	206-266-6969 (Home)
ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
KATHLEEN I DAHLBY	425-891-3774 (Cell)
THOMAS R DAHLBY	425-891-3775 (Cell)
KAREN EASTON	206-708-3664 (Cell)
TOM EASTON	
BRUCE E ERIKSON	425-226-2981 (Home) 206-669-8881 (Cell)
MARY R ERIKSON	425-226-2981 (Home)
BRIAN L FIFE	206-380-8414 (Cell)
STEPHANIE C FIFE	
MONICA M FIX	425-306-1990 (Home)
BANG DAE HEE	
JOHN PATRICK HEILY	206-491-6004 (Home)
APRIL L HUMPHREY	206-391-8019 (Cell)
DAVID R HUMPHREY	206-391-8019 (Cell)
DEBRA L KEPPLER	206-250-3637 (Home)
WILLIAM F KEPPLER	206-250-3638 (Cell)
REBECCA LEPROWSE	206-920-1033 (Cell)
SHAWN LEPROWSE	
MARCIA LEVEQUE	
SCOTT LEVEQUE	
KEVIN L LINDAHL	206-266-6969 (Home)
VIKTORIA LITTLEMAN	425-351-3745 (Home) 425-255-0487 (Cell)
ANTONIO MANDARANO	206-403-7272 (Cell)
JAMES C MORGAN	425-417-2513 (Home)
LAURA S MORGAN	
CHERYLE NAPOLI	

GIOVANNI NAPOLI	
FRITZ W NELSON	425-226-8772 (Home) 425-445-5430 (Cell)
KARYN A PASQUIER	425-271-1468 (Home)
PAUL L PASQUIER	
ANNE PETETT	425-277-4007 (Home) 425-765-5334 (Cell)
SCOTT PETETT	425-277-4007 (Home) 425-765-5334 (Cell)
KAAREN PRITCHARD	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)
BEVERLY REIMERS	206-898-8659 (Cell)
MILTON A REIMERS JR	
DARIUS RICHARDS	425-623-8177 (Home) 425-430-4469 (Cell)
VICKI L RICHARDS	425-430-4469 (Home)
DONALD L SAVOY	
PETER SPOUSE	206-369-5374 (Cell)
WILLIAM C STONEMAN	425-255-7972 (Home)
JIANPING SUN	
ALISON P TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ROBERT W TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ANGELA TROY	206-419-9499 (Cell)
GARY A WEIL	425-988-4556 (Home)
MARLENE R WINTER	425-417-4722 (Home)
JOAN WU GUANGOLIN	
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Mailer: Phase 2B Update Properties with Barges

8/2/2018

Letter to properties that will have barges in front of their properties about Phase 2B work update.

Type: Mailer

Contacts: 18

JOOS FAMILY LLC	
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
DOUGLAS HARWOOD	425-503-0242 (Cell) 425-455-0501 (Work)
LOIS A HOWELL	206-910-0180 (Cell)
RICHARD SCOTT HOWELL	
STEVE LEIGHTON	206-919-8774 (Cell)
ADRIENNE LINDBLAD	253-347-5964 (Cell) 206-940-2524 (Work)
WARREN ERIC LINDBLAD	
LISA LORD	
CHRIS OPPFELT	
NANCY A PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-601-3116 (Work)
STEPHEN C PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-604-3116 (Work)
BEVERLY REIMERS	206-898-8659 (Cell)
MILTON A REIMERS JR	
KRISTI SUNDERLAND	
DAVID WILLIAMSON	206-399-4522 (Cell)
GARY F YOUNG	425-736-4787 (Home)

Mailer: Phase 2B Notifications mailing list

7/30/2018

All Lakeline and Other properties. Used to pull mailing list for 8/2/2018 mailings.

Type: Mailer

Contacts: 95

CITY OF RENTON	
JOOS FAMILY LLC	
KING COUNTY-PARKS	
ANDREW T ALBERTSON	206-617-7511 (Cell)
MEGAN L ALBERTSON	
O LOWELL ANDERSON	206-772-6284 (Home)
CHERYL L ATKINSON	425-898-9359 (Home) 301-379-2089 (Cell)
MICHAEL H ATKINSON	425-898-9359 (Home)
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
TATYANA BARINOVA	
TONY BOYDSTON	206-999-3763 (Cell)
CRAG A BRAUFF	
GERALD F BRENNAN	425-271-2736 (Home)
JOHN MICHAEL BROWN	206-240-0133 (Home)
ROBERT H BURR	425-226-7114 (Home) 425-941-4004 (Cell)
BETSEY BURROUGHS	425-739-8698 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
REBECCA A BYUS	206-266-6969 (Home)
ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
KATHLEEN I DAHLBY	425-891-3774 (Cell)
THOMAS R DAHLBY	425-891-3775 (Cell)
JEANNE C DEMUND	206-970-3172 (Home) 206-898-9818 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
KAREN EASTON	206-708-3664 (Cell)
TOM EASTON	
BRUCE E ERIKSON	425-226-2981 (Home) 206-669-8881 (Cell)
MARY R ERIKSON	425-226-2981 (Home)
BRIAN L FIFE	206-380-8414 (Cell)
STEPHANIE C FIFE	
MONICA M FIX	425-306-1990 (Home)
BIN GONG	615-579-6738 (Cell)
DOUGLAS HARWOOD	425-503-0242 (Cell) 425-455-0501 (Work)
MARJORIE HARWOOD	425-503-7092 (Cell)
BANG DAE HEE	
JOHN PATRICK HEILY	206-491-6004 (Home)
SUNDAY G HEILY	206-491-6004 (Home)
LOIS A HOWELL	206-910-0180 (Cell)
RICHARD SCOTT HOWELL	
APRIL L HUMPHREY	206-391-8019 (Cell)
DAVID R HUMPHREY	206-391-8019 (Cell)

PAUL JOOS	425-417-9955 (Cell) 425-255-4250 (Work)
DEBRA L KEPPLER	206-250-3637 (Home)
WILLIAM F KEPPLER	206-250-3638 (Cell)
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STEVE LEIGHTON	206-919-8774 (Cell)
REBECCA LEPROWSE	206-920-1033 (Cell)
SHAWN LEPROWSE	
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SCOTT LEVEQUE	
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ADRIENNE LINDBLAD	253-347-5964 (Cell) 206-940-2524 (Work)
WARREN ERIC LINDBLAD	
VIKTORIA LITTLEMAN	425-351-3745 (Home) 425-255-0487 (Cell)
ANTONIO MANDARANO	206-403-7272 (Cell)
JAMES C MORGAN	425-417-2513 (Home)
LAURA S MORGAN	
CHERYLE NAPOLI	
GIOVANNI NAPOLI	
ANGIE F NELSON	
FRITZ W NELSON	425-226-8772 (Home) 425-445-5430 (Cell)
CHRIS OPPFELT	
HOLLY OPPFELT	425-891-4582 (Home)
KARYN A PASQUIER	425-271-1468 (Home)
PAUL L PASQUIER	
GREG PETERSON	206-793-1769 (Cell)
KIM PETERSON	206-793-1769 (Cell)
ANNE PETETT	425-277-4007 (Home) 425-765-5334 (Cell)
SCOTT PETETT	425-277-4007 (Home) 425-765-5334 (Cell)
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STEPHEN C PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-604-3116 (Work)
KAAREN PRITCHARD	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)
MARC PRITCHARD	425-957-7254 (Home)
ROBERT DAVID REED	206-503-7972 (Cell)
BEVERLY REIMERS	206-898-8659 (Cell)
MILTON A REIMERS JR	
DARIUS RICHARDS	425-623-8177 (Home) 425-430-4469 (Cell)
VICKI L RICHARDS	425-430-4469 (Home)
DONALD L SAVOY	

PETER SPOUSE	206-369-5374 (Cell)
WILLIAM C STONEMAN	425-255-7972 (Home)
JIANPING SUN	
KRISTI SUNDERLAND	
ALISON P TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ROBERT W TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ANGELA TROY	206-419-9499 (Cell)
GARY A WEIL	425-988-4556 (Home)
DAVID WILLIAMSON	206-399-4522 (Cell)
MARLENE R WINTER	425-417-4722 (Home)
JOAN WU GUANGOLIN	
GARY F YOUNG	425-736-4787 (Home)
HELEN YOUNG	425-736-4787 (Home)
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Door-hanging: June 2018 Survey

6/4/2018

List of parcels for May 2018 Survey notifications

Type: Flying**Contacts: 12**

JOOS FAMILY LLC	
LOIS A HOWELL	206-910-0180 (Cell)
RICHARD SCOTT HOWELL	
PAUL JOOS	425-417-9955 (Cell) 425-255-4250 (Work)
CHERYLE NAPOLI	
GIOVANNI NAPOLI	
CHRIS OPPFELT	
HOLLY OPPFELT	425-891-4582 (Home)
BEVERLY REIMERS	206-898-8659 (Cell)
MILTON A REIMERS JR	
GARY F YOUNG	425-736-4787 (Home)
HELEN YOUNG	425-736-4787 (Home)

Door-hanging: Bulkhead Assessment

10/7/2017

Flyering to alert homeowners and residents of bulkhead assessment work to begin Oct. 9 or 10.

Type: Flyering

Contacts: 83

JOOS FAMILY LLC	
KATELYNN	425-444-1412 (Cell)
KING COUNTY-PARKS	
ANDREW T ALBERTSON	206-617-7511 (Cell)
MEGAN L ALBERTSON	
O LOWELL ANDERSON	206-772-6284 (Home)
CHERYL L ATKINSON	425-898-9359 (Home) 301-379-2089 (Cell)
MICHAEL H ATKINSON	425-898-9359 (Home)
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
TATYANA BARINOVA	
TONY BOYDSTON	206-999-3763 (Cell)
GERALD F BRENNAN	425-271-2736 (Home)
JOHN MICHAEL BROWN	206-240-0133 (Home)
ROBERT H BURR	425-226-7114 (Home) 425-941-4004 (Cell)
BETSEY BURROUGHS	425-739-8698 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
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ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
MELANIE CROOKER	321-544-1481 (Cell)
KATHLEEN I DAHLBY	425-891-3774 (Cell)
THOMAS R DAHLBY	425-891-3775 (Cell)
JEANNE C DEMUND	206-970-3172 (Home) 206-898-9818 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
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TOM EASTON	
BRUCE E ERIKSON	425-226-2981 (Home) 206-669-8881 (Cell)
MARY R ERIKSON	425-226-2981 (Home)
BRIAN L FIFE	206-380-8414 (Cell)
STEPHANIE C FIFE	
MONICA M FIX	425-306-1990 (Home)
BIN GONG	615-579-6738 (Cell)
DOUGLAS HARWOOD	425-503-0242 (Cell) 425-455-0501 (Work)
MARJORIE HARWOOD	425-503-7092 (Cell)
BANG DAE HEE	
LOIS A HOWELL	206-910-0180 (Cell)
RICHARD SCOTT HOWELL	
APRIL L HUMPHREY	206-391-8019 (Cell)
DAVID R HUMPHREY	206-391-8019 (Cell)
PAUL JOOS	425-417-9955 (Cell) 425-255-4250 (Work)

DENIS W LAW	425-277-3434 (Home)
PATRICIA LAW	
LISA LEIGHTON	206-271-3233 (Home) 206-919-8776 (Cell)
STEVE LEIGHTON	206-919-8774 (Cell)
KEVIN L LINDAHL	206-266-6969 (Home)
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LAURA S MORGAN	
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FRITZ W NELSON	425-226-8772 (Home) 425-445-5430 (Cell)
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HOLLY OPPFELT	425-891-4582 (Home)
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PAUL L PASQUIER	
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KIM PETERSON	206-793-1769 (Cell)
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VICKI L RICHARDS	425-430-4469 (Home)
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KRISTI SUNDERLAND	
ALISON P TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ROBERT W TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ANGELA TROY	206-419-9499 (Cell)
GARY A WEIL	425-988-4556 (Home)
DAVID WILLIAMSON	206-399-4522 (Cell)
JOAN WU GUANGOLIN	

GARY F YOUNG	425-736-4787 (Home)
HELEN YOUNG	425-736-4787 (Home)
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Phone Calls: Access and courtesy reminders - Bulkhead assessment

10/6/2017

Phone calls to homeowners to alert them to upcoming bulkhead assessment work and coordinate access.

Properties with access coordination needs:

3811 Lake Wa Blvd
 3815 Lake Wa Blvd
 3821 Lake Wa Blvd

Courtesy reminders:

3001 Mountain View
 3601 Lake Wa Blvd (doberman property)
 3605 Lake Wa Blvd

Type: Phone Calls

Contacts: 13

TATYANA BARINOVA	
ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
KAREN EASTON	206-708-3664 (Cell)
TOM EASTON	
BRUCE E ERIKSON	425-226-2981 (Home) 206-669-8881 (Cell)
MARY R ERIKSON	425-226-2981 (Home)
GREG PETERSON	206-793-1769 (Cell)
KIM PETERSON	206-793-1769 (Cell)
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VICKI L RICHARDS	425-430-4469 (Home)
ALISON P TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ROBERT W TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)

Site Visit - Multiple Fieldwork Crews - 9/25-29/2017

9/25/2017

Type: Fieldwork

Contacts: 49

CITY OF RENTON	
JOOS FAMILY LLC	
ANDREW T ALBERTSON	206-617-7511 (Cell)
MEGAN L ALBERTSON	
CHERYL L ATKINSON	425-898-9359 (Home) 301-379-2089 (Cell)
MICHAEL H ATKINSON	425-898-9359 (Home)
TONY BOYDSTON	206-999-3763 (Cell)
CRAG A BRAUFF	
GERALD F BRENNAN	425-271-2736 (Home)
ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
KATHLEEN I DAHLBY	425-891-3774 (Cell)
THOMAS R DAHLBY	425-891-3775 (Cell)
JEANNE C DEMUND	206-970-3172 (Home) 206-898-9818 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
BRUCE E ERIKSON	425-226-2981 (Home) 206-669-8881 (Cell)
MARY R ERIKSON	425-226-2981 (Home)
BRIAN L FIFE	206-380-8414 (Cell)
STEPHANIE C FIFE	
BIN GONG	615-579-6738 (Cell)
DOUGLAS HARWOOD	425-503-0242 (Cell) 425-455-0501 (Work)
MARJORIE HARWOOD	425-503-7092 (Cell)
JOHN PATRICK HEILY	206-491-6004 (Home)
SUNDAY G HEILY	206-491-6004 (Home)
LOIS A HOWELL	206-910-0180 (Cell)
RICHARD SCOTT HOWELL	
APRIL L HUMPHREY	206-391-8019 (Cell)
DAVID R HUMPHREY	206-391-8019 (Cell)
PAUL JOOS	425-417-9955 (Cell) 425-255-4250 (Work)
DENIS W LAW	425-277-3434 (Home)
PATRICIA LAW	
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CHRIS OPPFELT	
HOLLY OPPFELT	425-891-4582 (Home)
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SCOTT PETETT	425-277-4007 (Home) 425-765-5334 (Cell)
ROBERT DAVID REED	206-503-7972 (Cell)
BEVERLY REIMERS	206-898-8659 (Cell)

MILTON A REIMERS JR	
DARIUS RICHARDS	425-623-8177 (Home) 425-430-4469 (Cell)
VICKI L RICHARDS	425-430-4469 (Home)
JIANPING SUN	
ANGELA TROY	206-419-9499 (Cell)
JOAN WU GUANGOLIN	
GARY F YOUNG	425-736-4787 (Home)
HELEN YOUNG	425-736-4787 (Home)

Phone calls: Access and courtesy reminder calls

9/22/2017

Laura and Connie made phone calls to 8 properties about fieldwork the week of Sept. 25.

Properties with access coordination needs:

3811 Lake Wa Blvd
 3815 Lake Wa Blvd
 3821 Lake Wa Blvd

Work in front yard only:

2731 Mountain View Ave

Doberman on property:

3601 Lake Wa Blvd; only work is survey

Courtesy reminders:

3001 Mountain View
 3101 Mountain View
 3605 Lake Wa Blvd

Type: Phone Calls

Contacts: 13

ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
KAREN EASTON	206-708-3664 (Cell)
TOM EASTON	
BRUCE E ERIKSON	425-226-2981 (Home) 206-669-8881 (Cell)
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WILLIAM C STONEMAN	425-255-7972 (Home)
ALISON P TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ROBERT W TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
MARLENE R WINTER	425-417-4722 (Home)

Door-hanging: Lakeline Survey 9/25

9/21/2017

Connie and Tyler (EI) delivered door hangers to all parcels to provide notification of Lakeline Survey starting Sept. 25.

Type: Flying

Contacts: 95

CITY OF RENTON	
JOOS FAMILY LLC	
KATELYNN	425-444-1412 (Cell)
KING COUNTY-PARKS	
ANDREW T ALBERTSON	206-617-7511 (Cell)
MEGAN L ALBERTSON	
O LOWELL ANDERSON	206-772-6284 (Home)
CHERYL L ATKINSON	425-898-9359 (Home) 301-379-2089 (Cell)
MICHAEL H ATKINSON	425-898-9359 (Home)
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
TATYANA BARINOVA	
TONY BOYDSTON	206-999-3763 (Cell)
CRAG A BRAUFF	
GERALD F BRENNAN	425-271-2736 (Home)
JOHN MICHAEL BROWN	206-240-0133 (Home)
ROBERT H BURR	425-226-7114 (Home) 425-941-4004 (Cell)
BETSEY BURROUGHS	425-739-8698 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
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BANG DAE HEE	
JOHN PATRICK HEILY	206-491-6004 (Home)
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LOIS A HOWELL	206-910-0180 (Cell)
RICHARD SCOTT HOWELL	

APRIL L HUMPHREY	206-391-8019 (Cell)
DAVID R HUMPHREY	206-391-8019 (Cell)
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WILLIAM F KEPPLER	206-250-3638 (Cell)
DENIS W LAW	425-277-3434 (Home)
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WARREN ERIC LINDBLAD	
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VICKI L RICHARDS	425-430-4469 (Home)
DONALD L SAVOY	

PETER SPOUSE	206-369-5374 (Cell)
WILLIAM C STONEMAN	425-255-7972 (Home)
JIANPING SUN	
KRISTI SUNDERLAND	
ALISON P TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ROBERT W TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ANGELA TROY	206-419-9499 (Cell)
GARY A WEIL	425-988-4556 (Home)
DAVID WILLIAMSON	206-399-4522 (Cell)
MARLENE R WINTER	425-417-4722 (Home)
JOAN WU GUANGOLIN	
GARY F YOUNG	425-736-4787 (Home)
HELEN YOUNG	425-736-4787 (Home)
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Mailer: Phase 2A September update

9/18/2017

Type: Mailer

Contacts: 85

JOOS FAMILY LLC	
KING COUNTY-PARKS	
ANDREW T ALBERTSON	206-617-7511 (Cell)
MEGAN L ALBERTSON	
O LOWELL ANDERSON	206-772-6284 (Home)
CHERYL L ATKINSON	425-898-9359 (Home) 301-379-2089 (Cell)
MICHAEL H ATKINSON	425-898-9359 (Home)
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
TATYANA BARINOVA	
TONY BOYDSTON	206-999-3763 (Cell)
CRAG A BRAUFF	
GERALD F BRENNAN	425-271-2736 (Home)
JOHN MICHAEL BROWN	206-240-0133 (Home)
ROBERT H BURR	425-226-7114 (Home) 425-941-4004 (Cell)
BETSEY BURROUGHS	425-739-8698 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
REBECCA A BYUS	206-266-6969 (Home)
ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
MELANIE CROOKER	321-544-1481 (Cell)
KATHLEEN I DAHLBY	425-891-3774 (Cell)
THOMAS R DAHLBY	425-891-3775 (Cell)
JEANNE C DEMUND	206-970-3172 (Home) 206-898-9818 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
KAREN EASTON	206-708-3664 (Cell)
TOM EASTON	
BRUCE E ERIKSON	425-226-2981 (Home) 206-669-8881 (Cell)
MARY R ERIKSON	425-226-2981 (Home)
BRIAN L FIFE	206-380-8414 (Cell)
STEPHANIE C FIFE	
MONICA M FIX	425-306-1990 (Home)
DOUGLAS HARWOOD	425-503-0242 (Cell) 425-455-0501 (Work)
BANG DAE HEE	
JOHN PATRICK HEILY	206-491-6004 (Home)
SUNDAY G HEILY	206-491-6004 (Home)
LOIS A HOWELL	206-910-0180 (Cell)
RICHARD SCOTT HOWELL	
APRIL L HUMPHREY	206-391-8019 (Cell)
DAVID R HUMPHREY	206-391-8019 (Cell)
DEBRA L KEPPLER	206-250-3637 (Home)
WILLIAM F KEPPLER	206-250-3638 (Cell)

DENIS W LAW	425-277-3434 (Home)
PATRICIA LAW	
LISA LEIGHTON	206-271-3233 (Home) 206-919-8776 (Cell)
STEVE LEIGHTON	206-919-8774 (Cell)
REBECCA LEPROWSE	206-920-1033 (Cell)
SHAWN LEPROWSE	
KEVIN L LINDAHL	206-266-6969 (Home)
ADRIENNE LINDBLAD	253-347-5964 (Cell) 206-940-2524 (Work)
WARREN ERIC LINDBLAD	
VIKTORIA LITTLEMAN	425-351-3745 (Home) 425-255-0487 (Cell)
ANTONIO MANDARANO	206-403-7272 (Cell)
JAMES C MORGAN	425-417-2513 (Home)
LAURA S MORGAN	
FRITZ W NELSON	425-226-8772 (Home) 425-445-5430 (Cell)
CHRIS OPPFELT	
KARYN A PASQUIER	425-271-1468 (Home)
PAUL L PASQUIER	
ANNE PETETT	425-277-4007 (Home) 425-765-5334 (Cell)
SCOTT PETETT	425-277-4007 (Home) 425-765-5334 (Cell)
NANCY A PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-601-3116 (Work)
STEPHEN C PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-604-3116 (Work)
KAAREN PRITCHARD	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)
MARC PRITCHARD	425-957-7254 (Home)
ROBERT DAVID REED	206-503-7972 (Cell)
BEVERLY REIMERS	206-898-8659 (Cell)
MILTON A REIMERS JR	
DARIUS RICHARDS	425-623-8177 (Home) 425-430-4469 (Cell)
VICKI L RICHARDS	425-430-4469 (Home)
DONALD L SAVOY	
PETER SPOUSE	206-369-5374 (Cell)
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DAVID WILLIAMSON	206-399-4522 (Cell)

MARLENE R WINTER	425-417-4722 (Home)
JOAN WU GUANGOLIN	
GARY F YOUNG	425-736-4787 (Home)
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Door-hanging: Lakeline Survey

8/24/2017

Delivered door hangers to parcels that did NOT get a Pilot, A, B door hanger on Monday to provide notification of Lakeline Survey starting Aug. 25.

Type: Flying

Contacts: 68

JOOS FAMILY LLC	
ANDREW T ALBERTSON	206-617-7511 (Cell)
MEGAN L ALBERTSON	
CHERYL L ATKINSON	425-898-9359 (Home) 301-379-2089 (Cell)
MICHAEL H ATKINSON	425-898-9359 (Home)
TATYANA BARINOVA	
TONY BOYDSTON	206-999-3763 (Cell)
CRAG A BRAUFF	
GERALD F BRENNAN	425-271-2736 (Home)
JOHN MICHAEL BROWN	206-240-0133 (Home)
REBECCA A BYUS	206-266-6969 (Home)
ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
KATHLEEN I DAHLBY	425-891-3774 (Cell)
THOMAS R DAHLBY	425-891-3775 (Cell)
JEANNE C DEMUND	206-970-3172 (Home) 206-898-9818 (Cell)
KAREN EASTON	206-708-3664 (Cell)
TOM EASTON	
BRUCE E ERIKSON	425-226-2981 (Home) 206-669-8881 (Cell)
MARY R ERIKSON	425-226-2981 (Home)
BRIAN L FIFE	206-380-8414 (Cell)
STEPHANIE C FIFE	
MONICA M FIX	425-306-1990 (Home)
DOUGLAS HARWOOD	425-503-0242 (Cell) 425-455-0501 (Work)
BANG DAE HEE	
JOHN PATRICK HEILY	206-491-6004 (Home)
SUNDAY G HEILY	206-491-6004 (Home)
LOIS A HOWELL	206-910-0180 (Cell)
RICHARD SCOTT HOWELL	
APRIL L HUMPHREY	206-391-8019 (Cell)
DAVID R HUMPHREY	206-391-8019 (Cell)
DEBRA L KEPPLER	206-250-3637 (Home)
WILLIAM F KEPPLER	206-250-3638 (Cell)
DENIS W LAW	425-277-3434 (Home)
PATRICIA LAW	
LISA LEIGHTON	206-271-3233 (Home) 206-919-8776 (Cell)
STEVE LEIGHTON	206-919-8774 (Cell)
REBECCA LEPROWSE	206-920-1033 (Cell)
SHAWN LEPROWSE	
KEVIN L LINDAHL	206-266-6969 (Home)
VIKTORIA LITTLEMAN	425-351-3745 (Home) 425-255-0487 (Cell)
ANTONIO MANDARANO	206-403-7272 (Cell)
JAMES C MORGAN	425-417-2513 (Home)

LAURA S MORGAN	
FRITZ W NELSON	425-226-8772 (Home) 425-445-5430 (Cell)
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KARYN A PASQUIER	425-271-1468 (Home)
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SCOTT PETETT	425-277-4007 (Home) 425-765-5334 (Cell)
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GARY A WEIL	425-988-4556 (Home)
DAVID WILLIAMSON	206-399-4522 (Cell)
MARLENE R WINTER	425-417-4722 (Home)
JOAN WU GUANGOLIN	
GARY F YOUNG	425-736-4787 (Home)

Door-hanging: Pilot Study, Batch A, Batch B

8/21/2017

Type: Flying

Contacts: 20

KING COUNTY-PARKS	
O LOWELL ANDERSON	206-772-6284 (Home)
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
GERALD F BRENNAN	425-271-2736 (Home)
ROBERT H BURR	425-226-7114 (Home) 425-941-4004 (Cell)
BETSEY BURROUGHS	425-739-8698 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
MELANIE CROOKER	321-544-1481 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
ADRIENNE LINDBLAD	253-347-5964 (Cell) 206-940-2524 (Work)
WARREN ERIC LINDBLAD	
KAAREN PRITCHARD	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)
MARC PRITCHARD	425-957-7254 (Home)
DARIUS RICHARDS	425-623-8177 (Home) 425-430-4469 (Cell)
VICKI L RICHARDS	425-430-4469 (Home)
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Phone Calls: Outreach Pilot, Batch A, Batch B

8/21/2017

Connie (EnviroIssues) gave a courtesy call to the Pilot, Batch A and Batch B properties to notify them of fieldwork starting on Wednesday 8/23 until the end of the week. Connie noted the possibility of work extending to the following week.

Type: Phone Calls

Contacts: 20

KING COUNTY-PARKS	
O LOWELL ANDERSON	206-772-6284 (Home)
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
GERALD F BRENNAN	425-271-2736 (Home)
ROBERT H BURR	425-226-7114 (Home) 425-941-4004 (Cell)
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DARIUS RICHARDS	425-623-8177 (Home) 425-430-4469 (Cell)
VICKI L RICHARDS	425-430-4469 (Home)
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Site Visit - City Survey - 8/16 to 9/6/2017

8/16/2017

City of Renton crews visited Lakeline properties to verify site access and cleanout and valve locations.

Type: Fieldwork

Contacts: 86

JOOS FAMILY LLC	
KATELYNN	425-444-1412 (Cell)
KING COUNTY-PARKS	
ANDREW T ALBERTSON	206-617-7511 (Cell)
MEGAN L ALBERTSON	
O LOWELL ANDERSON	206-772-6284 (Home)
CHERYL L ATKINSON	425-898-9359 (Home) 301-379-2089 (Cell)
MICHAEL H ATKINSON	425-898-9359 (Home)
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
TATYANA BARINOVA	
TONY BOYDSTON	206-999-3763 (Cell)
GERALD F BRENNAN	425-271-2736 (Home)
JOHN MICHAEL BROWN	206-240-0133 (Home)
ROBERT H BURR	425-226-7114 (Home) 425-941-4004 (Cell)
BETSEY BURROUGHS	425-739-8698 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
REBECCA A BYUS	206-266-6969 (Home)
MELANIE CROOKER	321-544-1481 (Cell)
KATHLEEN I DAHLBY	425-891-3774 (Cell)
THOMAS R DAHLBY	425-891-3775 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
KAREN EASTON	206-708-3664 (Cell)
TOM EASTON	
BRUCE E ERIKSON	425-226-2981 (Home) 206-669-8881 (Cell)
MARY R ERIKSON	425-226-2981 (Home)
BRIAN L FIFE	206-380-8414 (Cell)
STEPHANIE C FIFE	
MONICA M FIX	425-306-1990 (Home)
BIN GONG	615-579-6738 (Cell)
DOUGLAS HARWOOD	425-503-0242 (Cell) 425-455-0501 (Work)
MARJORIE HARWOOD	425-503-7092 (Cell)
BANG DAE HEE	
JOHN PATRICK HEILY	206-491-6004 (Home)
SUNDAY G HEILY	206-491-6004 (Home)
LOIS A HOWELL	206-910-0180 (Cell)
RICHARD SCOTT HOWELL	
APRIL L HUMPHREY	206-391-8019 (Cell)
DAVID R HUMPHREY	206-391-8019 (Cell)
PAUL JOOS	425-417-9955 (Cell) 425-255-4250 (Work)
DEBRA L KEPPLER	206-250-3637 (Home)
WILLIAM F KEPPLER	206-250-3638 (Cell)
DENIS W LAW	425-277-3434 (Home)

PATRICIA LAW	
LISA LEIGHTON	206-271-3233 (Home) 206-919-8776 (Cell)
STEVE LEIGHTON	206-919-8774 (Cell)
REBECCA LEPROWSE	206-920-1033 (Cell)
SHAWN LEPROWSE	
KEVIN L LINDAHL	206-266-6969 (Home)
ADRIENNE LINDBLAD	253-347-5964 (Cell) 206-940-2524 (Work)
WARREN ERIC LINDBLAD	
VIKTORIA LITTLEMAN	425-351-3745 (Home) 425-255-0487 (Cell)
ANTONIO MANDARANO	206-403-7272 (Cell)
JAMES C MORGAN	425-417-2513 (Home)
LAURA S MORGAN	
ANGIE F NELSON	
FRITZ W NELSON	425-226-8772 (Home) 425-445-5430 (Cell)
CHRIS OPPFELT	
HOLLY OPPFELT	425-891-4582 (Home)
KARYN A PASQUIER	425-271-1468 (Home)
PAUL L PASQUIER	
GREG PETERSON	206-793-1769 (Cell)
ANNE PETETT	425-277-4007 (Home) 425-765-5334 (Cell)
SCOTT PETETT	425-277-4007 (Home) 425-765-5334 (Cell)
NANCY A PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-601-3116 (Work)
STEPHEN C PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-604-3116 (Work)
KAAREN PRITCHARD	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)
MARC PRITCHARD	425-957-7254 (Home)
ROBERT DAVID REED	206-503-7972 (Cell)
DARIUS RICHARDS	425-623-8177 (Home) 425-430-4469 (Cell)
VICKI L RICHARDS	425-430-4469 (Home)
DONALD L SAVOY	
PETER SPOUSE	206-369-5374 (Cell)
WILLIAM C STONEMAN	425-255-7972 (Home)
JIANPING SUN	
KRISTI SUNDERLAND	
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ROBERT W TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ANGELA TROY	206-419-9499 (Cell)
GARY A WEIL	425-988-4556 (Home)
DAVID WILLIAMSON	206-399-4522 (Cell)

JOAN WU GUANGOLIN	
GARY F YOUNG	425-736-4787 (Home)
HELEN YOUNG	425-736-4787 (Home)
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Mailer: Phase 2A Notification

8/8/2017

Type: Mailer

Contacts: 92

BARBEE FOREST PRODUCTS INC	
ESTATE OF VIRGINIA E LUCK	
JOOS FAMILY LLC	
KING COUNTY-PARKS	
KING COUNTY-PROPERTY SVCS	ADM-ES-0800 (Work)
ANDREW T ALBERTSON	206-617-7511 (Cell)
MEGAN L ALBERTSON	
O LOWELL ANDERSON	206-772-6284 (Home)
CHERYL L ATKINSON	425-898-9359 (Home) 301-379-2089 (Cell)
MICHAEL H ATKINSON	425-898-9359 (Home)
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
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KATHLEEN I DAHLBY	425-891-3774 (Cell)
THOMAS R DAHLBY	425-891-3775 (Cell)
SUSAN DELOOF	
JEANNE C DEMUND	206-970-3172 (Home) 206-898-9818 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
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MARY R ERIKSON	425-226-2981 (Home)
BRIAN L FIFE	206-380-8414 (Cell)
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MONICA M FIX	425-306-1990 (Home)
DOUGLAS HARWOOD	425-503-0242 (Cell) 425-455-0501 (Work)
BANG DAE HEE	
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SUNDAY G HEILY	206-491-6004 (Home)
LOIS A HOWELL	206-910-0180 (Cell)
RICHARD SCOTT HOWELL	

APRIL L HUMPHREY	206-391-8019 (Cell)
DAVID R HUMPHREY	206-391-8019 (Cell)
DEBRA L KEPPLER	206-250-3637 (Home)
WILLIAM F KEPPLER	206-250-3638 (Cell)
BILL E KILLION	
TED LAVALLEY	
DENIS W LAW	425-277-3434 (Home)
PATRICIA LAW	
LISA LEIGHTON	206-271-3233 (Home) 206-919-8776 (Cell)
STEVE LEIGHTON	206-919-8774 (Cell)
REBECCA LEPROWSE	206-920-1033 (Cell)
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MARK LORD	
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GARY F YOUNG	425-736-4787 (Home)
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Site Visit 10/26 - Survey Team

10/26/2016 10:00am to 2:15pm

KPG surveyors, Phil Adams and Justin Williams, and Alison Payauys, Carollo returned to several approved access homes to survey lakeline and cleanouts.

Type: Site Visit

Contacts: 12

O LOWELL ANDERSON	206-772-6284 (Home)
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
GERALD F BRENNAN	425-271-2736 (Home)
BETSEY BURROUGHS	425-739-8698 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
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STEVE LEIGHTON	206-919-8774 (Cell)

Phone Calls: Outreach

10/25/2016

Connie (Envirolssues) called the properties Alison (Carollo) requested for crews to survey the pipe and/or clean out on Wednesday 10/26 or Thursday 10/27

The following properties were identified:

2815 Mountain View (cleanout only, pipe covered in rock)
 3001 Mountain View (cleanout and visible pipe – note to walk on pavers only)
 3107 Mountain View (cleanout and probe for pipe)
 3307 Mountain View (cleanout only near the house)
 3405 Lake WA Blvd (cleanout and probe for pipe)
 3411 Lake WA Blvd (visible pipe)
 3501 Lake WA - Beach Park (probe for pipe)
 3605 Lake WA Blvd (probe for pipe)
 3717 Lake WA Blvd (cleanout only, no probing, water is deep)
 2727 Mountain View
 2731 Mountain View

Type: Phone Calls

Contacts: 16

KING COUNTY-PARKS	
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
GERALD F BRENNAN	425-271-2736 (Home)
BETSEY BURROUGHS	425-739-8698 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
JOHN PATRICK HEILY	206-491-6004 (Home)
SUNDAY G HEILY	206-491-6004 (Home)
LISA LEIGHTON	206-271-3233 (Home) 206-919-8776 (Cell)
STEVE LEIGHTON	206-919-8774 (Cell)
DARIUS RICHARDS	425-623-8177 (Home) 425-430-4469 (Cell)
VICKI L RICHARDS	425-430-4469 (Home)
MARLENE R WINTER	425-417-4722 (Home)

Mailing to request contact info

10/25/2016

Type: Mailer

Contacts: 13

ROBERT H BURR	425-226-7114 (Home) 425-941-4004 (Cell)
JEANNE C DEMUND	206-970-3172 (Home) 206-898-9818 (Cell)
ADRIENNE LINDBLAD	253-347-5964 (Cell) 206-940-2524 (Work)
WARREN ERIC LINDBLAD	
FRITZ W NELSON	425-226-8772 (Home) 425-445-5430 (Cell)
KAAREN PRITCHARD	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)
MARC PRITCHARD	425-957-7254 (Home)
BEVERLY REIMERS	206-898-8659 (Cell)
MILTON A REIMERS JR	
JEFFREY T RILEY	
TAMI H RILEY	
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Phone Calls: Request for Access

10/21/2016

Type: Phone Calls

Contacts: 4

TONY BOYDSTON	206-999-3763 (Cell)
MELANIE CROOKER	321-544-1481 (Cell)
KEVIN L LINDAHL	206-266-6969 (Home)
VIKTORIA LITTLEMAN	425-351-3745 (Home) 425-255-0487 (Cell)

Site Visit 10/13

10/13/2016 9:00 am to 12:15 pm

Dave Scott, TetraTech and Alison Payauys, Carollo visited approved access homes to determine lakeline visibility, shoreline conditions, and to locate cleanouts.

Type: Site Visit

Contacts: 13

KING COUNTY-PARKS	
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
GERALD F BRENNAN	425-271-2736 (Home)
BETSEY BURROUGHS	425-739-8698 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
LISA LEIGHTON	206-271-3233 (Home) 206-919-8776 (Cell)
STEVE LEIGHTON	206-919-8774 (Cell)
DARIUS RICHARDS	425-623-8177 (Home) 425-430-4469 (Cell)
VICKI L RICHARDS	425-430-4469 (Home)

Phone Calls: Visual Inspection Reminders

10/11/2016

EnviroIssues called properties with a courtesy reminder that crews would be in the neighborhood performing visual inspections in the coming days.

Type: Phone Calls

Contacts: 9

GERALD F BRENNAN	425-271-2736 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
JOHN PATRICK HEILY	206-491-6004 (Home)
DARIUS RICHARDS	425-623-8177 (Home) 425-430-4469 (Cell)
VICKI L RICHARDS	425-430-4469 (Home)
ROBERT W TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
MARLENE R WINTER	425-417-4722 (Home)

Flying: Follow-up door hanger only

10/7/2016

Brett and Connie left door hangers to the following properties to give updates on the project.

The following properties received just door hangers.

Mountain View Avenue N:

-2727
-2731
-2801
-2805
-2827
-2909
-3005
-3007
-3009
-3011
-3015
-3101
-3103
-3115
-3119
-3209
-3213
-3217

Lake Washington Boulevard N:

-3411
-3607
-3611
-3613
-3619
-3625
-3703
-3707
-3709
-3711
-3713
-3715
-3805
-3815
-3827
-3901
-3905

The following priority properties, identified for their key access points, received a door hanger as well and have explicitly given the project team permission from prior phone calls to access property for further sewer line inspection.

Mountain View Avenue N:

-2815
-3001

Lake Washington Boulevard N:

-3405
-3605

Type: Flying

Flyering: Follow-up door hanger and knocking

10/7/2016

Brett and Connie left project update door hangers with a hand-written note requesting that the property owners call David regarding a visual inspection due to their proximity to the sewer line. Properties were knocked on in attempt to receive verbal approval for project team to access these priority properties.

Mountain View Avenue N:

-2807
-2811
-2905
-3013
-3107
-3111
-3205
-3233
-3307

Lake Washington Boulevard N:

-3717
-3719
-3811
-3821
-3825
-3837

Type: Flyering

Contacts: 26

O LOWELL ANDERSON	206-772-6284 (Home)
LAURIE L BAKER	425-227-4317 (Home) 206-772-6284 (Cell)
ROBERT H BURR	425-226-7114 (Home) 425-941-4004 (Cell)
REBECCA A BYUS	206-266-6969 (Home)
MELANIE CROOKER	321-544-1481 (Cell)
JEANNE C DEMUND	206-970-3172 (Home) 206-898-9818 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
LISA LEIGHTON	206-271-3233 (Home) 206-919-8776 (Cell)
STEVE LEIGHTON	206-919-8774 (Cell)
KEVIN L LINDAHL	206-266-6969 (Home)
ADRIENNE LINDBLAD	253-347-5964 (Cell) 206-940-2524 (Work)
WARREN ERIC LINDBLAD	
FRITZ W NELSON	425-226-8772 (Home) 425-445-5430 (Cell)
NANCY A PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-601-3116 (Work)
STEPHEN C PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-604-3116 (Work)
KAAREN PRITCHARD	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)
MARC PRITCHARD	425-957-7254 (Home)
BEVERLY REIMERS	206-898-8659 (Cell)
MILTON A REIMERS JR	
JEFFREY T RILEY	
TAMI H RILEY	
ALISON P TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
ROBERT W TAYLOR	425-430-5476 (Home) 425-615-0480 (Cell)
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Phone Calls: Outreach to priority properties

10/6/2016

Connie and Brett conducted outreach calls to priority properties identified by the project team to request access to the following properties.

Type: Phone Calls

Contacts: 17

CHERYL L ATKINSON	425-898-9359 (Home) 301-379-2089 (Cell)
MICHAEL H ATKINSON	425-898-9359 (Home)
GERALD F BRENNAN	425-271-2736 (Home)
BETSEY BURROUGHS	425-739-8698 (Home)
JOHN D BURROUGHS	425-736-8698 (Cell)
ANNE F SIM CONNER	206-931-7667 (Home) 425-572-6344 (Cell)
CHARLES F CONNER	425-572-6344 (Cell)
MELANIE CROOKER	321-544-1481 (Cell)
DAYTON P DENNISON	425-351-2040 (Home) 425-271-4388 (Cell)
MARILYN DENNISON	425-271-4388 (Home)
KEVIN L LINDAHL	206-266-6969 (Home)
NANCY A PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-601-3116 (Work)
STEPHEN C PORTER	425-277-5949 (Home) 206-940-9334 (Cell) 206-604-3116 (Work)
DARIUS RICHARDS	425-623-8177 (Home) 425-430-4469 (Cell)
VICKI L RICHARDS	425-430-4469 (Home)
MARK E ZILMER	425-226-9090 (Home) 425-681-3001 (Cell)
ROSEMARY ZILMER	206-799-0361 (Home)

Flyering: Initial notification Mountain View Ave N

9/12/2016

Mountain View Ave N

Renton, WA

City of Renton maintenance crews will perform routine flushing of the Kennydale Lakeline Sewer System along Lake Washington Boulevard North and Mountain View Avenue North. This effort launches a more thorough assessment of the lakeline to identify if upgrades to this crucial piece of public infrastructure are needed. This initial assessment will continue throughout 2016, and will help to inform a thorough evaluation of the entire lakeline system in 2017 and 2018. Here's what you can expect in the coming weeks:

Week of September 12:

Crews will be in the area to set up survey equipment and plan the flush work.

Week of September 19:

The team will gather data about the pump station and other lakeline components that are accessible by land.

Trucks and other equipment will be onsite throughout the week.

Crews will maintain safe roadway and property access throughout the duration of this project.

Week of September 26 and beyond:

Additional work to complete the flush and surveying may continue, if needed.

Team members will survey in-water portions of the lakeline by boat.

How you can help:

Do you know where your local system is located (e.g., lateral, valve, cleanout)? We would appreciate information you could share as we gather data.

Would you like to receive updates by email? Please send us your email address.

Next steps:

As this initial assessment continues, the project team may contact you to learn more about how your property is connected into the lakeline.

We will continue to provide you with updates as these efforts continue.

Brett and Connie flyered the following homes that are directly affected by the project.

Mountain View Avenue N

- 2727
- 2731
- 2801
- 2805
- 2807
- 2811
- 2015
- 2827
- 2905
- 2909
- 2931 (delivered to contractor)
- 3001
- 3003 (delivered to contractor)
- 3005
- 3007
- 3009
- 3011
- 3013
- 3015
- 3101
- 3103
- 3107
- 3111
- 3115
- 3119
- 3205
- 3209
- 3213
- 3217
- 3233
- 3307

Type: Flyering

Flyering: Initial Notification Lake Washington Boulevard N

9/12/2016

Lake Washington Boulevard N
Renton, WA

City of Renton maintenance crews will perform routine flushing of the Kennydale Lakeline Sewer System along Lake Washington Boulevard North and Mountain View Avenue North. This effort launches a more thorough assessment of the lakeline to identify if upgrades to this crucial piece of public infrastructure are needed. This initial assessment will continue throughout 2016, and will help to inform a thorough evaluation of the entire lakeline system in 2017 and 2018. Here's what you can expect in the coming weeks:

Week of September 12:

Crews will be in the area to set up survey equipment and plan the flush work.

Week of September 19:

The team will gather data about the pump station and other lakeline components that are accessible by land.

Trucks and other equipment will be onsite throughout the week.

Crews will maintain safe roadway and property access throughout the duration of this project.

Week of September 26 and beyond:

Additional work to complete the flush and surveying may continue, if needed.

Team members will survey in-water portions of the lakeline by boat.

We will continue to provide you with updates as these efforts continue.

Brett and Connie flyered the nearby homes that may be affected by the project.

Lake Washington Boulevard N

- 3401
- 3405
- 3411
- 3605
- 3607
- 3611
- 3613
- 3619
- 3625
- 3703
- 3707
- 3709
- 3711
- 3713
- 3715
- 3717
- 3719
- 3805
- 3811
- 3815
- 3821
- 3825
- 3827
- 3837
- 3901
- 3905

Type: Flyering

Mailer: Stakeholders Initial Notification

9/7/2016

Notification of Kennydale Lakeline Sewer System Assessment and Maintenance Flushing

Where: Lake Washington Boulevard North and Mountain View Avenue North

When: September 12-30, 2016 (with additional prep and follow-up work)

Work Hours: Monday through Friday, 7:00 a.m. to 4:00 p.m.

City of Renton maintenance crews will perform routine flushing of the Kennydale Lakeline Sewer System along Lake Washington Boulevard North and Mountain View Avenue North. This effort launches a more thorough assessment of the lakeline to identify if upgrades to this crucial piece of public infrastructure are needed. This initial assessment will continue throughout 2016, and will help to inform a thorough evaluation of the entire lakeline system in 2017 and 2018. Here's what you can expect in the coming weeks:

Week of September 12:

Crews will be in the area to set up survey equipment and plan the flush work.

Week of September 19:

The team will gather data about the pump station and other lakeline components that are accessible by land.

Trucks and other equipment will be onsite throughout the week.

Crews will maintain safe roadway and property access throughout the duration of this project.

Week of September 26 and beyond:

Additional work to complete the flush and surveying may continue, if needed.

Team members will survey in-water portions of the lakeline by boat.

How you can help:

Do you know where your local system is located (e.g., lateral, valve, cleanout)? We would appreciate information you could share as we gather data.

Would you like to receive updates by email? Please send us your email address.

Next steps:

As this initial assessment continues, the project team may contact you to learn more about how your property is connected into the lakeline.

We will continue to provide you with updates as these efforts continue.

If you have questions or wish to receive email updates, please contact David Christensen at dchristensen@rentonwa.gov or 425-430-7212.

We will post ongoing updates to the project website at rentonwa.gov/kennydalelakeline/

Mailer to stakeholders on Lakeline, sent on 09/07/16

Type: Mailer

Mailer: Stakeholders Initial Notification (North of Lakeline Properties)

9/7/2016

Notification of Kennydale Lakeline Sewer System
Assessment and Maintenance Flushing

Where: Lake Washington Boulevard North and Mountain View Avenue North
When: September 12-30, 2016 (with additional prep and follow-up work)
Work Hours: Monday through Friday, 7:00 a.m. to 4:00 p.m.

City of Renton maintenance crews will perform routine flushing of the Kennydale Lakeline Sewer System along Lake Washington Boulevard North and Mountain View Avenue North. This effort launches a more thorough assessment of the lakeline to identify if upgrades to this crucial piece of public infrastructure are needed. This initial assessment will continue throughout 2016, and will help to inform a thorough evaluation of the entire lakeline system in 2017 and 2018. Here's what you can expect in the coming weeks:

Week of September 12:

Crews will be in the area to set up survey equipment and plan the flush work.

Week of September 19:

The team will gather data about the pump station and other lakeline components that are accessible by land. Trucks and other equipment will be onsite throughout the week. Crews will maintain safe roadway and property access throughout the duration of this project.

Week of September 26 and beyond:

Additional work to complete the flush and surveying may continue, if needed. Team members will survey in-water portions of the lakeline by boat.

We will continue to provide you with updates as these efforts continue.

If you have questions or wish to receive email updates, please contact David Christensen at dchristensen@rentonwa.gov or 425-430-7212.

We will post ongoing updates to the project website at rentonwa.gov/kennydalelakeline/

Mailer to stakeholders north of Lakeline, sent on 09/07/16

Type: Mailer

Activities

Project: Renton Kenndale Lakeline

Door-hanging: Weekend work near manhole 1

10/26/2018

Type: Flyering

Description: Providing notification to three properties that work near manhole 1 will continue through the weekend.

Contacts included: 6

Door-hanging: 2018 Condition Assessment

10/11/2018

Type: Flyering

Description: List to deliver door hanger notifications to six properties (seven addresses) re condition assessment work the weeks of Oct. 8 and Oct. 15. Also included the three manhole 4 neighbors in this notification.

Contacts included: 15

Renton Kennydale Lakeline Cleaning Project Viewing

9/25/2018, 9:00 am - 11:00 am

Description: Meeting invitees: 'brianh@skywayws.org'; 'DHelling@Huitt-Zollars.com'; 'achung@bellevuewa.gov'; Ellman, John (JEllman@bellevuewa.gov); Peckler, Richard E. (RPeckler@bellevuewa.gov); Duncan, Brett (BDuncan@bellevuewa.gov); Dickey, Nate (NDickey@bellevuewa.gov); Marcum, Tony (TMarcum@bellevuewa.gov); erich.fiedler@seattle.gov; Dennis.baker@mercergov.org; Mark.jones@mercergov.org; 'corinne.deleon@seattle.gov'; Goss, Kevin (Kevin.Goss@tetrattech.com); david.scott@tetrattech.com; Daniel Reisinger (DReisinger@carollo.com); Lara Kammereck (LKammereck@carollo.com); David Christensen (Dchristensen@Rentonwa.gov); Laura Treadway (ltreadway@enviroissues.com); Nicole Lobodzinski (nlobodzinski@enviroissues.com); Shane Couty (SCouty@Rentonwa.gov); Jayson Gallaway (JGallaway@Rentonwa.gov); Rocky Sittner (RSittner@Rentonwa.gov)

Meeting information:

The City's contractor (Ballard Marine Construction) is currently scheduled to begin cleaning on Tuesday, Sept 25th. I'll let you know if their schedule slips and we can reschedule if necessary. The viewing area will be on a currently vacant property (2909 Mountain View Ave N).

2909 Mountain View Ave N	Renton	WA	98056
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Mailer: Phase 2B Update

8/2/2018

Type: Mailer

Description: Letter to properties about Phase 2B work update.

Contacts included: 66

Mailer: Phase 2B Update Properties with Barges

8/2/2018

Type: Mailer

Description: Letter to properties that will have barges in front of their properties about Phase 2B work update.

Contacts included: 18

Mailer: Phase 2B Notifications Mailing list

7/30/2018

Type: Mailer

Description: All Lakeline and Other properties. Used to pull mailing list for 8/2/2018 mailings.

Contacts included: 95

Door-hanging: June 2018 Survey

6/4/2018

Type: Flyering

Description: List of parcels for May 2018 Survey notifications

Contacts included: 12

Door-hanging: Bulkhead Assessment

10/7/2017

Type: Flyering

Description: Flyering to alert homeowners and residents of bulkhead assessment work to begin Oct. 9 or 10.

Contacts included: 83

Phone Calls: Access and courtesy reminders - Bulkhead assessment
10/6/2017

Type: Phone Calls

Description: Phone calls to homeowners to alert them to upcoming bulkhead assessment work and coordinate access.

Properties with access coordination needs:

3811 Lake Wa Blvd

3815 Lake Wa Blvd

3821 Lake Wa Blvd

Courtesy reminders:

3001 Mountain View

3601 Lake Wa Blvd (doberman property)

3605 Lake Wa Blvd

Contacts included: 13

Site Visit - Multiple Fieldwork Crews - 9/25-29/2017

9/25/2017 9/29/2017 12:00:00 AM,

Type: Fieldwork

Description:

Contacts included: 49

Phone calls: Access and courtesy reminder calls

9/22/2017

Type: Phone Calls

Description: Laura and Connie made phone calls to 8 properties about fieldwork the week of Sept. 25.

Properties with access coordination needs:

3811 Lake Wa Blvd

3815 Lake Wa Blvd

3821 Lake Wa Blvd

Work in front yard only:

2731 Mountain View Ave

Doberman on property:

3601 Lake Wa Blvd; only work is survey

Courtesy reminders:

3001 Mountain View

3101 Mountain View

3605 Lake Wa Blvd

Contacts included: 13

Door-hanging: Lakeline Survey 9/25

9/21/2017

Type: Flyering

Description: Connie and Tyler (EI) delivered door hangers to all parcels to provide notification of Lakeline Survey starting Sept. 25.

Contacts included: 95

Mailer: Phase 2A September update

9/18/2017

Type: Mailer

Contacts included: 85

Door-hanging: Lakeline Survey

8/24/2017

Type: Flyering

Description: Delivered door hangers to parcels that did NOT get a Pilot, A, B door hanger on Monday to provide notification of Lakeline Survey starting Aug. 25.

Attempted to deliver to 3401 Lake Washington Blvd N and noted that property is under construction.

Contacts included: 68

Door-hanging: Pilot Study, Batch A, Batch B

8/21/2017

Type: Flyering

Contacts included: 20

Phone Calls: Outreach Pilot, Batch A, Batch B

8/21/2017

Type: Phone Calls

Description: Connie (Envirolssues) gave a courtesy call to the Pilot, Batch A and Batch B properties to notify them of fieldwork starting on Wednesday 8/23 until the end of the week. Connie noted the possibility of work extending to the following week.

Contacts included: 20

Site Visit - City Survey - 8/16 to 9/6/2017

8/16/2017 9/6/2017 12:00:00 AM,

Type: Fieldwork

Description: City of Renton crews visited Lakeline properties to verify site access and cleanout and valve locations.

Contacts included: 86

Mailer: Phase 2A Notification

8/8/2017

Type: Mailer

Contacts included: 92

Site Visit 10/26 - Survey Team

10/26/2016, 10:00am - 2:15pm

Type: Site Visit

Description: KPG surveyors, Phil Adams and Justin Williams, and Alison Payauys, Carollo returned to several approved access homes to survey lakeline and cleanouts.

Contacts included: 12

Phone Calls: Outreach

10/25/2016

Type: Phone Calls

Description: Connie (Envirolssues) called the properties Alison (Carollo) requested for crews to survey the pipe and/or clean out on Wednesday 10/26 or Thursday 10/27

The following properties were identified:

2815 Mountain View (cleanout only, pipe covered in rock)
3001 Mountain View (cleanout and visible pipe – note to walk on pavers only)
3107 Mountain View (cleanout and probe for pipe)
3307 Mountain View (cleanout only near the house)
3405 Lake WA Blvd (cleanout and probe for pipe)
3411 Lake WA Blvd (visible pipe)
3501 Lake WA - Beach Park (probe for pipe)
3605 Lake WA Blvd (probe for pipe)
3717 Lake WA Blvd (cleanout only, no probing, water is deep)
2727 Mountain View
2731 Mountain View

Contacts included: 16

Mailing to request contact info

10/25/2016

Type: Mailer

Contacts included: 13

Phone Calls: Request for Access

10/21/2016

Type: Phone Calls

Contacts included: 4

Site Visit 10/13

10/13/2016, 9:00 am 12:15 pm

Type: Site Visit

Description: Dave Scott, TetraTech and Alison Payauys, Carollo visited approved access homes to determine lakeline visibility, shoreline conditions, and to locate cleanouts.

Contacts included: 13

Phone Calls: Visual Inspection Reminders

10/11/2016

Type: Phone Calls

Description: Envirolssues called properties with a courtesy reminder that crews would be in the neighborhood performing visual inspections in the coming days.

Contacts included: 9

Flyering: Follow-up door hanger only

10/7/2016

Type: Flyering

Description: Brett and Connie left door hangers to the following properties to give updates on the project.

The following properties received just door hangers.

Mountain View Avenue N:

-2727

-2731

-2801

-2805

-2827

-2909

-3005

-3007

-3009

-3011

-3015

-3101

-3103

-3115

-3119

-3209

-3213

-3217

Lake Washington Boulevard N:

-3411

-3607

-3611

-3613

-3619

-3625

-3703

-3707

-3709

-3711

-3713

-3715

-3805

-3815

-3827

-3901

-3905

The following priority properties, identified for their key access points, received a door hanger as well and have explicitly given the project team permission from prior phone calls to access property for further sewer line inspection.

Mountain View Avenue N:

-2815

-3001

Lake Washington Boulevard N:

-3405

-3605

Flyering: Follow-up door hanger and knocking

10/7/2016

Type: Flyering

Description: Brett and Connie left project update door hangers with a hand-written note requesting that the property owners call David regarding a visual inspection due to their proximity to the sewer line. Properties were knocked on in attempt to receive verbal approval for project team to access these priority properties.

Mountain View Avenue N:

-2807

-2811

-2905

-3013

-3107

-3111

-3205

-3233

-3307

Lake Washington Boulevard N:

-3717

-3719

-3811

-3821

-3825

-3837

Contacts included: 26

Phone Calls: Outreach to priority properties

10/6/2016

Type: Phone Calls

Description: Connie and Brett conducted outreach calls to priority properties identified by the project team to request access to the following properties.

Contacts included: 17

Flyering: Initial notification Mountain View Ave N

9/12/2016

Type: Flyering

Description: City of Renton maintenance crews will perform routine flushing of the Kennydale Lakeline Sewer System along Lake Washington Boulevard North and Mountain View Avenue North. This effort launches a more thorough assessment of the lakeline to identify if upgrades to this crucial piece of public infrastructure are needed. This initial assessment will continue throughout 2016, and will help to inform a thorough evaluation of the entire lakeline system in 2017 and 2018. Here's what you can expect in the coming weeks:

Week of September 12:

Crews will be in the area to set up survey equipment and plan the flush work.

Week of September 19:

The team will gather data about the pump station and other lakeline components that are accessible by land.

Trucks and other equipment will be onsite throughout the week.

Crews will maintain safe roadway and property access throughout the duration of this project.

Week of September 26 and beyond:

Additional work to complete the flush and surveying may continue, if needed.

Team members will survey in-water portions of the lakeline by boat.

How you can help:

Do you know where your local system is located (e.g., lateral, valve, cleanout)? We would appreciate information you could share as we gather data.

Would you like to receive updates by email? Please send us your email address.

Next steps:

As this initial assessment continues, the project team may contact you to learn more about how your property is connected into the lakeline.

We will continue to provide you with updates as these efforts continue.

Brett and Connie flyered the following homes that are directly affected by the project.

Mountain View Avenue N

- 2727
- 2731
- 2801
- 2805
- 2807
- 2811
- 2015
- 2827
- 2905
- 2909
- 2931 (delivered to contractor)
- 3001
- 3003 (delivered to contractor)

- 3005
- 3007
- 3009
- 3011
- 3013
- 3015
- 3101
- 3103
- 3107
- 3111
- 3115
- 3119
- 3205
- 3209
- 3213
- 3217
- 3233
- 3307

Flyering: Initial Notification Lake Washington Boulevard N

9/12/2016

Type: Flyering

Description: City of Renton maintenance crews will perform routine flushing of the Kennydale Lakeline Sewer System along Lake Washington Boulevard North and Mountain View Avenue North. This effort launches a more thorough assessment of the lakeline to identify if upgrades to this crucial piece of public infrastructure are needed. This initial assessment will continue throughout 2016, and will help to inform a thorough evaluation of the entire lakeline system in 2017 and 2018. Here's what you can expect in the coming weeks:

Week of September 12:

Crews will be in the area to set up survey equipment and plan the flush work.

Week of September 19:

The team will gather data about the pump station and other lakeline components that are accessible by land.

Trucks and other equipment will be onsite throughout the week.

Crews will maintain safe roadway and property access throughout the duration of this project.

Week of September 26 and beyond:

Additional work to complete the flush and surveying may continue, if needed.

Team members will survey in-water portions of the lakeline by boat.

We will continue to provide you with updates as these efforts continue.

Brett and Connie flyered the nearby homes that may be affected by the project.
Lake Washington Boulevard N

- 3401
- 3405
- 3411
- 3605
- 3607
- 3611
- 3613
- 3619
- 3625
- 3703
- 3707
- 3709
- 3711
- 3713
- 3715
- 3717
- 3719
- 3805
- 3811
- 3815
- 3821
- 3825
- 3827
- 3837
- 3901
- 3905

Mailer: Stakeholders Initial Notification

9/7/2016

Type: Mailer

Description: Notification of Kenndale Lakeline Sewer System Assessment and Maintenance Flushing

Where: Lake Washington Boulevard North and Mountain View Avenue North

When: September 12-30, 2016 (with additional prep and follow-up work)

Work Hours: Monday through Friday, 7:00 a.m. to 4:00 p.m.

City of Renton maintenance crews will perform routine flushing of the Kenndale Lakeline Sewer System along Lake Washington Boulevard North and Mountain View Avenue North. This effort launches a more thorough assessment of the lakeline to identify if upgrades to this crucial piece of public infrastructure are needed. This initial assessment will continue throughout 2016, and will help to inform a thorough evaluation of the entire lakeline system in 2017 and 2018. Here's what you can expect in the coming weeks:

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Week of September 26 and beyond:

Additional work to complete the flush and surveying may continue, if needed.

Team members will survey in-water portions of the lakeline by boat.

How you can help:

Do you know where your local system is located (e.g., lateral, valve, cleanout)? We would appreciate information you could share as we gather data.

Would you like to receive updates by email? Please send us your email address.

Next steps:

As this initial assessment continues, the project team may contact you to learn more about how your property is connected into the lakeline.

We will continue to provide you with updates as these efforts continue.

If you have questions or wish to receive email updates, please contact David Christensen at dchristensen@rentonwa.gov or 425-430-7212.

We will post ongoing updates to the project website at rentonwa.gov/kennydalelakeline/

Mailer to stakeholders on Lakeline, sent on 09/07/16

Mailer: Stakeholders Initial Notification (North of Lakeline Properties)
9/7/2016

Type: Mailer

Description: Notification of Kennydale Lakeline Sewer System
Assessment and Maintenance Flushing

Where: Lake Washington Boulevard North and Mountain View Avenue North

When: September 12-30, 2016 (with additional prep and follow-up work)

Work Hours: Monday through Friday, 7:00 a.m. to 4:00 p.m.

City of Renton maintenance crews will perform routine flushing of the Kennydale Lakeline Sewer System along Lake Washington Boulevard North and Mountain View Avenue North. This effort launches a more thorough assessment of the lakeline to identify if upgrades to this crucial piece of public infrastructure are needed. This initial assessment will continue throughout 2016, and will help to inform a thorough evaluation of the entire lakeline system in 2017 and 2018. Here's what you can expect in the coming weeks:

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Trucks and other equipment will be onsite throughout the week.

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Week of September 26 and beyond:

Additional work to complete the flush and surveying may continue, if needed.

Team members will survey in-water portions of the lakeline by boat.

We will continue to provide you with updates as these efforts continue.

If you have questions or wish to receive email updates, please contact David Christensen at dchristensen@rentonwa.gov or 425-430-7212.

We will post ongoing updates to the project website at rentonwa.gov/kennydalelakeline/

Mailer to stakeholders north of Lakeline, sent on 09/07/16

Renton Kenndale Lakeline - Communications (221 Total)**Communication ID: 225066 - Laurie inquires about access to sewerline on her lot****Communication** (9/12/2016)

Laurie inquires about access to sewerline on her lot

I live at 3107 Mountain View Ave N.

There is a TALL access to the sewer on the southwest corner of our lot.

Not sure if that is what you are looking for or not. Don't know anything about valves

Laurie

Response (9/13/2016)

Ms. Baker,

Thank you for the information, we will be looking for this type of facility as we proceed with work over the next few weeks.

Dave Christensen

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
624285	LAURIE L BAKER	Individual	425-227-4317 (Home) 206-772-6284 (Cell)	laurieb@mcseac.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118864	3342103880		

Communication ID: 225069 - Darius' inquiry of sewerline access locations**Communication** (9/12/2016)

Darius' inquiry of sewerline access locations

Hi, David:

Re: Sewer facilities at my residence - 3605 Lake Wash. Blvd. N.

In regard to your "Notification..." letter, I will be glad to show you the exact location of my lateral, valve and also the wye that picks up the sewer line from my neighbor's home at 3601 Lk. WA Blvd. N. Also, I can show you the location of the main line where it crosses underneath my boat dock.

I am retired and home most of the time. Please call me at 425-430-4469 to arrange a time for you or your representative to drop by.

Cheers,

Darius Richards

Response (9/13/2016)

Mr. Richards,

Thank you very much for the information. We will take you up on your offer soon. Folks from the team will coordinate directly with you as you have requested.

Dave Christensen

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>645234</u>	<u>DARIUS RICHARDS</u>	Individual	425-623-8177 (Home) 425-430-4469 (Cell)	<u>dariusvicki@msn.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118877</u>	3342700355	Requests advance call for visits	

Communication ID: 225281 - Vicki: KNA picnic question

Communication (8/30/2016)

Vicki: KNA picnic question

Hi Vicki,

I'm part of a team recently hired by the City of Renton to support the Kennydale Lakeline Sewer System Evaluation project (quite a mouthful!). I'm leading the community outreach portion of the project, and our first activity will be a line flush and field surveys the week of Sept. 19. I see that the KNA picnic is next Wednesday, and wondered if it made sense to either attend or provide written information about the project for interested community members?

A little more about the project: Our team will be evaluating a portion of the lake line that connects to approximately 50 waterfront homes. The goal is to determine over the next several months whether and how to upgrade the line. Our first notifications will be mailed as early as next week to that area of Kennydale.

Do you think our presence and/or materials at the picnic would be helpful, or is the project too small or the picnic the wrong forum?

Thanks in advance for your insights!

Sarah Brandt

08/31/16

Thanks, Vicki, for your quick response.

I agree with your suggestions (and we'll not plan to attend the picnic).

Would you like to be on the project's email list as the KNA contact so that you're aware of status? If not, we'll have a project webpage up soon through the City's main site that you can check for updates.

Thanks again, and have a great picnic!
Sarah

Response (8/30/2016)

Hi Sarah,

Thank you for reaching out to our Neighborhood association. My thoughts are that the project will only effect 50 homes on the Lake and the attendance at the picnic could be up to 600 people and most of these people will have little interest in hearing about the project. My suggestion is drop off flyers or mailers to the homes that will be effected. Hope my suggestions are helpful to you.

Cheers,
Vicki

08/31/16

Hi Sarah,
Yes, that would be nice if you could update us via email.
Thank you!
Cheers
Vicki

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
624283	VICKI L RICHARDS	Individual	425-430-4469 (Home)	dariusvicki@msn.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118878	3342700330	Requested advance call for visits	Requested advance call for visits as a reminder.

Communication ID: 225291 - Linda: Examples of Work Notification City of Renton

Communication (8/24/2016)

Linda: Examples of Work Notification City of Renton

Thank you for contacting me about your upcoming project in the Kennydale area. Attached are three examples of notices we have distributed to residents when our projects impact neighborhood roads. In addition we usually include a map of the area on the back of the notice to provide a visual explanation of the affected area(s). I am happy to help you draft or review your notice if you would like it to be consistent with past city practices.

As I mentioned Police Cmdr. Dave Leibman is the Kennydale neighborhood liaison. I have copied Dave on this email so he is in the loop on our conversation. In addition I encourage you to contact either Darius or Vicki Richards, who are both very active in the association. Their email address is dariusvicki@msn.com. Also consider visiting the Kennydale Neighborhood Association web site at www.kennydale.org for additional contact information and information on their upcoming picnic scheduled for September 7.

Please let me know if I can be of further assistance. My contact information is below.

Linda Moschetti-Newing
 Administrative Assistant
 Public Works Department
 City of Renton
 1055 South Grady Way
 Renton, Washington 98057
 Phone: (425) 430-7394
 Fax: (425) 430-7241
 E-mail: Imoschetti@rentonwa.gov

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
660193	LINDA MOSCHETTI	Individual	425-430-7394 (Work)	Imoschetti@rentonwa.gov

Communication ID: 226631 - Outreach to priority property

Communication (10/7/2016)

Outreach to priority property

Brett Watson (EnviroIssues) spoke with a member of the household (not the property decision-maker) and requested that he pass the informational flyer along to Mark or Kaaren Pritchard and encourage one of them to reach out to David.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624237	MARC PRITCHARD	Individual	425-957-7254 (Home)	
624267	KAAREN PRITCHARD	Individual	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)	kaaren.pritchard@nordstrom.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118849	3342104040		

Communication ID: 226645 - Nancy Porter: Not interested in project team visiting property

Communication (10/7/2016)

Nancy Porter: Not interested in project team visiting property

Brett Watson (EnviroIssues) spoke with Nancy Porter about the project team accessing her property for a quick visual inspection of the lakeline. Nancy said that she was NOT interested in project team members visiting her property at this time. Brett thanked her for her consideration, and confirmed an updated phone number for the property (206-601-3116). Brett said that the project team may be in touch with her in the future, and Nancy noted that her husband (Stephen Porter) would be the best contact for future communications.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624246	<u>STEPHEN C PORTER</u>	Individual	425-277-5949 (Home) 206-940-9334 (Cell) 206-604-3116 (Work)	
624276	<u>NANCY A PORTER</u>	Individual	425-277-5949 (Home) 206-940-9334 (Cell) 206-601-3116 (Work)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118868</u>	3342103840		Nancy Porter did not wish for crews to access her property for an inspection (10/7/16). Encouraged team members to reach out to her husband in the future if access or coordination is needed.

Communication ID: 226649 - Marilyn: Approves of access for project team

Communication (10/11/2016)

Marilyn: Approves of access for project team

Brett Watson (EnviroIssues) spoke with Marilyn Dennison. She said that it was fine for crews to access her backyard to do a quick visual inspection, and she identified that the lakeline was clearly visible from the end of her neighbor's dock (at 3719 Lake Washington Blvd. N). Marilyn also noted that she heard "gurgling" from her toilets during the maintenance flush in early September, and wanted that note passed along to the project team.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624202	<u>DAYTON P DENNISON</u>	Individual	425-351-2040 (Home) 425-271-4388 (Cell)	<u>budmanis@comcast.net</u>
662350	<u>MARILYN DENNISON</u>	Individual	425-271-4388 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118889</u>	3342700200		

Communication ID: 226650 - Robert Taylor: Approves of access to property.

Communication (10/11/2016)

Robert Taylor: Approves of access to property

Brett Watson (EnviroIssues) spoke with Robert Taylor. He did not have a problem with project team members accessing his property; however, he noted that it was likely that no one would be home on 10/12 and 10/13 and that the gates to access the back of his property would be locked. He noted that the neighbors in that area of Lake Washington Drive are often on the lookout for visitors, and he noted that it was important to alert as many adjacent neighbors as possible to any upcoming site visits. Brett confirmed an updated cell phone number with Robert (425-615-0480).

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624227	<u>ROBERT W TAYLOR</u>	Individual	425-430-5476 (Home) 425-615-0480 (Cell)	
624257	<u>ALISON P TAYLOR</u>	Individual	425-430-5476 (Home) 425-615-0480 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118892</u>	3342700149	Requested advance call for access	Advance call requested for visits to property. Gate kept locked and neighbors pay attention to visitors.

Communication ID: 226657 - Patrick & Sunday: Gives permission for property access

Communication (10/10/2016)

Patrick & Sunday: Gives permission for property access

Hi! Just wanted to give permission to come on over and view property as needed!

contact info:

Patrick & Sunday Heily
2727 Mt. View Ave. N. We're very last house next to the park and station. My phone is 206 491 3004.

I know where our sewer line connects to the city (we had a back up issue in 2014 - flooded our basement...etc, etc...) but if there is something that goes to the lake I have no idea. Sorry.

We keep our gates locked (our house was robbed and vandalized a couple years ago) but will happily open if you give me a heads-up on general timing.

If there is anything else we can do or provide don't hesitate to ask!

Thanks,
Sunday Heily

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
624252	<u>JOHN PATRICK HEILY</u>	Individual	206-491-6004 (Home)	
624281	<u>SUNDAY G HEILY</u>	Individual	206-491-6004 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118845</u>	3342104050		

Communication ID: 226773 - Marlene: Requests a call back**Communication** (10/10/2016)

Marlene: Requests a call back

Phone message from Maureen Winters at 425.417.4722 to David's phone. She would like a call.

10/12/16

Mike Benoit with Renton called to let Alison [Carollo] know Marlene Winter at 2731 Mountain View Ave N left a message on Dave's number. She said we can inspect her property but she has dogs that could get out and the gate must be kept closed.

This house is NOT one of the properties we'd like to see this week. The Lakeline actually passes on the east side of her house (not in the lake).

Alison requested EI give her a quick call back and let her know that project team won't need to be on her property at this time.

Response (10/11/2016)

Connie gave Marlene a call who did not answer and had a full inbox.

Connie gave Marlene a call later that afternoon and left a brief message based off the talking points and let her know that project team members will be in the area on Thursday and may be interested in accessing her property for a quick visual inspection. Connie left Marlene David's phone number but also noted that she will call again tomorrow morning to try to reach her.

10/12/16

Connie spoke with Marlene and let her know that the project team will not need to access her property on 10/13

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
624214	MARLENE R WINTER	Individual	425-417-4722 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118846	3342104048	Concerns about lawn and 2 dogs	Concerns about possible disruption of new expensive lawn as part of our work. Noted that she has 2 dogs and crews MUST close both gates when walking in and out to prevent them from running away.

Communication ID: 226774 - Outreach to Laurie Baker for access to property.

Communication (10/11/2016)

Outreach to Laurie Baker for access to property

Ms. Baker,

I'm contacting you on behalf of David Christensen, City of Renton, in regards to the Kennydale Lakeline Sewer System Evaluation Project. Thank you for contacting us in September about access to the sewer line from the southwest corner of your property. To help the City target future survey efforts, the project team would like to stop by your property on Thursday, October 13, to do a quick visual inspection of the lakeline from your yard. They will be looking to see if the lakeline is visible, so they may need access to your dock if you have one. (You don't need to be home at the time of our visit.)

If you are okay with a member of the project team stopping by on Thursday, please simply respond to this email (or contact David Christensen at 425-430-7212).

David is also available if you have any additional questions about the overall project, though is out of the office this week (hence my email on his behalf).

Thank you,
Connie

Response (10/12/2016)

Okay to access property. Would love to know how far out the sewer line is from the shore.

Laurie

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
624285	Laurie L Baker	Individual	425-227-4317 (Home) 206-772-6284 (Cell)	laurieb@mcseac.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118864	3342103880		

Communication ID: 226877 - Bill Stoneman: Questions about the project status and history

Communication (10/13/2016)

Bill Stoneman: Questions about the project status and history

Brett Watson/EnviroIssues called Bill Stoneman (3101 Mountain View Avenue) on behalf of David Christensen/City of Renton to follow up on questions that Bill had regarding the Kenneydale Lakeline Assessment Project.

- Bill was generally frustrated with the assessment, and he noted that:
- The lakeline was installed after he had paid to connect and pump effluent to the system that runs along Lake Washington Blvd
 - This is the third assessment in 40 years; cited concerns that the initial construction of the lakeline was incorrectly managed
 - He was unhappy that he will have to "pay for another assessment" (Brett tried to discern whether or not he meant by use of public funds, or if he thought that he was going to be individually charged, but couldn't tell)
 - He would consider looking into legal recourse if charged for the assessment

Brett thanked Bill for providing the team with his questions, and he said that he would pass the noted concerns along to David. Brett said that Bill could expect a call back within the next week.

Response

From David/City of Renton:

Called Bill Stoneman yesterday afternoon.

I was able to address all of his concerns in regards to our project. He has been a resident there for a long time, so has a lot of history. Big thing for him is that in the 70's he was told city sewer project was dead, so he installed a septic system (Even longer history, prior to our install of sewer in the 1970's, the majority of properties where direct discharge to the lake, as most were vacation homes historically, not regular residences. One year later the LID was formed and now he had to pay for sewer twice. I fully understand his frustration. He also had to work thru out work in the mid-80's with the failed valves, now is concerned that he will once again have to pay. I assured him that we are not looking to assess the individuals on the lake, but to have project costs covered through rates.

Lastly, we talked about the project and I mentioned the potential of moving the line out of the lake. While he understood the potential environmental risks with the lakeline, he was not exactly thrilled with the idea of bringing the line upland, including all the individual stations needed.

He has good at this point and I let him know we would continue to communicate with him as we progress with the analysis.

Dave C.

Due 10/18/2016

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624210	WILLIAM C STONEMAN	Individual	425-255-7972 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118862	3342103895		Bill Stoneman is a long-time resident, lots of history with sewer system projects along the lakeline. Concerned about having to pay for system. Understands the project and needs mindful outreach moving forward to keep him aware of developments.

Communication ID: 226879 - Property Visit Courtesy Reminders

Communication (10/13/2016)

Property Visit Courtesy Reminders

Brett Watson/EnviroIssues called Anne Sims (3001 Mountain View Ave. N) and Darius and Vicki Richards (3605 Lake Washington Blvd. N) to provide them with a courtesy reminder that a project team member would stop by in the morning to conduct a quick visual inspection of the lakeline along their property.

Anne noted that her dog (Whirley) may be around but should not give staff any issues. She also said that there are workers refinishing her entry way area and that she wouldn't be home, so no need for the project team to knock.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624260</u>	<u>ANNE F SIM CONNER</u>	Individual	206-931-7667 (Home) 425-572-6344 (Cell)	
<u>624283</u>	<u>VICKI L RICHARDS</u>	Individual	425-430-4469 (Home)	dariusvicki@msn.com
<u>645234</u>	<u>DARIUS RICHARDS</u>	Individual	425-623-8177 (Home) 425-430-4469 (Cell)	dariusvicki@msn.com

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118855</u>	3342103940	Requests advance call for visits	Dog's name is Whirley; has invisible fence. Requests advance call for visits to property.
<u>118856</u>	3342103941		
<u>118854</u>	3342103942		
<u>118878</u>	3342700330	Requested advance call for visits	Requested advance call for visits as a reminder.

Communication ID: 227656 - Survey Reminder Email

Communication (10/25/2016)

Survey Reminder Email

Hi Steve,

I'm part of the City of Renton's Kennydale Lakeline Assessment project team, and wanted to let you know that surveyors will be in the area tomorrow and/or Thursday (weather permitting) to do additional work. Team members may again visit your yard to survey the lakeline and connected elements based on what we were able to learn earlier in the month. You might also see boats in the area, as our team takes a look from the water.

Thanks for your help as we complete this important work. If you have any questions or concerns, please contact Dave Christensen (copied above, and at 425-430-7212).

Response

Sounds Good Thanks for the information...

Steve Leighton
 President/General Manager
 Precision Iron Works Inc.

(253)887-5555 x214

(206)919-8774 Cell

Due 10/25/2016

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624225</u>	<u>STEVE LEIGHTON</u>	Individual	206-919-8774 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118908</u>	3124059079		narrow parcel / access to dock

Communication ID: 227657 - Survey Reminder Email

Communication (10/25/2016)

Survey Reminder Email

Kennydale lakeline update: Surveyors working tomorrow / Thursday

Hi Laurie,

I'm part of the City of Renton's Kennydale Lakeline Assessment project team, and wanted to let you know that surveyors will be in the area tomorrow and/or Thursday (weather permitting) to do additional work. Team members may again visit your yard to survey the lakeline and connected elements based on what we were able to learn earlier in the month. You might also see boats in the area, as our team takes a look from the water.

Thanks for your help as we complete this important work. If you have any questions or concerns, please contact Dave Christensen (copied above, and at 425-430-7212).

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
624285	Laurie L Baker	Individual	425-227-4317 (Home) 206-772-6284 (Cell)	laurieb@mcseac.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118864	3342103880		

Communication ID: 227659 - Request for Property Access

Communication (10/21/2016)

Request for Property Access

Call to Kenneth (who we learned recently passed away) requesting access to 3111 Mountain View Avenue for a quick visual survey.

Response (10/25/2016)

All,

Just spoke with Melanie Crooker at 3111 Mtn View Av N. She is fine with us visiting her property. Also please update our record to her name as her Husband recently passed away. Contact phone number for Melanie is 321.544.1481.

Dave C.

Due 10/25/2016

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
624199	MELANIE CROOKER	Individual	321-544-1481 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118865	3342103860		

Communication ID: 227661 - Call: Request for property access

Communication (10/21/2016)

Call: Request for property access

Connie Kim/EnviroIssues called the number for Boydston Enterprises in Renton-- accessed a family member of Tony who provided her with a cell phone number for Tony (206.999.9763). Tony responded to a voicemail on this number denying the project team's request to access his property. He noted that access to the lake from his property would require access to his home. Tony noted that his next door neighbors (to the South) do not live at the home anymore and teams could probably access their dock. Tony Expressed frustration with the process.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624191</u>	<u>TONY BOYDSTON</u>	Individual	206-999-3763 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118898</u>	3342700070	No-go property in 2016	Tony Boydston noted during a call (10/21/16) that he did not want project staff to access his property, and that he was frustrated with the overall process.

Communication ID: 227662 - Call: Property Access Request

Communication (10/6/2016)

Call: Property Access Request

Brett Watson/EnviroIssues called Anne Sim to request project team access for a visual inspection of the lakeline. Anne approved access and noted that the lakeline is visible from her property's dock (walk out about 15-20 feet & look to the south). Anne noted that the area near shore was recently landscaped and she requested that crews use concrete pads to access. Dog named Whirley may be out, but is friendly and has an invisible fence.

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624260</u>	<u>ANNE F. SIM CONNER</u>	Individual	206-931-7667 (Home) 425-572-6344 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118855</u>	3342103940	Requests advance call for visits	Dog's name is Whirley; has invisible fence. Requests advance call for visits to property.
<u>118856</u>	3342103941		
<u>118854</u>	3342103942		

Communication ID: 227663 - Call: Request for Property Access

Communication (10/6/2016)

Call: Request for Property Access

Brett Watson/EnviroIssues called John and Betsey Burroughs (2815 Mountain View Ave) to request project team access for a quick visual inspection of the lakeline. Betsey approved access and noted that they are currently living out of town.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624198</u>	<u>JOHN D BURROUGHS</u>	Individual	425-736-8698 (Cell)	
<u>716029</u>	<u>BETSEY BURROUGHS</u>	Individual	425-739-8698 (Home)	<u>betsy_mann@hotmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118851</u>	3342104010		

Communication ID: 227664 - Call: Request for Property Access

Communication (10/6/2016)

Call: Request for Property Access

Brett Watson/EnviroIssues called Gerald Brennan (3405 & 3411 Lake Washington Blvd.) to see if crews could access his properties for a quick visual inspection. Gerald approved access.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624218</u>	<u>GERALD F BRENNAN</u>	Individual	425-271-2736 (Home)	<u>jerry_brennan@yahoo.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118875</u>	3124059075	3405	
<u>118900</u>	3342103656		
<u>118901</u>	3342103657		

Communication ID: 227665 - Call: Request for Property Access

Communication (10/6/2016)

Call: Request for Property Access

Brett Watson/EnviroIssues left a voicemail for Darius and Vicki Richards (3605 Lake Washington Blvd.) to see if crews could access their property for a quick visual inspection.

Response (10/6/2016)

[David received a call back from Mr. Richards at 3605 Lake Wa Blvd N. in response to voicemail. He is good with us visiting and should be home on both the 12 and 13th. Would like a call before we arrive as a reminder. 425-430-4469.]

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624283	<u>VICKI L RICHARDS</u>	Individual	425-430-4469 (Home)	dariusvicki@msn.com
645234	<u>DARIUS RICHARDS</u>	Individual	425-623-8177 (Home) 425-430-4469 (Cell)	dariusvicki@msn.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118878	3342700330	Requested advance call for visits	Requested advance call for visits as a reminder.

Communication ID: 227666 - Call: Request for Property Access

Communication (10/6/2016)

Call: Request for Property Access

Brett Watson/EnviroIssues left a voicemail for Marilyn and Dayton Dennison (3717 Lake Washington Blvd.) to see if crews could access their property for a quick visual inspection.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624202	<u>DAYTON P DENNISON</u>	Individual	425-351-2040 (Home) 425-271-4388 (Cell)	budmanis@comcast.net
662350	<u>MARILYN DENNISON</u>	Individual	425-271-4388 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118889	3342700200		

Communication ID: 227667 - Call: Request for Property Access

Communication (10/6/2016)

Call: Request for Property Access

Brett Watson/EnviroIssues left a voicemail for Marilyn and Dayton Dennison (3717 Lake Washington Blvd.) to see if crews could access their property for a quick visual inspection.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624202</u>	<u>DAYTON P DENNISON</u>	Individual	425-351-2040 (Home) 425-271-4388 (Cell)	<u>budmanis@comcast.net</u>
<u>662350</u>	<u>MARILYN DENNISON</u>	Individual	425-271-4388 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118889</u>	3342700200		

Communication ID: 227675 - Letter: Request for Contact Information**Communication** (10/25/2016)

Letter: Request for Contact Information

Renton sent a letter to priority lakeline properties that the project team has been unable to contact for approval:

Dear NAME:

Thank you very much for your patience over the past several weeks as crews worked in your neighborhood to perform maintenance work and conduct initial assessments on the Kennydale Lakeline Sewer System. Our project team will continue assessment efforts in the coming weeks from both the shore and the water.

Members of the project team are interested in stopping by your property to perform a quick visual inspection. They will be looking to see if the lakeline is visible, so they may need to access your dock if you have one. So far, efforts to reach you directly have not succeeded.

Please contact me as soon as possible to discuss this potential visit and to share your preferred contact information. We are aiming to conclude these visits during early November. You may reach me directly at 425 430-7212 or by email at dchristensen@rentonwa.gov.

Sincerely,

[SIGNATURE]

David Christensen
Wastewater Utility Manager
City of Renton

Source: Mailing**Owner(s):**

Contact ID	Name	Type	Phones	Email
624197	ROBERT H BURR	Individual	425-226-7114 (Home) 425-941-4004 (Cell)	
624201	JEANNE C DEMUND	Individual	206-970-3172 (Home) 206-898-9818 (Cell)	jcdemund@gmail.com
624206	FRITZ W NELSON	Individual	425-226-8772 (Home) 425-445-5430 (Cell)	
624226	WARREN ERIC LINDBLAD	Individual		
624233	MILTON A REIMERS JR	Individual		
624237	MARC PRITCHARD	Individual	425-957-7254 (Home)	
624250	MARK E ZILMER	Individual	425-226-9090 (Home) 425-681-3001 (Cell)	
624253	JEFFREY T RILEY	Individual		
624256	ADRIENNE LINDBLAD	Individual	253-347-5964 (Cell) 206-940-2524 (Work)	
624263	BEVERLY REIMERS	Individual	206-898-8659 (Cell)	
624267	KAAREN PRITCHARD	Individual	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)	kaaren.pritchard@nordstrom.com
624279	ROSEMARY ZILMER	Individual	206-799-0361 (Home)	
624282	TAMI H RILEY	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118860	3342103905		
118850	3342104029		
118872	3342103775		
118895	3342700110		
118849	3342104040		
118853	3342103985		
118894	3342700125	Call in advance for access	Call Kim Peterson at 206-793-1769 to get keys to the gate to get access the property.
118897	3342700080		

Communication ID: 227692 - 3605 Lake WA Blvd Site Visit 10/13

Communication (10/27/2016)

3605 Lake WA Blvd Site Visit 10/13

Darius Richards was home for the site visit on 10/13 at 11am. He showed Dave Scott and Alison Payauys into his backyard through the south gate. He explained the location where he believed the lakeline crossed his dock and waterfront. Lakeline was not visible. He said there was a cleanout or valve near the start of the dock that is now buried. He also pointed out a spot next to the house where there was a cleanout or valve.

Due 10/13/2016

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624283	VICKI L RICHARDS	Individual	425-430-4469 (Home)	dariusvicki@msn.com
645234	DARIUS RICHARDS	Individual	425-623-8177 (Home) 425-430-4469 (Cell)	dariusvicki@msn.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118878	3342700330	Requested advance call for visits	Requested advance call for visits as a reminder.

Communication ID: 227695 - 3717 Lake WA Blvd Site Visit 10/13

Communication (10/27/2016)

3717 Lake WA Blvd Site Visit 10/13

Marilyn Dennison was home for the site visit on 10/13. She directed Dave Scott and Alison Payauys to access the backyard along the north side of the house. She pointed out the cleanout in her yard and the lateral running along the neighbors dock. She pointed out the buoy for Site 1 Manhole to the north. She mentioned the City had worked on a problem with the sewer in her backyard for a year. Unclear what exactly was done or when.

Due 10/13/2016

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
662350	MARILYN DENNISON	Individual	425-271-4388 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118889	3342700200		

Communication ID: 227696 - 3013 Mountain View Site Visit 10/26

Communication (10/27/2016)

3013 Mountain View Site Visit 10/26

Robert Burr was home for the site visit on 10/26. He approved access to his docks. Stan Job and Alison Payauys inspected the docks and the cleanout/monitoring location. Robert came outside to look for the lakeline from the docks. He provided his cell number, 425-941-4004, for the project team to call as needed.

Due 10/26/2016

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624197	ROBERT.H.BURR	Individual	425-226-7114 (Home) 425-941-4004 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118860	3342103905		

Communication ID: 228021 - Kaaren: Approval for accessing priority property

Communication (10/29/2016)

Kaaren: Approval for accessing priority property

Hi David,

I got you letter regarding needing access to our property at 2807 Mountain View Ave N, Renton.

You can contact me at this email address or on my cell at 206-226-4300

Kaaren Pritchard

Replenishment Buyer

Women's Shoes

[206]303-1612

Response (10/31/2016)

Ms. Pritchard,

Thank you for the contact information, we will use this contact information as we progress with our assessment of the Kennydale Lakeline.

Dave Christensen

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
624267	KAAREN PRITCHARD	Individual	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)	kaaren.pritchard@nordstrom.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118849	3342104040		

Communication ID: 228023 - Adrienne: Approval for accessing priority property

Communication (11/2/2016)

Adrienne: Approval for accessing priority property

David Christensen spoke with Adrienne Lindbald at 3233 Mountain View Av N (cell number 253.347.5964) and she has no problem with us accessing her property/dock through the existing gate for our work.

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624256</u>	<u>ADRIENNE LINDBLAD</u>	Individual	253-347-5964 (Cell) 206-940-2524 (Work)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118872</u>	3342103775		

Communication ID: 228025 - Jeanne: Approval for accessing priority property

Communication (11/2/2016)

Jeanne: Approval for accessing priority property

Dear Mr. Christensen,
Please ask the relevant person to call me at their convenience at 206-898-9818, to discuss when they would like to look at the lakeline at my home.

Best regards,
Jeanne DeMund
2811 Mountain View Ave. N.
Renton WA 98056

Response (11/2/2016)

Sarah,
See information below. I spoke with Ms. Demund just now and she is fine with us accessing here property. However, need to contact ahead to get through her gate, she locks it when she is not there, or if we have permission from neighbor on either side, she said it is easy to go across and on to here property that way.
Dave C.

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624201</u>	<u>JEANNE C DEMUND</u>	Individual	206-970-3172 (Home) 206-898-9818 (Cell)	<u>jcdemund@gmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118850</u>	3342104029		

Communication ID: 228040 - Approval to access property.

Communication (11/3/2016)

Approval to access property

Sarah,
 Received a call today from Rosemary Zilmer at 3837 Lake Wa Blvd. She is fine with us accessing her property for inspection. Contact phone number is 206.799.0361.
 Dave C.

Due 11/1/2016

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624279</u>	<u>ROSEMARY ZILMER</u>	Individual	206-799-0361 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118897</u>	3342700080		

Communication ID: 228402 - Thomas Dahlby: Problems with closed valve

Communication (11/8/2016)

Thomas Dahlby: Problems with closed valve

Hi Dave,
 Stan received a call from Thomas Dahlby @ 3217 MNT. View Ave N. yesterday 11-7-16 stating that the valve was closed. He sent Shane out to check valve. Wastewater crew responded and CCTV'd line with Mini-camera his line is laid pretty flat and had a lot of toilet paper standing in spots, and appears that the valve can be turned too far ...open which in turn goes over center essentially partially closing valve. The valve also is recessed bottom potentially catching paper and so Mr. Thomas Dahlby would like to speak with you. His phone number is (425) 891-3775 or E-mail is Thomas Dahlby@Yahoo.com

Response

Rocky,
 Thanks for the info. I talked with Mr. Dahlby this A.M. and explained the purpose of our overall project. I also let him know that we would note the specific issues he has had over the years as a result of the valve and materials hanging up in the valve. I let him know that we are looking both near term and long term for the project and I said we would also look at any potential even shorter term solutions we may be able to implement as we proceed with our project. He is O.K. with this proposal. Still not totally happy with us until we better resolve the issue at this location.

I think your explanation regarding how we handle this valve helps, but the simple fact is that this property is at a very low elevation, the valve, even when properly open, is not conducive to have sewage flow through it and has a high tendency to have material catch and cause a blockage. Probably should be one of the things the team looks at early is replacement valves that both close properly and best allow flow through them.

Sarah, Lara, Alison,
 Please see info above and below and please note in our overall plan the need to specifically address the issue here. Would probably be good to follow up with more detail from both myself and Rocky to fully capture our issue at this location.

Thanks, Dave C.

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
624200	THOMAS R DAHLBY	Individual	425-891-3775 (Cell)	ThomasDahlby@Yahoo.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118871	3342103795		Also owns parcel 3342103805. Has had sewer issues with materials hanging up on the valve in the pipes.
118870	3342103805		Also owns parcel 3342103795. Has had sewer issues with materials hanging up on the valve in the pipes.

Communication ID: 258036 - Call: Left voicemail

Communication (10/6/2016)

Call: Left voicemail

Left voicemail about access to priority property

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624234</u>	<u>MICHAEL H ATKINSON</u>	Individual	425-898-9359 (Home)	
<u>624264</u>	<u>CHERYL L ATKINSON</u>	Individual	425-898-9359 (Home) 301-379-2089 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118874</u>	3124059076	Currently under construction (2017)	

Communication ID: 258041 - Call: Left voicemail

Communication (10/6/2016)

Call: Left voicemail

Left voicemail about access to priority property

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624246</u>	<u>STEPHEN C PORTER</u>	Individual	425-277-5949 (Home) 206-940-9334 (Cell) 206-604-3116 (Work)	
<u>624276</u>	<u>NANCY A PORTER</u>	Individual	425-277-5949 (Home) 206-940-9334 (Cell) 206-601-3116 (Work)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118868</u>	3342103840		Nancy Porter did not wish for crews to access her property for an inspection (10/7/16). Encouraged team members to reach out to her husband in the future if access or coordination is needed.

Communication ID: 258042 - Call: Left voicemail

Communication (10/6/2016)

Call: Left voicemail

Left voicemail about access to priority property

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624199	MELANIE CROOKER	Individual	321-544-1481 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118865	3342103860		

Communication ID: 258044 - Call: Left voicemail

Communication (10/6/2016)

Call: Left voicemail

Left voicemail about access to priority property

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624250	MARK E ZILMER	Individual	425-226-9090 (Home) 425-681-3001 (Cell)	
624279	ROSEMARY ZILMER	Individual	206-799-0361 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118897	3342700080		

Communication ID: 258045 - Call: Left voicemail

Communication (10/6/2016)

Call: Left voicemail

Left voicemail about access to priority property

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624188	KEVIN L LINDAHL	Individual	206-266-6969 (Home)	kevinlindahl@comcast.net

Parcels

Parcel ID	Parcel	Property Name	Notes
118890	3342700190		

Communication ID: 258046 - Left door hanger

Communication (10/7/2016)

Left door hanger

[Not home when conducting in-the-field outreach; hanger with message to contact David left on the door.]

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624188	<u>KEVIN L LINDAHL</u>	Individual	206-266-6969 (Home)	kevinlindahl@comcast.net
624197	<u>ROBERT H BURR</u>	Individual	425-226-7114 (Home) 425-941-4004 (Cell)	
624199	<u>MELANIE CROOKER</u>	Individual	321-544-1481 (Cell)	
624201	<u>JEANNE C DEMUND</u>	Individual	206-970-3172 (Home) 206-898-9818 (Cell)	jcdemund@gmail.com
624206	<u>FRITZ W NELSON</u>	Individual	425-226-8772 (Home) 425-445-5430 (Cell)	
624226	<u>WARREN ERIC LINDBLAD</u>	Individual		
624233	<u>MILTON A REIMERS JR</u>	Individual		
624234	<u>MICHAEL H ATKINSON</u>	Individual	425-898-9359 (Home)	
624250	<u>MARK E ZILMER</u>	Individual	425-226-9090 (Home) 425-681-3001 (Cell)	
624253	<u>JEFFREY T RILEY</u>	Individual		
624256	<u>ADRIENNE LINDBLAD</u>	Individual	253-347-5964 (Cell) 206-940-2524 (Work)	
624263	<u>BEVERLY REIMERS</u>	Individual	206-898-8659 (Cell)	
624264	<u>CHERYL L ATKINSON</u>	Individual	425-898-9359 (Home) 301-379-2089 (Cell)	
624279	<u>ROSEMARY ZILMER</u>	Individual	206-799-0361 (Home)	
624282	<u>TAMI H RILEY</u>	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118874	3124059076	Currently under construction (2017)	
118872	3342103775		
118865	3342103860		
118860	3342103905		
118853	3342103985		
118850	3342104029		
118897	3342700080		
118895	3342700110		
118894	3342700125	Call in advance for access	Call Kim Peterson at 206-793-1769 to get keys to the gate to get access the property.
118890	3342700190		

Communication ID: 258047 - Left door hanger

Communication (10/7/2016)

Left door hanger

[Left door hanger while doing in-the-field outreach to priority properties.]

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624198	JOHN D BURROUGHS	Individual	425-736-8698 (Cell)	
624218	GERALD F BRENNAN	Individual	425-271-2736 (Home)	jerry_brennan@yahoo.com
624230	CHARLES F CONNER	Individual	425-572-6344 (Cell)	
624260	ANNE F SIM CONNER	Individual	206-931-7667 (Home) 425-572-6344 (Cell)	
624283	VICKI L RICHARDS	Individual	425-430-4469 (Home)	dariusvicki@msn.com
645234	DARIUS RICHARDS	Individual	425-623-8177 (Home) 425-430-4469 (Cell)	dariusvicki@msn.com
716029	BETSEY BURROUGHS	Individual	425-739-8698 (Home)	betsy_mann@hotmail.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118876	3124059074	3411	
118875	3124059075	3405	
118855	3342103940	Requests advance call for visits	Dog's name is Whirley; has invisible fence. Requests advance call for visits to property.
118851	3342104010		
118878	3342700330	Requested advance call for visits	Requested advance call for visits as a reminder.

Communication ID: 258048 - Email: Requesting updates

Communication (10/10/2016)

Email: Requesting updates

David, Can you keep me informed via email? Thanks

Steve and Lisa Leighton 3307 Mountain view ave north Renton....

Steve Leighton

President/General Manager

Precision Iron Works Inc.

(253)887-5555 x214

(206)919-8774 Cell

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624225</u>	<u>STEVE LEIGHTON</u>	Individual	206-919-8774 (Cell)	
<u>624241</u>	<u>LISA LEIGHTON</u>	Individual	206-271-3233 (Home) 206-919-8776 (Cell)	<u>lisalord19@gmail.com</u>

Communication ID: 258049 - Call: Regarding access

Communication (10/11/2016)

Call: Regarding access

Call made on 10/11; Stephen is alerted and we are good to access

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624225</u>	<u>STEVE LEIGHTON</u>	Individual	206-919-8774 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118873</u>	3124059077		

Communication ID: 260040 - Phone call: Concerns about lawn - do not disturb

Communication (8/10/2017)

Phone call: Concerns about lawn - do not disturb

[Received phone message from Marlene Winter at 2731 Mtn View. Concern is possible disruption of new expensive lawn as part of our work. Property is two north of flush station. Lakeline is not in Lake at this point therefore we will not be disturbing her property.

JOHN H will follow up with return call. Her number is 425.417.4722.

Dave C]

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624214	MARLENE R WINTER	Individual	425-417-4722 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118846	3342104048	Concerns about lawn and 2 dogs	Concerns about possible disruption of new expensive lawn as part of our work. Noted that she has 2 dogs and crews MUST close both gates when walking in and out to prevent them from running away.

Communication ID: 265631 - Phone call: Reminder about lawn

Communication (8/24/2017)

Phone call: Reminder about lawn

[Marlene called David C. with a reminder about her lawn after receiving a door hanger:

Just a reminder, I did get a call from Property Owner at 2731 Mtn View reminding us not to excavate on her property without first contacting her and coordinating, especially with her special lawn.

Name: Marlene Winters
Phone Number: 425.417.4722]

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624214	MARLENE R WINTER	Individual	425-417-4722 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118846	3342104048	Concerns about lawn and 2 dogs	Concerns about possible disruption of new expensive lawn as part of our work. Noted that she has 2 dogs and crews MUST close both gates when walking in and out to prevent them from running away.

Communication ID: 266861 - Carollo Site Visit Notes: Let go

Communication (10/13/2016)

Carollo Site Visit Notes: Let go

Let go. We can locate next door (3405 and 3411).

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624234	MICHAEL H ATKINSON	Individual	425-898-9359 (Home)	
624264	CHERYL L ATKINSON	Individual	425-898-9359 (Home) 301-379-2089 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118874	3124059076	Currently under construction (2017)	

Communication ID: 266862 - Carollo Site Visit Notes: Visited

Communication (10/13/2016)

Carollo Site Visit Notes: Visited

Visited; pipe not visible but good location to probe; send Surveyor back

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624285	LAURIE L BAKER	Individual	425-227-4317 (Home) 206-772-6284 (Cell)	laurieb@mcseac.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118864	3342103880		

Communication ID: 266863 - Carollo Site Visit Notes: To add

Communication (10/13/2016)

Carollo Site Visit Notes: To add

New one to add, expect exposed pipe, may have better luck reaching owner.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624191</u>	<u>TONY BOYDSTON</u>	Individual	206-999-3763 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118898</u>	3342700070	No-go property in 2016	Tony Boydston noted during a call (10/21/16) that he did not want project staff to access his property, and that he was frustrated with the overall process.

Communication ID: 266864 - Carollo Site Visit Notes: Visited

Communication (10/13/2016)

Carollo Site Visit Notes: Visited

Visited; pipe visible at 3411; send Surveyor back to both 3405 and 3411.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624218</u>	<u>GERALD F BRENNAN</u>	Individual	425-271-2736 (Home)	<u>jerry_brennan@yahoo.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118876</u>	3124059074	3411	
<u>118875</u>	3124059075	3405	

Communication ID: 266866 - Carollo Site Visit Notes: Try again

Communication (10/13/2016)

Carollo Site Visit Notes: Try again

Try Again; since City crews access the monitoring point here he may feel he doesn't need to give special permission.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624197</u>	<u>ROBERT H BURR</u>	Individual	425-226-7114 (Home) 425-941-4004 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118860</u>	3342103905		

Communication ID: 266867 - Carollo Site Visit Notes: Visited

Communication (10/13/2016)

Carollo Site Visit Notes: Visited

Visited; very rocky; done at site.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624198</u>	<u>JOHN D BURROUGHS</u>	Individual	425-736-8698 (Cell)	
<u>716029</u>	<u>BETSEY BURROUGHS</u>	Individual	425-739-8698 (Home)	<u>betsy_mann@hotmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118851</u>	3342104010		

Communication ID: 266868 - Carollo Site Visit Notes: Visited

Communication (10/13/2016)

Carollo Site Visit Notes: Visited

Visited; pipe visible; send Surveyor back.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624230</u>	<u>CHARLES F CONNER</u>	Individual	425-572-6344 (Cell)	
<u>624260</u>	<u>ANNE F SIM CONNER</u>	Individual	206-931-7667 (Home) 425-572-6344 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118855</u>	3342103940	Requests advance call for visits	Dog's name is Whirley; has invisible fence. Requests advance call for visits to property.

Communication ID: 266869 - Carollo Site Visit Notes: Let go

Communication (10/13/2016)

Carollo Site Visit Notes: Let go

Let go. We should be ok with locating next door (3107).

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624199</u>	<u>MELANIE CROOKER</u>	Individual	321-544-1481 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118865</u>	3342103860		

Communication ID: 266870 - Carollo Site Visit Notes: Try again

Communication (10/13/2016)

Carollo Site Visit Notes: Try again

Try Again - exposed pipe.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624201</u>	<u>JEANNE C DEMUND</u>	Individual	206-970-3172 (Home) 206-898-9818 (Cell)	<u>jcdemund@gmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118850</u>	3342104029		

Communication ID: 266871 - Carollo Site Visit Notes: Visited

Communication (10/13/2016)

Carollo Site Visit Notes: Visited

Visited; pipe not visible, likely better locating to north. Let go.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624202</u>	<u>DAYTON P DENNISON</u>	Individual	425-351-2040 (Home) 425-271-4388 (Cell)	<u>budmanis@comcast.net</u>
<u>662350</u>	<u>MARILYN DENNISON</u>	Individual	425-271-4388 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118889</u>	3342700200		

Communication ID: 266872 - Carollo Site Visit Notes: Visited

Communication (10/13/2016)

Carollo Site Visit Notes: Visited

Visited; pipe covered, optional location for Surveyor to probe.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624225	<u>STEVE LEIGHTON</u>	Individual	206-919-8774 (Cell)	
624241	<u>LISA LEIGHTON</u>	Individual	206-271-3233 (Home) 206-919-8776 (Cell)	lisalord19@gmail.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118873	3124059077		

Communication ID: 266873 - Carollo Site Visit Notes: Try again

Communication (10/13/2016)

Carollo Site Visit Notes: Try again

Try Again - exposed pipe.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624188	<u>KEVIN L LINDAHL</u>	Individual	206-266-6969 (Home)	kevinlindahl@comcast.net

Parcels

Parcel ID	Parcel	Property Name	Notes
118890	3342700190		

Communication ID: 266874 - Carollo Site Visit Notes: Try again

Communication (10/13/2016)

Carollo Site Visit Notes: Try again

Try Again. If can't reach we can locate adjacent in water.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624226	<u>WARREN ERIC LINDBLAD</u>	Individual		
624256	<u>ADRIENNE LINDBLAD</u>	Individual	253-347-5964 (Cell) 206-940-2524 (Work)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118872	3342103775		

Communication ID: 266875 - Carollo Site Visit Notes: To add

Communication (10/13/2016)

Carollo Site Visit Notes: To add

New one to add, expect exposed pipe, may have better luck reaching owner.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624205</u>	<u>VIKTORIA LITTLEMAN</u>	Individual	425-351-3745 (Home) 425-255-0487 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118891</u>	3342700176	Careful of irrigation when digging.	

Communication ID: 266876 - Carollo Site Visit Notes: Try again

Communication (10/13/2016)

Carollo Site Visit Notes: Try again

Try Again - exposed pipe.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624206</u>	<u>FRITZ W NELSON</u>	Individual	425-226-8772 (Home) 425-445-5430 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118895</u>	3342700110		

Communication ID: 266877 - Carollo Site Visit Notes: Try again

Communication (10/13/2016)

Carollo Site Visit Notes: Try again

Try Again - exposed pipe.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624237</u>	<u>MARC PRITCHARD</u>	Individual	425-957-7254 (Home)	
<u>624267</u>	<u>KAAREN PRITCHARD</u>	Individual	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)	kaaren.pritchard@nordstrom.com

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118849</u>	3342104040		

Communication ID: 266878 - Carollo Site Visit Notes: Try again

Communication (10/13/2016)

Carollo Site Visit Notes: Try again

Try Again. If can't reach we can locate adjacent in water.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624233</u>	<u>MILTON A REIMERS JR</u>	Individual		
<u>624263</u>	<u>BEVERLY REIMERS</u>	Individual	206-898-8659 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118853</u>	3342103985		

Communication ID: 266879 - Carollo Site Visit Notes: Visited

Communication (10/13/2016)

Carollo Site Visit Notes: Visited

Visited; pipe not visible but good location to probe; send Surveyor back.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624283	<u>VICKI L RICHARDS</u>	Individual	425-430-4469 (Home)	dariusvicki@msn.com
645234	<u>DARIUS RICHARDS</u>	Individual	425-623-8177 (Home) 425-430-4469 (Cell)	dariusvicki@msn.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118878	3342700330	Requested advance call for visits	Requested advance call for visits as a reminder.

Communication ID: 266880 - Carollo Site Visit Notes: Try again

Communication (10/13/2016)

Carollo Site Visit Notes: Try again

Try Again.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624253	<u>JEFFREY T RILEY</u>	Individual		
624282	<u>TAMI H RILEY</u>	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118894	3342700125	Call in advance for access	Call Kim Peterson at 206-793-1769 to get keys to the gate to get access the property.

Communication ID: 266881 - Carollo Site Visit Notes: Try again

Communication (10/13/2016)

Carollo Site Visit Notes: Try again

Try Again - exposed pipe. Need to coordinate a time when we can inspect or get ok to access dock from water.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624227</u>	<u>ROBERT W TAYLOR</u>	Individual	425-430-5476 (Home) 425-615-0480 (Cell)	
<u>624257</u>	<u>ALISON P TAYLOR</u>	Individual	425-430-5476 (Home) 425-615-0480 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118892</u>	3342700149	Requested advance call for access	Advance call requested for visits to property. Gate kept locked and neighbors pay attention to visitors.

Communication ID: 266882 - Carollo Site Visit Notes: Try again

Communication (10/13/2016)

Carollo Site Visit Notes: Try again

Try Again.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624250</u>	<u>MARK E ZILMER</u>	Individual	425-226-9090 (Home) 425-681-3001 (Cell)	
<u>624279</u>	<u>ROSEMARY ZILMER</u>	Individual	206-799-0361 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118897</u>	3342700080		

Communication ID: 266883 - Carollo Site Visit Notes: Visited

Communication (10/13/2016)

Carollo Site Visit Notes: Visited

Visited; pipe not visible but good location to probe; send Surveyor back.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624180	KING COUNTY-PARKS	Organization		

Parcels

Parcel ID	Parcel	Property Name	Notes
118842	3124059004	Former Railroad, includes Kennydale Beach Park	

Communication ID: 266888 - Call: Left voicemail

Communication (10/21/2016)

Call: Left voicemail

Left voicemail requesting access to property.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624188	KEVIN L LINDAHL	Individual	206-266-6969 (Home)	kevinlindahl@comcast.net
624205	VIKTORIA LITTLEMAN	Individual	425-351-3745 (Home) 425-255-0487 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118890	3342700190		
118891	3342700176	Careful of irrigation when digging.	

Communication ID: 266892 - Call: Courtesy reminder

Communication (10/25/2016)

Call: Courtesy reminder

Left voicemail with a courtesy reminder of upcoming surveys.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624252</u>	<u>JOHN PATRICK HEILY</u>	Individual	206-491-6004 (Home)	
<u>624281</u>	<u>SUNDAY G HEILY</u>	Individual	206-491-6004 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118845</u>	3342104050		

Communication ID: 266893 - Call: Spoke to Marlene Winter

Communication (10/25/2016)

Call: Spoke to Marlene Winter

Noted that she has 2 dogs and crews MUST close both gates when walking in and out to prevent them from running away.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624214</u>	<u>MARLENE R WINTER</u>	Individual	425-417-4722 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118846</u>	3342104048	Concerns about lawn and 2 dogs	Concerns about possible disruption of new expensive lawn as part of our work. Noted that she has 2 dogs and crews MUST close both gates when walking in and out to prevent them from running away.

Communication ID: 266894 - Call: Spoke to Betsey Burroughs

Communication (10/25/2016)

Call: Spoke to Betsey Burroughs

Spoke with Betsy who said that people will be in and out of the house and might not be home but is okay with crews stopping by.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624198</u>	<u>JOHN D BURROUGHS</u>	Individual	425-736-8698 (Cell)	
<u>716029</u>	<u>BETSEY BURROUGHS</u>	Individual	425-739-8698 (Home)	<u>betsy_mann@hotmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118851</u>	3342104010		

Communication ID: 266895 - Call: Spoke with the Conners

Communication (10/25/2016)

Call: Spoke with the Conners

Won't be home, out of country but is okay with crews stopping by. Notes that dog named "Whirley" is very friendly.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624230</u>	<u>CHARLES F CONNER</u>	Individual	425-572-6344 (Cell)	
<u>624260</u>	<u>ANNE F SIM CONNER</u>	Individual	206-931-7667 (Home) 425-572-6344 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118855</u>	3342103940	Requests advance call for visits	Dog's name is Whirley; has invisible fence. Requests advance call for visits to property.

Communication ID: 266896 - Call: Courtesy reminder

Communication (10/25/2016)

Call: Courtesy reminder

Left voicemail with a courtesy reminder of upcoming surveys.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624218</u>	<u>GERALD F BRENNAN</u>	Individual	425-271-2736 (Home)	<u>jerry_brennan@yahoo.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118875</u>	3124059075	3405	
<u>118876</u>	3124059074	3411	

Communication ID: 266897 - Call: Courtesy reminder

Communication (10/25/2016)

Call: Courtesy reminder

Left voicemail with a courtesy reminder of upcoming surveys.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624283</u>	<u>VICKI L RICHARDS</u>	Individual	425-430-4469 (Home)	<u>dariusvicki@msn.com</u>
<u>645234</u>	<u>DARIUS RICHARDS</u>	Individual	425-623-8177 (Home) 425-430-4469 (Cell)	<u>dariusvicki@msn.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118878</u>	3342700330	Requested advance call for visits	Requested advance call for visits as a reminder.

Communication ID: 266898 - Call: Courtesy reminder

Communication (10/25/2016)

Call: Courtesy reminder

Left voicemail with a courtesy reminder of upcoming surveys.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624202</u>	<u>DAYTON P DENNISON</u>	Individual	425-351-2040 (Home) 425-271-4388 (Cell)	<u>budmanis@comcast.net</u>
<u>662350</u>	<u>MARILYN DENNISON</u>	Individual	425-271-4388 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118889</u>	3342700200		

Communication ID: 266956 - Renton Site Visit Notes: No answer

Communication (9/6/2017)

Renton Site Visit Notes: No answer

Summary of Communication with City Employees
Door hanger and card left on 9/6/17

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624252</u>	<u>JOHN PATRICK HEILY</u>	Individual	206-491-6004 (Home)	
<u>624281</u>	<u>SUNDAY G HEILY</u>	Individual	206-491-6004 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118845</u>	3342104050		

Communication ID: 266957 - Renton Site Visit Notes: Cleanouts located

Communication (8/24/2017)

Renton Site Visit Notes: Cleanouts located

Summary of Communication with City Employees

City spoke with owner. Talked with Bill on multiple occasions. Bill was helpful in showing locations of 3 cleanouts (8/23). Talked with Bill about trimming bushes near cleanout on 8/24/17. Bill indicated he would remove bushes and bolts himself.

Completed Work and Investigations by City Staff

Cleanout #1: Located in front driveway, 16 ft off front of house in a 16" x 24" metal box/lid.
 Cleanout #2: Located on the north side walkway heading towards house. 16" x 24" metal box/lid.
 Cleanout #3: Located north of front door on walkway. 16" x 24" metal box/lid.

Additional Notes on Work Done by City Staff

No need for marking cleanouts. Cleanouts are located in plain sight with rectangular metal lids.
 Mini cam down cleanout next to was underwater. Went out 90'.
 Removed bolts from flange using grinder. Installed new bolts and nuts.

Items City Staff Denoted for Follow-up Needed

Bolts and hedging still not removed by homeowner via his request to do so himself.

Additional Follow-up for Homeowner

Homeowner stated bushes covering cleanout would be trimmed and bolts removed prior to additional work.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624235</u>	<u>WILLIAM F KEPPLER</u>	Individual	206-250-3638 (Cell)	<u>bill_debra@msn.com</u>
<u>624265</u>	<u>DEBRA L KEPPLER</u>	Individual	206-250-3637 (Home)	<u>bill_debra@msn.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118848</u>	3342104045		

Communication ID: 266958 - Renton Site Visit Notes: Cleanout located

Communication (8/16/2017)

Renton Site Visit Notes: Cleanout located

Summary of Communication with City Employees

City with spoke with owner, Kaaren (8/16/17), and she was not able to give any information about locations of valves or cleanouts. Gave permission to dig etc. as needed to locate cleanout and valve.

Completed Work and Investigations by City Staff

Located cleanout that appeared to be from 2807. Located under back deck, 42" off back of house and 32" off edge of house. Confirm with as-built.

Additional Notes on Work Done by City Staff

Cleanout was marked using GPS from top of decking (8/23/17). Held off on further checking of cleanout condition due to pulling up the decking.

Items City Staff Denoted for Follow-up Needed

Opened and marked with whiskers (8/28/17)

Photos taken to show condition (8/28/17)

Carollo Follow-up and Clarification Items

Clarification needed. What was located and whiskered on 8/28? Confirm if cleanout located is for 2807 and 2811.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624237	MARC PRITCHARD	Individual	425-957-7254 (Home)	
624267	KAAREN PRITCHARD	Individual	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)	kaaren.pritchard@nordstrom.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118849	3342104040		

Communication ID: 266959 - Renton Site Visit Notes: Located cleanout and valve**Communication** (8/16/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees

Made contact with owner on 8/16/17. Owner described a water meter box in backyard with a sewer valve inside.

Completed Work and Investigations by City Staff

Dug up cleanout and located valve in backyard on 8/16/17. Valve has easy access and a box around it. Clean out is also in box, but lid won't come off. Rusty bolts need to be removed to open.

Additional Notes on Work Done by City Staff

Valve location 13 feet from bulkhead heading east towards the house and 12 feet off house.

(8/16/17)

Clean out 12 feet off bulkhead directly in front of a valve and 13 feet off the house. (8/16/17)

Both cleanout and valve have been GPS'ed, photographed, and cleanout reburied.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624198</u>	<u>JOHN D BURROUGHS</u>	Individual	425-736-8698 (Cell)	
<u>716029</u>	<u>BETSEY BURROUGHS</u>	Individual	425-739-8698 (Home)	<u>betsy_mann@hotmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118851</u>	3342104010		

Communication ID: 266960 - Renton Site Visit Notes: Cleanouts located

Communication (8/16/2017)

Renton Site Visit Notes: Cleanouts located

Summary of Communication with City Employees

Spoke with owner on 8/16/17. Found PVC cleanout in the concrete.

Owner gave contact info for their Contractor, Dave Ellwell: DMEconstruction@msn.com, 425-451-4967

Completed Work and Investigations by City Staff

Located cleanout next to house. 8" Metal c/o lid with 4" c/o PVC pipe. No valve located. (8/16/17)

Cleanout was photographed, GPSed, and opened. (8/28/17).

Additional Notes on Work Done by City Staff

Cleanout located 3 feet off corner of house (west, facing bulkhead) in side concrete patio. 20 feet east of bulk head.

Items City Staff Denoted for Follow-up Needed

As-built pulled and valve located, GPS and bolts removed if necessary (8/28/17).

Carollo Follow-up and Clarification Items

Confirm if City located valve.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624242	RICHARD SCOTT HOWELL	Individual		
624272	LOIS A HOWELL	Individual	206-910-0180 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118852	3342104009		

Communication ID: 266961 - Renton Site Visit Notes: Spoke with dock builder

Communication (9/5/2017)

Renton Site Visit Notes: Spoke with dock builder

Summary of Communication with City Employees

City met with the builder of dock and pile driving, Tyler Somers. The house is being torn down and new headwall and bulkhead are being installed. There was no visible cleanout. City staff helped locate sewer in lake to ensure line is not impacted.

Completed Work and Investigations by City Staff

No visible cleanout. House being torn down.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
741720	PAUL JOOS	Individual	425-417-9955 (Cell) 425-255-4250 (Work)	
624178	JOOS FAMILY LLC	Organization		

Parcels

Parcel ID	Parcel	Property Name	Notes
118837	3342103953	House is being torn down; requests no survey marker on new wall (Sept. 2017)	

Communication ID: 266962 - Renton Site Visit Notes: Dye test shows misconnection; repaired

Communication (8/23/2017)

Renton Site Visit Notes: Dye test shows misconnection; repaired

Summary of Communication with City Employees
 City spoke with owner about the Lakeline project. Owner asked about PSE contacting him regarding putting a gas line through sewer line. Owner was given Rocky's card regarding this cross drilling.

Completed Work and Investigations by City Staff
 Cleanout was dye tested and revealed sewer was connected to surface water drain. Contractors were brought in to repair. Cleanout was minicammed. Cleanout has metal lid with PVC pipe twist cap.

Carollo Follow-up and Clarification Items
 Confirm cleanout locations.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
717235	ANTONIO MANDARANO	Individual	206-403-7272 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118856	3342103941		

Communication ID: 266963 - Renton Site Visit Notes: Cleanout located

Communication (8/29/2017)

Renton Site Visit Notes: Cleanout located

Summary of Communication with City Employees
 City spoke met homeowner on 8/29/17, homeowner showed location of cleanout in backyard flower bed.

Completed Work and Investigations by City Staff
 Found cleanout and marked with whiskers. Took cap off, verified cleanout was clean and functional. Cleanout already at grade and in good shape. GPS and photos taken.

Additional Notes on Work Done by City Staff
 Cleanout is 30 inches off back of house and 13 feet off property line. Marked with whisker on 8/29/17. Cleanout is 4" with a cap.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
717233	SHAWN LEPROWSE	Individual		
717234	REBECCA LEPROWSE	Individual	206-920-1033 (Cell)	rlleprose@msn.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118840	3342103931		

Communication ID: 266964 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/23/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees

Owner showed location of valve in backyard on 8/16/17, but did not have information on cleanout. Requested to be notified before digging.

Completed Work and Investigations by City Staff

Valve is in northwest corner of yard near bulkhead. Valve cap located and cleaned. Valve key did not fit and valve box full of water. Valve is located down the property line between 3007/3009. Valve is located towards the far end of the backyard near the water, 18" off the fence and 2 feet from first bulkhead. Cleanout appears to be located under bulkhead, but location could not be confirmed.

Items City Staff Denoted for Follow-up Needed

City indicated valve can not be opened due to angle of pipe and should be replaced.

Carollo Follow-up and Clarification Items

Clarification needed. Was cleanout located beneath rocks?

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624203	MONICA M FIX	Individual	425-306-1990 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118857	3342103930	Notify before digging	

Communication ID: 266965 - Renton Site Visit Notes: Valve located

Communication (8/16/2017)

Renton Site Visit Notes: Valve located

Summary of Communication with City Employees

City interacted with owner who was helpful, but did not know location of valve or cleanout.

Completed Work and Investigations by City Staff

Found and marked valve (maybe in yard of 3007?), but no visible cleanout. Located what may be a cleanout, but lid won't open. Location of valve 31'-6" west of bottom corner of North end of patio and 4'-6" south of black fence in backyard of 3007.

Additional Notes on Work Done by City Staff

Additional cleanout located in back patio concrete 6 feet out from back door. Lid needs to be removed, can't be opened.

Carollo Follow-up and Clarification Items

Confirm that valve located was in yard of 3007.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624211	JIANPING SUN	Individual		
741722	BIN GONG	Individual	615-579-6738 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118858	3342103924		

Communication ID: 266966 - Renton Site Visit Notes: Cleanout located**Communication** (8/29/2017)

Renton Site Visit Notes: Cleanout located

Summary of Communication with City Employees

City interacted with homeowner who showed what he thought was cleanout.

Completed Work and Investigations by City Staff

Cleanout located 15" off south side of house. Cleanout has green lid and lid is located in concrete bricks.

Items City Staff Denoted for Follow-up Needed

City can not get cap open.

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
624209	PETER SPOUSE	Individual	206-369-5374 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118859	3342103920		

Communication ID: 266967 - Renton Site Visit Notes: Two manholes located**Communication** (8/16/2017)

Renton Site Visit Notes: Two manholes located

Summary of Communication with City Employees

City interacted with homeowner who showed manhole in driveway.

Completed Work and Investigations by City Staff

Two manholes located on property, A and B. Manhole A was located in driveway and CCTVed on 8/23.17. Located on north side of the house. Cleanout located in Manhole A. 6 feet north of cleanout is a valve. Additional manhole (Manhole B) located 185 feet Northeast of cleanout in Manhole A. Manhole B is located under fruit trees on the property line between 3101 and 3013. Manhole is located 6 feet from grass in the backyard of 3101. Manhole B was not CCTVed.

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
624197	ROBERT H BURR	Individual	425-226-7114 (Home) 425-941-4004 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118860	3342103905		

Communication ID: 266968 - Renton Site Visit Notes: Cannot locate cleanout

Communication (8/29/2017)

Renton Site Visit Notes: Cannot locate cleanout

Completed Work and Investigations by City Staff
 Searched backyard for cleanout, but could not locate. Inserted minicam in manhole on 3013 property to locate 3015 but camera could not go deep enough.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624208	DONALD L SAVOY	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118861	3342103906		

Communication ID: 266969 - Renton Site Visit Notes: Manhole located

Communication (8/16/2017)

Renton Site Visit Notes: Manhole located

Summary of Communication with City Employees
 Homeowner showed manhole located in 3013 and indicated that they tie into that manhole.
 Completed Work and Investigations by City Staff
 Manhole located in garden 35 feet south of front door. Field inspection showed no direct sign that 3101 ties into sewer line at MH at 3013.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624210	WILLIAM C STONEMAN	Individual	425-255-7972 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118862	3342103895		Bill Stoneman is a long-time resident, lots of history with sewer system projects along the lakeline. Concerned about having to pay for system. Understands the project and needs mindful outreach moving forward to keep him aware of developments.

Communication ID: 266970 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/17/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees
Homeowner showed City where valve was.

Completed Work and Investigations by City Staff
Sewer valve located in NW corner of yard 6' off bulkhead. Located in a black plastic vault labeled "Irrigation Control Valve". Valve located on lot for 3107. About 15 feet east of the valve in the garden is a 4" PVC stub which appears to be the cleanout.

Additional Notes on Work Done by City Staff
Second cleanout located 10 feet from hot tub towards the lake along the rock wall. Located 4 feet from bottom of stairs at "V" in rock wall behind a bush.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624236	LAURA S MORGAN	Individual		
624266	JAMES C MORGAN	Individual	425-417-2513 (Home)	morganjjmc@hotmail.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118863	3342103890		

Communication ID: 266971 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/17/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees
City interacted with homeowner.

Completed Work and Investigations by City Staff
Valve located in SW corner of yard in black plastic vault labeled "irrigation control valve" (Same as 3103). Actually located on the property of 3107. A 4" PVC cleanout is located about 13 feet north of the valve. The cleanout is a 4" PVC stub sticking up out of the ground about 3 feet.

Additional Notes on Work Done by City Staff
Attempted to CCTV from the cleanout but was unable to get minicam towards lake downstream.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624187	O LOWELL ANDERSON	Individual	206-772-6284 (Home)	lowell@mvseac.com
624285	LAURIE L BAKER	Individual	425-227-4317 (Home) 206-772-6284 (Cell)	laurieb@mcseac.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118864	3342103880		

Communication ID: 266972 - Renton Site Visit Notes: Cleanout located

Communication (8/17/2017)

Renton Site Visit Notes: Cleanout located

Summary of Communication with City Employees
 City made contact with renter, Kateyln (425-444-1412)

Completed Work and Investigations by City Staff
 Cleanout located 2.5 feet south of concrete wall at the bottom of the launch ramp. Cleanout is buried 2 feet deep.

Items City Staff Denoted for Follow-up Needed
 Cleanout needs to be opened and brought up to grade.

Carollo Follow-up and Clarification Items
 Clarify if cleanout was brought up to grade.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624199</u>	<u>MELANIE CROOKER</u>	Individual	321-544-1481 (Cell)	
<u>741730</u>	<u>KATELYNN</u>	Individual	425-444-1412 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118865</u>	3342103860		

Communication ID: 266973 - Renton Site Visit Notes: Cleanout located

Communication (8/18/2017)

Renton Site Visit Notes: Cleanout located

Summary of Communication with City Employees
 Homeowner had no knowledge of valve or cleanout.

Completed Work and Investigations by City Staff
 Located cleanout lid in backyard 4 feet east of bulkhead and removed lid. Cleanout is 6" PVC pipe with gripper plug stuck in it. Gripper plug removed and minicam run 2.5 feet down the lateral and 10 feet total. No valve or DI cleanout located.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624215</u>	<u>GARY F YOUNG</u>	Individual	425-736-4787 (Home)	<u>letyoung2@gmail.com</u>
<u>741733</u>	<u>HELEN YOUNG</u>	Individual	425-736-4787 (Home)	<u>letyoung2@gmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118866</u>	3342103855		

Communication ID: 266974 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/18/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees
Owner had general idea of valve location.

Completed Work and Investigations by City Staff
Found valve lid in NW corner of backyard about 10 feet off the bulkhead. Had to dig to access valve.

Additional Notes on Work Done by City Staff
Cleanout located in fire place smokestack on back patio, 6" PVC pipe with cap.

Carollo Follow-up and Clarification Items
Confirm cleanout location and accessibility of cleanout in smokestack.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624207	<u>CHRIS OPPFELT</u>	Individual		<u>chris.oppfelt@gmail.com</u>
741734	<u>HOLLY OPPFELT</u>	Individual	425-891-4582 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118867	3342103845		

Communication ID: 266975 - Renton Site Visit Notes: Cannot locate cleanout

Communication (8/18/2017)

Renton Site Visit Notes: Cannot locate cleanout

Summary of Communication with City Employees
Talked to homeowners on 8/29, and owners had no information on sewer cleanout, but had as-builts. Owners indicated they would get in touch with City regarding as-built information.

Completed Work and Investigations by City Staff
Could not locate valve or cleanout at 3205. Waiting on homeowner to provide as-built information.

Additional Follow-up for Homeowner
Homeowners informed City they would provide as-built information. As-built information not yet supplied.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624246	<u>STEPHEN C PORTER</u>	Individual	425-277-5949 (Home) 206-940-9334 (Cell) 206-604-3116 (Work)	
624276	<u>NANCY A PORTER</u>	Individual	425-277-5949 (Home) 206-940-9334 (Cell) 206-601-3116 (Work)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118868	3342103840		Nancy Porter did not wish for crews to access her property for an inspection (10/7/16). Encouraged team members to reach out to her husband in the future if access or coordination is needed.

Communication ID: 266976 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/18/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees
 City met homeowner, who will be out of country until 9/13/17. Owners do not mind if digging needed on property as they are re-doing landscaping.

Completed Work and Investigations by City Staff
 Located cleanout and valve in SW corner of backyard 10 feet east of bulkhead.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624231	DAVID R HUMPHREY	Individual	206-391-8019 (Cell)	
624261	APRIL L HUMPHREY	Individual	206-391-8019 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118869	3342103810		

Communication ID: 266977 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/18/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees
 Owner knew where cleanout and valves were.

Completed Work and Investigations by City Staff
 Owner located two valves and a cleanout 6 feet from bulkhead. Cleanout and valve for 3217 are in the walkway between the yards. Valve for 3213 is between garden box and concrete walkway.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624200	THOMAS R DAHLBY	Individual	425-891-3775 (Cell)	ThomasDahlby@Yahoo.com
624270	KATHLEEN I DAHLBY	Individual	425-891-3774 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118871	3342103795		Also owns parcel 3342103805. Has had sewer issues with materials hanging up on the valve in the pipes.

Communication ID: 266978 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/18/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees
City made contact with owner.

Completed Work and Investigations by City Staff
Located sewer valve in middle of paved driveway 12 feet east of the garage. Cleanout located 45 feet south of valve in the grass. Located next to an old planter box and apple tree. Located a second cleanout 20 feet north of the driveway for 3233 towards 3307.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624226</u>	<u>WARREN ERIC LINDBLAD</u>	Individual		
<u>624256</u>	<u>ADRIENNE LINDBLAD</u>	Individual	253-347-5964 (Cell) 206-940-2524 (Work)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118872</u>	3342103775		

Communication ID: 266979 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/18/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees
Homeowner showed valve location. Side gate: 1963.

Completed Work and Investigations by City Staff
Located 6" valve in patio at bottom of stairs.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624225</u>	<u>STEVE LEIGHTON</u>	Individual	206-919-8774 (Cell)	
<u>624241</u>	<u>LISA LEIGHTON</u>	Individual	206-271-3233 (Home) 206-919-8776 (Cell)	lisalord19@gmail.com

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118873</u>	3124059077		

Communication ID: 266980 - Renton Site Visit Notes: Cleanouts located

Communication (8/22/2017)

Renton Site Visit Notes: Cleanouts located

This site currently under construction.

Summary of Communication with City Employees

Construction superintendent helpful. Indicated old D.I. cleanout and valve encased in concrete were removed and replaced with 2 new PVC cleanouts.

Completed Work and Investigations by City Staff

Found, marked, and GPS'd 2 PVC cleanouts on south side of house 1 - 4" c/o and 1 - 6" c/o.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624234	MICHAEL H ATKINSON	Individual	425-898-9359 (Home)	
624264	CHERYL L ATKINSON	Individual	425-898-9359 (Home) 301-379-2089 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118874	3124059076	Currently under construction (2017)	

Communication ID: 266981 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/22/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees

Renter (Cheryl Atkinson) was nice and had no issues with accessing property.

Completed Work and Investigations by City Staff

Found valve and cleanout about 20 feet north of the northeast corner of the house.

Additional Notes on Work Done by City Staff

Marked and GPS'd valve and cleanout.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624218	GERALD F BRENNAN	Individual	425-271-2736 (Home)	jerry_brennan@yahoo.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118875	3124059075	3405	

Communication ID: 266982 - Renton Site Visit Notes: Two manholes located

Communication (8/23/2017)

Renton Site Visit Notes: Two manholes located

Completed Work and Investigations by City Staff

Two Manholes located, "A" and "B". Manhole A is set into the pavers with cleanout accessible under ring and lid. Located 10 feet from the retaining wall to the east, and the lid is painted green. Cleanout is 59" down.

Additional Notes on Work Done by City Staff

Manhole B is in the retaining wall. Manhole has a cleanout pipe that comes up to give access to sewer main. Cleanout stack comes up 111" to lid and ring. Main is 89" from ring/lid and the base of the manhole is 102" from ring/lid.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624180</u>	<u>KING COUNTY-PARKS</u>	Organization		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118842</u>	3124059004	Former Railroad, includes Kennydale Beach Park	

Communication ID: 266983 - Renton Site Visit Notes: Spoke with homeowner

Communication (8/21/2017)

Renton Site Visit Notes: Spoke with homeowner

Summary of Communication with City Employees

City explained that people may be accessing property as part of work. Owner has a large Doberman that can be aggressive. Contact before entering property.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624238</u>	<u>TOM EASTON</u>	Individual		
<u>624268</u>	<u>KAREN EASTON</u>	Individual	206-708-3664 (Cell)	<u>kjeaston@comcast.net</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118877</u>	3342700355	Requests advance call for visits	

Communication ID: 266984 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/21/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees

City made contact with owner who is going out of town around September 9th. Gave permission to perform work as needed in his yard. Owner indicated cleanout under flower bed along the back of the house in southwest corner. Owner believes valve is located a few feet from dock entrance below grass.

Completed Work and Investigations by City Staff

Located and marked valve and cleanout. Cleanout and valve between 10' - 13' east of bulkhead. Valve was 3" below grade and cleanout was 17" below grade. Homeowner okay holes for valve and cleanout remaining open.

Additional Notes on Work Done by City Staff

Cleanout bolts rusted and encased in concrete. Bolts were T-bolts.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624283	VICKI L RICHARDS	Individual	425-430-4469 (Home)	dariusvicki@msn.com
645234	DARIUS RICHARDS	Individual	425-623-8177 (Home) 425-430-4469 (Cell)	dariusvicki@msn.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118878	3342700330	Requested advance call for visits	Requested advance call for visits as a reminder.

Communication ID: 266985 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/21/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees

Owner made aware that property will be accessed to perform needed work. (8/21/17)

Completed Work and Investigations by City Staff

Minicamera for 54.2 feet. GPS'd and whiskered. Valve located under patio carpet.

Additional Notes on Work Done by City Staff

Cleanout located 6 feet 10 inches from northwest corner of home.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
717275	ANGELA TROY	Individual	206-419-9499 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118879	3342700320		

Communication ID: 266986 - Renton Site Visit Notes: Cannot locate cleanout

Communication (8/28/2017)

Renton Site Visit Notes: Cannot locate cleanout

Summary of Communication with City Employees
No one home. No cleanout or valves visible.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624204</u>	<u>BANG DAE HEE</u>	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118880</u>	3342700310		

Communication ID: 266987 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/28/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees
City made contact with owner on 8/28/17.

Completed Work and Investigations by City Staff
4" Cleanout with brass lid located 2'-4" from southwest corner of home. CCTV performed for 97.3 feet. Located a valve during CCTV 29 feet from house cleanout. Valve buried in flower bed 5'-9" from head wall under a fence.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624251</u>	<u>BRIAN L FIFE</u>	Individual	206-380-8414 (Cell)	<u>justyourtype@me.com</u>
<u>624280</u>	<u>STEPHANIE C FIFE</u>	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118881</u>	3342700300		

Communication ID: 266988 - Renton Site Visit Notes: Grease in lateral; cleanout located

Communication (8/28/2017)

Renton Site Visit Notes: Grease in lateral; cleanout located

Summary of Communication with City Employees
 City made contact with owner on 8/28/17.

Completed Work and Investigations by City Staff
 Cleanout located 1.5 feet from southwest corner of house. CCTVed for 22.6 feet in the northwest direction to buried valve. Tee at 27.5 feet. Mayor's house may tie in at this point. Noticeable grease in lateral.

Additional Notes on Work Done by City Staff
 City CCTVed and dye tested and Roto Rooter cleared a blockage.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624245	ANDREW T ALBERTSON	Individual	206-617-7511 (Cell)	
624275	MEGAN L ALBERTSON	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118882	3342700290		

Communication ID: 266989 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/28/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees
 Knocked on door and rang bell on 8/28 and no one home. No visible cleanout. Made contact with owner on 8/29.

Completed Work and Investigations by City Staff
 Located 4" PVC cleanout. CCTV minicam for 65 feet, at which point camera could go no further. Valve located at 52 feet with mini cam. Could not confirm if this is the same valve located under neighbor's deck.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624247	DENIS W LAW	Individual	425-277-3434 (Home)	
624277	PATRICIA LAW	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118883	3342700280		

Communication ID: 266990 - Renton Site Visit Notes: Cannot locate valve

Communication (8/29/2017)

Renton Site Visit Notes: Cannot locate valve

Summary of Communication with City Employees
 Made contact with owner who was not aware of any valve or cleanout on property.

Completed Work and Investigations by City Staff
 Original search in back yard and south of side of house revealed nothing. Owner believed valve was under deck in SW corner of yard. Metal detector used to identify valve location. Located 7' off fence to the north. Deck is bulged up and homeowner indicated he will make arrangements to have it exposed.

Items City Staff Denoted for Follow-up Needed
 Confirm that owner intends to remove decking and expose valve.

Additional Follow-up for Homeowner
 Indicated he would remove decking to expose location of valve. Confirm if owner exposing valve.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624196	JOHN MICHAEL BROWN	Individual	206-240-0133 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118884	3342700270		

Communication ID: 266991 - Renton Site Visit Notes: Cleanout located

Communication (8/29/2017)

Renton Site Visit Notes: Cleanout located

Summary of Communication with City Employees
 Owner located a black plastic lid in backyard patio pavers that could not be opened. Was not able to identify anything else.

Completed Work and Investigations by City Staff
 Opened 4" ABS screw-in cap to reveal cleanout. CCTVed lateral.

Additional Notes on Work Done by City Staff
 Valve potentially located under palm tree in yard.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624248	JOAN WU GUANGOLIN	Individual		
624278	ROBERT DAVID REED	Individual	206-503-7972 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118885	3342700260		

Communication ID: 266992 - Renton Site Visit Notes: Cannot locate cleanout**Communication** (8/21/2017)

Renton Site Visit Notes: Cannot locate cleanout

Summary of Communication with City Employees

Owner made aware of the need to access the yard. Owner was instructed to contact Dave Christiansen with any further questions.

Completed Work and Investigations by City Staff

No cleanout or valve visible.

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>624239</u>	<u>PAUL L PASQUIER</u>	Individual		
<u>624269</u>	<u>KARYN A PASQUIER</u>	Individual	425-271-1468 (Home)	<u>kpstu@aol.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118886</u>	3342700250		

Communication ID: 266993 - Renton Site Visit Notes: Located cleanout and valve**Communication** (8/29/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees

Owner knew location of valve and cleanout.

Completed Work and Investigations by City Staff

Valve and cleanout located and marked. Located 3 feet west of chain-link fence in the northwest corner of the yard. Located in the yard of 3713 Lake WA Blvd. Shared side sewer with 3713 Lake Wa Blvd.

Carollo Follow-up and Clarification Items

Confirm valve location and information. Field visit information for 3713 shows only cleanout. Note on 3711 says valve and cleanout present at 3713, but no valve shown in 3713 inspection. Cleanout was located.

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>624213</u>	<u>GARY A WEIL</u>	Individual	425-988-4556 (Home)	<u>ziggyweil@gmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118887</u>	3342700230		

Communication ID: 266994 - Renton Site Visit Notes: Grease in lateral; cleanout located

Communication (8/21/2017)

Renton Site Visit Notes: Grease in lateral; cleanout located

Summary of Communication with City Employees

Owner made aware of the need to access property. Owner has a dog, but the dog is friendly and will likely be inside. Attempt to contact owner prior to entering yard. If no contact is made, the owner has given permission to access the yard.

Completed Work and Investigations by City Staff

Located PVC cleanout that was surcharged and full of grease. Mechanical rodder was used for 100 feet and there were no obstructions or drop levels in the cleanout or lateral.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
717256	<u>DOUGLAS HARWOOD</u>	Individual	425-503-0242 (Cell) 425-455-0501 (Work)	doug.harwood@comcast.net
741738	<u>MARJORIE HARWOOD</u>	Individual	425-503-7092 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118888</u>	3342700240	Please attempt to contact owner prior to entering yard.	

Communication ID: 266995 - Renton Site Visit Notes: Valve located; cannot locate cleanout

Communication (8/29/2017)

Renton Site Visit Notes: Valve located; cannot locate cleanout

Summary of Communication with City Employees

Owner showed a hatch on the deck with a lid to pop open.

Completed Work and Investigations by City Staff

Opened hatch on back deck and located valve lid. Valve lid opened. Cleanout was buried and digging hit concrete. Drawings show cleanout encased in concrete. Dug down a foot and a half and used a metal detector, but cleanout could not be located.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
741119	<u>KRISTI SUNDERLAND</u>	Individual		
741120	<u>DAVID WILLIAMSON</u>	Individual	206-399-4522 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118838</u>	3342700211		

Communication ID: 266996 - Renton Site Visit Notes: Cleanout located

Communication (8/21/2017)

Renton Site Visit Notes: Cleanout located

Summary of Communication with City Employees
 Owner okay with accessing yard. Showed location of cleanout and valve in backyard.

Completed Work and Investigations by City Staff
 Located cleanout. Owner indicated sewer crew was on property to respond to a backup. Crew raised cleanout up to grade and supposedly abandoned the valve. Cleanout located in grass 8 feet NW of the house and 7 feet south of the fence.

Carollo Follow-up and Clarification Items
 Confirm if isolation valve was abandoned as indicated by owner. Rocky was mentioned specifically when discussing previous work and abandonment of valve.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624202	<u>DAYTON P DENNISON</u>	Individual	425-351-2040 (Home) 425-271-4388 (Cell)	<u>budmanis@comcast.net</u>
662350	<u>MARILYN DENNISON</u>	Individual	425-271-4388 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118889</u>	3342700200		

Communication ID: 266997 - Renton Site Visit Notes: Valve located

Communication (8/21/2017)

Renton Site Visit Notes: Valve located

Summary of Communication with City Employees
 Need to access property was explained, but owner would like crews to knock on door in case they are home. Owner asked about financial responsibility for work and was referred to Dave Christiansen.

Completed Work and Investigations by City Staff
 Found valve lid in backyard of 3805, 4 feet north of fence and 6 feet east of bulkhead.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624188	<u>KEVIN L LINDAHL</u>	Individual	206-266-6969 (Home)	<u>kevinlindahl@comcast.net</u>
624286	<u>REBECCA A BYUS</u>	Individual	206-266-6969 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118890</u>	3342700190		

Communication ID: 266998 - Renton Site Visit Notes: Valves located

Communication (8/29/2017)

Renton Site Visit Notes: Valves located

Summary of Communication with City Employees

Owner knew of general location of a lid. Owner requested to be careful when digging because irrigation is installed. Okay to access property if no one is home. Dog is friendly.

Completed Work and Investigations by City Staff

Found two lids in southwest corner of backyard. South most lid was for a valve, but was underwater. Other circular lid appeared to be for a valve according to drawings, but was also underwater. South most valve supposed to be for 3719 and north most valve supposed to be for 3805 with a shared cleanout. One valve is 4' north of fence and 6' east of bulkhead. Other valve is located 6' north of fence and 7' east of bulkhead.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624205	<u>VIKTORIA LITTLEMAN</u>	Individual	425-351-3745 (Home) 425-255-0487 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118891	3342700176	Careful of irrigation when digging.	

Communication ID: 266999 - Renton Site Visit Notes: Cannot locate cleanout or valve

Communication (8/21/2017)

Renton Site Visit Notes: Cannot locate cleanout or valve

Summary of Communication with City Employees

Contact made with owner, owner requested a call in advance to gain access.

Completed Work and Investigations by City Staff

Gate was unlocked. No valve or cleanout located. Record drawings indicate valve and cleanout shared with 3815.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624227	<u>ROBERT W TAYLOR</u>	Individual	425-430-5476 (Home) 425-615-0480 (Cell)	
624257	<u>ALISON P TAYLOR</u>	Individual	425-430-5476 (Home) 425-615-0480 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118892	3342700149	Requested advance call for access	Advance call requested for visits to property. Gate kept locked and neighbors pay attention to visitors.

Communication ID: 267000 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/29/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees

City made contact with owner. Owner must be contacted prior to work to accessing property to get gate unlocked.

Completed Work and Investigations by City Staff

Located valve lid under step on far southwest corner of yard. Owner pulled boards off to access. Valve located 10 feet from SW corner of home under wood steps. Cleanout has about 18" of mud in the riser.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624244</u>	<u>BRUCE E ERIKSON</u>	Individual	425-226-2981 (Home) 206-669-8881 (Cell)	
<u>624274</u>	<u>MARY R ERIKSON</u>	Individual	425-226-2981 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118893</u>	3342700126	Advance call to gain access	Owner must be contacted prior to work to accessing property to get gate unlocked.

Communication ID: 267001 - Renton Site Visit Notes: Cannot locate cleanout or valve

Communication (8/29/2017)

Renton Site Visit Notes: Cannot locate cleanout or valve

Summary of Communication with City Employees

No contact, neighbors say they rent and are in and out frequently.

Completed Work and Investigations by City Staff

Metal detected around concrete where drawings indicate cleanout is located. Not found at the time. Call Kim for keys to open the gate and access the property.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>717245</u>	<u>TATYANA BARINOVA</u>	Individual		
<u>741740</u>	<u>GREG PETERSON</u>	Individual	206-793-1769 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118894</u>	3342700125	Call in advance for access	Call Kim Peterson at 206-793-1769 to get keys to the gate to get access the property.

Communication ID: 267002 - Renton Site Visit Notes: Located cleanout and valve**Communication** (9/5/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees

Contact made with owners of 3825. Shared valve and cleanout with 3827.

Completed Work and Investigations by City Staff

Valve and cleanout located under deck boards 8 feet west of the stairs down from the house and 4 feet south of rocks stacked north of the dock in back of 3827.

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>624206</u>	<u>FRITZ W NELSON</u>	Individual	425-226-8772 (Home) 425-445-5430 (Cell)	
<u>741741</u>	<u>ANGIE F NELSON</u>	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118895</u>	3342700110		

Communication ID: 267003 - Renton Site Visit Notes: Located cleanout and valve**Communication** (9/5/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees

Neighbors indicated that owners of 3827 do not live on the property and are renovating the house for rentals.

Completed Work and Investigations by City Staff

Located valve and cleanout under new lower deck. Cleanout bolts encased in concrete and rusty.

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>717243</u>	<u>SCOTT PETETT</u>	Individual	425-277-4007 (Home) 425-765-5334 (Cell)	
<u>738802</u>	<u>ANNE PETETT</u>	Individual	425-277-4007 (Home) 425-765-5334 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118896</u>	3342700100		

Communication ID: 267004 - Renton Site Visit Notes: Located cleanout and valve

Communication (9/5/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees
 Owner concerned and interested in the work going on.

Completed Work and Investigations by City Staff
 3837 and 3901 share common side sewer cleanout and valve under 3901 house.

Cleanout located 5 feet south of fence near front door of 3901. Located in pavement next to small boat trailer. Cleanout in water meter box. CCTVed to mainline.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624250	MARK E ZILMER	Individual	425-226-9090 (Home) 425-681-3001 (Cell)	
624279	ROSEMARY ZILMER	Individual	206-799-0361 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118897	3342700080		

Communication ID: 267005 - Renton Site Visit Notes: Located cleanout and valve

Communication (8/29/2017)

Renton Site Visit Notes: Located cleanout and valve

Summary of Communication with City Employees
 Owner was not aware of any valve or cleanout on property.

Completed Work and Investigations by City Staff
 Cleanout located 5 feet south of fence near front door. Located in pavement next to small boat trailer. Cleanout in water meter box. CCTVed to mainline. 3837 and 3901 share common side sewer cleanout and valve under 3901 house.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624191	TONY BOYDSTON	Individual	206-999-3763 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118898	3342700070	No-go property in 2016	Tony Boydston noted during a call (10/21/16) that he did not want project staff to access his property, and that he was frustrated with the overall process.

Communication ID: 267095 - CCTV Notes

Communication (8/24/2017)

CCTV Notes

Minicam used went as far as 90 degree bend. Line full of water.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624235</u>	<u>WILLIAM F KEPLER</u>	Individual	206-250-3638 (Cell)	<u>bill_debra@msn.com</u>
<u>624265</u>	<u>DEBRA L KEPLER</u>	Individual	206-250-3637 (Home)	<u>bill_debra@msn.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118848</u>	3342104045		

Communication ID: 267096 - CCTV Notes

Communication (8/18/2017)

CCTV Notes

Minicam run 2.5 feet down the lateral and 10 feet total.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624215</u>	<u>GARY F YOUNG</u>	Individual	425-736-4787 (Home)	<u>letyoung2@gmail.com</u>
<u>741733</u>	<u>HELEN YOUNG</u>	Individual	425-736-4787 (Home)	<u>letyoung2@gmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118866</u>	3342103855		

Communication ID: 267097 - CCTV Notes

Communication (8/21/2017)

CCTV Notes

Minicamera used for 54.2' feet.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>717275</u>	<u>ANGELA TROY</u>	Individual	206-419-9499 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118879</u>	3342700320		

Communication ID: 267098 - CCTV Notes

Communication (8/28/2017)

CCTV Notes

97.3' feet CCTVed. Valve located 29 feet from the house cleanout.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624251	BRIAN L FIFE	Individual	206-380-8414 (Cell)	justyourtype@me.com
624280	STEPHANIE C FIFE	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118881	3342700300		

Communication ID: 267099 - CCTV Notes

Communication (8/28/2017)

CCTV Notes

CCTVed for 22.6 feet in the northwest direction to buried valve. Tee at 27.5 feet. Mayor's house may tie in at this point. Noticeable grease in lateral.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624245	ANDREW T ALBERTSON	Individual	206-617-7511 (Cell)	
624275	MEGAN L ALBERTSON	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118882	3342700290		

Communication ID: 267100 - CCTV Notes

Communication (8/28/2017)

CCTV Notes

CCTV minicam for 65 feet, at which point camera could go no further. Valve located at 52 feet with mini cam. Could not confirm if this is the same valve located under neighbor's deck.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624247</u>	<u>DENIS W LAW</u>	Individual	425-277-3434 (Home)	
<u>624277</u>	<u>PATRICIA LAW</u>	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118883</u>	3342700280		

Communication ID: 267101 - CCTV Notes

Communication (8/29/2017)

CCTV Notes

CCTV of lateral performed.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624248</u>	<u>JOAN WU GUANGOLIN</u>	Individual		
<u>624278</u>	<u>ROBERT DAVID REED</u>	Individual	206-503-7972 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118885</u>	3342700260		

Communication ID: 267102 - CCTV Notes

Communication (8/21/2017)

CCTV Notes

No CCTV performed, but cleanout was filled with grease. Mechanical rodder was used and line rodded for 100 feet without hitting an obstruction of drop level.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>717256</u>	<u>DOUGLAS HARWOOD</u>	Individual	425-503-0242 (Cell) 425-455-0501 (Work)	doug.harwood@comcast.net
<u>741738</u>	<u>MARJORIE HARWOOD</u>	Individual	425-503-7092 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118888</u>	3342700240	Please attempt to contact owner prior to entering yard.	

Communication ID: 267103 - CCTV Notes

Communication (8/29/2017)

CCTV Notes

CCTVed to mainline.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624191</u>	<u>TONY BOYDSTON</u>	Individual	206-999-3763 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118898</u>	3342700070	No-go property in 2016	Tony Boydston noted during a call (10/21/16) that he did not want project staff to access his property, and that he was frustrated with the overall process.

Communication ID: 267199 - Phone call: requests no survey markers in new wall (1)**Communication** (9/22/2017)

Phone call: requests no survey markers in new wall (1)

Dr. Joos from 2909 Mtn View Av N called Dave C. and left a message. He has requested that we not install the survey markers in his new wall.

Response (9/22/2017)

Dave C. left a message for Dr. Joos that we will not install markers in his new wall, but that our surveyors may identify potential other locations that may work and that we would contact ahead to make sure that area would be acceptable.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>741720</u>	<u>PAUL JOOS</u>	Individual	425-417-9955 (Cell) 425-255-4250 (Work)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118837</u>	3342103953	House is being torn down; requests no survey marker on new wall (Sept. 2017)	

Communication ID: 267210 - Phone call: Work reminder, request for access**Communication** (9/22/2017)

Phone call: Work reminder, request for access

Left messages at 425-226-2981 (h) and 206-669-8881 (c)

Courtesy reminder that work is starting Monday
Know we need to work with you to gain access to the property
Work is scheduled for Monday Sept. 25 and Thursday Sept. 28
Please call Laura or Dave Christensen to coordinate
Crews may also call you from the field

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624244</u>	<u>BRUCE E ERIKSON</u>	Individual	425-226-2981 (Home) 206-669-8881 (Cell)	
<u>624274</u>	<u>MARY R ERIKSON</u>	Individual	425-226-2981 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118893</u>	3342700126	Advance call to gain access	Owner must be contacted prior to work to accessing property to get gate unlocked.

Communication ID: 267211 - Phone call: Work reminder, request for access**Communication** (9/22/2017)

Phone call: Work reminder, request for access

Left message at 206-793-1769

Courtesy reminder that work is starting Monday

Know we need to work with you to gain access to the property

Work is scheduled on your property for Monday Sept. 25, although it might be pushed out a week

Please call Laura or Dave Christensen to coordinate

Source: Phone**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>742047</u>	<u>KIM PETERSON</u>	Individual	206-793-1769 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118894</u>	3342700125	Call in advance for access	Call Kim Peterson at 206-793-1769 to get keys to the gate to get access the property.

Communication ID: 267212 - Phone call: Work reminder, request for access**Communication** (9/22/2017)

Phone call: Work reminder, request for access

Left message at 425-430-5476 (h) and 425-615-0480 (c)

Courtesy reminder that work is starting Monday

Know we need to work with you to gain access to the property

Work is scheduled on your property for Thursday Sept. 28

Please call Laura or Dave Christensen to coordinate

Source: Phone**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>624227</u>	<u>ROBERT W TAYLOR</u>	Individual	425-430-5476 (Home) 425-615-0480 (Cell)	
<u>624257</u>	<u>ALISON P TAYLOR</u>	Individual	425-430-5476 (Home) 425-615-0480 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118892</u>	3342700149	Requested advance call for access	Advance call requested for visits to property. Gate kept locked and neighbors pay attention to visitors.

Communication ID: 267213 - Phone call: Courtesy reminder

Communication (9/22/2017)

Phone call: Courtesy reminder

Left message at 425-417-4722 (h)

Courtesy reminder that work is starting Monday

Work is scheduled for your property for Monday Sept. 25

We know you had concerns about your lawn and your dogs - work is only expected to be in the front yard, so that should not be an issues

Please call Dave Christensen with questions

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624214	<u>MARLENE R WINTER</u>	Individual	425-417-4722 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118846</u>	3342104048	Concerns about lawn and 2 dogs	Concerns about possible disruption of new expensive lawn as part of our work. Noted that she has 2 dogs and crews MUST close both gates when walking in and out to prevent them from running away.

Communication ID: 267214 - Phone call: requests no survey markers in new wall (2)

Communication (9/22/2017)

Phone call: requests no survey markers in new wall (2)

Dr. Joos called Dave C. back. He reiterated desire not to have markers in new bulkhead. Also mentioned that he thought his cleanout was to south with property to south. Also, has no issue if we come up with a different location for us to contact him. He said best contact number for him is 425.417.9955.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>741720</u>	<u>PAUL JOOS</u>	Individual	425-417-9955 (Cell) 425-255-4250 (Work)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118837</u>	3342103953	House is being torn down; requests no survey marker on new wall (Sept. 2017)	

Communication ID: 267218 - Phone call: Will leave gate unlocked on Monday.

Communication (9/22/2017)

Phone call: Will leave gate unlocked on Monday

Kim Peterson called Laura back. He said he would leave the gate open on Monday, Sept. 25. He will let his daughter know crews may be around.

Laura explained the work on his property is survey work that won't be very invasive but there is a chance it might get moved to another day. Kim requested a call back if plans change and the work is not completed Monday.

Kim was also curious about the project and Laura gave him a brief overview.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>742047</u>	<u>KIM PETERSON</u>	Individual	206-793-1769 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118894</u>	3342700125	Call in advance for access	Call Kim Peterson at 206-793-1769 to get keys to the gate to get access the property.

Communication ID: 267280 - Phone call: Tool left behind

Communication (9/22/2017)

Phone call: Tool left behind

Property Owner at 2825 Mtn View let Dave C. know that we left a 1-1/8 inch socket at his property. If we knock on his door on Monday and he will be happy to return to us. Fits the fittings at his house.

Response (9/25/2017)

There is no 2825, so we are adding this communication to both 2815 and 2827 to cover bases. Dave did not note name or contact number.

Dan confirmed they were able to retrieve the tool from the property owner (9/25/2017).

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624198</u>	<u>JOHN D BURROUGHS</u>	Individual	425-736-8698 (Cell)	
<u>624242</u>	<u>RICHARD SCOTT HOWELL</u>	Individual		
<u>624272</u>	<u>LOIS A HOWELL</u>	Individual	206-910-0180 (Cell)	
<u>716029</u>	<u>BETSEY BURROUGHS</u>	Individual	425-739-8698 (Home)	<u>betsy_mann@hotmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118852</u>	3342104009		
<u>118851</u>	3342104010		

Communication ID: 267281 - Returned call: Coordinating access

Communication (9/25/2017)

Returned call: Coordinating access

Laura spoke to Mary Erikson regarding fieldwork access to her property.

Mary will be in and out today (Sept. 25) running errands. If she is not home when crews approach her property, please try again later, as she may have returned by then. If she sees crews outside near her house, she will talk to them about access to her property.

On Thursday (Sept. 28), when they are scheduled for additional work, she can be around to let people in first thing, but otherwise they will not be around later in the day. Since fieldwork schedules are subject to change, Laura said we'd call back closer to Thursday and confirm if first thing Thursday will work for the crews.

Response (9/27/2017)

Laura called to coordinate access for the survey work that remains to be done. She left a message letting the Eriksons know that it does not currently look like the work is expected on Thursday. She also asked if crews visiting on Friday or sometime next week would work for them. Laura committed to calling again when the project schedule for the remaining work is more clear.

Due 9/27/2017

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624274	MARY R ERIKSON	Individual	425-226-2981 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118893	3342700126	Advance call to gain access	Owner must be contacted prior to work to accessing property to get gate unlocked.

Communication ID: 267604 - Phone call: Left message regarding access

Communication (9/29/2017)

Phone call: Left message regarding access

Survey crews are ready to conduct survey work on the 3815 Lake Wa Bvd property.

Roger from the City left messages on the Eriksons' phones to coordinate access for survey work.

Response (9/29/2017)

Phil from KPG confirmed they were able to map this property on Sept. 29.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624244	BRUCE E ERIKSON	Individual	425-226-2981 (Home) 206-669-8881 (Cell)	
624274	MARY R ERIKSON	Individual	425-226-2981 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118893	3342700126	Advance call to gain access	Owner must be contacted prior to work to accessing property to get gate unlocked.

Communication ID: 268057 - Phone call: Property access for bulkhead assessment work

Communication (10/6/2017)

Phone call: Property access for bulkhead assessment work

Laura spoke with Kim Peterson about work coming up next week. She let him know the work is scheduled for Thursday, but it could be a day earlier or later depending on how other work goes.

He is happy to work with us on access, and requested a call when the date of work is more clear. Laura confirmed we would let him know, probably Tuesday or Wednesday.

Response (10/10/2017)

Laura called and left a message confirming work is planned for Thursday, likely in the morning. She also left her phone number in case there were any questions.

Due 10/10/2017

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>742047</u>	<u>KIM PETERSON</u>	Individual	206-793-1769 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118894</u>	3342700125	Call in advance for access	Call Kim Peterson at 206-793-1769 to get keys to the gate to get access the property.

Communication ID: 268063 - Phone call: Property access for bulkhead assessment work

Communication (10/6/2017)

Phone call: Property access for bulkhead assessment work

Laura left a message for the Eriksons, letting them know that bulkhead assessment work is scheduled for their property on Thursday, but it could be a day earlier or later depending on how other work goes.

Laura asked if there is a day next week they would prefer crews visit, and said she would call again when the schedule was more clear.

Response (10/10/2017)

Laura left a message confirming work is planned for Thursday, likely in the morning. If that time is difficult for the Eriksons, Laura left her number for them to call back.

Due 10/10/2017

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624244</u>	<u>BRUCE E ERIKSON</u>	Individual	425-226-2981 (Home) 206-669-8881 (Cell)	
<u>624274</u>	<u>MARY R ERIKSON</u>	Individual	425-226-2981 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118893</u>	3342700126	Advance call to gain access	Owner must be contacted prior to work to accessing property to get gate unlocked.

Communication ID: 268065 - Phone call: Property access for bulkhead assessment work

Communication (10/6/2017)

Phone call: Property access for bulkhead assessment work

Laura spoke with Robert Taylor about access to his property for bulkhead assessment work.

He will be out of town starting Wednesday, and his wife will be out of town starting Friday. So the work must be done before Friday.

They will plan on the work being on Thursday. If the day shifts earlier, please call and leave a message so they can unlock the gate earlier.

Response (10/10/2017)

[No additional call made because work is expected to occur on Thursday.]

Due 10/10/2017

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624227	<u>ROBERT W TAYLOR</u>	Individual	425-430-5476 (Home) 425-615-0480 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118892	3342700149	Requested advance call for access	Advance call requested for visits to property. Gate kept locked and neighbors pay attention to visitors.

Communication ID: 268067 - Phone call: Courtesy reminders for property access for bulkhead assessment work

Communication (10/6/2017)

Phone call: Courtesy reminders for property access for bulkhead assessment work

Laura left messages with courtesy reminder for upcoming bulkhead assessment work starting Monday, Oct. 9.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624230	<u>CHARLES F CONNER</u>	Individual	425-572-6344 (Cell)	
624238	<u>TOM EASTON</u>	Individual		
624260	<u>ANNE F SIM CONNER</u>	Individual	206-931-7667 (Home) 425-572-6344 (Cell)	
624268	<u>KAREN EASTON</u>	Individual	206-708-3664 (Cell)	<u>kjeaston@comcast.net</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
118855	3342103940	Requests advance call for visits	Dog's name is Whirley; has invisible fence. Requests advance call for visits to property.
118877	3342700355	Requests advance call for visits	

Communication ID: 268077 - Phone call: Courtesy reminder for property access for bulkhead assessment work

Communication (10/6/2017)

Phone call: Courtesy reminder for property access for bulkhead assessment work

Laura spoke with Vicki Richards about upcoming bulkhead assessment work starting next week.

Vicki let Laura know they will be out of town Oct 22 - Nov 19. If we expect more work will happen during that time period, she'll let the people stopping by to care for the property know.

Due 10/16/2017

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624283	VICKI L RICHARDS	Individual	425-430-4469 (Home)	dariusvicki@msn.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118878	3342700330	Requested advance call for visits	Requested advance call for visits as a reminder.

Communication ID: 291917 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located at SE corner of home. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624252	JOHN PATRICK HEILY	Individual	206-491-6004 (Home)	
624281	SUNDAY G HEILY	Individual	206-491-6004 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118845	3342104050		

Communication ID: 291919 - Renton Site Visit Notes: Carollo visit

Communication (9/25/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Spoke to homeowner (woman). Okay with chalk.

Work completed: CCTV side sewer. Water in pipeline. CCTV stopped.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624252</u>	<u>JOHN PATRICK HEILY</u>	Individual	206-491-6004 (Home)	
<u>624281</u>	<u>SUNDAY G HEILY</u>	Individual	206-491-6004 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118845</u>	3342104050		

Communication ID: 291920 - Renton Site Visit Notes: TetraTech visit

Communication (9/25/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: Cleanout at SE corner (between 3901 & 3837), traveled along property line, difficult to track in backyard/debt. Unable to locate via tone of physical visual on mainline or lateral although able to see lakebed.

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624191</u>	<u>TONY BOYDSTON</u>	Individual	206-999-3763 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118898</u>	3342700070	No-go property in 2016	Tony Boydston noted during a call (10/21/16) that he did not want project staff to access his property, and that he was frustrated with the overall process.

Communication ID: 292409 - Renton Site Visit Notes: Bravo installed inframarker tag**Communication** (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 11 feet south of garage door just west of sidewalk. Additional information is located in the inframarker data base.

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>624193</u>	<u>CRAG A BRAUFF</u>	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118847</u>	3342104046		

Communication ID: 292410 - Renton Site Visit Notes: Bravo installed inframarker tag**Communication** (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located West side of home 2 feet South of back door in concrete patio. Additional information is located in the inframarker data base.

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>624242</u>	<u>RICHARD SCOTT HOWELL</u>	Individual		
<u>624272</u>	<u>LOIS A HOWELL</u>	Individual	206-910-0180 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118852</u>	3342104009		

Communication ID: 292411 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 10 feet North of front door and 10 ft off house. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624233</u>	<u>MILTON A REIMERS JR</u>	Individual		
<u>624263</u>	<u>BEVERLY REIMERS</u>	Individual	206-898-8659 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118853</u>	3342103985		

Communication ID: 292414 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located at SW corner of prop and 3 feet east from bulk head. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>741720</u>	<u>PAUL JOOS</u>	Individual	425-417-9955 (Cell) 425-255-4250 (Work)	
<u>624178</u>	<u>JOOS FAMILY LLC</u>	Organization		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118837</u>	3342103953	House is being torn down; requests no survey marker on new wall (Sept. 2017)	

Communication ID: 292420 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located at SW corner of property next to neighbors driveway. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>717235</u>	<u>ANTONIO MANDARANO</u>	Individual	206-403-7272 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118856</u>	3342103941		

Communication ID: 292421 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 25 feet South from NW corner of house and 10 feet West. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624211</u>	<u>JIANPING SUN</u>	Individual		
<u>741722</u>	<u>BIN GONG</u>	Individual	615-579-6738 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118858</u>	3342103924		

Communication ID: 292423 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 5 feet East from bulkhead and 25 feet south from NE corner of prop. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624215	GARY F YOUNG	Individual	425-736-4787 (Home)	letyoung2@gmail.com
741733	HELEN YOUNG	Individual	425-736-4787 (Home)	letyoung2@gmail.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118866	3342103855		

Communication ID: 292424 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located at NE corner of house. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624207	CHRIS OPPFELT	Individual		chris.oppfelt@gmail.com
741734	HOLLY OPPFELT	Individual	425-891-4582 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118867	3342103845		

Communication ID: 292426 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located ON souther property line with 3213 and 10 feet East from bulkhead. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624200</u>	<u>THOMAS R DAHLBY</u>	Individual	425-891-3775 (Cell)	<u>ThomasDahlby@Yahoo.com</u>
<u>624270</u>	<u>KATHLEEN I DAHLBY</u>	Individual	425-891-3774 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118871</u>	3342103795		Also owns parcel 3342103805. Has had sewer issues with materials hanging up on the valve in the pipes.

Communication ID: 292430 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located approx 30 feet North from NE corner of house. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624225</u>	<u>STEVE LEIGHTON</u>	Individual	206-919-8774 (Cell)	
<u>624241</u>	<u>LISA LEIGHTON</u>	Individual	206-271-3233 (Home) 206-919-8776 (Cell)	<u>lisalord19@gmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118873</u>	3124059077		

Communication ID: 292431 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located approx 15 feet West from SE corner of house and 30 feet S. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624234</u>	<u>MICHAEL H ATKINSON</u>	Individual	425-898-9359 (Home)	
<u>624264</u>	<u>CHERYL L ATKINSON</u>	Individual	425-898-9359 (Home) 301-379-2089 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118874</u>	3124059076	Currently under construction (2017)	

Communication ID: 292432 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located in a sewer manhole 35 feet West from SW corner of restroom building. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624185</u>	<u>CITY OF RENTON</u>	Organization		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118844</u>	3342103580	Kennydale Beach Park	

Communication ID: 292435 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 20 feet West from SW corner from house. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624283	<u>VICKI L RICHARDS</u>	Individual	425-430-4469 (Home)	dariusvicki@msn.com
645234	<u>DARIUS RICHARDS</u>	Individual	425-623-8177 (Home) 425-430-4469 (Cell)	dariusvicki@msn.com

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118878</u>	3342700330	Requested advance call for visits	Requested advance call for visits as a reminder.

Communication ID: 292438 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 8 feet South of NE corner of house. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>717275</u>	<u>ANGELA TROY</u>	Individual	206-419-9499 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118879</u>	3342700320		

Communication ID: 292442 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 2 feet S from SW corner of house. RFID tag buried 8 feet west from clean out. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624251	BRIAN L FIFE	Individual	206-380-8414 (Cell)	justyourtype@me.com
624280	STEPHANIE C FIFE	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118881	3342700300		

Communication ID: 292443 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 3 feet West from SW corner from house. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624245	ANDREW T ALBERTSON	Individual	206-617-7511 (Cell)	
624275	MEGAN L ALBERTSON	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118882	3342700290		

Communication ID: 292446 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 25 feet West of NE corner of house and 4 feet North. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624247</u>	<u>DENIS W LAW</u>	Individual	425-277-3434 (Home)	
<u>624277</u>	<u>PATRICIA LAW</u>	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118883</u>	3342700280		

Communication ID: 292450 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 25 feet S from NE corner of house and 3 feet West of house. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624248</u>	<u>JOAN WU GUANGOLIN</u>	Individual		
<u>624278</u>	<u>ROBERT DAVID REED</u>	Individual	206-503-7972 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118885</u>	3342700260		

Communication ID: 292451 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 12 feet West from SW corner from house. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>717256</u>	<u>DOUGLAS HARWOOD</u>	Individual	425-503-0242 (Cell) 425-455-0501 (Work)	<u>doug.harwood@comcast.net</u>
<u>741738</u>	<u>MARJORIE HARWOOD</u>	Individual	425-503-7092 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118888</u>	3342700240	Please attempt to contact owner prior to entering yard.	

Communication ID: 292459 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 6 feet North from NW corner of house and 8 feet West. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624202</u>	<u>DAYTON P DENNISON</u>	Individual	425-351-2040 (Home) 425-271-4388 (Cell)	<u>budmanis@comcast.net</u>
<u>662350</u>	<u>MARILYN DENNISON</u>	Individual	425-271-4388 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118889</u>	3342700200		

Communication ID: 292462 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 115 feet West from SW corner of house and 5 feet S. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624244	<u>BRUCE E ERIKSON</u>	Individual	425-226-2981 (Home) 206-669-8881 (Cell)	
624274	<u>MARY R ERIKSON</u>	Individual	425-226-2981 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118893	3342700126	Advance call to gain access	Owner must be contacted prior to work to accessing property to get gate unlocked.

Communication ID: 292463 - Renton Site Visit Notes: Bravo installed inframarker tag

Communication (9/25/2017)

Renton Site Visit Notes: Bravo installed inframarker tag

Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.

Notes: Sewer clean out located 11 feet South from SE corner of house. Additional information is located in the inframarker data base.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624191	<u>TONY BOYDSTON</u>	Individual	206-999-3763 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118898	3342700070	No-go property in 2016	Tony Boydston noted during a call (10/21/16) that he did not want project staff to access his property, and that he was frustrated with the overall process.

Communication ID: 292466 - Renton Site Visit Notes: Carollo visit

Communication (9/25/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Homeowner (woman) concerned about stormwater filling garage.

Work completed: Check valve (took picture) in clean out. [Illegible] debris @ 21', [illegible] @ 17'

Notes: Clean out under sidewalk. Took picture.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624193</u>	<u>CRAG A BRAUFF</u>	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118847</u>	3342104046		

Communication ID: 292467 - Renton Site Visit Notes: Carollo visit

Communication (9/25/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Talked to owner (female) dog-friendly

Work completed: Lots of turns on PVC side sewer. No toning

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624233</u>	<u>MILTON A REIMERS JR</u>	Individual		
<u>624263</u>	<u>BEVERLY REIMERS</u>	Individual	206-898-8659 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118853</u>	3342103985		

Communication ID: 292471 - Renton Site Visit Notes: Carollo visit

Communication (9/25/2017)

Renton Site Visit Notes: Carollo visit

Work completed: CCTV'd new clean out to confirm connection at 3005(3?) to 3001

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624230</u>	<u>CHARLES F CONNER</u>	Individual	425-572-6344 (Cell)	
<u>624260</u>	<u>ANNE F SIM CONNER</u>	Individual	206-931-7667 (Home) 425-572-6344 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118855</u>	3342103940	Requests advance call for visits	Dog's name is Whirley; has invisible fence. Requests advance call for visits to property.

Communication ID: 292477 - Renton Site Visit Notes: Carollo visit

Communication (9/25/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Spoke with homeowner. She was OK with access

Work completed: Rocky got covers open. PVC. CCTV flagged Y-connection with 3007 PVC

Notes: Valve at 66' main @ 97'

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624211</u>	<u>JIANPING SUN</u>	Individual		
<u>741722</u>	<u>BIN GONG</u>	Individual	615-579-6738 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118858</u>	3342103924		

Communication ID: 292505 - Renton Site Visit Notes: Carollo visit

Communication (9/25/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Spoke to homeowners. Requested grade and lawn be reestablished
Weren't happy about several holes

Work completed: Toning may be able to clip on C1 lip in clean out

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624215	GARY F YOUNG	Individual	425-736-4787 (Home)	letyoung2@gmail.com
741733	HELEN YOUNG	Individual	425-736-4787 (Home)	letyoung2@gmail.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118866	3342103855		

Communication ID: 292617 - Renton Site Visit Notes: Carollo visit

Communication (9/25/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Homeowner OK with work

Work completed: PVC till valve. Tone from valve

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624207	CHRIS OPPFELT	Individual		chris.oppfelt@gmail.com
741734	HOLLY OPPFELT	Individual	425-891-4582 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118867	3342103845		

Communication ID: 292618 - Renton Site Visit Notes: Carollo visit

Communication (9/25/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: No owner home. Large dog in house.

Work completed: Can't TV due to bolts on clean out

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624231	DAVID R HUMPHREY	Individual	206-391-8019 (Cell)	
624261	APRIL L HUMPHREY	Individual	206-391-8019 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118869	3342103810		

Communication ID: 292619 - Renton Site Visit Notes: Carollo visit

Communication (9/26/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Spoke to homeowner. Owns both 3213 and 3217

Work completed: Has flags

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624200	THOMAS R DAHLBY	Individual	425-891-3775 (Cell)	ThomasDahlby@Yahoo.com
624270	KATHLEEN I DAHLBY	Individual	425-891-3774 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118871	3342103795		Also owns parcel 3342103805. Has had sewer issues with materials hanging up on the valve in the pipes.

Communication ID: 292622 - Renton Site Visit Notes: Carollo visit**Communication** (9/26/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Clean out on back deck

Work completed: No toning. C1 @ 2', 4' tee

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>624225</u>	<u>STEVE LEIGHTON</u>	Individual	206-919-8774 (Cell)	
<u>624241</u>	<u>LISA LEIGHTON</u>	Individual	206-271-3233 (Home) 206-919-8776 (Cell)	lisalord19@gmail.com

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118873</u>	3124059077		

Communication ID: 292625 - Renton Site Visit Notes: Carollo visit**Communication** (9/26/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: House under construction

Work completed: 6" PVC cleanout

Early bonds

PVC Wye

Appears cast iron line

Underwater at 48'

80-90' stopped due to obstruction

Notes: Unclear if entered main

Tone with wire to get cast-iron

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>624234</u>	<u>MICHAEL H ATKINSON</u>	Individual	425-898-9359 (Home)	
<u>624264</u>	<u>CHERYL L ATKINSON</u>	Individual	425-898-9359 (Home) 301-379-2089 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118874</u>	3124059076	Currently under construction (2017)	

Communication ID: 292626 - Renton Site Visit Notes: Carollo visit

Communication (9/25/2017)

Renton Site Visit Notes: Carollo visit

Work completed: TV crew already done at this house

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624218	GERALD F BRENNAN	Individual	425-271-2736 (Home)	jerry_brennan@yahoo.com
624264	CHERYL L ATKINSON	Individual	425-898-9359 (Home) 301-379-2089 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118875	3124059075	3405	

Communication ID: 292627 - Renton Site Visit Notes: Carollo visit

Communication (9/25/2017)

Renton Site Visit Notes: Carollo visit

Work completed: Nothing visible. Likely ties to 3405

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624218	GERALD F BRENNAN	Individual	425-271-2736 (Home)	jerry_brennan@yahoo.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118876	3124059074	3411	

Communication ID: 292628 - Renton Site Visit Notes: Carollo visit**Communication** (9/26/2017)

Renton Site Visit Notes: Carollo visit

Work completed: Bend down at 3', up at 7'

CIP

40' underwater

67' unable to push further

Notes: Tone

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>624283</u>	<u>VICKI L RICHARDS</u>	Individual	425-430-4469 (Home)	<u>dariusvicki@msn.com</u>
<u>645234</u>	<u>DARIUS RICHARDS</u>	Individual	425-623-8177 (Home) 425-430-4469 (Cell)	<u>dariusvicki@msn.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118878</u>	3342700330	Requested advance call for visits	Requested advance call for visits as a reminder.

Communication ID: 292629 - Renton Site Visit Notes: Carollo visit**Communication** (9/26/2017)

Renton Site Visit Notes: Carollo visit

Work completed: PVC to cast at 3 back to PVC

Valve at 6'

10' bend down

12' bend up

Clean valave

At 41' would be underwater if pump on

Notes: Underwater ~50'

Main at 55'

Follow-up needed:

Tone with wire past PVC

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
<u>717275</u>	<u>ANGELA TROY</u>	Individual	206-419-9499 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118879</u>	3342700320		

Communication ID: 292630 - Renton Site Visit Notes: Carollo visit

Communication (9/26/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Rocky spoke with owner

Work completed: Instral pipe PVC
 Switch to CI 29' out at Teetop (flagged)
 Flagged bend right from C10 ~ 3'-4'
 Valve at 31'
 Right down at 35'
 Pipe runs along fence 3611/3613

Notes: 37' join up CI lateral
 Underwater ~70
 Stopped solid ~79'

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624251	BRIAN L FIFE	Individual	206-380-8414 (Cell)	justyourtype@me.com
624280	STEPHANIE C FIFE	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118881	3342700300		

Communication ID: 292683 - Renton Site Visit Notes: Carollo visit

Communication (9/26/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Talked with owner/family friend

Work completed: 10' Bend L
 20' Bend down
 21' Bend right
 22' Bend up
 23' Tee R
 24' Valve-cast iron past valve
 31' Bend up
 79' would be underwater with pump on

Notes: 88' main visible
 Tee right flagged
 Sewer lateral PVC from house ~2' below power

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624245	ANDREW T ALBERTSON	Individual	206-617-7511 (Cell)	
624275	MEGAN L ALBERTSON	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118882	3342700290		

Communication ID: 292684 - Renton Site Visit Notes: Carollo visit

Communication (9/26/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Talked to mayor. Thanked for effort

Notes: Pipe dry out at 117'

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624247</u>	<u>DENIS W LAW</u>	Individual	425-277-3434 (Home)	
<u>624277</u>	<u>PATRICIA LAW</u>	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118883</u>	3342700280		

Communication ID: 292686 - Renton Site Visit Notes: Carollo visit

Communication (9/26/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: No homeowner

Work completed: Ran into check valve. No CCTV. City has CCTV
Rock/City to provide video

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624248</u>	<u>JOAN WU GUANGOLIN</u>	Individual		
<u>624278</u>	<u>ROBERT DAVID REED</u>	Individual	206-503-7972 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118885</u>	3342700260		

Communication ID: 292687 - Renton Site Visit Notes: Carollo visit

Communication (9/27/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: No CCTV. Full of grease with water

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>717256</u>	<u>DOUGLAS HARWOOD</u>	Individual	425-503-0242 (Cell) 425-455-0501 (Work)	<u>doug.harwood@comcast.net</u>
<u>741738</u>	<u>MARJORIE HARWOOD</u>	Individual	425-503-7092 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118888</u>	3342700240	Please attempt to contact owner prior to entering yard.	

Communication ID: 292688 - Renton Site Visit Notes: Carollo visit

Communication (9/27/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Yard was undermined.
Put in a new footer on bulkhead. Nov. 14

Work completed: Flagged valve. PVC repair, otherwise C1

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624202</u>	<u>DAYTON P DENNISON</u>	Individual	425-351-2040 (Home) 425-271-4388 (Cell)	<u>budmanis@comcast.net</u>
<u>662350</u>	<u>MARILYN DENNISON</u>	Individual	425-271-4388 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118889</u>	3342700200		

Communication ID: 292689 - Renton Site Visit Notes: Carollo visit

Communication (9/27/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Talked to homeowner on the phone to locate clean out

Work completed: Homeowner provided directions to clean out. Uncovered and flagged gray water came out when loosening bolts (pressurized) so cap was not removed.

Notes: 206-669-8881 Bruce Erikson

Follow-up needed: Cleanout was not original

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624244</u>	<u>BRUCE E ERIKSON</u>	Individual	425-226-2981 (Home) 206-669-8881 (Cell)	
<u>624274</u>	<u>MARY R ERIKSON</u>	Individual	425-226-2981 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118893</u>	3342700126	Advance call to gain access	Owner must be contacted prior to work to accessing property to get gate unlocked.

Communication ID: 292690 - Renton Site Visit Notes: Carollo visit

Communication (9/27/2017)

Renton Site Visit Notes: Carollo visit

Summary of communication: Cleanout is underwater but dries out after a while

Work completed: Main at 43 feet

Pipe is not full below

Lift station pumped down to 1.54'

Notes: Below invert of inlet pipe

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624191</u>	<u>TONY BOYDSTON</u>	Individual	206-999-3763 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118898</u>	3342700070	No-go property in 2016	Tony Boydston noted during a call (10/21/16) that he did not want project staff to access his property, and that he was frustrated with the overall process.

Communication ID: 292691 - Renton Site Visit Notes: TetraTech visit

Communication (9/25/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: Connected tone to rusted bolts, toned and tracked lateral to tee in main

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>717243</u>	<u>SCOTT PETETT</u>	Individual	425-277-4007 (Home) 425-765-5334 (Cell)	
<u>738802</u>	<u>ANNE PETETT</u>	Individual	425-277-4007 (Home) 425-765-5334 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118896</u>	3342700100		

Communication ID: 292692 - Renton Site Visit Notes: TetraTech visit

Communication (9/25/2017)

Renton Site Visit Notes: TetraTech visit

Summary of communication: Showed us to cleanout and opened gate for crews

Work completed: Connected to c/o, toned and tracked to mainline, tracked tone to the North and South (3811 and 3821) to fill in gap from survey.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624244</u>	<u>BRUCE E ERIKSON</u>	Individual	425-226-2981 (Home) 206-669-8881 (Cell)	
<u>624274</u>	<u>MARY R ERIKSON</u>	Individual	425-226-2981 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118893</u>	3342700126	Advance call to gain access	Owner must be contacted prior to work to accessing property to get gate unlocked.

Communication ID: 292693 - Renton Site Visit Notes: TetraTech visit

Communication (9/25/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: Toned to tee connecting mainline and lateral

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624205	VIKTORIA LITTLEMAN	Individual	425-351-3745 (Home) 425-255-0487 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118891	3342700176	Careful of irrigation when digging.	

Communication ID: 292694 - Renton Site Visit Notes: TetraTech visit

Communication (9/25/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: Toning completed on MH closest to lake. Successfully toned to mainline and traced tone through mainline into second lateral

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624180	KING COUNTY-PARKS	Organization		

Parcels

Parcel ID	Parcel	Property Name	Notes
118842	3124059004	Former Railroad, includes Kennydale Beach Park	

Communication ID: 292695 - Renton Site Visit Notes: TetraTech visit

Communication (9/25/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: No cleanout, mistaken on list of places to tone.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624218	GERALD F BRENNAN	Individual	425-271-2736 (Home)	jerry_brennan@yahoo.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118876	3124059074	3411	

Communication ID: 292696 - Renton Site Visit Notes: TetraTech visit

Communication (9/25/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: Toned from c/o to mainline

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624218</u>	<u>GERALD F BRENNAN</u>	Individual	425-271-2736 (Home)	<u>jerry_brennan@yahoo.com</u>
<u>624264</u>	<u>CHERYL L ATKINSON</u>	Individual	425-898-9359 (Home) 301-379-2089 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118875</u>	3124059075	3405	

Communication ID: 292698 - Renton Site Visit Notes: TetraTech visit

Communication (9/25/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: Toning complete at c/o next to house via fish tape. Attempted fish tape through c/o next to lake (south from house)

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624234</u>	<u>MICHAEL H ATKINSON</u>	Individual	425-898-9359 (Home)	
<u>624264</u>	<u>CHERYL L ATKINSON</u>	Individual	425-898-9359 (Home) 301-379-2089 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118874</u>	3124059076	Currently under construction (2017)	

Communication ID: 292717 - Renton Site Visit Notes: TetraTech visit

Communication (9/26/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: UT completed.

Exposed pipe between 2811 & 2815 docks, no exposed pipe on 2807. Looks like pipe buried under 2811 dock, possible dive in pipe from profile.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624201</u>	<u>JEANNE C DEMUND</u>	Individual	206-970-3172 (Home) 206-898-9818 (Cell)	<u>jcdemund@gmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118850</u>	3342104029		

Communication ID: 292718 - Renton Site Visit Notes: TetraTech visit

Communication (9/26/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: UT complete

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624230</u>	<u>CHARLES F CONNER</u>	Individual	425-572-6344 (Cell)	
<u>624260</u>	<u>ANNE F SIM CONNER</u>	Individual	206-931-7667 (Home) 425-572-6344 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118855</u>	3342103940	Requests advance call for visits	Dog's name is Whirley; has invisible fence. Requests advance call for visits to property.

Communication ID: 292719 - Renton Site Visit Notes: TetraTech visit

Communication (9/26/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: Toning

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624245	ANDREW T ALBERTSON	Individual	206-617-7511 (Cell)	
624275	MEGAN L ALBERTSON	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
118882	3342700290		

Communication ID: 292720 - Renton Site Visit Notes: TetraTech visit

Communication (9/26/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: UT complete

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624218	GERALD F BRENNAN	Individual	425-271-2736 (Home)	jerry_brennan@yahoo.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118876	3124059074	3411	

Communication ID: 292721 - Renton Site Visit Notes: TetraTech visit

Communication (9/26/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: UT lateral complete

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624180	KING COUNTY-PARKS	Organization		

Parcels

Parcel ID	Parcel	Property Name	Notes
118842	3124059004	Former Railroad, includes Kennydale Beach Park	

Communication ID: 292722 - Renton Site Visit Notes: TetraTech visit

Communication (9/27/2017)

Renton Site Visit Notes: TetraTech visit

Site Address:

3625 Lake WA BLVD N Dock Access
3703 Lake WA BLVD N Exposed Pipe

Work completed: UT complete

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624196</u>	<u>JOHN MICHAEL BROWN</u>	Individual	206-240-0133 (Home)	
<u>624247</u>	<u>DENIS W LAW</u>	Individual	425-277-3434 (Home)	
<u>624277</u>	<u>PATRICIA LAW</u>	Individual		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118884</u>	3342700270		
<u>118883</u>	3342700280		

Communication ID: 292723 - Renton Site Visit Notes: TetraTech visit

Communication (9/27/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: Coupon attempted
UT Complete

Notes on work completed: On 09/27/17 coupon was started, required different drill bit. Repair clamp secured over top coupon location until coupon could be taken.

Follow-up needed: Coupon completed on 09/28/17 and repair clam secured and centered on coupon.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624185</u>	<u>CITY OF RENTON</u>	Organization		

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118836</u>	0523059010	Coulon Beach Park & Flush Station	

Communication ID: 292725 - Renton Site Visit Notes: TetraTech visit

Communication (9/27/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: UT complete on lateral

Notes on work completed: Found 20-25 ft exposed on mainline

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624202</u>	<u>DAYTON P DENNISON</u>	Individual	425-351-2040 (Home) 425-271-4388 (Cell)	<u>budmanis@comcast.net</u>
<u>662350</u>	<u>MARILYN DENNISON</u>	Individual	425-271-4388 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118889</u>	3342700200		

Communication ID: 292726 - Renton Site Visit Notes: TetraTech visit

Communication (9/28/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: Attempted to tone but only got fish tape few feet in pipe therefore unable to tone.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624225</u>	<u>STEVE LEIGHTON</u>	Individual	206-919-8774 (Cell)	
<u>624241</u>	<u>LISA LEIGHTON</u>	Individual	206-271-3233 (Home) 206-919-8776 (Cell)	<u>lisalord19@gmail.com</u>

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118873</u>	3124059077		

Communication ID: 292727 - Renton Site Visit Notes: TetraTech visit

Communication (9/28/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: Found mainline exposed, decided to UT test. Approximately had 50 ft exposed pipe.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624202</u>	<u>DAYTON P DENNISON</u>	Individual	425-351-2040 (Home) 425-271-4388 (Cell)	<u>budmanis@comcast.net</u>
<u>662350</u>	<u>MARILYN DENNISON</u>	Individual	425-271-4388 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118889</u>	3342700200		

Communication ID: 292728 - Renton Site Visit Notes: TetraTech visit

Communication (9/28/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: UT completed on mainline. Moving South

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>717243</u>	<u>SCOTT PETETT</u>	Individual	425-277-4007 (Home) 425-765-5334 (Cell)	
<u>738802</u>	<u>ANNE PETETT</u>	Individual	425-277-4007 (Home) 425-765-5334 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118896</u>	3342700100		

Communication ID: 292729 - Renton Site Visit Notes: TetraTech visit**Communication** (9/28/2017)

Renton Site Visit Notes: TetraTech visit

Work completed: Missing gap on survey due to depth, had access to use divers and was successful to use tone at valve on 3713 to trace into mainline. Survey shots were taken between manholes in water.

Source: In person**Owner(s):**

Contact ID	Name	Type	Phones	Email
717256	DOUGLAS HARWOOD	Individual	425-503-0242 (Cell) 425-455-0501 (Work)	doug.harwood@comcast.net
741738	MARJORIE HARWOOD	Individual	425-503-7092 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
118888	3342700240	Please attempt to contact owner prior to entering yard.	

Communication ID: 316633 - Email: Kenndale lake line sewer project**Communication** (8/12/2018)

Email: Kenndale lake line sewer project

Hi John:

We live at 3119 Mountain View Avenue N. ("Site 4 Manhole (New)). Quick question: Is the schedule coming together such that you have a good idea when and for how long the work barges will be anchored off our shoreline? We have an inflatable floating raft anchored off our shore and will need to pull it in before the barges show up.

Thanks,

Chris Oppfelt

Response (8/22/2018)

Mr. Oppfelt,

The contractor has submitted a preliminary schedule that indicates that their construction barge(s) will arrive in the project vicinity on September 7. The tentative schedule also has their barge(s) arriving adjacent to your residence and the installation of the temporary manhole beginning on September 12.

We have a pre-construction meeting scheduled with the contractor today which will include discussion about their proposed schedule. Some of the above dates may change as a result of the meeting. I will get you an update as soon as I know more details.

John Hobson
City of Renton
Wastewater Utility
425-430-7279

Due 8/22/2018**Source:** Email**Owner(s):**

Contact ID	Name	Type	Phones	Email
624207	CHRIS OPPFELT	Individual		chris.oppfelt@gmail.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118867	3342103845		

Communication ID: 316634 - Email: Kennydale lake line sewer project (2)

Communication (8/22/2018)

Email: Kennydale lake line sewer project (2)

Thanks for this info. I appreciate it.

Chris

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
624207	CHRIS OPPFELT	Individual		chris.oppfelt@gmail.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118867	3342103845		

Communication ID: 320987 - Phone call: Notifications to property owners re manhole #5 work

Communication (9/7/2018)

Phone call: Notifications to property owners re manhole #5 work

John Hobson spoke with property owners adjacent to manhole #5 regarding upcoming work and contractor's new start date of September 17 for cleaning at manhole #5:

- 2827 Mountain View Ave N – Spoke with Richard Howell at 2 pm
- 2905 Mountain View Ave N – Left message for Beverly Reimers at 2:05pm
- 2909 Mountain View Ave N – Spoke with Dr Joos at 2:10pm

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
624233	MILTON A REIMERS JR	Individual		
624242	RICHARD SCOTT HOWELL	Individual		
624263	BEVERLY REIMERS	Individual	206-898-8659 (Cell)	
624272	LOIS A HOWELL	Individual	206-910-0180 (Cell)	
741720	PAUL JOOS	Individual	425-417-9955 (Cell) 425-255-4250 (Work)	
624178	JOOS FAMILY LLC	Organization		

Parcels

Parcel ID	Parcel	Property Name	Notes
118852	3342104009		
118853	3342103985		
118837	3342103953	House is being torn down; requests no survey marker on new wall (Sept. 2017)	

Communication ID: 323063 - Meeting: Project update

Communication (10/1/2018)

Meeting: Project update

John Hobson met with Mr. and Mrs. Young at their home (3115 Mountain View Ave N) and gave them the latest (at the time) updates on the projects progress and anticipated schedule.

They were concerned about impacts to a wedding planned for outside. John confirmed they would not mar any photo opportunities for the wedding.

Source: In person

Owner(s):

Contact ID	Name	Type	Phones	Email
624215	GARY F YOUNG	Individual	425-736-4787 (Home)	letyoung2@gmail.com
741733	HELEN YOUNG	Individual	425-736-4787 (Home)	letyoung2@gmail.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118866	3342103855		

Communication ID: 323064 - Email: Kennydale Lakeline Sewer Project

Communication (10/11/2018)

Email: Kennydale Lakeline Sewer Project

From: John D. Hobson <Jhobson@Rentonwa.gov>
Sent: Thursday, October 11, 2018 11:06 AM
To: Chris Oppfelt (chris.oppfelt@gmail.com) <chris.oppfelt@gmail.com>
Subject: Kennydale Lakeline Sewer Project

Chris,

I apologize for the late notice however, I'm sure you've noticed our contractor's barge adjacent to your property recently.

The following is a brief update of the project and the latest plan for the work adjacent to your property:

1. Today, the contractor has temporarily moved their construction barge back to the site of MH 5 (adjacent to 2909 Mountain View Ave N). They will be removing a temporary pipe system that had to be installed to reach the existing sewer main line due the lake lower winter depth preventing them from reaching the sewer main. Their construction barge should be back in place adjacent to your property later today.
2. Tomorrow they plan to install the temporary manhole over the sewer main in front of your residence. Once the manhole is set, they will move the construction barge to a different area and move their cleaning barge into place to begin cleaning. If everything goes well, they should be finished with cleaning by the end of next week and then remove the temporary manhole.
3. Our Fisheries Permit requires that we place a thin layer of fish spawning on the lake bottom where we perform work. Placing the gravel will inevitably result in cloudy water so the contractor will leave the "silt curtain" in place until the suspended sediment settles back to the lake bottom. Once the gravel has been placed, the contractor will move their barges to the next location. They will return to remove the silt curtain once the silt has settled back to the bottom of the lake.

Please let me know if you have any questions.

John Hobson
 City of Renton
 Wastewater Utility
 425-430-7279

Source: Email

Owner(s):

Contact ID	Name	Type	Phones	Email
624207	CHRIS OPPFELT	Individual		chris.oppfelt@gmail.com

Parcels

Parcel ID	Parcel	Property Name	Notes
118867	3342103845		

Communication ID: 323065 - Phone call: Notification call

Communication (10/11/2018)

Phone call: Notification call

John Hosbson spoke directly with Nancy Porter (3205 Mountain View Ave N) and gave her an update on the project.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624276</u>	<u>NANCY A PORTER</u>	Individual	425-277-5949 (Home) 206-940-9334 (Cell) 206-601-3116 (Work)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118868</u>	3342103840		Nancy Porter did not wish for crews to access her property for an inspection (10/7/16). Encouraged team members to reach out to her husband in the future if access or coordination is needed.

Communication ID: 323095 - Phone call: Notification call

Communication (10/11/2018)

Phone call: Notification call

John Hobson left a message on Holly Oppfert's cell phone (3119 Mountain View Ave N), explaining the project's current work tasks and schedule.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>741734</u>	<u>HOLLY OPPFELT</u>	Individual	425-891-4582 (Home)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118867</u>	3342103845		

Communication ID: 323096 - Phone call: Notification call

Communication (10/6/2018)

Phone call: Notification call

John Hobson spoke with Anne Conner (3001 Mountain View Ave N) and gave her a brief on the projects progress and schedule.

Source: Phone

Owner(s):

Contact ID	Name	Type	Phones	Email
<u>624260</u>	<u>ANNE F SIM CONNER</u>	Individual	206-931-7667 (Home) 425-572-6344 (Cell)	

Parcels

Parcel ID	Parcel	Property Name	Notes
<u>118855</u>	3342103940	Requests advance call for visits	Dog's name is Whirley; has invisible fence. Requests advance call for visits to property.

Contacts

Filter

Project Renton Kenndale Lakeline

BARBEE FOREST PRODUCTS INC

Type:Organization

Address	City	State	Zip	Type	Options
PO BOX 359	RENTON	WA	98057	= Taxpayer	ok to mail
3905 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail
3907 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail
3909 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

CITY OF RENTON

Type:Organization

Address	City	State	Zip	Type	Options
1055 S GRADY WAY	RENTON	WA	98055	= Taxpayer	ok to mail

Preferred Contact Method:

Source:

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

CITY OF RENTON PUBLIC WORKS DEPARTMENT

Type:Organization

Preferred Contact Method:

Source: Email

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

CONNER HOMES AT MOUNTAIN VIEW

Type:Organization

Address	City	State	Zip	Type	Options
12600 SE 38TH ST #250	BELLEVUE	WA	98006	= Taxpayer	do not mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

ESTATE OF VIRGINIA E LUCK

Type:Organization

Address	City	State	Zip	Type	Options
PO BOX 2304	OCEAN SHORES	WA	98569	= Taxpayer	ok to mail

Preferred Contact Method:

Source:

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

JOOS FAMILY LLC

Type:Organization

Address	City	State	Zip	Type	Options
4057 WILLIAMS AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
2909 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

KATELYNN

Type:Individual Contact

Preferred Contact Method:

Source: Flying

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

KING COUNTY-PARKS

Type:Organization

Address	City	State	Zip	Type	Options
201 S JACKSON ST #700	SEATTLE	WA	98104	= Taxpayer	ok to mail
3501 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

KING COUNTY-PROPERTY SVCS

Type:Organization

Address	City	State	Zip	Type	Options
500 4TH AVE	SEATTLE	WA	98104	= Taxpayer	ok to mail

Preferred Contact Method:

Source:

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

THE LAKE HOUSES AT EAGLE CO

Type:Organization

Address	City	State	Zip	Type	Options
PO BOX 359	RENTON	WA	98057	= Taxpayer	ok to mail
3979 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

ANDREW T ALBERTSON

Type:Individual Contact

Address	City	State	Zip	Type	Options
3619 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

MEGAN L ALBERTSON

Type: Individual Contact

Address	City	State	Zip	Type	Options
3619 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

O LOWELL ANDERSON

Type: Individual Contact

Address	City	State	Zip	Type	Options
PO BOX 78382	SEATTLE	WA	98178	= Taxpayer	ok to mail
3107 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Address	Options
lowell@mvseac.com	ok to email

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

CHERYL L ATKINSON

Type: Individual Contact

Address	City	State	Zip	Type	Options
3401 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

MICHAEL H ATKINSON

Type: Individual Contact

Address	City	State	Zip	Type	Options
3401 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

LAURIE L BAKER

Type: Individual Contact

Address	City	State	Zip	Type	Options
PO BOX 78382	SEATTLE	WA	98178	= Taxpayer	ok to mail
3107 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Address **Options**

laurieb@mcseac.com	ok to email
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Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

TATYANA BARINOVA

Type:Individual Contact

Address **City** **State** **Zip** **Type** **Options**

3821 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail
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Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

KIM BOWDEN

Type:Individual Contact

Address **City** **State** **Zip** **Type** **Options**

7317 134TH AVE SE	NEWCASTLE	WA	98059	= Taxpayer	ok to mail
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Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

TONY BOYDSTON

Type:Individual Contact

Address **City** **State** **Zip** **Type** **Options**

3920 NE 11TH PL	RENTON	WA	98056	= Taxpayer	ok to mail
3901 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

CRAG A BRAUFF

Type:Individual Contact

Address **City** **State** **Zip** **Type** **Options**

2801 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
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Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

GERALD F BRENNAN

Type:Individual Contact

Address **City** **State** **Zip** **Type** **Options**

3405 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail
3411 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail
3411 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Address	Options
jerry_brennan@yahoo.com	ok to email

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

JOHN MICHAEL BROWN

Type: Individual Contact

Address	City	State	Zip	Type	Options
3703 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3703 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

ROBERT H BURR

Type: Individual Contact

Address	City	State	Zip	Type	Options
3013 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

BETSEY BURROUGHS

Type: Individual Contact

Address	City	State	Zip	Type	Options
2815 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Parcel	ok to mail

Address	Options
betsy_mann@hotmail.com	ok to email

Preferred Contact Method: Email, Phone

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

JOHN D BURROUGHS

Type: Individual Contact

Address	City	State	Zip	Type	Options
2315 CROWS NEST PKWY	RENO	NV	89519	= Taxpayer	ok to mail
2815 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

REBECCA A BYUS

Type: Individual Contact

Address	City	State	Zip	Type	Options
3719 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3719 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Email, Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

ANNE F SIM CONNER

Type:Individual Contact

Address	City	State	Zip	Type	Options
3001 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
2931 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

CHARLES F CONNER

Type:Individual Contact

Address	City	State	Zip	Type	Options
3001 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail
2931 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

MELANIE CROOKER

Type:Individual Contact

Address	City	State	Zip	Type	Options
3695 SANSOME CIRCLE	MELBOURNE	FL	32940	= Taxpayer	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

KATHLEEN I DAHLBY

Type:Individual Contact

Address	City	State	Zip	Type	Options
3217 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

THOMAS R DAHLBY

Type:Individual Contact

Address	City	State	Zip	Type	Options
3213 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail
3217 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Address	Options
ThomasDahlby@Yahoo.com	ok to email

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

SUSAN DELOOF

Type: Individual Contact

Address	City	State	Zip	Type	Options
469 TACOMA AVE NE	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

JEANNE C DEMUND

Type: Individual Contact

Address	City	State	Zip	Type	Options
2811 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Address	Options
jcdemund@gmail.com	ok to email

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

DAYTON P DENNISON

Type: Individual Contact

Address	City	State	Zip	Type	Options
3717 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Address	Options
budmanis@comcast.net	ok to email

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

MARILYN DENNISON

Type: Individual Contact

Address	City	State	Zip	Type	Options
3717 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Flying

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

KAREN EASTON

Type:Individual Contact

Address	City	State	Zip	Type	Options
3601 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Address	Options
kjeaston@comcast.net	ok to email

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

TOM EASTON

Type:Individual Contact

Address	City	State	Zip	Type	Options
3601 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

BRUCE E ERIKSON

Type:Individual Contact

Address	City	State	Zip	Type	Options
3815 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3815 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

MARY R ERIKSON

Type:Individual Contact

Address	City	State	Zip	Type	Options
3815 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3815 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

BRIAN L FIFE

Type:Individual Contact

Address	City	State	Zip	Type	Options
3613 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Address	Options
justyourtype@me.com	ok to email

Preferred Contact Method: Email, Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

STEPHANIE C FIFE

Type:Individual Contact

Address	City	State	Zip	Type	Options
3613 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

MONICA M FIX

Type:Individual Contact

Address	City	State	Zip	Type	Options
3007 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

BIN GONG

Type:Individual Contact

Address	City	State	Zip	Type	Options
3009 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Flying

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

DOUGLAS HARWOOD

Type:Individual Contact

Address	City	State	Zip	Type	Options
3713 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Address	Options
doug.harwood@comcast.net	ok to email

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

MARJORIE HARWOOD

Type:Individual Contact

Address	City	State	Zip	Type	Options
3713 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Flying

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

BANG DAE HEE

Type:Individual Contact

Address	City	State	Zip	Type	Options
3611 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

JOHN PATRICK HEILY

Type:Individual Contact

Address	City	State	Zip	Type	Options
2727 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

SUNDAY G HEILY

Type:Individual Contact

Address	City	State	Zip	Type	Options
2727 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

LOIS A HOWELL

Type:Individual Contact

Address	City	State	Zip	Type	Options
2827 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
2827 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

RICHARD SCOTT HOWELL

Type:Individual Contact

Address	City	State	Zip	Type	Options
2827 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
2827 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

WILLIAM HUDSON

Type:Individual Contact

Address	City	State	Zip	Type	Options
8058 118TH AVE SE	NEWCASTLE	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

APRIL L HUMPHREY

Type:Individual Contact

Address	City	State	Zip	Type	Options
11652 SE 62ND ST	BELLEVUE	WA	98006	= Taxpayer	ok to mail
3209 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

DAVID R HUMPHREY

Type:Individual Contact

Address	City	State	Zip	Type	Options
11652 SE 62ND ST	BELLEVUE	WA	98006	= Taxpayer	ok to mail
3209 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

PAUL JOOS

Type:Individual Contact

Preferred Contact Method:

Source: Flying

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

DEBRA L KEPPLER

Type:Individual Contact

Address	City	State	Zip	Type	Options
2805 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Address	Options
bill_debra@msn.com	ok to email

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

WILLIAM F KEPPLER

Type:Individual Contact

Address	City	State	Zip	Type	Options
2805 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Address **Options**

bill_debra@msn.com	ok to email
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Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

BILL E KILLION

Type:Individual Contact

Address **City** **State** **Zip** **Type** **Options**

15275 BIRCH DR	RENTON	WA	98058	= Taxpayer	ok to mail
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Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

TED LAVALLEY

Type:Individual Contact

Address **City** **State** **Zip** **Type** **Options**

18019 SE 121ST PL	RENTON	WA	98059	= Taxpayer	ok to mail
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Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

DENIS W LAW

Type:Individual Contact

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

PATRICIA LAW

Type:Individual Contact

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

LISA LEIGHTON

Type:Individual Contact

Address **City** **State** **Zip** **Type** **Options**

102 FRONTAGE RD S	PACIFIC	WA	98047	= Taxpayer	ok to mail
3307 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Address **Options**

lisalord19@gmail.com	ok to email
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Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

STEVE LEIGHTON

Type:Individual Contact

Address	City	State	Zip	Type	Options
102 FRONTAGE RD S	PACIFIC	WA	98047	= Taxpayer	ok to mail
3307 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

REBECCA LEPROWSE

Type:Individual Contact

Address	City	State	Zip	Type	Options
3005 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Address	Options
rleprose@msn.com	ok to email

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

SHAWN LEPROWSE

Type:Individual Contact

Address	City	State	Zip	Type	Options
3005 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

MARCIA LEVEQUE

Type:Individual Contact

Address	City	State	Zip	Type	Options
3625 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Other	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

SCOTT LEVEQUE

Type:Individual Contact

Address	City	State	Zip	Type	Options
3625 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Other	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

KEVIN L LINDAHL

Type:Individual Contact

Address	City	State	Zip	Type	Options
3719 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3719 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Address	Options
kevinlindahl@comcast.net	ok to email

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

ADRIENNE LINDBLAD

Type: Individual Contact

Address	City	State	Zip	Type	Options
3233 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

WARREN ERIC LINDBLAD

Type: Individual Contact

Address	City	State	Zip	Type	Options
3233 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

VIKTORIA LITTLEMAN

Type: Individual Contact

Address	City	State	Zip	Type	Options
3805 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3805 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

LISA LORD

Type: Individual Contact

Address	City	State	Zip	Type	Options
3307 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

MARK LORD

Type: Individual Contact

Address	City	State	Zip	Type	Options
3307 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

ANTONIO MANDARANO

Type:Individual Contact

Address	City	State	Zip	Type	Options
3003 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

JAMES C MORGAN

Type:Individual Contact

Address	City	State	Zip	Type	Options
3103 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Address	Options
morganjimc@hotmail.com	ok to email

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

LAURA S MORGAN

Type:Individual Contact

Address	City	State	Zip	Type	Options
3103 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

LINDA MOSCHETTI

Type:Individual Contact

Address	City	State	Zip	Type	Options
1055 S GRADY WAY	RENTON	WA	98057	= Postal	ok to mail

Address	Options
lmoschetti@rentonwa.gov	ok to email

Preferred Contact Method:

Source: Email

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

CHERYLE NAPOLI

Type:Individual Contact

Address	City	State	Zip	Type	Options
3111 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Other	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

GIOVANNI NAPOLI

Type:Individual Contact

Address	City	State	Zip	Type	Options
3111 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Other	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

ANGIE F NELSON

Type:Individual Contact

Address	City	State	Zip	Type	Options
3825 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

FRITZ W NELSON

Type:Individual Contact

Address	City	State	Zip	Type	Options
3825 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3825 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

CHRIS OPPFELT

Type:Individual Contact

Address	City	State	Zip	Type	Options
13028 NE 32ND PL	BELLEVUE	WA	98005	= Taxpayer	ok to mail
3119 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Address	Options
chris.oppfelt@gmail.com	ok to email

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

HOLLY OPPFELT

Type:Individual Contact

Address	City	State	Zip	Type	Options
3119 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Flying

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

KARYN A PASQUIER

Type: Individual Contact

Address	City	State	Zip	Type	Options
3709 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3709 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Address	Options
kpstu@aol.com	ok to email

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

PAUL L PASQUIER

Type: Individual Contact

Address	City	State	Zip	Type	Options
3709 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3709 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

GREG PETERSON

Type: Individual Contact

Address	City	State	Zip	Type	Options
3821 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

KIM PETERSON

Type: Individual Contact

Address	City	State	Zip	Type	Options
3821 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

ANNE PETETT

Type: Individual Contact

Address	City	State	Zip	Type	Options
3827 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

SCOTT PETETT

Type:Individual Contact

Address	City	State	Zip	Type	Options
3827 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

THERESA PHELAN

Type:Individual Contact

Address	City	State	Zip	Type	Options
1055 S GRADY WAY, 5TH FLOOR	RENTON	WA	98057	= Postal	ok to mail

Address	Options
tpheLAN@rentonwa.gov	ok to email

Preferred Contact Method:

Source: Email

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

NANCY A PORTER

Type:Individual Contact

Address	City	State	Zip	Type	Options
3205 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
3205 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

STEPHEN C PORTER

Type:Individual Contact

Address	City	State	Zip	Type	Options
3205 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
3205 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

KAAREN PRITCHARD

Type:Individual Contact

Address	City	State	Zip	Type	Options
2807 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Address	Options
kaaren.pritchard@nordstrom.com	ok to email

Preferred Contact Method: Email, Phone

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

MARC PRITCHARD

Type:Individual Contact

Address	City	State	Zip	Type	Options
2807 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

ROBERT DAVID REED

Type:Individual Contact

Address	City	State	Zip	Type	Options
3707 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

BEVERLY REIMERS

Type:Individual Contact

Address	City	State	Zip	Type	Options
2907 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail
2905 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

MILTON A REIMERS JR

Type:Individual Contact

Address	City	State	Zip	Type	Options
2907 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail
2905 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

DARIUS RICHARDS

Type:Individual Contact

Address	City	State	Zip	Type	Options
3605 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3605 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Parcel	ok to mail

Address	Options
dariusvicki@msn.com	ok to email

Preferred Contact Method: Email

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

VICKI L RICHARDS

Type: Individual Contact

Address	City	State	Zip	Type	Options
3605 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3605 LAKE WASHINGTON BLVD N	RENTON	WA	98055	= Parcel	ok to mail

Address	Options
dariusvicki@msn.com	ok to email

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

JEFFREY T RILEY

Type: Individual Contact

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

TAMI H RILEY

Type: Individual Contact

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

TIMOTHY J RILEY

Type: Individual Contact

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

VIRGINIAL L RILEY

Type: Individual Contact

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

DONALD L SAVOY

Type:Individual Contact

Address	City	State	Zip	Type	Options
3015 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:**Source:** Parcel Import**Permission to Access for Visual Inspection?:****Priority Property (Land Use):****Geography:****LUZ M SOBRINO****Type:**Individual Contact

Address	City	State	Zip	Type	Options
8621 138TH AVE SE	NEWCASTLE	WA	98059	= Taxpayer	do not mail

Preferred Contact Method:**Source:** Parcel Import**Permission to Access for Visual Inspection?:****Priority Property (Land Use):****Geography:****MACRO A SOBRINO****Type:**Individual Contact

Address	City	State	Zip	Type	Options
8621 138TH AVE SE	NEWCASTLE	WA	98059	= Taxpayer	do not mail

Preferred Contact Method:**Source:** Parcel Import**Permission to Access for Visual Inspection?:****Priority Property (Land Use):****Geography:****PETER SPOUSE****Type:**Individual Contact

Address	City	State	Zip	Type	Options
3011 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method: Phone**Source:** Parcel Import**Permission to Access for Visual Inspection?:****Priority Property (Land Use):****Geography:****WILLIAM C STONEMAN****Type:**Individual Contact

Address	City	State	Zip	Type	Options
3101 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
3101 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method: Phone**Source:** Parcel Import**Permission to Access for Visual Inspection?:****Priority Property (Land Use):****Geography:****JIANPING SUN****Type:**Individual Contact

Address	City	State	Zip	Type	Options
3009 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

KRISTI SUNDERLAND

Type:Individual Contact

Address	City	State	Zip	Type	Options
3715 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

JAMES G TASCA

Type:Individual Contact

Address	City	State	Zip	Type	Options
14805 SE JONES PL	RENTON	WA	98058	= Taxpayer	do not mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

ALISON P TAYLOR

Type:Individual Contact

Address	City	State	Zip	Type	Options
3811 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

ROBERT W TAYLOR

Type:Individual Contact

Address	City	State	Zip	Type	Options
3811 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

ANGELA TROY

Type:Individual Contact

Address	City	State	Zip	Type	Options
3607 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

GARY A WEIL

Type:Individual Contact

Address	City	State	Zip	Type	Options
3711 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Address	Options
ziggyweil@gmail.com	ok to email

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

DAVID WILLIAMSON

Type:Individual Contact

Address	City	State	Zip	Type	Options
3715 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Other

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

MARLENE R WINTER

Type:Individual Contact

Address	City	State	Zip	Type	Options
2731 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
2731 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

JOAN WU GUANGOLIN

Type:Individual Contact

Address	City	State	Zip	Type	Options
3707 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method:

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

GARY F YOUNG

Type:Individual Contact

Address	City	State	Zip	Type	Options
3115 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

Address	Options
letyoung2@gmail.com	ok to email

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

HELEN YOUNG

Type: Individual Contact

Address	City	State	Zip	Type	Options
3115 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

Address	Options
letyoung2@gmail.com	ok to email

Preferred Contact Method: Phone

Source: Flying

Permission to Access for Visual Inspection?:

Priority Property (Land Use):

Geography:

MARK E ZILMER

Type: Individual Contact

Address	City	State	Zip	Type	Options
3837 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?:

Priority Property (Land Use): Yes

Geography:

ROSEMARY ZILMER

Type: Individual Contact

Address	City	State	Zip	Type	Options
3837 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

Preferred Contact Method: Phone

Source: Parcel Import

Permission to Access for Visual Inspection?: Yes

Priority Property (Land Use): Yes

Geography:

Parcels

Total	80
Project	Renton Kennydale Lakeline

0523059010 Coulon Beach Park & Flush Station

Parcel Id	118836
Name	Coulon Beach Park & Flush Station
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address City State Zip Type Mailing Option

1055 S GRADY WAY	RENTON	WA	98055	= Taxpayer	ok to mail
2550 LAKE WASHINGTON BLVD	RENTON	WA	98056	= Parcel	ok to mail

ContactId Name Type Phones

624185	CITY OF RENTON	Organization	
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Present Use: Public(Zoo/Arbor)

Property Name: COULON BEACH PARK

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Coupon, UT Testing

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: Other

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: NW

Range: 5

Section: 5

Township: 23

Legal Description: GL 2 SD SEC LY WLY OF NP RR R/W TGW BLKS D & E LK WASH SH LDS ADD TGW POR GL 1 SEC 06-23-05 LY WLY OF NP RR R/W & SH LDS ADJ LESS POR PLATTED CD HILLMANS LK WASH GARDEN OF EDEN #1

3124059004 Former Railroad, includes Kennydale Beach Park

Parcel Id	118842
Name	Former Railroad, includes Kennydale Beach Park
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address City State Zip Type Mailing Option

201 S JACKSON ST #700	SEATTLE	WA	98104	= Taxpayer	ok to mail
3501 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId Name Type Phones

624180	KING COUNTY-PARKS	Organization	
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Present Use: Vacant(Single-family)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch A/B, Bulkhead Assessment, Group 1, Lakeline Survey, Permanent Markers, Pilot Project, Toning, UT Testing

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Not located, CCTV : Further inspection needed

Phase One Status: Approved for visual

Property Notes:

Proximity: Other

Sewer Type: Lateral

Cleanout Location: First cleanout is in Manhole "A" located in pavers 10 feet from retaining wall. Second cleanout located in Manhole "B" located in the retaining wall. Both manhole lids painted green.

Lateral Location Notes:

Valve Location: No valve located during inspection. Valve may be downstream of cleanout in Manhole "A".

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: BN FORMERLY NP R/W OVER SE 1/4 OF STR 31-24-05 LESS POR WLY OF LN BAAP ON N LN SD SUBD 35 FT W FR C/L SD R/W TH SWLY TAP 45 FT W - AT R/A'S FR SD C/L & 25 FT S FR SD N LN TH W 5 FT & LESS POR PER SURV REC #9901299008 LESS POR PER SURV REC NO 9904129002 & LESS PER REC # 20001218000913 (SEE RENTON SP# LUA-10-038-SHPL REC# 20101229900002) LESS POR GL 3 SD STR DAF - BEG SE 1/4 COR SD SEC 31 TH N 1-48-16 E 2455.27 FT TH N 88-11-44 W 41.34 FT BNG C/L LK WASH BLVD TH S 20-04-48 W ALG SD C/L 405.39 TH ALG CRV TO R RAD 1602.25 FT ARC DIST 217.53 FT TH N 59-28-15 W 63.79FT TAP 20FT AS MEAS RADIALLY FROM BN R/R MAINTRACK C/L TH SLY PLT SD C/L ALG CRV TO R RAD 1552.2 FT ARC DIST 25.02 FT TH N 59-28-15 W 119.27 FT TH N 25-57-59 E 25.11 FT TH S 59-28-15 E 120.53 FT TO POB

3124059074 3411

Parcel Id	118876
Name	3411
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3411 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3411 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624218	GERALD F BRENNAN	Individual	425-271-2736 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch C/D, Bulkhead Assessment, Group 2, Lakeline Survey, Permanent Markers, Toning, UT Testing

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: PCL 1 RENTON SP #LUA-10-038 SHPL REC #20101229900002 SD SP BEING POR FORMER R/R R/W PER SURV REC #9901299008 TGW POR SD R/W ALL IN GL 3 LY ELY OF BLK A HILLMANS LAKE WASHINGTON GARDEN OF EDEN #1 & WLY LAKE WASHINGTON BLVD N & SLY LOT 12 BLK A & NLY LOT 24 SD BLK A

3124059075 3405

Parcel Id	118875
Name	3405
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3411 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3405 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624264	CHERYL L ATKINSON	Individual	425-898-9359 (Home) 301-379-2089 (Cell)
624218	GERALD F BRENNAN	Individual	425-271-2736 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch A/B, Bulkhead Assessment, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Located, Isolation Valve: Opened, CCTV : Further inspection needed

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: 20 feet north of northeast corner of house.

Lateral Location Notes:

Valve Location: 20 feet north of northeast corner of house.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: PCL 2 RENTON SP #LUA-10-038 SHPL REC #20101229900002 SD SP BEING POR FORMER R/R R/W PER SURV REC #9901299008 TGW POR SD R/W ALL IN GL 3 LY ELY OF BLK A HILLMANS LAKE WASHINGTON GARDEN OF EDEN #1 & WLY LAKE WASHINGTON BLVD N & SLY LOT 12 SD BLK A & NLY LOT 24 SD BLK A

3124059076 Currently under construction (2017)

Parcel Id	118874
Name	Currently under construction (2017)
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 26, 2018

Address	City	State	Zip	Type	Mailing Option
3401 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624264	CHERYL L ATKINSON	Individual	425-898-9359 (Home) 301-379-2089 (Cell)
624234	MICHAEL H ATKINSON	Individual	425-898-9359 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Condition Assessment - UT Testing

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, CCTV : Further inspection needed

Phase One Status: Unable to contact

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Located on south side of house.

Lateral Location Notes:

Valve Location: Old valve and cleanout were removed by contractor.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: PCL 3 RENTON SP #LUA-10-038 SHPL REC #20101229900002 SD SP BEING POR FORMER R/R R/W PER SURV REC #9901299008 TGW POR SD R/W ALL IN GL 3 LY ELY OF BLK A HILLMANS LAKE WASHINGTON GARDEN OF EDEN #1 & WLY LAKE WASHINGTON BLVD N & SLY LOT 12 SD BLK A & NLY LOT 24 SD BLK A

3124059077

Parcel Id	118873
Name	
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 26, 2018

Address	City	State	Zip	Type	Mailing Option
102 FRONTAGE RD S	PACIFIC	WA	98047	= Taxpayer	ok to mail
3307 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624241	LISA LEIGHTON	Individual	206-271-3233 (Home) 206-919-8776 (Cell)
624225	STEVE LEIGHTON	Individual	206-919-8774 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Condition Assessment - UT Testing, Existing Manhole - Site 2, Existing Manhole - Site 3, June 2018 Survey 2

Outreach Groups: Phase 2A, Phase 2B, Phase One

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Located

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location:

Lateral Location Notes:

Valve Location: Valve located in patio at bottom the stairs.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: POR OF SE 1/4 31-24-05 DAF- COMM AT SE OF SD SEC 31 TH N01-48-16E ALG EAST LN A DIST OF 1675.55 FT TH N 88-11-44 W 362.42 FT TO A CASED MONUMENT IN C/L OF LAKE WASH BLVD TH S 61-20-10 W 152.90 FT TO NXN WITH A LN PLW &&& DIST 20.00 FT AS MEAS AT R/A FR THE C/L OF BN &&& SF RAILWAY CO SEATTLE BELT LINE MAIN TRACK AS NOW LOCATED &&& CONSTRUCTED UPON OVER AND ACROSS SD SEC 31 &&& THE TPOB OF PARCEL HEREIN DESC - TH N 59-28-15 W A DIST OF 65.84 FT TO NXN WITH SELY LN OF MOUNTAIN VIEW AVENUE TH N 22-57-59 E ALG SD SELY LN FOR A DIST OF 12.23 FT TH N 24-57-59 E ALG SD SELY LN FOR A DIST OF 319.19 FT TH S 59-28-15 E 119.27 FT TO NXN WITH SD PLL LN OF SD RAILWAY CO TH SWLY ALG SD PLL LN OF SD RAILWAY CO BEING THE ARC OF A CRV HAVING A RAD OF 1557.21 FT THRU A C/A OF 09-45-21 &&& ARC DIST OF 265.15 FT TH CONT ALG SD PLL LN OF SD RAILWAY CO TANGENT TO PRECEDING CRV S 38-04-21 W FOR A DIST OF 65.36 FT TO POB ACDG TO BDRY SURV UNDER REC NO 9904129002

3124059079

Parcel Id	118908
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, August 4, 2017
narrow parcel / access to dock	

Address City State Zip Type Mailing Option

102 FRONTAGE RD S	PACIFIC	WA	98047	= Taxpayer	ok to mail
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ContactId Name Type Phones

624225	STEVE LEIGHTON	Individual	206-919-8774 (Cell)
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Present Use: Fresh

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: POR GL 3 STR 31-24-5 DAF BEG SE 1/4 COR SD SEC 31 TH N 1-48-16 E 2455.27 FT TH N 88-11-44 W 41.34 FT BNG C/L LK WASH BOULEVARD TH S 20-04-48 W ALG SD C/L 405.39 FT TH ALG CRV TO R RAD 1602.25 FT ARC DIST 217.53 FT TH N 59-28-15 W 63.79 FT TAP 20 FT AS MEAS RADIALLY FROM BN R/R MAIN TRACK C/L TH SLY PLT SD C/L ALG CRV POR RAD 1552.20 FT ARC DIST 25.02 FT TH N 59-28-15 W 119.27 FT TH N 24-57-59 E 25.11 FT TH S 59-28-15 E 120.53 FT TO POB

3224059005 Railroad

Parcel Id	118843
Name	Railroad
Created	Sunday, September 11, 2016
Last Modified	Friday, August 4, 2017

Address City State Zip Type Mailing Option

201 S JACKSON ST #700	SEATTLE	WA	98104	= Taxpayer	ok to mail
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ContactId Name Type Phones

624180	KING COUNTY-PARKS	Organization	
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Present Use: Road

Property Name: RR RIGHT OF WAY

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: Other

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: RR R/W OVER NW 1/4 SD SEC 32 & TGW R/W OVER NE 1/4 31-24-5 LESS WLY 15 FT M/L THOF DAF - COMMENCING AT THE W QTR COR STR 32-24-05 TH N 17-24-36 E 808.55 TAP ON W RR R/W LN WCH IS THE NE COR OF TIBBETTS PROP & TPOB TH S 88-42-39 W 17.69 FT TH NELY ON A CRV TO RGT WHOSE CENTER BEARS S 59-25-07 E DIST 2038.59 A C/A 03-00-54 AND A CRV LENGTH OF 107.27 FT TH S 73-02-49 E 15.66 FT TH SWLY ON A CRV TO LFT WHOSE CENTER BEARS S 56-16-36 E WITH A DIST OF 2023.59 FT A C/A OF 02-52-39 AND A CRV LENGTH OF 101.63 FT TO THE POINT OF BEGINNING LESS NWLY 25.00 FT OF BNSF ROW LY BTWN TWO LNS DRAWN PLW & DIST 25.00 AND 50.00 FT NWLY AS MEAS AT R/A FR MAIN TRACK C/L BOUNDED ON THE NORTH BY THE ELY EXTN OF THE NORTH LN OF LOT 1 AND BOUNDED ON THE SOUTH BY THE ELY EXTN OF THE SOUTH LN OF LOT 13 OF SD HILLMANS LAKE WASHINGTON GARDEN OF EDEN DIV NO 2 PLAT

3342103580 Kennydale Beach Park

Parcel Id	118844
Name	Kennydale Beach Park
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 26, 2018

Address	City	State	Zip	Type	Mailing Option
1055 S GRADY WAY	RENTON	WA	98055	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624185	CITY OF RENTON	Organization	

Present Use: Public(Zoo/Arbor)

Property Name: KENNYDALE BEACH PARK

Phase 2B: Condition Assessment - UT Testing

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: Other

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 LOTS 2 THRU 10 TGW 2ND CL SH LDS ADJ

3342103625

Parcel Id	118835
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
PO BOX 2304	OCEAN SHORES	WA	98569	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624397	ESTATE OF VIRGINIA E LUCK	Organization	

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS

3342103635

Parcel Id	118902
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
3411 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624218	GERALD F BRENNAN	Individual	425-271-2736 (Home)

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS

3342103656

Parcel Id	118900
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
3411 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624218	GERALD F BRENNAN	Individual	425-271-2736 (Home)

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 17-18 & POR 19 N OF LN BEG AT SE COR TH N 72 DEG 35 MIN 00 SEC W 60.86 FT TO C/L OF 19 TH W ALG C/L TO W LN

3342103657

Parcel Id	118901
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
3411 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624218	GERALD F BRENNAN	Individual	425-271-2736 (Home)

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 20 & POR 19 S OF LN BEG AT SE COR TH N 72 DEG 35 MIN 00 SEC W 60.86 FT TO C/L LOT 19 TH W ALG C/L TO W LN

3342103695

Parcel Id	118903
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
469 TACOMA AVE NE	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624220	SUSAN DELOOF	Individual	

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS

3342103705

Parcel Id	118899
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, August 4, 2017

Address	City	State	Zip	Type	Mailing Option
7317 134TH AVE SE	NEWCASTLE	WA	98059	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624216	KIM BOWDEN	Individual	

Present Use: Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS ADJ

3342103715

Parcel Id	118910
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
3307 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624288	LISA LORD	Individual	
624190	MARK LORD	Individual	

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS

3342103720

Parcel Id	118841
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
500 4TH AVE	SEATTLE	WA	98104	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624186	KING COUNTY-PROPERTY SVCS	Organization	ADM-ES-0800 (Work)

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS

3342103730

Parcel Id	118839
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
500 4TH AVE	SEATTLE	WA	98104	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624186	KING COUNTY-PROPERTY SVCS	Organization	ADM-ES-0800 (Work)

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS

3342103735

Parcel Id	118909
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
3307 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId Name Type Phones

624288	LISA LORD	Individual	
624190	MARK LORD	Individual	

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS

3342103740

Parcel Id	118907
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
18019 SE 121ST PL	RENTON	WA	98059	= Taxpayer	ok to mail

ContactId Name Type Phones

624224	TED LAVALLEY	Individual	
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Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS

3342103743

Parcel Id	118904
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
8058 118TH AVE SE	NEWCASTLE	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624221	WILLIAM HUDSON	Individual	

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 & SH LDS ADJ

3342103745

Parcel Id	118906
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
18019 SE 121ST PL	RENTON	WA	98059	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624224	TED LAVALLEY	Individual	

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock:

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 & SH LDS ADJ

3342103760

Parcel Id	118905
Name	
Created	Sunday, September 11, 2016
Last Modified	Sunday, September 11, 2016

Address	City	State	Zip	Type	Mailing Option
15275 BIRCH DR	RENTON	WA	98058	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624222	BILL E KILLION	Individual	

Present Use: Fresh, Water Body

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lake Lot

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS ADJ UNDER WATER

3342103775

Parcel Id	118872
Name	
Created	Sunday, September 11, 2016
Last Modified	Monday, July 16, 2018

Address	City	State	Zip	Type	Mailing Option
3233 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624256	ADRIENNE LINDBLAD	Individual	253-347-5964 (Cell) 206-940-2524 (Work)
624226	WARREN ERIC LINDBLAD	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Existing Manhole - Site 2, June 2018 Survey 2

Outreach Groups: Phase 2A, Phase 2B, Phase One

Phase 2A Batches: Batch A/B, Bulkhead Assessment, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Isolation Valve: Located, Isolation Valve: Opened, CCTV : Further inspection needed

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: First cleanout located 45 feet south of valve in the grass. Located next to an old planter box and apple tree. Located a second cleanout 20 feet north of the driveway for 3233 towards 3307. Second cleanout appears to access Lakeline.

Lateral Location Notes:

Valve Location: Located sewer valve in middle of paved driveway 12 feet east of the garage.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS

3342103795

Parcel Id	118871
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Also owns parcel 3342103805. Has had sewer issues with materials hanging up on the valve in the pipes.

Address	City	State	Zip	Type	Mailing Option
3217 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
3217 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624270	KATHLEEN I DAHLBY	Individual	425-891-3774 (Cell)
624200	THOMAS R DAHLBY	Individual	425-891-3775 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Located, CCTV : Further inspection needed

Phase One Status: Special considerations

Property Notes: Requires extra care

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Cleanout for 3213/3217 is located in walkway between the yards. Cleanout and valves are 6 feet from the bulkhead.

Lateral Location Notes:

Valve Location: Valve for 3217 is in the walkway between the yards 6 feet from the bulkhead.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS

3342103805

Parcel Id	118870
Name	
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 26, 2018

Also owns parcel 3342103795. Has had sewer issues with materials hanging up on the valve in the pipes.

Address City State Zip Type Mailing Option

3217 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
3213 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624200	THOMAS R DAHLBY	Individual	425-891-3775 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Condition Assessment - UT Testing

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Located, CCTV : Further inspection needed

Phase One Status: Special considerations

Property Notes: Requires extra care

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location: Cleanout for 3213/3217 is located in walkway between the yards. Cleanout and valves are 6 feet from the bulkhead.

Lateral Location Notes:

Valve Location: Valve for 3213 is between the garden box and concrete walkway 6 feet from the bulkhead.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 42 & N 10 FT OF 43 & 2ND CL SH LDS

3342103810

Parcel Id	118869
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address City State Zip Type Mailing Option

11652 SE 62ND ST	BELLEVUE	WA	98006	= Taxpayer	ok to mail
3209 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624261	APRIL L HUMPHREY	Individual	206-391-8019 (Cell)
624231	DAVID R HUMPHREY	Individual	206-391-8019 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Isolation Valve: Located, Isolation Valve: Opened, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Located in SW corner of backyard 10 feet east of bulkhead.

Lateral Location Notes:

Valve Location: Located in SW corner of backyard 10 feet east of bulkhead.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 43 LESS N 10 FT ALL 44 & 2ND CL SH LDS

3342103840

Parcel Id	118868
Name	
Created	Sunday, September 11, 2016
Last Modified	Monday, July 16, 2018
Nancy Porter did not wish for crews to access her property for an inspection (10/7/16). Encouraged team members to reach out to her husband in the future if access or coordination is needed.	

Address	City	State	Zip	Type	Mailing Option
3205 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
3205 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624276	NANCY A PORTER	Individual	425-277-5949 (Home) 206-940-9334 (Cell) 206-601-3116 (Work)
624246	STEPHEN C PORTER	Individual	425-277-5949 (Home) 206-940-9334 (Cell) 206-604-3116 (Work)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: New Manhole - Site 4

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Not located

Phase One Status: Not approved

Property Notes: Dog on property, Requires extra care

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 LESS POR OF LOT 48 LYING S OF LN DAF - BEG AT NXN ON S LN OF OF SD LOT 48 & W LN OF MOUNTAIN VIEW AVE N TH NLY ON A CRV TO E RAD PT BEARS S 76-59-19 E & RAD 1506.18 FT ARC DIST OF 20.12 FT TO TPOB TH N 89-35-27 W 242.84 FT TAP ON INNER HARBOR LN & TERM OF SD LN LESS RD TGW 2ND CLASS SHORELANDS ADJ AKA PAR A OF RENTON LUA-98-034-LLA PER REC #980511-9023

3342103845

Parcel Id	118867
Name	
Created	Sunday, September 11, 2016
Last Modified	Monday, July 16, 2018

Address	City	State	Zip	Type	Mailing Option
13028 NE 32ND PL	BELLEVUE	WA	98005	= Taxpayer	ok to mail
3119 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624207	CHRIS OPPFELT	Individual	
741734	HOLLY OPPFELT	Individual	425-891-4582 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: June 2018 Survey 1, New Manhole - Site 4

Outreach Groups: Phase 2A, Phase 2B

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Buried, Isolation Valve: Located, Isolation Valve: Buried, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Cleanout located in fire place smokestack on back of patio. Cleanout is not buried, but is difficult to access. Cleanout appears to be upstream of valve and does not appear to be cleanout shown on record drawings.

Lateral Location Notes:

Valve Location: Found valve lid in NW corner of backyard about 10 feet off the bulkhead. Had to dig to access valve.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 LESS POR OF LOT 48 LYING N OF LN DAF - BEG AT NXN ON PT OF S LN OF SD LOT 48 && W LN OF MOUNTAIN VIEW N TH NLY ON CRV TO E RAD PT BEARS S 76-59-19 E && RAD 1506.18 FT ARC DIST OF 20.12 FT TO TPOB TH N 89-35-27 W 242.84 FT TAP ON INNER HARBOR LN && TERM OF SD LN LESS RD TGW 2ND CLASS SHORELANDS ADJ RENTON LUA-98-034-LLA PER REC #980511-9023

3342103855

Parcel Id	118866
Name	
Created	Sunday, September 11, 2016
Last Modified	Monday, July 16, 2018

Address	City	State	Zip	Type	Mailing Option
3115 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624215	GARY F YOUNG	Individual	425-736-4787 (Home)
741733	HELEN YOUNG	Individual	425-736-4787 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: June 2018 Survey 1, New Manhole - Site 4

Outreach Groups: Phase 2A, Phase 2B

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Not located, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Located cleanout lid in backyard 4 feet east of bulkhead and removed lid.

Lateral Location Notes:

Valve Location: Valve shown on record drawings but not found in field.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 50 && N 25 FT OF 51 && SH LDS ADJ

3342103860

Parcel Id	118865
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, May 11, 2018

Address	City	State	Zip	Type	Mailing Option
3111 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail
1205 N 27TH PL	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
784084	CHERYLE NAPOLI	Individual	
784083	GIOVANNI NAPOLI	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: June 2018 Survey 1

Outreach Groups: Phase 2A, Phase 2B, Phase One

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 2, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Buried, Isolation Valve: Not located, CCTV : Further inspection needed

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Cleanout located 2.5 feet south of concrete wall at the bottom of the launch ramp. Cleanout is buried 2 feet deep.

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 LOT 51 LESS NORTH 25.00 FT TGW ALL LOT 52 TGW LOT 53 LESS THE FOLG POR OF SD LOT 53 DAF - BEG AT SE COR OF SD LOT 53 ACCORDING TO R.O.S. UNDER REC NO 9109179005 SD SE COR BEING A PT ON A CRV HAVING A RAD OF 1196.48 FT THE CENTER OF WCH BRS S81-42-34E TH NLY ALG SD CRV TO RGT THRU A C/A OF 00-07-59 AN ARC DIST OF 2.78 FT TH N 89-50-05 W A DIST OF 132.83 FT TH N 89-18-24 W A DIST OF 12.55 FT TH S 89-19-51 W A DIST OF 18.24 FT TH N 88-23-37 W A DIST OF 29.04 FT TH S 89-49-16 W PLW SOUTH LN OF SD LOT 53 A DIST OF 199.55 FT M/L TAP ON INNER HARBOR LN TH S 23-38-10 W ALG SD INNER HARBOR LN A DIST OF 4.90 FT TO SW COR OF SD LOT 53 TH N 89-49-16 E ALG SD SOUTH LN OF SD LOT 53 A DIST OF 393.76 FT M/L TO SD SW COR OF SD LOT 53 && THE POB PER KING COUNTY S.C.C. NO. 00-2-32561-4 SEA UNDER REC NO 20020206000781 TGW SH LDS ADJ SD LOTS 51-52 && 53

3342103880

Parcel Id	118864
Name	
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 26, 2018

Address	City	State	Zip	Type	Mailing Option
PO BOX 78382	SEATTLE	WA	98178	= Taxpayer	ok to mail
3107 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624187	O LOWELL ANDERSON	Individual	206-772-6284 (Home)
624285	LAURIE L BAKER	Individual	425-227-4317 (Home) 206-772-6284 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Condition Assessment - Coupon

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch A/B, Bulkhead Assessment, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Isolation Valve: Located, Isolation Valve: Opened, CCTV : Further inspection needed

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: 4" PVC cleanout is located about 13 feet north of the valve. The cleanout is a 4" PVC stub sticking up out of the ground about 3 feet. Cleanout appears to be upstream of shared valve located for 3103/3107.

Lateral Location Notes:

Valve Location: Valve located in SW corner of yard in black plastic vault labeled "irrigation control valve"; (Same as 3103). Actually located on the property of 3107. Appears to be downstream of cleanouts.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 ALL LOTS 54 & 55 TGW POR OF LOT 53 DAF - BEG AT SE COR OF SD LOT 53 ACCORDING TO R.O.S. UNDER REC NO 9109179005 SD SE COR BEING A PT ON A CRV HAVING A RAD OF 1196.48 FT THE CENTER OF WCH BRS S81-42-34 E TH NLY ALG SD CRV TO RGT THRU A C/A OF 00-07-59 AN ARC DIST OF 2.78 FT TH N 89-50-05 W A DIST OF 132.83 FT TH N 89-18-24 W A DIST OF 12.55 FT TH S89-19-51W A DIST OF 18.24 FT TH N88-23-37W A DIST OF 29.04 FT TH S 89-49-16 W PLW SOUTH LN OF SD LOT 53 A DIST OF 199.55 FT M/L TAP ON INNER HARBOR LN TH S 23-38-10 W ALG SD INNER HARBOR LN A DIST OF 4.90 FT TO SW COR OF SD LOT 53 TH N 89-49-16 E ALG SD SOUTH LN OF SD LOT 53 A DIST OF 393.76 FT M/L TO SD SW COR OF SD LOT 53 & THE POB-PER KING COUNTY S.C.C. NO. 00-2-32561-4 SEA UNDER REC NO 20020206000781 TGW SH LDS ADJ SD LOTS 53-54 & 55

3342103890

Parcel Id	118863
Name	
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 26, 2018

Address	City	State	Zip	Type	Mailing Option
3103 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624266	JAMES C MORGAN	Individual	425-417-2513 (Home)
624236	LAURA S MORGAN	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Condition Assessment - Coupon

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Bulkhead Assessment, Group 1, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Isolation Valve: Not located, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location: A 4" PVC cleanout is located about 13 feet north of the valve. The cleanout is a 4" PVC stub sticking up out of the ground about 3 feet. Second cleanout located 10 feet from hot tub towards the lake along the rock wall. Located 4 feet from bottom of stairs at "V" in rock wall behind a bush. Cleanouts appear to be upstream of located valve.

Lateral Location Notes:

Valve Location: Valve is located on 3107.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 & 2ND CL SH LDS ADJ LESS POR LY S OF LN DAF BEG AT INTX OF S LN OF LOT 58 WITH MDR LN TH S 80-13-02 W 42.78 FT TH N 72-03-18 W 99.44 FT TH S 89-50-57 W 190.56 FT TO INNER HARBOR LN TH N 23-40-00 E ALG SD HARBOR LN 52.76 FT TO TPOB TH N 89-50-57 E 219.38 FT TH S 75-24-20 E 83.14 FT TH S 61-50-30 E 22.86 FT TH N 89-50-57 E TO TERMINUS AT ELY LN OF BLK A TGW POR OF 2ND CL SH LDS ADJ LOT 58 DAF BEG AT INTX OF S LN OF LOT 58 WITH MDR LN TH S 80-13-02 W 42.78 FT TH S 00-35-34 W 6.33 FT TH N 72-09-29 E 44.37 FT TO BEG

3342103895

Parcel Id	118862
Name	
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 26, 2018

Bill Stoneman is a long-time resident, lots of history with sewer system projects along the lakeline. Concerned about having to pay for system. Understands the project and needs mindful outreach moving forward to keep him aware of developments.

Address	City	State	Zip	Type	Mailing Option
3101 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
3101 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624210	WILLIAM C STONEMAN	Individual	425-255-7972 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Condition Assessment - UT Testing

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch Other, Bulkhead Assessment, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Not located

Phase One Status: Special considerations

Property Notes: Requires extra care

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 POR OF LOTS 56-57 & 58 & OF ADJ 2ND CL SH LDS DAF BEG AT INTX OF S LN OF LOT 58 WITH GOV MDR LN TH S 80-13-02 W 42.78 FT TH N 72-03-18 W 99.44 FT TH S 89-50-57 W 190.56 FT TO INNER HARBOR LN TH N 23-40-00 E ALG SD HARBOR LN 52.76 FT TH N 89-50-57 E 219.38 FT TH S 75-24-20 E 83.14 FT TH S 61-50-30 E 22.86 FT TH N 89-50-57 E TO ELY LN OF BLK A TH SLY ALG SD ELY LN TO S LN OF LOT 58 TH S 89-50-57 W ALG SD S LN TO BEG TGW POR OF LOTS 57 & 58 & OF ADJ 2ND CL SH LDS DAF BEG AT INTX OF S LN OF LOT 58 WITH MDR LN TH S 80-13-02 W 42.78 FT TO TPOB TH N 72-03-18 W 99.44 FT TH S 89-50-57 W 190.56 FT TO INNER HARBOR LN TH S 23-40-00 W ALG SD HARBOR LN TAP S 80-13-02 W FR TPOB TH N 80-13-02 E TO TPOB

3342103905

Parcel Id	118860
Name	
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 20, 2017

Address	City	State	Zip	Type	Mailing Option
3013 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624197	ROBERT H BURR	Individual	425-226-7114 (Home) 425-941-4004 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch A/B, Bulkhead Assessment, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Located, Isolation Valve: Opened, CCTV : Further inspection needed

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Located in manhole on driveway. Manhole A was located in driveway and CCTVed on 8/23/17. Located on north side of the house. Cleanout located in Manhole A. 6 feet north of cleanout is a valve. Does not appear to be cleanout close to shore. May be upstream of valve.

Lateral Location Notes:

Valve Location: Valve located 6 feet north of manhole and cleanout.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 LOTS 59-60 & 61 & 2ND CL SH LDS ADJ LESS BEG AT NXN OF MDR LN WITH N LN OF 59 TH S 72 DEG 09 MIN 29 SEC W 44.37 FT TH S 00 DEG 35 MIN 34 SEC W 59.67 FT TH N 89 DEG 50 MIN 57 SEC E TO WLY MGN OF NP RW TH NLY ALG SD MGN TO N LN OF LOT 59 TH W TO BEG LESS RD TGW POR OF LOT 58 & OF 2ND CL SH LDS ADJ DAF BEG AT INTX OF MDR LN WITH S LN OF LOT 58 TH S 80-13-02 W 42.78 FT TO TPOB TH S 00-35-34 W 6.33 FT TO S LN OF LOT 58 TH S 72-09-39 W 368.21 FT TO INNER HARBOR LN TH N 23-40-00 E ALG SD HARBOR LN TAP S 80-13-02 W FR TPOB TH N 80-13-02 E TO TPOB

3342103906

Parcel Id	118861
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3015 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624208	DONALD L SAVOY	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Cleanout: Not located, Isolation Valve: Not located

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 POR BEG AT NXN OF MDR LN WITH N LN OF 59 TH S 72 DEG 09 MIN 29 SEC W 44.37 FT TH S 00 DEG 35 MIN 34 SEC W 59.67 FT TH N 89 DEG 50 MIN 57 SEC E TO WLY MGN OF N P R/W TH NLY ALG SD MGN TO N LN OF 59 TH W TO BEG LESS RD

3342103920

Parcel Id	118859
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3011 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624209	PETER SPOUSE	Individual	206-369-5374 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Group 2, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Isolation Valve: Not located

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location: Cleanout 15" off south side of house. Located in concrete bricks.

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 LOT "1" RENTON LUA-01-107-LLA REC NO. 2002012490003 BEING A POR OF SE 1/4 31-24-05

3342103924

Parcel Id	118858
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3009 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
741722	BIN GONG	Individual	615-579-6738 (Cell)
624211	JIANPING SUN	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Bulkhead Assessment, Group 2, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Isolation Valve: Not located

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location: Cleanout located in back patio concrete 6 feet out the back door.

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 LOT "2" TGW SH LDS ADJ RENTON LUA-01-107-LLA REC NO. 20020124900003 BEING A POR OF SE 1/4 31-24-05

3342103930 Notify before digging

Parcel Id	118857
Name	Notify before digging
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3007 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624203	MONICA M FIX	Individual	425-306-1990 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 2, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Cleanout: Buried, Isolation Valve: Located

Phase One Status:

Property Notes: Requires extra care

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Cleanout not definitively located. Likely buried beneath rocks under bulkhead and not accessible.

Lateral Location Notes:

Valve Location: Valve is in northwest corner of yard near bulkhead and down the property line between 3007/3009. Valve is located towards the far end of the backyard near the water, 18" off the fence and 2 feet from first bulkhead.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 LOT 2 RENTON LLA #LUA-10-063-LLA REC #20110223900005 SD LLA DAF- LOTS 64 & 65 SD BLK A TGW 2ND CL SH LDS

3342103931

Parcel Id	118840
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3005 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail
3005 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
717234	REBECCA LEPROWSE	Individual	206-920-1033 (Cell)
717233	SHAWN LEPROWSE	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch C/D, Group 1, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Not located

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location: Cleanout is 30 inches off back of house and 13 feet off property line. Located in backyard flower bed. Cleanout likely upstream of eventual valve and cleanout downstream for 3007.

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 LOT 1 RENTON LLA #LUA-10-063-LLA REC #20110223900005 SD LLA DAF- LOTS 64 & 65 SD BLK A TGW 2ND CL SH LDS

3342103940 Requests advance call for visits

Parcel Id	118855
Name	Requests advance call for visits
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 20, 2017

Dog's name is Whirley; has invisible fence. Requests advance call for visits to property.

Address	City	State	Zip	Type	Mailing Option
3001 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
3001 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624260	ANNE F SIM CONNER	Individual	206-931-7667 (Home) 425-572-6344 (Cell)
624230	CHARLES F CONNER	Individual	425-572-6344 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch A/B, Bulkhead Assessment, Group 1, Lakeline Survey, Permanent Markers, Pilot Project, Toning, UT Testing

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes: Dog on property, Requested advance call when visiting

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 LOT 1 RENTON SP#LUA14-000202 REC# 20150320900008 SD SP DAF- LOTS 66-67-68 & N 20 FT OF 69 SD BLK A & 2ND CL SH LDS ADJ

3342103941

Parcel Id	118856
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3003 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
717235	ANTONIO MANDARANO	Individual	206-403-7272 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch C/D, Group 1, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 LOT 2 RENTON SP#LUA14-000202 REC# 20150320900008 SD SP DAF- LOTS 66-67-68 & N 20 FT OF 69 SD BLK A & 2ND CL SH LDS ADJ

3342103942

Parcel Id	118854
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, October 6, 2017

Address	City	State	Zip	Type	Mailing Option
3001 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
2931 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624260	ANNE F SIM CONNER	Individual	206-931-7667 (Home) 425-572-6344 (Cell)
624230	CHARLES F CONNER	Individual	425-572-6344 (Cell)

Present Use: Vacant(Single-family)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 LOT 3 RENTON SP#LUA14-000202 REC# 20150320900008 SD SP DAF- LOTS 66-67-68 & N 20 FT OF 69 SD BLK A & 2ND CL SH LDS ADJ

3342103953 House is being torn down; requests no survey marker on new wall (Sept. 2017)

Parcel Id	118837
Name	House is being torn down; requests no survey marker on new wall (Sept. 2017)
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 26, 2018

Address	City	State	Zip	Type	Mailing Option
4057 WILLIAMS AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
2909 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624178	JOOS FAMILY LLC	Organization	
741720	PAUL JOOS	Individual	425-417-9955 (Cell) 425-255-4250 (Work)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Condition Assessment - Coupon, June 2018 Survey 1, New Manhole - Site 5

Outreach Groups: Phase 2A, Phase 2B

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Not located

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location:

Lateral Location Notes: Lakeline visible in water behind property.

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 S 10 FT OF 69 ALL 70-71-72 &&& 2ND CL SH LDS ADJ

3342103985

Parcel Id	118853
Name	
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 26, 2018

Address	City	State	Zip	Type	Mailing Option
2905 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
2905 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail
2907 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624263	BEVERLY REIMERS	Individual	206-898-8659 (Cell)
624233	MILTON A REIMERS JR	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Condition Assessment - Coupon, June 2018 Survey 1, New Manhole - Site 5

Outreach Groups: Phase 2A, Phase 2B, Phase One

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status:

Phase One Status: Unable to contact

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 &&&&& 2ND CL SH LDS

3342104009

Parcel Id	118852
Name	
Created	Sunday, September 11, 2016
Last Modified	Monday, July 16, 2018

Address	City	State	Zip	Type	Mailing Option
2827 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
2827 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624272	LOIS A HOWELL	Individual	206-910-0180 (Cell)
624242	RICHARD SCOTT HOWELL	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: June 2018 Survey 1, New Manhole - Site 5

Outreach Groups: Phase 2A, Phase 2B

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Not located, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Cleanout located 3 feet off corner of house (west, facing bulkhead) in side concrete patio. 20 feet east of bulk head. Cleanout appears to be up stream of valve shown in record drawings.

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 POR LOTS & 2ND CL SH LDS ADJ NLY OF LN BEG NXN MDR LN WITH S LN OF 80 TH N 46 DEG 33 MIN 56 SEC W 27.08 FT TH N 50 DEG 55 MIN 04 SEC E 36.07 FT TH N 65 DEG 50 MIN 45 SEC E 20 FT TO WLY MGN N P R/W TH NWLY ALG SD MDR LN 75.97 FT TO TPOB TH S 68 DEG 46 MIN 54 SEC W 20 FT TH S 50 DEG 25 MIN 04 SEC W 67 FT M/L TO MDR LN TH S 50 DEG 25 MIN 04 SEC W 49.15 FT TH S 66 DEG 29 MIN 57 SEC W 215.58 FT TO INNER-HARBOR LN

3342104010

Parcel Id	118851
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
2315 CROWS NEST PKWY	RENO	NV	89519	= Taxpayer	ok to mail
2815 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
716029	BETSEY BURROUGHS	Individual	425-739-8698 (Home)
624198	JOHN D BURROUGHS	Individual	425-736-8698 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 2, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Buried, Isolation Valve: Located

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Clean out 12 feet off bulkhead directly in front of a valve and 13 feet off the house. Can't open due to rusty bolts.

Lateral Location Notes:

Valve Location: Valve location 13 feet from bulkhead heading east towards the house and 12 feet off house. Valve is easily accessed in a box in the backyard.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 POR OF LOTS & SH LDS ADJ BEG NXN MDR LN WITH S LN OF SD 80 TH N 46 DEG 33 MIN 56 SEC W 27.08 FT TO TPOB TH N 50 DEG 55 MIN 04 SEC E 36.07 FT TH N 65 DEG 50 MIN 45 SEC E 20 FT TO W MGN OF N P R/W TH NWLY ALG SD R/W MGN 75.97 FT TH S 68 DEG 46 MIN 54 SEC W 20 FT TH S 50 DEG 25 MIN 04 SEC W 67 FT M/L TO MDR LN TH S 50 DEG 25 MIN 04 SEC W 49.15 FT TH S 66 DEG 29 MIN 57 SEC W 215.58 FT TO INNER HBR LN TH S 40 DEG 35 MIN 00 SEC E 80.82 FT TH N 63 DEG 38 MIN 40 SEC E 222.51 FT TH N 50 DEG 55 MIN 04 SEC E 47 FT TO TPOB

3342104029

Parcel Id	118850
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
2811 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624201	JEANNE C DEMUND	Individual	206-970-3172 (Home) 206-898-9818 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch Other, Bulkhead Assessment, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 POR OF LOTS & 2ND CL SH LDS ADJ BEG NXN MDR LN WITH S LN LOT 81 TH N 51 DEG 21 MIN 04 SEC E 32 FT M/L TO WLY MGN N P R/W TH NWLY ALG SD MGN 69 FT TH S 65 DEG 50 MIN 45 SEC W 20 FT TH S 50 DEG 55 MIN 04 SEC W 36.07 FT TO PT ON MDR LN TH S 50 DEG 55 MIN 04 SEC W 47 FT TH S 63 DEG 38 MIN 40 SEC W 222.51 FT TO INNER-HARBOR LN TH S 40 DEG 35 MIN 00 SEC E 65.07 FT TH N 62 DEG 15 MIN 42 SEC E 224.02 FT TH S 46 DEG 34 MIN 00 SEC E 10.82 FT TH N 50 DEG 36 MIN 04 SEC E 50.70 FT TO POB

3342104040

Parcel Id	118849
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
2807 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624267	KAAREN PRITCHARD	Individual	425-917-2200 (Home) 206-226-4300 (Cell) 206-303-1612 (Work)
624237	MARC PRITCHARD	Individual	425-957-7254 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Pilot Project, Toning, UT Testing

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: SE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 1 POR BEG AT NXN OF S LN LOT 81 WITH MDR LN TH E ALG S LN & ITS PROD 35 FT TO SWLY LN N P R/W TH NWLY ALG SWLY LN 24 FT TH S 51 DEG 21 MIN 04 SEC W 32 FT TO POB & 82 & SH LDS ADJ LESS POR BEG AT NXN OF MDR LN WITH N LN LOT 82 TH S 50 DEG 36 MIN 04 SEC W 50.70 FT TH N 46 DEG 34 MIN 00 SEC W 10.82 FT TO PT WCH BEARS S 62 DEG 15 MIN 42 SEC W FRM POB TH N 62 DEG 15 MIN 42 SEC E TO POB

3342104045

Parcel Id	118848
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, October 6, 2017

Address	City	State	Zip	Type	Mailing Option
2805 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624265	DEBRA L KEPPLER	Individual	206-250-3637 (Home)
624235	WILLIAM F KEPPLER	Individual	206-250-3638 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch C/D, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Not located, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type:

Cleanout Location: Cleanout #1: Located in front driveway, 16 ft off front of house in a 16" x 24" metal box/lid. Cleanout #2: Located on the north side walkway heading towards house. 16" x 24" metal box/lid. Cleanout #3: Located north of front door on walkway. 16" x 24" metal box/lid.

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: NE

Range: 5

Section: 6

Township: 23

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 LOT 83 TGW LOT 84 LESS POR WITHIN FOLG - BEG MOST ELY COR OF LOT 85 TH NLY ALG A CURVE TO RGT RAD OF 1482.65 FT THRU C/A OF 02-24-58 ARC DIST OF 62.53 FT TH N 46-33-56 W 2.91 FT TH S 59-35-17 W 65.56 FT TH S 58-26-25 W TO WLY LN LOT 84 TH SELY ALG WLY LN OF LOTS 84 & 85 TO SELY LN OF LOT 85 TH ALG SD SELY LN N 57-07-22 E TO POB TGW 2ND CL SHORELANDS ADJ

3342104046

Parcel Id	118847
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, October 6, 2017

Address	City	State	Zip	Type	Mailing Option
2801 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624193	CRAG A BRAUFF	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: NE

Range: 5

Section: 6

Township: 23

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 POR LOT 84 TGW ALL LOT 85 AS FOLLOWS

3342104048 Concerns about lawn and 2 dogs

Parcel Id	118846
Name	Concerns about lawn and 2 dogs
Created	Sunday, September 11, 2016
Last Modified	Friday, October 6, 2017

Concerns about possible disruption of new expensive lawn as part of our work. Noted that she has 2 dogs and crews MUST close both gates when walking in and out to prevent them from running away.

Address	City	State	Zip	Type	Mailing Option
2731 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail
2731 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624214	MARLENE R WINTER	Individual	425-417-4722 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch Other, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes: Dog on property, Requires extra care

Proximity: Lakeline

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: NE

Range: 5

Section: 6

Township: 23

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 LOT 86 TGW NWLY 1/2 LOT 87 MEAS MIDWAY BTWN NWLY & SELY LNS SD LOT 87 & SH LDS ADJ

3342104050

Parcel Id	118845
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, October 6, 2017

Address	City	State	Zip	Type	Mailing Option
2727 MOUNTAIN VIEW AVE N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624252	JOHN PATRICK HEILY	Individual	206-491-6004 (Home)
624281	SUNDAY G HEILY	Individual	206-491-6004 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch Other, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 01

Quarter Section: NE

Range: 5

Section: 6

Township: 23

Legal Description: HILLMANS LK WN GARDEN OF EDEN #1 LOT 88 TGW SELY 1/2 LOT 87 MEAS MIDWAY BTWN NWLY & SELY LNS SD LOT 87 & SH LDS ADJ

3342700005

Parcel Id	118831
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, August 4, 2017

Address	City	State	Zip	Type	Mailing Option
3979 Lake Washington Blvd N	Renton	WA	98056	= Postal	ok to mail
PO BOX 359	RENTON	WA	98057	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624183	THE LAKE HOUSES AT EAGLE CO	Organization	

Present Use: Single Family(Res Use/Zone)

Property Name: RESIDENTIAL LAND

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: North

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 "LOT A" RENTON LOT LINE ADJUSTMENT NO LUA-96-153LLA-LND-30-0152 REC NO 20061002900012 SD LOT LINE ADJUSTMENT DAF LOTS 1 THRU 13 IN BLOCK A OF HILLMANS LAKE WASHINGTON GARDEN OF EDEN DIV NO 2 PLAT TGW SH LDS ADS AND TGW THE NWLY 25.00 FT OF BNSF ROW LY BTWN TWO LNS DRAWN PLW & DIST 25.00 AND 50.00 FT NWLY AS MEAS AT R/A FR MAIN TRACK C/L BOUNDED ON THE NORTH BY THE ELY EXTN OF THE NORTH LN OF LOT 1 AND BOUNDED ON THE SOUTH BY THE ELY EXTN OF THE SOUTH LN OF LOT 13 OF SD HILLMANS LAKE WASHINGTON GARDEN OF EDEN DIV 2

3342700007

Parcel Id	118833
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, August 4, 2017

Address	City	State	Zip	Type	Mailing Option
PO BOX 359	RENTON	WA	98057	= Taxpayer	ok to mail
3909 Lake Washington Blvd N	Renton	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624182	BARBEE FOREST PRODUCTS INC	Organization	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: North

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 "LOT B" RENTON LOT LINE ADJUSTMENT NO LUA-96-153LLA-LND-30-0152 REC NO 20061002900012 SD LOT LINE ADJUSTMENT DAF LOTS 1 THRU 13 IN BLOCK A OF HILLMANS LAKE WASHINGTON GARDEN OF EDEN DIV NO 2 PLAT TGW SH LDS ADS AND TGW THE NWLY 25.00 FT OF BNSF ROW LY BTWN TWO LNS DRAWN PLW & DIST 25.00 AND 50.00 FT NWLY AS MEAS AT R/A FR MAIN TRACK C/L BOUNDED ON THE NORTH BY THE ELY EXTN OF THE NORTH LN OF LOT 1 AND BOUNDED ON THE SOUTH BY THE ELY EXTN OF THE SOUTH LN OF LOT 13 OF SD HILLMANS LAKE WASHINGTON GARDEN OF EDEN DIV 2

3342700009

Parcel Id	118834
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, August 4, 2017

Address	City	State	Zip	Type	Mailing Option
PO BOX 359	RENTON	WA	98057	= Taxpayer	ok to mail
3907 Lake Washington Blvd N	Renton	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624182	BARBEE FOREST PRODUCTS INC	Organization	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status: Approved for visual

Property Notes:

Proximity: North

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 "LOT C" RENTON LOT LINE ADJUSTMENT NO LUA-96-153LLA-LND-30-0152 REC NO 20061002900012 SD LOT LINE ADJUSTMENT DAF LOTS 1 THRU 13 IN BLOCK A OF HILLMANS LAKE WASHINGTON GARDEN OF EDEN DIV NO 2 PLAT TGW SH LDS ADS AND TGW THE NWLY 25.00 FT OF BNSF ROW LY BTWN TWO LNS DRAWN PLW & DIST 25.00 AND 50.00 FT NWLY AS MEAS AT R/A FR MAIN TRACK C/L BOUNDED ON THE NORTH BY THE ELY EXTN OF THE NORTH LN OF LOT 1 AND BOUNDED ON THE SOUTH BY THE ELY EXTN OF THE SOUTH LN OF LOT 13 OF SD HILLMANS LAKE WASHINGTON GARDEN OF EDEN DIV 2

3342700011

Parcel Id	118832
Name	
Created	Sunday, September 11, 2016
Last Modified	Thursday, August 24, 2017

Address	City	State	Zip	Type	Mailing Option
PO BOX 359	RENTON	WA	98057	= Taxpayer	ok to mail
3905 Lake Washington Blvd N	Renton	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624182	BARBEE FOREST PRODUCTS INC	Organization	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups:

Phase 2A Batches:

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: North

Sewer Type:

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 "LOT D" RENTON LOT LINE ADJUSTMENT NO LUA-96-153LLA-LND-30-0152 REC NO 20061002900012 SD LOT LINE ADJUSTMENT DAF LOTS 1 THRU 13 IN BLOCK A OF HILLMANS LAKE WASHINGTON GARDEN OF EDEN DIV NO 2 PLAT TGW SH LDS ADS AND TGW THE NWLY 25.00 FT OF BNSF ROW LY BTWN TWO LNS DRAWN PLW & DIST 25.00 AND 50.00 FT NWLY AS MEAS AT R/A FR MAIN TRACK C/L BOUNDED ON THE NORTH BY THE ELY EXTN OF THE NORTH LN OF LOT 1 AND BOUNDED ON THE SOUTH BY THE ELY EXTN OF THE SOUTH LN OF LOT 13 OF SD HILLMANS LAKE WASHINGTON GARDEN OF EDEN DIV 2

3342700070 No-go property in 2016

Parcel Id	118898
Name	No-go property in 2016
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Tony Boydston noted during a call (10/21/16) that he did not want project staff to access his property, and that he was frustrated with the overall process.

Address	City	State	Zip	Type	Mailing Option
3920 NE 11TH PL	RENTON	WA	98056	= Taxpayer	ok to mail
3901 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624191	TONY BOYDSTON	Individual	206-999-3763 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Not located, CCTV : Further inspection needed

Phase One Status: Not approved

Property Notes: Requires extra care

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location: Located 5 feet south of fence in pavement. Near the front door and next to a small boat trailer.

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 & SH LDS ADJ

3342700080

Parcel Id	118897
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3837 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624250	MARK E ZILMER	Individual	425-226-9090 (Home) 425-681-3001 (Cell)
624279	ROSEMARY ZILMER	Individual	206-799-0361 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch A/B, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Not located

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 & SH LDS ADJ

3342700100

Parcel Id	118896
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3824 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3827 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
738802	ANNE PETETT	Individual	425-277-4007 (Home) 425-765-5334 (Cell)
717243	SCOTT PETETT	Individual	425-277-4007 (Home) 425-765-5334 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 2, Lakeline Survey, Permanent Markers, Toning, UT Testing

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Isolation Valve: Located, Isolation Valve: Opened

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Cleanout located under new wooden, lower deck. Bolts encased in concrete.

Lateral Location Notes:

Valve Location: Valve located under new wooden lower deck.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 & SH LDS ADJ TGW POR OF LOT 23 DAF: BEG AT NE COR SD LOT TH SWLY 13.87 FT TH N 55-20-57 W 19.27 FT TO N LN OF LOT 23 TH N 89-20-08 E 23.99 TO POB PER SSC #02-2-04565-1KNT & SURVEY REC #20031222900008

3342700110

Parcel Id	118895
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3825 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3825 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
741741	ANGIE F NELSON	Individual	
624206	FRITZ W NELSON	Individual	425-226-8772 (Home) 425-445-5430 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch Other, Bulkhead Assessment, Group 3, Lakeline Survey, Permanent Markers, UT Testing

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Not located

Phase One Status: Unable to contact

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 & SH LDS ADJ LESS POR LY SLY OF FOLG DESC LN BEG NE COR LOT 25 TH SWLY ALG ELY LN SD LOT 25 6 FT & TPOB TH N 73-02-49 W 33.68 FT TH S 88-42-39 W PLW N LN SD LOT 25 255 FT M/L TO INNER HARBOR LNS & TERMINUS SD DESC LN LESS POR OF LOT 23 DAF: BEG AT NE COR SD LOT TH SWLY 13.87 FT TH N 55-20-57 W 19.27 FT TO N LN OF LOT 23 TH N 89-20-08 E 23.99 TO POB PER SSC #02-2-04565-1KNT & SURVEY REC #20031222900008

3342700125 Call in advance for access

Parcel Id	118894
Name	Call in advance for access
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017
Call Kim Peterson at 206-793-1769 to get keys to the gate to get access the property.	

Address	City	State	Zip	Type	Mailing Option
3821 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
717245	TATYANA BARINOVA	Individual	
741740	GREG PETERSON	Individual	206-793-1769 (Cell)
742047	KIM PETERSON	Individual	206-793-1769 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Not located

Phase One Status: Unable to contact

Property Notes: Requested advance call when visiting

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: No cleanout found even though drawings show cleanout and valve on property.

Lateral Location Notes:

Valve Location: No valve found even though drawings show cleanout and valve on property.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 LOT 2 RENTON LLA #LUA-97-160-LLA REC #9712159027 SD LLA BEING LOTS 24 THRU 32 SD BLK A

3342700126 Advance call to gain access

Parcel Id	118893
Name	Advance call to gain access
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017
Owner must be contacted prior to work to accessing property to get gate unlocked.	

Address City State Zip Type Mailing Option

3815 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3815 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624244	BRUCE E ERIKSON	Individual	425-226-2981 (Home) 206-669-8881 (Cell)
624274	MARY R ERIKSON	Individual	425-226-2981 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Located, Isolation Valve: Opened, CCTV : Further inspection needed

Phase One Status:

Property Notes: Requested advance call when visiting

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Valve and cleanout located 10 feet from SW corner of home under wood steps. Cleanout has about 18" of mud in the riser.

Lateral Location Notes:

Valve Location: Valve covers located 10 feet from SW corner of home under wood steps.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 LOT 1 RENTON LLA #LUA-97-160-LLA REC #9712159027 SD LLA BEING LOTS 24 THRU 32 SD BLK A

3342700149 Requested advance call for access

Parcel Id	118892
Name	Requested advance call for access
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017
Advance call requested for visits to property. Gate kept locked and neighbors pay attention to visitors.	

Address City State Zip Type Mailing Option

3811 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
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ContactId	Name	Type	Phones
624257	ALISON P TAYLOR	Individual	425-430-5476 (Home) 425-615-0480 (Cell)
624227	ROBERT W TAYLOR	Individual	425-430-5476 (Home) 425-615-0480 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers, UT Testing

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Not located

Phase One Status: Approved for visual

Property Notes: Requested advance call when visiting

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 POR OF 31 THRU 34 & WLY 15 FT OF FORMER NP R/W ADJ DAF BEG AT W 1/4 COR STR 32-24-05 TH N 15-41-32 E 708.77 FT TH NELY ALG ELY MGN SD WLY 15 FT 37.48 FT TO TPOB TH SWLY ALG SD MGN 37.48 FT TH N 82-29-09 W 69.75 FT TH N 11-36-00 E 35.09 FT TH N 07-30-51 E 6.92 FT TH S 82-29-09 E 43 FT TH SELY IN A STRAIGHT LN TO TPOB & UPLAND S & 2ND CL SH LDS ADJ

3342700176 Careful of irrigation when digging.

Parcel Id	118891
Name	Careful of irrigation when digging.
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3805 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3805 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624205	VIKTORIA LITTLEMAN	Individual	425-351-3745 (Home) 425-255-0487 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Located

Phase One Status: Unable to contact

Property Notes: Dog on property, Requires extra care

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Shared cleanout supposed to be present. Was not located.

Lateral Location Notes:

Valve Location: One valve is 4' north of fence and 6' east of bulkhead. Other valve is located 6' north of fence and 7' east of bulkhead. Both valves were underwater.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 POR LOTS 33 THRU 36 & WLY 15 FT OF FORMER NP R/W ADJ DAF BEG W 1/4 COR STR 32-24-05 TH N 14-46-34 E 657.27 FT TO TPOB TH NELY ALG ELY LN SD WLY 15 FT 52.64 FT TH N 82-29-07 W 69.75 FT TH S 26-45-59 W 59.84 FT TH S 88-00-09 E 72.08 FT TO TPOB TGW UPLANDS & 2ND CL SH LDS ADJ

3342700190

Parcel Id	118890
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3719 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3719 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624286	REBECCA A BYUS	Individual	206-266-6969 (Home)
624188	KEVIN L LINDAHL	Individual	206-266-6969 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Located

Phase One Status: Unable to contact

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location: Valve located on property of 3805 Lake WA Blvd.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 POR LOTS 36 THRU 38 & WLY 15 FT OF FORMER NP R/W DAF BEG W 1/4 COR STR 32-24-05 TH N 14-08-49 E 621.78 FT TO TPOB TH NELY ALG ELY MGN SD WLY 15 FT 36.25 FT TH N 88-01-36 W 72.31 FT TH S 14-41-39 W 33.59 FT TH S 87-42-54 E 64.96 FT TO TPOB TGW UPLANDS & 2ND CL SH LDS ADJ

3342700200

Parcel Id	118889
Name	
Created	Sunday, September 11, 2016
Last Modified	Monday, July 16, 2018

Address	City	State	Zip	Type	Mailing Option
3717 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624202	DAYTON P DENNISON	Individual	425-351-2040 (Home) 425-271-4388 (Cell)
662350	MARILYN DENNISON	Individual	425-271-4388 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Existing Manhole - Site 1

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning, UT Testing

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Not located, CCTV : Further inspection needed

Phase One Status: Approved for visual

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: In grass 8 feet NW of house and 7 feet South of fence.

Lateral Location Notes:

Valve Location: Valve supposedly abandoned in 2016.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 POR LOTS 37 THRU 40 & WLY 15 FT OF FORMER NP R/W DAF BEG W 1/4 COR STR 32-24-05 TH N 12-54-33 E 557.02 FT TO TPOB TH NELY ALG ELY MGN SD WLY 15 FT 65.97 FT TH N 87-43-09 W 64.77 FT TH S 02-01-13 W 63.54 FT TH N 88-42-39 E 39.62 FT TO TPOB TGW LOT 41 LESS S 13 FT THOF TGW UPLANDS ADJ TGW 2ND CL SH LDS ADJ TGW POR OF SD NP RR R/W ADJ SD POR OF LOT 41

3342700211

Parcel Id	118838
Name	
Created	Sunday, September 11, 2016
Last Modified	Monday, July 16, 2018

Address	City	State	Zip	Type	Mailing Option
3715 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
741119	KRISTI SUNDERLAND	Individual	
741120	DAVID WILLIAMSON	Individual	206-399-4522 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Existing Manhole - Site 1

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Cleanout: Buried, Isolation Valve: Located

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Could not locate cleanout underneath deck. Drawings showed cleanout encased in concrete. Could not be located with metal detector.

Lateral Location Notes:

Valve Location: Valve in box under deck 7 feet off the back of the house.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 S 13 FT OF 41 ALL 42-43 TGW N 10 FT OF 44 & TGW W 15 FT OF FORMER NP R/W LN IN NW 1/4 32-24-05 LY BET N LN OF S 13 FT OF SD LOT 41 PROD E & S LN OF NLY 10 FT OF LOT 44 PROD ELY TGW 2ND CL SH LDS ADJ

3342700230

Parcel Id	118887
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3711 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624213	GARY A WEIL	Individual	425-988-4556 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Isolation Valve: Located, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location: Valve and cleanout located and marked. Located 3 feet west of chain-link fence in the northwest corner of the yard. Located in the yard of 3713 Lake WA Blvd. Shared S/S with 3713 Lake Wa Blvd.

Lateral Location Notes:

Valve Location: Valve and cleanout located and marked. Located 3 feet west of chain-link fence in the northwest corner of the yard. Located in the yard of 3713 Lake WA Blvd. Shared S/S with 3713 Lake Wa Blvd.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 LOT 46 LESS N 16.26 FT AS MEAS ALG E LN THOF TGW ALL LOTS 47 & 48 TGW SH LDS ADJ TGW WLY 15 FT OF NP R/W ADJ AKA LOT 2 RENTON LLA 003-88 REC NO 8806219003

3342700240 Please attempt to contact owner prior to entering yard.

Parcel Id	118888
Name	Please attempt to contact owner prior to entering yard.
Created	Sunday, September 11, 2016
Last Modified	Monday, July 16, 2018

Address	City	State	Zip	Type	Mailing Option
3713 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3713 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
717256	DOUGLAS HARWOOD	Individual	425-503-0242 (Cell) 425-455-0501 (Work)
741738	MARJORIE HARWOOD	Individual	425-503-7092 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Existing Manhole - Site 1

Outreach Groups: Phase 2A

Phase 2A Batches: Batch C/D, Bulkhead Assessment, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Not located, CCTV : Further inspection needed

Phase One Status:

Property Notes: Dog on property, Requires extra care

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NW

Range: 5

Section: 32

Township: 24

Legal Description: HILLMANS LK WA GARDEN OF EDEN #2 LOT 45 TGW S 10.84 FT LOT 44 & N 16.26 FT LOT 46 AS MEAS ALG E LN TGW SH LDS ADJ TGW WLY 15 FT OF NP R/R ADJ AKA LOT 1 RENTON LLA 003-88 REC NO 8806219003

3342700250

Parcel Id	118886
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3709 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3709 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624269	KARYN A PASQUIER	Individual	425-271-1468 (Home)
624239	PAUL L PASQUIER	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Bulkhead Assessment, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Not located

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 & SH LDS ADJ & WLY 15 FT OF FORMER NP R/W ADJ

3342700260

Parcel Id	118885
Name	
Created	Sunday, September 11, 2016
Last Modified	Monday, June 4, 2018

Address	City	State	Zip	Type	Mailing Option
3707 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624278	ROBERT DAVID REED	Individual	206-503-7972 (Cell)
624248	JOAN WU GUANGOLIN	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: June 2018 Survey 2

Outreach Groups: Phase 2A, Phase 2B

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Not located, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Located underneath black ABS screw-in cap on back patio.

Lateral Location Notes:

Valve Location: Valve possibly under bush in backyard close to water.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 & SH LDS ADJ & WLY 15 FT OF FORMER NP R/W ADJ

3342700270

Parcel Id	118884
Name	
Created	Sunday, September 11, 2016
Last Modified	Wednesday, September 26, 2018

Address	City	State	Zip	Type	Mailing Option
3703 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3703 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
624196	JOHN MICHAEL BROWN	Individual	206-240-0133 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: Condition Assessment - Coupon, June 2018 Survey 2

Outreach Groups: Phase 2A, Phase 2B

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 2, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Located, Isolation Valve: Buried

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location:

Lateral Location Notes:

Valve Location: 7' feet off of the fence to the north. Underneath deck.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 53-54 && SH LDS ADJ && WLY 15 FT OF FORMER NP R/W ADJ

3342700280

Parcel Id	118883
Name	
Created	Sunday, September 11, 2016
Last Modified	Monday, June 4, 2018

Address	City	State	Zip	Type	Mailing Option
3625 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
784089	MARCIA LEVEQUE	Individual	
784088	SCOTT LEVEQUE	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B: June 2018 Survey 2

Outreach Groups: Phase 2A, Phase 2B

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning, UT Testing

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Located, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location: Cleanout in concrete. May be a new cleanout. Does not appear to be cleanout shown on record drawings.

Lateral Location Notes:

Valve Location: Valve located downstream of cleanout in CCTV.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 55-56 & WLY 15 FT OF FORMER N P R/W ADJ-E 10 FT FOR RD & SH LDS ADJ

3342700290

Parcel Id	118882
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3619 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624245	ANDREW T ALBERTSON	Individual	206-617-7511 (Cell)
624275	MEGAN L ALBERTSON	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Located, Isolation Valve: Buried, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: 1.5 feet from southwest corner of house near jacuzzi.

Lateral Location Notes:

Valve Location: 22.6 feet northwest of cleanout location.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 57-58 WLY 15 FT OF FORMER N P R/W ADJ-E 10 FT FOR RD & SH LDS ADJ

3342700300

Parcel Id	118881
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3613 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624251	BRIAN L FIFE	Individual	206-380-8414 (Cell)
624280	STEPHANIE C FIFE	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Located, Isolation Valve: Buried, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: 2'-4" from southwest corner of house. Cleanout close to house appears upstream of valve and marked cleanout location from record drawings.

Lateral Location Notes:

Valve Location: Buried in flower bed 5'-8" from head wall under fence. 29 feet from house.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 ALL OF 59 & N 13 FT OF 60 & NWLY 15 FT OF FORMER R R R/W ADJ ON E E 10 FT FOR RD & SH LDS ADJ ON W

3342700310

Parcel Id	118880
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3611 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624204	BANG DAE HEE	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status:

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 S 7 FT OF 60 & ALL OF 61 & N 8 FT OF 62 & WLY 15 FT OF FORMER R R R/W ADJ ON E E 10 FT FOR RD & SH LDS ADJ ON W TGW POR LOT 62 LY NLY OF LN DAF- BEG W 1/4 STR 32-24-5 TH S89-23-22W 62.53FT TO A 3/4" IRON PIPE SD PT 35 FT WLY MEAS PRPDIC FROM AS-BUILT C/L NP RR TRACK AS EXSISTED 11-16-1984 TH N 18-17-02 E PLW & 35 FT WLY SD TRACK C/L 108.68 FT TO A HUB TACK SD PT BEING 3.15 FT S OF POWER POLE & TPOB OF LN - TH S 89-30-57 W 14.94 FT TO A R-K NAIL IN SE COR 6 FT RETAINING WALL TH CONT S 89-30-57 W 65.74 FT TO A P-K NAIL IN BULK- HEAD ON LK WASH SD PT NXN OF BULKHEAD LN TO S & RETAIN- ING WALL TO E TH S 88-45-34 W TO INNER HARBOR LN & TERM SD LN PER SURV REC #9106069003 PER KC SCC #85-2-17170-5 TGW SH LDS ADJ

3342700320

Parcel Id	118879
Name	
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3607 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail
3607 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Postal	ok to mail

ContactId	Name	Type	Phones
717275	ANGELA TROY	Individual	206-419-9499 (Cell)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch C/D, Bulkhead Assessment, CCTV, Group 1, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Opened, Isolation Valve: Located, Isolation Valve: Opened, CCTV : Further inspection needed

Phase One Status:

Property Notes:

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location: Located 6 feet 10 inches from northwest corner of home and 17" from back of house. City drawings from inspection indicate cleanout upstream of valve.

Lateral Location Notes:

Valve Location: 6'-10" from northwest corner of home and 8'-7" from back of house. Based on City inspector drawings valve is downstream of located cleanout.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 POR SD LOTS LY SLY OF LN DAF - BEG SE COR SE 1/4 STR 31-24-5 TH S 89-23-22 W 62.53 FT TO S 3/4 INCH IRON PIPE SD PT 35 WLY MEAS PRPDIC FROM AS-BUILT C/L OF NPRR TRACKS AS EXISTED 11-16-1994 TH N 18-17-02E PLW & 35 FT WLY SD RR TRACK C/L 108.68 FT TO HUB TACK SD PT 3.15 FT S OF POWER POLE & TPOB OF LN TH S 89-30-57 W 14.94 FT TO P-K NAIL SET AT SE COR 6 FT RET WALL TH CONT S 89-30-57 W 65.74 FT TO A P-K NAIL SET IN BULKHEAD ON LK WASH SD PT AT NXN OF BULKHEAD LN TO S & RET WALL TO E TH S 88-45-34 W TO INNER HARBOR LN & TERM PT SD DESC PER SURV REC #9106069003 PER KC SCC # 85-2-17170-5 TGW POR SD LOT 64 LY NLY OF LN DAF - BEG ON WLY LN SD NP R/W N 18-17-02 E 70.12 FT FR S LN OF SD NE 1/4 TH N 89-06-04 W 15.72 FT TAP 50 FT W OF C/L OF SD RR R/W & TPOB TH N 89-06-04 W 60.3 FT TO ANGLE PT IN A CONCRETE BULKHEAD ON LK WASH & TERM SD LN PER KC SCC #83-2-1 6000-6 TGW SH LDS ADJ

3342700330 Requested advance call for visits

Parcel Id	118878
Name	Requested advance call for visits
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017
Requested advance call for visits as a reminder.	

Address	City	State	Zip	Type	Mailing Option
3605 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
645234	DARIUS RICHARDS	Individual	425-623-8177 (Home) 425-430-4469 (Cell)
624283	VICKI L RICHARDS	Individual	425-430-4469 (Home)

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A, Phase One

Phase 2A Batches: Batch A/B, Bulkhead Assessment, CCTV, Group 2, Lakeline Survey, Permanent Markers, Toning

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Located, Cleanout: Buried, Isolation Valve: Located, Isolation Valve: Opened, Isolation Valve: Buried

Phase One Status: Approved for visual

Property Notes: Requested advance call when visiting

Proximity: Lakeline

Sewer Type: Lateral

Cleanout Location: Owner indicated under flower bed at southwest corner of the back of the house. Located 10 to 13 feet east of bulkhead. Dug up under 17" of grass. Cleanout bolts rusted and encased in concrete. Bolts were T-bolts.

Lateral Location Notes:

Valve Location: Located 10 to 13 feet east of bulkhead. Dug up from under 4" of dirt/grass.

Platblock: A

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN # 2 POR OF 64 S OF LN BEG ON ELY LN 13.50 FT SWLY OF NE COR TH N 88 DEG 39 MIN 00 SEC W TO INNER HBR LN ALL OF 65 & POR OF 66 N OF LN BEG ON E LN OF SD 66 AT PT 55.88 FT SWLY OF NE COR OF LOT 64 TH N 88 DEG 43 MIN 00 SEC W TO INNER HBR LN & SH LDS ADJ & WLY 15 FT OF FORMER N P R/W ADJ-E 10 FT FOR RD

3342700355 Requests advance call for visits

Parcel Id	118877
Name	Requests advance call for visits
Created	Sunday, September 11, 2016
Last Modified	Friday, September 22, 2017

Address	City	State	Zip	Type	Mailing Option
3601 LAKE WASHINGTON BLVD N	RENTON	WA	98056	= Taxpayer	ok to mail

ContactId	Name	Type	Phones
624268	KAREN EASTON	Individual	206-708-3664 (Cell)
624238	TOM EASTON	Individual	

Present Use: Single Family(Res Use/Zone)

Property Name:

Phase 2B:

Outreach Groups: Phase 2A

Phase 2A Batches: Batch Other, Bulkhead Assessment, CCTV, Group 3, Lakeline Survey, Permanent Markers

Phase 2A Field Activity Status: Property Access: Available, Cleanout: Not located, Isolation Valve: Not located

Phase One Status:

Property Notes: Dog on property, Requested advance call when visiting

Proximity: Lakeline

Sewer Type: Side sewer

Cleanout Location:

Lateral Location Notes:

Valve Location:

Platblock: A &

Platname: HILLMANS LAKE WASH GARDEN OF EDEN NO. 02

Quarter Section: NE

Range: 5

Section: 31

Township: 24

Legal Description: HILLMANS LK WN GARDEN OF EDEN #2 67 & POR OF 66 SLY OF LN BEG ON ELY LN OF 66 AT 9.36 FT SLY MEAS ALG SD LOT LN FR NE COR OF SLY 16 FT OF SD OF 66 TH N 88 DEG 43 MIN 00 SEC W TO INNER HARBOR LN & WLY 15 FT OF FORMER N P R/W ADJ & SH LDS ADJ E 10 FT FOR RD TGW LOT 1 BLK A HILLMANS LK WASHINGTON GARDEN OF EDEN #1 & POR VAC ST ADJ & 2ND CL SH LDS & POR R/W ADJ LY WLY OF LN BAAP ON N LN OF SE 31-24-05 15 15 E FR NE COR SD BLK TH SWLY TAP 25 FT S FR SD N LN AT R/A & 45 FT W AT R/A FR CL SD R/W TH W 5 FT

ACTIVITIES

Activity ID	End date	Start time	End time	Created by	Date created	Last modified by	Date modified	Name	Date	Description	Activity type	Type	Assigned to	Address1	City1	State1	Zip1	Label1	Address type1	Notes		
44674				Laura Treadway	10/25/2018 1:14:30 PM	Laura Treadway	10/25/2018 1:18:14 PM	Door-hanging: Weekend work near manhole 1	10/26/2018 12:00:00 AM	Providing notification to three properties that work near manhole 1 will continue through the weekend.		Flying										
43779				Laura Treadway	9/26/2018 11:30:07 AM	Laura Treadway	10/11/2018 9:57:58 AM	Door-hanging: 2018 Condition Assessment	10/11/2018 12:00:00 AM	List to deliver door hanger notifications to six properties (seven addresses) re condition assessment work the weeks of Oct. 8 and Oct. 15. Also included the three manhole 4 neighbors in this notification. Meeting invitees: 'brianh@skyways.org'; 'DHelling@Huit-Zollars.com'; 'achung@bellevuewa.gov'; Ellman, John (JEllman@bellevuewa.gov); Peckler, Richard E. (RPeckler@bellevuewa.gov); Duncan, Brett (BDuncan@bellevuewa.gov); Dickey, Nate (NDickey@bellevuewa.gov); Marcum, Tony (TMarcum@bellevuewa.gov); erich.fiedler@seattle.gov; Dennis.baker@mercergov.org; Mark.jones@mercergov.org; 'corinne.deleon@seattle.gov'; Goss, Kevin (Kevin.Goss@tetrattech.com); david.scott@tetrattech.com; Daniel.Reisinger (DReisinger@carollo.com); Lara.Kammereck (LKammereck@carollo.com); David Christensen (Dchristensen@Rentonwa.gov); Laura.Treadway (ltreadway@enviroissues.com); Nicole.Lobodzinski (nlobodzinski@enviroissues.com); Shane.Couty (SCouty@Rentonwa.gov); Jayson.Gallaway (JGallaway@Rentonwa.gov); Rocky.Sittner (RSittner@Rentonwa.gov)		Flying										
43765		9:00 am	11:00 am	Laura Treadway	9/26/2018 10:31:59 AM	Laura Treadway	12/14/2018 10:21:20 AM	Renton Kenndale Lakeline Cleaning	9/25/2018 12:00:00 AM	Meeting information: The City's contractor (Ballard Marine Construction) is currently scheduled to begin cleaning on Tuesday, Sept 25th. I'll let you know if their schedule slips and we can reschedule if necessary. The viewing area will be on a currently vacant property (2909 Mountain View Ave N).				2909 Mountain View Ave N	Renton	WA	98056					
42804				Nicole Lobodzinski	8/7/2018 12:17:28 PM	Nicole Lobodzinski	8/7/2018 1:27:23 PM	Project Viewing	8/2/2018 12:00:00 AM	Letter to properties about Phase 2B work update.		Mailer										
42808				Nicole Lobodzinski	8/7/2018 1:28:13 PM	Nicole Lobodzinski	8/7/2018 1:28:13 PM	Mailer: Phase 2B Update Properties with Barges	8/2/2018 12:00:00 AM	Letter to properties that will have barges in front of their properties about Phase 2B work update.		Mailer										
39233				Laura Treadway	4/24/2018 5:46:34 PM	Laura Treadway	12/14/2018 10:59:10 AM	Mailer: Phase 2B Notifications mailing list	7/30/2018 12:00:00 AM	All Lakeline and Other properties. Used to pull mailing list for 8/2/2018 mailings.		Mailer										
39499				Laura Treadway	5/11/2018 12:38:12 PM	Laura Treadway	6/1/2018 9:30:58 AM	Door-hanging: June 2018 Survey	6/4/2018 12:00:00 AM	List of parcels for May 2018 Survey notifications		Flying										
35546				Laura Treadway	10/6/2017 10:35:30 AM	Laura Treadway	10/6/2017 10:35:30 AM	Door-hanging: Bulkhead Assessment	10/7/2017 12:00:00 AM	Flying to alert homeowners and residents of bulkhead assessment work to begin Oct. 9 or 10. Phone calls to homeowners to alert them to upcoming bulkhead assessment work and coordinate access. Properties with access coordination needs: 3811 Lake Wa Blvd 3815 Lake Wa Blvd 3821 Lake Wa Blvd Courtesy reminders: 3001 Mountain View 3601 Lake Wa Blvd (doberman property) 3605 Lake Wa Blvd		Flying										
35547				Laura Treadway	10/6/2017 10:36:44 AM	Laura Treadway	10/6/2017 4:12:48 PM	Phone Calls: Access and courtesy reminders - Bulkhead assessment	10/6/2017 12:00:00 AM	Site Visit - Multiple Fieldwork Crews - 9/25-29/2017		Phone Calls										
38526	9/29/2017 12:00:00 AM			Laura Treadway	3/12/2018 4:30:44 PM	Laura Treadway	3/12/2018 4:30:44 PM	Site Visit - Multiple Fieldwork Crews - 9/25-29/2017	9/25/2017 12:00:00 AM	Laura and Connie made phone calls to 8 properties about fieldwork the week of Sept. 25. Properties with access coordination needs: 3811 Lake Wa Blvd 3815 Lake Wa Blvd 3821 Lake Wa Blvd Work in front yard only: 2731 Mountain View Ave Doberman on property: 3601 Lake Wa Blvd; only work is survey Courtesy reminders: 3001 Mountain View 3101 Mountain View 3605 Lake Wa Blvd 3605 Lake Wa Blvd Connie and Tyler (EJ) delivered door hangers to all parcels to provide notification of Lakeline Survey starting Sept. 25.		Fieldwork										
35022				Laura Treadway	9/22/2017 11:08:47 AM	Laura Treadway	9/22/2017 11:49:40 AM	Phone calls: Access and courtesy reminder calls	9/22/2017 12:00:00 AM			Phone Calls										
35023				Connie Kim	9/22/2017 11:59:21 AM	Connie Kim	9/22/2017 11:59:21 AM	Door-hanging: Lakeline Survey 9/25	9/21/2017 12:00:00 AM			Flying										
34762				Laura Treadway	9/14/2017 11:14:05 AM	Laura Treadway	9/14/2017 11:14:05 AM	Mailer: Phase 2A September update	9/18/2017 12:00:00 AM			Mailer										
34212				Laura Treadway	8/24/2017 3:18:54 PM	Laura Treadway	8/24/2017 4:03:44 PM	Door-hanging: Lakeline Survey	8/24/2017 12:00:00 AM	Delivered door hangers to parcels that did NOT get a Pilot, A, B door hanger on Monday to provide notification of Lakeline Survey starting Aug. 25.		Flying								Attempted to deliver to 3401 Lake Washington Blvd N and noted that property is under construction.		
34143				Connie Kim	8/21/2017 2:51:13 PM	Laura Treadway	8/24/2017 3:11:05 PM	Door-hanging: Pilot Study, Batch A, Batch B	8/21/2017 12:00:00 AM			Flying										
34155				Connie Kim	8/22/2017 11:06:48 AM	Connie Kim	8/22/2017 11:06:48 AM	Phone Calls: Outreach Pilot, Batch A, Batch B	8/21/2017 12:00:00 AM	Connie (Enviroissues) gave a courtesy call to the Pilot, Batch A and Batch B properties to notify them of fieldwork starting on Wednesday 8/23 until the end of the week. Connie noted the possibility of work extending to the following week.		Phone Calls										
34857	9/6/2017 12:00:00 AM			Laura Treadway	9/19/2017 2:03:10 PM	Laura Treadway	9/19/2017 2:14:32 PM	Site Visit - City Survey - 8/16 to 9/6/2017	8/16/2017 12:00:00 AM	City of Renton crews visited Lakeline properties to verify site access and cleanout and valve locations.		Fieldwork										
32879				Laura Treadway	8/4/2017 11:57:10 AM	Laura Treadway	8/8/2017 2:40:35 PM	Mailer: Phase 2A Notification	8/8/2017 12:00:00 AM			Mailer										
27352		10:00am	2:15pm	Alison Payauys	10/27/2016 11:27:35 AM	Laura Treadway	8/4/2017 12:01:33 PM	Site Visit 10/26 - Survey Team	10/26/2016 12:00:00 AM	KPG surveyors, Phil Adams and Justin Williams, and Alison Payauys, Carollo returned to several approved access homes to survey lakeline and cleanouts. Connie (Enviroissues) called the properties Alison (Carollo) requested for crews to survey the pipe and/or clean out on Wednesday 10/26 or Thursday 10/27 The following properties were identified: 2815 Mountain View (cleanout only, pipe covered in rock) 3001 Mountain View (cleanout and visible pipe - note to walk on pavers only) 3107 Mountain View (cleanout and probe for pipe) 3307 Mountain View (cleanout only near the house) 3405 Lake WA Blvd (cleanout and probe for pipe) 3411 Lake WA Blvd (visible pipe) 3501 Lake WA - Beach Park (probe for pipe) 3605 Lake WA Blvd (probe for pipe) 3717 Lake WA Blvd (cleanout only, no probing, water is deep) 2727 Mountain View		Site Visit										
27294				Connie Kim	10/25/2016 1:51:33 PM	Laura Treadway	9/18/2017 3:30:14 PM	Phone Calls: Outreach	10/25/2016 12:00:00 AM			Phone Calls										
34829				Laura Treadway	9/18/2017 3:38:43 PM	Laura Treadway	9/18/2017 3:52:33 PM	Mailing to request contact info	10/25/2016 12:00:00 AM			Mailer										
34822				Laura Treadway	9/18/2017 2:51:36 PM	Laura Treadway	9/18/2017 2:51:36 PM	Phone Calls: Request for Access	10/21/2016 12:00:00 AM			Phone Calls										
27351		9:00 am	12:15 pm	Alison Payauys	10/27/2016 11:09:20 AM	Laura Treadway	8/4/2017 12:01:23 PM	Site Visit 10/13	10/13/2016 12:00:00 AM	Dave Scott, TetraTech and Alison Payauys, Carollo visited approved access homes to determine lakeline visibility, shoreline conditions, and to locate cleanouts.		Site Visit										
27345				Brett Watson	10/26/2016 1:56:56 PM	Laura Treadway	8/4/2017 12:01:01 PM	Phone Calls: Visual Inspection Reminders	10/11/2016 12:00:00 AM	Enviroissues called properties with a courtesy reminder that crews would be in the neighborhood performing visual inspections in the coming days.		Phone Calls										

ACTIVITIES

Activity ID	End date	Start time	End time	Created by	Date created	Last modified by	Date modified	Name	Date	Description	Activity type	Type	Assigned to	Address1	City1	State1	Zip1	Label1	Address type1	Notes				
26948				Connie Kim	10/10/2016 4:51:15 PM	Connie Kim	10/10/2016 4:51:15 PM	Flying: Follow-up door hanger only	10/7/2016 12:00:00 AM	<p>The following properties received just door hangers.</p> <p>Mountain View Avenue N: -2727 -2731 -2801 -2805 -2827 -2909 -3005 -3007 -3009 -3011 -3015 -3101 -3103 -3115 -3119 -3209 -3213 -3217</p> <p>Lake Washington Boulevard N: -3411 -3607 -3611 -3613 -3619</p>	Flying													
26950				Connie Kim	10/10/2016 5:07:09 PM	Laura Treadway	8/4/2017 12:02:22 PM	Flying: Follow-up door hanger and knocking	10/7/2016 12:00:00 AM	<p>Brett and Connie left project update door hangers with a hand-written note requesting that the property owners call David regarding a visual inspection due to their proximity to the sewer line. Properties were knocked on in attempt to receive verbal approval for project team to access these priority properties.</p> <p>Mountain View Avenue N: -2807 -2811 -2905 -3013 -3107 -3111 -3205 -3233 -3307</p> <p>Lake Washington Boulevard N: -3717 -3719 -3811 -3821 -3825 -3837</p>	Flying													
26955				Connie Kim	10/11/2016 12:19:34 PM	Laura Treadway	8/4/2017 12:02:38 PM	Phone Calls: Outreach to priority properties	10/6/2016 12:00:00 AM	<p>Connie and Brett conducted outreach calls to priority properties identified by the project team to request access to the following properties.</p> <p>City of Renton Homeless Shelter with priority flushing meeting at the Renton Homeless Shelter, 4200 Washington Boulevard North and Mountain View Avenue North. This effort launches a more thorough assessment of the lakeline to identify if upgrades to this crucial piece of public infrastructure are needed. This initial assessment will continue throughout 2016, and will help to inform a thorough evaluation of the entire lakeline system in 2017 and 2018. Here's what you can expect in the coming weeks:</p> <p>Week of September 12: Crews will be in the area to set up survey equipment and plan the flush work.</p> <p>Week of September 19: The team will gather data about the pump station and other lakeline components that are accessible by land. Trucks and other equipment will be onsite throughout the week. Crews will maintain safe roadway and property access throughout the duration of this project.</p> <p>Week of September 26 and beyond: Additional work to complete the flush and surveying may continue, if needed. Team members will survey in-water portions of the lakeline by boat.</p> <p>How you can help: Do you know where your local system is located (e.g., lateral, valve, cleanout)? We would appreciate information you could share as we gather data. Would you like to receive updates by email? Please send us your email address.</p> <p>Next steps: As this initial assessment continues, the project team may contact you to learn more about how your property is connected into the lakeline. We will continue to provide you with updates as these efforts continue.</p>	Phone Calls													
26578				Connie Kim	9/20/2016 11:33:41 AM	Connie Kim	9/20/2016 11:39:21 AM	Flying: Initial notification Mountain View Ave N	9/12/2016 12:00:00 AM	<p>Brett and Connie flyered the following homes that are directly affected by the project.</p> <p>Mountain View Avenue N -2727 -2731 -2801 -2805 -2827 -2909 -3005 -3007 -3009 -3011 -3015 -3101 -3103 -3115 -3119 -3209 -3213 -3217</p> <p>Lake Washington Boulevard N: -3411 -3607 -3611 -3613 -3619</p> <p>Week of September 12: Crews will be in the area to set up survey equipment and plan the flush work.</p> <p>Week of September 19: The team will gather data about the pump station and other lakeline components that are accessible by land. Trucks and other equipment will be onsite throughout the week. Crews will maintain safe roadway and property access throughout the duration of this project.</p> <p>Week of September 26 and beyond: Additional work to complete the flush and surveying may continue, if needed. Team members will survey in-water portions of the lakeline by boat.</p> <p>We will continue to provide you with updates as these efforts continue.</p>	Flying			Mountain View Ave N	Renton	WA			Other					
26579				Connie Kim	9/20/2016 11:41:47 AM	Connie Kim	9/20/2016 11:41:47 AM	Flying: Initial Notification Lake Washington Boulevard N	9/12/2016 12:00:00 AM	<p>Brett and Connie flyered the nearby homes that may be affected by the project.</p> <p>Lake Washington Boulevard N -3401 -3405 -3411 -3605 -3607 -3611</p>	Flying			Lake Washington Boulevard N	Renton	WA			Other					

ACTIVITIES

Activity ID	End date	Start time	End time	Created by	Date created	Last modified by	Date modified	Name	Date	Description	Activity type	Type	Assigned to	Address1	City1	State1	Zip1	Label1	Address type1	Notes							
26583				Connie Kim	9/20/2016 1:19:18 PM	Brett Watson	9/21/2016 9:31:50 AM	Mailer: Stakeholders Initial Notification	9/7/2016 12:00:00 AM	<p>Work Order for Kenmydale Lakeline Sewer System Assessment and Maintenance Flushing</p> <p>Where: Lake Washington Boulevard North and Mountain View Avenue North When: September 12-30, 2016 (with additional prep and follow-up work) Work Hours: Monday through Friday, 7:00 a.m. to 4:00 p.m.</p> <p>City of Renton maintenance crews will perform routine flushing of the Kenmydale Lakeline Sewer System along Lake Washington Boulevard North and Mountain View Avenue North. This effort launches a more thorough assessment of the lakeline to identify if upgrades to this crucial piece of public infrastructure are needed. This initial assessment will continue throughout 2016, and will help to inform a thorough evaluation of the entire lakeline system in 2017 and 2018. Here's what you can expect in the coming weeks:</p> <p>Week of September 12: Crews will be in the area to set up survey equipment and plan the flush work.</p> <p>Week of September 19: The team will gather data about the pump station and other lakeline components that are accessible by land. Trucks and other equipment will be onsite throughout the week. Crews will maintain safe roadway and property access throughout the duration of this project.</p> <p>Week of September 26 and beyond: Additional work to complete the flush and surveying may continue, if needed. Team members will survey in-water portions of the lakeline by boat.</p> <p>How you can help: Do you know where your local system is located (e.g., lateral, valve, cleanout)? We would appreciate information you could share as we gather data. Would you like to receive updates by email? Please send us your email address.</p> <p>Next steps: As this initial assessment continues, the project team may contact you to learn more about how your property is connected into the lakeline.</p> <p>Assessment and Maintenance Flushing</p> <p>Where: Lake Washington Boulevard North and Mountain View Avenue North When: September 12-30, 2016 (with additional prep and follow-up work) Work Hours: Monday through Friday, 7:00 a.m. to 4:00 p.m.</p>	Assessment and Maintenance Flushing																Mailer
26611				Brett Watson	9/21/2016 9:20:12 AM	Brett Watson	9/21/2016 9:30:38 AM	Mailer: Stakeholders Initial Notification (North of Lakeline Properties)	9/7/2016 12:00:00 AM	<p>City of Renton maintenance crews will perform routine flushing of the Kenmydale Lakeline Sewer System along Lake Washington Boulevard North and Mountain View Avenue North. This effort launches a more thorough assessment of the lakeline to identify if upgrades to this crucial piece of public infrastructure are needed. This initial assessment will continue throughout 2016, and will help to inform a thorough evaluation of the entire lakeline system in 2017 and 2018. Here's what you can expect in the coming weeks:</p> <p>Week of September 12: Crews will be in the area to set up survey equipment and plan the flush work.</p> <p>Week of September 19: The team will gather data about the pump station and other lakeline components that are accessible by land. Trucks and other equipment will be onsite throughout the week. Crews will maintain safe roadway and property access throughout the duration of this project.</p> <p>Week of September 26 and beyond: Additional work to complete the flush and surveying may continue, if needed. Team members will survey in-water portions of the lakeline by boat.</p> <p>We will continue to provide you with updates as these efforts continue.</p>																	Mailer

COMMUNICATIONS

Communication ID	Sent/received	Date received	Title	Communication	Assigned to	Date assigned	Communication status	Initial response date	Initial response	Response date	Response	Due date	Contacts	Created by	Date created	Last modified by	Date modified	Latitude	Longitude	Source	Documents	Notes		
225066	Received	09/12/2016	Laurie inquires about access to sewerline on her lot	I live at 3107 Mountain View Ave N. There is a TALL access to the sewer on the southwest corner of our lot. Not sure if that is what you are looking for or not. Don't know anything about valves Laurie Hi, David: Re: Sewer facilities at my residence - 3605 Lake Wash. Blvd. N. In regard to your "Notification..." letter, I will be glad to show you the exact location of my lateral, valve and also the wye that picks up the sewer line from my neighbor's home at 3601 Lk. WA Blvd. N. Also, I can show you the location of the main line where it crosses underneath my boat dock. I am retired and home most of the time. Please call me at 425-430-4469 to arrange a time for you or your representative to drop by. Cheers, Darius Richards	Sarah Brandt	09/20/2016	Closed			09/13/2016	Ms. Baker, Thank you for the information, we will be looking for this type of facility as we proceed with work over the next few weeks. Dave Christensen Mr. Richards, Thank you very much for the information. We will take you up on your offer soon. Folks from the team will coordinate directly with you as you have requested. Dave Christensen		LAURIE L BAKER	Connie Kim	09/15/2016	Connie Kim	09/20/2016					Email		
225069	Received	09/12/2016	Darius' inquiry of sewerline access locations	I'm part of a team recently hired by the City of Renton to support the Kenndale Lakeline Sewer System Evaluation project (quite a mouthful). I'm leading the community outreach portion of the project, and our first activity will be a line flush and field surveys the week of Sept. 19. I see that the KNA picnic is next Wednesday, and wondered if it made sense to either attend or provide written information about the project for interested community members? A little more about the project: Our team will be evaluating a portion of the lake line that connects to approximately 50 waterfront homes. The goal is to determine over the next several months whether and how to upgrade the line. Our first notifications will be mailed as early as next week to that area of Kenndale. Do you think our presence and/or materials at the picnic would be helpful, or is the project too small or the picnic the wrong forum? Thanks in advance for your insights! Sarah Brandt 08/31/16 Thanks, Vicki, for your quick response. I agree with your suggestions (and we'll not plan to attend the picnic). Would you like to be on the project's email list as the KNA contact so that you're aware of status? If not, we'll have a project webpage up soon through the City's main site that you can check for updates.		09/20/2016	Closed			09/13/2016	Hi Sarah, Thank you for reaching out to our Neighborhood association. My thoughts are that the project will only effect 50 homes on the Lake and the attendance at the picnic could be up to 600 people and most of these people will have little interest in hearing about the project. My suggestion is drop off flyers or mailers to the homes that will be effected. Hope my suggestions are helpful to you. Cheers, Vicki 08/31/16 Hi Sarah, Yes, that would be nice if you could update us via email. Thank you! Cheers Vicki		DARIUS RICHARDS	Connie Kim	09/15/2016	Connie Kim	09/20/2016					Email		
225281	Sent	08/30/2016	Vicki: KNA picnic question	Thanks again, and have a great picnic! Thank you for contacting me about your upcoming project in the Kenndale area. Attached are three examples of notices we have distributed to residents when our projects impact neighborhood roads. In addition we usually include a map of the area on the back of the notice to provide a visual explanation of the affected area(s). I am happy to help you draft or review your notice if you would like it to be consistent with past city practices. As I mentioned Police Cmdr. Dave Leibman is the Kenndale neighborhood liaison. I have copied Dave on this email so he is in the loop on our conversation. In addition I encourage you to contact either Darius or Vicki Richards, who are both very active in the association. Their email address is dariusvicki@msn.com. Also consider visiting the Kenndale Neighborhood Association web site at www.kenndale.org for additional contact information and information on their upcoming picnic scheduled for September 7. Please let me know if I can be of further assistance. My contact information is below. Linda Moschetti-Newing Administrative Assistant Public Works Department City of Renton 1055 South Grady Way Renton, Washington 98057 Phone: (425) 430-7394 Fax: (425) 430-7241 E-mail: lmoschetti@rentonwa.gov	Sarah Brandt	09/20/2016	Closed			08/30/2016			VICKI L RICHARDS	Connie Kim	09/20/2016	Connie Kim	09/20/2016					Email		
225291	Received	08/24/2016	Linda: Examples of Work Notification City of Renton	Brett Watson (Envirotssues) spoke with a member of the household (not the property decision-maker) and requested that he pass the informational flyer along to Mark or Kaaren Pritchard and encourage one of them to reach out to David.	Brett Watson	09/20/2016	Closed						LINDA MOSCHETTI	Connie Kim	09/20/2016	Connie Kim	09/20/2016					Email		
226631	Received	10/07/2016	Outreach to priority property	Brett Watson (Envirotssues) spoke with Nancy Porter about the project team accessing her property for a quick visual inspection of the lakeline. Nancy said that she was NOT interested in project team members visiting her property at this time. Brett thanked her for her consideration, and confirmed an updated phone number for the property (206-601-3116). Brett said that the project team may be in touch with her in the future, and Nancy noted that her husband (Stephen Porter) would be the best contact for future communications.	Brett Watson	10/10/2016	Closed						MARC PRITCHARD,KAAREN PRITCHARD	Connie Kim	10/10/2016	Laura Treadway	07/14/2017					In person		
226645	Received	10/07/2016	Nancy Porter: Not interested in project team visiting property	Brett Watson (Envirotssues) spoke with Marilyn Dennison. She said that it was fine for crews to access her backyard to do a quick visual inspection, and she identified that the lakeline was clearly visible from the end of her neighbor's dock (at 3719 Lake Washington Blvd. N). Marilyn also noted that she heard "gurgling" from her toilets during the maintenance flush in early September, and wanted that note passed along to the project team.	Brett Watson	10/11/2016	Closed						STEPHEN C PORTER,NANCY A PORTER	Connie Kim	10/11/2016	Connie Kim	10/11/2016					In person		
226649	Received	10/11/2016	Marilyn: Approves of access for project team	Brett Watson (Envirotssues) spoke with Robert Taylor. He did not have a problem with project team members accessing his property; however, he noted that it was likely that no one would be home on 10/12 and 10/13 and that the gates to access the back of his property would be locked. He noted that the neighbors in that area of Lake Washington Drive are often on the lookout for visitors, and he noted that it was important to alert as many adjacent neighbors as possible to any upcoming site visits. Brett confirmed an updated cell phone number with Robert (425-615-0480).	Brett Watson	10/11/2016	Closed						DAYTON P DENNISON,MARILYN DENNISON	Connie Kim	10/11/2016	Connie Kim	10/11/2016					In person		
226650	Received	10/11/2016	Robert Taylor: Approves of access to property			10/11/2016	Closed						ROBERT W TAYLOR,ALISON P TAYLOR	Connie Kim	10/11/2016	Connie Kim	10/11/2016					In person		

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226657	Received	10/10/2016	Patrick & Sunday: Gives permission for property access	<p>Hi! Just wanted to give permission to come on over and view property as needed!</p> <p>contact info: Patrick & Sunday Heily 2727 Mt. View Ave. N. We're very last house next to the park and station. My phone is 206 491 3004.</p> <p>I know where our sewer line connects to the city (we had a back up issue in 2014 - flooded our basement...etc, etc...) but if there is something that goes to the lake I have no idea. Sorry.</p> <p>We keep our gates locked (our house was robbed and vandalized a couple years ago) but will happily open if you give me a heads-up on general timing.</p> <p>If there is anything else we can do or provide don't hesitate to ask!</p> <p>Thanks, Sunday Heily</p>		10/11/2016	Closed							JOHN PATRICK HEILY,SUNDAY G HEILY	Connie Kim	10/11/2016	Connie Kim	10/11/2016					Email		
226773	Received	10/10/2016	Marlene: Requests a call back	<p>Phone message from Maureen Winters at 425.417.4722 to David's phone. She would like a call.</p> <p>10/12/16 Mike Benoit with Renton called to let Alison [Carollo] know Marlene Winter at 2731 Mountain View Ave N left a message on Dave's number. She said we can inspect her property but she has dogs that could get out and the gate must be kept closed.</p> <p>This house is NOT one of the properties we'd like to see this week. The Lakeline actually passes on the east side of her house (not in the lake).</p> <p>Alison requested EI give her a quick call back and let her know that project team won't need to be on her property at this time.</p>	Connie Kim	10/12/2016	Closed			10/11/2016	<p>Connie gave Marlene a call who did not answer and had a full inbox. Connie gave Marlene a call later that afternoon and left a brief message based off the talking points and let her know that project team members will be in the area on Thursday and may be interested in accessing her property for a quick visual inspection. Connie left Marlene David's phone number but also noted that she will call again tomorrow morning to try to reach her.</p> <p>10/12/16 Connie spoke with Marlene and let her know that the project team will not need to access her property on 10/13</p>		MARLENE R WINTER	Connie Kim	10/12/2016	Connie Kim	10/12/2016							Email	
226774	Sent	10/11/2016	Outreach to Laurie Baker for access to property	<p>Thank you, Connie</p> <p>I'm contacting you on behalf of David Christensen, City of Renton, in regards to the Kennydale Lakeline Sewer System Evaluation Project. Thank you for contacting us in September about access to the sewer line from the southwest corner of your property. To help the City target future survey efforts, the project team would like to stop by your property on Thursday, October 13, to do a quick visual inspection of the lakeline from your yard. They will be looking to see if the lakeline is visible, so they may need access to your dock if you have one. (You don't need to be home at the time of our visit.)</p> <p>If you are okay with a member of the project team stopping by on Thursday, please simply respond to this email (or contact David Christensen at 425-430-7212).</p> <p>David is also available if you have any additional questions about the overall project, though is out of the office this week (hence my email on his behalf).</p>	Connie Kim	09/18/2017	Closed			10/12/2016	<p>Laurie from the City of Renton.</p> <p>Called Bill Stoneman yesterday afternoon.</p> <p>I was able to address all of his concerns in regards to our project. He has been a resident there for a long time, so has a lot of history. Big thing for him is that in the 70's he was told city sewer project was dead, so he installed a septic system (Even longer history, prior to our install of sewer in the 1970's, the majority of properties where direct discharge to the lake, as most were vacation homes historically, not regular residences. One year later the LID was formed and now he had to pay for sewer twice. I fully understand his frustration. He also had to work thru out work in the mid-80's with the failed valves, now is concerned that he will once again have to pay. I assured him that we are not looking to assess the individuals on the lake, but to have project costs covered through rates.</p>		LAURIE L BAKER	Connie Kim	10/12/2016	Laura Treadway	09/19/2017							Email	
226877	Sent	10/13/2016	Bill Stoneman: Questions about the project status and history	<p>Brett Watson/Enviroissues called Bill Stoneman (3101 Mountain View Avenue) on behalf of David Christensen/City of Renton to follow up on questions that Bill had regarding the Kennydale Lakeline Assessment Project.</p> <p>Bill was generally frustrated with the assessment, and he noted that:</p> <ul style="list-style-type: none"> The lakeline was installed after he had paid to connect and pump effluent to the system that runs along Lake Washington Blvd This is the third assessment in 40 years; cited concerns that the initial construction of the lakeline was incorrectly managed He was unhappy that he will have to "pay for another assessment" (Brett tried to discern whether or not he meant by use of public funds, or if he thought that he was going to be individually charged, but couldn't tell) He would consider looking into legal recourse if charged for the assessment <p>Brett thanked Bill for providing the team with his questions, and he said that he would pass the noted concerns along to David. Brett said that Bill could expect a call back within the next week.</p> <p>Brett Watson/Enviroissues called Anne Sims (3001 Mountain View Ave. N) and Darius and Vicki Richards (3605 Lake Washington Blvd. N) to provide them with a courtesy reminder that a project team member would stop by in the morning to conduct a quick visual inspection of the lakeline along their property.</p>	Brett Watson	01/18/2018	Closed				<p>Lastly, we talked about the project and I mentioned the potential of moving</p>	10/18/2016	WILLIAM C STONEMAN	Brett Watson	10/13/2016	Laura Treadway	01/19/2018						Phone		
226879	Sent	10/13/2016	Property Visit Courtesy Reminders	<p>Anne noted that her dog (Whirley) may be around but should not give staff any issues. She also said that there are workers refinishing her entry way area and that she wouldn't be home, so no need for the project team to knock.</p> <p>Hi Steve,</p> <p>I'm part of the City of Renton's Kennydale Lakeline Assessment project team, and wanted to let you know that there are surveyors will be in the area tomorrow and/or Thursday (weather permitting) to do additional work. Team members may again visit your yard to survey the lakeline and connected elements based on what we were able to learn earlier in the month. You might also see boats in the area, as our team takes a look from the water.</p> <p>Thanks for your help as we complete this important work. If you have any questions or concerns, please contact Dave Christensen (copied above, and at 425-430-7212).</p>	Brett Watson	10/13/2016	Closed			10/13/2016				ANNE F SIM CONNER,VICKI L RICHARDS,DARIUS RICHARDS	Brett Watson	10/13/2016	Brett Watson	10/14/2016					Phone		
227656	Sent	10/25/2016	Survey Reminder Email	<p>Thanks for your help as we complete this important work. If you have any questions or concerns, please contact Dave Christensen (copied above, and at 425-430-7212).</p>	Sarah Brandt	10/26/2016	Closed				<p>Sounds Good Thanks for the information...</p> <p>Steve Leighton President/General Manager Precision Iron Works Inc. (253)887-5555 x214 (206)919-8774 Cell</p>		STEVE LEIGHTON	Brett Watson	10/26/2016	Brett Watson	10/26/2016							Email	

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				<p>Kennydale lakeline update: Surveyors working tomorrow / Thursday</p> <p>Hi Laurie,</p> <p>I'm part of the City of Renton's Kennydale Lakeline Assessment project team, and wanted to let you know that surveyors will be in the area tomorrow and/or Thursday (weather permitting) to do additional work. Team members may again visit your yard to survey the lakeline and connected elements based on what we were able to learn earlier in the month. You might also see boats in the area, as our team takes a look from the water.</p> <p>Thanks for your help as we complete this important work. If you have any questions or concerns, please contact Dave Christensen (copied above, and at 425-430-7212).</p>																				
227657	Sent	10/25/2016	Survey Reminder Email			10/26/2016	Closed				All,		LAURIE L BAKER	Brett Watson	10/26/2016	Brett Watson	10/26/2016						Email	
											Just spoke with Melanie Crooker at 3111 Mtn View Av N. She is fine with us visiting her property. Also please update our record to her name as her Husband recently passed away. Contact phone number for Melanie is 321.544.1481.													
227659	Received	10/21/2016	Request for Property Access	Call to Kenneth (who we learned recently passed away) requesting access to 3111 Mountain View Avenue for a quick visual survey.	Connie Kim	10/26/2016	Closed			10/25/2016	Dave C.	10/25/2016	MELANIE CROOKER	Brett Watson	10/26/2016	Brett Watson	10/26/2016						Email	
227661	Sent	10/21/2016	Call: Request for property access	Connie Kim/Envirotissues called the number for Boydston Enterprises in Renton-- accessed a family member of Tony who provided her with a cell phone number for Tony (206.999.9763). Tony responded to a voicemail on this number denying the project team's request to access his property. He noted that access to the lake from his property would require access to his home. Tony noted that his next door neighbors (to the South) do not live at the home anymore and teams could probably access their dock. Tony Expressed frustration with the process.	Connie Kim	09/18/2017	Closed						TONY BOYDSTON	Brett Watson	10/26/2016	Laura Treadway	09/19/2017						Phone	
227662	Received	10/06/2016	Call: Property Access Request	Brett Watson/Envirotissues called Anne Sim to request project team access for a visual inspection of the lakeline. Anne approved access and noted that the lakeline is visible from her property's dock (walk out about 15-20 feet & look to the south). Anne noted that the area near shore was recently landscaped and she requested that crews use concrete pads to access. Dog named Whirley may be out, but is friendly and has an invisible fence. Brett Watson/Envirotissues called John and Betsy Burroughs (2815 Mountain View Ave) to request project team access for a quick visual inspection of the lakeline. Betsy approved access and noted that they are currently living out of town.	Brett Watson	10/26/2016	Closed						ANNE F SIM CONNER	Brett Watson	10/26/2016	Brett Watson	10/26/2016						Email	
227663	Sent	10/06/2016	Call: Request for Property Access	Brett Watson/Envirotissues called Gerald Brennan (3405 & 3411 Lake Washington Blvd.) to see if crews could access his properties for a quick visual inspection. Gerald approved access.	Brett Watson	09/18/2017	Closed						JOHN D BURROUGHS,BETSEY BURROUGHS	Brett Watson	10/26/2016	Laura Treadway	09/19/2017						Phone	
227664	Sent	10/06/2016	Call: Request for Property Access		Brett Watson	09/18/2017	Closed						GERALD F BRENNAN	Brett Watson	10/26/2016	Laura Treadway	09/19/2017						Phone	
											[David received a call back from Mr. Richards at 3605 Lake Wa Blvd N. in response to voicemail. He is good with us visiting and should be home on both the 12 and 13th. Would like a call before we arrive as a reminder. 425-430-4469.]													
227665	Sent	10/06/2016	Call: Request for Property Access	Brett Watson/Envirotissues left a voicemail for Darius and Vicki Richards (3605 Lake Washington Blvd.) to see if crews could access their property for a quick visual inspection.	Brett Watson	09/18/2017	Closed			10/06/2016			VICKI L RICHARDS,DARIUS RICHARDS	Brett Watson	10/26/2016	Laura Treadway	09/19/2017						Phone	
227666	Sent	10/06/2016	Call: Request for Property Access	Brett Watson/Envirotissues left a voicemail for Marilyn and Dayton Dennison (3717 Lake Washington Blvd.) to see if crews could access their property for a quick visual inspection.	Brett Watson	09/18/2017	Closed						DAYTON P DENNISON,MARILYN DENNISON	Brett Watson	10/26/2016	Laura Treadway	09/19/2017						Phone	
227667	Sent	10/06/2016	Call: Request for Property Access	Brett Watson/Envirotissues left a voicemail for Marilyn and Dayton Dennison (3717 Lake Washington Blvd.) to see if crews could access their property for a quick visual inspection. Renton sent a letter to priority lakeline properties that the project team has been unable to contact for approval:	Brett Watson	09/18/2017	Closed						DAYTON P DENNISON,MARILYN DENNISON	Brett Watson	10/26/2016	Laura Treadway	09/19/2017						Phone	
				Dear NAME:																				
				Thank you very much for your patience over the past several weeks as crews worked in your neighborhood to perform maintenance work and conduct initial assessments on the Kennydale Lakeline Sewer System. Our project team will continue assessment efforts in the coming weeks from both the shore and the water.																				
				Members of the project team are interested in stopping by your property to perform a quick visual inspection. They will be looking to see if the lakeline is visible, so they may need to access your dock if you have one. So far, efforts to reach you directly have not succeeded.																				
				Please contact me as soon as possible to discuss this potential visit and to share your preferred contact information. We are aiming to conclude these visits during early November. You may reach me directly at 425 430-7212 or by email at dchristensen@rentonwa.gov.																				
				Sincerely,																				
				[SIGNATURE]																				
				David Christensen Wastewater Utility Manager City of Renton																				
227675	Sent	10/25/2016	Letter: Request for Contact Information			09/18/2017	Closed						ROBERT H BURR,JEANNE C DEMUND,WARREN ERIC LINDBLAD,ADRIENNE LINDBLAD,FRITZ W NELSON,MARC PRITCHARD,KAAREN PRITCHARD,BEVERLY REIMERS,MILTON A REIMERS JR,JEFFREY T RILEY,TAMI H RILEY,ROSEMARY ZILMER,MARK E ZILMER	Brett Watson	10/26/2016	Laura Treadway	09/19/2017						Mailing	
				Darius Richards was home for the site visit on 10/13 at 11am. He showed Dave Scott and Alison Payauys into his backyard through the south gate. He explained the location where he believed the lakeline crossed his dock and waterfront. Lakeline was not visible. He said there was a cleanout or valve near the start of the dock that is now buried. He also pointed out a spot next to the house where there was a cleanout or valve.																				
227692	Received	10/27/2016	3605 Lake WA Blvd Site Visit 10/13			10/27/2016	Closed					10/13/2016	VICKI L RICHARDS,DARIUS RICHARDS	Alison Payauys	10/27/2016	Alison Payauys	10/27/2016						In person	
				Marilyn Dennison was home for the site visit on 10/13. She directed Dave Scott and Alison Payauys to access the backyard along the north side of the house. She pointed out the cleanout in her yard and the lateral running along the neighbors dock. She pointed out the buoy for Site 1 Manhole to the north. She mentioned the City had worked on a problem with the sewer in her backyard for a year. Unclear what exactly was done or when.																				
227695	Received	10/27/2016	3717 Lake WA Blvd Site Visit 10/13			10/27/2016	Closed					10/13/2016	MARILYN DENNISON	Alison Payauys	10/27/2016	Alison Payauys	10/27/2016						In person	
				Robert Burr was home for the site visit on 10/26. He approved access to his docks. Stan Job and Alison Payauys inspected the docks and the cleanout/monitoring location. Robert came outside to look for the lakeline from the docks. He provided his cell number, 425-941-4004, for the project team to call as needed.																				
227696	Received	10/27/2016	3013 Mountain View Site Visit 10/26			10/27/2016	Closed					10/26/2016	ROBERT H BURR	Alison Payauys	10/27/2016	Alison Payauys	10/27/2016						In person	
				Hi David,																				
				I got you letter regarding needing access to our property at 2807 Mountain View Ave N, Renton.																				
				You can contact me at this email address or on my cell at 206-226-4300																				
				Kaaren Pritchard																				
				Replenishment Buyer Women's Shoes [206]303-1612																				
228021	Received	10/29/2016	Kaaren: Approval for accessing priority property			11/02/2016	Closed			10/31/2016			KAAREN PRITCHARD	Connie Kim	11/02/2016	Connie Kim	11/03/2016						Email	
				Adrienne: Approval for accessing priority property																				
228023	Received	11/02/2016	Adrienne: Approval for accessing priority property	David Christensen spoke with Adrienne Lindblad at 3233 Mountain View Av N (cell number 253.347.5964) and she has no problem with us accessing her property/dock through the existing gate for our work.	Sarah Brandt	11/02/2016	Closed						ADRIENNE LINDBLAD	Connie Kim	11/02/2016	Connie Kim	11/03/2016						Email	

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228025	Received	11/02/2016	Jeanne: Approval for accessing priority property	<p>Dear Mr. Christensen, Please ask the relevant person to call me at their convenience at 206-898-9818, to discuss when they would like to look at the lakeline at my home.</p> <p>Best regards, Jeanne DeMund 2811 Mountain View Ave. N. Renton WA 98056</p>		11/02/2016	Closed			11/02/2016	<p>Sarah, See information below. I spoke with Ms. Demund just now and she is fine with us accessing here property. However, need to contact ahead to get through her gate, she locks it when she is not there, or if we have permission from neighbor on either side, she said it is easy to go across and on to here property that way. Dave C.</p>			JEANNE C DEMUND	Connie Kim	11/02/2016	Connie Kim	11/03/2016					Email		
228040	Received	11/03/2016	Approval to access property	<p>Sarah, Received a call today from Rosemary Zilmer at 3837 Lake Wa Blvd. She is fine with us accessing her property for inspection. Contact phone number is 206.799.0361. Dave C.</p>	Brett Watson	11/03/2016	Closed			11/03/2016	<p>Thanks for the info. I talked with Mr. Dahlby this A.M. and explained the purpose of our overall project. I also let him know that we would note the specific issues he has had over the years as a result of the valve and materials hanging up in the valve. I let him know that we are looking both near term and long term for the project and I said we would also look at any potential even shorter term solutions we may be able to implement as we proceed with our project. He is O.K. with this proposal. Still not totally happy with us until we better resolve the issue at this location.</p>	11/01/2016	ROSEMARY ZILMER	Brett Watson	11/03/2016	Brett Watson	11/03/2016							Email	
228402	Received	11/08/2016	Thomas Dahlby: Problems with closed valve	<p>Hi Dave, Stan received a call from Thomas Dahlby @ 3217 MNT. View Ave N. yesterday 11-7-16 stating that the valve was closed. He sent Shane out to check valve. Wastewater crew responded and CCTV'd line with Mini-camera his line is laid pretty flat and had a lot of toilet paper standing in spots, and appears that the valve can be turned too far ...open which in turn goes over center essentially partially closing valve. The valve also is recessed bottom potentially catching paper and so Mr. Thomas Dahlby would like to speak with you. His phone number is (425) 891-3775 or E-mail is Thomas.Dahlby@Yahoo.com</p>		09/25/2017	Closed				<p>I think your explanation regarding how we handle this valve helps, but the simple fact is that this property is at a very low elevation, the valve, even when properly open, is not conducive to have sewage flow through it and has a high tendency to have material catch and cause a blockage. Probably should be one of the things the team looks at early is replacement valves</p>			THOMAS R DAHLBY	Connie Kim	11/08/2016	Laura Treadway	09/25/2017					Email		
258036	Sent	10/06/2016	Call: Left voicemail	Left voicemail about access to priority property		07/17/2017	Closed							MICHAEL H ATKINSON, CHERYL L ATKINSON	Laura Treadway	07/17/2017	Laura Treadway	07/18/2017					Phone		
258041	Sent	10/06/2016	Call: Left voicemail	Left voicemail about access to priority property		07/17/2017	Closed							STEPHEN C PORTER, NANCY A PORTER	Laura Treadway	07/17/2017	Laura Treadway	07/18/2017					Phone		
258042	Sent	10/06/2016	Call: Left voicemail	Left voicemail about access to priority property		07/17/2017	Closed							MELANIE CROOKER	Laura Treadway	07/17/2017	Laura Treadway	07/18/2017					Phone		
258044	Sent	10/06/2016	Call: Left voicemail	Left voicemail about access to priority property		07/17/2017	Closed							MARK E ZILMER, ROSEMARY ZILMER	Laura Treadway	07/17/2017	Laura Treadway	07/18/2017					Phone		
258045	Sent	10/06/2016	Call: Left voicemail	Left voicemail about access to priority property		07/17/2017	Closed							KEVIN L LINDAHL	Laura Treadway	07/17/2017	Laura Treadway	07/18/2017					Phone		
258046	Sent	10/07/2016	Left door hanger	[Not home when conducting in-the-field outreach; hanger with message to contact David left on the door.]		09/18/2017	Closed							MICHAEL H ATKINSON, ROBERT H BURR, MELANIE CROOKER, JEANNE C DEMUND, KEVIN L LINDAHL, ADRIENNE LINDBLAD, WARREN ERIC LINDBLAD, FRITZ W NELSON, BEVERLY REIMERS, MILTON A REIMERS JR, JEFFREY T RILEY, TAMI H RILEY, ROSEMARY ZILMER, MARK E ZILMER	Laura Treadway	07/17/2017	Laura Treadway	09/18/2017					In person		
258047	Sent	10/07/2016	Left door hanger	[Left door hanger while doing in-the-field outreach to priority properties.] David, Can you keep me informed via email? Thanks		07/17/2017	Closed							GERALD F BRENNAN, JOHN D BURROUGHS, BETSEY BURROUGHS, CHARLES F CONNER, ANNE F SIM CONNER, VICKI L RICHARDS, DARIUS RICHARDS	Laura Treadway	07/17/2017	Laura Treadway	07/18/2017					In person		
258048	Received	10/10/2016	Email: Requesting updates	Steve and Lisa Leighton 3307 Mountain view ave north Renton.... Steve Leighton President/General Manager Precision Iron Works Inc. (253)887-5555 x214 (206)919-8774 Cell		07/17/2017	Closed							STEVE LEIGHTON, LISA LEIGHTON	Laura Treadway	07/17/2017	Laura Treadway	07/18/2017					Email		
258049	Sent	10/11/2016	Call: Regarding access	Call made on 10/11; Stephen is alerted and we are good to access [Received phone message from Marlene Winter at 2731 Mtn View. Concern is possible disruption of new expensive lawn as part of our work. Property is two north of flush station. Lakeline is not in Lake at this point therefore we will not be disturbing her property.]		09/18/2017	Closed							STEVE LEIGHTON	Laura Treadway	07/17/2017	Laura Treadway	09/19/2017					Phone		
260040	Received	08/10/2017	Phone call: Concerns about lawn - do not disturb	JOHN H will follow up with return call. Her number is 425.417.4722. Dave C] [Marlene called David C. with a reminder about her lawn after receiving a door hanger: Just a reminder, I did get a call from Property Owner at 2731 Mtn View reminding us not to excavate on her property without first contacting her and coordinating, especially with her special lawn. Name: Marlene Winters Phone Number: 425.417.4722]		08/10/2017	Closed							MARLENE R WINTER	Laura Treadway	08/10/2017	Laura Treadway	08/10/2017					260040 FW Kenny dale Lakeline.msg (8/10/2017)		
265631	Received	08/24/2017	Phone call: Reminder about lawn	Let go. We can locate next door (3405 and 3411). Visited; pipe not visible but good location to probe; send Surveyor back New one to add, expect exposed pipe, may have better luck reaching owner. Visited; pipe visible at 3411; send Surveyor back to both 3405 and 3411. Try Again; since City crews access the monitoring point here he may feel he doesn't need to give special permission. Visited; very rocky; done at site. Visited; pipe visible; send Surveyor back. Let go. We should be ok with locating next door (3107). Try Again - exposed pipe. Visited; pipe not visible, likely better locating to north. Let go. Visited; pipe covered, optional location for Surveyor to probe. Try Again - exposed pipe. Try Again. If can't reach we can locate adjacent in water. New one to add, expect exposed pipe, may have better luck reaching owner. Try Again - exposed pipe. Try Again - exposed pipe. Try Again. If can't reach we can locate adjacent in water.		08/25/2017	Closed							MARLENE R WINTER	Laura Treadway	08/25/2017	Laura Treadway	08/25/2017					265631 RE In-Lake Survey Schedule.msg (8/25/2017)		
266861	Sent	10/13/2016	Carollo Site Visit Notes: Let go	Visited; pipe not visible but good location to probe; send Surveyor back		09/18/2017	Closed							MICHAEL H ATKINSON, CHERYL L ATKINSON	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266862	Sent	10/13/2016	Carollo Site Visit Notes: Visited	Visited; pipe visible at 3411; send Surveyor back to both 3405 and 3411.		09/18/2017	Closed							LAURIE L BAKER	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266863	Sent	10/13/2016	Carollo Site Visit Notes: To add	Visited; pipe visible at 3411; send Surveyor back to both 3405 and 3411.		09/18/2017	Closed							TONY BOYDSTON	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266864	Sent	10/13/2016	Carollo Site Visit Notes: Visited	Visited; pipe visible at 3411; send Surveyor back to both 3405 and 3411.		09/18/2017	Closed							GERALD F BRENNAN	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266866	Sent	10/13/2016	Carollo Site Visit Notes: Try again	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							ROBERT H BURR	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266867	Sent	10/13/2016	Carollo Site Visit Notes: Visited	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							JOHN D BURROUGHS, BETSEY BURROUGHS	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266868	Sent	10/13/2016	Carollo Site Visit Notes: Visited	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							CHARLES F CONNER, ANNE F SIM CONNER	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266869	Sent	10/13/2016	Carollo Site Visit Notes: Let go	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							MELANIE CROOKER	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266870	Sent	10/13/2016	Carollo Site Visit Notes: Try again	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							JEANNE C DEMUND	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266871	Sent	10/13/2016	Carollo Site Visit Notes: Visited	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							DAYTON P DENNISON, MARILYN DENNISON	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266872	Sent	10/13/2016	Carollo Site Visit Notes: Visited	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							STEVE LEIGHTON, LISA LEIGHTON	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266873	Sent	10/13/2016	Carollo Site Visit Notes: Try again	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							KEVIN L LINDAHL	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266874	Sent	10/13/2016	Carollo Site Visit Notes: Try again	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							WARREN ERIC LINDBLAD, ADRIENNE LINDBLAD	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266875	Sent	10/13/2016	Carollo Site Visit Notes: To add	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							VICTORIA LITTLEMAN	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266876	Sent	10/13/2016	Carollo Site Visit Notes: Try again	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							FRITZ W NELSON	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266877	Sent	10/13/2016	Carollo Site Visit Notes: Try again	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							MARC PRITCHARD, KAAREN PRITCHARD	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		
266878	Sent	10/13/2016	Carollo Site Visit Notes: Try again	Visited; pipe not visible, likely better locating to north. Let go.		09/18/2017	Closed							BEVERLY REIMERS, MILTON A REIMERS JR	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017					In person		

COMMUNICATIONS

Communication ID	Sent/received	Date received	Title	Communication	Assigned to	Date assigned	Communication status	Initial response date	Initial response	Response date	Response	Due date	Contacts	Created by	Date created	Last modified by	Date modified	Latitude	Longitude	Source	Documents	Notes
266879	Sent	10/13/2016	Carollo Site Visit Notes: Visited	Visited; pipe not visible but good location to probe; send Surveyor back.		09/18/2017	Closed						VICKI L RICHARDS,DARIUS RICHARDS	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017			In person		
266880	Sent	10/13/2016	Carollo Site Visit Notes: Try again	Try Again.		09/18/2017	Closed						JEFFREY T RILEY,TAMI H RILEY	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017			In person		
266881	Sent	10/13/2016	Carollo Site Visit Notes: Try again	Try Again - exposed pipe. Need to coordinate a time when we can inspect or get ok to access dock from water.		09/18/2017	Closed						ROBERT W TAYLOR,ALISON P TAYLOR	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017			In person		
266882	Sent	10/13/2016	Carollo Site Visit Notes: Try again	Try Again.		09/18/2017	Closed						MARK E ZILMER,ROSEMARY ZILMER	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017			In person		
266883	Sent	10/13/2016	Carollo Site Visit Notes: Visited	Visited; pipe not visible but good location to probe; send Surveyor back.		09/18/2017	Closed						KING COUNTY-PARKS	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017			In person		
266888	Sent	10/21/2016	Call: Left voicemail	Left voicemail requesting access to property.		09/18/2017	Closed						KEVIN L LINDAHL,VIKTORIA LITTLEMAN	Laura Treadway	09/18/2017	Laura Treadway	09/18/2017			Phone		
266892	Sent	10/25/2016	Call: Courtesy reminder	Left voicemail with a courtesy reminder of upcoming surveys.		09/18/2017	Closed						JOHN PATRICK HEILY,SUNDAY G HEILY	Laura Treadway	09/18/2017	Laura Treadway	09/19/2017			Phone		
266893	Sent	10/25/2016	Call: Spoke to Marlene Winter	Noted that she has 2 dogs and crews MUST close both gates when walking in and out to prevent them from running away.		09/18/2017	Closed						MARLENE R WINTER	Laura Treadway	09/18/2017	Laura Treadway	09/19/2017			Phone		
266894	Sent	10/25/2016	Call: Spoke to Betsey Burroughs	Spoke with Betsy who said that people will be in and out of the house and might not be home but is okay with crews stopping by.		09/18/2017	Closed						JOHN D BURROUGHS,BETSEY BURROUGHS	Laura Treadway	09/18/2017	Laura Treadway	09/19/2017			Phone		
266895	Sent	10/25/2016	Call: Spoke with the Connors	Won't be home, out of country but is okay with crews stopping by. Notes that dog named "Whirley" is very friendly.		09/18/2017	Closed						CHARLES F CONNER,ANNE F SIM CONNER	Laura Treadway	09/18/2017	Laura Treadway	09/19/2017			Phone		
266896	Sent	10/25/2016	Call: Courtesy reminder	Left voicemail with a courtesy reminder of upcoming surveys.		09/18/2017	Closed						GERALD F BRENNAN	Laura Treadway	09/18/2017	Laura Treadway	09/19/2017			Phone		
266897	Sent	10/25/2016	Call: Courtesy reminder	Left voicemail with a courtesy reminder of upcoming surveys.		09/18/2017	Closed						VICKI L RICHARDS,DARIUS RICHARDS	Laura Treadway	09/18/2017	Laura Treadway	09/19/2017			Phone		
266898	Sent	10/25/2016	Call: Courtesy reminder	Left voicemail with a courtesy reminder of upcoming surveys.		09/18/2017	Closed						DAYTON P DENNISON,MARILYN DENNISON	Laura Treadway	09/18/2017	Laura Treadway	09/19/2017			Phone		
266956	Sent	09/06/2017	Renton Site Visit Notes: No answer	Summary of Communication with City Employees Door hanger and card left on 9/6/17 Summary of Communication with City Employees City spoke with owner. Talked with Bill on multiple occasions. Bill was helpful in showing locations of 3 cleanouts (8/23). Talked with Bill about trimming bushes near cleanout on 8/24/17. Bill indicated he would remove bushes and bolts himself. Completed Work and Investigations by City Staff Cleanout #1: Located in front driveway, 16 ft off front of house in a 16" x 24" metal box/lid. Cleanout #2: Located on the north side walkway heading towards house. 16" x 24" metal box/lid. Cleanout #3: Located north of front door on walkway. 16" x 24" metal box/lid. Additional Notes on Work Done by City Staff No need for marking cleanouts. Cleanouts are located in plain sight with rectangular metal lids. Mini cam down cleanout next to was underwater. Went out 90'. Removed bolts from flange using grinder. Installed new bolts and nuts. Items City Staff Denoted for Follow-up Needed Bolts and hedging still not removed by homeowner via his request to do so himself.		09/19/2017	Closed						JOHN PATRICK HEILY,SUNDAY G HEILY	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	2727 Mnt View.pdf (9/19/2017)	
266957	Sent	08/24/2017	Renton Site Visit Notes: Cleanouts located	Additional Follow-up for Homeowner Homeowner stated bushes covering cleanout would be trimmed and bolts removed prior to additional work. Summary of Communication with City Employees City with spoke with owner, Kaaren (8/16/17), and she was not able to give any information about locations of valves or cleanouts. Gave permission to dig etc. as needed to locate cleanout and valve. Completed Work and Investigations by City Staff Located cleanout that appeared to be from 2807. Located under back deck, 42" off back of house and 32" off edge of house. Confirm with as-built. Additional Notes on Work Done by City Staff Cleanout was marked using GPS from top of decking (8/23/17). Held off on further checking of cleanout condition due to pulling up the decking. Items City Staff Denoted for Follow-up Needed Opened and marked with whisksers (8/28/17) Photos taken to show condition (8/28/17)		09/19/2017	Closed						WILLIAM F KEPPLER,DEBRA L KEPPLER	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	2805 Mt View Ave N.pdf (9/20/2017)	
266958	Sent	08/16/2017	Renton Site Visit Notes: Cleanout located	Carollo Follow-up and Clarification Items Clarification needed. What was located and whiskered on 8/28? Confirm if cleanout located is for 2807 and 2811. Summary of Communication with City Employees Made contact with owner on 8/16/17. Owner described a water meter box in backyard with a sewer valve inside. Completed Work and Investigations by City Staff Dug up cleanout and located valve in backyard on 8/16/17. Valve has easy access and a box around it. Clean out is also in box, but lid won't come off. Rusty bolts need to be removed to open. Additional Notes on Work Done by City Staff Valve location 13 feet from bulkhead heading east towards the house and 12 feet off house. (8/16/17) Clean out 12 feet off bulkhead directly in front of a valve and 13 feet off the house. (8/16/17) Both cleanout and valve have been GPS'ed, photographed, and cleanout reburied. Summary of Communication with City Employees Spoke with owner on 8/16/17. Found PVC cleanout in the concrete. Owner gave contact info for their Contractor, Dave Ellwell: DMEconstruction@msn.com, 425-451-4967		09/19/2017	Closed						MARC PRITCHARD,KAAREN PRITCHARD	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	2807 Mtn View Ave N.pdf (9/20/2017), 2807 Mtn View.pdf (9/20/2017), 2807, 2811, 2909, 3001 Map.pdf (9/20/2017), 2807, 2811, 2909, 3001 Mtn View Ave N Map.pdf (9/20/2017)	
266959	Sent	08/16/2017	Renton Site Visit Notes: Located cleanout and valve	Completed Work and Investigations by City Staff Located cleanout next to house. 8" Metal c/o lid with 4" c/o PVC pipe. No valve located. (8/16/17) Cleanout was photographed, GPS'ed, and opened. (8/28/17). Additional Notes on Work Done by City Staff Cleanout located 3 feet off corner of house (west, facing bulkhead) in side concrete patio. 20 feet east of bulk head. Items City Staff Denoted for Follow-up Needed As-built pulled and valve located, GPS and bolts removed if necessary (8/28/17).		09/19/2017	Closed						JOHN D BURROUGHS,BETSEY BURROUGHS	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	2815 Mtn View Ave N.pdf (9/20/2017)	
266960	Sent	08/16/2017	Renton Site Visit Notes: Cleanouts located	Carollo Follow-up and Clarification Items Confirm if City located valve. Summary of Communication with City Employees City met with the builder of dock and pile driving, Tyler Somers. The house is being torn down and new headwall and bulkhead are being installed. There was no visible cleanout. City staff helped locate sewer in lake to ensure line is not impacted.		09/19/2017	Closed						RICHARD SCOTT HOWELL,LOIS A HOWELL	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	2827 Mtn View Ave N.pdf (9/20/2017)	
266961	Sent	09/05/2017	Renton Site Visit Notes: Spoke with dock builder	Completed Work and Investigations by City Staff No visible cleanout. House being torn down. Summary of Communication with City Employees City spoke with owner about the Lakeline project. Owner asked about PSE contacting him regarding putting a gas line through sewer line. Owner was given Rocky's card regarding this cross drilling. Completed Work and Investigations by City Staff Cleanout was dye tested and revealed sewer was connected to surface water drain. Contractors were brought in to repair. Cleanout was minicammed. Cleanout has metal lid with PVC pipe twist cap.		09/19/2017	Closed						JOOS FAMILY LLC,PAUL JOOS	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	2909 Mt View Ave N.pdf (9/20/2017), 2909 Mtn View Ave N Locate Ticket.pdf (9/20/2017)	
266962	Sent	08/23/2017	Renton Site Visit Notes: Dye test shows misconnection; repaired	Carollo Follow-up and Clarification Items Confirm cleanout locations.		09/19/2017	Closed						ANTONIO MANDARANO	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3003 Mt View Ave N As-Built.pdf (9/20/2017), 3003 Mt View Ave N.pdf (9/20/2017)	

COMMUNICATIONS

Communication ID	Sent/received	Date received	Title	Communication	Assigned to	Date assigned	Communication status	Initial response date	Initial response	Response date	Response	Due date	Contacts	Created by	Date created	Last modified by	Date modified	Latitude	Longitude	Source	Documents	Notes
266963	Sent	08/29/2017	Renton Site Visit Notes: Cleanout located	<p>Summary of Communication with City Employees City spoke met homeowner on 8/29/17, homeowner showed location of cleanout in backyard flower bed.</p> <p>Completed Work and Investigations by City Staff Found cleanout and marked with whisksers. Took cap off, verified cleanout was clean and functional. Cleanout already at grade and in good shape. GPS and photos taken.</p> <p>Additional Notes on Work Done by City Staff Cleanout is 30 inches off back of house and 13 feet off property line. Marked with whisker on 8/29/17. Cleanout is 4" with a cap.</p>		09/19/2017	Closed						SHAWN LEPROWSE,REBECCA LEPROWSE	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3005 Mt View Ave N.pdf (9/20/2017)	
266964	Sent	08/23/2017	Renton Site Visit Notes: Located cleanout and valve	<p>Summary of Communication with City Employees Owner showed location of valve in backyard on 8/16/17, but did not have information on cleanout. Requested to be notified before digging.</p> <p>Completed Work and Investigations by City Staff Valve is in northwest corner of yard near bulkhead. Valve cap located and cleaned. Valve key did not fit and valve box full of water. Valve is located down the property line between 3007/3009. Valve is located towards the far end of the backyard near the water, 18" off the fence and 2 feet from first bulkhead. Cleanout appears to be located under bulkhead, but location could not be confirmed.</p> <p>Items City Staff Denoted for Follow-up Needed City indicated valve can not be opened due to angle of pipe and should be replaced.</p>		09/19/2017	Closed						MONICA M FIX	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3007 Mt View Ave N.pdf (9/20/2017)	
266965	Sent	08/16/2017	Renton Site Visit Notes: Valve located	<p>Carollo Follow-up and Clarification Items Clarification needed. Was cleanout located beneath rocks?</p> <p>Summary of Communication with City Employees City interacted with owner who was helpful, but did not know location of valve or cleanout.</p> <p>Completed Work and Investigations by City Staff Found and marked valve (maybe in yard of 3007?), but no visible cleanout. Located what may be a cleanout, but lid won't open. Location of valve 31'-6" west of bottom corner of North end of patio and 4'-6" south of black fence in backyard of 3007.</p> <p>Additional Notes on Work Done by City Staff Additional cleanout located in back patio concrete 6 feet out from back door. Lid needs to be removed, can't be opened.</p>		09/19/2017	Closed						BIN GONG,JIANPING SUN	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3009 Mt View Ave N.pdf (9/20/2017)	
266966	Sent	08/29/2017	Renton Site Visit Notes: Cleanout located	<p>Carollo Follow-up and Clarification Items Confirm that valve located was in yard of 3007.</p> <p>Summary of Communication with City Employees City interacted with homeowner who showed what he thought was cleanout.</p> <p>Completed Work and Investigations by City Staff Cleanout located 15" off south side of house. Cleanout has green lid and lid is located in concrete bricks.</p> <p>Items City Staff Denoted for Follow-up Needed City can not get cap open.</p>		09/19/2017	Closed						PETER SPOUSE	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3011 Mt View Ave N.pdf (9/20/2017)	
266967	Sent	08/16/2017	Renton Site Visit Notes: Two manholes located	<p>Completed Work and Investigations by City Staff Two manholes located on property, A and B. Manhole A was located in driveway and CCTVed on 8/23.17. Located on north side of the house. Cleanout located in Manhole A. 6 feet north of cleanout is a valve.</p> <p>Additional manhole (Manhole B) located 185 feet Northeast of cleanout in Manhole A. Manhole B is located under fruit trees on the property line between 3101 and 3013. Manhole is located 6 feet from grass in the backyard of 3101. Manhole B was not CCTVed.</p>		09/19/2017	Closed						ROBERT H BURR	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3013 Mt View Ave N.pdf (9/20/2017)	
266968	Sent	08/29/2017	Renton Site Visit Notes: Cannot locate cleanout	<p>Completed Work and Investigations by City Staff Searched backyard for cleanout, but could not locate. Inserted minicam in manhole on 3013 property to locate 3015 but camera could not go deep enough.</p> <p>Summary of Communication with City Employees Homeowner showed manhole located in 3013 and indicated that they tie into that manhole.</p>		09/19/2017	Closed						DONALD L SAVOY	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3015 Mt View Ave N.pdf (9/20/2017)	
266969	Sent	08/16/2017	Renton Site Visit Notes: Manhole located	<p>Completed Work and Investigations by City Staff Manhole located in garden 35 feet south of front door. Field inspection showed no direct sign that 3101 ties into sewer line at MH at 3013.</p> <p>Summary of Communication with City Employees Homeowner showed City where valve was.</p>		09/19/2017	Closed						WILLIAM C STONEMAN	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3101 Mt View Ave N.pdf (9/20/2017)	
266970	Sent	08/17/2017	Renton Site Visit Notes: Located cleanout and valve	<p>Completed Work and Investigations by City Staff Sewer valve located in NW corner of yard 6' off bulkhead. Located in a black plastic vault labeled "Irrigation Control Valve". Valve located on lot for 3107. About 15 feet east of the valve in the garden is a 4" PVC stub which appears to be the cleanout.</p> <p>Additional Notes on Work Done by City Staff Second cleanout located 10 feet from hot tub towards the lake along the rock wall. Located 4 feet from bottom of stairs at "V" in rock wall behind a bush.</p>		09/19/2017	Closed						LAURA S MORGAN,JAMES C MORGAN	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3103 Mt View Ave N.pdf (9/20/2017)	
266971	Sent	08/17/2017	Renton Site Visit Notes: Located cleanout and valve	<p>Completed Work and Investigations by City Staff Valve located in SW corner of yard in black plastic vault labeled "irrigation control valve" (Same as 3103). Actually located on the property of 3107. A 4" PVC cleanout is located about 13 feet north of the valve. The cleanout is a 4" PVC stub sticking up out of the ground about 3 feet.</p> <p>Additional Notes on Work Done by City Staff Attempted to CCTV from the cleanout but was unable to get minicam towards lake downstream.</p>		09/19/2017	Closed						O LOWELL ANDERSON,LAURIE L BAKER	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3107 Mt View Ave N.pdf (9/20/2017)	
266972	Sent	08/17/2017	Renton Site Visit Notes: Cleanout located	<p>Summary of Communication with City Employees City made contact with renter, Kateyin (425-444-1412)</p> <p>Completed Work and Investigations by City Staff Cleanout located 2.5 feet south of concrete wall at the bottom of the launch ramp. Cleanout is buried 2 feet deep.</p> <p>Items City Staff Denoted for Follow-up Needed Cleanout needs to be opened and brought up to grade.</p>		09/19/2017	Closed						KATELYNN,MELANIE CROOKER	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3111 Mt View Ave N.pdf (9/20/2017)	
266973	Sent	08/18/2017	Renton Site Visit Notes: Cleanout located	<p>Completed Work and Investigations by City Staff Located cleanout lid in backyard 4 feet east of bulkhead and removed lid. Cleanout is 6" PVC pipe with gripper plug stuck in it. Gripper plug removed and minicam run 2.5 feet down the lateral and 10 feet total. No valve or DI cleanout located.</p>		09/19/2017	Closed						GARY F YOUNG,HELEN YOUNG	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3115 Mt View Ave N.pdf (9/20/2017)	

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				Summary of Communication with City Employees Owner had general idea of valve location.																			
				Completed Work and Investigations by City Staff Found valve lid in NW corner of backyard about 10 feet off the bulkhead. Had to dig to access valve.																			
				Additional Notes on Work Done by City Staff Cleanout located in fire place smokestack on back patio, 6" PVC pipe with cap.																			
266974	Sent	08/18/2017	Renton Site Visit Notes: Located cleanout and valve	Carollo Follow-up and Clarification Items Confirm cleanout location and accessibility of cleanout in smokestack. Summary of Communication with City Employees Talked to homeowners on 8/29, and owners had no information on sewer cleanout, but had as-builts. Owners indicated they would get in touch with City regarding as-built information.		09/19/2017	Closed						CHRIS OPPFELT,HOLLY OPPFELT	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3119 Mt View Ave N.pdf (9/20/2017), 3119 Valve Map.pdf (9/20/2017)		
				Completed Work and Investigations by City Staff Could not locate valve or cleanout at 3205. Waiting on homeowner to provide as-built information.																			
266975	Sent	08/18/2017	Renton Site Visit Notes: Cannot locate cleanout	Additional Follow-up for Homeowner Homeowners informed City they would provide as-built information. As-built information not yet supplied. Summary of Communication with City Employees City met homeowner, who will be out of country until 9/13/17. Owners do not mind if digging needed on property as they are re-doing landscaping.		09/19/2017	Closed						STEPHEN C PORTER,NANCY A PORTER	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3205 Mt View Ave N.pdf (9/20/2017)		
				Completed Work and Investigations by City Staff Located cleanout and valve in SW corner of backyard 10 feet east of bulkhead.																			
266976	Sent	08/18/2017	Renton Site Visit Notes: Located cleanout and valve	Summary of Communication with City Employees Owner knew where cleanout and valves were.		09/19/2017	Closed						DAVID R HUMPHREY,APRIL L HUMPHREY	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3209 Mt View Ave N.pdf (9/20/2017)		
				Completed Work and Investigations by City Staff Owner located two valves and a cleanout 6 feet from bulkhead. Cleanout and valve for 3217 are in the walkway between the yards. Valve for 3213 is between garden box and concrete walkway.																			
266977	Sent	08/18/2017	Renton Site Visit Notes: Located cleanout and valve	Summary of Communication with City Employees City made contact with owner.		09/19/2017	Closed						THOMAS R DAHLBY,KATHLEEN I DAHLBY	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3217 Mt View Ave N.pdf (9/20/2017)		
				Completed Work and Investigations by City Staff Located sewer valve in middle of paved driveway 12 feet east of the garage. Cleanout located 45 feet south of valve in the grass. Located next to an old planter box and apple tree. Located a second cleanout 20 feet north of the driveway for 3233 towards 3307.																			
266978	Sent	08/18/2017	Renton Site Visit Notes: Located cleanout and valve	Summary of Communication with City Employees Homeowner showed valve location. Side gate: 1963.		09/19/2017	Closed						WARREN ERIC LINDBLAD,ADRIENNE LINDBLAD	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3233 Mt View Ave N.pdf (9/20/2017)		
				Completed Work and Investigations by City Staff Located 6" valve in patio at bottom of stairs. This site currently under construction.																			
266979	Sent	08/18/2017	Renton Site Visit Notes: Located cleanout and valve	Summary of Communication with City Employees Construction superintendent helpful. Indicated old D.I. cleanout and valve encased in concrete were removed and replaced with 2 new PVC cleanouts.																			
				Completed Work and Investigations by City Staff Found, marked, and GPS'd 2 PVC cleanouts on south side of house 1 - 4" c/o and 1 - 6" c/o.																			
266980	Sent	08/22/2017	Renton Site Visit Notes: Cleanouts located	Summary of Communication with City Employees Renter (Cheryl Atkinson) was nice and had no issues with accessing property.		09/19/2017	Closed						MICHAEL H ATKINSON,CHERYL L ATKINSON	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3401 Lake WA Blvd.pdf (9/20/2017)		
				Completed Work and Investigations by City Staff Found valve and cleanout about 20 feet north of the northeast corner of the house.																			
				Additional Notes on Work Done by City Staff Marked and GPS'd valve and cleanout.																			
266981	Sent	08/22/2017	Renton Site Visit Notes: Located cleanout and valve	Completed Work and Investigations by City Staff Two Manholes located, "A" and "B". Manhole A is set into the pavers with cleanout accessible under ring and lid. Located 10 feet from the retaining wall to the east, and the lid is painted green. Cleanout is 59" down.		09/19/2017	Closed						GERALD F BRENNAN	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3405 Lake WA Blvd.pdf (9/20/2017)		
				Additional Notes on Work Done by City Staff Manhole B is in the retaining wall. Manhole has a cleanout pipe that comes up to give access to sewer main. Cleanout stack comes up 111" to lid and ring. Main is 89" from ring/lid and the base of the manhole is 102" from ring/lid.																			
266982	Sent	08/23/2017	Renton Site Visit Notes: Two manholes located	Summary of Communication with City Employees City explained that people may be accessing property as part of work. Owner has a large Doberman that can be aggressive. Contact before entering property.		09/19/2017	Closed						KING COUNTY-PARKS	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3501 Lake WA Blvd N.pdf (9/20/2017)		
266983	Sent	08/21/2017	Renton Site Visit Notes: Spoke with homeowner	Summary of Communication with City Employees City made contact with owner who is going out of town around September 9th. Gave permission to perform work as needed in his yard. Owner indicated cleanout under flower bed along the back of the house in southwest corner. Owner believes valve is located a few feet from dock entrance below grass.																			
				Completed Work and Investigations by City Staff Located and marked valve and cleanout. Cleanout and valve between 10' - 13' east of bulkhead. Valve was 3" below grade and cleanout was 17" below grade. Homeowner okay holes for valve and cleanout remaining open.																			
266984	Sent	08/21/2017	Renton Site Visit Notes: Located cleanout and valve	Additional Notes on Work Done by City Staff Cleanout bolts rusted and encased in concrete. Bolts were T-bolts. Summary of Communication with City Employees Owner made aware that property will be accessed to perform needed work. (8/21/17)		09/19/2017	Closed						VICKI L RICHARDS,DARIUS RICHARDS	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3605 Lake WA Blvd N As-Built.pdf (9/20/2017), 3605 Lake WA Blvd N.pdf (9/20/2017)		
				Completed Work and Investigations by City Staff Minicamera for 54.2 feet. GPS'd and whiskered. Valve located under patio carpet.																			
266985	Sent	08/21/2017	Renton Site Visit Notes: Located cleanout and valve	Additional Notes on Work Done by City Staff Cleanout located 6 feet 10 inches from northwest corner of home.		09/19/2017	Closed						ANGELA TROY	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3607 Lake WA Blvd N.pdf (9/20/2017)		
266986	Sent	08/28/2017	Renton Site Visit Notes: Cannot locate cleanout	Summary of Communication with City Employees No one home. No cleanout or valves visible.		09/19/2017	Closed						BANG DAE HEE	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3611 Lake WA Blvd N.pdf (9/20/2017)		
				Summary of Communication with City Employees City made contact with owner on 8/28/17.																			
				Completed Work and Investigations by City Staff 4" Cleanout with brass lid located 2'-4" from southwest corner of home. CCTV performed for 97.3 feet. Located a valve during CCTV 29 feet from house cleanout. Valve buried in flower bed 5'-9" from head wall under a fence.																			
266987	Sent	08/28/2017	Renton Site Visit Notes: Located cleanout and valve			09/19/2017	Closed						BRIAN L FIFE,STEPHANIE C FIFE	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017				3613 Lake WA Blvd N.pdf (9/20/2017)		

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				Summary of Communication with City Employees City made contact with owner on 8/28/17.																		
				Completed Work and Investigations by City Staff Cleanout located 1.5 feet from southwest corner of house. CCTVed for 22.6 feet in the northwest direction to buried valve. Tee at 27.5 feet. Mayor's house may tie in at this point. Noticeable grease in lateral.																		
266988	Sent	08/28/2017	Renton Site Visit Notes: Grease in lateral; cleanout located	Additional Notes on Work Done by City Staff City CCTVed and dye tested and Roto Rooter cleared a blockage. Summary of Communication with City Employees Knocked on door and rang bell on 8/28 and no one home. No visible cleanout. Made contact with owner on 8/29.		09/19/2017	Closed						ANDREW T ALBERTSON,MEGAN L ALBERTSON	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3619 Lake WA Blvd N.pdf (9/20/2017)	
266989	Sent	08/28/2017	Renton Site Visit Notes: Located cleanout and valve	Completed Work and Investigations by City Staff Located 4" PVC cleanout. CCTV minicam for 65 feet, at which point camera could go no further. Valve located at 52 feet with mini cam. Could not confirm if this is the same valve located under neighbor's deck. Summary of Communication with City Employees Made contact with owner who was not aware of any valve or cleanout on property.		09/19/2017	Closed						DENIS W LAW,PATRICIA LAW	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3625 Lake WA Blvd N.pdf (9/20/2017)	
				Completed Work and Investigations by City Staff Original search in back yard and south of side of house revealed nothing. Owner believed valve was under deck in SW corner of yard. Metal detector used to identify valve location. Located 7' off fence to the north. Deck is bulged up and homeowner indicated he will make arrangements to have it exposed.																		
				Items City Staff Denoted for Follow-up Needed Confirm that owner intends to remove decking and expose valve.																		
266990	Sent	08/29/2017	Renton Site Visit Notes: Cannot locate valve	Additional Follow-up for Homeowner Indicated he would remove decking to expose location of valve. Confirm if owner exposing valve. Summary of Communication with City Employees Owner located a black plastic lid in backyard patio pavers that could not be opened. Was not able to identify anything else.		09/19/2017	Closed						JOHN MICHAEL BROWN	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3703 Lake WA Blvd N.pdf (9/20/2017)	
				Completed Work and Investigations by City Staff Opened 4" ABS screw-in cap to reveal cleanout. CCTVed lateral.																		
266991	Sent	08/29/2017	Renton Site Visit Notes: Cleanout located	Additional Notes on Work Done by City Staff Valve potentially located under palm tree in yard. Summary of Communication with City Employees Owner made aware of the need to access the yard. Owner was instructed to contact Dave Christiansen with any further questions.		09/19/2017	Closed						ROBERT DAVID REED,JOAN WU GUANGOLIN	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3707 Lake WA Blvd N.pdf (9/20/2017)	
266992	Sent	08/21/2017	Renton Site Visit Notes: Cannot locate cleanout	Completed Work and Investigations by City Staff No cleanout or valve visible. Summary of Communication with City Employees Owner knew location of valve and cleanout.		09/19/2017	Closed						PAUL L PASQUIER,KARYN A PASQUIER	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3709 Lake WA Blvd N.pdf (9/20/2017)	
				Completed Work and Investigations by City Staff Valve and cleanout located and marked. Located 3 feet west of chain-link fence in the northwest corner of the yard. Located in the yard of 3713 Lake WA Blvd. Shared side sewer with 3713 Lake Wa Blvd.																		
266993	Sent	08/29/2017	Renton Site Visit Notes: Located cleanout and valve	Carollo Follow-up and Clarification Items Confirm valve location and information. Field visit information for 3713 shows only cleanout. Note on 3711 says valve and cleanout present at 3713, but no valve shown in 3713 inspection. Cleanout was located. Summary of Communication with City Employees Owner made aware of the need to access property. Owner has a dog, but the dog is friendly and will likely be inside. Attempt to contact owner prior to entering yard. If no contact is made, the owner has given permission to access the yard.		09/19/2017	Closed						GARY A WEIL	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3711 Lake WA Blvd N.pdf (9/20/2017)	
266994	Sent	08/21/2017	Renton Site Visit Notes: Grease in lateral; cleanout located	Completed Work and Investigations by City Staff Located PVC cleanout that was surcharged and full of grease. Mechanical rodder was used for 100 feet and there were no obstructions or drop levels in the cleanout or lateral. Summary of Communication with City Employees Owner showed a hatch on the deck with a lid to pop open.		09/19/2017	Closed						DOUGLAS HARWOOD,MARJORIE HARWOOD	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3713 Lake WA Blvd N.pdf (9/20/2017)	
266995	Sent	08/29/2017	Renton Site Visit Notes: Valve located; cannot locate cleanout	Completed Work and Investigations by City Staff Opened hatch on back deck and located valve lid. Valve lid opened. Cleanout was buried and digging hit concrete. Drawings show cleanout encased in concrete. Dug down a foot and a half and used a metal detector, but cleanout could not be located. Summary of Communication with City Employees Owner okay with accessing yard. Showed location of cleanout and valve in backyard.		09/19/2017	Closed						KRISTI SUNDERLAND,DAVID WILLIAMSON	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3715 Lake WA Blvd N.pdf (9/20/2017)	
				Completed Work and Investigations by City Staff Located cleanout. Owner indicated sewer crew was on property to respond to a backup. Crew raised cleanout up to grade and supposedly abandoned the valve. Cleanout located in grass 8 feet NW of the house and 7 feet south of the fence.																		
266996	Sent	08/21/2017	Renton Site Visit Notes: Cleanout located	Carollo Follow-up and Clarification Items Confirm if isolation valve was abandoned as indicated by owner. Rocky was mentioned specifically when discussing previous work and abandonment of valve. Summary of Communication with City Employees Need to access property was explained, but owner would like crews to knock on door in case they are home. Owner asked about financial responsibility for work and was referred to Dave Christiansen.		09/19/2017	Closed						DAYTON P DENNISON,MARILYN DENNISON	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3717 Lake WA Blvd N.pdf (9/20/2017)	
266997	Sent	08/21/2017	Renton Site Visit Notes: Valve located	Completed Work and Investigations by City Staff Found valve lid in backyard of 3805, 4 feet north of fence and 6 feet east of bulkhead. Summary of Communication with City Employees Owner knew of general location of a lid. Owner requested to be careful when digging because irrigation is installed. Okay to access property if no one is home. Dog is friendly.		09/19/2017	Closed						REBECCA A BYUS,KEVIN L LINDAHL	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3719 Lake WA Blvd N.pdf (9/20/2017)	
266998	Sent	08/29/2017	Renton Site Visit Notes: Valves located	Completed Work and Investigations by City Staff Found two lids in southwest corner of backyard. South most lid was for a valve, but was underwater. Other circular lid appeared to be for a valve according to drawings, but was also underwater. South most valve supposed to be for 3719 and north most valve supposed to be for 3805 with a shared cleanout. One valve is 4' north of fence and 6' east of bulkhead. Other valve is located 6' north of fence and 7' east of bulkhead. Summary of Communication with City Employees Contact made with owner, owner requested a call in advance to gain access.		09/19/2017	Closed						VIKTORIA LITTLEMAN	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3805 Lake WA Blvd N.pdf (9/20/2017)	
266999	Sent	08/21/2017	Renton Site Visit Notes: Cannot locate cleanout or valve	Completed Work and Investigations by City Staff Gate was unlocked. No valve or cleanout located. Record drawings indicate valve and cleanout shared with 3815.		09/19/2017	Closed						ROBERT W TAYLOR,ALISON P TAYLOR	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3811 Lake WA Blvd N.pdf (9/20/2017)	

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				Summary of Communication with City Employees City made contact with owner. Owner must be contacted prior to work to accessing property to get gate unlocked.																		
267000	Sent	08/29/2017	Ren-ton Site Visit Notes: Located cleanout and valve	Completed Work and Investigations by City Staff Located valve lid under step on far southwest corner of yard. Owner pulled boards off to access. Valve located 10 feet from SW corner of home under wood steps. Cleanout has about 18" of mud in the riser. Summary of Communication with City Employees No contact, neighbors say they rent and are in and out frequently.		09/19/2017	Closed						BRUCE E ERIKSON,MARY R ERIKSON	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3815 Lake WA Blvd N.pdf (9/20/2017)	
267001	Sent	08/29/2017	Ren-ton Site Visit Notes: Cannot locate cleanout or valve	Completed Work and Investigations by City Staff Metal detected around concrete where drawings indicate cleanout is located. Not found at the time. Call Kim for keys to open the gate and access the property. Summary of Communication with City Employees Contact made with owners of 3825. Shared valve and cleanout with 3827.		09/19/2017	Closed						TATYANA BARINOVA,GREG PETERSON	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3821 Lake WA Blvd N.pdf (9/20/2017)	
267002	Sent	09/05/2017	Ren-ton Site Visit Notes: Located cleanout and valve	Completed Work and Investigations by City Staff Valve and cleanout located under deck boards 8 feet west of the stairs down from the house and 4 feet south of rocks stacked north of the dock in back of 3827.		09/19/2017	Closed						FRITZ W NELSON,ANGIE F NELSON	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3825 Lake WA Blvd N.pdf (9/20/2017)	
267003	Sent	09/05/2017	Ren-ton Site Visit Notes: Located cleanout and valve	Summary of Communication with City Employees Neighbors indicated that owners of 3827 do not live on the property and are renovating the house for rentals. Completed Work and Investigations by City Staff Located valve and cleanout under new lower deck. Cleanout bolts encased in concrete and rusty. Summary of Communication with City Employees Owner concerned and interested in the work going on.		09/19/2017	Closed						SCOTT PETETT,ANNE PETETT	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3827 Mt View Dr.pdf (9/20/2017)	
267004	Sent	09/05/2017	Ren-ton Site Visit Notes: Located cleanout and valve	Completed Work and Investigations by City Staff 3837 and 3901 share common side sewer cleanout and valve under 3901 house. Cleanout located 5 feet south of fence near front door of 3901. Located in pavement next to small boat trailer. Cleanout in water meter box. CCTVed to mainline. Summary of Communication with City Employees Owner was not aware of any valve or cleanout on property.		09/19/2017	Closed						MARK E ZILMER,ROSEMARY ZILMER	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3837 Mt View.pdf (9/20/2017)	
267005	Sent	08/29/2017	Ren-ton Site Visit Notes: Located cleanout and valve	Completed Work and Investigations by City Staff Cleanout located 5 feet south of fence near front door. Located in pavement next to small boat trailer. Cleanout in water meter box. CCTVed to mainline. 3837 and 3901 share common side sewer cleanout and valve under 3901 house.		09/19/2017	Closed						TONY BOYDSTON	Laura Treadway	09/19/2017	Laura Treadway	09/19/2017			In person	3901 Lake WA Blvd.pdf (9/20/2017)	
267095	Sent	08/24/2017	CCTV Notes	Minicam used went as far as 90 degree bend. Line full of water.		09/20/2017	Closed						WILLIAM F KEPPLER,DEBRA L KEPPLER	Laura Treadway	09/20/2017	Laura Treadway	09/21/2017			In person		
267096	Sent	08/18/2017	CCTV Notes	Minicam run 2.5 feet down the lateral and 10 feet total.		09/20/2017	Closed						GARY F YOUNG,HELEN YOUNG	Laura Treadway	09/20/2017	Laura Treadway	09/21/2017			In person		
267097	Sent	08/21/2017	CCTV Notes	Minicamera used for 54.2' feet.		09/20/2017	Closed						ANGELA TROY	Laura Treadway	09/20/2017	Laura Treadway	09/21/2017			In person		
267098	Sent	08/28/2017	CCTV Notes	97.3' feet CCTVed. Valve located 29 feet from the house cleanout.		09/20/2017	Closed						BRIAN L FIFE,STEPHANIE C FIFE	Laura Treadway	09/20/2017	Laura Treadway	09/21/2017			In person		
267099	Sent	08/28/2017	CCTV Notes	CCTVed for 22.6 feet in the northwest direction to buried valve. Tee at 27.5 feet. Mayor's house may tie in at this point. Noticeable grease in lateral.		09/20/2017	Closed						ANDREW T ALBERTSON,MEGAN L ALBERTSON	Laura Treadway	09/20/2017	Laura Treadway	09/21/2017			In person		
267100	Sent	08/28/2017	CCTV Notes	CCTV minicam for 65 feet, at which point camera could go no further. Valve located at 52 feet with mini cam.		09/20/2017	Closed						DENIS W LAW,PATRICIA LAW	Laura Treadway	09/20/2017	Laura Treadway	09/21/2017			In person		
267101	Sent	08/29/2017	CCTV Notes	Could not confirm if this is the same valve located under neighbor's deck. CCTV of lateral performed.		09/20/2017	Closed						ROBERT DAVID REED,JOAN WU GUANGOLIN	Laura Treadway	09/20/2017	Laura Treadway	09/21/2017			In person		
267102	Sent	08/21/2017	CCTV Notes	No CCTV performed, but cleanout was filled with grease. Mechanical rodder was used and line roddeed for 100 feet without hitting an obstruction of drop level.		09/20/2017	Closed						DOUGLAS HARWOOD,MARJORIE HARWOOD	Laura Treadway	09/20/2017	Laura Treadway	09/21/2017			In person		
267103	Sent	08/29/2017	CCTV Notes	CCTVed to mainline.		09/20/2017	Closed						TONY BOYDSTON	Laura Treadway	09/20/2017	Laura Treadway	09/21/2017			In person		
267199	Received	09/22/2017	Phone call: requests no survey markers in new wall (1)	Dr. Joos from 2909 Mtn View Av N called Dave C. and left a message. He has requested that we not install the survey markers in his new wall. Left messages at 425-226-2981 (h) an d 206-669-8881 (c)		09/22/2017	Closed			09/22/2017	Dave C. left a message for Dr. Joos that we will not install markers in his new wall, but that our surveyors may identify potential other locations that may work and that we would contact ahead to make sure that area would be acceptable.		PAUL JOOS	Laura Treadway	09/22/2017	Laura Treadway	09/22/2017			Phone	267199 2909 Mountain View Av N.msg (9/22/2017)	
267210	Sent	09/22/2017	Phone call: Work reminder, request for access	Courtesy reminder that work is starting Monday Know we need to work with you to gain access to the property Work is scheduled for Monday Sept. 25 and Thursday Sept. 28 Please call Laura or Dave Christensen to coordinate Crews may also call you from the field Left message at 206-793-1769	Laura Treadway	09/22/2017	Closed						BRUCE E ERIKSON,MARY R ERIKSON	Laura Treadway	09/22/2017	Laura Treadway	09/27/2017			Phone		
267211	Sent	09/22/2017	Phone call: Work reminder, request for access	Courtesy reminder that work is starting Monday Know we need to work with you to gain access to the property Work is scheduled on your property for Monday Sept. 25, although it might be pushed out a week Please call Laura or Dave Christensen to coordinate Left message at 425-430-5476 (h) and 425-615-0480 (c)	Laura Treadway	09/22/2017	Closed						KIM PETERSON	Laura Treadway	09/22/2017	Laura Treadway	09/27/2017			Phone		
267212	Sent	09/22/2017	Phone call: Work reminder, request for access	Courtesy reminder that work is starting Monday Know we need to work with you to gain access to the property Work is scheduled on your property for Thursday Sept. 28 Please call Laura or Dave Christensen to coordinate Left message at 425-417-4722 (h)	Laura Treadway	09/22/2017	Closed						ROBERT W TAYLOR,ALISON P TAYLOR	Laura Treadway	09/22/2017	Laura Treadway	09/27/2017			Phone		
267213	Sent	09/22/2017	Phone call: Courtesy reminder	Courtesy reminder that work is starting Monday Work is scheduled for your property for Monday Sept. 25 We know you had concerns about your lawn and your dogs - work is only expected to be in the front yard, so that should not be an issues Please call Dave Christensen with questions	Laura Treadway	09/22/2017	Closed						MARLENE R WINTER	Laura Treadway	09/22/2017	Laura Treadway	09/27/2017			Phone		
267214	Received	09/22/2017	Phone call: requests no survey markers in new wall (2)	Dr. Joos called Dave C. back. He reiterated desire not to have markers in new bulkhead. Also mentioned that he thought his cleanout was to south with property to south. Also, has no issue if we come up with a different location for us to contact him. He said best contact number for him is 425.417.9955. Kim Peterson called Laura back. He said he would leave the gate open on Monday, Sept. 25. He will let his daughter know crews may be around.		09/22/2017	Closed						PAUL JOOS	Laura Treadway	09/22/2017	Laura Treadway	09/22/2017			Phone	267214 RE 2909 Mountain View Av N.msg (9/22/2017)	
267218	Received	09/22/2017	Phone call: Will leave gate unlocked on Monday	Laura explained the work on his property is survey work that won't be very invasive but there is a chance it might get moved to another day. Kim requested a call back if plans change and the work is not completed Monday. Kim was also curious about the project and Laura gave him a brief overview.	Laura Treadway	09/22/2017	Closed						KIM PETERSON	Laura Treadway	09/22/2017	Laura Treadway	09/27/2017			Phone	267218 3821 Lake Washington Blvd.msg (9/25/2017)	
267280	Received	09/22/2017	Phone call: Tool left behind	Property Owner at 2825 Mtn View let Dave C. know that we left a 1-1/8 inch socket at his property. If we knock on his door on Monday and he will be happy to return to us. Fits the fittings at his house.		09/25/2017	Closed			09/25/2017	Dan confirmed they were able to retrieve the tool from the property owner (9/25/2017).		JOHN D BURROUGHS,BETSEY BURROUGHS,RICHARD SCOTT HOWELL,LOIS A HOWELL	Laura Treadway	09/25/2017	Laura Treadway	09/25/2017			Phone	267280 2825 Mountain View.msg (9/25/2017)	

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267281	Received	09/25/2017	Returned call: Coordinating access	Laura spoke to Mary Erikson regarding fieldwork access to her property. Mary will be in and out today (Sept. 25) running errands. If she is not home when crews approach her property, please try again later, as she may have returned by then. If she sees crews outside near her house, she will talk to them about access to her property. On Thursday (Sept. 28), when they are scheduled for additional work, she can be around to let people in first thing, but otherwise they will not be around later in the day. Since fieldwork schedules are subject to change, Laura said we'd call back closer to Thursday and confirm if first thing Thursday will work for the crews.	Laura Treadway	10/06/2017	Closed			09/27/2017	Laura called to coordinate access for the survey work that remains to be done. She left a message letting the Eriksons know that it does not currently look like the work is expected on Thursday. She also asked if crews visiting on Friday or sometime next week would work for them. Laura committed to calling again when the project schedule for the remaining work is more clear.	09/27/2017	MARY R ERIKSON	Laura Treadway	09/25/2017	Laura Treadway	10/07/2017			Phone	267281 3815 Lake Wa Blvd.msg (9/25/2017)	
267604	Sent	09/29/2017	Phone call: Left message regarding access	Roger from the City left messages on the Eriksons' phones to coordinate access for survey work. Laura spoke with Kim Peterson about work coming up next week. She let him know the work is scheduled for Thursday, but it could be a day earlier or later depending on how other work goes.		09/29/2017	Closed			09/29/2017	Phil from KPG confirmed they were able to map this property on Sept. 29. Laura called and left a message confirming work is planned for Thursday, likely in the morning. She also left her phone number in case there were any questions.		BRUCE E ERIKSON,MARY R ERIKSON	Laura Treadway	09/29/2017	Laura Treadway	09/29/2017			Phone		
268057	Sent	10/06/2017	Phone call: Property access for bulkhead assessment work	He is happy to work with us on access, and requested a call when the date of work is more clear. Laura confirmed we would let him know, probably Tuesday or Wednesday. Laura left a message for the Eriksons, letting them know that bulkhead assessment work is scheduled for their property on Thursday, but it could be a day earlier or later depending on how other work goes.	Laura Treadway	10/10/2017	Closed			10/10/2017	Laura left a message confirming work is planned for Thursday, likely in the morning. If that time is difficult for the Eriksons, Laura left her number for them to call back.	10/10/2017	KIM PETERSON	Laura Treadway	10/06/2017	Laura Treadway	10/11/2017			Phone		
268063	Sent	10/06/2017	Phone call: Property access for bulkhead assessment work	Laura asked if there is a day next week they would prefer crews visit, and said she would call again when the schedule was more clear. Laura spoke with Robert Taylor about access to his property for bulkhead assessment work.	Laura Treadway	10/10/2017	Closed			10/10/2017		10/10/2017	BRUCE E ERIKSON,MARY R ERIKSON	Laura Treadway	10/06/2017	Laura Treadway	10/11/2017			Phone		
268065	Sent	10/06/2017	Phone call: Property access for bulkhead assessment work	They will plan on the work being on Thursday. If the day shifts earlier, please call and leave a message so they can unlock the gate earlier.	Laura Treadway	10/10/2017	Closed			10/10/2017	[No additional call made because work is expected to occur on Thursday.]	10/10/2017	ROBERT W TAYLOR	Laura Treadway	10/06/2017	Laura Treadway	10/11/2017			Phone		
268067	Sent	10/06/2017	Phone call: Courtesy reminders for property access for bulkhead assessment work	Laura left messages with courtesy reminder for upcoming bulkhead assessment work starting Monday, Oct. 9. Laura spoke with Vicki Richards about upcoming bulkhead assessment work starting next week.	Laura Treadway	10/06/2017	Closed						CHARLES F CONNER,ANNE F SIM CONNER,KAREN EASTON,TOM EASTON	Laura Treadway	10/06/2017	Laura Treadway	10/07/2017			Phone		
268077	Sent	10/06/2017	Phone call: Courtesy reminder for property access for bulkhead assessment work	Vicki let Laura know they will be out of town Oct 22 - Nov 19. If we expect more work will happen during that time period, she'll let the people stopping by to care for the property know. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.	Laura Treadway	11/07/2017	Closed					10/16/2017	VICKI L RICHARDS	Laura Treadway	10/06/2017	Laura Treadway	11/07/2017			Phone		
291917	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located at SE corner of home. Additional information is located in the inframarker data base. Summary of communication: Spoke to homeowner (woman). Okay with chalk.		03/12/2018	Closed						JOHN PATRICK HEILY,SUNDAY G HEILY	Laura Treadway	03/12/2018	Laura Treadway	03/13/2018			In person		
291919	Sent	09/25/2017	Renton Site Visit Notes: Carollo visit	Work completed: CCTV side sewer. Water in pipeline. CCTV stopped.		03/12/2018	Closed						JOHN PATRICK HEILY,SUNDAY G HEILY	Laura Treadway	03/12/2018	Laura Treadway	03/13/2018			In person		
291920	Sent	09/25/2017	Renton Site Visit Notes: TetraTech visit	Work completed: Cleanout at SE corner (between 3901 & 3837), traveled along property line, difficult to track in backyard/debt. Unable to locate via tone of physical visual on mainline or lateral although able to see lakebed. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/12/2018	Closed						TONY BOYDSTON	Laura Treadway	03/12/2018	Laura Treadway	03/13/2018			Email		
292409	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 11 feet south of garage door just west of sidewalk. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						CRAG A BRAUFF	Connie Kim	03/20/2018	Connie Kim	03/20/2018			In person		
292410	Received	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located West side of home 2 feet South of back door in concrete patio. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						RICHARD SCOTT HOWELL,LOIS A HOWELL	Connie Kim	03/20/2018	Connie Kim	03/20/2018			In person		
292411	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 10 feet North of front door and 10 ft off house. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						BEVERLY REIMERS,MILTON A REIMERS JR	Connie Kim	03/20/2018	Connie Kim	03/20/2018			In person		
292414	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located at SW corner of prop and 3 feet east from bulk head. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						JOOS FAMILY LLC,PAUL JOOS	Connie Kim	03/20/2018	Connie Kim	03/20/2018			In person		
292420	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located at SW corner of property next to neighbors driveway. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						ANTONIO MANDARANO	Connie Kim	03/20/2018	Connie Kim	03/20/2018			In person		
292421	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 25 feet South from NW corner of house and 10 feet West. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						BIN GONG,JIANPING SUN	Connie Kim	03/20/2018	Connie Kim	03/20/2018			In person		
292423	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 5 feet East from bulkhead and 25 feet south from NE corner of prop. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						GARY F YOUNG,HELEN YOUNG	Connie Kim	03/20/2018	Connie Kim	03/20/2018			In person		
292424	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located at NE corner of house. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						CHRIS OPPFELT,HOLLY OPPFELT	Connie Kim	03/20/2018	Connie Kim	03/20/2018			In person		
292426	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located ON souther property line with 3213 and 10 feet East from bulkhead. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						THOMAS R DAHLBY,KATHLEEN I DAHLBY	Connie Kim	03/20/2018	Connie Kim	03/20/2018			In person		
292430	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located approx 30 feet North from NE corner of house. Additional information is located in the inframarker data base.		03/20/2018	Closed						STEVE LEIGHTON,LISA LEIGHTON	Connie Kim	03/20/2018	Connie Kim	03/20/2018			In person		

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292431	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located approx 15 feet West from SE corner of house and 30 feet S. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						MICHAEL H ATKINSON, CHERYL L ATKINSON	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292432	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located in a sewer manhole 35 feet West from SW corner of restroom building. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						CITY OF RENTON	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292435	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 20 feet West from SW corner from house. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						VICKI L RICHARDS, DARIUS RICHARDS	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292438	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 8 feet South of NE corner of house. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						ANGELA TROY	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292442	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 2 feet S from SW corner of house. RFID tag buried 8 feet west from clean out. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						BRIAN L FIFE, STEPHANIE C FIFE	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292443	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 3 feet West from SW corner from house. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						ANDREW T ALBERTSON, MEGAN L ALBERTSON	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292446	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 25 feet West of NE corner of house and 4 feet North. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						DENIS W LAW, PATRICIA LAW	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292450	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 25 feet S from NE corner of house and 3 feet West of house. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						ROBERT DAVID REED, JOAN WU GUANGOLIN	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292451	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 12 feet West from SW corner from house. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						DOUGLAS HARWOOD, MARJORIE HARWOOD	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292459	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 6 feet North from NW corner of house and 8 feet West. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						DAYTON P DENNISON, MARILYN DENNISON	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292462	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 115 feet West from SW corner of house and 5 feet S. Additional information is located in the inframarker data base. Work completed: Installed inframarker tag at side sewer clean out on property. Lateral cam side sewer from clean out.		03/20/2018	Closed						BRUCE E ERIKSON, MARY R ERIKSON	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292463	Sent	09/25/2017	Renton Site Visit Notes: Bravo installed inframarker tag	Notes: Sewer clean out located 11 feet South from SE corner of house. Additional information is located in the inframarker data base. Summary of communication: Homeowner (woman) concerned about stormwater filling garage. Work completed: Check valve (took picture) in clean out. [illegible] debris @ 21', [illegible] @ 17'		03/20/2018	Closed						TONY BOYDSTON	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292466	Sent	09/25/2017	Renton Site Visit Notes: Carollo visit	Notes: Clean out under sidewalk. Took picture. Summary of communication: Talked to owner (female) dog-friendly		03/20/2018	Closed						CRAG A BRAUFF	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292467	Sent	09/25/2017	Renton Site Visit Notes: Carollo visit	Work completed: Lots of turns on PVC side sewer. No toning Work completed: CCTV'd new clean out to confirm connection at 3005(37) to 3001		03/20/2018	Closed						BEVERLY REIMERS, MILTON A REIMERS JR	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292471	Sent	09/25/2017	Renton Site Visit Notes: Carollo visit	Summary of communication: Spoke with homeowner. She was OK with access Work completed: Rocky got coves open. PVC. CCTV flagged Y-connection with 3007 PVC		03/20/2018	Closed						CHARLES F CONNER, ANNE F SIM CONNER	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292477	Sent	09/25/2017	Renton Site Visit Notes: Carollo visit	Notes: Valve at 66' main @ 97' Summary of communication: Spoke to homeowners. Requested grade and lawn be reestablished Weren't happy about several holes		03/20/2018	Closed						BIN GONG, JIANPING SUN	Connie Kim	03/20/2018	Connie Kim	03/20/2018						In person
292505	Sent	09/25/2017	Renton Site Visit Notes: Carollo visit	Work completed: Toning may be able to clip on C1 lip in clean out Summary of communication: Homeowner OK with work		03/21/2018	Closed						GARY F YOUNG, HELEN YOUNG	Connie Kim	03/21/2018	Connie Kim	03/21/2018						In person
292617	Sent	09/25/2017	Renton Site Visit Notes: Carollo visit	Work completed: PVC till valve. Tone from valve Summary of communication: No owner home. Large dog in house.		03/21/2018	Closed						CHRIS OPPFELT, HOLLY OPPFELT	Connie Kim	03/21/2018	Connie Kim	03/21/2018						In person
292618	Sent	09/25/2017	Renton Site Visit Notes: Carollo visit	Work completed: Can't TV due to bolts on clean out Summary of communication: Spoke to homeowner. Owns both 3213 and 3217		03/21/2018	Closed						DAVID R HUMPHREY, APRIL L HUMPHREY	Connie Kim	03/21/2018	Connie Kim	03/21/2018						In person
292619	Sent	09/26/2017	Renton Site Visit Notes: Carollo visit	Work completed: Has flags Summary of communication: Clean out on back deck		03/21/2018	Closed						THOMAS R DAHLBY, KATHLEEN I DAHLBY	Connie Kim	03/21/2018	Connie Kim	03/21/2018						In person
292622	Sent	09/26/2017	Renton Site Visit Notes: Carollo visit	Work completed: No toning. C1 @ 2', 4' tee Summary of communication: House under construction		03/21/2018	Closed						STEVE LEIGHTON, LISA LEIGHTON	Connie Kim	03/21/2018	Connie Kim	03/21/2018						In person
292625	Sent	09/26/2017	Renton Site Visit Notes: Carollo visit	Work completed: 6" PVC cleanout Early bonds PVC Wye Appears cast iron line Underwater at 48' 80-90' stopped due to obstruction Notes: Unclear if entered main Tone with wire to get cast-iron Work completed: TV crew already done at this house		03/21/2018	Closed						MICHAEL H ATKINSON, CHERYL L ATKINSON	Connie Kim	03/21/2018	Connie Kim	03/21/2018						In person
292626	Sent	09/25/2017	Renton Site Visit Notes: Carollo visit			03/21/2018	Closed						CHERYL L ATKINSON, GERALD F BRENNAN	Connie Kim	03/21/2018	Connie Kim	03/21/2018						In person

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292627	Sent	09/25/2017	Renton Site Visit Notes: Carollo visit	Work completed: Nothing visible. Likely ties to 3405 Work completed: Bend down at 3', up at 7' CIP 40' underwater 67' unable to push further		03/21/2018	Closed						GERALD F BRENNAN	Connie Kim	03/21/2018	Connie Kim	03/21/2018			In person		
292628	Sent	09/26/2017	Renton Site Visit Notes: Carollo visit	Notes: Tone Work completed: PVC to cast at 3 bact to PVC Valve at 6' 10' bend down 12' bend up Clean valave At 41' would be underwater if pump on Notes: Underwater ~50' Main at 55'		03/21/2018	Closed						VICKI L RICHARDS,DARIUS RICHARDS	Connie Kim	03/21/2018	Connie Kim	03/21/2018			In person		
292629	Sent	09/26/2017	Renton Site Visit Notes: Carollo visit	Follow-up needed: Tone with wire past PVC Summary of communication: Rocky spoke with owner Work completed: Instral pipe PVC Switch to CI 29' out at Teetop (flagged) Flagged bend right from C10 ~ 3'-4' Valve at 31' Right down at 35' Pipe runs along fence 3611/3613 Notes: 37' join up CI lateral Underwater ~70 Stopped solid ~79' Summary of communication: Talked with owner/family friend		03/21/2018	Closed						ANGELA TROY	Connie Kim	03/21/2018	Connie Kim	03/21/2018			In person		
292630	Sent	09/26/2017	Renton Site Visit Notes: Carollo visit	Work completed: 10' Bend L 20' Bend down 21' Bend right 22' Bend up 23' Tee R 24' Valve-cast iron past valve 31' Bend up 79' would be underwater with pump on Notes: 88' main visible Tee right flagged Sewer lateral PVC from house ~2' below power Summary of communication: Talked to mayor. Thanked for effort		03/21/2018	Closed						BRIAN L FIFE,STEPHANIE C FIFE	Connie Kim	03/21/2018	Connie Kim	03/21/2018			In person		
292683	Sent	09/26/2017	Renton Site Visit Notes: Carollo visit	Notes: Pipe dry out at 117' Summary of communication: No homeowner		03/22/2018	Closed						ANDREW T ALBERTSON,MEGAN L ALBERTSON	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292684	Sent	09/26/2017	Renton Site Visit Notes: Carollo visit	Work completed: Ran into check valve. No CCTV. City has CCTV Rock/City to provide video		03/22/2018	Closed						DENIS W LAW,PATRICIA LAW	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292686	Sent	09/26/2017	Renton Site Visit Notes: Carollo visit	Summary of communication: No CCTV. Full of grease with water		03/22/2018	Closed						ROBERT DAVID REED,JOAN WU GUANGOLIN	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292687	Sent	09/27/2017	Renton Site Visit Notes: Carollo visit	Summary of communication: Yard was undermined. Put in a new footer on bulkhead. Nov. 14		03/22/2018	Closed						DOUGLAS HARWOOD,MARJORIE HARWOOD	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292688	Sent	09/27/2017	Renton Site Visit Notes: Carollo visit	Work completed: Flagged valve. PVC repair, otherwise C1 Summary of communication: Talked to homeowner on the phone to locate clean out Work completed: Homeowner provided directions to clean out. Uncovered and flagged gray water came out when loosening bolts (pressurized) so cap was not removed. Notes: 206-669-8881 Bruce Erikson		03/22/2018	Closed						DAYTON P DENNISON,MARILYN DENNISON	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292689	Sent	09/27/2017	Renton Site Visit Notes: Carollo visit	Follow-up needed: Cleanout was not original Summary of communication: Cleanout is underwater but dries out after a while Work completed: Main at 43 feet Pipe is not full below Lift station pumped down to 1.54'		03/22/2018	Closed						BRUCE E ERIKSON,MARY R ERIKSON	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292690	Sent	09/27/2017	Renton Site Visit Notes: Carollo visit	Notes: Below invert of inlet pipe		03/22/2018	Closed						TONY BOYDSTON	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292691	Sent	09/25/2017	Renton Site Visit Notes: TetraTech visit	Work completed: Connected tone to rusted bolts, toned and tracked lateral to tee in main Summary of communication: Showed us to cleanout and opened gate for crews		03/22/2018	Closed						SCOTT PETETT,ANNE PETETT	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292692	Sent	09/25/2017	Renton Site Visit Notes: TetraTech visit	Work completed: Connected to c/o, toned and tracked to mainline, tracked tone to the North and South (3811 and 3821) to fill in gap from survey.		03/22/2018	Closed						BRUCE E ERIKSON,MARY R ERIKSON	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292693	Sent	09/25/2017	Renton Site Visit Notes: TetraTech visit	Work completed: Toned to tee connecting mainline and lateral		03/22/2018	Closed						VIKTORIA LITTLEMAN	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292694	Sent	09/25/2017	Renton Site Visit Notes: TetraTech visit	Work completed: Toning completed on MH closest to lake. Successfully toned to mainline and traced tone through mainline into second lateral		03/22/2018	Closed						KING COUNTY-PARKS	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292695	Sent	09/25/2017	Renton Site Visit Notes: TetraTech visit	Work completed: No cleanout, mistaken on list of places to tone.		03/22/2018	Closed						GERALD F BRENNAN	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292696	Sent	09/25/2017	Renton Site Visit Notes: TetraTech visit	Work completed: Toned from c/o to mainline		03/22/2018	Closed						CHERYL L ATKINSON,GERALD F BRENNAN	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292698	Sent	09/25/2017	Renton Site Visit Notes: TetraTech visit	Work completed: Toning complete at c/o next to house via fish tape. Attempted fish tape through c/o next to lake (south from house) Work completed: UT completed.		03/22/2018	Closed						MICHAEL H ATKINSON,CHERYL L ATKINSON	Connie Kim	03/22/2018	Connie Kim	03/22/2018			In person		
292717	Sent	09/26/2017	Renton Site Visit Notes: TetraTech visit	Exposed pipe between 2811 & 2815 docks, no exposed pipe on 2807. Looks like pipe buried under 2811 dock, possible dive in pipe from profile.		03/23/2018	Closed						JEANNE C DEMUND	Connie Kim	03/23/2018	Connie Kim	03/23/2018			In person		
292718	Sent	09/26/2017	Renton Site Visit Notes: TetraTech visit	Work completed: UT complete		03/23/2018	Closed						CHARLES F CONNER,ANNE F SIM CONNER	Connie Kim	03/23/2018	Connie Kim	03/23/2018			In person		
292719	Sent	09/26/2017	Renton Site Visit Notes: TetraTech visit	Work completed: Toning		03/23/2018	Closed						ANDREW T ALBERTSON,MEGAN L ALBERTSON	Connie Kim	03/23/2018	Connie Kim	03/23/2018			In person		
292720	Sent	09/26/2017	Renton Site Visit Notes: TetraTech visit	Work completed: UT complete		03/23/2018	Closed						GERALD F BRENNAN	Connie Kim	03/23/2018	Connie Kim	03/23/2018			In person		
292721	Sent	09/26/2017	Renton Site Visit Notes: TetraTech visit	Work completed: UT lateral complete Site Address: 3625 Lake WA BLVD N Dock Access 3703 Lake WA BLVD N Exposed Pipe		03/23/2018	Closed						KING COUNTY-PARKS	Connie Kim	03/23/2018	Connie Kim	03/23/2018			In person		
292722	Sent	09/27/2017	Renton Site Visit Notes: TetraTech visit	Work completed: UT complete Work completed: Coupon attempted UT Complete Notes on work completed: On 09/27/17 coupon was started, required different drill bit. Repair clamp secured over top coupon location until coupon could be taken.		03/23/2018	Closed						JOHN MICHAEL BROWN,DENIS W LAW,PATRICIA LAW	Connie Kim	03/23/2018	Connie Kim	03/23/2018			In person		
292723	Sent	09/27/2017	Renton Site Visit Notes: TetraTech visit	Follow-up needed: Coupon completed on 09/28/17 and repair clam secured and centered on coupon.		03/23/2018	Closed						CITY OF RENTON	Connie Kim	03/23/2018	Connie Kim	03/23/2018			In person		

COMMUNICATIONS

Communication ID	Sent/received	Date received	Title	Communication	Assigned to	Date assigned	Communication status	Initial response date	Initial response	Response date	Response	Due date	Contacts	Created by	Date created	Last modified by	Date modified	Latitude	Longitude	Source	Documents	Notes		
				Work completed: UT complete on lateral																				
292725	Sent	09/27/2017	Renton Site Visit Notes: TetraTech visit	Notes on work completed: Found 20-25 ft exposed on mainline		03/23/2018	Closed						DAYTON P DENNISON,MARILYN DENNISON	Connie Kim	03/23/2018	Connie Kim	03/23/2018					In person		
292726	Sent	09/28/2017	Renton Site Visit Notes: TetraTech visit	Work completed: Attempted to tone but only got fish tape few feet in pipe therefore unable to tone.		03/23/2018	Closed						STEVE LEIGHTON,LISA LEIGHTON	Connie Kim	03/23/2018	Connie Kim	03/23/2018					In person		
292727	Sent	09/28/2017	Renton Site Visit Notes: TetraTech visit	Work completed: Found mainline exposed, decided to UT test. Approximately had 50 ft exposed pipe.		03/23/2018	Closed						DAYTON P DENNISON,MARILYN DENNISON	Connie Kim	03/23/2018	Connie Kim	03/23/2018					In person		
292728	Sent	09/28/2017	Renton Site Visit Notes: TetraTech visit	Work completed: UT completed on mainline. Moving South		03/23/2018	Closed						SCOTT PETETT,ANNE PETETT	Connie Kim	03/23/2018	Connie Kim	03/23/2018					In person		
292729	Sent	09/28/2017	Renton Site Visit Notes: TetraTech visit	Work completed: Missing gap on survey due to depth, had access to use divers and was successful to use tone at valve on 3713 to trace into mainline. Survey shots were taken between manholes in water.		03/23/2018	Closed						DOUGLAS HARWOOD,MARJORIE HARWOOD	Connie Kim	03/23/2018	Connie Kim	03/23/2018					In person		
				Mr. Oppfelt,																				
				The contractor has submitted a preliminary schedule that indicates that their construction barge(s) will arrive in the project vicinity on September 7. The tentative schedule also has their barge(s) arriving adjacent to your residence and the installation of the temporary manhole beginning on September 12.																				
				We have a pre-construction meeting scheduled with the contractor today which will include discussion about their proposed schedule. Some of the above dates may change as a result of the meeting. I will get you an update as soon as I know more details.																				
				Hi John:																				
				We live at 3119 Mountain View Avenue N. ("Site 4 Manhole (New)). Quick question: Is the schedule coming together such that you have a good idea when and for how long the work barges will be anchored off our shoreline? We have an inflatable floating raft anchored off our shore and will need to pull it in before the barges show up.																				
				Thanks,																				
316633	Received	08/12/2018	Email: Kenneydale lake line sewer project	Chris Oppfelt Thanks for this info. I appreciate it.		08/24/2018	Closed			08/22/2018		08/22/2018	CHRIS OPPFELT	Laura Treadway	08/24/2018	Laura Treadway	08/24/2018					Email	316633_RE Kenneydale lake line sewer project.msg (8/24/2018)	
316634	Received	08/22/2018	Email: Kenneydale lake line sewer project (2)	Chris John Hobson spoke with property owners adjacent to manhole #5 regarding upcoming work and contractor's new start date of September 17 for cleaning at manhole #5:		08/24/2018	Closed						CHRIS OPPFELT	Laura Treadway	08/24/2018	Laura Treadway	08/24/2018					Email	316634_Re Kenneydale lake line sewer project.msg (8/24/2018)	
320987	Sent	09/07/2018	Phone call: Notifications to property owners re manhole #5 work	2827 Mountain View Ave N – Spoke with Richard Howell at 2 pm 2905 Mountain View Ave N – Left message for Beverly Reimers at 2:05pm 2909 Mountain View Ave N – Spoke with Dr Joos at 2:10pm John Hobson met with Mr. and Mrs. Young at their home (3115 Mountain View Ave N) and gave them the latest (at the time) updates on the projects progress and anticipated schedule.		10/08/2018	Closed						JOOS FAMILY LLC,RICHARD SCOTT HOWELL,LOIS A HOWELL,PAUL JOOS,BEVERLY REIMERS,MILTON A REIMERS JR	Laura Treadway	10/08/2018	Laura Treadway	10/08/2018					Phone		
323063	Sent	10/01/2018	Meeting: Project update	They were concerned about impacts to a wedding planned for outside. John confirmed they would not mar any photo opportunities for the wedding. Sent: Thursday, October 11, 2018 11:06 AM To: Chris Oppfelt (chris.oppfelt@gmail.com) chris.oppfelt@gmail.com Subject: Kenneydale Lakeline Sewer Project		10/11/2018	Closed						GARY F YOUNG,HELEN YOUNG	Laura Treadway	10/11/2018	Laura Treadway	10/11/2018					In person		
				Chris,																				
				I apologize for the late notice however, I'm sure you've noticed our contractor's barge adjacent to your property recently. The following is a brief update of the project and the latest plan for the work adjacent to your property:																				
				Today, the contractor has temporarily moved their construction barge back to the site of MH 5 (adjacent to 2909 Mountain View Ave N). They will be removing a temporary pipe system that had to be installed to reach the existing sewer main line due the lake lower winter depth preventing them from reaching the sewer main. Their construction barge should be back in place adjacent to your property later today. Tomorrow they plan to install the temporary manhole over the sewer main in front of your residence. Once the manhole is set, they will move the construction barge to a different area and move their cleaning barge into place to begin cleaning. If everything goes well, they should be finished with cleaning by the end of next week and then remove the temporary manhole. Our Fisheries Permit requires that we place a thin layer of fish spawning on the lake bottom where we perform work. Placing the gravel will inevitably result in cloudy water so the contractor will leave the "silt curtain" in place until the suspended sediment settles back to the lake bottom. Once the gravel has been placed, the contractor will move their barges to the next location. They will return to remove the silt curtain once the silt has settled back to the bottom of the lake.																				
				Please let me know if you have any questions.																				
323064	Sent	10/11/2018	Email: Kenneydale Lakeline Sewer Project	John Hobson City of Renton John Hobson spoke directly with Nancy Porter (3205 Mountain View Ave N) and gave her an update on the project.		10/11/2018	Closed						CHRIS OPPFELT	Laura Treadway	10/11/2018	Laura Treadway	10/11/2018					Email		
323065	Sent	10/11/2018	Phone call: Notification call	John Hobson left a message on Holly Oppfert's cell phone (3119 Mountain View Ave N), explaining the project's current work tasks and schedule.	Laura Treadway	10/11/2018	Closed						NANCY A PORTER	Laura Treadway	10/11/2018	Laura Treadway	10/11/2018					Phone		
323095	Sent	10/11/2018	Phone call: Notification call	John Hobson spoke with Anne Conner (3001 Mountain View Ave N) and gave her a brief on the projects progress and schedule.		10/11/2018	Closed						HOLLY OPPFELT	Laura Treadway	10/11/2018	Laura Treadway	10/11/2018					Phone		
323096	Sent	10/06/2018	Phone call: Notification call			10/11/2018	Closed						ANNE F SIM CONNER	Laura Treadway	10/11/2018	Laura Treadway	10/11/2018					Phone		

CONTACTS

Contact ID	Type	First name	Last name	Organization name	Related Organization(s)	Title	Priority	Phones	Address	Address Line 2	City	State	Zip	Lat	Long	Label	Do not mail	Mail bounced	Address type	Description	Created by	Date created	Modified by	Date modified	Assigned to	Twitter	Website	Preferred Contact Method	Source	Permission to Access for Visual Inspection?	Priority Property (Land Use)	Email addresses	Notes
624267	Individual	KAAREN	PRITCHARD					266-4300 (Home), 206-226-4300 (Cell), 206-303-1612 (Work)	2807 MOUNTAIN VIEW AVE N		RENTON	WA	98056	47.51698	-122.2091		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/15/2017			Phone	Parcel Import	Yes	Yes	kaaren.pritchard@nordstrom.com	Provided 206-226-4300 as preferred phone.	
624268	Individual	KAREN	EASTON					206-708-3664 (Cell)	3601 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.52795	-122.20326		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/15/2017				Parcel Import	Yes		kjeaston@comcast.net		
624269	Individual	KARYN A	PASQUIER					425-271-1468 (Home)	3709 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.524876	-122.206899		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/15/2017				Parcel Import	Yes		kpstus@aol.com		
624270	Individual	KATHLEEN I	DAHLBY					425-271-1468 (Home)	3709 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.524876	-122.206899		FALSE	FALSE	Postal			09/11/2016	Laura Treadway	09/15/2017				Parcel Import	Yes		kpstus@aol.com		
624271	Individual	LOIS A	HOWELL					425-891-3774 (Cell)	3217 MOUNTAIN VIEW AVE N		RENTON	WA	98056	47.520133	-122.21002		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/15/2017			Phone	Parcel Import	Yes				
624272	Individual	LOIS A	HOWELL					206-910-0180 (Cell)	2827 MOUNTAIN VIEW AVE N		RENTON	WA	98056	47.517563	-122.210019		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/15/2017			Phone	Parcel Import	Yes				
624273	Individual	LIZ M	SOBRINO					425-226-2981 (Home)	8621 138TH AVE SE		NEWCASTLE	WA	98059	47.524463	-122.156707		TRUE	FALSE	Taxpayer			09/11/2016		09/11/2016				Parcel Import	Yes			Former owner of parcel 3342700240, sold to Douglas and Marjorie Harwood.	
624274	Individual	MARY R	ERIKSON					425-226-2981 (Home)	3815 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.525941	-122.206207		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/15/2017				Parcel Import	Yes				
624275	Individual	MARY R	ERIKSON					425-226-2981 (Home)	3815 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.525941	-122.206207		FALSE	FALSE	Postal			09/11/2016	Laura Treadway	09/15/2017				Parcel Import	Yes				
624276	Individual	MEGAN L	ALBERTSON					425-277-5949 (Home), 206-940-9334 (Cell), 206-601-3116 (Work)	3619 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.5239	-122.206677		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/15/2017				Parcel Import	Yes				
624276	Individual	NANCY A	PORTER					425-277-5949 (Home), 206-940-9334 (Cell), 206-601-3116 (Work)	3205 MOUNTAIN VIEW AVE N		RENTON	WA	98056	47.52014	-122.21021		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/15/2017				Parcel Import	Yes			Provided 206-940-9334 as preferred contact number.	
624276	Individual	NANCY A	PORTER					425-277-5949 (Home), 206-940-9334 (Cell), 206-601-3116 (Work)	3205 MOUNTAIN VIEW AVE N		RENTON	WA	98056	47.52014	-122.21021		FALSE	FALSE	Postal			09/11/2016	Laura Treadway	09/15/2017				Parcel Import	Yes			Provided 206-940-9334 as preferred contact number.	
624277	Individual	PATRICIA	LAW					206-503-7972 (Cell)	3707 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.527395	-122.203526		FALSE	FALSE	Taxpayer			09/11/2016		09/11/2016				Parcel Import	Yes			Former owner of parcel 3342700280 purchased by MARCIA and SCOTT LEVEQUE on 9/18/2017 per KCPV. Former owners DENIS W LAW and PATRICIA LAW removed from parcel.	
624278	Individual	ROBERT DAVID	REED					206-799-0361 (Home)	3837 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.525991	-122.206395		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/15/2017				Parcel Import	Yes				
624279	Individual	ROSEMARY	ZILMER					206-941-6004 (Home)	3613 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.523862	-122.206693		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/11/2016				Parcel Import	Yes				
624280	Individual	STEPHANIE C	FIFE					206-491-6004 (Home)	2727 MOUNTAIN VIEW AVE N		RENTON	WA	98056	47.516546	-122.208622		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	07/14/2017				Parcel Import	Yes				
624281	Individual	SUNDAY G	HELLY					425-430-4469 (Home)	3605 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.523764	-122.206782		FALSE	FALSE	Taxpayer			09/11/2016	Connie Kim	10/05/2016				Parcel Import	Yes			Former owner of parcel 3342700125, sold to TATYANA BARINOVA.	
624282	Individual	TAMI H	RILEY					425-430-4469 (Home)	3605 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.523764	-122.206782		FALSE	FALSE	Taxpayer			09/11/2016	Connie Kim	08/30/2017				Parcel Import	Yes				
624283	Individual	VICKI L	RICHARDS					425-430-4469 (Home)	3605 LAKE WASHINGTON BLVD N		RENTON	WA	98055	47.523764	-122.206782		FALSE	FALSE	Parcel			09/11/2016	Laura Treadway	08/30/2017				Parcel Import	Yes				
624284	Individual	VIRGINIAL L	RILEY					425-227-4317 (Home), 206-772-6284 (Cell)	PO BOX 78382		SEATTLE	WA	98178	47.492385	-122.235856		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/18/2017				Parcel Import	Yes			Former owner of parcel 3342700320. Sold to Angela Roy.	
624285	Individual	LAURIE L	BAKER					425-227-4317 (Home), 206-772-6284 (Cell)	3107 MOUNTAIN VIEW AVE N		RENTON	WA	98056	47.519482	-122.210252		FALSE	FALSE	Postal			09/11/2016	Laura Treadway	09/18/2017				Parcel Import	Yes			Provided 425-227-4317 as preferred phone number.	
624285	Individual	LAURIE L	BAKER					206-266-6969 (Home)	3719 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.525939	-122.206395		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/20/2017				Parcel Import	Yes				
624286	Individual	REBECCA A	BYLUS					206-266-6969 (Home)	3719 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.525939	-122.206395		FALSE	FALSE	Taxpayer			09/11/2016	Laura Treadway	09/20/2017				Parcel Import	Yes				
624286	Individual	REBECCA A	BYLUS					425-623-8177 (Home), 425-430-4469 (Cell)	3307 MOUNTAIN VIEW AVE N		RENTON	WA	98056	47.520648	-122.209196		FALSE	FALSE	Taxpayer			09/11/2016	Ray Outlaw	09/11/2016				Parcel Import	Yes				
624288	Individual	LISA	LORD					425-623-8177 (Home), 425-430-4469 (Cell)	3605 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.523764	-122.206782		FALSE	FALSE	Taxpayer			09/15/2016	Laura Treadway	09/15/2017				Parcel Import	Yes			Provided 425-623-8177 as preferred phone number.	
645234	Individual	DARIUS	RICHARDS					425-623-8177 (Home), 425-430-4469 (Cell)	3605 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.523764	-122.206782		FALSE	FALSE	Parcel			09/15/2016	Laura Treadway	09/15/2017				Parcel Import	Yes			Provided 425-623-8177 as preferred phone number.	
645234	Individual	DARIUS	RICHARDS					425-430-7394 (Work)	1055 S GRADY WAY		RENTON	WA	98057	47.4746	-122.204878		FALSE	FALSE	Postal			09/20/2016	Laura Treadway	07/14/2017				Parcel Import	Yes				
660193	Individual	LINDA	MOSCHETTI		CITY OF RENTON PUBLIC WORKS DEPARTMENT	Administrative Assistant		1055 S GRADY WAY			RENTON	WA	98057	47.4746	-122.204878		FALSE	FALSE	Postal			09/20/2016	Laura Treadway	07/14/2017				Email	Yes				
660195	Individual	THERESA	PHELAN		CITY OF RENTON PUBLIC WORKS DEPARTMENT	Utility Systems		1055 S GRADY WAY, 5TH FLOOR			RENTON	WA	98057	47.4746	-122.204878		FALSE	FALSE	Postal			09/20/2016	Laura Treadway	07/14/2017				Email	Yes				
662350	Individual	MARILYN	DENNISON			Administrative Secretary		3717 LAKE WASHINGTON BLVD N			RENTON	WA	98056	47.525434	-122.206519		FALSE	FALSE	Taxpayer			10/11/2016	Laura Treadway	07/14/2017				Flying	Yes				
716029	Individual	BETSEY	BURROUGHS					2815 MOUNTAIN VIEW AVE N			RENTON	WA	98056	47.517028	-122.20914		FALSE	FALSE	Parcel			07/14/2017	Laura Treadway	09/15/2017				Other	Yes				
717223	Individual	SHAWN	LEPROWSE					3005 MOUNTAIN VIEW AVE N			RENTON	WA	98056	47.51844	-122.210152		FALSE	FALSE	Postal		KC PV records show Shawn Leprowse purchased property from Conner Homes on 10/17/2016	07/26/2017	Laura Treadway	09/15/2017				Other	Yes				
717234	Individual	REBECCA	LEPROWSE					3005 MOUNTAIN VIEW AVE N			RENTON	WA	98056	47.51844	-122.210152		FALSE	FALSE	Postal			07/26/2017	Laura Treadway	09/15/2017				Other	Yes				
717235	Individual	ANTONIO	MANDARANO					3003 MOUNTAIN VIEW AVE N			RENTON	WA	98056	47.518424	-122.21015		FALSE	FALSE	Postal			07/26/2017	Laura Treadway	09/15/2017				Other	Yes				
717243	Individual	SCOTT	PETETT					425-277-4807 (Home), 425-765-5334 (Cell)	3827 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.52642	-122.205605		FALSE	FALSE	Postal			07/26/2017	Laura Treadway	09/22/2017				Other				425-277-4007 from Sept. 2017 web search.	
717245	Individual	TATYANA	BARINOVA					3821 LAKE WASHINGTON BLVD N			RENTON	WA	98056	47.525838	-122.205308		FALSE	FALSE	Postal			07/26/2017	Laura Treadway	09/15/2017				Other				425-765-5334 from utility records. Parcel sold by Jeffrey Riley to Tatyana Barinova 6/7/2017	
717256	Individual	DOUGLAS	HARWOOD					425-503-0242 (Cell), 425-455-0501 (Work)	3713 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.525107	-122.206749		FALSE	FALSE	Postal		property acquired 04/10/2017	07/26/2017	Laura Treadway	09/15/2017				Other					
717275	Individual	ANGELA	TROY					206-419-9499 (Cell)	3607 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.524125	-122.207324		FALSE	FALSE	Postal			07/26/2017	Laura Treadway	04/24/2018				Other					
738802	Individual	ANNE	PETETT					425-277-4007 (Home), 425-765-5334 (Cell)	3827 LAKE WASHINGTON BLVD N		RENTON	WA	98056	47.52642	-122.205605		FALSE	FALSE	Postal			08/21/2017	Laura Treadway	09/22/2017				Other				425-277-4007 from Sept. 2017 web search.	
741119	Individual	KRISTI	SUNDERLAND					3715 LAKE WASHINGTON BLVD N			RENTON	WA	98056	47.525299	-122.206581		FALSE	FALSE	Taxpayer			09/12/2017	Laura Treadway	09/12/2017				Other				425-765-5334 from utility records.	
741120	Individual	DAVID	WILLIAMSON		</																												

Appendix B

PERMIT DOCUMENTS



US Army Corps
of Engineers ®
Seattle District

NATIONWIDE PERMIT 12

Terms and Conditions

Effective Date: March 19, 2017



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- A. Description of Authorized Activities
 - B. U.S. Army Corps of Engineers (Corps) National General Conditions for all NWP
 - C. Corps Seattle District Regional General Conditions
 - D. Corps Regional Specific Conditions for this NWP
 - E. Washington Department of Ecology (Ecology) Section 401 Water Quality Certification (401 Certification): General Conditions
 - F. Ecology 401 Certification: Specific Conditions for this NWP
 - G. Coastal Zone Management Consistency Response for this NWP
-

In addition to any special condition that may be required on a case-by-case basis by the District Engineer, the following terms and conditions must be met, as applicable, for a Nationwide Permit (NWP) authorization to be valid in Washington State.

A. DESCRIPTION OF AUTHORIZED ACTIVITIES

Utility Line Activities. Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

Utility lines: This NWP authorizes discharges of dredged or fill material into waters of the United States and structures or work in navigable waters for crossings of those waters associated with the construction, maintenance, or repair of utility lines, including outfall and intake structures. There must be no change in pre-construction contours of waters of the United States. A “utility line” is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and internet, radio, and television communication. The term “utility line” does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area. Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit. This NWP authorizes, to the extent that Department of the Army authorization is required, temporary structures, fills, and work necessary for the remediation of inadvertent returns of drilling fluids to waters of the United States through sub-soil fissures or fractures that might occur during horizontal directional drilling activities conducted for the purpose of installing or replacing utility lines. These remediation activities must be done as soon as practicable, to restore the affected waterbody. District engineers may add special conditions to this NWP to require a remediation plan for addressing inadvertent returns of drilling fluids to waters of the United States during horizontal directional drilling activities conducted for the purpose of installing or replacing utility lines. This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After construction, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate. Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) the activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to or along a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: Where the utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, a copy of the NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation. Note 2: For utility line activities crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Utility line activities must

comply with 33 CFR 330.6(d). Note 3: Utility lines consisting of aerial electric power transmission lines crossing navigable waters of the United States (which are defined at 33 CFR part 329) must comply with the applicable minimum clearances specified in 33 CFR 322.5(i). Note 4: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, in accordance with the requirements for temporary fills. Note 5: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15). Note 6: This NWP authorizes utility line maintenance and repair activities that do not qualify for the Clean Water Act section 404(f) exemption for maintenance of currently serviceable fills or fill structures. Note 7: For overhead utility lines authorized by this NWP, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities. Note 8: For NWP 12 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

B. CORPS NATIONAL GENERAL CONDITIONS FOR ALL NWPs

To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).
7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.
13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status. (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights. No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species or critical

habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP. (e) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. (f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required. (g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether “incidental take” permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of

historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. (d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment. (a) Discharges of dredged or fill material into

waters of the United States are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site). (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal. (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)). (e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation. (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no

more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)). (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation. (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided. (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs. (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management. (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency

concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: “When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include: (a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions; (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and (c) The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a “USACE project”), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by

NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches

should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals. (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity’s compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity’s adverse environmental effects so that they are no more than minimal. (2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve

discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes. (3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. (4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act. (5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

District Engineer's Decision: 1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the individual crossings of waters of the United States to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51, 52, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects. For those NWPs that have a waivable 300 linear foot limit for losses of intermittent and ephemeral stream bed and a 1/2-acre limit (i.e., NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52), the loss of intermittent and ephemeral stream bed, plus any other losses of jurisdictional waters and wetlands, cannot exceed 1/2-acre. 2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource

functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns. 3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters (e.g., streams). The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer. 4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31, or to evaluate PCNs for activities authorized by NWPs 21, 49, and 50), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

Further Information: 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP. 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law. 3. NWPs do not grant any property rights or exclusive privileges. 4. NWPs do not authorize any injury to the property or rights of others. 5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

C. CORPS SEATTLE DISTRICT REGIONAL GENERAL CONDITIONS: The following conditions apply to all NWP for the Seattle District in Washington State, unless specified.

1. Project Drawings: Drawings must be submitted with pre-construction notification (PCN). Drawings must provide a clear understanding of the proposed project, and how waters of the U.S. will be affected. Drawings must be originals and not reduced copies of large-scale plans. Engineering drawings are not required. Existing and proposed site conditions (manmade and landscape features) must be drawn to scale.

2. Aquatic Resources Requiring Special Protection: Activities resulting in a loss of waters of the United States in mature forested wetlands, bogs and peatlands, aspen-dominated wetlands, alkali wetlands, vernal pools, camas prairie wetlands, estuarine wetlands, wetlands in coastal lagoons, and wetlands in dunal systems along the Washington coast cannot be authorized by a NWP, except by the following NWPs:

- NWP 3 – Maintenance
- NWP 20 – Response Operations for Oil and Hazardous Substances
- NWP 32 – Completed Enforcement Actions
- NWP 38 – Cleanup of Hazardous and Toxic Waste

In order to use one of the above-referenced NWPs in any of the aquatic resources requiring special protection, prospective permittees must submit a PCN to the Corps of Engineers (see NWP general condition 32) and obtain written authorization before commencing work.

3. New Bank Stabilization in Tidal Waters of Puget Sound: Activities involving new bank stabilization in tidal waters in Water Resource Inventory Areas (WRIAs) 8, 9, 10, 11 and 12 (within the areas identified on Figures 1a through 1e on Corps website) cannot be authorized by NWP.

4. Commencement Bay: The following NWPs may not be used to authorize activities located in the Commencement Bay Study Area (see Figure 2 on Corps website):

- NWP 12 – Utility Line Activities (substations)
- NWP 13 – Bank Stabilization
- NWP 14 – Linear Transportation Projects
- NWP 23 – Approved Categorical Exclusions
- NWP 29 – Residential Developments
- NWP 39 – Commercial and Institutional Developments
- NWP 40 – Agricultural Activities
- NWP 41 – Reshaping Existing Drainage Ditches
- NWP 42 – Recreational Facilities
- NWP 43 – Stormwater and Wastewater Management Facilities

5. Bank Stabilization: All projects including new or maintenance bank stabilization activities require PCN to the Corps of Engineers (see NWP general condition 32). For new bank stabilization projects only, the following must be submitted to the Corps of Engineers:

- a. The cause of the erosion and the distance of any existing structures from the area(s) being stabilized.
- b. The type and length of existing bank stabilization within 300 feet of the proposed project.
- c. A description of current conditions and expected post-project conditions in the waterbody.
- d. A statement describing how the project incorporates elements avoiding and minimizing adverse environmental effects to the aquatic environment and nearshore riparian area, including vegetation impacts in the waterbody.

In addition to a. through d., the results from any relevant geotechnical investigations can be submitted with the PCN if it describes current or expected conditions in the waterbody.

6. Crossings of Waters of the United States: Any project including installing, replacing, or modifying crossings of waters of the United States, such as culverts or bridges, requires submittal of a PCN to the Corps of Engineers (see NWP general condition 32). If a culvert is proposed to cross waters of the U.S. where salmonid species are present or could be present, the project must apply the stream simulation design method from the Washington Department of Fish and Wildlife located in the *Water Crossing Design Guidelines* (2013), or a design method which provides passage at all life stages at all flows where the salmonid species would naturally seek passage. If the stream simulation design method is not applied for a culvert where salmonid species are present or could be present, the project proponent must provide a rationale in the PCN sufficient to establish one of the following:

- a. The existence of extraordinary site conditions.
- b. How the proposed design will provide equivalent or better fish passage and fisheries habitat benefits than the stream simulation design method.

If a culvert is proposed to cross waters of the U.S. where salmonid species are present or could be present, project proponents must provide a monitoring plan with the PCN that specifies how the proposed culvert will be assessed over a five-year period from the time of construction completion to ensure its effectiveness in providing passage at all life stages at all flows where the salmonid species would naturally seek passage. Culverts installed under emergency authorization that do not meet the above design criteria will be required to meet the above design criteria to receive an after-the-fact nationwide permit verification.

7. Stream Loss: A PCN is required for all activities that result in the loss of any linear feet of stream beds. No activity shall result in the loss of any linear feet of perennial stream beds or the loss of greater than 300 linear feet of intermittent and/or ephemeral stream beds. A stream may be rerouted if it is designed in a manner that maintains or restores hydrologic, ecologic, and geomorphic stream processes, provided there is not a reduction in the linear feet of stream bed. Streams include brooks, creeks, rivers, and historical waters of the U.S. that have been channelized into ditches. This condition does not apply to ditches constructed in uplands. Stream loss restrictions may be waived by the district engineer on a case-by-case basis provided the activities result in net increases of aquatic resource functions and services.

8. Mitigation: Pre-construction notification is required for any project that will result in permanent wetland losses that exceed 1,000 square feet. In addition to the requirements of General Condition 23 (Mitigation), compensatory mitigation at a minimum one-to-one ratio will be required for all permanent wetland losses that exceed 1,000 square feet. When a PCN is required for wetland losses less than 1,000 square feet, the Corps of Engineers may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation for impacts to marine waters, lakes, and streams will be determined on a case-by-case basis. If temporary impacts to waters of the U.S. exceed six months, the Corps of Engineers may require compensatory mitigation for temporal effects.

9. Magnuson-Stevens Fishery Conservation and Management Act – Essential Fish Habitat Essential Fish Habitat (EFH) is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. If EFH may be adversely affected by a proposed activity, the prospective permittee must provide a written EFH assessment with an analysis of the effects of the proposed action on EFH. The assessment must identify the type(s) of essential fish habitat (i.e., Pacific salmon, groundfish, and/or coastal-pelagic species) that may be affected. If the Corps of Engineers determines the project will adversely affect EFH, consultation with NOAA Fisheries will be required. Federal agencies should follow their own procedures for complying with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act. If PCN is required for the proposed activity, Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

10. Forage Fish: For projects in forage fish spawning habitat, in-water work must occur within designated forage fish work windows, or when forage fish are not spawning. If working outside of a designated work window, or if forage fish work windows are closed year round, work may occur if the work window restriction is released for a period of time after a forage fish spawning survey has been conducted by a biologist approved by the Washington State Department of Fish and Wildlife (WDFW). Forage fish species with designated in-water work windows include Pacific sand lance (*Ammodytes hexapterus*), Pacific herring (*Clupea pallasii*), and surf smelt (*Hypomesus pretiosus*). This RGC does not apply to NWP 48, *Commercial Shellfish Aquaculture Activities*. Please see specific regional conditions for NWP 48.

11. Notification of Permit Requirements: The permittee must provide a copy of the nationwide permit authorization letter, conditions, and permit drawings to all contractors and any other parties performing the authorized work prior to the commencement of any work in waters of the U.S. The permittee must ensure all appropriate contractors and any other parties performing the authorized work at the project site have read and understand relevant NWP conditions as well as plans, approvals, and documents referenced in the NWP letter. A copy of these documents must be maintained onsite throughout the duration of construction.

12. Construction Boundaries: Permittees must clearly mark all construction area boundaries before beginning work on projects that involve grading or placement of fill. Boundary markers and/or construction fencing must be maintained and clearly visible for the duration of construction. Permittees should avoid and minimize removal of native vegetation (including submerged aquatic vegetation) to the maximum extent possible.

13. Temporary Impacts and Site Restoration

- a. Temporary impacts to waters of the U.S. must not exceed six months unless the prospective permittee requests and receives a waiver by the district engineer. Temporary impacts to waters of the U.S. must be identified in the PCN.
- b. No more than 1/2 acre of waters of the U.S. may be temporarily filled unless the prospective permittee requests and receives a waiver from the district engineer (temporary fills do not affect specified limits for loss of waters associated with specific nationwide permits).
- c. Native soils removed from waters of the U.S. for project construction should be stockpiled and used for site restoration. Restoration of temporarily disturbed areas must include returning the area to pre-project ground surface contours. If native soil is not available from the project site for restoration, suitable clean soil of the same textural class may be used. Other soils may be used only if identified in the PCN.
- d. The permittee must revegetate disturbed areas with native plant species sufficient in number, spacing, and diversity to restore affected functions. A maintenance and monitoring plan commensurate with the impacts, may be required. Revegetation must begin as soon as site conditions allow within the same growing season as the disturbance unless the schedule is approved by the Corps of Engineers. Native plants removed from waters of the U.S. for project construction should be stockpiled and used for revegetation when feasible. Temporary Erosion and Sediment Control measures must be removed as soon as the area has established vegetation sufficient to control erosion and sediment.
- e. If the Corps determines the project will result in temporary impacts of submerged aquatic vegetation (SAV) that are more than minimal, a monitoring plan must be submitted. If recovery is not achieved by the end of the monitoring period, contingencies must be implemented, and additional monitoring will be required.

This RGC does not apply to NWP 48, *Commercial Shellfish Aquaculture Activities*. Please see specific regional conditions for NWP 48.

D. CORPS REGIONAL SPECIFIC CONDITIONS FOR THIS NWP:

1. Pre-construction notification (PCN) must be submitted to the district engineer (see NWP general condition 32) if the activity involves mechanized land clearing in a forested wetland for the construction of a substation and/or access roads.
2. A PCN must be submitted to the district engineer (see NWP general condition 32) if the utility line exceeds 300 linear feet in waters of the U.S. for each single and complete project.
3. For projects subject to PCN, the PCN must include drawings and/or a description of the measures that will be used to prevent permanent drainage of adjacent areas by the backfilled trench and/or along the buried utility line.

E. ECOLOGY 401 CERTIFICATION: GENERAL CONDITIONS

In addition to all the Corps National and Seattle Districts' Regional permit conditions, the following State General Section 401 Water Quality Certification (Section 401) conditions apply to all Nationwide Permits whether **certified** or **partially certified** in the State of Washington.

1. **For in-water construction activities.** Ecology Section 401 review is required for projects or activities authorized under NWPs that will cause, or may be likely to cause or contribute to an exceedance of a State water quality standard (Chapter 173-201A WAC) or sediment management standard (Chapter 173-204 WAC). State water quality standards and sediment management standards are available on Ecology's website. Note: In-water activities include any activity within a wetland and/or activities below the ordinary high water mark (OHWM).
2. **Projects or Activities Discharging to Impaired Waters.** Ecology Section 401 review is required for projects or activities authorized under NWPs if the project or activity will occur in a 303(d) listed segment of a waterbody or upstream of a listed segment and may result in further exceedances of the specific listed parameter. To determine if your project or activity is in a 303(d) listed segment of a waterbody, visit Ecology's Water Quality Assessment webpage for maps and search tools.
3. **Application.** For projects or activities that will require Ecology Section 401 review, applicants must provide Ecology with a Joint Aquatic Resources Permit Application (JARPA) along with the documentation provided to the Corps, as described in National General Condition 32, Pre-Construction Notification, including, when applicable: (a) A description of the project, including site plans, project purpose, direct and indirect adverse environmental effects the project would cause, best management practices (BMPs), and any other Department of the Army or federal agency permits used or intended to be used to authorize any part of the proposed project or any related activity. (b) Drawings indicating the Ordinary High Water Mark (OHWM), delineation of special aquatic sites and other waters of the state. Wetland delineations must be prepared in accordance with the current method required by the Corps and shall include Ecology's Wetland Rating form. Wetland rating forms are subject to review and verification by Ecology staff. Guidance for determining the OHWM is available on Ecology's website. (c) A statement describing how the mitigation requirement will be satisfied. A conceptual or detailed mitigation or restoration plan may be submitted. See State General Condition 5 for details on mitigation requirements. (d) Other applicable requirements of Corps Nationwide Permit General Condition 32, Corps Regional Conditions, or notification conditions of the applicable NWP. (e) Within 180 calendar days from receipt of applicable documents noted above **and** a copy of the final authorization letter from the Corps providing coverage for a proposed project or activity under the NWP Program Ecology will provide the applicant notice of whether an individual Section 401 will be required for the project. If Ecology fails to act within a year after receipt of **both** of these documents, Section 401 is presumed waived.

4. Aquatic resources requiring special protection. Certain aquatic resources are unique, difficult-to-replace components of the aquatic environment in Washington State. Activities that would affect these resources must be avoided to the greatest extent possible. Compensating for adverse impacts to high value aquatic resources is typically difficult, prohibitively expensive, and may not be possible in some landscape settings. Ecology Section 401 review is required for activities in or affecting the following aquatic resources (and not prohibited by Seattle District Regional General Condition): (a) Wetlands with special characteristics (as defined in the Washington State Wetland Rating Systems for western and eastern Washington, Ecology Publications #14-06-029 and #14-06-030):

- Estuarine wetlands.
- Wetlands of High Conservation Value.
- Bogs.
- Old-growth and mature forested wetlands.
- Wetlands in coastal lagoons.
- Interdunal wetlands.
- Vernal pools.
- Alkali wetlands.

(b) Fens, aspen-dominated wetlands, camas prairie wetlands. (c) Marine water with eelgrass (*Zostera marina*) beds (except for NWP 48). (d) Category I wetlands. (e) Category II wetlands with a habitat score ≥ 8 points. This State General Condition does not apply to the following Nationwide Permits: NWP 20 – *Response Operations for Oil and Hazardous Substances*, NWP 32 – *Completed Enforcement Actions*

5. Mitigation. Applicants are required to show that they have followed the mitigation sequence and have first avoided and minimized impacts to aquatic resources wherever practicable. For projects requiring Ecology Section 401 review with unavoidable impacts to aquatics resources, adequate compensatory mitigation must be provided.

(a) Wetland mitigation plans submitted for Ecology review and approval shall be based on the most current guidance provided in Wetland Mitigation in Washington State, Parts 1 and 2 (available on Ecology's website) and shall, at a minimum, include the following:

- i. A description of the measures taken to avoid and minimize impacts to wetlands and other waters of the U.S.
- ii. The nature of the proposed impacts (i.e., acreage of wetlands and functions lost or degraded).
- iii. The rationale for the mitigation site that was selected.
- iv. The goals and objectives of the compensatory mitigation project.
- v. How the mitigation project will be accomplished, including construction sequencing, best management practices to protect water quality, proposed performance standards for measuring success and the proposed buffer widths.
- vi. How it will be maintained and monitored to assess progress towards goals and objectives. Monitoring will generally be required for a minimum of five years. For forested and scrub-shrub wetlands, 10 years of monitoring will often be necessary.
- vii. How the compensatory mitigation site will be legally protected for the long term.

Refer to Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Ecology Publication #06-06-011b) and Selecting Wetland Mitigation Sites Using a Watershed Approach (Ecology Publications #09-06-032 (Western Washington) and #10-06-007 (Eastern Washington)) for guidance on selecting suitable mitigation sites and developing mitigation plans. Ecology encourages the use of alternative mitigation approaches, including credit/debit methodology, advance mitigation, and other programmatic approach such as mitigation banks and in-lieu fee programs. If you are interested in proposing use of an alternative mitigation approach, consult with the appropriate Ecology regional staff person. Information on alternative mitigation approaches is available on Ecology's website.

(b) Mitigation for other aquatic resource impacts will be determined on a case-by-case basis.

6. Temporary Fills. Ecology Section 401 review is required for any project or activity with temporary fill in wetlands or other waters of the state for more than 90 days, unless the applicant has received written approval from Ecology. Note: This State General Condition does not apply to projects or activities authorized under NWP 33, *Temporary Construction, Access, and Dewatering*

7. Stormwater pollution prevention: All projects that involve land disturbance or impervious surfaces must implement stormwater pollution prevention or control measures to avoid discharge of pollutants in stormwater runoff to waters of the State.

(a) For land disturbances during construction, the applicant must obtain and implement permits (e.g., Construction Stormwater General Permit) where required and follow Ecology's current stormwater manual.

(b) Following construction, prevention or treatment of on-going stormwater runoff from impervious surfaces shall be provided.

Ecology's Stormwater Management and Design Manuals and stormwater permit information are available on Ecology's website.

8. State Section 401 Review for PCNs not receiving 45-day response from the Seattle District. In the event the Seattle District Corps does not issue a NWP authorization letter within 45 calendar days of receipt of a **complete** pre-construction notification, the applicant must contact Ecology for Section 401 review prior to commencing work.

F. ECOLOGY 401 CERTIFICATION: SPECIFIC CONDITIONS FOR THIS NWP:

Certified subject to conditions. Ecology Section 401 review is required for projects or activities authorized under this NWP if:

1. The project or activity impacts more than 1/3 acre of waters of the state.
2. The project or activity is in or adjoining a known contaminated or cleanup site.
3. The project or activity requires a Federal Energy Regulatory Commission (FERC) license.

G. COASTAL ZONE MANAGEMENT CONSISTENCY RESPONSE FOR THIS NWP:

(Note: This only applies in the following counties: Clallam, Grays Harbor, Island, Jefferson, King, Kitsap, Mason, Pacific, Pierce, San Juan, Skagit, Snohomish, Thurston, Wahkiakum and Whatcom)

Response: Ecology concurs that this NWP is consistent with the CZMP, subject to the following condition: An individual Coastal Zone Management Consistency Determination is required for project or activities under this NWP if State Section 401 review is required.

General Conditions: For Non-Federal Permittees

1. Necessary Data and Information. A Coastal Zone Management Program "Certification of Consistency" form is required for projects located within a coastal county. "Certification of Consistency" forms are available on Ecology's website. The form shall include a description of the proposed project or activity and evidence of compliance with the applicable enforceable policies of the Washington Coastal Zone Management Program (CZMP). Also, a map of the site location is required.
2. Timing. Within 6 months from receipt of the necessary data and information, Ecology will provide a federal consistency determination for the proposed project or activity. If Ecology fails to act within the 6 month period, concurrence with the CZMP is presumed.

General Conditions: For Federal Permittees (Agencies)

1. Necessary Data and Information. Federal agencies shall submit the determination, information, and analysis required by 15 CFR 930.39 to obtain a federal consistency determination.
2. Timing. Within 60 days from receipt of the necessary data and information, Ecology will provide a federal consistency determination for the proposed project or activity. If Ecology fails to act within the 60 day period, concurrence with the CZMP is presumed.

**DEPARTMENT OF COMMUNITY
AND ECONOMIC DEVELOPMENT**



PLANNING DIVISION
CERTIFICATE OF EXEMPTION
FROM SHORELINE SUBSTANTIAL DEVELOPMENT

DATE: June 18, 2018

PROJECT NUMBER: LUA18-000277, ECF, SME

PROJECT NAME: Kennydale Lakeline Assessment

PROJECT MANAGER: Clark H. Close, Senior Planner

APPLICANT: City of Renton
David Christensen
1055 S Grady Way
Renton, WA 98057

PROJECT LOCATION: Renton Kennydale Area. Along Lake Washington from approximately 2725 Mountain View Ave N (APN 0623059005) to 3905 Lake Washington Blvd N (APN 3342700011).

SEC-TWN-R: NE06-23-5, SE31-24-5 and NW05-23-5

LEGAL DESCRIPTION: Not Applicable (multiple locations)

WATER BODY: Lake Washington Reach E

PROJECT DESCRIPTION: The applicant is requesting a Shoreline Exemption and Environmental (SEPA) Review to evaluate the condition of the Kennydale Lakeline Sewer System. The sewer line is located in the Residential-8 zone in Lake Washington. During the 2018 summer fish window, the project proposes to allow the City of Renton Wastewater Utility to complete a physical inspection of the sewer pipeline at up to thirteen (13) locations, perform pipe sampling, install manholes, and complete pipe cleaning in and along Lake Washington to determine what is needed to properly maintain the system and evaluate replacement options. The results of the evaluation would determine the remaining useful life of the system and may result in recommendations for future improvements. Condition evaluation would include ultrasonic thickness testing at five (5) locations, pipe sampling via the collection of a single coupon on the mainline, collection of up to three (3) coupons on lateral lines, and temporary access to two (2) existing manholes for lake line cleaning. Two (2) additional locations would be accessed, pipe sections would be removed for evaluation, and the section would be replaced with manholes below grade. The project locations are aquatic and all work would be staged from a floating barge and/or boat. Divers would be deployed from the barge/boat to expose the sewer lake line and conduct maintenance activities.

The KLSS was originally constructed in 1972 to provide sanitary sewer service to approximately 55 to 60 lakefront homes along Lake Washington from the north end of Gene Coulon Memorial Beach Park to just south of May Creek. The pipeline evaluation and associated work would be located in Lake Washington Reach E, in select areas with moderate landslide hazards, and in an area with potential cultural resources. Coordination with property owners is anticipated as part of the work.

Pursuant to the City of Renton's Environmental Ordinance and SEPA (RCW 43.21C, 1971 as amended), on (ERC meeting date) the Environmental Review Committee issued a Determination of Non-Significance (DNS) for the Kennydale Lakeline Assessment. A 14-day appeal period commenced on May 21, 2018 and ended on June 8, 2018. No appeals of the threshold determination were filed.

EXEMPTION JUSTIFICATION: An exemption from a Shoreline Management Substantial Development Permit is hereby **Approved** on the proposed project in accordance with RMC 4.9.190C 'Exemption from Permit System' and for the following reasons:

WAC 173.27.040 (2)(b) - Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements. "Normal maintenance" includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. "Normal repair" means to restore a development to a state comparable to its original condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resource or environment. Replacement of a structure or development may be authorized as repair where such replacement is the common method of repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including but not limited to its size, shape, configuration, location and external appearance and the replacement does not cause substantial adverse effects to shoreline resources or environment;

The proposed development is:
Consistent with the policies of the Shoreline Management Act.

Not Applicable to the guidelines of the Department of Ecology where no Master Program has been finally approved or adopted by the Department.

Consistent with the City of Renton Shoreline Master Program.

SIGNATURE & DATE OF DECISION:

DocuSigned by:
Jennifer T. Henning
1522F84079C3492...
Jennifer Henning, AICP, Planning Director
Department of Community & Economic Development

6/18/2018 | 12:01 PM PDT
Date

RECONSIDERATION: Within 14 days of the decision date, any party of record may request that the decision be reopened by the approval body. The approval body may modify his decision if material evidence not readily discoverable prior to the original decision is found or if he finds there was misrepresentation of fact. After review of the reconsideration request, if the approval body finds sufficient evidence to amend the original decision, there will be no further extension of the appeal period. Any person wishing to take further action must file a formal appeal within the 14 day appeal time frame.

APPEALS: The administrative land use decision will become final if not appealed in writing together with the required fee to: Hearing Examiner, City of Renton, 1055 South Grady Way, Renton, WA 98057 on or before 5:00 pm, on **July 2, 2018** (RCW 43.21.C075(3); WAC 197-11-680). RMC 4-8-110 governs appeals to the Hearing Examiner and additional information regarding the appeal process may be obtained from the Renton City Clerk's office, Renton City Hall, 7th Floor, (425) 430-6510.

EXPIRATION: Two (2) years from the date of decision (date signed).

Attachments: SEPA Environmental Review Report with Exhibits 1-6

cc: Dave Christensen (City of Renton) – Contact
Robert Burr - Party of Record
William Hudson - Party of Record
Milt Reimers - Party of Record
Thomas Dahlby - Party of Record
WC Stoneman - Party of Record
Darius & Vicki Richards - Party of Record

**DEPARTMENT OF COMMUNITY
AND ECONOMIC DEVELOPMENT**



ENVIRONMENTAL REVIEW COMMITTEE REPORT

ERC MEETING DATE: May 21, 2018

Project Name: Kennydale Lakeline Assessment

Project Number: PR18-000184

Land Use Permit Number: LUA18-000277, ECF, SME

Project Manager: Clark H. Close, Senior Planner

Applicant/Contact: David Christensen, Wastewater Utility Manager / City of Renton / dchristensen@rentonwa.gov / 1055 S Grady Way 5th Fl. Renton, WA 98057

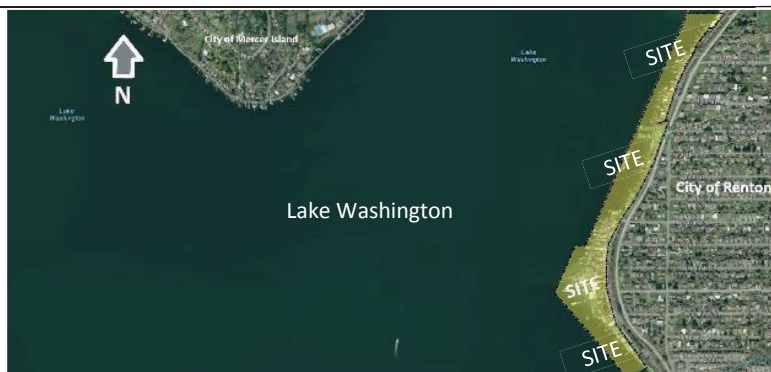
Project Location: Renton Kennydale Area. Along Lake Washington from approximately 2725 Mountain View Ave N (APN 0623059005) to 3905 Lake Washington Blvd N (APN 3342700011).

Project Summary: The applicant is requesting a Shoreline Exemption and Environmental (SEPA) Review to evaluate the condition of the Kennydale Lakeline Sewer System. During the 2018 summer fish window, the project proposes to allow the City of Renton Wastewater Utility to complete a physical inspection of the pipe, perform pipe sampling, install manholes, and complete pipe cleaning in and along Lake Washington to determine what is needed to properly maintain the system and evaluate replacement options. The results of the evaluation would determine the remaining useful life of the system and may result in recommendations for future improvements. The pipeline evaluation and associated work would be located in Lake Washington Reach E, in select areas with moderate landslide hazards, and in an area with potential cultural resources. Coordination with property owners is anticipated with the work.

Exist. Bldg. Area SF: N/A **Proposed New Bldg. Area (footprint):** None
Proposed New Bldg. Area (gross): None

Site Area: N/A **Total Building Area to Remain GSF:** N/A

STAFF RECOMMENDATION: **Staff Recommends that the Environmental Review Committee issue a Determination of Non-Significance (DNS).**



Project Location Map
ERC Report_Kennydale Lakeline Assessment

PART ONE: PROJECT DESCRIPTION / BACKGROUND

The applicant, City of Renton Wastewater Utility Systems, is requesting a Shoreline Exemption and Environmental (SEPA) Review to assess the condition of the Kenneydale Lakeline Sewer System (KLSS). The sewer line is located in the Residential-8 zone in Lake Washington (*Exhibit 2*). This maintenance project is intended to complete a physical inspection of the sewer pipeline at up to thirteen (13) locations to determine what is needed to properly maintain the system and evaluate replacement options. Condition evaluation would include ultrasonic thickness testing at five (5) locations, pipe sampling via the collection of a single coupon on the mainline, collection of up to three (3) coupons on lateral lines, and temporary access to two (2) existing manholes for lake line cleaning. Two (2) additional locations would be accessed, pipe sections would be removed for evaluation, and the section would be replaced with manholes below grade. The project locations are aquatic and all work would be staged from a floating barge and/or boat. Divers would be deployed from the barge/boat to expose the sewer lake line and conduct maintenance activities.

In general, the work plan would involve the installation of site isolation best management practices (BMPs), followed by placement of a shoring system, if required, and pipeline excavation using a suction dredge. Once the pipeline is exposed the pipeline would be evaluated and sediment sampling or corrosion/thickness measurement may occur. Depending on the location, one of three types of actions would occur at this point: either 1) a pipeline sample or coupon would be removed for corrosion and thickness testing and repaired with compression fitting; 2) ultrasonic pipeline thickness testing; or 3) a section of pipeline would be removed for testing, and replaced with a manhole. These coupons, collected from several locations, would provide valuable information on the condition of the lake line pipe. One coupon would be collected near 3703 Lake Washington Blvd N. This coupon is at a relatively high elevation along the lake line that is more likely to have been exposed to corrosive atmosphere. Additional coupons would also be collected on laterals in front of 2905 Mountain View Ave N, 3107 Mountain View Ave N, and 3703 Lake Washington Blvd N. Pipeline sampling at these locations may also impact the adjacent properties at 2909 Mountain View Ave N and 3103 Mountain View Ave N (*Exhibits 3 and 4*). These laterals are also at relatively high elevations along the lake line and experience intermittent gas exposure. These coupons would supply information about pipe corrosion under adverse conditions. The results of the evaluation would aid in formulating a conservative estimate of the remaining useful life and vulnerability of the system and may result in recommendations for future improvements. Following pipeline repair, the substrate would be returned to pre-construction conditions and BMPs would be removed. No substantial changes would be made to the overall structure or layout of the pipeline and all elements would be below final grade.

The KLSS was originally constructed in 1972 to provide sanitary sewer service to approximately 55 to 60 lakefront homes along Lake Washington from the north end of Gene Coulon Memorial Beach Park to just south of May Creek. The pipeline evaluation and associated work would be located in Lake Washington Reach E, in select areas with moderate landslide hazards, and in an area with potential cultural resources.

The proposed work follows the Phase 2A of the Lake Line Condition Assessment which included ultrasonic thickness testing and visual inspection of exposed portions of the lake line as well as survey, bulkhead assessment and hydraulic assessment. As part of the hydraulic assessment it was concluded that the hydraulic capacity of the lake line is reduced, indicative of partial blockages in two general areas. These partial blockages are likely the result of solids settlement caused by velocities below those needed for self-cleaning. Current access from the shoreline for cleaning is limited, and settled solids cannot effectively be

removed using the shore-based cleaning protocol. Therefore to address these partial blockages, it is proposed that three (3) existing submerged manholes on the lake line be temporarily accessed for cleaning. Temporary access from the lake surface would be obtained with steel riser sections connected to the manhole structure.

Once accessed, wastewater from the manholes and adjacent sections of the lake line would be removed prior to cleaning. It is proposed that the cleaning process would use a jetter hose to flush solids toward the manhole where they would be removed by a vacuum. Closed circuit television (CCTV) inspection would be performed before and after cleaning to evaluate the effectiveness of the cleaning procedure. Properties at 2827, 2909, 3111, and 3119 Mountain View Ave N, would experience short-term construction impacts due to their proximity to the manhole location. The two (2) new proposed manholes would be at low points along the undulating sewer to facilitate solids removal. Their locations would facilitate cleaning of a partial blockage believed to be impacting the southern portion of the pipe. The three (3) existing submerged manholes would be used to clean the northern blockage. The proposed manholes would be buried to comply with anticipated permit requirements.

Flexible couplings would be installed on the lake line approximately 10 feet from the manhole to enable localized lowering of the sewer profile and ensure that the manhole cover is below the lakebed. This would allow the manholes to be installed without permanently modifying the lakebed, which would trigger a more intensive permitting process and likely preclude this work from being performed in this summer. The proposed work would be conducted between July 16, 2018 and September 30, 2018 (work windows for fish protection for Lake Washington) and would include a condition assessment on parts of the pipe not currently exposed. This assessment would enable additional analyses of the pipe material to determine the amount of corrosion and remaining useful life of the pipe to aid in the City's strategic planning process.

A summary of the work plan includes the following steps:

1. Surround the work area with a floating silt curtain, starting with a collapsed curtain and expanding it so as to eliminate fish from the work area. Once expanded to enclose the work area, the bottom of the silt curtain would be anchored to the lake bed with sandbags at four foot intervals. The curtain would remain in place throughout the work and for a sufficient period after the work to allow the vast majority of sediments to settle.
2. Conduct turbidity monitoring adjacent to the work zone before, during, and after the work. Results would be documented and any noted exceedances would lead to a) adjustment of work practices, or b) stoppage of the work until suitable adjustments can be made.
3. Place a shoring box along the pipeline surrounding the excavation zone. The shoring box would settle down to the base of the excavation as the work progresses.
4. Expose the buried pipeline by suction dredging within the shoring system. Dredging would be conducted using a boat/barge-mounted trash pump. Excavated materials would be placed outside the shoring but within the silt curtain perimeter.
5. Reduced water usage would be requested of home owners adjacent to the sewer prior to commencement of work. Flush the pipeline with municipal water to remove most of the sewage prior to cutting the pipe.
6. Cut a 4-6-inch diameter hole from the pipe for thickness and corrosion testing. Seal the hole with a pipe repair coupling.

7. Cut through the pipe at the downstream end of the work zone and place a plate to seal the downstream pipe from excessive lake water intrusion. Cut through the pipe at the upstream end of the work zone and removing the existing pipe between the cuts.
8. Replace the removed pipe section with a new pipe segment that includes a manhole to facilitate future cleaning operations. The manholes would be left below the lake bed (*Exhibit 5*). Install repair couplings to join and seal the replacement segment to the existing pipeline.
9. Return the sewer system to normal operation. Check for leaks and ensure KLSS is functioning properly.
10. Suction dredge excavated materials back into the excavation zone while removing the shoring system. Shovel/rake/hydrojet finished surface to original grade.
11. Wait until sediments have settled from the work area before removing the floating silt curtain.

Several permits would be required for either maintenance of the existing line or for conducting a conditions assessment for the existing line, which would include in-water work and disturbance of the lakebed. The following other government approvals/permits would be required: US Army Corp of Engineers (“Corps”) permit to meet requirements of the Rivers and Harbors Act Section 10 and Section 404 of the Clean Water Act, Hydraulic Project Approval (HPA) for projects located near or within a Water of the State, Section 401 Water Quality Certification from Washington State Department of Ecology (“Ecology”) (possibly required), and Hydraulic Project Approval (HPA) from Washington Department of Fish & Wildlife (WDFW). The Joint Aquatic Resource Permit Application (JARPA) process is used to request the HPA, CWA Section 401 Certification, Section 404, and Section 10 permits. Issuance of Section 404 and Section 10 permits by the Corps is contingent on completion of the National Environmental Policy Act (NEPA) and the federal Endangered Species Act (ESA) processes. Additional SEPA review is anticipated for future improvements, maintenance, or replacement of the Kennydale system after the scope and schedule for those improvements are known.

PART TWO: ENVIRONMENTAL REVIEW

In compliance with RCW 43.21C.240, the following environmental (SEPA) review addresses only those project impacts that are not adequately addressed under existing development standards and environmental regulations.

A. Environmental Threshold Recommendation

Based on analysis of probable impacts from the proposal, staff recommends that the Responsible Officials:

Issue a DNS with a 14-day Appeal Period.

B. Exhibits

- Exhibit 1 ERC Report
- Exhibit 2 Location Map
- Exhibit 3 Vicinity Map
- Exhibit 4 Location Reference Table
- Exhibit 5 Lake Line Manhole Plans
- Exhibit 6 Environmental Conditions Report

C. Environmental Impacts

The proposal was circulated and reviewed by various City Departments and Divisions to determine whether the applicant has adequately identified and addressed environmental impacts anticipated to occur in conjunction with the proposed development. Staff reviewers have identified that the proposal is likely to have the following probable impacts:

1. Earth

Impacts: The project site is located in Lake Washington, waterward of the Ordinary High Water Line. The KLSS corridor is approximately 4,800 linear feet (*Exhibit 6*). The shoreline in the proposed work area runs primarily parallel to the highly modified shoreline, approximately 4,500 linear feet. The shoreline consists of riprap, gabion walls, vertical bulkheads, gravel beaches from south of Coleman Point, at the Lake Washington Flush Station, north to May Creek. Overwater structures include docks associated with single-family residences and a log boom delineating the designated swimming area at Kenneydale Beach Park.

The adjacent uplands are residential, relatively flat and rolling. Slopes along the shoreline range from flat (less than 15 percent slope) to gently or moderately sloping (less than 40 percent slopes), with a majority of the shoreline having 15 to 25 percent slopes. Slopes in each project location are less than 1 percent, indicating low risks to the existing moderate landslide hazards. The project is not located near steep slopes and would not affect steep slopes. The bathymetry of the lake is gradual in the project vicinity with water depths between 6 and 20 feet.

The sediment characteristics underlying the water along the vessel routes in the study area include sand, gravel, and cobble, along with various combinations of these sediment types. Excavation would be limited to the volumes sufficient to expose the sewer pipe. Excavated areas would be no larger than 20 feet wide by 36 feet long by 6 feet deep. Up to approximately 279 cubic yards of material may be excavated. The applicant estimates between 5 and 234 cubic yards of excavation depending upon the activity proposed at each site. Material would be stockpiled inside the floating turbidity curtain. After completing inspection and repair at each location, excavated sediments would be used to return the lakebed to its original grade.

According to the applicant, no erosion is expected as a result of this project. Excavation and site restoration would occur over approximately five (5) working days at each location. A sediment curtain would be used to prevent material from being discharged beyond the project site. Excavation would be limited to the smallest amount necessary to expose the pipe and conduct inspections and/or make repairs.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

2. Air

Impacts: It is anticipated that some temporary air quality impacts associated with the assessment and excavation work of the KLSS would occur. The project would require a work barge/boat which includes water-jetting or suction dredge to perform underwater excavation. Emissions from project construction would be limited to roughly three (3) gasoline generators during daily operations plus outboard boat engines for site access and environmental monitoring during operations.

Upstream sewage would be diverted to Pump Station #14 wet well for storage and the pipeline would be flushed with freshwater prior to commencing with the work. This would ensure that no sewer gases are released into the environment. Should the work take long enough to fill the wet well, Vactor vacuum trucks would be available to empty the wet well and dispose of the sewage in another sewer service area. This would ensure that no waste would enter Lake Washington.

Maintenance of the equipment to meet State and Federal air quality requirements would serve to mitigate the potential adverse impacts. No further site specific mitigation for the identified impacts from typical vehicle and construction exhaust is required.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

3. Environmental Health

a. Environmental Health Hazards

Impacts: The project would include removing coupons from the sewer pipeline for testing. Best management practices related to the handling and storage of any environmental health hazards would be implemented during the sewer line inspection to avoid and minimize any potential hazards. The workers' health would be protected during demolition activities by applicable regulations regarding removal of hazardous materials from Washington State Department of Labor and Industries, the Environmental Protection Agency and the Washington State Department of Ecology.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

b. Noise

Impacts: Temporary, short-term impacts are anticipated from transit to and from the inspection site from outboard engines, the operation of water jet/suction dredge equipment, and generators required to operate the equipment or compressors providing air to underwater workers. Project-related noise is anticipated to attenuate to background levels within 283 feet of the project. No changes to noise levels would occur following the completion of the project. The equipment noise would be regulated through the City's adopted noise level regulations per Chapter 8-7, RMC. Permitted work hours in or near residential areas are restricted to the hours between seven o'clock (7:00) a.m. and eight o'clock (8:00) p.m. Monday through Friday. Work on Saturdays is restricted to the hours between nine o'clock (9:00) a.m. and eight o'clock (8:00) p.m. No work is permitted on Sundays. The applicant indicated that all the construction noise impacts are anticipated to occur during daylight hours. No unusual noise impacts are proposed, which would require further levels of mitigation.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

4. Aesthetics

Impacts: During inspection and repair activities, a barge/boat would be located at the site. These vessels would not be higher than 10 feet above the water level and would be onsite for up to five (5) days at each location. Upon completion, all structures and repair work on the sewer pipeline would be buried below grade in the bed of Lake Washington.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

5. Historic and Cultural Preservation

Impacts: In the SEPA Checklist (“Checklist”), the applicant indicated that there are no historic structures or sites present in the project area. However, historic and pre-historic settlements are known to have existed around Lake Washington. The proposed excavation, maintenance and repair activity would be limited to the disturbance area of the already buried pipeline within the lake bed. Probes would be used to confirm the pipe’s location prior to excavation. The Checklist concludes that because the pipeline was installed in 1972, all relevant lake sediments have been considered previously disturbed and thus the applicant is not anticipating the discovery of any historic artifacts in the anticipated area of excavation. If any historic or archaeological resources are encountered during implementation of maintenance activities, work would be stopped in accordance with RCW 27.53.060 and 27.44.020 and a professional archaeologist would be called to assess the significance of the find.

No comments were received from the Washington State Department of Archeology and Historic Preservation.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

D. Comments of Reviewing Departments

The proposal has been circulated to City Department and Division Reviewers. Where applicable, their comments have been incorporated into the text of this report.

- ✓ **Copies of all Review Comments are contained in the Official File and may be attached to this report.**

The Environmental Determination decision will become final if the decision is not appealed within the 14-day appeal period (RCW 43.21.C.075(3); WAC 197-11-680).

Environmental Determination Appeal Process: Appeals of the environmental determination must be filed in writing together with the required fee to: Hearing Examiner, City of Renton, 1055 South Grady Way, Renton, WA 98057, on or before 5:00 p.m. on June 8, 2018. RMC 4-8-110 governs appeals to the Hearing Examiner and additional information regarding the appeal process may be obtained from the City Clerk’s Office, Renton City Hall – 7th Floor, (425) 430-6510.



**DEPARTMENT OF COMMUNITY
AND ECONOMIC DEVELOPMENT**

ENVIRONMENTAL (SEPA) DETERMINATION OF NON-SIGNIFICANCE (DNS)

PROJECT NUMBER: LUA18-000277, ECF, SME

APPLICANT: David Christensen / (425) 430-7212 / 1055 Grady S Way, Renton, WA 98057

PROJECT NAME: Kennydale Lakeline Assessment

PROJECT DESCRIPTION: The applicant is requesting a Shoreline Exemption and Environmental (SEPA) Review to evaluate the condition of the Kennydale Lakeline Sewer System (KLSS). During the 2018 summer fish window, the project proposes to allow the City of Renton Wastewater Utility to complete a physical inspection of the pipe, perform pipe sampling, install manholes, and complete pipe cleaning along Lake Washington to determine what is needed to properly maintain the system and evaluate replacement options. The results of the evaluation would determine the remaining useful life and vulnerability of the system and may result in recommendations for future improvements. The KLSS was originally constructed in 1972 to provide sanitary sewer service to approximately 55 to 60 lakefront homes along Lake Washington from the north end of Gene Coulon Memorial Beach Park to just south of May Creek. The pipeline evaluation and associated work would be located in Lake Washington Reach E, areas of moderate landslide hazards and in an area of potential cultural resources. Coordination with property owners is anticipated as part of the work. The applicant submitted an Environmental Conditions Report with the application.

PROJECT LOCATION: Renton Kennydale Area. Along Lake Washington from approximately 2725 Mountain View Ave N (APN 0623059005) to 3905 Lake Washington Blvd N (APN 3342700011).

LEAD AGENCY: City of Renton
Environmental Review Committee
Department of Community & Economic Development

The City of Renton Environmental Review Committee has determined that it does not have a probable significant adverse impact on the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(c). This Determination of Non-Significance is issued under WAC 197-11-340. Because other agencies of jurisdiction may be involved, the lead agency will not act on this proposal for fourteen (14) days.

Appeals of the environmental determination must be filed in writing on or before 5:00 p.m. on June 8, 2018. Appeals must be filed in writing together with the required fee with: Hearing Examiner, City of Renton, 1055 South Grady Way, Renton, WA 98057. Appeals to the Examiner are governed by RMC 4-8-110 and more information may be obtained from the Renton City Clerk's Office, (425) 430-6510.

PUBLICATION DATE: MAY 25, 2018

DATE OF DECISION: MAY 21, 2018

SIGNATURES:



DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT

DocuSigned by:
Gregg A. Zimmerman
6C74AD07BEBB45E...
Gregg Zimmerman, Administrator
Public Works Department
5/17/2018 | 1:02 PM
Date

DocuSigned by:
Rick M. Marshall
78841F96A3D244D...
Rick M. Marshall, Administrator
Renton Regional Fire Authority
5/17/2018 | 1:13 PM
Date

DocuSigned by:
Kelly Beymer
66EC1E23C7044F7...
Kelly Beymer, Administrator
Community Services Department
5/17/2018 | 2:02 PM
Date

DocuSigned by:
Chip Vincent
49DB377706A9477...
C.E. Chip Vincent, Administrator
Department of Community & Economic Development
5/17/2018 | 1:32 PM
Date

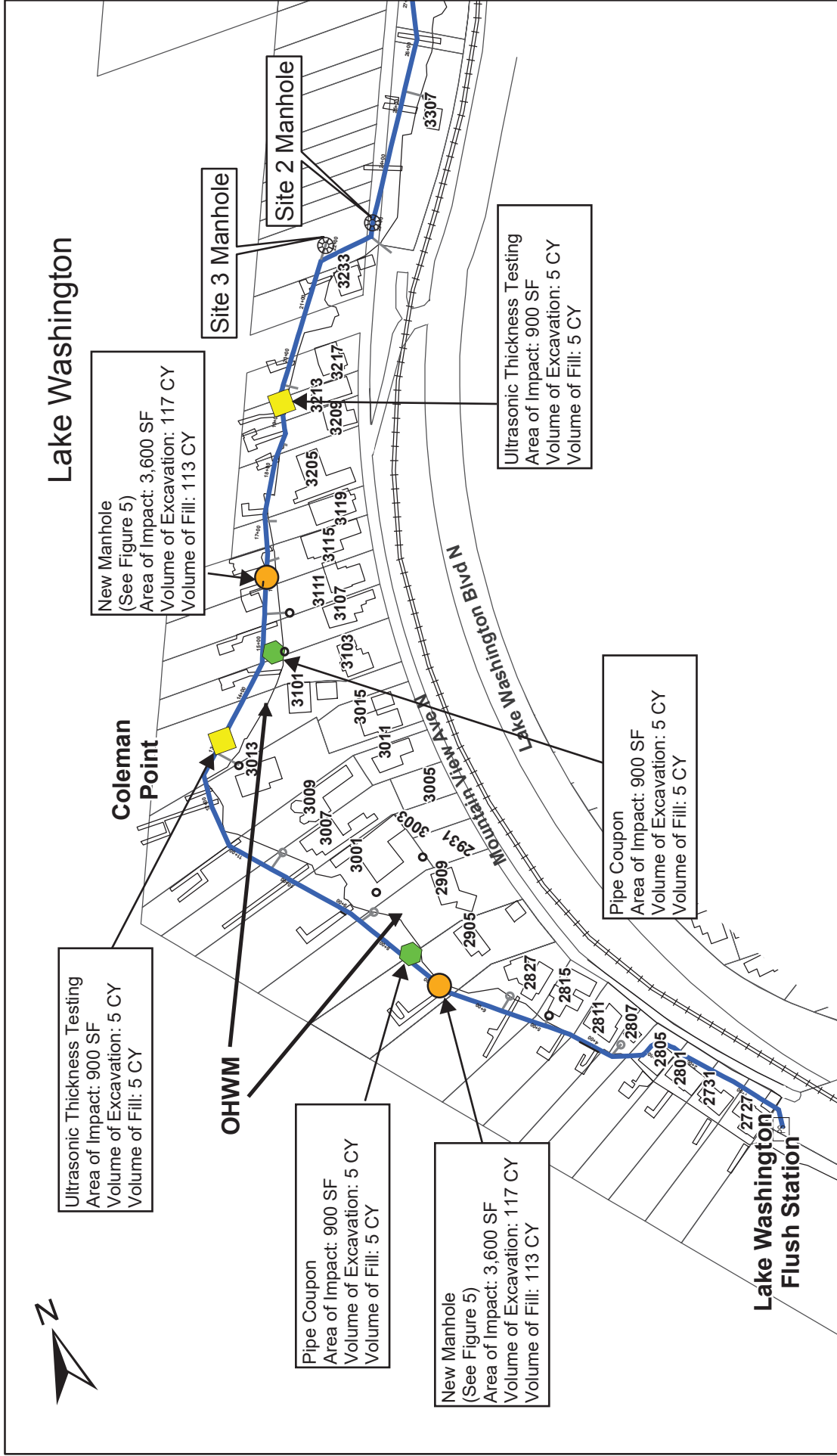


REFERENCE NUMBER:
 APPLICANT NAME: City of Renton, WA
 PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
 LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
 SHEET 1 OF 7
 DATE: 1-31-2018



FIGURE 1
 LOCATION MAP

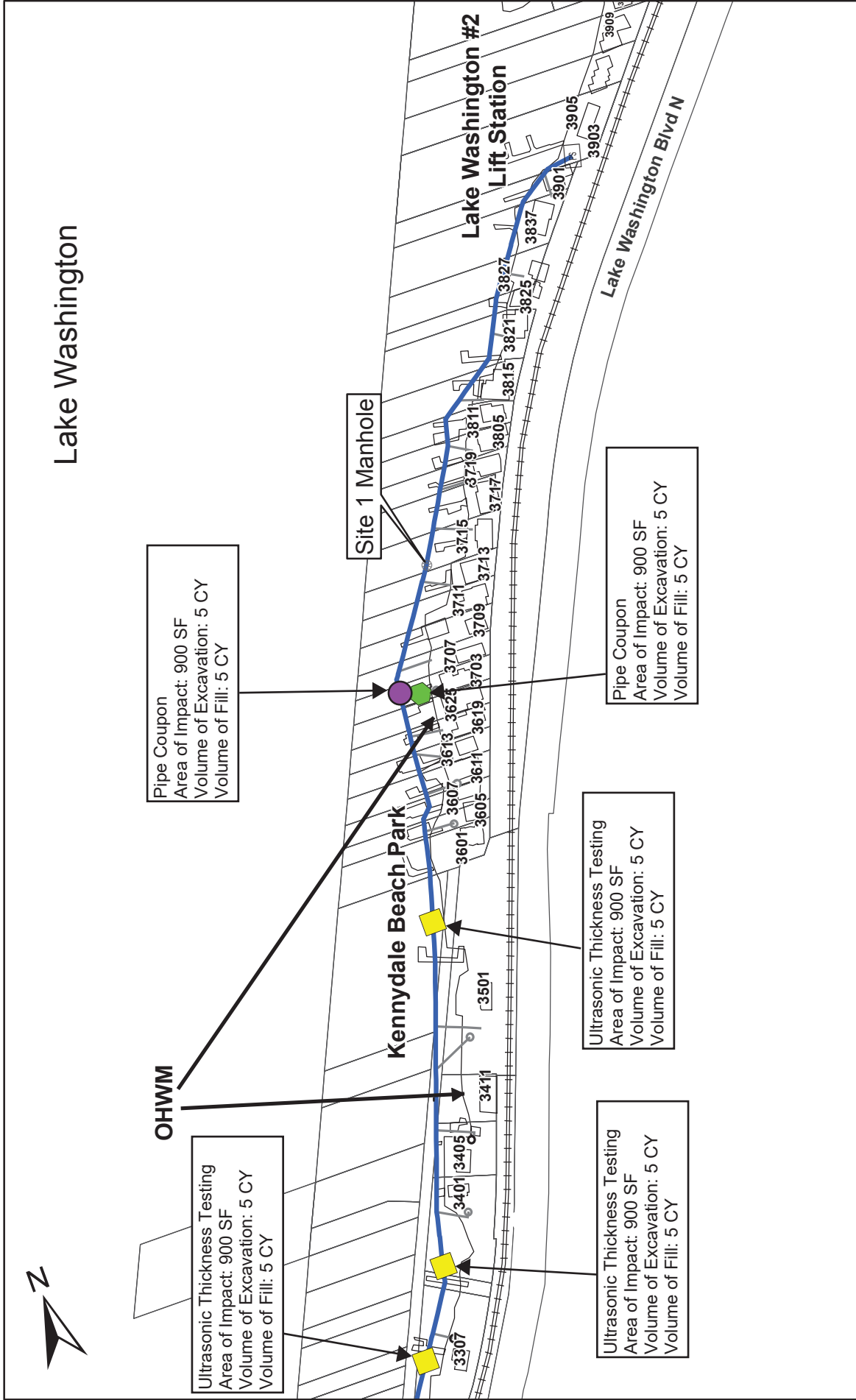
EXHIBIT 2



REFERENCE NUMBER:
 APPLICANT NAME: City of Renton, WA
 PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
 LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
 SHEET 2 OF 7
 DATE: 1-31-2018

FIGURE 2
VICINITY MAP





REFERENCE NUMBER:
 APPLICANT NAME: City of Renton, WA
 PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
 LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
 SHEET 3 OF 7
 DATE: 1-31-2018

Legend

- Mainline Coupon
- Ultrasonic Thickness Testing
- Lateral Coupon

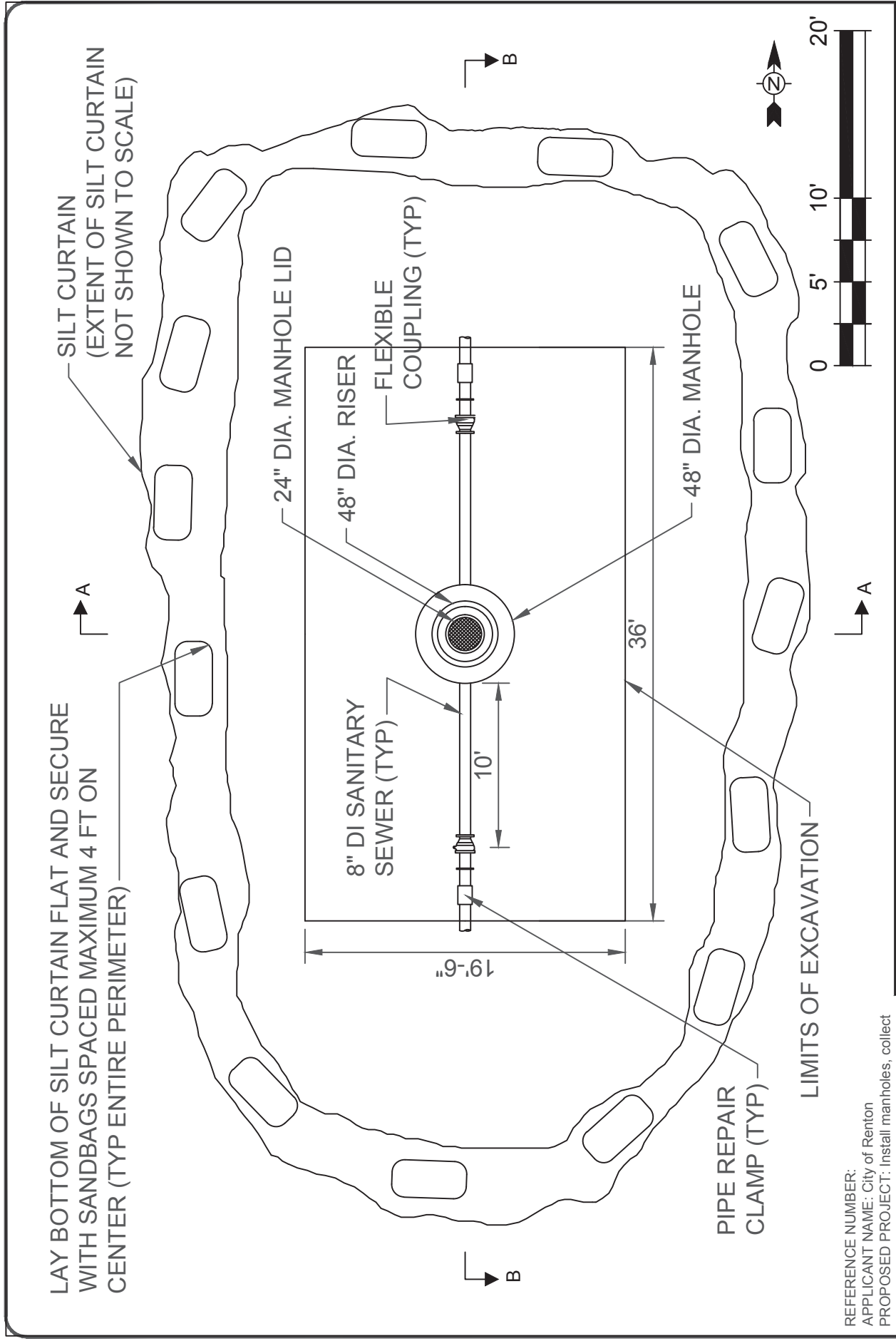
FIGURE 3
VICINITY MAP



Work Performed	Approximate Latitude/Longitude	Parcels Impacted	Addresses
Manhole Installation	47.517663,-122.210646	3342103985	2905 Mountain View Ave N
		3342103953	2909 Mountain View Ave N
		3342104009	2827 Mountain View Ave N
Main Line Coupon	47.519782,-122.210761	3342103860	3111 Mountain View Ave N
		3342103855	3115 Mountain View Ave N
		3342103845	3119 Mountain View Ave N
Lateral Coupon	47.524637,-122.207548	3342700270	3703 Lake Washington Blvd N
		3342103985	2905 Mountain View Ave N
		3342103953	2909 Mountain View Ave N
Ultrasonic Thickness Testing	47.519402,-122.210915	3342103890	3103 Mountain View Ave N
		3342103880	3107 Mountain View Ave N
		3342700270	3703 Lake Washington Blvd N
Ultrasonic Thickness Testing	47.524635,-122.207415	3342103895	3101 Mountain View Ave N
		3342103805	3213 Mountain View Ave N
		3124059077	3307 Lake Washington Blvd N
		3124059076	3401 Lake Washington Blvd N
	47.523563,-122.207942	3342103580	3501 Lake Washington Blvd N

REFERENCE NUMBER:
APPLICANT NAME: City of Renton, WA
PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
SHEET 4 OF 7
DATE: 1-31-2018

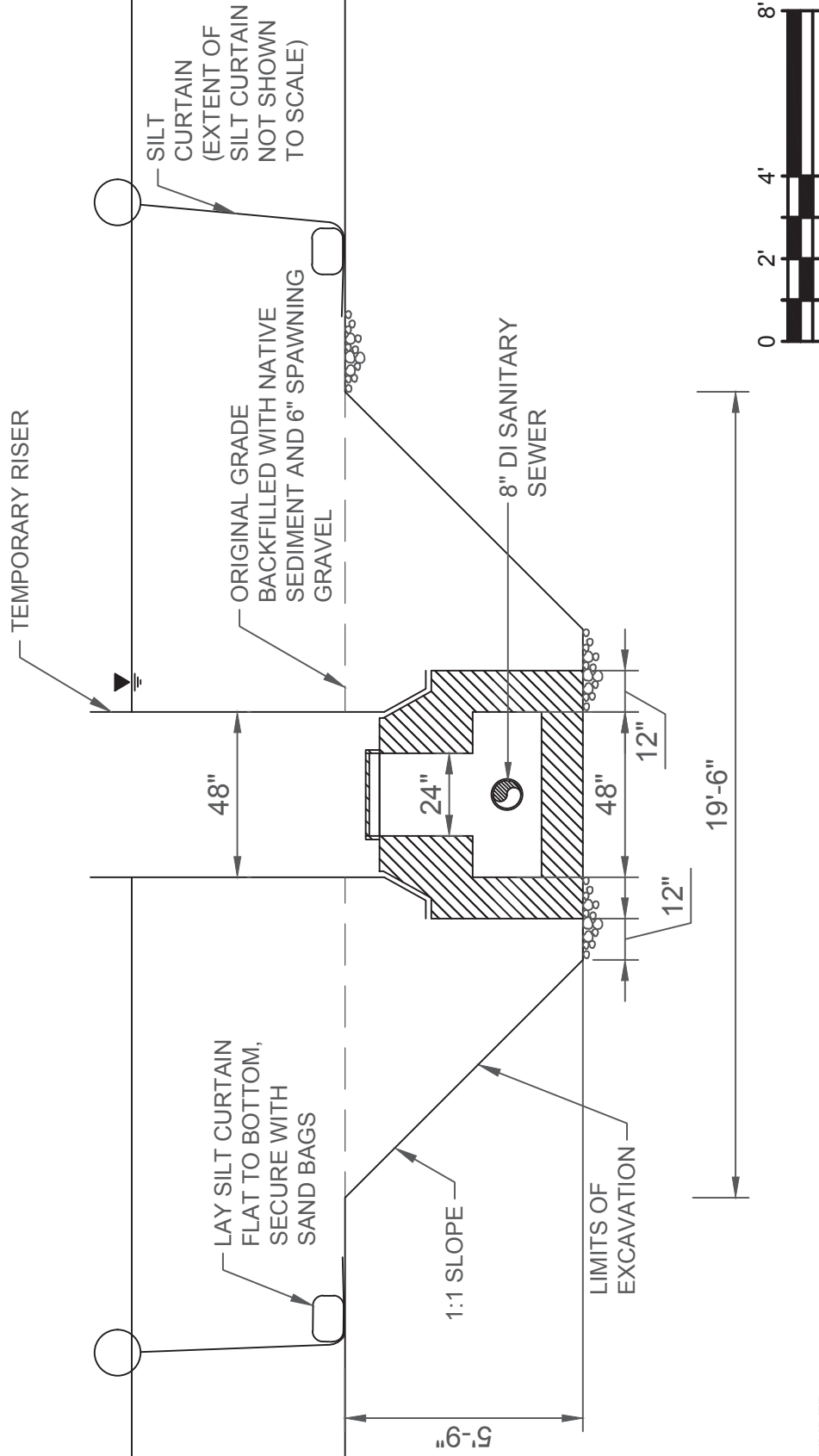
Figure 4
Location Reference Table



TETRA TECH
 www.tetratech.com
 1420 FIFTH AVENUE, SUITE 600
 SEATTLE, WA 98101
 206.883.9300

REFERENCE NUMBER:
 APPLICANT NAME: City of Renton
 PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
 LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
 SHEET 5 OF 7
 DATE: 1-31-2018

CITY OF RENTON
LAKE LINE MANHOLE PLAN
FIGURE 5

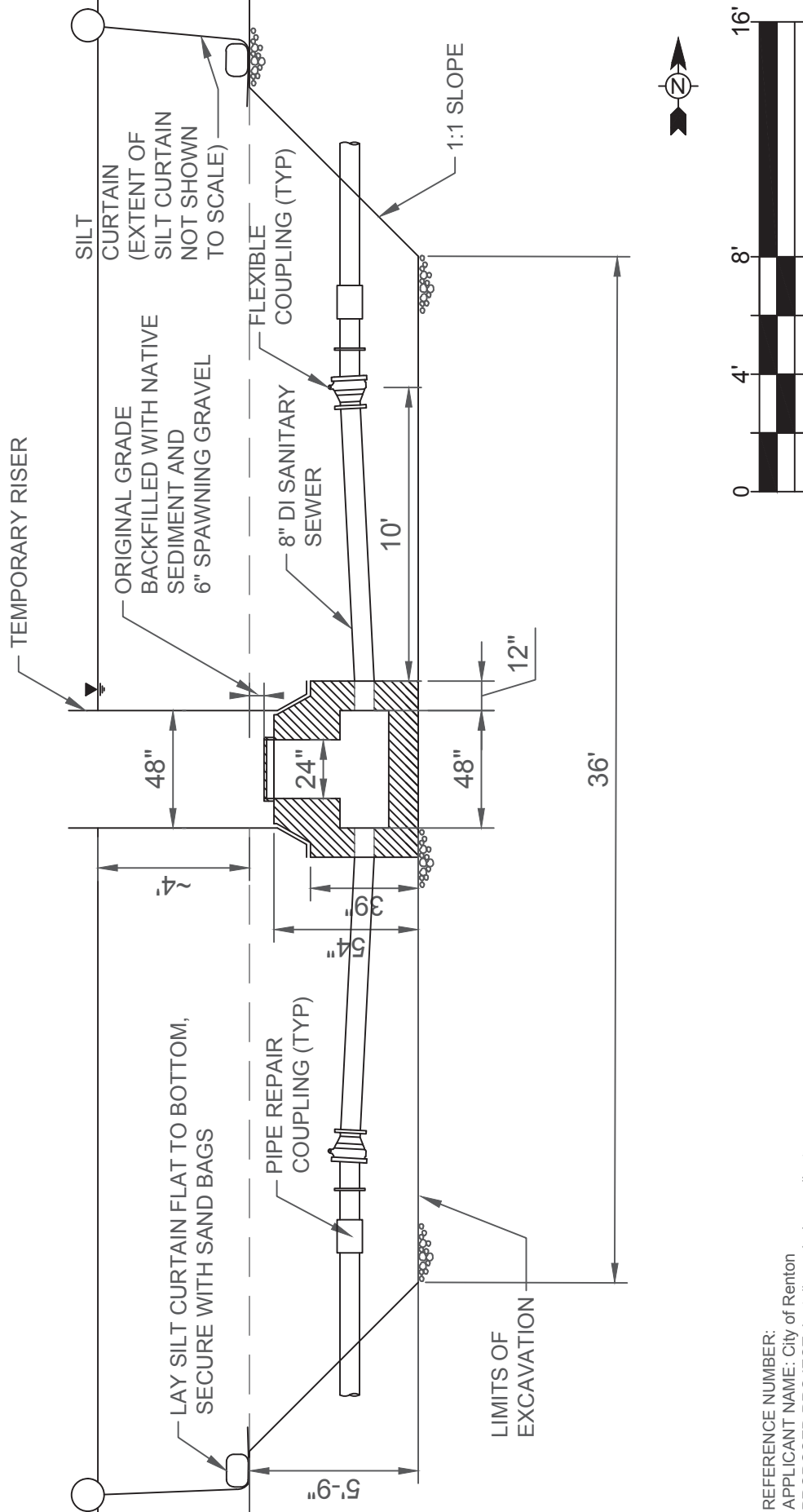


REFERENCE NUMBER:
 APPLICANT NAME: City of Renton
 PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
 LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
 SHEET 6 OF 7
 DATE: 1-17-2018

TETRA TECH
 www.tetratech.com
 1420 FIFTH AVENUE, SUITE 600
 SEATTLE, WA 98101
 206.883.9300

CITY OF RENTON
LAKE LINE MANHOLE SECTION A-A

FIGURE 6



REFERENCE NUMBER:
 APPLICANT NAME: City of Renton
 PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
 LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
 SHEET 7 OF 7
 DATE: 1-31-2018

TETRA TECH
 www.tetratech.com
 1420 FIFTH AVENUE, SUITE 600
 SEATTLE, WA 98101
 206.883.9300

CITY OF RENTON
**LAKE LINE MANHOLE
 SECTION B-B**

FIGURE 7



CONFLUENCE

ENVIRONMENTAL COMPANY



Kennydale Lakeline Sewer System ENVIRONMENTAL CONDITIONS REPORT

Prepared for:
City of Renton
April 6, 2017





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
1201 NE Lloyd Boulevard, Suite 1100
Portland, OR 97232

Refer to NMFS No:
WCR-2018-10281

Aug 7, 2018

Michelle Walker
Corps of Engineers, Seattle District
Regulatory Branch CENWS-OD-RG
Post Office Box 3755
Seattle, Washington 98124-3755

Re: Endangered Species Act Section 7(a)(2) Concurrence Letter and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the City of Renton's Kennydale Lakeline Sewer System Evaluation Project, Renton, Washington. COE Number: NWS-2018-197, Sixth Field HUC: 171100120400 Lake Washington.

Dear Ms. Walker:

This letter responds to your July 11, 2018, request for concurrence from the National Marine Fisheries Service (NMFS) pursuant to Section 7 of the Endangered Species Act (ESA) for the subject action. Your request qualified for our expedited review and concurrence because it met our screening criteria and contained all required information on your proposed action and its potential effects to listed species and designated critical habitat.

We reviewed your consultation request document and related materials. Based on our knowledge, expertise, and the materials you provided, we concur with your conclusions that the proposed action is not likely to adversely affect the NMFS ESA-listed species and/or designated critical habitats identified in your consultation request.

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). A complete record of this consultation is on file electronically at the NMFS West Coast Region Oregon-Washington Coast Office.



Reinitiation of consultation is required and shall be requested by the COE, or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this concurrence letter; or if (3) a new species is listed or critical habitat designated that may be affected by the identified action.

NMFS also reviewed the proposed action for potential effects on essential fish habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), and concurs with the COE determination that the project will not adversely affect EFH. This review was pursuant to section 305(b) of the MSA, implementing regulations at 50 CFR 600.920, and agency guidance for use of the ESA consultation process to complete EFH consultation. In this case, NMFS concluded the action would not adversely affect EFH, thus, consultation under the MSA is not required for this action.

Please direct questions regarding this letter to Donald Hubner at the Oregon-Washington Coastal office at Donald.Hubner@noaa.gov or 206-526-4359.

Sincerely,

A handwritten signature in cursive script that reads "Elizabeth Babcock for".

Barry A. Thom
Regional Administrator

cc: James Carsner, COE
Chris Cziesla, Confluence Environmental Co.



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, SEATTLE DISTRICT
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

Regulatory Branch

August 9, 2018

City of Renton
Mr. David Christensen
1055 South Grady Way
Renton, Washington 98057

Reference: NWS-2018-197
Renton, City of

Dear Mr. Christensen:

We have reviewed your application to perform sewer line inspection and maintenance work in Lake Washington at Renton, King County, Washington. Based on the information you provided to us, Nationwide Permit (NWP) 12, *Utility Line Activities* (Federal Register January 6, 2017, Vol. 82, No. 4), authorizes your proposal as depicted on the enclosed drawings dated January 8, 2018. In order for this authorization to be valid, you must ensure the work is performed in accordance with the enclosed *NWP 12, Terms and Conditions* and the following special conditions:

a. Incidents where any individuals of fish species, marine mammals and/or sea turtles listed by National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the U.S. or structures or work in navigable waters of the U.S. authorized by this Nationwide Permit verification shall be reported to NOAA Fisheries, Office of Protected Resources at (301) 713-1401 and the Regulatory Office of the Seattle District of the U.S. Army Corps of Engineers at (206) 764-3495. The finder should leave the animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

b. You must implement and abide by the Endangered Species Act (ESA) requirements and/or agreements set forth in the Biological Evaluation for Informal ESA Consultation, dated February 1, 2018, in its entirety. The U.S. Fish and Wildlife Service (USFWS) provided the enclosed Letter of Concurrence (LOC) with a finding of "may affect, not likely to adversely

affect" based on this document on August 6, 2018 (USFWS Reference Number 01EWF00-2018-I-13891). The National Marine Fisheries Service (NMFS) provided the enclosed LOC with a finding of "may affect, not likely to adversely affect" based on this document on August 7, 2018 (NMFS Reference Number WCR-2018-10281). Both agencies will be informed of this permit issuance. Failure to comply with the commitments made in this consultation constitutes non-compliance with the ESA and your U.S. Army Corps of Engineers permit. The USFWS/NMFS is the appropriate authority to determine compliance with ESA.

c. In order to meet the requirements of the Endangered Species Act you may conduct the authorized activities from July 16 through December 31 in any year this permit is valid. You shall not conduct work authorized by this permit from January 1 through July 15 in any year this permit is valid.

We have reviewed your project pursuant to the requirements of the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act and the National Historic Preservation Act. We have determined this project complies with the requirements of these laws provided you comply with all of the permit general and special conditions.

The authorized work complies with the Washington State Department of Ecology's (Ecology) Water Quality Certification (WQC) requirements and Coastal Zone Management (CZM) consistency determination response for this NWP. No further coordination with Ecology for WQC and CZM is required

You have not requested a jurisdictional determination for this proposed project. If you believe the Corps does not have jurisdiction over all or portions of your project you may request a preliminary or approved jurisdictional determination (JD). If one is requested, please be aware that we may require the submittal of additional information to complete the JD and work authorized in this letter may not occur until the JD has been completed.

Our verification of this NWP authorization is valid until March 18, 2022, unless the NWP is modified, reissued, or revoked prior to that date. If the authorized work has not been completed by that date and you have commenced or are under contract to commence this activity before March 18, 2022, you will have until March 18, 2023, to complete the activity under the enclosed terms and conditions of this NWP. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. You must also obtain all local, State, and other Federal permits that apply to this project.

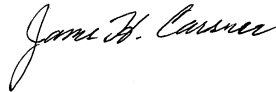
You are cautioned that any change in project location or plans will require that you submit a copy of the revised plans to this office and obtain our approval before you begin work. Deviating from the approved plans could result in the assessment of criminal or civil penalties. Please note that we may need to reinitiate consultation with the National Marine Fisheries Service and/or U.S.

Fish and Wildlife Service in order to authorize any work not already included in the enclosed plans. Civil administrative penalties are described in the enclosure *Clean Water Act Class I Administrative Penalties*.

Upon completing the authorized work, you must fill out and return the enclosed *Certificate of Compliance with Department of the Army Permit*. Thank you for your cooperation during the permitting process. We are interested in your experience with our Regulatory Program and encourage you to complete a customer service survey. These documents and information about our program are available on our website at www.nws.usace.army.mil, select "Regulatory Branch, Permit Information" and then "Contact Us."

A copy of this letter with enclosures will be furnished to Mr. Chris Cziesla, Confluence Environmental Company, 146 North Canal Street, Suite 111, Seattle, Washington, 98103. If you have any questions, please contact me at james.h.carsner@usace.army.mil or (206) 316-3047.

Sincerely,



James H. Carsner, Project Manager
Regulatory Branch

Enclosures

cc: letter only via email to Washington Department of Ecology, Federal Permit Coordinator at: ecyrefedpermits@ecy.wa.gov

cc via email: w/drawings only:

U.S. Fish and Wildlife Service, wfwoclap@fws.gov

National Marine Fisheries Service, frankie.johnson@noaa.gov

Denis Law Mayor



Community & Economic Development C. E. "Chip" Vincent, Administrator

May 25, 2018

Washington State
Department of Ecology
Environmental Review Section
PO Box 47703
Olympia, WA 98504-7703

Subject: ENVIRONMENTAL (SEPA) THRESHOLD DETERMINATION

Transmitted herewith is a copy of the Environmental Determination for the following project reviewed by the Environmental Review Committee (ERC) on May 21, 2018:

SEPA DETERMINATION: Determination of Non-Significance (DNS)
PROJECT NAME: Kennydale Lakeline Assessment
PROJECT NUMBER: LUA18-000277, ECF, SME

Appeals of the environmental determination must be filed in writing on or before 5:00 p.m. on June 8, 2018, together with the required fee with: Hearing Examiner, City of Renton, 1055 South Grady Way, Renton, WA 98057. Appeals to the Examiner are governed by RMC 4-8-110 and information regarding the appeal process may be obtained from the City Clerk's Office, (425) 430-6510.

Please refer to the enclosed Notice of Environmental Determination for complete details. If you have questions, please call me at (425) 430-7289.

For the Environmental Review Committee,

A handwritten signature in blue ink that reads "Clark H. Close".

Clark H. Close
Senior Planner

Enclosure

cc: King County Wastewater Treatment Division
Boyd Powers, Department of Natural Resources
Karen Walter, Fisheries, Muckleshoot Indian Tribe
Melissa Calvert, Muckleshoot Cultural Resources Program
Gretchen Kaehler, Office of Archaeology & Historic Preservation

Ramin Pazooki, WSDOT, NW Region
Larry Fisher, WDFW
Duwamish Tribal Office
US Army Corp. of Engineers
Washington State Department of Ecology

Enclosure

cc: King County Wastewater Treatment Division
Boyd Powers, Department of Natural Resources
Karen Walter, Fisheries, Muckleshoot Indian Tribe
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Ramin Pazooki, WSDOT, NW Region
Larry Fisher, WDFW
Duwamish Tribal Office
US Army Corp. of Engineers
Washington State Department of Ecology



**DEPARTMENT OF COMMUNITY
AND ECONOMIC DEVELOPMENT**

ENVIRONMENTAL (SEPA) DETERMINATION OF NON-SIGNIFICANCE (DNS)

PROJECT NUMBER: LUA18-000277, ECF, SME

APPLICANT: David Christensen / (425) 430-7212 / 1055 Grady S Way, Renton, WA 98057

PROJECT NAME: Kennydale Lakeline Assessment

PROJECT DESCRIPTION: The applicant is requesting a Shoreline Exemption and Environmental (SEPA) Review to evaluate the condition of the Kennydale Lakeline Sewer System (KLSS). During the 2018 summer fish window, the project proposes to allow the City of Renton Wastewater Utility to complete a physical inspection of the pipe, perform pipe sampling, install manholes, and complete pipe cleaning along Lake Washington to determine what is needed to properly maintain the system and evaluate replacement options. The results of the evaluation would determine the remaining useful life and vulnerability of the system and may result in recommendations for future improvements. The KLSS was originally constructed in 1972 to provide sanitary sewer service to approximately 55 to 60 lakefront homes along Lake Washington from the north end of Gene Coulon Memorial Beach Park to just south of May Creek. The pipeline evaluation and associated work would be located in Lake Washington Reach E, areas of moderate landslide hazards and in an area of potential cultural resources. Coordination with property owners is anticipated as part of the work. The applicant submitted an Environmental Conditions Report with the application.

PROJECT LOCATION: Renton Kennydale Area. Along Lake Washington from approximately 2725 Mountain View Ave N (APN 0623059005) to 3905 Lake Washington Blvd N (APN 3342700011).

LEAD AGENCY: City of Renton
Environmental Review Committee
Department of Community & Economic Development

The City of Renton Environmental Review Committee has determined that it does not have a probable significant adverse impact on the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(c). This Determination of Non-Significance is issued under WAC 197-11-340. Because other agencies of jurisdiction may be involved, the lead agency will not act on this proposal for fourteen (14) days.

Appeals of the environmental determination must be filed in writing on or before 5:00 p.m. on June 8, 2018. Appeals must be filed in writing together with the required fee with: Hearing Examiner, City of Renton, 1055 South Grady Way, Renton, WA 98057. Appeals to the Examiner are governed by RMC 4-8-110 and more information may be obtained from the Renton City Clerk's Office, (425) 430-6510.

PUBLICATION DATE: MAY 25, 2018

DATE OF DECISION: JUNE 8, 2018

SIGNATURES:



DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT

DocuSigned by:
Gregg A. Zimmerman
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Gregg Zimmerman, Administrator
Public Works Department

5/17/2018 | 1:33 PM
Date

DocuSigned by:
Rick M. Marshall
78841F96A3D244D...
Rick M. Marshall, Administrator
Renton Regional Fire Authority

5/17/2018 | 1:13 PM
Date

DocuSigned by:
Kelly Beymer
66EC1E23C7044F7...
Kelly Beymer, Administrator
Community Services Department

5/17/2018 | 2:02 PM
Date

DocuSigned by:
Chip Vincent
49DB37706A9477...
C.E. Chip Vincent, Administrator
Department of Community & Economic Development

5/17/2018 | 1:32 PM
Date

DETERMINATION OF NON-SIGNIFICANCE – MITIGATED (DNS-M) MITIGATION MEASURES AND ADVISORY NOTES



PROJECT NUMBER: LUA18-000277, ECF, SME
APPLICANT: David Christensen
PROJECT NAME: Kennydale Lakeline Assessment

PROJECT DESCRIPTION: The applicant is requesting a Shoreline Exemption and Environmental (SEPA) Review to evaluate the condition of the Kennydale Lakeline Sewer System (KLSS). During the 2018 summer fish window, the project proposes to allow the City of Renton Wastewater Utility to complete a physical inspection of the pipe, perform pipe sampling, install manholes, and complete pipe cleaning along Lake Washington to determine what is needed to properly maintain the system and evaluate replacement options. The results of the evaluation would determine the remaining useful life and vulnerability of the system and may result in recommendations for future improvements. The KLSS was originally constructed in 1972 to provide sanitary sewer service to approximately 55 to 60 lakefront homes along Lake Washington from the north end of Gene Coulon Memorial Beach Park to just south of May Creek. The pipeline evaluation and associated work would be located in Lake Washington Reach E, in select areas with moderate landslide hazards, and in an area with potential cultural resources. Coordination with property owners is anticipated as part of the work. The applicant submitted an Environmental Conditions Report with the application.

PROJECT LOCATION: Renton Kennydale Area. Along Lake Washington from approximately 2725 Mountain View Ave N (APN 0623059005) to 3501 Lake Washington Blvd N (APN 3124059004).

LEAD AGENCY: The City of Renton
Department of Community & Economic Development
Planning Division

MITIGATION MEASURES:

There are no mitigation measures proposed for this project

ADVISORY NOTES:

The following notes are supplemental information provided in conjunction with the administrative land use action. *Because these notes are provided as information only, they are not subject to the appeal process for the land use actions.*

See below.

ADVISORY NOTES TO APPLICANT

The following notes are supplemental information provided in conjunction with the administrative land use action. Because these notes are provided as information only, they are not subject to the appeal process for the land use action.

Planning:

(Contact: Name, 425-430-7289, cclose@rentonwa.gov)

1. RMC section 4-4-030.C.2 limits haul hours between 8:30 am to 3:30 pm, Monday through Friday unless otherwise approved by the Development Services Division.
2. Commercial and other nonresidential construction activities shall be restricted to the hours between seven o'clock (7:00) a.m. and eight o'clock (8:00) p.m., Monday through Friday. Work on Saturdays shall be restricted to the hours between nine o'clock (9:00) a.m. and eight o'clock (8:00) p.m. No work shall be permitted on Sundays.
3. Within thirty (30) days of completion of grading work, the applicant shall hydroseed or plant an appropriate ground cover over any portion of the site that is graded or cleared of vegetation and where no further construction work will occur within ninety (90) days. Alternative measures such as mulch, sodding, or plastic covering as specified in the current King County Surface Water Management Design Manual as adopted by the City of Renton may be proposed between the dates of November 1st and March 31st of each year. The Development Services Division's approval of this work is required prior to final inspection and approval of the permit.

Development Engineering:

(Contact: Name, 425-430-7382, aflower@rentonwa.gov)

1. See Attached Development Engineering Memo dated May 8, 2018.

Fire Authority:

(Contact: Corey Thomas, 425-430-7024, cthomas@rentonwa.gov)

1. Reviewed.

Technical Services:

(Contact: Amanda Askren, 425-430-7369, aaskren@rentonwa.gov)

1. Reviewed.

Community Services:

(Contact: Leslie Betlach, 425-430-6619, lbetlach@rentonwa.gov)

1. As the inspection and physical installation of manholes is scheduled to occur between July 16, 2018 and September 30, 2018 and work may impact public access and use of the (life) guarded swimming beach, park use, and maintenance and operations of Kenneydale Beach Park, please coordinate all work in advance with the Parks and Trails Director, Cailin Hunsaker and the Recreation Director, Maryjane Van Cleave to ensure safe use and access. Advance public notification of potential impacts may be required due to potential impacts to the public.

Police:

(Contact: Cyndie Parks, 425-430-7521, cparks@rentonwa.gov)

1. Reviewed.

Building:

(Contact: Craig Burnell, 425-430-7290, cburnell@rentonwa.gov)

1. Reviewed.



DEPARTMENT OF COMMUNITY
& ECONOMIC DEVELOPMENT

M E M O R A N D U M

DATE: May 8, 2018
TO: Clark Close, Senior Planner
FROM: Ann Fowler, Civil Engineer III, Plan Review
SUBJECT: **Kennydale Lakeline
Sewer System Upgrades
LUA18-000277**

I have completed a preliminary review for the above-referenced proposal. The following comments are based on the pre-application submittal made to the City of Renton by the applicant.

SEWER

1. Separate side sewer permits will be required for each residence subject to side sewer repairs, as applicable.

SURFACE WATER

1. The project will need a Temporary Erosion and Sediment Control (TESC) Plan and Storm Water Pollution Prevention Plan that complies with the 2017 City of Renton Surface Water Design Manual (RSWDM). The TESC Plan will need to include dewatering measures and detail in-water sediment control.
 - a. Any temporary fill must be removed from project site by the end of construction.
 - b. A berm design is required for the stockpiled area.
 - c. The geomembrane must be protected during dewatered sediment removal from stockpiled area.
2. A traffic control plan and haul route will need to be submitted and approved prior to the start of construction. Construction hours be in accordance with City standards (7:00 AM 8:00 PM, hauling: 8:30 AM – 3:00 PM) or as established in the approved traffic control plan.

GENERAL COMMENTS

1. A civil construction permit for utility repairs will be required. All utility plans shall confirm to the Renton Drafting Standards. A licensed Civil Engineer shall prepare the civil plans. Please visit the Development Engineering Forms page for the most up-to-date plan submittal requirements: <http://rentonwa.gov/business/default.aspx?id=42473>
2. A landscaping plan shall be included with the civil plan submittal, if applicable.

DEPARTMENT OF COMMUNITY & ECONOMIC DEVELOPMENT

Planning Division

1055 South Grady Way, 6th Floor | Renton, WA 98057 | 425-430-7200

www.rentonwa.gov



NOTICE OF ENVIRONMENTAL DETERMINATION ISSUANCE OF A DETERMINATION OF NON-SIGNIFICANCE (DNS) POSTED TO NOTIFY INTERESTED PERSONS OF AN ENVIRONMENTAL ACTION

DNS: THE CITY OF RENTON ENVIRONMENTAL REVIEW COMMITTEE (ERC) HAS DETERMINED THAT THE PROPOSED ACTION DOES NOT HAVE A SIGNIFICANT ADVERSE IMPACT ON THE ENVIRONMENT.

DATE OF NOTICE OF ENVIRONMENTAL DETERMINATION: May 25, 2018

PROJECT NAME/NUMBER: Kennydale Lakeline Assessment / LUA18-000277, ECF, SME

PROJECT LOCATION: Renton Kennydale Area. Along Lake Washington from approximately 2725 Mountain View Ave N (APN 0623059005) to 3501 Lake Washington Blvd N (APN 3124059004).



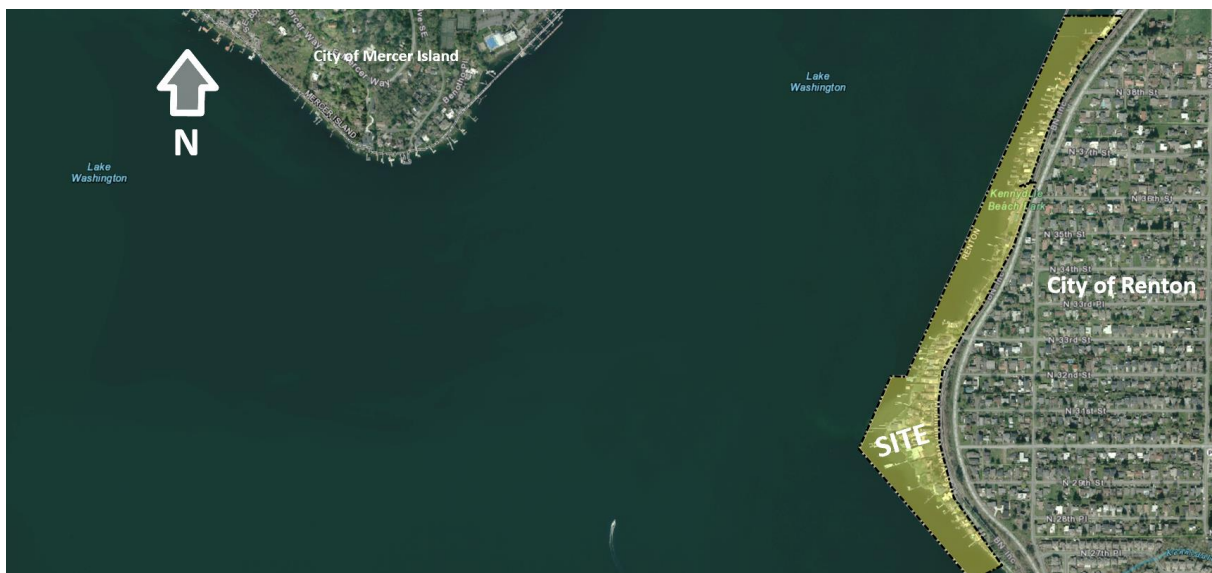
LOCATION WHERE APPLICATION MAY BE REVIEWED: Applicant documents are available online through the City of Renton Document Center website. See also <https://bit.ly/2Ls6eWm>

PROJECT DESCRIPTION: The applicant is requesting a Shoreline Exemption and Environmental (SEPA) Review to evaluate the condition of the Kennydale Lakeline Sewer System (KLSS). During the 2018 summer fish window, the project proposes to allow the City of Renton Wastewater Utility to complete a physical inspection of the pipe, perform pipe sampling, install manholes, and complete pipe cleaning along Lake Washington to determine what is needed to properly maintain the system and evaluate replacement options. The results of the evaluation would determine the remaining useful life and vulnerability of the system and may result in recommendations for future improvements. The KLSS was originally constructed in 1972 to provide sanitary sewer service to approximately 55 to 60 lakefront homes along Lake Washington from the north end of Gene Coulon Memorial Beach Park to just south of May Creek. The pipeline evaluation and associated work would be located in Lake Washington Reach E, in select areas with moderate landslide hazards, and in an area with potential cultural resources. Coordination with property owners is anticipated as part of the work. The applicant submitted an Environmental Conditions Report with the application.

Appeals of the environmental determination must be filed in writing on or before 5:00 p.m. on June 8, 2018, together with the required fee with: Hearing Examiner, City of Renton, 1055 South Grady Way, Renton, WA 98057. Appeals to the Examiner are governed by City of RMC 4-8-110 and information regarding the appeal process may be obtained from the Renton City Clerk’s Office, (425) 430-6510.

PUBLIC HEARING: If the Environmental Determination is appealed, a public hearing will be set and all parties notified.

CONTACT PERSON: Clark H. Close, Senior Planner; Tel: (425) 430-7289; Email: CClose@rentonwa.gov



FOR FURTHER INFORMATION, PLEASE CONTACT THE CITY OF RENTON, DEPARTMENT OF COMMUNITY & ECONOMIC DEVELOPMENT AT (425) 430-7200.

DO NOT REMOVE THIS NOTICE WITHOUT PROPER AUTHORIZATION

PLEASE INCLUDE THE PROJECT NUMBER WHEN CALLING FOR PROPER FILE IDENTIFICATION.



SEPA ENVIRONMENTAL CHECKLIST

A. Background

1. Name of proposed project, if applicable:

Renton Kennydale Lakeline Sewer Condition Assessment

2. Name of applicant:

City of Renton, Utility Systems Division – David Christensen

3. Address and phone number of applicant and contact person:

Address: 1055 S Grady Way, 5th Floor, Renton, WA 98057

Phone: (425) 430-7212

Contact Person: David Christensen, City of Renton

4. Date checklist prepared:

January 30, 2018

5. Agency requesting checklist:

City of Renton, Utility Systems Division

6. Proposed timing or schedule (including phasing, if applicable):

City of Renton, Utilities Division proposes to complete the physical inspection and installation of manholes along the Kennydale Lake Line between July 16, 2018 and September 30, 2018. These dates align with WDFW's in-water work windows for areas of Lake Washington more than 1 mile from Mercer Slough and the Cedar River where beach spawning by sockeye salmon has been recorded in the past.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

This project is a system evaluation. The results of this evaluation will determine the remaining useful life and vulnerability of the system and may result in recommendations for future improvements.

Future improvements, maintenance or replacement of the Kennydale system would undergo environmental evaluation after the scope and schedule for those improvements are known.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

An environmental conditions report characterizing the Lake Washington habitats above and adjacent to the existing Kennydale Sewer Line was completed in April 2017 (Confluence Environmental 2017).

A Joint Aquatic Resource Permit Application (JARPA) and a Biological Evaluation for compliance with Section 7 of the federal Endangered Species Act (ESA) have been prepared for this project.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No.

10. List any government approvals or permits that will be needed for your proposal, if known.

- Department of Army permit to meet requirements of the Rivers and Harbors Act Section 10 and Section 404 of the Clean Water Act.
- Section 401 Water Quality Certification from Washington State Department of Ecology (Possibly required)
- Hydraulic Project Approval from WDFW
- City of Renton Shoreline Exemption

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

This maintenance project is intended to evaluate pipeline conditions at up to thirteen locations. Condition evaluation will include ultrasonic thickness testing at five locations, collection of a single coupon on the mainline, collection of up to three coupons on lateral lines, and temporary access at two existing manholes for lakeline cleaning. Two additional locations will be accessed, pipe sections will be removed for evaluation, and the sections will be replaced with manholes below grade. The project locations are aquatic and all work will be staged from a floating barge or boat. Divers will be deployed from the boat/barge to expose the sewer lakeline and conduct maintenance activities.

Work at each location will follow a similar approach which will be customized based on site conditions. In general, the work plan will involve the installation of site isolation best management practices (BMPs), followed by placement of a shoring system, if

required, and pipeline excavation using a suction dredge. Once the pipeline is exposed the pipeline will be evaluated and sediment sampling or corrosion/thickness measurement may occur. Depending on the location, one of three types of actions will occur at this point. Either 1) a pipeline sample or coupon will be removed for corrosion and thickness testing and repaired with a compression fitting, 2) ultrasonic pipeline thickness testing, or 3) a section of pipeline will be removed for testing, and replaced with a manhole. Following pipeline repair, the substrate will be returned to pre-construction conditions and BMPs will be removed. No substantial changes will be made to the overall structure or layout of the pipeline and all elements will be below final grade.

Work Plan:

1. Surround the work area with a floating silt curtain, starting with a collapsed curtain and expanding it so as to eliminate fish from the work area. Once expanded to enclose the work area, the bottom of the silt curtain will be anchored to the lake bed with sandbags at four foot intervals. The curtain will remain in place throughout the work and for a sufficient period after the work to allow the vast majority of sediments to settle.
2. Conduct turbidity monitoring adjacent to the work zone before, during, and after the work. Results will be documented and any noted exceedances will lead to a) adjustment of work practices, or b) stoppage of the work until suitable adjustments can be made.
3. Place a shoring box along the pipeline surrounding the excavation zone. The shoring box will settle down to the base of the excavation as the work progresses.
4. Expose the buried pipeline by suction dredging within the shoring system. Dredging will be conducted using a boat/barge-mounted trash pump. Excavated materials will be placed outside the shoring but within the silt curtain perimeter.
5. Reduced water usage will be requested of home owners adjacent to the sewer prior to commencement of work. Flush the pipeline with municipal water to remove most of the sewage prior to cutting the pipe.
6. Cut a 4-6-inch diameter hole from the pipe for thickness and corrosion testing. Seal the hole with a pipe repair coupling
7. Cut through the pipe at the downstream end of the work zone and place a plate to seal the downstream pipe from excessive lake water intrusion. Cut through the pipe at the upstream end of the work zone and removing the existing pipe between the cuts.
8. Replace the removed pipe section with a new pipe segment that includes a manhole to facilitate future cleaning operations. The manholes will be left below the lake bed as shown in Figures 6 and 7. Install repair couplings to join and seal the replacement segment to the existing pipeline.

9. Return the sewer system to normal operation. Check for leaks and ensure lakeline is functioning properly.

10. Suction dredge excavated materials back into the excavation zone while removing the shoring system. Shovel/rake/hydrojet finished surface to original grade.

11. Wait until sediments have settled from the work area before removing the floating silt curtain.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

See attached Figures 1-4.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

The project is located in Lake Washington, waterward of the Ordinary High Water Line. Adjacent uplands are residential, relatively flat, and rolling.

b. What is the steepest slope on the site (approximate percent slope)?

Slopes in each project location are less than 1%. The project is not located near steep slopes and will not affect steep slopes. The bathymetry of the lake is gradual in the project vicinity with water depths between 6 and 20 feet.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The sediment characteristics underlying the water along the vessel routes in the study area include sand, gravel, and cobble, along with various combinations of these sediment types.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No. The sewer line has been in place since 1972 with no history of failure due to unstable soils.

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Excavation would be limited to the volumes sufficient to expose the sewer pipe. Excavated areas will be no larger than 20 feet wide, by 36 feet long by 6 feet deep. After completing inspection and repair at each location, excavated sediments would be used to return the lakebed to its original grade.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No erosion is expected. Excavation and site restoration would occur over approximately 5 working days at each site.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

None.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

A sediment curtain will be used to prevent material from being discharged beyond the project site. Excavation will be limited to the small amount necessary to expose the pipe and conduct inspections and/or make repairs.

2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

The project would require a work barge and boat which includes water-jetting or suction dredge to perform underwater excavation. Emissions from project construction would be limited to approximately 3 gasoline generators during daily operations plus outboard boat engines for site access and environmental monitoring during operations.

Upstream sewage will be re-directed and the pipeline will be flushed with freshwater prior to commencing with work. This will ensure that no sewer gases are released into the environment.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Engines will be turned off when not in use.

3. Water

- a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The project is situated in Lake Washington.

May Creek, a small perennial stream draining approximately 9,000 acres, is located approximately 0.2 miles north of the northernmost project location. The stream is well outside the action area and the project will have no effect on the stream.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes. The project includes inspection of the existing sewer line which is buried in the lake bed.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Up to approximately 279 cubic yards of material may be excavated (between 5 and 234 cubic yards depending upon the activity proposed at each site). Material will be stockpiled inside the floating turbidity curtain to restore the lakebed to its original grade once inspection and repairs are completed.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Yes, the site is waterward of the ordinary highwater mark of Lake Washington.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No. Upstream sewage will be diverted to Pump Station #14 wet well for storage and the lakeline will be flushed with freshwater prior to work commencing. Should the work take long enough to fill the wet well, vector trucks will be available to empty the wet well and dispose of the sewage in another sewer service area. This will ensure that no waste will enter the lake.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No groundwater use or withdrawal.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material will be discharged.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The project is in the lake so no surface runoff will occur. A floating turbidity curtain will enclose the work areas to ensure that no elevated turbidity levels are experienced within the lake.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

No. Upstream sewage will be diverted to Pump Station #14 wet well for storage and the lakeline will be flushed with freshwater prior to work commencing. Should the work take long enough to fill the wet well, vacor trucks will be available to empty the wet well and dispose of the sewage in another sewer service area. This will ensure that now waste will enter the lake.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Not Applicable. Because the project is aquatic, no runoff will occur.

4. Plants

a. Check the types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- Orchards, vineyards or other permanent crops.
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: milfoil, elodea

____ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

No vegetation will be removed or altered.

c. List threatened and endangered species known to be on or near the site.

No listed plants are known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None/Not Applicable.

e. List all noxious weeds and invasive species known to be on or near the site.

Common non-native species in Lake Washington include: milfoil, hydrilla, elodea and water hyacinth. Excavations are anticipated to occur outside of vegetated beds but some non-native aquatic vbegetation may be present at some sites.

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site.

Puget Sound Chinook salmon, Puget Sound steelhead, and bull trout.

c. Is the site part of a migration route? If so, explain.

Yes. Multiple species migrate through Lake Washington. Migratory birds may use the area as a stopover site, and migratory fish moving to Puget Sound, Lake Washington or the Lake Washington tributaries may move past the site.

d. Proposed measures to preserve or enhance wildlife, if any:

Isolation of the in-water work area using a floating turbidity curtain will remove and exclude fish from the vicinity of the project, while also containing project-related turbidity.

e. List any invasive animal species known to be on or near the site.

New Zealand mud snail, oriental weatherfish, walleye, and northern pike are all known to occur in Lake Washington and/or its tributaries. Specific surveys of the project sites have not been conducted.

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Gasoline would be used for operation of engines to power generators, pumps, and/or outboards during inspection and repair activities.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

- 1) Describe any known or possible contamination at the site from present or past uses.

None known.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None known.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Gasoline may be used on support boats and/or barges.

- 4) Describe special emergency services that might be required.

Should an accident occur, the injured individual(s) would be transported by boat to an appropriate dock for offloading and transport to hospital for treatment.

- 5) Proposed measures to reduce or control environmental health hazards, if any:

Best management practices related to the handling and storage of any environmental health hazards will be implemented during the sewer line inspection to avoid and minimize any potential hazards.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Ambient noise conditions are from adjacent residences, Interstate 405, and recreational boats operating on Lake Washington.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Noise would be generated during transit to and from the inspection sites from outboard engines. Noise during inspection would be from the operation of water jet/suction dredge and any generators required to operate this equipment or compressors to provide air to underwater workers. Project-related noise is anticipated to attenuate to background levels within 283 feet of the project. No changes to noise levels would occur following the completion of the project.

- 3) Proposed measures to reduce or control noise impacts, if any:

Inspection activities will occur during daylight hours.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Adjacent properties are primarily single family residential properties. Two parks are located in the project vicinity – Kennydale Beach Park is within the project action area and Gene Coulon Park is approximately 0.5 miles to the south.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No/Not Applicable.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversized equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No/Not Applicable.

- c. Describe any structures on the site.

The project will inspect an 8-inch ductile pipe that is buried under the lakebed in most locations. This is the only structure on the project sites.

Adjacent structures are primarily single family residences and auxiliary structures (e.g., sheds, bulkheads, docks, boat lifts).

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

Residential-8

f. What is the current comprehensive plan designation of the site?

Residential Medium Density

g. If applicable, what is the current shoreline master program designation of the site?

Single-family residential

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Yes. Aquatic sites are designated critical areas.

i. Approximately how many people would reside or work in the completed project?

The project would provide temporary employment for individuals during the period of inspection.

The project does not provide housing.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not Applicable.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

This project is maintenance of an existing sewer line so does not change existing or projected land uses.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None. The proposed project will not affect agricultural or forest lands of long-term commercial significance.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

- c. Proposed measures to reduce or control housing impacts, if any:

None.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

All proposed repairs will be buried below-grade.

- b. What views in the immediate vicinity would be altered or obstructed?

During inspection and repair activities, a barge and/or boat would be located at the site. These would not be higher than 10 feet above the water level and would be on site for up to 5 days at each location. Upon completion, all structures will be buried below grade in the bed of the lake.

- b. Proposed measures to reduce or control aesthetic impacts, if any:

None proposed.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The project will occur during daylight hours and therefore is not expected to contribute to lighting or glare. Flashlights or similar may be used to illuminate work surfaces under water.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

- c. What existing off-site sources of light or glare may affect your proposal?

Not applicable.

d. Proposed measures to reduce or control light and glare impacts, if any:

None, not applicable.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Gene Coulon Memorial Beach Park provides numerous upland recreation activities in addition to boat launches and a summer swimming area. Kennydale Beach Park includes a swim area and recreation and picnic areas.

Informal recreational opportunities in the area include park amenities, boating, kayaking, fishing, and wildlife viewing.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No. The finished project will be buried below grade. Temporary inspection and repair activities may limit boating or fishing in the immediate vicinity of project activities.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None, not applicable.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

No historic structures or sites are present in the project area. Maintenance and repair activities include excavation of an already-buried pipeline. Because the pipeline was installed in 1972, all relevant lake sediments have been previously disturbed.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No known sites are in the project vicinity. Historic and pre-historic settlements are known to have existed around Lake Washington. However, the sites are currently submerged and would have been historically submerged as well. Furthermore, the pipeline is buried in soils disturbed during the initial pipeline installation. The project footprint is within the footprint of excavation in 1970's for pipeline installation.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

None. It is assumed that, because the existing pipe was buried in the lake bed in the early 1970s, there are no historic artifacts in the area anticipated for excavation.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

The project will limit activities to the sediments immediately above the existing pipe. Probes will be used to confirm the pipe's location prior to excavation and therefore excavation will be limited to sediments disturbed during the initial installation of the pipeline.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

None. The project site is aquatic and will be accessed by boats launched from nearby boat launches.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No. Site is wholly aquatic.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

None.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Small, private boats and/or barges will be used to access the site and stage inspection and repair activities.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

Up to 10 vehicle round trips could occur as part of this project. Vehicles will be used to deliver divers, inspectors, and support personnel to nearby boat ramps for transport by boat to the in-water project sites.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

- h. Proposed measures to reduce or control transportation impacts, if any:

Not applicable.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

None proposed.

16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

The project entails the inspection and repair of the existing sewer line in Lake Washington.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None proposed.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Name of signee _____

Position and Agency/Organization _____

Date Submitted: _____



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: June 18, 2018
Project End Date: June 17, 2023

Permit Number: 2018-4-426+01
FPA/Public Notice Number: N/A
Application ID: 14975

PERMITTEE	AUTHORIZED AGENT OR CONTRACTOR
City of Renton: Utility Systems Division ATTENTION: David Christensen 1055 S Grady Way Renton, WA 98057	Confluence Environmental Company ATTENTION: Chris Czesla 146 N Canal St Seattle, WA 98103-8652

Project Name: Kennydale Lakeline Sewer System Evaluation

Project Description: This maintenance project is intended to clean the pipeline and evaluate sewer pipeline conditions at up to thirteen locations. Condition evaluation will include ultrasonic thickness testing at five locations, collection of a single coupon on the mainline, collection of up to three coupons on lateral lines, and temporary access at three existing manholes for lakeline cleaning. Two additional locations will be accessed, pipe sections will be removed for evaluation, and the sections will be replaced with manholes below grade. The project locations are aquatic and all work will be staged from a floating barge or boat. Divers will be deployed from the boat/barge to expose the sewer lakeline and conduct maintenance activities. Work at each location will follow a similar approach which will be customized based on site conditions. In general, the work plan will involve the installation of site isolation best management practices (BMPs), followed by placement of a shoring system, if required, and pipeline excavation using a suction pump. Following pipeline repair, the substrate would be returned to pre-construction conditions and BMPs would be removed.

PROVISIONS

1. This STANDARD Hydraulic Project Approval (HPA) is issued for the inspection and maintenance of an underground sewer line at up to 13 locations waterward of the ordinary high water line in Lake Washington. Washed, well-rounded 2" minus gravels will be placed over the tops of the restored excavation locations, as needed, to ensure no net loss of fish habitat.

TIMING - PLANS - INVASIVE SPECIES CONTROL

2. TIMING LIMITATION: You may begin the project immediately and you must complete the project by June 17, 2023, provided that all work below the OHWL is only performed between July 15 through September 30 of a given year.

3. APPROVED PLANS: You must accomplish the work per plans and specifications submitted with the application and approved by the Washington Department of Fish and Wildlife, except as modified by this Hydraulic Project Approval. You must have a copy of these plans available on site during all phases of the project construction.

4. INVASIVE SPECIES CONTROL: Follow Level 1 Decontamination protocol for low risk locations. Thoroughly remove visible dirt and organic debris from all equipment and gear (including drive mechanisms, wheels, tires, tracks, buckets and undercarriage) before arriving and leaving the job site to prevent the transport and introduction of invasive species. Properly dispose of any water and chemicals used to clean gear and equipment. For contaminated or high risk sites please refer to the Level 2 Decontamination protocol. You can find this and additional information in the Washington Department of Fish and Wildlife's "Invasive Species Management Protocols", available online at <http://wdfw.wa.gov/publications/search.php?Cat=Aquatic Invasive Species>.

NOTIFICATION REQUIREMENTS



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: June 18, 2018

Permit Number: 2018-4-426+01

Project End Date: June 17, 2023

FPA/Public Notice Number: N/A

Application ID: 14975

5. **POST-CONSTRUCTION NOTIFICATION:** You, your agent, or contractor must contact the Washington Department of Fish and Wildlife by e-mail at HPAapplications@dfw.wa.gov; mail to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946 within thirty days after completing the work. The notification must include the permit number and, if possible, photographs of the completed project sites which demonstrate that the sites were returned to pre-project condition or better.

6. **FISH KILL/ WATER QUALITY PROBLEM NOTIFICATION:** If a fish kill occurs or fish are observed in distress at the job site, immediately stop all activities causing harm. Immediately notify the Washington Department of Fish and Wildlife of the problem. If the likely cause of the fish kill or fish distress is related to water quality, also notify the Washington Military Department Emergency Management Division at 1-800-258-5990. Activities related to the fish kill or fish distress must not resume until the Washington Department of Fish and Wildlife gives approval. The Washington Department of Fish and Wildlife may require additional measures to mitigate impacts.

STAGING, JOB SITE ACCESS, AND EQUIPMENT

7. Retain all natural habitat features encountered on the bed including large woody material. You may move these natural habitat features during project activities but you must place them near the preproject location before leaving the job site. If non-native materials (rip rap, angular rocks, other garbage/debris) are encountered in the isolated work areas during project activities, remove these items from the lake and dispose of them in an appropriate upland location.

8. Confine the use of equipment to the specific locations and work corridor shown in the approved plans. If during field verification activities it is discovered that the locations vary significantly from what is shown in the plans, consult with the Habitat Biologist before proceeding.

9. Station and operate equipment used for this project landward of the ordinary high water line or on a barge or boat.

10. Equipment used for this project may operate waterward of the ordinary high water line, provided the drive mechanisms (wheels, tracks, tires, etc.) do not enter or operate waterward of the ordinary high water line.

11. Check equipment daily for leaks and complete any required repairs in an upland location before using the equipment in or near the water.

12. Use environmentally acceptable lubricants composed of biodegradable base oils such as vegetable oils, synthetic esters, and polyalkylene glycols in equipment operated in or near the water.

13. Operate and anchor vessels and barges during construction in a manner that protects native aquatic vegetation and prevents grounding.

CONSTRUCTION-RELATED SEDIMENT, EROSION AND POLLUTION CONTAINMENT

14. Install a containment boom/turbidity curtain so that it surrounds each in-water inspection area for the duration of the work at that location. Secure the curtains with sandbags and ensure that no fish are trapped in the isolation area before proceeding.

15. Prevent project contaminants, such as petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials, from entering or leaching into waters of the state.

16. Route construction water (wastewater) from the project to an upland area above the limits of anticipated floodwater. Remove fine sediment and other contaminants before discharging the construction water to waters of the state.

17. Deposit all trash from the project at an appropriate upland disposal location.

CONSTRUCTION MATERIALS

18. Use only clean well-rounded 2" minus gravels or another comparable fish-friendly substrate mix as fill material (no trash, debris, car bodies, tires, asphalt, concrete, etc.).

19. Use of angular rock is not permitted in any part of this project.

FISH LIFE REMOVAL

20. All persons participating in capture and removal must have training, knowledge, and skills in the safe handling of



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: June 18, 2018
Project End Date: June 17, 2023

Permit Number: 2018-4-426+01
FPA/Public Notice Number: N/A
Application ID: 14975

fish life.

- 21. Capture and safely move fish life from the work area to the nearest suitable free-flowing water.
- 22. If electrofishing is conducted, a person with electrofishing training must be on-site to conduct or direct all electrofishing activities.

LAKEBED EXCAVATION

- 23. This HPA authorizes you to excavate only enough material as is necessary for the purposes of the project. The material is not authorized to leave Lake Washington and must be returned to its original location in the excavation zone prior to the completion of the project.
- 24. Deposit excavated materials in the area within the containment boom/turbidity curtain to ensure that sediment filled water is isolated from the rest of Lake Washington.
- 25. Upon the return of the sediments to their pre-project location, the bed must be raked and leveled to pre-project conditions to ensure that it does not contain pits, potholes, or large depressions.
- 26. Place washed, well-rounded fish-friendly gravels on top of the excavated areas after backfilling to ensure no net loss of fish habitat.

DEMOBILIZATION AND CLEANUP

- 27. To minimize sediment delivery to the lake, do not remove the turbidity curtain from the work area until all in-water work is completed and the water has cleared to pre-project conditions.
- 28. Remove temporary sediment control methods after job site is stabilized or within three months of project completion, whichever is sooner.
- 29. Replace native aquatic vegetation (except invasive or noxious weeds) damaged or destroyed by construction with at least a 1:1 ratio using a proven methodology.
- 30. Upon completion of the project, remove all materials or equipment from the site and dispose of all excess spoils and waste materials in an upland area above the limits of anticipated floodwater.

LOCATION #1: , , WA						
WORK START: June 18, 2018			WORK END: June 17, 2023			
<u>WRIA</u>		<u>Waterbody:</u>			<u>Tributary to:</u>	
08 - Cedar - Sammamish		Lake Washington			Ship Canal	
<u>1/4 SEC:</u>	<u>Section:</u>	<u>Township:</u>	<u>Range:</u>	<u>Latitude:</u>	<u>Longitude:</u>	<u>County:</u>
E 1/2	31	24 N	05 E	47.523317	-122.208437	King
<u>Location #1 Driving Directions</u>						

APPLY TO ALL HYDRAULIC PROJECT APPROVALS



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This Hydraulic Project Approval shall be available on the job site at all times and all its provisions followed by the person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work.

This Hydraulic Project Approval does not authorize trespass.

The person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work may be held liable for any loss or damage to fish life or fish habitat that results from failure to comply with the provisions of this Hydraulic Project Approval.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a civil penalty of up to one hundred dollars per day and/or a gross misdemeanor charge, possibly punishable by fine and/or imprisonment.

All Hydraulic Project Approvals issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this Hydraulic Project Approval is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.

MINOR MODIFICATIONS TO THIS HPA: You may request approval of minor modifications to the required work timing or to the plans and specifications approved in this HPA unless this is a General HPA. If this is a General HPA you must use the Major Modification process described below. Any approved minor modification will require issuance of a letter documenting the approval. A minor modification to the required work timing means any change to the work start or end dates of the current work season to enable project or work phase completion. Minor modifications will be approved only if spawning or incubating fish are not present within the vicinity of the project. You may request subsequent minor modifications to the required work timing. A minor modification of the plans and specifications means any changes in the materials, characteristics or construction of your project that does not alter the project's impact to fish life or habitat and does not require a change in the provisions of the HPA to mitigate the impacts of the modification. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a minor modification through APPS. A link to APPS is at <http://wdfw.wa.gov/licensing/hpa/>. If you did not use APPS you must submit a written request that clearly indicates you are seeking a minor modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234, or by email to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.



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MAJOR MODIFICATIONS TO THIS HPA: You may request approval of major modifications to any aspect of your HPA. Any approved change other than a minor modification to your HPA will require issuance of a new HPA. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a major modification through APPS. A link to APPS is at <http://wdfw.wa.gov/licensing/hpa/>. If you did not use APPS you must submit a written request that clearly indicates you are requesting a major modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send your written request by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You may email your request for a major modification to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.

APPEALS INFORMATION

If you wish to appeal the issuance, denial, conditioning, or modification of a Hydraulic Project Approval (HPA), Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the department employee who issued or denied the HPA to discuss your concerns. Such a discussion may resolve your concerns without the need for further appeal action. If you proceed with an appeal, you may request an informal or formal appeal. WDFW encourages you to take advantage of the informal appeal process before initiating a formal appeal. The informal appeal process includes a review by department management of the HPA or denial and often resolves issues faster and with less legal complexity than the formal appeal process. If the informal appeal process does not resolve your concerns, you may advance your appeal to the formal process. You may contact the HPA Appeals Coordinator at (360) 902-2534 for more information.

A. INFORMAL APPEALS: WAC 220-660-460 is the rule describing how to request an informal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete informal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request an informal appeal of that action. You must send your request to WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. WDFW must receive your request within 30 days from the date you receive notice of the decision. If you agree, and you applied for the HPA, resolution of the appeal may be facilitated through an informal conference with the WDFW employee responsible for the decision and a supervisor. If a resolution is not reached through the informal conference, or you are not the person who applied for the HPA, the HPA Appeals Coordinator or designee may conduct an informal hearing or review and recommend a decision to the Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

B. FORMAL APPEALS: WAC 220-660-470 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule.



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Permit Number: 2018-4-426+01

FPA/Public Notice Number: N/A

Application ID: 14975

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request a formal appeal of that action. You must send your request for a formal appeal to the clerk of the Pollution Control Hearings Boards and serve a copy on WDFW within 30 days from the date you receive notice of the decision. You may serve WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, you may request a formal appeal within 30 days from the date you receive the Director's or designee's written decision in response to the informal appeal.

C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.

Habitat Biologist

Elizabeth.Torrey@dfw.wa.gov

A handwritten signature in blue ink that reads "Elizabeth Torrey".

for Director

Elizabeth Torrey

425-313-5681

WDFW



HYDRAULIC PROJECT APPROVAL

Washington Department of
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Issued Date: September 24, 2018
Project End Date: June 17, 2023

Permit Number: 2018-4-426+02
FPA/Public Notice Number: N/A
Application ID: 14975

PERMITTEE	AUTHORIZED AGENT OR CONTRACTOR
City of Renton: Utility Systems Division ATTENTION: David Christensen 1055 S Grady Way Renton, WA 98057	Confluence Environmental Company ATTENTION: Chris Czesla 146 N Canal St Seattle, WA 98103-8652

Project Name: Kennydale Lakeline Sewer System Evaluation

Project Description: This maintenance project is intended to clean the pipeline and evaluate sewer pipeline conditions at up to thirteen locations. Condition evaluation will include ultrasonic thickness testing at five locations, collection of a single coupon on the mainline, collection of up to three coupons on lateral lines, and temporary access at three existing manholes for lakeline cleaning. Two additional locations will be accessed, pipe sections will be removed for evaluation, and the sections will be replaced with manholes below grade. The project locations are aquatic and all work will be staged from a floating barge or boat. Divers will be deployed from the boat/barge to expose the sewer lakeline and conduct maintenance activities. Work at each location will follow a similar approach which will be customized based on site conditions. In general, the work plan will involve the installation of site isolation best management practices (BMPs), followed by placement of a shoring system, if required, and pipeline excavation using a suction pump. Following pipeline repair, the substrate would be returned to pre-construction conditions and BMPs would be removed.

Major Modification: use of a barge mounted backhoe (within area surrounded by the turbidity curtain) to access the sewer line in the two areas identified where a section of the pipeline would be replaced with a manhole. It is not anticipated that the backhoe would be used for pipeline sampling or coupon or for ultrasonic thickness testing locations. Those areas of pipeline would be accessed via suction pump or hydrojet as previously proposed.

PROVISIONS

1. This STANDARD Hydraulic Project Approval (HPA) is issued for the inspection and maintenance of an underground sewer line at up to 13 locations waterward of the ordinary high water line in Lake Washington. Washed, well-rounded 2" minus gravels will be placed over the tops of the restored excavation locations, as needed, to ensure no net loss of fish habitat.

TIMING - PLANS - INVASIVE SPECIES CONTROL

2. TIMING LIMITATION: You may begin the project immediately and you must complete the project by June 17, 2023, provided that all work below the OHWL is only performed between July 15 through September 30 of a given year.

NOTE: During the 2018 year only, the work window is permitted to extend until October 15. Every effort must be made to complete as much work as possible during the original work window extending through September 30.

NOTE: Before performing work between September 30 through October 15, an experienced fisheries biologist must first inspect each work area for redds or spawning salmonids prior to commencing work. No work is authorized to be



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FPA/Public Notice Number: N/A

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performed if any evidence of redds or spawning fish is observed; you must halt your activities and contact the WDFW for further instruction.

3. **APPROVED PLANS:** You must accomplish the work per plans and specifications submitted with the application and approved by the Washington Department of Fish and Wildlife, except as modified by this Hydraulic Project Approval. You must have a copy of these plans available on site during all phases of the project construction.

4. **INVASIVE SPECIES CONTROL:** Follow Level 1 Decontamination protocol for low risk locations. Thoroughly remove visible dirt and organic debris from all equipment and gear (including drive mechanisms, wheels, tires, tracks, buckets and undercarriage) before arriving and leaving the job site to prevent the transport and introduction of invasive species. Properly dispose of any water and chemicals used to clean gear and equipment. For contaminated or high risk sites please refer to the Level 2 Decontamination protocol. You can find this and additional information in the Washington Department of Fish and Wildlife's "Invasive Species Management Protocols", available online at <http://wdfw.wa.gov/publications/search.php?Cat=Aquatic Invasive Species>.

NOTIFICATION REQUIREMENTS

5. **POST-CONSTRUCTION NOTIFICATION:** You, your agent, or contractor must contact the Washington Department of Fish and Wildlife by e-mail at HPAapplications@dfw.wa.gov; mail to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946 within thirty days after completing the work. The notification must include the permit number and, if possible, photographs of the completed project sites which demonstrate that the sites were returned to pre-project condition or better.

6. **FISH KILL/ WATER QUALITY PROBLEM NOTIFICATION:** If a fish kill occurs or fish are observed in distress at the job site, immediately stop all activities causing harm. Immediately notify the Washington Department of Fish and Wildlife of the problem. If the likely cause of the fish kill or fish distress is related to water quality, also notify the Washington Military Department Emergency Management Division at 1-800-258-5990. Activities related to the fish kill or fish distress must not resume until the Washington Department of Fish and Wildlife gives approval. The Washington Department of Fish and Wildlife may require additional measures to mitigate impacts.

STAGING, JOB SITE ACCESS, AND EQUIPMENT

7. Retain all natural habitat features encountered on the bed including large woody material. You may move these natural habitat features during project activities but you must place them near the preproject location before leaving the job site. If non-native materials (rip rap, angular rocks, other garbage/debris) are encountered in the isolated work areas during project activities, remove these items from the lake and dispose of them in an appropriate upland location.

8. Confine the use of equipment to the specific locations and work corridor shown in the approved plans. If during field verification activities it is discovered that the locations vary significantly from what is shown in the plans, consult with the Habitat Biologist before proceeding.

9. Station and operate equipment used for this project landward of the ordinary high water line or on a barge or boat.

10. Equipment used for this project may operate waterward of the ordinary high water line, provided the drive mechanisms (wheels, tracks, tires, etc.) do not enter or operate waterward of the ordinary high water line.

11. Check equipment daily for leaks and complete any required repairs in an upland location before using the equipment in or near the water.

12. Use environmentally acceptable lubricants composed of biodegradable base oils such as vegetable oils, synthetic esters, and polyalkylene glycols in equipment operated in or near the water.

13. Operate and anchor vessels and barges during construction in a manner that protects native aquatic vegetation and prevents grounding.

CONSTRUCTION-RELATED SEDIMENT, EROSION AND POLLUTION CONTAINMENT

14. Install a containment boom/turbidity curtain so that it surrounds each in-water inspection area for the duration of the work at that location. Secure the curtains with sandbags and ensure that no fish are trapped in the isolation area before



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Permit Number: 2018-4-426+02
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proceeding.

- 15. Prevent project contaminants, such as petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials, from entering or leaching into waters of the state.
- 16. Route construction water (wastewater) from the project to an upland area above the limits of anticipated floodwater. Remove fine sediment and other contaminants before discharging the construction water to waters of the state.
- 17. Deposit all trash from the project at an appropriate upland disposal location.

CONSTRUCTION MATERIALS

- 18. Use only clean well-rounded 2" minus gravels or another comparable fish-friendly substrate mix as fill material (no trash, debris, car bodies, tires, asphalt, concrete, etc.).
- 19. Use of angular rock is not permitted in any part of this project.

FISH LIFE REMOVAL

- 20. All persons participating in capture and removal must have training, knowledge, and skills in the safe handling of fish life.
- 21. Capture and safely move fish life from the work area to the nearest suitable free-flowing water.
- 22. If electrofishing is conducted, a person with electrofishing training must be on-site to conduct or direct all electrofishing activities.

LAKEBED EXCAVATION

- 23. This HPA authorizes you to excavate only enough material as is necessary for the purposes of the project. The material is not authorized to leave Lake Washington and must be returned to its original location in the excavation zone prior to the completion of the project.
- 24. Deposit excavated materials in the area within the containment boom/turbidity curtain to ensure that sediment filled water is isolated from the rest of Lake Washington.
- 25. Upon the return of the sediments to their pre-project location, the bed must be raked and leveled to pre-project conditions to ensure that it does not contain pits, potholes, or large depressions.
- 26. Place washed, well-rounded fish-friendly gravels on top of the excavated areas after backfilling to ensure no net loss of fish habitat.

DEMOBILIZATION AND CLEANUP

- 27. To minimize sediment delivery to the lake, do not remove the turbidity curtain from the work area until all in-water work is completed and the water has cleared to pre-project conditions.
- 28. Remove temporary sediment control methods after job site is stabilized or within three months of project completion, whichever is sooner.
- 29. Replace native aquatic vegetation (except invasive or noxious weeds) damaged or destroyed by construction with at least a 1:1 ratio using a proven methodology.
- 30. Upon completion of the project, remove all materials or equipment from the site and dispose of all excess spoils and waste materials in an upland area above the limits of anticipated floodwater.

LOCATION #1:	, , WA		
WORK START:	September 24, 2018	WORK END:	June 17, 2023
<u>WRIA</u>	<u>Waterbody:</u>	<u>Tributary to:</u>	



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08 - Cedar - Sammamish		Lake Washington			Ship Canal	
<u>1/4 SEC:</u>	<u>Section:</u>	<u>Township:</u>	<u>Range:</u>	<u>Latitude:</u>	<u>Longitude:</u>	<u>County:</u>
E 1/2	31	24 N	05 E	47.523317	-122.208437	King
<u>Location #1 Driving Directions</u>						

APPLY TO ALL HYDRAULIC PROJECT APPROVALS

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FPA/Public Notice Number: N/A
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A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request an informal appeal of that action. You must send your request to WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. WDFW must receive your request within 30 days from the date you receive notice of the decision. If you agree, and you applied for the HPA, resolution of the appeal may be facilitated through an informal conference with the WDFW employee responsible for the decision and a supervisor. If a resolution is not reached through the informal conference, or you are not the person who applied for the HPA, the HPA Appeals Coordinator or designee may conduct an informal hearing or review and recommend a decision to the Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

B. FORMAL APPEALS: WAC 220-660-470 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request a formal appeal of that action. You must send your request for a formal appeal to the clerk of the Pollution Control Hearings Boards and serve a copy on WDFW within 30 days from the date you receive notice of the decision. You may serve WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, you may request a formal appeal within 30 days from the date you receive the Director's or designee's written decision in response to the informal appeal.

C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.

Habitat Biologist Elizabeth.Torrey@dfw.wa.gov
Elizabeth Torrey 509-607-6711

for Director
WDFW



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: October 11, 2018
Project End Date: June 17, 2023

Permit Number: 2018-4-426+03
FPA/Public Notice Number: N/A
Application ID: 14975

PERMITTEE	AUTHORIZED AGENT OR CONTRACTOR
City of Renton: Utility Systems Division ATTENTION: David Christensen 1055 S Grady Way Renton, WA 98057	Confluence Environmental Company ATTENTION: Chris Czesla 146 N Canal St Seattle, WA 98103-8652

Project Name: Kennydale Lakeline Sewer System Evaluation

Project Description: This maintenance project is intended to clean the pipeline and evaluate sewer pipeline conditions at up to thirteen locations. Condition evaluation will include ultrasonic thickness testing at five locations, collection of a single coupon on the mainline, collection of up to three coupons on lateral lines, and temporary access at three existing manholes for lakeline cleaning. Two additional locations will be accessed, pipe sections will be removed for evaluation, and the sections will be replaced with manholes below grade. The project locations are aquatic and all work will be staged from a floating barge or boat. Divers will be deployed from the boat/barge to expose the sewer lakeline and conduct maintenance activities. Work at each location will follow a similar approach which will be customized based on site conditions. In general, the work plan will involve the installation of site isolation best management practices (BMPs), followed by placement of a shoring system, if required, and pipeline excavation using a suction pump. Following pipeline repair, the substrate would be returned to pre-construction conditions and BMPs would be removed.

Major Modification: use of a barge mounted backhoe (within area surrounded by the turbidity curtain) to access the sewer line in the two areas identified where a section of the pipeline would be replaced with a manhole. It is not anticipated that the backhoe would be used for pipeline sampling or coupon or for ultrasonic thickness testing locations. Those areas of pipeline would be accessed via suction pump or hydrojet as previously proposed.

PROVISIONS

1. This STANDARD Hydraulic Project Approval (HPA) is issued for the inspection and maintenance of an underground sewer line at up to 13 locations waterward of the ordinary high water line in Lake Washington. Washed, well-rounded 2" minus gravels will be placed over the tops of the restored excavation locations, as needed, to ensure no net loss of fish habitat.

TIMING - PLANS - INVASIVE SPECIES CONTROL

2. TIMING LIMITATION: You may begin the project immediately and you must complete the project by June 17, 2023, provided that all work below the OHWL is only performed between July 15 through September 30 of a given year.

NOTE: During the 2018 year only, the work window is permitted to extend until October 31, provided that all work conducted between September 30 and October 31 is only performed within pre-installed turbidity curtains which isolate the work areas from the rest of Lake Washington and prevent fish from entering or spawning within the isolated work areas.

3. APPROVED PLANS: You must accomplish the work per plans and specifications submitted with the application and



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

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FPA/Public Notice Number: N/A

Application ID: 14975

approved by the Washington Department of Fish and Wildlife, except as modified by this Hydraulic Project Approval. You must have a copy of these plans available on site during all phases of the project construction.

4. **INVASIVE SPECIES CONTROL:** Follow Level 1 Decontamination protocol for low risk locations. Thoroughly remove visible dirt and organic debris from all equipment and gear (including drive mechanisms, wheels, tires, tracks, buckets and undercarriage) before arriving and leaving the job site to prevent the transport and introduction of invasive species. Properly dispose of any water and chemicals used to clean gear and equipment. For contaminated or high risk sites please refer to the Level 2 Decontamination protocol. You can find this and additional information in the Washington Department of Fish and Wildlife's "Invasive Species Management Protocols", available online at <http://wdfw.wa.gov/publications/search.php?Cat=Aquatic Invasive Species>.

NOTIFICATION REQUIREMENTS

5. **POST-CONSTRUCTION NOTIFICATION:** You, your agent, or contractor must contact the Washington Department of Fish and Wildlife by e-mail at HPAapplications@dfw.wa.gov; mail to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946 within thirty days after completing the work. The notification must include the permit number and, if possible, photographs of the completed project sites which demonstrate that the sites were returned to pre-project condition or better.

6. **FISH KILL/ WATER QUALITY PROBLEM NOTIFICATION:** If a fish kill occurs or fish are observed in distress at the job site, immediately stop all activities causing harm. Immediately notify the Washington Department of Fish and Wildlife of the problem. If the likely cause of the fish kill or fish distress is related to water quality, also notify the Washington Military Department Emergency Management Division at 1-800-258-5990. Activities related to the fish kill or fish distress must not resume until the Washington Department of Fish and Wildlife gives approval. The Washington Department of Fish and Wildlife may require additional measures to mitigate impacts.

STAGING, JOB SITE ACCESS, AND EQUIPMENT

7. Retain all natural habitat features encountered on the bed including large woody material. You may move these natural habitat features during project activities but you must place them near the preproject location before leaving the job site. If non-native materials (rip rap, angular rocks, other garbage/debris) are encountered in the isolated work areas during project activities, remove these items from the lake and dispose of them in an appropriate upland location.

8. Confine the use of equipment to the specific locations and work corridor shown in the approved plans. If during field verification activities it is discovered that the locations vary significantly from what is shown in the plans, consult with the Habitat Biologist before proceeding.

9. Station and operate equipment used for this project landward of the ordinary high water line or on a barge or boat.

10. Equipment used for this project may operate waterward of the ordinary high water line, provided the drive mechanisms (wheels, tracks, tires, etc.) do not enter or operate waterward of the ordinary high water line.

11. Check equipment daily for leaks and complete any required repairs in an upland location before using the equipment in or near the water.

12. Use environmentally acceptable lubricants composed of biodegradable base oils such as vegetable oils, synthetic esters, and polyalkylene glycols in equipment operated in or near the water.

13. Operate and anchor vessels and barges during construction in a manner that protects native aquatic vegetation and prevents grounding.

CONSTRUCTION-RELATED SEDIMENT, EROSION AND POLLUTION CONTAINMENT

14. Install a containment boom/turbidity curtain so that it surrounds each in-water inspection area for the duration of the work at that location. Secure the curtains with sandbags and ensure that no fish are trapped in the isolation area before proceeding.

15. Prevent project contaminants, such as petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials, from entering or leaching into waters of the state.



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

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Permit Number: 2018-4-426+03
FPA/Public Notice Number: N/A
Application ID: 14975

- 16. Route construction water (wastewater) from the project to an upland area above the limits of anticipated floodwater. Remove fine sediment and other contaminants before discharging the construction water to waters of the state.
- 17. Deposit all trash from the project at an appropriate upland disposal location.

CONSTRUCTION MATERIALS

- 18. Use only clean well-rounded 2" minus gravels or another comparable fish-friendly substrate mix as fill material (no trash, debris, car bodies, tires, asphalt, concrete, etc.).
- 19. Use of angular rock is not permitted in any part of this project.

FISH LIFE REMOVAL

- 20. All persons participating in capture and removal must have training, knowledge, and skills in the safe handling of fish life.
- 21. Capture and safely move fish life from the work area to the nearest suitable free-flowing water.
- 22. If electrofishing is conducted, a person with electrofishing training must be on-site to conduct or direct all electrofishing activities.

LAKEBED EXCAVATION

- 23. This HPA authorizes you to excavate only enough material as is necessary for the purposes of the project. The material is not authorized to leave Lake Washington and must be returned to its original location in the excavation zone prior to the completion of the project.
- 24. Deposit excavated materials in the area within the containment boom/turbidity curtain to ensure that sediment filled water is isolated from the rest of Lake Washington.
- 25. Upon the return of the sediments to their pre-project location, the bed must be raked and leveled to pre-project conditions to ensure that it does not contain pits, potholes, or large depressions.
- 26. Place washed, well-rounded fish-friendly gravels on top of the excavated areas after backfilling to ensure no net loss of fish habitat.

DEMOBILIZATION AND CLEANUP

- 27. To minimize sediment delivery to the lake, do not remove the turbidity curtain from the work area until all in-water work is completed and the water has cleared to pre-project conditions.
- 28. Remove temporary sediment control methods after job site is stabilized or within three months of project completion, whichever is sooner.
- 29. Replace native aquatic vegetation (except invasive or noxious weeds) damaged or destroyed by construction with at least a 1:1 ratio using a proven methodology.
- 30. Upon completion of the project, remove all materials or equipment from the site and dispose of all excess spoils and waste materials in an upland area above the limits of anticipated floodwater.

LOCATION #1: , , WA						
WORK START: October 11, 2018			WORK END: June 17, 2023			
<u>WRIA</u>		<u>Waterbody:</u>		<u>Tributary to:</u>		
08 - Cedar - Sammamish		Lake Washington		Ship Canal		
<u>1/4 SEC:</u>	<u>Section:</u>	<u>Township:</u>	<u>Range:</u>	<u>Latitude:</u>	<u>Longitude:</u>	<u>County:</u>



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E 1/2	31	24 N	05 E	47.523317	-122.208437	King
<u>Location #1 Driving Directions</u>						

APPLY TO ALL HYDRAULIC PROJECT APPROVALS

This Hydraulic Project Approval pertains only to those requirements of the Washington State Hydraulic Code, specifically Chapter 77.55 RCW. Additional authorization from other public agencies may be necessary for this project. The person(s) to whom this Hydraulic Project Approval is issued is responsible for applying for and obtaining any additional authorization from other public agencies (local, state and/or federal) that may be necessary for this project.

This Hydraulic Project Approval shall be available on the job site at all times and all its provisions followed by the person (s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work.

This Hydraulic Project Approval does not authorize trespass.

The person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work may be held liable for any loss or damage to fish life or fish habitat that results from failure to comply with the provisions of this Hydraulic Project Approval.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a civil penalty of up to one hundred dollars per day and/or a gross misdemeanor charge, possibly punishable by fine and/or imprisonment.

All Hydraulic Project Approvals issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this Hydraulic Project Approval is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
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FPA/Public Notice Number: N/A
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MINOR MODIFICATIONS TO THIS HPA: You may request approval of minor modifications to the required work timing or to the plans and specifications approved in this HPA unless this is a General HPA. If this is a General HPA you must use the Major Modification process described below. Any approved minor modification will require issuance of a letter documenting the approval. A minor modification to the required work timing means any change to the work start or end dates of the current work season to enable project or work phase completion. Minor modifications will be approved only if spawning or incubating fish are not present within the vicinity of the project. You may request subsequent minor modifications to the required work timing. A minor modification of the plans and specifications means any changes in the materials, characteristics or construction of your project that does not alter the project's impact to fish life or habitat and does not require a change in the provisions of the HPA to mitigate the impacts of the modification. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a minor modification through APPS. A link to APPS is at <http://wdfw.wa.gov/licensing/hpa/>. If you did not use APPS you must submit a written request that clearly indicates you are seeking a minor modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234, or by email to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.

MAJOR MODIFICATIONS TO THIS HPA: You may request approval of major modifications to any aspect of your HPA. Any approved change other than a minor modification to your HPA will require issuance of a new HPA. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a major modification through APPS. A link to APPS is at <http://wdfw.wa.gov/licensing/hpa/>. If you did not use APPS you must submit a written request that clearly indicates you are requesting a major modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send your written request by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You may email your request for a major modification to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.

APPEALS INFORMATION

If you wish to appeal the issuance, denial, conditioning, or modification of a Hydraulic Project Approval (HPA), Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the department employee who issued or denied the HPA to discuss your concerns. Such a discussion may resolve your concerns without the need for further appeal action. If you proceed with an appeal, you may request an informal or formal appeal. WDFW encourages you to take advantage of the informal appeal process before initiating a formal appeal. The informal appeal process includes a review by department management of the HPA or denial and often resolves issues faster and with less legal complexity than the formal appeal process. If the informal appeal process does not resolve your concerns, you may advance your appeal to the formal process. You may contact the HPA Appeals Coordinator at (360) 902-2534 for more information.

A. INFORMAL APPEALS: WAC 220-660-460 is the rule describing how to request an informal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete informal appeal procedures. The following information summarizes that rule.



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: October 11, 2018
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Permit Number: 2018-4-426+03
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B. FORMAL APPEALS: WAC 220-660-470 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule.

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C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.

Habitat Biologist Elizabeth.Torrey@dfw.wa.gov
Elizabeth Torrey 509-607-6711

for Director
WDFW

Appendix C
CONTRACT DOCUMENTS

Award Date:

CAG-18-110.

Awarded to:

Award Amount:

Pricing Requirements, City of Renton
Forms, Contract Forms, Conditions of the
Contract, Plans and Specifications

Construction of:

Kennydale Lakeline Sewer Improvement Ph II

**PROJECT NO.
WWP-27-4010**

Summer 2018

City of Renton
1055 South Grady Way
Renton, WA 98057

City of
Renton



**CITY OF RENTON
RENTON, WASHINGTON**

CONTRACT DOCUMENTS

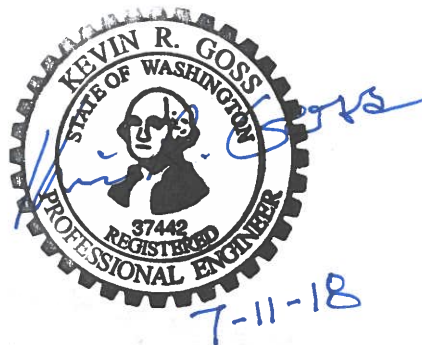
for the

Kennydale Lakeline Sewer Improvement Ph II

**PROJECT NO.
WTR-27-4010**

Summer 2018

**PRICING REQUIREMENTS
CONTRACT FORMS
CONDITIONS OF THE CONTRACT
SPECIFICATIONS
PLANS**



Kennydale Lakeline Sewer Improvement Ph II
WWP-27-4010

CONTRACT DOCUMENT TABLE OF CONTENTS

- Summary of Fair Practices Policy
- Summary of Americans with Disability Act Policy
- Scope of Work
- Vicinity Map
- Instructions to Contractor on Pricing Proposal
- Request for Pricing Proposal
- * Pricing Proposal & Combined Affidavit & Certificate Form:
 - Non-Collusion
 - Anti-Trust Claims
 - Minimum Wage Form
- * Department of Labor and Industries Certificate of Registration
- * Schedule of Prices
- * Certificate of Compliance with Wage Payment Statutes
- ❖ Bond to the City of Renton
- ❖ Fair Practices Policy Affidavit of Compliance
- ❖ Contract Agreement
- Prevailing Minimum Hourly Wage Rates
- Special Provisions
- Plans

Documents marked as follows must be submitted at the time noted and must be executed by the Contractor, President and Vice President or Secretary if corporation by-laws permit. All pages must be signed. In the event another person has been duly authorized to execute contracts, a copy of the corporation minutes establishing this authority must be attached to the Pricing Proposal.

- * Submit with Pricing Proposal
 - ❖ Submit at Notice of Award
- Appendix A - Permits

CITY OF RENTON
Public Works Department
1055 South Grady Way
Renton, Washington 98057

CITY OF RENTON
SUMMARY OF FAIR PRACTICES POLICY
ADOPTED BY RESOLUTION NO. 4085

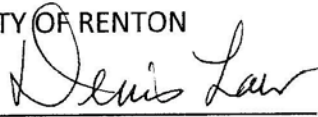
It is the policy of the City of Renton to promote and provide equal treatment and service to all citizens and to ensure equal employment opportunity to all persons without regard to their race; religion/creed; national origin; ancestry; sex; age over 40; sexual orientation or gender identity; pregnancy; HIV/AIDS and Hepatitis C status; use of a guide dog/service animal; marital status; parental/family status; military status; or veteran's status, or the presence of a physical, sensory, or mental disability, when the City of Renton can reasonably accommodate the disability, of employees and applicants for employment and fair, non-discriminatory treatment to all citizens. All departments of the City of Renton shall adhere to the following guidelines:

- (1) EMPLOYMENT PRACTICES - The City of Renton will ensure all employment related activities included recruitment, selection, promotion, demotion, training, retention and separation are conducted in a manner which is based on job-related criteria which does not discriminate against women, minorities and other protected classes. Human resources decisions will be in accordance with individual performance, staffing requirements, governing civil service rules, and labor contract agreements.
- (2) COOPERATION WITH HUMAN RIGHTS ORGANIZATIONS - The City of Renton will cooperate fully with all organizations and commissions organized to promote fair practices and equal opportunity in employment.
- (3) CONTRACTORS' OBLIGATIONS - Contractors, sub-contractors, consultants and suppliers conducting business with the City of Renton shall affirm and subscribe to the Fair Practices and Non-discrimination policies set forth by the law and by City policy.

Copies of this policy shall be distributed to all City employees, shall appear in all operational documentation of the City, including bid calls, and shall be prominently displayed in appropriate city facilities.

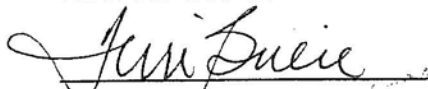
CONCURRED IN by the City Council of the City of Renton, Washington, this 7th day of March, 2011.

CITY OF RENTON



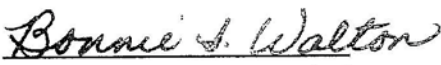
Denis Law, Mayor

RENTON CITY COUNCIL



Council President

Attest:



Bonnie I. Walton, City Clerk



CITY OF RENTON

SUMMARY OF AMERICANS WITH DISABILITIES ACT POLICY
ADOPTED BY RESOLUTION NO. 3007

The policy of the City of Renton is to promote and afford equal treatment and service to all citizens and to assure employment opportunity to persons with disabilities, when the City of Renton can reasonably accommodate the disability. This policy shall be based on the principles of equal employment opportunity, the Americans With Disabilities Act and other applicable guidelines as set forth in federal, state and local laws. All departments of the City of Renton shall adhere to the following guidelines:

- (1) EMPLOYMENT PRACTICES - All activities relating to employment such as recruitment, selection, promotion, termination and training shall be conducted in a non-discriminatory manner. Personnel decisions will be based on individual performance, staffing requirements, and in accordance with the Americans With Disabilities Act and other applicable laws and regulations.
- (2) COOPERATION WITH HUMAN RIGHTS ORGANIZATIONS - The City of Renton will cooperate fully with all organizations and commissions organized to promote fair practices and equal opportunity for persons with disabilities in employment and receipt of City services, activities and programs.
- (3) AMERICANS WITH DISABILITIES ACT POLICY - The City of Renton Americans With Disabilities Act Policy will be maintained to facilitate equitable representation within the City work force and to assure equal employment opportunity and equal access to City services, activities and programs to all people with disabilities. It shall be the responsibility and the duty of all City officials and employees to carry out the policies and guidelines as set forth in this policy
- (4) CONTRACTORS' OBLIGATION - Contractors, subcontractors, consultants and suppliers conducting business with the City of Renton shall abide by the requirements of the Americans With Disabilities Act and promote access to services, activities and programs for people with disabilities.

Copies of this policy shall be distributed to all City employees, shall appear in all operational documentation of the City, including bid calls, and shall be prominently displayed in appropriate City facilities.

CONCURRED IN by the City Council of the City of Renton, Washington,

this 4th day of October 1993.

CITY OF RENTON



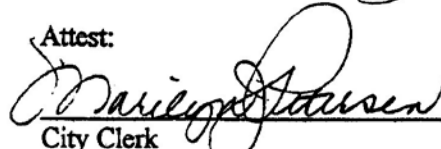
Mayor

RENTON CITY COUNCIL:



Council President

Attest:



City Clerk

CITY OF RENTON

Kennydale Lakeline Sewer Improvement Ph II WWP-27-4010

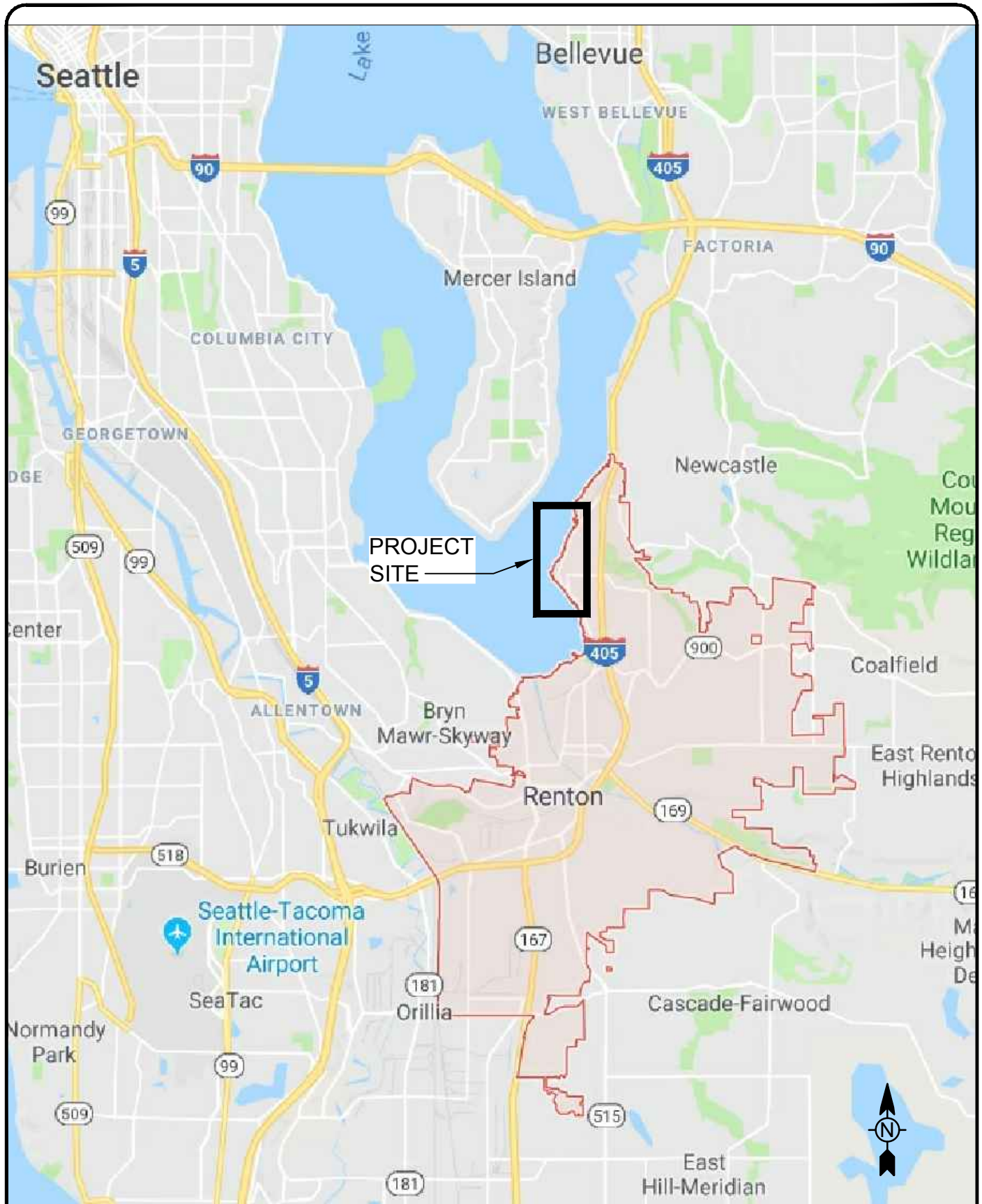
SCOPE OF WORK

The work involved under the terms of this contract document shall be full and complete installation of the facilities, as shown on the plans and as described in the construction specifications, to include but not be limited to:

1. The manufacturer of a steel access manhole, temporary installation that manhole in two locations beneath Lake Washington on the City's Kennydale Lake Line sewer, including excavation, connection to the existing sewer, and backfill. This work shall take place between July 15, 2018 and October 26, 2018, subject to permit time restrictions.
2. The cleaning of the entire length of the Kennydale Lake Line.
3. Closed-circuit TV (CCTV) inspection of the entire length of the Kennydale Lake Line.

Any contractor connected with this project shall comply with all Federal, State, County, and City codes and regulations applicable to such work and perform the work in accordance with the plans and specifications of this contract document. A total of 65 working days will be allowed for the completion of this project.

6/20/2018 7:13:25 AM - O:\PROJECTS\SEATTLE\1621\135-01621-160001\CAD\CONCEPTUAL\PROJECT VICINITY MAP.DWG - SCHUMACHER, MIKE



Tt TETRA TECH
 www.tetrattech.com
 1420 FIFTH AVE, SUITE 600
 SEATTLE, WA 98101
 PH: (206) 883-9300

CITY OF RENTON
 KENNYDALE LAKEFRONT SEWER
 IMPROVEMENT PAHSE II
 PROJECT VICINITY MAP

Project No.:	135-01621-16001
Date:	JUNE 2018
Designed By:	KRG
FIGURE 1	

Bar Measures 1 inch

Copyright: Tetra Tech

INSTRUCTIONS TO CONTRACTOR ON PRICING PROPOSAL

- 2 1. Any omissions, discrepancies or need for interpretation should be brought, in writing, to the attention of the Project Engineer. Written addenda to clarify questions that arise may then be issued.

No oral statements by Owner, Engineer, or other representative of the owner shall, in any way, modify the contract documents, whether made before or after letting the contract.

- 3 The work to be done is shown in the plans and / or specifications. Quantities are understood to be only approximate. Final payment will be based on actual quantities and at the unit price provided. The City reserves the right to add or to eliminate portions of that work as deemed necessary.
4. Contractor shall satisfy themselves as to the local conditions by inspection of the site.
5. The price for any pay item must include the performance of all work necessary for completion of that item as described in the specifications.
6. The price shall be stated in terms of the units indicated and as to a total amount. In the event of errors, the unit price provided will govern. Illegible figures will invalidate the pricing.
10. The Contractor shall, upon request, furnish information to the City as to his financial and practical ability to satisfactorily perform the work.
11. Payment for this work will be made in Cash Warrants.
12. The contractor shall obtain such construction insurance (e.g. fire and extended coverage, worker's compensation, public liability, and property damage as identified within Special Provisions, Specification Section 1-07.18 "Public Liability and Property Damage Insurance".
13. The contractor, prior to the start of construction, shall provide the City of Renton a detailed bar chart type construction schedule for the project.
- 14 Before starting work under this contract, the Contractor is required to supply information to the City of Renton on all chemical hazards Contractor is bringing into the work place and potentially exposing City of Renton Employees.
15. Payment of retainage shall be done in accordance with Section 1-09.9(1) "Retainage".

16. **Basis for Approval**

The construction contract will be awarded by the City of Renton upon completion of negotiations with the contractor.

17. **Trench Excavation Safety Systems**

As required by RCW 39.04.180, on public works projects in which trench excavation will exceed a depth of four feet, any contract therefor shall require adequate safety systems for the trench excavation that meet the requirements of the Washington Industrial Safety and Health Act, Chapter 49.17 RCW. These requirements shall be included in the Pricing Schedule as a separate item. The

costs of trench safety systems shall not be considered as incidental to any other contract item and any attempt to include the trench safety systems as an incidental cost is prohibited.

18. Payment of Prevailing Wages

In accordance with Revised Code of Washington Chapters 39.12 and 49.28 as amended or supplemented herein, there shall be paid to all laborers, workmen or mechanics employed on this contract the prevailing rate of wage for an hour's work in the same trade or occupation in the area of work regardless of any contractual relationship which may exist, or be alleged to exist, between the CONTRACTOR and any laborers, workmen, mechanics or subconsultants.

The most recent issue of the prevailing wage rates is included within these specifications under section titled "Prevailing Minimum Hourly Wage Rates". The Contractor is Responsible for obtaining updated issues of the prevailing wage rate forms as they become available during the duration of the contract. The wage rates shall be included as part of any subcontracts the Contractor may enter into for work on this project.

19. Pollution Control Requirements

Work under this contract shall meet all local, state and federal requirements for the prevention of environmental pollution and the preservation of public natural resources. The CONTRACTOR shall conduct the work in accordance with all applicable pollution control laws. The CONTRACTOR shall comply with and be liable for all penalties, damages, and violations under Chapter 90.48 RCW, in performance of the work. The CONTRACTOR shall also comply with Article 4 in the Puget Sound Air Pollution Control Agency Regulation III regarding removal and encapsulation of asbestos materials.

20. Standard Specifications

All work under this contract shall be performed in accordance with the following standard specifications except as may be exempted or modified by the City of Renton Supplemental Specifications, Special Provisions other sections of these contract documents. These standard specifications are hereby made a part of this contract and shall control and guide all activities within this project whether referred to directly, paragraph by paragraph, or not.

1. WSDOT/APWA "2016 Standard Specifications for Road, Bridge and Municipal Construction" and "Division 1 APWA Supplement" hereinafter referred to by the abbreviated title "Standard Specifications."
 - A. Any reference to "State," "State of Washington," "Department of Transportation," "WSDOT," or any combination thereof in the WSDOT/APWA standards shall be modified to read "City of Renton," unless specifically referring to a standard specification or test method.
 - B. All references to measurement and payment in the WSDOT/APWA standards shall be deleted and the measurement and payment provisions of Section 1-09.14, Measurement and Payment (added herein) shall govern.

22. Contractor's Checklist

- Has the proposal been signed?
- Have you submitted the Subcontractors List?
- Have you reviewed the Prevailing Wage Requirements?
- Have you submitted the Department of Labor and Industries Certificate of Registration form?
- Have you submitted the Certificate of Compliance with Wages Paid Statutes form?

CITY OF RENTON
REQUEST FOR PRICING PROPOSAL
Kennydale Lakeline Sewer Improvement Ph II
WWP-27-4010

The work to be performed within 65 working days from the date of commencement under this contract shall include, but not be limited to:

1. The manufacturer of a steel access manhole, temporary installation that manhole in two locations beneath Lake Washington on the City's Kennydale Lake Line sewer, including excavation, connection to the existing sewer, and backfill. This work shall take place between July 15, 2018 and October 26, 2018, subject to permit time restrictions.
2. The cleaning of the entire length of the Kennydale Lake Line.
3. Closed-circuit TV (CCTV) inspection of the entire length of the Kennydale Lake Line.

Contract documents will be provided to the contractor for pricing purposes.

The City's Fair Practices, Non-Discrimination, and Americans with Disability Act Policies shall apply.

Jason A. Seth, CMC, City Clerk



Kennydale Lakeline Sewer Improvement Ph II
WWP-27-4010

Pricing Proposal & Combined Affidavit & Certificate Form

TO THE CITY OF RENTON
RENTON, WASHINGTON

Ladies and/or Gentlemen:

The undersigned hereby certify that the Contractor has examined the site of the proposed work and has read and thoroughly understand the plans, specifications and contract governing the work embraced in this improvement, and the method by which payment will be made for said work, and hereby propose to undertake and complete the work embraced in this improvement, or as much thereof as can be completed with the money available, in accordance with the said plans, specifications and contract and the schedule of prices.

The undersigned further certifies and agrees to the following provisions:

NON-COLLUSION AFFIDAVIT

Being duly sworn, deposes and says, that he is the identical person who submitted the foregoing proposal or bid, and that such bid is genuine and not sham or collusive or made in the interest or on behalf of any person not therein named, and further, that the deponent has not directly induced or solicited any other Bidder on the foregoing work or equipment to put in a sham bid, or any other person or corporation to refrain from bidding, and that deponent has not in any manner sought by collusion to secure to himself or to any other person any advantage over other Bidder or Bidders.

AND

**CERTIFICATION RE: ASSIGNMENT OF
ANTI-TRUST CLAIMS TO PURCHASER**

Vendor and purchaser recognize that in actual economic practice overcharges resulting from anti-trust violations are in fact usually borne by the purchaser. Therefore, vendor hereby assigns to purchaser any and all claims for such over-charges as to goods and materials purchased in connection with this order or contract, except as to overcharges resulting from anti-trust violations commencing after the date of the proposal, quotation, or other event establishing the price under this order or contract. In addition, vendor warrants and represents that such of his suppliers and subcontractors shall assign any and all such claims to purchaser, subject to the aforementioned exception.

AND

MINIMUM WAGE AFFIDAVIT FORM

I, the undersigned, having been duly sworn, deposed, say and certify that in connection with the performance of the work of this project, I will pay each classification of laborer, workman, or mechanic employed in the performance of such work; not less than the prevailing rate of wage or not less than the minimum rate of wages as specified in the principal contract.

I have read the above and foregoing statements and certificate, know the contents thereof and the substance as set forth therein is true to my knowledge and belief.

FOR: PROPOSAL, NON COLLUSION AFFIDAVIT, ASSIGNMENT OF ANTI-TRUST CLAIMS TO PURCHASER AND MINIMUM WAGE AFFIDAVIT

Name of Firm

Signature of Authorized Representative of Contractor*:

Printed Name: _____ Title: _____

Address: _____

Contact Name (please print): _____

Phone: _____ Email: _____

***The above signature must be notarized using the applicable notary language found on pages 3 and 4.**

If business is a CORPORATION, please complete this section:

Name of President of Corporation _____

Name of Secretary of Corporation _____

Corporation Organized under the laws of _____

With Main Office in State of Washington at _____

If business is a PARTNERSHIP or LIMITED LIABILITY COMPANY, please complete this section:

Name: _____ Title (Partner, Member, Manager): _____

INDIVIDUAL FORM

STATE OF WASHINGTON)
 : ss
 County of _____)

On this _____ day of _____ before me personally appeared _____ to me known to be the individual(s) described in and who executed the foregoing instrument, and acknowledged under oath that _____ (he/she/they) signed and sealed the same as _____ (his, her, their) free and voluntary act and deed, for the uses and purposes therein mentioned.

GIVEN under my hand and official seal the day and year last above written.

(SEAL)

 Notary Public in and for the State of
 Washington, residing at _____
 Print Name: _____

My commission expires: _____

CORPORATION FORM

STATE OF WASHINGTON)
 : ss
 County of _____)

On this _____ day of _____ before me personally appeared _____ to me known to be the _____ (President, Secretary, Treasurer) of the corporation that executed the foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that _____ (he/she/they) are authorized to execute said instrument.

GIVEN under my hand and official seal the day and year last above written.

(SEAL)

 Notary Public in and for the State of
 Washington, residing at _____
 Print Name: _____

My commission expires: _____

PARTNERSHIP FORM

STATE OF WASHINGTON)
 : ss
County of _____)

On this _____ day of _____ before me personally appeared _____ to me known to be a General Partner of the partnership known as _____ that executed the foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said partnership, for the uses and purposes therein mentioned, and on oath stated that _____ (he/she/they) are authorized to execute said instrument.

GIVEN under my hand and official seal the day and year last above written.

(SEAL)

Notary Public in and for the State of
Washington, residing at _____
Print Name: _____

My commission expires: _____

LIMITED LIABILITY COMPANY (LLC) FORM

STATE OF WASHINGTON)
 : ss
County of _____)

On this _____ day of _____, 20___, before me personally appeared _____ to me known to be a Managing Member of the Limited Liability Company known as _____ and that he/she/they executed the foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said Limited Liability Company, for the uses and purposes therein mentioned, and on oath stated that _____ (he/she/they) are authorized to execute said instrument.

GIVEN under my hand and official seal the day and year last above written.

(SEAL)

Notary Public in and for the State of
Washington, residing at _____
Print Name: _____

My commission expires: _____

Department of Labor and Industries
Certificate of Registration

Name on Registration: _____

Registration Number: _____

Expiration Date: _____

Note: A copy of the certificate will be requested as part of contract execution when project is awarded.



This form must be submitted with the Pricing Proposal.

Certification of Compliance with Wage Payment Statutes

The Contractor hereby certifies that, within the three-year period immediately preceding the pricing proposal date, the Contractor is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Contractor’s Business Name

Signature of Authorized Official*

Printed Name

Title

Date

City

State

Check One:

Sole Proprietorship Partnership Joint Venture Corporation

State of Incorporation, or if not a corporation, State where business entity was formed:

If a co-partnership, give firm name under which business is transacted:

** If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

BOND TO THE CITY OF RENTON

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned _____
as principal, and _____
corporation organized and existing under the laws of the State of _____ as a
surety corporation, and qualified under the laws of the State of Washington to become surety upon
bonds of contractors with municipal corporations, as surety are jointly and severally held and firmly
bound to the City of Renton in the penal sum of _____ for the payment of
which sum on demand we bind ourselves and our successors, heirs, administrators or person
representatives, as the case may be.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinance of
the City of Renton.

Dated at _____, Washington, this _____ day of _____, 20 ____.

Nevertheless, the conditions of the above obligation are such that:

WHEREAS, under and pursuant to Public Works Construction Contract **CAG-18-110** providing for
construction of **Kennydale Lakeline Sewer Improvement Ph II**, the principal is required to furnish a
bond for the faithful performance of the contract; and

WHEREAS, the principal has accepted, or is about to accept, the contract, and undertake to perform the
work therein provided for in the manner and within the time set forth;

NOW, THEREFORE, if the principal shall faithfully perform all of the provisions of said contract in the
manner and within the time therein set forth, or within such extensions of time as may be granted
under said contract, and shall pay all laborers, mechanics, subcontractors and material men, and all
persons who shall supply said principal or subcontractors with provisions and supplies for the carrying
on of said work, and shall hold said City of Renton harmless from any loss or damage occasioned to any
person or property by reason of any carelessness or negligence on the part of said principal, or any
subcontractor in the performance of said work, and shall indemnify and hold the City of Renton
harmless from any damage or expense by reason of failure of performance as specified in the contract
or from defects appearing or developing in the material or workmanship provided or performed under
the contract within a period of one year after its acceptance thereof by the City of Renton, then and in
that event this obligation shall be void; but otherwise it shall be and remain in full force and effect.

Principal

Surety

Signature

Signature

Title

Title



AGREEMENT

CONTRACT NO. CAG-18-110

THIS AGREEMENT, made and entered into this _____ day of _____, 2018 by and between the CITY OF RENTON, Washington, a municipal corporation of the State of Washington, hereinafter referred to as "City" and [Enter Contractor name], hereinafter referred to as "Contractor."

Now, therefore the parties agree as follows:

1. **Agreement.** This agreement incorporates the following documents as if fully set forth herein: the 2016 Standard Specifications for Road, Bridge, and Municipal Construction, as prepared by the Washington State Department of Transportation and the Washington State Chapter of the American Public Works Association, including all published amendments issued by those organizations ("Standard Specifications"); the City's Contract Bid Documents for the Project, including but not limited to Addenda, Proposal Form, Special Provisions, Contract Plans, and Amendments to the Standard Specifications; Contractor's Proposal and all documents submitted therewith in response to the City's Request for Pricing Proposal Documents; and any additional documents referenced as comprising the Contract and Contract Documents in Section 1-04.2 of the Standard Specifications, as revised by the Amendments and Special Provisions included with the City's Request for Pricing Proposal and Contract Documents.
2. **Project.** Contractor shall complete all work and furnish all labor, tools, materials, and equipment for the project entitled Kennydale Lakeline Sewer Improvement Ph II, WWP-27-4010, including all changes to the Work and force account work, in accordance with the Contract Documents, as described in Section 1-04.2 of the Special Provisions.
3. **Payments.** City shall pay Contractor at the unit and lump sum prices, and by force account as specified in the Proposal according to the Contract Documents as to time, manner, and condition of payment in a contract amount not to exceed \$ _____, unless modified by an approved change order or addendum. The payments to Contractor include the costs for all labor, tools, materials and equipment for the Work.
4. **Completion Date.** Contract time shall commence upon City's Notice to Proceed to Contractor. The Work under this Agreement shall be completed within the time specified in the Contract Documents. If the Physical Work under this Agreement is not completed within the time specified, Contractor shall pay liquidated damages and all engineering inspection and supervision costs to City as specified in the Contract Documents.
5. **Attorney's Fees.** In the event litigation is commenced to enforce this Agreement, the prevailing party shall be entitled to recover its costs, including reasonable attorney's and expert witness fees.
6. **Disclaimer.** No liability of Contractor shall attach to City by reason of entering into this Agreement, except as expressly provided in this Agreement.
7. **Counterparts.** This Agreement is executed in two (2) identical counterparts, by the parties, each of which shall for all purposes be deemed an original.

IN WITNESS WHEREOF, the City has caused these presents to be signed by its Mayor and attested by its City Clerk and the Contractor has hereunto set his hand and seal the day and year first above-written.

CONTRACTOR:

CITY OF RENTON:

President/Partner/Owner

Denis Law, Mayor

ATTEST

Secretary

Jason Seth, City Clerk

FIRM INFORMATION

d/b/a [Enter Firm name]

CHECK ONE:

Limited Liability Company

Partnership

Corporation

STATE OF INCORPORATION:

[Enter state of incorporation]

CONTRACTOR CONTACT INFORMATION:

CITY CONTACT INFORMATION:

[Address Line 1]

City of Renton

[Address Line 2]

1055 South Grady Way

[City, State and Zip]

Renton, WA 98057

[Enter Phone Number]

425-430-7279

[Enter Fax Number or Email Address]

Jhobson@rentonwa.gov

Attention:

If business is a CORPORATION, the name of the corporation should be listed in full and both the President and Secretary must sign the contract. OR, if one signature is permitted by corporation by-laws, a copy of the by-laws shall be furnished to the City and made a part of the contract document.

If the business is a PARTNERSHIP, the full name of each partner should be listed followed by d/b/a (doing business as) and firm or trade name. Any one partner may sign the contract.

If the business is a limited Liability Company, an authorized managing member or manager must sign followed by his/her title.



PREVAILING MINIMUM HOURLY WAGE RATES

State of Washington
 Department of Labor & Industries
 Prevailing Wage Section - Telephone 360-902-5335
 PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 7/11/2018

<u>County</u>	<u>Trade</u>	<u>Job Classification</u>	<u>Wage</u>	<u>Holiday</u>	<u>Overtime</u>	<u>Note</u>
King	Asbestos Abatement Workers	Journey Level	\$46.57	<u>5D</u>	<u>1H</u>	
King	Boilermakers	Journey Level	\$66.54	<u>5N</u>	<u>1C</u>	
King	Brick Mason	Journey Level	\$55.82	<u>5A</u>	<u>1M</u>	
King	Brick Mason	Pointer-Caulker-Cleaner	\$55.82	<u>5A</u>	<u>1M</u>	
King	Building Service Employees	Janitor	\$23.73	<u>5S</u>	<u>2F</u>	
King	Building Service Employees	Traveling Waxer/Shampooer	\$24.18	<u>5S</u>	<u>2F</u>	
King	Building Service Employees	Window Cleaner (Non-Scaffold)	\$27.23	<u>5S</u>	<u>2F</u>	
King	Building Service Employees	Window Cleaner (Scaffold)	\$28.13	<u>5S</u>	<u>2F</u>	
King	Cabinet Makers (In Shop)	Journey Level	\$22.74		<u>1</u>	
King	Carpenters	Acoustical Worker	\$57.18	<u>5D</u>	<u>4C</u>	
King	Carpenters	Bridge, Dock And Wharf Carpenters	\$57.18	<u>5D</u>	<u>4C</u>	
King	Carpenters	Carpenter	\$57.18	<u>5D</u>	<u>4C</u>	
King	Carpenters	Carpenters on Stationary Tools	\$57.31	<u>5D</u>	<u>4C</u>	
King	Carpenters	Creosoted Material	\$57.28	<u>5D</u>	<u>4C</u>	
King	Carpenters	Floor Finisher	\$57.18	<u>5D</u>	<u>4C</u>	
King	Carpenters	Floor Layer	\$57.18	<u>5D</u>	<u>4C</u>	
King	Carpenters	Scaffold Erector	\$57.18	<u>5D</u>	<u>4C</u>	
King	Cement Masons	Journey Level	\$57.21	<u>7A</u>	<u>1M</u>	
King	Divers & Tenders	Bell/Vehicle or Submersible Operator (Not Under Pressure)	\$110.54	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Dive Supervisor/Master	\$72.97	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Diver	\$110.54	<u>5D</u>	<u>4C</u>	<u>8V</u>
King	Divers & Tenders	Diver On Standby	\$67.97	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Diver Tender	\$61.65	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Manifold Operator	\$61.65	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Manifold Operator Mixed Gas	\$66.65	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders	Remote Operated Vehicle Operator/Technician	\$61.65	<u>5D</u>	<u>4C</u>	
King	Divers & Tenders		\$57.43	<u>5A</u>	<u>4C</u>	

		Remote Operated Vehicle Tender				
King	Dredge Workers	Assistant Engineer	\$56.44	<u>5D</u>	<u>3F</u>	
King	Dredge Workers	Assistant Mate (Deckhand)	\$56.00	<u>5D</u>	<u>3F</u>	
King	Dredge Workers	Boatmen	\$56.44	<u>5D</u>	<u>3F</u>	
King	Dredge Workers	Engineer Welder	\$57.51	<u>5D</u>	<u>3F</u>	
King	Dredge Workers	Leverman, Hydraulic	\$58.67	<u>5D</u>	<u>3F</u>	
King	Dredge Workers	Mates	\$56.44	<u>5D</u>	<u>3F</u>	
King	Dredge Workers	Oiler	\$56.00	<u>5D</u>	<u>3F</u>	
King	Drywall Applicator	Journey Level	\$56.78	<u>5D</u>	<u>1H</u>	
King	Drywall Tapers	Journey Level	\$57.43	<u>5P</u>	<u>1E</u>	
King	Electrical Fixture Maintenance Workers	Journey Level	\$28.99	<u>5L</u>	<u>1E</u>	
King	Electricians - Inside	Cable Splicer	\$76.96	<u>7C</u>	<u>4E</u>	
King	Electricians - Inside	Cable Splicer (tunnel)	\$82.24	<u>7C</u>	<u>4E</u>	
King	Electricians - Inside	Certified Welder	\$74.38	<u>7C</u>	<u>4E</u>	
King	Electricians - Inside	Certified Welder (tunnel)	\$79.80	<u>7C</u>	<u>4E</u>	
King	Electricians - Inside	Construction Stock Person	\$39.69	<u>7C</u>	<u>4E</u>	
King	Electricians - Inside	Journey Level	\$71.80	<u>7C</u>	<u>4E</u>	
King	Electricians - Inside	Journey Level (tunnel)	\$76.96	<u>7C</u>	<u>4E</u>	
King	Electricians - Motor Shop	Craftsman	\$15.37		<u>1</u>	
King	Electricians - Motor Shop	Journey Level	\$14.69		<u>1</u>	
King	Electricians - Powerline Construction	Cable Splicer	\$79.43	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Certified Line Welder	\$69.75	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Groundperson	\$46.28	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Heavy Line Equipment Operator	\$69.75	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Journey Level Lineperson	\$69.75	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Line Equipment Operator	\$59.01	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Meter Installer	\$46.28	<u>5A</u>	<u>4D</u>	<u>8W</u>
King	Electricians - Powerline Construction	Pole Sprayer	\$69.75	<u>5A</u>	<u>4D</u>	
King	Electricians - Powerline Construction	Powderperson	\$52.20	<u>5A</u>	<u>4D</u>	
King	Electronic Technicians	Journey Level	\$31.00		<u>1</u>	
King	Elevator Constructors	Mechanic	\$91.24	<u>7D</u>	<u>4A</u>	
King	Elevator Constructors	Mechanic In Charge	\$98.51	<u>7D</u>	<u>4A</u>	
King	Fabricated Precast Concrete Products	All Classifications - In-Factory Work Only	\$17.72	<u>5B</u>	<u>1R</u>	
King	Fence Erectors	Fence Erector	\$15.18		<u>1</u>	
King	Flaggers	Journey Level	\$39.48	<u>7A</u>	<u>3I</u>	
King	Glaziers	Journey Level	\$61.81	<u>7L</u>	<u>1Y</u>	

King	Heat & Frost Insulators And Asbestos Workers	Journeyman	\$67.93	<u>5J</u>	<u>4H</u>	
King	Heating Equipment Mechanics	Journey Level	\$78.17	<u>7F</u>	<u>1E</u>	
King	Hod Carriers & Mason Tenders	Journey Level	\$48.02	<u>7A</u>	<u>3I</u>	
King	Industrial Power Vacuum Cleaner	Journey Level	\$11.50		<u>1</u>	
King	Inland Boatmen	Boat Operator	\$61.41	<u>5B</u>	<u>1K</u>	
King	Inland Boatmen	Cook	\$56.48	<u>5B</u>	<u>1K</u>	
King	Inland Boatmen	Deckhand	\$57.48	<u>5B</u>	<u>1K</u>	
King	Inland Boatmen	Deckhand Engineer	\$58.81	<u>5B</u>	<u>1K</u>	
King	Inland Boatmen	Launch Operator	\$58.89	<u>5B</u>	<u>1K</u>	
King	Inland Boatmen	Mate	\$57.31	<u>5B</u>	<u>1K</u>	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	\$31.49		<u>1</u>	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	\$11.50		<u>1</u>	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	\$24.91		<u>1</u>	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	\$19.33		<u>1</u>	
King	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	\$20.45		<u>1</u>	
King	Insulation Applicators	Journey Level	\$57.18	<u>5D</u>	<u>4C</u>	
King	Ironworkers	Journeyman	\$67.88	<u>7N</u>	<u>1O</u>	
King	Laborers	Air, Gas Or Electric Vibrating Screed	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Airtrac Drill Operator	\$48.02	<u>7A</u>	<u>3I</u>	
King	Laborers	Ballast Regular Machine	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Batch Weighman	\$39.48	<u>7A</u>	<u>3I</u>	
King	Laborers	Brick Pavers	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Brush Cutter	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Brush Hog Feeder	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Burner	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Caisson Worker	\$48.02	<u>7A</u>	<u>3I</u>	
King	Laborers	Carpenter Tender	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Caulker	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Cement Dumper-paving	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Cement Finisher Tender	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Change House Or Dry Shack	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Chipping Gun (under 30 Lbs.)	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Chipping Gun(30 Lbs. And Over)	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Choker Setter	\$46.57	<u>7A</u>	<u>3I</u>	

King	Laborers	Chuck Tender	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Clary Power Spreader	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Clean-up Laborer	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Concrete Dumper/chute Operator	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Concrete Form Stripper	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Concrete Placement Crew	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Concrete Saw Operator/core Driller	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Crusher Feeder	\$39.48	<u>7A</u>	<u>3I</u>	
King	Laborers	Curing Laborer	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Demolition: Wrecking & Moving (incl. Charred Material)	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Ditch Digger	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Diver	\$48.02	<u>7A</u>	<u>3I</u>	
King	Laborers	Drill Operator (hydraulic, diamond)	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Dry Stack Walls	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Dump Person	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Epoxy Technician	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Erosion Control Worker	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Faller & Bucker Chain Saw	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Fine Graders	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Firewatch	\$39.48	<u>7A</u>	<u>3I</u>	
King	Laborers	Form Setter	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Gabian Basket Builders	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	General Laborer	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Grade Checker & Transit Person	\$48.02	<u>7A</u>	<u>3I</u>	
King	Laborers	Grinders	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Grout Machine Tender	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Groutmen (pressure)including Post Tension Beams	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Guardrail Erector	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Hazardous Waste Worker (level A)	\$48.02	<u>7A</u>	<u>3I</u>	
King	Laborers	Hazardous Waste Worker (level B)	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Hazardous Waste Worker (level C)	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	High Scaler	\$48.02	<u>7A</u>	<u>3I</u>	
King	Laborers	Jackhammer	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Laserbeam Operator	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Maintenance Person	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Manhole Builder-mudman	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Material Yard Person	\$46.57	<u>7A</u>	<u>3I</u>	

King	Laborers	Motorman-dinky Locomotive	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Nozzleman (concrete Pump, Green Cutter When Using Combination Of High Pressure Air & Water On Concrete & Rock, Sandblast, Guniting, Shotcrete, Water Bla	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Pavement Breaker	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Pilot Car	\$39.48	<u>7A</u>	<u>3I</u>	
King	Laborers	Pipe Layer Lead	\$48.02	<u>7A</u>	<u>3I</u>	
King	Laborers	Pipe Layer/tailor	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Pipe Pot Tender	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Pipe Reliner	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Pipe Wrapper	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Pot Tender	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Powderman	\$48.02	<u>7A</u>	<u>3I</u>	
King	Laborers	Powderman's Helper	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Power Jacks	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Railroad Spike Puller - Power	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Raker - Asphalt	\$48.02	<u>7A</u>	<u>3I</u>	
King	Laborers	Re-timberman	\$48.02	<u>7A</u>	<u>3I</u>	
King	Laborers	Remote Equipment Operator	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Rigger/signal Person	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Rip Rap Person	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Rivet Buster	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Rodder	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Scaffold Erector	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Scale Person	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Sloper (over 20")	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Sloper Sprayer	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Spreader (concrete)	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Stake Hopper	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Stock Piler	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Tamper (multiple & Self-propelled)	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Timber Person - Sewer (lagger, Shorer & Cribber)	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Toolroom Person (at Jobsite)	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Topper	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Track Laborer	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Track Liner (power)	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Traffic Control Laborer	\$42.22	<u>7A</u>	<u>3I</u>	<u>8R</u>
King	Laborers	Traffic Control Supervisor	\$42.22	<u>7A</u>	<u>3I</u>	<u>8R</u>
King	Laborers	Truck Spotter	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Tugger Operator	\$47.44	<u>7A</u>	<u>3I</u>	

King	Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	\$92.60	<u>7A</u>	<u>3I</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	\$97.63	<u>7A</u>	<u>3I</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	\$101.31	<u>7A</u>	<u>3I</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	\$107.01	<u>7A</u>	<u>3I</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	\$109.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	\$114.23	<u>7A</u>	<u>3I</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	\$116.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	\$118.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	\$120.13	<u>7A</u>	<u>3I</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Guage and Lock Tender	\$48.12	<u>7A</u>	<u>3I</u>	<u>8Q</u>
King	Laborers	Tunnel Work-Miner	\$48.12	<u>7A</u>	<u>3I</u>	<u>8Q</u>
King	Laborers	Vibrator	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Vinyl Seamer	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers	Watchman	\$35.88	<u>7A</u>	<u>3I</u>	
King	Laborers	Welder	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Well Point Laborer	\$47.44	<u>7A</u>	<u>3I</u>	
King	Laborers	Window Washer/cleaner	\$35.88	<u>7A</u>	<u>3I</u>	
King	Laborers - Underground Sewer & Water	General Laborer & Topman	\$46.57	<u>7A</u>	<u>3I</u>	
King	Laborers - Underground Sewer & Water	Pipe Layer	\$47.44	<u>7A</u>	<u>3I</u>	
King	Landscape Construction	Irrigation Or Lawn Sprinkler Installers	\$13.56		<u>1</u>	
King	Landscape Construction	Landscape Equipment Operators Or Truck Drivers	\$28.17		<u>1</u>	
King	Landscape Construction	Landscaping or Planting Laborers	\$17.87		<u>1</u>	
King	Lathers	Journey Level	\$56.78	<u>5D</u>	<u>1H</u>	
King	Marble Setters	Journey Level	\$55.82	<u>5A</u>	<u>1M</u>	
King	Metal Fabrication (In Shop)	Fitter	\$15.86		<u>1</u>	
King	Metal Fabrication (In Shop)	Laborer	\$11.50		<u>1</u>	
King	Metal Fabrication (In Shop)	Machine Operator	\$13.04		<u>1</u>	
King	Metal Fabrication (In Shop)	Painter	\$11.50		<u>1</u>	
King	Metal Fabrication (In Shop)	Welder	\$15.48		<u>1</u>	
King	Millwright	Journey Level	\$58.68	<u>5D</u>	<u>4C</u>	
King	Modular Buildings	Cabinet Assembly	\$11.56		<u>1</u>	
King	Modular Buildings	Electrician	\$11.56		<u>1</u>	
King	Modular Buildings	Equipment Maintenance	\$11.56		<u>1</u>	
King	Modular Buildings	Plumber	\$11.56		<u>1</u>	

King	Modular Buildings	Production Worker	\$11.50		<u>1</u>	
King	Modular Buildings	Tool Maintenance	\$11.56		<u>1</u>	
King	Modular Buildings	Utility Person	\$11.56		<u>1</u>	
King	Modular Buildings	Welder	\$11.56		<u>1</u>	
King	Painters	Journey Level	\$41.60	<u>6Z</u>	<u>2B</u>	
King	Pile Driver	Crew Tender	\$52.37	<u>5D</u>	<u>4C</u>	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	\$71.35	<u>5D</u>	<u>4C</u>	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 30.01 - 44.00 PSI	\$76.35	<u>5D</u>	<u>4C</u>	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	\$80.35	<u>5D</u>	<u>4C</u>	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	\$85.35	<u>5D</u>	<u>4C</u>	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	\$87.85	<u>5D</u>	<u>4C</u>	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	\$92.85	<u>5D</u>	<u>4C</u>	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	\$94.85	<u>5D</u>	<u>4C</u>	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	\$96.85	<u>5D</u>	<u>4C</u>	
King	Pile Driver	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	\$98.85	<u>5D</u>	<u>4C</u>	
King	Pile Driver	Journey Level	\$57.43	<u>5D</u>	<u>4C</u>	
King	Plasterers	Journey Level	\$54.89	<u>7Q</u>	<u>1R</u>	
King	Playground & Park Equipment Installers	Journey Level	\$11.50		<u>1</u>	
King	Plumbers & Pipefitters	Journey Level	\$81.69	<u>6Z</u>	<u>1G</u>	
King	Power Equipment Operators	Asphalt Plant Operators	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Assistant Engineer	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Barrier Machine (zipper)	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Batch Plant Operator, Concrete	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Bobcat	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Brokk - Remote Demolition Equipment	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Brooms	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Bump Cutter	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cableways	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Chipper	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>

King	Power Equipment Operators	Compressor	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Concrete Finish Machine -laser Screed	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Conveyors	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes Friction: 200 tons and over	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: Friction cranes through 199 tons	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Crusher	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Deck Engineer/deck Winches (power)	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Derricks, On Building Work	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Dozers D-9 & Under	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Drilling Machine	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Elevator And Man-lift: Permanent And Shaft Type	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators		\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>

		Forklift: 3000 Lbs And Over With Attachments				
King	Power Equipment Operators	Forklifts: Under 3000 Lbs. With Attachments	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Gradechecker/stakeman	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Guardrail Punch	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Horizontal/directional Drill Locator	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Horizontal/directional Drill Operator	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Hydralifts/boom Trucks Over 10 Tons	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Hydralifts/boom Trucks, 10 Tons And Under	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Loaders, Overhead Under 6 Yards	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Loaders, Plant Feed	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Loaders: Elevating Type Belt	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Locomotives, All	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Material Transfer Device	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Motor Patrol Graders	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Outside Hoists (elevators And Manlifts), Air Tuggers, strato	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Overhead, Bridge Type: 100 Tons And Over	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Pavement Breaker	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>

King	Power Equipment Operators	Pile Driver (other Than Crane Mount)	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Posthole Digger, Mechanical	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Power Plant	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Pumps - Water	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Quad 9, Hd 41, D10 And Over	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Rigger And Bellman	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Rigger/Signal Person, Bellman (Certified)	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Rollagon	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Roller, Other Than Plant Mix	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Roto-mill, Roto-grinder	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Saws - Concrete	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Scrapers - Concrete & Carry All	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Service Engineers - Equipment	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Shotcrete/gunite Equipment	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Slipform Pavers	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Spreader, Topsider & Screedman	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Subgrader Trimmer	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Tower Bucket Elevators	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Tower Crane Up To 175' In Height Base To Boom	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>

King	Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Tower Cranes: over 250' in height from base to boom	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Transporters, All Track Or Truck Type	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Trenching Machines	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Truck Crane Oiler/driver Under 100 Tons	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Truck Mount Portable Conveyor	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Welder	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Wheel Tractors, Farmall Type	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators	Yo Yo Pay Dozer	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operators	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Assistant Engineer	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Barrier Machine (zipper)	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Batch Plant Operator, Concrete	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Bobcat	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Brokk - Remote Demolition Equipment	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Brooms	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Bump Cutter	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Cableways	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Chipper	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Compressor	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Concrete Finish Machine -laser Screed	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King		Conveyors	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>

	Power Equipment Operators-Underground Sewer & Water					
King	Power Equipment Operators-Underground Sewer & Water	Cranes Friction: 200 tons and over	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (Including Jib With Attachments)	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Cranes: A-frame - 10 Tons And Under	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Cranes: Friction cranes through 199 tons	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Crusher	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Deck Engineer/deck Winches (power)	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Derricks, On Building Work	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Dozers D-9 & Under	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Drilling Machine	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Elevator And Man-lift: Permanent And Shaft Type	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Forklift: 3000 Lbs And Over With Attachments	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Forklifts: Under 3000 Lbs. With Attachments	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Gradechecker/stakeman	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>

King	Power Equipment Operators-Underground Sewer & Water	Guardrail Punch	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Locator	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Horizontal/directional Drill Operator	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom Trucks Over 10 Tons	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Hydralifts/boom Trucks, 10 Tons And Under	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Loaders, Overhead Under 6 Yards	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Loaders, Plant Feed	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Loaders: Elevating Type Belt	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Locomotives, All	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Material Transfer Device	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Motor Patrol Graders	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Outside Hoists (elevators And Manlifts), Air Tuggers, strato	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 100 Tons And Over	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King			\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>

	Power Equipment Operators-Underground Sewer & Water	Pile Driver (other Than Crane Mount)				
King	Power Equipment Operators-Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Posthole Digger, Mechanical	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Power Plant	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Pumps - Water	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Rigger And Bellman	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Rigger/Signal Person, Bellman (Certified)	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Rollagon	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Roller, Other Than Plant Mix	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Roto-mill, Roto-grinder	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Saws - Concrete	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Scrapers - Concrete & Carry All	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Service Engineers - Equipment	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Shotcrete/gunite Equipment	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators-Underground Sewer & Water		\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>

		Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons				
King	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Slipform Pavers	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Spreader, Topsider & Screedman	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Subgrader Trimmer	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Tower Bucket Elevators	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Tower Crane Up To 175' In Height Base To Boom	\$61.10	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	\$61.72	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Tower Cranes: over 250' in height from base to boom	\$62.33	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Transporters, All Track Or Truck Type	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Trenching Machines	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Truck Crane Oiler/driver - 100 Tons And Over	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Truck Crane Oiler/driver Under 100 Tons	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Truck Mount Portable Conveyor	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Welder	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Wheel Tractors, Farmall Type	\$56.90	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Equipment Operators- Underground Sewer & Water	Yo Yo Pay Dozer	\$59.96	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Power Line Clearance Tree Trimmers	Journey Level In Charge	\$50.02	<u>5A</u>	<u>4A</u>	
King	Power Line Clearance Tree Trimmers	Spray Person	\$47.43	<u>5A</u>	<u>4A</u>	
King	Power Line Clearance Tree Trimmers	Tree Equipment Operator	\$50.02	<u>5A</u>	<u>4A</u>	
King	Power Line Clearance Tree Trimmers	Tree Trimmer	\$44.64	<u>5A</u>	<u>4A</u>	
King	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	\$33.67	<u>5A</u>	<u>4A</u>	
King	Refrigeration & Air Conditioning Mechanics	Journey Level	\$77.86	<u>6Z</u>	<u>1G</u>	
King	Residential Brick Mason	Journey Level	\$55.82	<u>5A</u>	<u>1M</u>	
King	Residential Carpenters	Journey Level	\$28.20		<u>1</u>	
King	Residential Cement Masons	Journey Level	\$22.64		<u>1</u>	

King	Residential Drywall Applicators	Journey Level	\$42.86	<u>5D</u>	<u>4C</u>	
King	Residential Drywall Tapers	Journey Level	\$57.43	<u>5P</u>	<u>1E</u>	
King	Residential Electricians	Journey Level	\$30.44		<u>1</u>	
King	Residential Glaziers	Journey Level	\$41.05	<u>7L</u>	<u>1H</u>	
King	Residential Insulation Applicators	Journey Level	\$26.28		<u>1</u>	
King	Residential Laborers	Journey Level	\$23.03		<u>1</u>	
King	Residential Marble Setters	Journey Level	\$24.09		<u>1</u>	
King	Residential Painters	Journey Level	\$24.46		<u>1</u>	
King	Residential Plumbers & Pipefitters	Journey Level	\$34.69		<u>1</u>	
King	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$77.86	<u>6Z</u>	<u>1G</u>	
King	Residential Sheet Metal Workers	Journey Level (Field or Shop)	\$44.56	<u>7F</u>	<u>1R</u>	
King	Residential Soft Floor Layers	Journey Level	\$47.61	<u>5A</u>	<u>3J</u>	
King	Residential Sprinkler Fitters (Fire Protection)	Journey Level	\$46.58	<u>5C</u>	<u>2R</u>	
King	Residential Stone Masons	Journey Level	\$55.82	<u>5A</u>	<u>1M</u>	
King	Residential Terrazzo Workers	Journey Level	\$51.36	<u>5A</u>	<u>1M</u>	
King	Residential Terrazzo/Tile Finishers	Journey Level	\$21.46		<u>1</u>	
King	Residential Tile Setters	Journey Level	\$20.00		<u>1</u>	
King	Roofers	Journey Level	\$51.02	<u>5A</u>	<u>3H</u>	
King	Roofers	Using Irritable Bituminous Materials	\$54.02	<u>5A</u>	<u>3H</u>	
King	Sheet Metal Workers	Journey Level (Field or Shop)	\$78.17	<u>7F</u>	<u>1E</u>	
King	Shipbuilding & Ship Repair	Boilermaker	\$43.31	<u>7M</u>	<u>1H</u>	
King	Shipbuilding & Ship Repair	Carpenter	\$41.06	<u>7T</u>	<u>2B</u>	
King	Shipbuilding & Ship Repair	Electrician	\$42.07	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Heat & Frost Insulator	\$67.93	<u>5J</u>	<u>4H</u>	
King	Shipbuilding & Ship Repair	Laborer	\$41.99	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Machinist	\$42.00	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Operator	\$41.95	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Painter	\$42.00	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Pipefitter	\$41.96	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Rigger	\$42.05	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Sheet Metal	\$41.98	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Shipfitter	\$42.05	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Trucker	\$41.91	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Warehouse	\$41.94	<u>7T</u>	<u>4B</u>	
King	Shipbuilding & Ship Repair	Welder/Burner	\$42.05	<u>7T</u>	<u>4B</u>	
King	Sign Makers & Installers (Electrical)	Sign Installer	\$22.92		<u>1</u>	
King	Sign Makers & Installers (Electrical)	Sign Maker	\$21.36		<u>1</u>	

King	Sign Makers & Installers (Non-Electrical)	Sign Installer	\$27.28		<u>1</u>	
King	Sign Makers & Installers (Non-Electrical)	Sign Maker	\$33.25		<u>1</u>	
King	Soft Floor Layers	Journey Level	\$47.61	<u>5A</u>	<u>3J</u>	
King	Solar Controls For Windows	Journey Level	\$12.44		<u>1</u>	
King	Sprinkler Fitters (Fire Protection)	Journey Level	\$75.64	<u>5C</u>	<u>1X</u>	
King	Stage Rigging Mechanics (Non Structural)	Journey Level	\$13.23		<u>1</u>	
King	Stone Masons	Journey Level	\$55.82	<u>5A</u>	<u>1M</u>	
King	Street And Parking Lot Sweeper Workers	Journey Level	\$19.09		<u>1</u>	
King	Surveyors	Assistant Construction Site Surveyor	\$59.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Surveyors	Chainman	\$58.93	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Surveyors	Construction Site Surveyor	\$60.49	<u>7A</u>	<u>3C</u>	<u>8P</u>
King	Telecommunication Technicians	Journey Level	\$22.76		<u>1</u>	
King	Telephone Line Construction - Outside	Cable Splicer	\$40.52	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Hole Digger/Ground Person	\$22.78	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Installer (Repairer)	\$38.87	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Special Aparatus Installer I	\$40.52	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Special Apparatus Installer II	\$39.73	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Telephone Equipment Operator (Heavy)	\$40.52	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	\$37.74	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Telephone Lineperson	\$37.74	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Television Groundperson	\$21.60	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Television Lineperson/Installer	\$28.68	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Television System Technician	\$34.10	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Television Technician	\$30.69	<u>5A</u>	<u>2B</u>	
King	Telephone Line Construction - Outside	Tree Trimmer	\$37.74	<u>5A</u>	<u>2B</u>	
King	Terrazzo Workers	Journey Level	\$51.36	<u>5A</u>	<u>1M</u>	
King	Tile Setters	Journey Level	\$51.36	<u>5A</u>	<u>1M</u>	
King	Tile, Marble & Terrazzo Finishers	Finisher	\$42.19	<u>5A</u>	<u>1B</u>	
King	Traffic Control Stripers	Journey Level	\$45.43	<u>7A</u>	<u>1K</u>	

King	Truck Drivers	Asphalt Mix Over 16 Yards (W. WA-Joint Council 28)	\$52.70	<u>5D</u>	<u>3A</u>	<u>8L</u>
King	Truck Drivers	Asphalt Mix To 16 Yards (W. WA-Joint Council 28)	\$51.86	<u>5D</u>	<u>3A</u>	<u>8L</u>
King	Truck Drivers	Dump Truck & Trailer	\$52.70	<u>5D</u>	<u>3A</u>	<u>8L</u>
King	Truck Drivers	Dump Truck (W. WA-Joint Council 28)	\$51.86	<u>5D</u>	<u>3A</u>	<u>8L</u>
King	Truck Drivers	Other Trucks (W. WA-Joint Council 28)	\$52.70	<u>5D</u>	<u>3A</u>	<u>8L</u>
King	Truck Drivers	Transit Mixer	\$43.23		<u>1</u>	
King	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	\$17.71		<u>1</u>	
King	Well Drillers & Irrigation Pump Installers	Oiler	\$12.97		<u>1</u>	
King	Well Drillers & Irrigation Pump Installers	Well Driller	\$18.00		<u>1</u>	

SPECIAL PROVISIONS

Special Provisions

2

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SPECIAL PROVISIONS

The work on this project shall be accomplished in accordance with the Standard Specifications for Road, Bridge and Municipal Construction, 2016 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter "Standard Specifications"). The Standard Specifications, as modified or supplemented by the Amendments to the Standard Specifications and these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work. These Special Provisions are made up of both General Special Provisions (GSPs) from various sources, which may have project-specific fill-ins; and project-specific Special Provisions. Each Provision either supplements, modifies, or replaces the comparable Standard Specification, or is a new Provision. The deletion, amendment, alteration, or addition to any subsection or portion of the Standard Specifications is meant to pertain only to that particular portion of the section, and in no way should it be interpreted that the balance of the section does not apply.

Also incorporated into the Contract Documents by reference are:

- Manual on Uniform Traffic Control Devices for Streets and Highways, currently adopted edition, with Washington State modifications, if any
- Standard Plans for Road, Bridge and Municipal Construction, WSDOT/APWA, current edition
- +City of Renton Standard Details, City of Renton Public Works Department, Current Edition
- Public Rights-Of-Way Accessibility Guidelines (PROWAG), current edition

Contractor shall obtain copies of these publications, at Contractor's own expense.

Throughout these Special Provisions are references to bids, bidding, bid items and other bid-related terminology. For the purposes of this emergency project, those should be interpreted within the context of negotiating prices with the City. No such interpretation should be taken to invalidate the terms and intent of the Contract Documents. References to Bidder shall be interpreted as Contractor.

DIVISION 1 GENERAL REQUIREMENTS

1-01 DEFINITIONS AND TERMS

1-01.1 General

Section 1-01.1 is supplemented with:

(*****)

Whenever reference is made to the State, State of Washington, Commission, Department of Transportation, Secretary of Transportation, Owner, Contracting Agency or Engineer, such reference shall be deemed to mean the City of Renton acting through its City Council, employees, and duly authorized representatives for all contracts administered by the City of Renton.

All references to "State Materials Laboratory" shall be revised to read "Contracting Agency designated location".

1-01.3 Definitions

Section 1-01.3 is revised and supplemented by the following:

(*****)

Act of God

"Act of God" means an earthquake, flood, cyclone, or other cataclysmic phenomenon of nature. A rain, windstorm, high water or other natural phenomenon of unusual intensity for the specific locality of the Work, which might reasonably have been anticipated from historical records of the general locality of the Work, shall not be construed as an act of God.

Consulting Engineer

The Contracting Agency's design consultant, who may or may not administer the construction program for the Contracting Agency.

Contract Documents

See definition for "Contract".

Contract Price

Either the unit price, the unit prices, or lump sum price or prices named in the proposal, or in properly executed change orders.

Contract Time

The period of time established by the terms and conditions of the Contract within which the Work must be physically completed.

Dates

Bid Opening Date: The date on which the Contracting Agency publicly opens and reads the bids.

Award Date: The date of the formal decision of the Contracting Agency to accept the lowest responsible and responsive Bidder for the Work.

Contract Execution Date: The date the Contracting Agency officially binds the agency to the Contract.

Notice to Proceed Date: The date stated in the Notice to Proceed on which the Contract Time begins.

Substantial Completion Date: The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, and only minor incidental Work, replacement of temporary substitute facilities, or correction or repair remains for the physical completion of the total contract.

Contract Completion Date: The date by which the Work is contractually required to be physically completed. The Contract Completion Date will be stated in the Notice to Proceed. Revisions of this date will be authorized in writing by the Engineer whenever there is an extension to the Contract time.

Completion Date: The day all the Work specified in the Contract is completed and all the obligations of the Contractor under the Contract are fulfilled by the Contractor.

Final Acceptance Date: The date the Contracting Agency accepts the Work as complete per the Contract requirements.

Day

Unless otherwise designated, day(s) as used in the Contract Documents, shall be understood to mean working days.

Engineer

The City Engineer or duly authorized representative, or an authorized member of a licensed consulting firm retained by the Owner for the construction engineering of a specific public works project.

Inspector

The Owner's authorized representative assigned to make necessary observations of the Work performed or being performed, or of materials furnished or being furnished by the Contractor.

Notice of Award: The written notice from the Contracting Agency to the successful bidder signifying the Contracting Agency's acceptance of the bid.

Notice to Proceed: The written notice from the Contracting Agency or the Engineer to the Contractor authorizing and directing the Contractor to proceed with Work and establishing the date on which the Contract time begins.

Or Equal

Where the term "or equal" is used herein, the Contracting Agency, or the Contracting Agency on recommendation of the Engineer, shall be the sole judge of the quality and suitability of the proposed substitution. The responsibility and cost of furnishing necessary evidence, demonstrations, or other information required to obtain the approval of alternative materials or processes by the Owner shall be entirely borne by the Contractor.

Owner

The City of Renton or its authorized representative also referred to as Contracting Agency.

Performance and Payment Bond

Same as "Contract Bond" defined in the Standard Specifications.

Plans

The Contract Plans and/or Standard Plans which show location, character, and dimensions of prescribed Work including layouts, profiles, cross-sections, and other details. Drawings may either be bound in the same book as the balance of the Contract Documents or bound in separate sets, and are a part of the Contract Documents, regardless of the method of binding. The terms "Standard Drawings" or "Standard Details" generally used in Specifications refers to drawings bound either with the specification documents or included with the Plans or the City of Renton Standard Plans.

Points

Wherever reference is made to the Engineer's points, this shall mean all marks, bench marks, reference points, stakes, hubs, tack, etc., established by the Engineer for maintaining horizontal and vertical control of the Work.

Provide

Means "furnish and install" as specified and shown in the Plans.

Secretary, Secretary of Transportation

The chief executive officer of the Department and other authorized representatives. The chief executive officer to the Department shall also refer to the Department of Public Works Administrator.

Shop Drawings

Same as "Working Drawings" defined in the Standard Specifications.

Special Provisions

Modifications to the Standard Specifications and their amendments that apply to an individual project. The special provisions may describe Work the Specifications do not cover. Such Work shall comply first with the Special Provisions and then with any Specifications that apply. The Contractor shall include all costs of doing this Work within the bid prices.

State

The state of Washington acting through its representatives. The State shall also refer to The City of Renton and its authorized representatives where applicable.

Supplemental Drawings and Instructions

Additional instructions by the Engineer at request of the Contractor by means of drawings or documents necessary, in the opinion of the Engineer, for the proper execution of the Work. Such drawings and instructions are consistent with the Contract Documents.

Traffic

Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and equestrian traffic.

Utility

Public or private fixed improvement for the transportation of fluids, gases, power, signals, or communications and shall be understood to include tracks, overhead and underground wires, cables, pipelines, conduits, ducts, sewers, or storm drains.

1-02 BID PROCEDURES AND CONDITIONS

1-02.1 Prequalification of Bidders

Delete this Section and replace it with the following:

(*****)

Bidders shall be qualified by experience, financing, equipment, and organization to do the Work called for in the Contract Documents. The Contracting Agency reserves the right to take whatever action it deems necessary to ascertain the ability of the bidder to perform the Work satisfactorily.

1-02.2 Plans and Specifications

Delete this Section and replace it with the following:

(*****)

Information as to where Bid Documents can be obtained or reviewed will be found in the Call for Bids (Advertisement for Bids) for the Work.

After award of the Contract, Plans and Specifications will be issued to the Contractor at no cost as detailed below:

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced Plans (11" x 17") and contract provisions	4	Furnished automatically upon award
Large Plans (22" x 34")	4	Furnished only upon request

1-02.4(2) Subsurface Information

Section 1-02.4(2) is supplemented with the following:

(*****)

If a geotechnical study was prepared for the project, then the findings and recommendations are summarized in a report. The City of Renton will provide this study upon request.

1-02.5 Proposal Forms

Delete this Section and replace it with the following:

(*****)

At the request of the bidder, the Contracting Agency will provide a proposal form for any project on which the bidder is eligible to bid.

The proposal form will identify the project and its location and describe the Work. It will also list estimated quantities, units of measurement, the items of Work, and the materials to be furnished at the unit bid prices. The bidder shall complete spaces on the proposal form that call for, but are not limited to, unit bid prices; extensions; summations; the total bid amount; signatures; date; and, where applicable, retail sales taxes and acknowledgement of addenda; the bidder's name, address, telephone number, and signature; and a State of Washington Contractor's Registration Number. Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. The required certifications are included as part of the proposal form.

The Contracting Agency reserves the right to arrange the proposal forms with alternates and additives, if such be to the advantage of the Contracting Agency. The bidder shall bid on all alternates and additives set forth in the proposal forms unless otherwise specified.

Any correction to a bid made by interlineations, alteration, or erasure, shall be initialed by the signer of the bid. The bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

A bid by a corporation shall be executed in the corporate name, by the president or a vice president (Or other corporate officer accompanied by evidence of authority to sign).

A bid by a partnership shall be executed in the partnership name, and signed by a partner. A copy of the partnership agreement shall be submitted with the Bid Form if any D/M/WBE requirements are to be satisfied through such an agreement.

A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture. A copy of the joint venture agreement shall be submitted with the Bid Form if any D/W/MBE requirements are to be satisfied through such an agreement.

1-02.6 Preparation of Proposal

Section 1-02.6 is supplemented with:

Supplement the second paragraph with the following:

4. If a minimum bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.
5. Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signer of the bid.

Delete the last paragraph, and replace it with the following:

The Bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

A bid by a corporation shall be executed in the corporate name, by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign).

A bid by a partnership shall be executed in the partnership name, and signed by a partner. A copy of the partnership agreement shall be submitted with the Bid Form if any D/M/WBE requirements are to be satisfied through such an agreement.

A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture. A copy of the joint venture agreement shall be submitted with the Bid Form if any D/W/MBE requirements are to be satisfied through such an agreement.

1-02.6(1) Proprietary Information

1-02.6(1) is a new Section.

(*****)

Vendors should, in the bid proposal, identify clearly any material(s), which constitute "(valuable) formula, designs drawings, and research data" so as to be exempt from public disclosure, RCW 42.17.310, or any materials otherwise claimed to be exempt, along with a Statement of the basis for such claim of exemption. The Department (or State) will give notice to the vendor of any request for disclosure of such information received within 5 (five) years from the date of submission. Failure to so label such materials or failure to timely respond after notice of request for public disclosure has been given shall be deemed a waiver by the submitting vendor of any claim that such materials are, in fact, so exempt.

1-02.7 Bid Deposit

Section 1-02.7 is supplemented with the following:

(*****)

Bid Bonds shall contain the following:

1. Number assigned to the project by the Contracting Agency;

2. Name of the project;
3. The Contracting Agency named as obligee;
4. The amount of the bid bond stated either as a dollar figure or as a percentage which represents five percent of the maximum bid amount that could be awarded;
5. Signature of the bidder's officer empowered to sign official statements. The signature of the person authorized to submit the bid should agree with the signature on the bond, and the title of the person must accompany said signature;
6. The signature of the surety's officer empowered to sign the bond form included in the Contract Provision.

1-02.9 Delivery of Proposal

Revise the first paragraph to read:

(*****)

Each proposal shall be submitted in a sealed envelope, with Project Name and Project Number clearly marked on the outside of the envelope as stated in the Advertisement for Bids, or as otherwise stated in the Bid Documents.

1-02.12 Public Opening of Proposals

Section 1-02.12 is supplemented with the following:

(*****)

The Contracting Agency reserves the right to postpone the date and time for bid opening. Notification to bidder will be by addenda.

1-02.13 Irregular Proposals

Revise item I to read:

(*****)

1. A proposal will be considered irregular and will be rejected if:
 - a. The bidder is not prequalified when so required;
 - b. The authorized proposal form furnished by the Contracting Agency is not used or is altered;
 - c. The complete proposal form contains any unauthorized additions, deletions, alternate bids, or conditions;
 - d. The bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
 - e. A price per unit cannot be determined from the bid proposal;
 - f. The proposal form is not properly executed;
 - g. The bidder fails to submit or properly complete a subcontractor list, if applicable, as required in Section 1-2.6
 - h. The bidder fails to submit or properly complete a Disadvantaged, Minority or Women's Business Enterprise Certification, if applicable, as required in Section 1-02.6; or
 - i. The bid proposal does not constitute a definite and unqualified offer to meet the material terms of the bid invitation.
 - j. More than one proposal is submitted for the same project from a Bidder under the same or different names.

1-02.14 Disqualification of Bidders

Revise this section to read:

(*****)

1. A bidder will be deemed not responsible and the proposal rejected if the bidder does not meet the responsibility criteria in RCW 39.04.
2. A bidder may be deemed not responsible and the proposal rejected if:
 - a. More than one proposal is submitted for the same project from a bidder under the same or different names;
 - b. Evidence of collusion exists with any other bidder or potential bidder. Participants in collusion will be restricted from submitting further bids;
 - c. The bidder, in the opinion of the Contracting Agency, is not qualified for the Work or to

- the full extent of the bid, or to the extent that the bid exceeds the authorized prequalification amount as may have been determined by a prequalification of the bidder;
- d. An unsatisfactory performance record exists based on past or current Contracting Agency Work or for Work done for others, as judged from the standpoint of conduct of the Work; workmanship; progress; affirmative action; equal employment opportunity practices; or Disadvantaged Enterprise, Minority Enterprise, or Women’s Business Enterprise utilization.
 - e. There is uncompleted Work (Contracting Agency or otherwise) which might hinder or prevent the prompt completion of the Work bid upon;
 - f. The bidder failed to settle bills for labor or materials on past or current contracts;
 - g. The bidder has failed to complete a written public contract or has been convicted of a crime arising from a previous public contract;
 - h. The bidder is unable, financially or otherwise, to perform the Work;
 - i. A bidder is not authorized to do business in the State of Washington (not registered in accordance with RCW 18.27)
 - j. The bidder does not meet the supplemental qualifications criteria as stated in Section 1-02.1(1).
 - k. There are any other reasons deemed proper by the Contracting Agency.

1-02.15 Pre Award Information

Revise this section to read:

(*****)

Before awarding any contract, the Contracting Agency may require one or more of these items or actions of:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used;
2. Samples of these materials for quality and fitness tests;
3. A progress schedule (in a form the Contracting Agency requires) showing the order of time required for the various phases of Work;
4. A breakdown of costs assigned to any bid item;
5. Attending at a conference with the Engineer or representatives of the Engineer;
6. Obtain, and furnish a copy of, a business license to do business in the city and/or county where the Work is located;
7. A copy of State of Washington Contractor’s Registration; or
8. Any other information or action taken that is deemed necessary to ensure that the bidder is the lowest responsible bidder.

1-03 AWARD AND EXECUTION OF CONTRACT

1-03.1 Consideration of bids

Section 1-03.1 is supplemented with the following:

(*****)

All bids will be based on total sum of all schedules of prices. No partial bids will be accepted unless so stated in the call for bids or special provisions. The City reserves the right however to award all or any schedule of a bid to the lowest bidder at its discretion.

1-03.2 Award of Contract

Section 1-03.2 is supplemented with the following:

(*****)

The Contract, bond form, and all other forms requiring execution, together with a list of all other forms or documents required to be submitted by the successful bidder, will be forwarded to the successful bidder within 10 days of the award. The number of copies to be executed by the Contractor shall be determined by the Contracting Agency.

1-03.3 Execution of Contract

Section 1-03.3 is revised and supplemented as follows:

(*****)

Within 10 calendar days after receipt from the City of the forms and documents required to be completed by the Contractor, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the Contract by the Contracting Agency, the successful bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

Until the Contracting Agency executes a contract, no proposal shall bind the Contracting Agency nor shall any Work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any Work begun outside such areas and for any materials ordered before the Contract is executed by the Contracting Agency.

If the bidder experiences circumstances beyond their control that prevents return of the Contract documents within 10 calendar days after the award date, the Contracting Agency may grant up to a maximum of 10 additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

The Contracting Agency is prohibited by RCW 39.06.010 from executing a contract with a Contractor who is not registered or licensed as required by the laws of the state. In addition, the Contracting Agency requires persons doing business with the Contracting Agency to possess a valid City of Renton business license prior to award.

When the Bid Form provides spaces for a business license number, a Washington State Contractors registration number, or both the Bidder shall insert such information in the spaces provided. The Contracting Agency requires legible copies of the Contractor's Registration and business license be submitted to the Engineer as part of the Contracting Agency's post-award information and evaluation activities.

1-03.4 Contract Bond

Revise the first paragraph to read:

(*****)

The successful bidder shall provide an executed contract bond for the full contract amount. This contract bond shall:

1. Be on the Contracting Agency-furnished form;
2. Be signed by an approved surety (or sureties) that:
 - a. Is registered with the Washington State Insurance Commissioner, and
 - b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner;
3. Be conditioned upon the faithful performance of the Contract by the Contractor within the prescribed time;
4. Guarantee that the surety shall indemnify, defend, and protect the Contracting Agency against any claim of direct or indirect loss resulting from the failure:
 - a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform the Contract, or
 - b. Of the Contractor (subcontractors, or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tie subcontractors, material person, or any other person who provides supplies or provisions for carrying out Work;
5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond must be signed by the president or vice-president, unless accompanied by a written proof of the authority of the individual signing the bond to bind the corporation (i.e., corporate resolution, power of attorney or a letter to such effect by the president or vice-president).

1-03.7 Judicial Review

Revise the last sentence to read:

The venue of all causes of action arising from the advertisement, award, execution, and performance of the Contract shall be in the Superior Court of the County where the Contracting Agency's headquarters are located.

1-04 SCOPE OF WORK

1-04.2 Coordination of Contract Documents, Plans, Special Provisions Specifications, and Addenda

Revise the second paragraph to read:

(*****)

Any inconsistency in the parts of the Contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):

1. Addenda
2. Proposal Form
3. Technical Specifications (if any)
4. Special Provisions
5. Contract Plans
6. Contracting Agency's Standard Plans (if any)
7. Amendments to the Standard Specifications
8. WSDOT/APWA Standard Specifications for Road, Bridge and Municipal Construction
9. WSDOT/APWA Standard Plans for Road, Bridge and Municipal Construction

1-04.3 Contractor-Discovered Discrepancies

Section 1-04.3 is a new section:

(*****)

Upon receipt of award of contract, the Contractor shall carefully study and compare all the components of the Contract Documents and other instructions, and check and verify all field measurements. The Contractor shall, prior to ordering material or performing Work, report in writing to the Engineer any error, inconsistency, or omission in respect to design or mode of construction, which is discovered. If the Contractor, in the course of this study or in the accomplishment of the Work, finds any discrepancy between the Plans and the physical condition of the locality as represented in the Plans, or any such errors or omissions in respect to design or mode of construction in the Plans or in the layout as given by points and instructions, it shall be the Contractor's duty to inform the Engineer immediately in writing, and the Engineer will promptly check the same. Any Work done after such discovery, until correction of Plans or authorization of extra Work is given, if the Engineer finds that extra Work is involved, will be done at the Contractor's risk. If extra Work is involved, the procedure shall be as provided in Section 1-04.4 of the Standard Specifications.

1-04.4 Changes

The last two paragraphs are replaced with the following:

(*****)

Renton does not have a formal policy or guidelines on cost reduction alternatives, but will evaluate such proposals by the Contractor on a case-by-case basis.

1-04.4(1) Minor Changes

Section 1-04.4(1) is supplemented as follows:

(*****)

Payments and credits will be determined in accordance with Section 1-09.4 of the Standard Specifications. For the purpose of providing a common proposal for all bidders, the Contracting Agency may have entered an amount for "Minor Change" in the Proposal to become a part of the total bid by the Contractor.

1-04.8 Progress Estimates and Payments

Section 1-04.8 is supplemented as follows:

(*****)

The Contractor is encouraged to provide to the Engineer prior to progress payments an estimate of "Lump Sum" Work accomplished to date. The Engineer's calculations and decisions shall be final in

regard to the actual percentage of any lump sum pay item accomplished and eligible for payment unless another specific method of calculating lump sum payments is provided elsewhere in the Specifications.

1-04.11 Final Cleanup

Section 1-04.11 is supplemented as follows:

(*****)

All salvage material as noted on the Plans and taken from any of the discarded facilities shall, at the Engineer's discretion, be carefully salvaged and delivered to the City shops. Any cost incurred in salvaging and delivering such items shall be considered incidental to the project and no compensation will be made.

The Contract price for "Finish and Cleanup, Lump Sum," shall be full compensation for all Work, equipment and materials required to perform final cleanup. If this pay item does not appear in the Contract Documents then final cleanup shall be considered incidental to the Contract and to other pay item and no further compensation shall be made.

1-05 CONTROL OF WORK

1-05.4 Conformity With and Deviation from Plans and Stakes

Section 1-05.4 is supplemented with the following:

(*****)

If the project calls for the Contractor supplied surveying, the Contractor shall provide all required survey Work, including such Work as mentioned in Sections 1-05, 1-11 and elsewhere in these Specifications as being provided by the Contractor. All costs for this survey Work shall be included in "Contractor Supplied Surveying," per lump sum.

The Engineer or the Contractor supplied surveyor will provide construction stakes and marks establishing lines, slopes, and grades as stipulated in Sections 1-05.4 and will perform such Work per Section 1-11. The Contractor shall assume full responsibility for detailed dimensions, elevations, and excavation slopes measured from the Engineer or the Contractor supplied surveyor furnished stakes and marks.

The Contractor shall provide a work site, which has been prepared to permit construction staking to proceed in a safe and orderly manner. The Contractor shall keep the Engineer or the Contractor supplied surveyor informed of staking requirements and provide at least 48 hour notice to allow the Engineer or the Contractor supplied surveyor adequate time for setting stakes.

The Contractor shall carefully preserve stakes, marks, and other reference points, including existing monumentation, set by Contracting Agency forces. The Contractor will be charged for the costs of replacing stakes, markers and monumentation that were not to be disturbed but were destroyed or damaged by the Contractor's operations. This charge will be deducted from monies due or to become due to the Contractor.

Any claim by the Contractor for extra compensation by reason of alterations or reconstruction Work allegedly due to error in the Engineer's line and grade, will not be allowed unless the original control points set by the Engineer still exist, or unless other satisfactory substantiating evidence to prove the error was furnished by the Engineer. Three consecutive points set on line or grade shall be the minimum points used to determine any variation from a straight line or grade. Any such variation shall, upon discovery, be reported to the Engineer. In the absence of such report the Contractor shall be liable for any error in alignment or grade.

The Contractor shall provide all surveys required other than those to be performed by the Engineer. All survey Work shall be done in accordance with Section 1-11 SURVEYING STANDARDS of these Specifications.

The Contractor shall keep updated survey field notes in a standard field book and in a format set by the Engineer, per Section 1-11.1(4). These field notes shall include all survey Work performed by the Contractor's surveyor in establishing line, grade and slopes for the construction Work. Copies of these

field notes shall be provided the Engineer upon request and upon completion of the Contract Work the field book or books shall be submitted to the Engineer and become the property of the Contracting Agency.

If the survey Work provided by the Contractor does not meet the standards of the Engineer, then the Contractor shall, upon the Engineer's written request, remove the individual or individuals doing the survey Work and the survey Work will be completed by the Engineer at the Contractor's expense. Costs for completing the survey Work required by the Engineer will be deducted from monies due or to become due the Contractor.

All costs for survey Work required to be performed by the Contractor shall be included in the prices bid for the various items which comprise the improvement or be included in the bid item for "Contractor Supplied Surveying" per lump sum if that item is included in the contracts.

1-05.4(3) Contractor Supplied Surveying

Section 1-05.4(3) is a new section:

(*****)

When the Contract provides for Contractor Supplied Surveying, the Contractor shall supply the survey Work required for the project. The Contractor shall retain as a part of the Contractor Organization an experienced team of surveyors under the direct supervision of a professional land surveyor licensed by the State of Washington. All survey Work shall be done in accordance with Sections 1-05.4 and 1-11.

The Contractor and/or the Surveyor shall inform the Engineer in writing of any errors, discrepancies, and omissions to the Plans that prevent the Contractor and/or the Surveyor from constructing the project in a manner satisfactory to the Engineer. All errors, discrepancies, and omissions must be corrected to the satisfaction of the Engineer before the survey Work may be continued.

The Contractor shall coordinate his Work with the Surveyor and perform his operations in a manner to protect all survey stakes from harm. The Contractor shall inform the Surveyor of the Contractor's intent to remove any survey stakes and/or points before physically removing them.

The Surveyor shall be responsible for maintaining As-Built records for the project. The Contractor shall coordinate his operations and assist the Surveyor in maintaining accurate As-Built records for the project.

If the Contractor and the Surveyor fail to provide, as directed by the Engineer and/or these Plans and Specifications, accurate As-Built records and other Work the Engineer deems necessary, the Engineer may elect to provide at Contractor expense, a surveyor to provide all As-Built records and other Work as directed by the Engineer. The Engineer shall deduct expenses incurred by the Engineer-supplied surveying from monies owed to the Contractor.

Payment per Section 1-04.1 for all Work and materials required for the full and complete survey Work required to complete the project and As-Built drawings shall be included in the lump sum price for "Construction Surveying, Staking, and As-Built."

1-05.4(4) Contractor Provided As-Built Information

Section 1-05.4(4) is a new section:

(*****)

It shall be the Contractor's responsibility to record the location prior to the backfilling of the trenches, by centerline station, offset, and depth below pavement, of all existing utilities uncovered or crossed during his Work as covered under this project.

It shall be the Contractor's responsibility to have his Surveyor locate by centerline station, offset and elevation each major item of Work done under this contract per the survey standard of Section 1-11. Major items of Work shall include but not be limited to: Manholes, Catch basins and Inlets, Valves, vertical and Horizontal Bends, Junction boxes, Cleanouts, Side Sewers, Street Lights & Standards,

Hydrants, Major Changes in Design Grade, Vaults, Culverts, Signal Poles, and Electrical Cabinets.

After the completion of the Work covered by this contract, the Contractor's Surveyor shall provide to the City the hard covered field book(s) containing the as-built notes and one set of white prints of the project drawings upon which he has plotted the notes of the Contractor locating existing utilities, and one set of white prints of the project drawings upon which he has plotted the as-built location of the new Work as he recorded in the field book(s). This drawing shall bear the Surveyor's seal and signature certifying its accuracy.

All costs for as-built Work shall be included in the Contract item "Construction Surveying, Staking, and As-Builts", lump sum.

1-05.7 Removal of Defective and/or Unauthorized Work

Section 1-05.7 is supplemented as follows:

(*****)

Upon written notice from the Engineer, the Contractor shall promptly replace and re-execute Work by Contractor forces, in accordance with the intent of the Contract and without expense to the Owner, and shall bear the expense of making good all Work of other contractors destroyed or damaged by such removal or replacement.

If the Contractor does not remove such condemned Work and materials and commence re-execution of the Work within 7 calendar days of written notice from the Engineer, or fails to perform any part of the Work required by the Contract Documents, the Owner may correct and remedy such Work as may be identified in the written notice, with Contracting Agency forces or by such other means as the Contracting Agency may deem necessary. In that case, the Owner may store removed material.

Direct or indirect costs incurred by the Contracting Agency attributable to correcting and remedying defective or unauthorized Work, or Work the Contractor failed or refused to perform, shall be paid by the Contractor. Payment will be deducted by the Engineer from monies due, or to become due, the Contractor. Such direct and indirect costs shall include in particular, but without limitation, compensation for additional professional services required, and costs for repair and replacement of Work of others destroyed or damaged by correction, removal, or replacement of the Contractor's unauthorized Work.

If sufficient funds do not remain in the Contract and the Contractor does not pay the cost of such removal and storage within 10 calendar days from the date of the notice to the Contractor of the fact of such removal, the Owner may, upon an additional 10 calendar days written notice, sell such materials at public or private sale, and deduct all costs and expenses incurred from monies due to the Contractor, including costs of sale, and accounting to Contractor for the net proceeds remaining. The Owner may bid at any such sale. The Contractor shall be liable to the Owner for the amount of any deficiency from any funds otherwise due the Contractor.

If the Contractor fails to comply with a written order to remedy what the Engineer determines to be an emergency situation, the Engineer may have the defective and unauthorized Work corrected immediately, have the rejected Work removed and replaced, or have Work the Contractor refuses to perform completed by using Contracting Agency or other forces. An emergency situation is any situation when, in the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or might cause serious risk of loss or damage to the public, the Property Owner and the Property Owner's property.

No adjustment in contract time or compensation will be allowed because of the delay in the performance of the Work attributable to the exercise of the Contracting Agency's rights provided by this section.

The rights exercised under the provisions of this section shall not diminish the Contracting Agency's right to pursue any other avenue for additional remedy or damages with respect to the Contractor's failure to perform the Work as required.

1-05.10 Guarantees

Section 1-05.10 is supplemented as follows:

(*****)

If within one year after the Acceptance Date of the Work by the Contracting Agency, defective and/or unauthorized Work is discovered, the Contractor shall promptly, upon written order by the Contracting Agency, return and in accordance with the Engineer's instructions, either correct such Work, or if such Work has been rejected by the Engineer, remove it from the project site and replace it with non-defective and authorized Work, all without cost to the Contracting Agency. If the Contractor does not promptly comply with the written order to correct defective and/or unauthorized Work, or if an emergency exists, the Contracting Agency reserves the right to have defective and/or unauthorized Work corrected or removed and replaced pursuant to Section 1-05.7 "Removal of Defective and/or Unauthorized Work."

The Contractor agrees the above one year limitation shall not exclude or diminish the Contracting Agency's rights under any law to obtain damages and recover costs resulting from defective and/or unauthorized Work discovered after one year but prior to the expiration of the legal time period set forth in RCW 4.16.040 limiting actions upon a contract in writing, or liability expressed or implied arising out of a written agreement.

The Contractor shall warrant good title to all materials, supplies, and equipment purchased for, or incorporated in the Work. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor, to recover under any bond given by the Contractor for their protection, or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Contracting Agency.

The provisions of this paragraph shall be inserted in all subcontracts and material contracts, and notice of its provisions shall be given to all persons furnishing materials for the Work when no formal contract is entered into for such materials.

1-05.11 Final Inspection

1-05.11(1) Substantial Completion Date

Section 1-05.11(1) is a new section:

(*****)

When the Contractor considers the Work to be substantially complete, the Contractor shall so notify the Engineer and request the Engineer establish the Substantial Completion Date. The Engineer will schedule an inspection of the Work with the Contractor to determine the status of completion.

To be considered substantially complete the following conditions must be met:

1. The Contracting Agency must have full and unrestricted use and benefit of the facilities both from the operational and safety standpoint.
2. Only minor incidental Work, replacement of temporary substitute facilities, or correction of repair Work remains to reach physical completion of the Work.

The Contractor's request shall list the specific items of Work in subparagraph two above that remains to be completed in order to reach physical completion. The Engineer may also establish the Substantial Completion Date unilaterally.

If after this inspection, the Engineer concurs with the Contractor that the Work is substantially complete and ready for its intended use, the Engineer, by written notice to the Contractor, will set the Substantial Completion Date. If, after this inspection the Engineer does not consider the Work substantially complete and ready for its intended use, the Engineer will, by written notice, so notify the Contractor giving the reasons therefore.

Upon receipt of written notice concurring in or denying substantial completion, whichever is applicable, the Contractor shall pursue vigorously, diligently and without unauthorized interruption,

the Work necessary to reach Substantial and Physical Completion. The Contractor shall provide the Engineer with a revised schedule indicating when the Contractor expects to reach substantial and physical completion of the Work.

The above process shall be repeated until the Engineer establishes the Substantial Completion Date and the Contractor considers the Work physically complete and ready for Final Inspection.

1-05.11(2) Final Inspection and Physical Completion Date

Section 1-05.11(2) is a new Section:

(*****)

When the Contractor considers the Work physically complete and ready for Final Inspection, the Contractor, by Written Notice, shall request the Engineer to schedule a final inspection. The Engineer will set a date for Final Inspection. The Engineer and the Contractor will then make a final inspection and the Engineer will notify the Contractor in writing of all particulars in which the Final Inspection reveals the Work incomplete or unacceptable. The Contractor shall immediately take such corrective measures as are necessary to remedy the listed deficiencies. Corrective Work shall be pursued vigorously, diligently, and without interruption until physical completion of the listed deficiencies. This process will continue until the Engineer is satisfied the listed deficiencies have been corrected.

If action to correct the listed deficiencies is not initiated within 7 days after receipt of the Written Notice listing the deficiencies, the Engineer may, upon Written Notice to the Contractor, take whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.8. The Contractor will not be allowed an extension of contract time because of a delay in the performance of the Work attributable to the exercise of the Engineer's right hereunder.

Upon correction of all deficiencies, the Engineer will notify the Contractor and the Contracting Agency, in writing, of the date upon which the Work was considered physically complete, that date shall constitute the Physical Completion Date of the Contract, but shall not imply all the obligations of the Contractor under the Contract have been fulfilled.

1-05.11(3) Operational Testing

Section 1-05.11(3) is a new section:

(*****)

Unless otherwise noted in the Contract Documents, the Contractor shall give the Engineer a minimum of 3 working days' notice of the time for each test and inspection. If the inspection is by another authority than the Engineer, the Contractor shall give the Engineer a minimum of 3 working days' notice of the date fixed for such inspection. Required certificates of inspection by other authority than the Engineer shall be secured by the Contractor.

It is the intent of the Contracting Agency to have at the Physical Completion Date a complete and operable system. Therefore, when the Work involves the installation of machinery or other mechanical equipment; street lighting, electrical distribution or signal systems; irrigation systems; buildings; or other similar Work, it may be desirable for the Engineer to have the Contractor operate and test the Work for a period of time, after final inspection but prior to the physical completion date. Whenever items of Work are listed in the Contract Provisions for operational testing they shall be fully tested under operating conditions for the time period specified to ensure their acceptability prior to the Physical Completion Date. During and following the test period, the Contractor shall correct any items of workmanship, materials, or equipment which prove faulty, or that are not in first class operating condition. Equipment, electrical controls, meters, or other devices and equipment to be tested during this period shall be tested under the observation of the Engineer, so that the Engineer may determine their suitability for the purpose for which they were installed. The Physical Completion Date cannot be established until testing and corrections have been completed to the satisfaction of the Engineer.

The costs for power, gas, labor, material, supplies, and everything else needed to successfully complete operational testing, shall be included in the unit contract prices related to the system being tested, unless specifically set forth otherwise in the proposal.

Operational and test periods, when required by the Engineer, shall not affect a manufacturer's guaranties or warranties furnished under the terms of the Contract.

1-05.12 Final Acceptance

The third and fourth sentences in paragraph 1 are deleted and replaced with:
(*****)

The Final Acceptance date shall be that date in which the Renton City Council formally approves acceptance of the Contract.

1-05.13 Superintendents, Labor and Equipment of Contractor

Revise the seventh paragraph to read:
(*****)

Whenever the Contracting Agency evaluates the Contractor's qualifications pursuant to Section 1-02.1, the Contracting Agency will take these performance reports into account.

1-05.14 Cooperation with Other Contractors

Section 1-05.14 is supplemented as follows:
(*****)

The Contractor shall afford the Owner and other contractors working in the area reasonable opportunity for the introduction and storage of their materials and the execution of their respective Work, and shall properly connect and coordinate the Contractor's Work with theirs.

Other utilities, districts, agencies, and contractors who may have facilities within the project area are:

1. Puget Sound Energy (gas and electric)
2. AT&T Broadband
3. CenturyLink
4. City of Renton (water, sewer, transportation)
5. Comcast
6. Seattle Public Utilities
7. King County
8. Olympic Pipeline
9. Soos Creek Sewer and Water District
10. Cedar River Sewer and Water District
11. Skyway Sewer and Water District
12. Private contractors employed by adjacent property owners

1-05.16 Water and Power

Section 1-05.16 is a new Section:
(*****)

The Contractor shall make necessary arrangements, and shall bear the costs for power and water necessary for the performance of the Work, unless the Contract includes power and water as a pay item.

1-05.17 Oral Agreements

Section 1-05.17 is a new section:
(*****)

No oral agreement or conversation with any officer, agent, or employee of the Contracting Agency, either before or after execution of the Contract, shall affect or modify any of the terms or

obligations contained in any of the documents comprising the Contract. Such oral agreement or conversation shall be considered as unofficial information and in no way binding upon the Contracting Agency, unless subsequently put in writing and signed by the Contracting Agency.

1-05.18 Contractor's Daily Diary

Section 1-05.18 is a new section:

(*****)

The Contractor and subcontractors shall maintain and provide to the Engineer a Daily Diary Record of this Work. This diary will be created by pen entries in a hardbound diary book of the type that is commonly available through commercial outlets. The diary must contain the Project and Number; if the diary is in loose-leaf form, this information must appear on every page. The diary must be kept and maintained by the Contractor's designated project superintendent(s). Entries must be made on a daily basis and must accurately represent all of the project activities on each day.

At a minimum, the diary shall show on a daily basis:

1. The day and date.
2. The weather conditions, including changes throughout the day.
3. A complete description of Work accomplished during the day with adequate references to the Plans and Contract Provisions, so that the reader can easily and accurately identify said Work in the Plans. Identify location/description of photographs or videos taken that day.
4. An entry for each and every changed condition, dispute or potential dispute, incident, accident, or occurrence of any nature whatsoever which might affect the Contractor, the Owner, or any third party in any manner.
5. Listing of any materials received and stored on- or off-site by the Contractor for future installation, to include the manner of storage and protection of the same.
6. Listing of materials installed during each day.
7. List of all subcontractors working on-site during each day.
8. Listing of the number of the Contractor's employees working during each day by category of employment.
9. Listing of the Contractor's equipment working on the site during each day. Idle equipment on the site shall be listed and designated as idle.
10. Notations to explain inspections, testing, stake-out, and all other services furnished by the Owner or other party during each day.
11. Entries to verify the daily (including non-Work days) inspection and maintenance of traffic control devices and condition of the traveled roadway surfaces. The Contractor shall not allow any conditions to develop that would be hazardous to the public.
12. Any other information that serves to give an accurate and complete record of the nature, quantity, and quality of Contractor's progress on each day.
13. Plan markups showing locations and dimensions of constructed features to be used by the Engineer to produce record drawings.
14. All pages of the diary must be numbered consecutively with no omissions in page numbers.
15. Each page must be signed and dated by the Contractor's official representative on the project.

The Contractor may use additional sheets separate from the diary book if necessary to provide a complete diary record, but they must be signed, dated, and labeled with project name and number.

It is expressly agreed between the Contractor and the Owner that the Daily Diary maintained by the Contractor shall be the "Contractor's Book of Original Entry" for the documentation of any potential claims or disputes that might arise during this contract. Failure of the Contractor to maintain this diary in the manner described above will constitute a waiver of any such claims or disputes by the Contractor.

The Engineer or other Owner's representative on the job site will also complete a Daily Construction Report.

1-05.19 Engineer, Assistants, Inspectors Transportation

Section 1-05.19 is a new section:

(*****)

The Contractor shall provide boat transport for City and Engineer staff from and to Gene Coulon Park docks to the respective work areas of the contract. Staff will at time be monitoring contract compliance, measuring liquid levels in the sewer system at the work site and at upland access points, monitoring discharge of liquids to the sewer lift station, conducting water quality measurements, and documenting the progress of the work. Such responsibilities require immediate access throughout the work zone. The Contractor shall provide a safe vessel and appropriately trained operator to provide such transportation at any time during the working day. The operator may have other responsibilities on the project, but none that would require a delay in providing transport such that the primary work of the project is impeded.

1-06 CONTROL OF MATERIAL

1-06.1 Approval of Materials Prior to Use

Section 1-06.1 is supplemented as follows:

(*****)

The materials and equipment lists submitted to the Engineer at the Preconstruction Conference shall include the quantity, manufacturer, and model number, if applicable, of materials and equipment to be installed under the Contract. This list will be checked by the Engineer as to conformity with the Contract Documents. The Engineer will review the lists within 10 working days, noting required corrections. The Contractor shall make required corrections and file 2 corrected copies with the Engineer within one week after receipt of required corrections. The Engineer's review and acceptance of the lists shall not relieve the Contractor from responsibility for suitability for the intended purpose, nor for deviations from the Contract Documents.

1-06.2(1) Samples and Tests for Acceptance

Section 1-06.2(1) is supplemented a follows:

(*****)

The finished Work shall be in accordance with approved samples. Approval of samples by the Engineer does not relieve the Contractor of responsibility for performance of the Work in accordance with the Contract Documents.

1-06.2(2) Statistical Evaluation of Materials for Acceptance

Section 1-06.02(2) is supplemented by adding the following:

(*****)

Unless stated otherwise in the special provisions, statistical evaluation will not be used by the City of Renton.

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.1 Laws to be Observed

Section 1-07.1 is supplemented as follows:

(*****)

The Contractor shall erect and properly maintain, at all times, as required by the conditions and progress of the Work, all necessary safeguards for protection of workers and the public; shall post danger signs warning against known or unusual hazards; and shall designate as Safety Supervisor, a responsible employee on the construction site whose duty shall be the enforcement of safety. The name and position of such person so designated shall be reported in writing to the Engineer by the Contractor.

The Contractor shall, at all times, enforce strict discipline and good order among all employees and shall not employ any person unfit or not skilled in the Work assigned to him/her.

Necessary sanitation conveniences for the use of the workers on the job, properly secluded from

public observation, shall be provided and maintained by the Contractor.

In cases of conflict between different safety regulations, the more stringent regulation shall apply.

The Washington State Department of Labor and Industries shall be the sole and paramount administrative agency responsible for the administration of the provisions of the Washington Industrial Safety and Health Act of 1973 (WISHA).

The Contractor shall maintain at the project site office, or other well-known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital or doctor's care, and persons, including employees, who may have been injured on the project site. Employees should not be permitted to Work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the Contractor's plant, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the project site, including safety for all persons and property in the performance of the Work. This requirement shall apply continuously, and not be limited to normal working hours. The required or implied duty of the Engineer to conduct construction review of the Contractor's performance does not, and shall not, be intended to include review and adequacy of the Contractor's safety measures, in, on, or near the project site.

1-07.2 State Sales Tax

Delete this section, including its sub-sections, in its entirety and replace it with the following:
(*****)

1-07.2(1) General

The Washington State Department of Revenue has issued special rules on the state sales tax. Sections 1-07.2(1) through 1-07.2(4) are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(3) describes this exception.

The Contracting Agency will pay the retained percentage only if the Contractor has obtained from the Washington State Department of Revenue a certificate showing that all contract-related taxes have been paid (RCW 60.28.050). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper state fund

1-07.2(2) State Sales Tax – Rule 171

WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads, etc., which are owned by a municipal corporation, or political subdivision of the state, or by the United States, and which are used primarily for foot or vehicular traffic. This includes storm or combined sewer systems within and included as part of the street or road drainage system, and power lines when such are part of the roadway lighting system. For Work performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in the various unit bid item prices, or other contract amounts, including those that the Contractor pays on the purchase of the materials, equipment, or supplies used or consumed in doing the Work.

1-07.2(2) State Sales Tax – Rule 170

WAC 458-20-170, and its related rules, applies to the constructing and repairing of new or existing buildings, or other structures, upon real property. This includes, but is not limited to; the construction of streets, roads, highways, etc., owned by the state of Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such sewers and disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph, electrical power distribution lines, or other conduits or lines in or above streets or roads, unless such power lines become a part of a street or road lighting system; and installing or attaching of any article of tangible personal property in or to real property, whether or not such personal property becomes a part of the realty by virtue of installation.

For Work performed in such cases, the Contractor shall collect from the Contracting Agency, retail sales tax on the full contract price. The Contracting Agency will automatically add this sales tax to each payment to the Contractor. For this reason, the Contractor shall not include the retail sales tax in the unit bid item prices, or in any other contract amount subject to Rule 170, with the following exception.

Exception: The Contracting Agency will not add in sales tax for a payment the Contractor or a subcontractor makes on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project. Such sales taxes shall be included in the unit bid item prices or in any other contract amount.

1-07.2(4) Services

The Contractor shall not collect retail sales tax from the Contracting Agency on any contract wholly for professional or other services (as defined in Washington State Department of Revenue Rules 138 and 244).

1-07.6 Permits and Licenses

Section 1-07.6 is supplemented as follows:

(*****)

The Contractor shall ensure that all necessary permits are obtained, and is responsible for reviewing all permits to become familiar with the requirements.

The Contractor and all subcontractors of any tier must obtain a City of Renton Business License (Contractor).

The permits, easements, and right of entry documents that have been acquired are available for inspection and review.

The Contractor shall be required to comply with all conditions of the permits, easements, and rights of entry, at no additional cost to the Owner. The Contractor is required to indemnify the Owner from claims on all easements and rights of entry.

All other permits, licenses, etc., shall be the responsibility of the Contractor. The Contractor shall comply with the special provisions and requirements of each.

Permits, permission under franchises, licenses and bonds of a temporary nature necessary for and during the prosecution of the Work, and inspection fees in connection therewith shall be secured and paid for by the Contractor. If the Owner is required to secure such permits, permission under franchises, licenses and bonds, and pay the fees, the costs incurred by the Owner thereby shall be charged against the Contractor and deducted from any funds otherwise due the Contractor.

The Contractor is cautioned to review all permits and other Contract Documents and schedule the work activities appropriately to complete the work within the number of days stated in the Contract Document. No additional compensation or extensions to time will be granted to the Contractor due to the time constraints imposed by such documents. The Contractor shall assume all responsibility for meeting all requirements of all permits.

Any fines or penalties incurred by Contracting Agency for not meeting state water quality standards and/or lack of stormwater pollution prevention on this Project shall be deducted from monies otherwise due to Contractor. Any fines assessed directly to Contractor shall be paid directly to the fining authority, at the Contractor's own cost.

1-07.9 Wages

1-07.9(5) Required Documents

Delete the first sentence of the third paragraph, and replace it with the following:

(*****)

The Contractor must submit weekly-certified payrolls for the Contractor and all subcontractors and lower tier subcontractors, regardless of project's funding source.

1-07.11 Requirements for Non-Discrimination

1-07.11(11) City of Renton Affidavit of Compliance

Section 1-07.11(11) is new:

(*****)

Each Contractor, Subcontractor, Consultant, and or Supplier shall complete and submit a copy of the "City of Renton Fair Practices Policy Affidavit of Compliance". A copy of this document will be bound in the bid documents.

1-07.12 Federal Agency Inspection

Section 1-07.12 is supplemented with the following:

(*****)

Required Federal Aid Provisions

The Required Contract Provisions Federal Aid Construction Contracts (FHWA 1273) and the amendments thereto supersede any conflicting provisions of the Standard Specifications and are made a part of this contract; provided, however, that if any of the provisions of FHWA 1273, as amended, are less restrictive than Washington State Law, then the Washington State Law shall prevail.

The provisions of FHWA 1273, as amended, included in this contract require that the Contractor insert the FHWA 1273 and amendments thereto in each subcontract, together with the wage rates which are part of the FHWA 1273, as amended. Also, a clause shall be included in each subcontract requiring

the subcontractors to insert the FHWA 1273 and amendments thereto in any lower tier subcontracts, together with the wage rates. The Contractor shall also ensure that this Section, REQUIRED FEDERAL AID PROVISIONS, is inserted in each subcontract for subcontractors and lower tier subcontractors. For this purpose, upon request to the Project Engineer, the Contractor will be provided with extra copies of the FHWA 1273, the amendments thereto, the applicable wage rates, and this Special Provision.

1-07.13 Contractor's Responsibility for Work

1-07.13(1) General

Section 1-07.13(1) is supplemented as follows:

(*****)

During unfavorable weather and other conditions, the Contractor shall pursue only such portions of the Work as shall not be damaged thereby.

No portion of the Work whose satisfactory quality or efficiency will be affected by unfavorable conditions shall be constructed while these conditions exist, unless the Contractor shall be able to overcome said unfavorable conditions by special means or precautions acceptable to the Engineer.

1-07.15 Temporary Water Pollution/Erosion Control

Delete the first paragraph, and replace it with the following:

(*****)

The Contractor shall perform all Work in strict accordance with all Federal, State, and local laws and regulations governing waters of the State, as well as permits acquired for the project.

The Contractor shall prepare a final Temporary Water Pollution/Erosion Control Plan (TWPECP) and a final SWPPP.

The TWPECP and SWPPP shall be developed in accordance with the erosion control standards contained in the 2010 City of Renton Amendments to the King County Surface Water Design Manual. The plan shall include any assumptions, detailed calculations, sketches and sequencing. The plan shall be signed and stamped by a Washington State Professional Engineer. A TESC supervisor shall be designated by the Contractor, whose name and phone number shall be given to the Engineer at the Preconstruction Conference. The TESC supervisor must be CESCL certified in accordance with NPDES permit requirements.

The plan shall be submitted for approval to the City within 10 days of the Notice of Award. The TWPECP shall include the various configurations that may be necessary to adequately control erosion and sediment at the site during the various stages of construction.

Design of dewatering, water control, bypass systems, and temporary erosion and sediment control during construction shall be the responsibility of the Contractor.

At a minimum, the plan shall contain:

1. Manufacturer's data and detailed plans for the erosion control products specified in the plan.
2. Plan for temporary pipe system diversions. This shall include a description of when the piping will be used, pipe material, locations, elevations, plan and profile views, inlet and outlet protection, hydraulic capacity, and details of important design features.
3. Plan for collecting, pumping and pipe surface stormwater runoff, dewatering discharge, and seepage from the source to the Baker Tank or acceptable discharge. The plan shall be shown in phases to coincide with the phases of construction. The plan shall include:
 - a. Layout and details of system.
 - b. Diversion systems manufacturer's data and material submittals.

- c. Pump and pipe types, sizes, manufacturer's data, and design criteria for pump sizing.
 - d. Flow calculations for stormwater, seepage, and dewatering pump discharge. Schedule and sketch of location for dewatering systems. Pumps shall be sized to pump stormwater runoff for the tributary area plus an allowance for groundwater and surface seepage. Each pump area location shall be equipped with two pumps meeting the capacity requirement, in case one is non-operational.
 - e. Source of power for pumps, description of schedule and fueling requirements, storage location, and methods.
4. Manufacturer's literature and test results (certificates) on the temporary silt fence, erosion control matting, riprap gradations, and any other necessary erosion control materials.
 5. Planned installation and maintenance schedule for temporary erosion and sedimentation control facilities. Indicate locations and outlets of dewatering systems.

The Contractor shall also prepare a final SWPPP. The SWPPP must meet the requirements of the Department of Ecology's NPDES and State Waste Discharge General Permit for Stormwater Discharges Associated with Construction Activity (General Permit). The SWPPP shall include and modify as necessary the Site Preparation and Erosion Control Plan drawings provided as part of the Contract Plans. The Contractor shall prepare, review, and modify the SWPPP as necessary to be consistent with the actual work schedule, sequencing, and construction methods that will be used on the project. The Contractor's SWPPP shall meet the requirements of the general permit.

The Contractor shall:

- Furnish, install, operate, and maintain necessary machinery, appurtenances, and equipment to keep excavations free of water during construction;
- Dewater and dispose of water in a manner that will not cause injury to public and private property, as well as keep sediment-laden water from entering the City surface water system or violate applicable water standards;
- Keep sufficient pumping equipment and machinery on hand at all times for emergencies, including electric power failures;
- Keep experienced personnel available at all times to operate pumping equipment, machinery and appliances;
- Not shut down dewatering systems between shifts, on holidays and weekends, nor during work stoppages without prior authorization by the Engineer;
- Control groundwater to prevent softening of bottoms of excavations, or formation of "quick" conditions or "boils";
- Design and operate dewatering system that will not remove natural soils;
- Keep excavations free of water during excavation, construction of structures, installation of pipelines, placing of structures, backfill, and placing and curing of concrete; and
- Control surface water runoff to prevent entry and collection in excavations.

As construction progresses and unexpected or seasonal conditions dictate, the Contractor shall anticipate that more water pollution/erosion control measures will be necessary. It shall be the obligation and responsibility of the Contractor to revise or supplement the pollution/erosion control measures as may be needed to protect the work, adjacent properties, storm drains, streams, and other water bodies.

At all times, there must be material on the job site to handle any spills caused by the Contractor, such as tack, oils, diesel, etc. Materials would include, but not be limited to, oil absorbent pads and

“kitty litter.” The Contractor must supply said materials at his expense and, in the event of a spill, be responsible for cleanup and disposal of contaminated materials.

In addition, the SWPPP shall outline the procedures to be used to prevent high pH stormwater or dewatering water from entering surface waters. The plan shall include how the pH of the water will be maintained between pH 6.5 and pH 8.5 prior to being discharged from the project or entering surface waters. Prior to beginning any concrete or grinding work, the Contractor shall submit the plan, for the Engineer’s review and approval.

An Ecology template is available to the Contractor for producing the SWPPP, using project- specific information added by the Contractor. The template and instructions are available at:

<http://www.ecy.wa.gov/programs/wq/stormwater/construction>.

The Engineer’s review and any resulting approval of the Contractor’s SWPPP and TЕСP will be only regarding conformance with the specification requirement that the Contractor have the plans prepared by a CPESC or professional Civil Engineer who has expertise in the type of facilities and that the SWPPP and TЕСP include the items specified for such plans. The Contractor shall be solely responsible for the adequacy of the SWPPP and TЕСP and if erosion sediment, and other pollutant control measures in deviation or addition to those described in the SWPPP become necessary to minimize erosion and prevent storm water contamination from sediment and other pollutants, the Contractor shall prepare and submit a revised SWPPP to the Engineer for review as specified for the original plan.

The Owner will not be liable to the Contractor for failure to accept all or any portion of an originally submitted or revised SWPPP, nor for any delays to the Work due to the Contractor’s failure to submit and implement an acceptable SWPPP.

1-07.16 Protection and Restoration of Property

1-07.16(1) Private/Public Property

Section 1-07.16(1) is supplemented by adding the following:

(*****)

The Contracting Agency will obtain all easements and franchises required for the project. The Contractor shall limit his operation to the areas obtained and shall not trespass on private property.

The Contracting Agency may provide certain lands, as indicated in connection with the Work under the Contract together with the right of access to such lands. The Contractor shall not unreasonably encumber the premises with his equipment or materials.

The Contractor shall provide, with no liability to the Contracting Agency, any additional land and access thereto not shown or described that may be required for temporary construction facilities or storage of materials. He shall construct all access roads, detour roads, or other temporary Work as required by his operations. The Contractor shall confine his equipment, storage of material, and operation of his workers to those areas shown and described and such additional areas as he may provide.

A. General. All construction Work under this contract on easements, right-of-way, over private property or franchise, shall be confined to the limits of such easements, right-of-way or franchise. All Work shall be accomplished so as to cause the least amount of disturbance and a minimum amount of damage. The Contractor shall schedule his Work so that trenches across easements shall not be left open during weekends or holidays and trenches shall not be open for more than 48 hours.

B. Structures. The Contractor shall remove such existing structures as may be necessary for the performance of the Work and, if required, shall rebuild the structures thus removed in as good a condition as found. He shall also repair all existing structures that may be damaged as a result of the Work under this contract.

C. Easements, cultivated areas and other surface improvements. All cultivated areas, either agricultural or lawns, and other surface improvements which are damaged by actions of the

Contractor shall be restored as nearly as possible to their original condition. Prior to excavation on an easement or private right-of-way, the Contractor shall strip topsoil from the trench or construction area and stockpile it in such a manner that it may be replaced by him, upon completion of construction. Ornamental trees and shrubbery shall be carefully removed with the earth surrounding their roots wrapped in burlap and replanted in their original positions within 48 hours.

All shrubbery or trees destroyed or damaged, shall be replaced by the Contractor with material of equal quality at no additional cost to the Contracting Agency. In the event that it is necessary to trench through any lawn area, the sod shall be carefully cut and rolled and replaced after the trenches have been backfilled. The lawn area shall be cleaned by sweeping or other means, of all earth and debris.

The Contractor shall use rubber wheel equipment similar to the small tractor-type backhoes used by side sewer contractors for all Work, including excavation and backfill, on easements or rights-of-way, which have lawn areas. All fences, markers, mailboxes, or other temporary obstacles shall be removed by the Contractor and immediately replace, after the trench is backfilled, in their original position. The Contractor shall notify the Contracting Agency and Property Owner at least 24 hours in advance of any Work done on easements or rights-of-way.

Damage to existing structures outside of easement areas that may result from dewatering and/or other construction activity under this contract shall be restored to their original condition or better. The original condition shall be established by photographs taken and/or inspection made prior to construction. All such Work shall be done to the satisfaction of the Property Owners and the Contracting Agency at the expense of the Contractor.

D. Streets. The Contractor will assume all responsibility of restoration of the surface of all streets (traveled ways) used by him if damaged.

In the event the Contractor does not have labor or material immediately available to make necessary repairs, the Contractor shall so inform the Contracting Agency. The Contracting Agency will make the necessary repairs and the cost of such repairs shall be paid by the Contractor.

The Contractor is responsible for identifying and documenting any damage that is pre-existing or caused by others. Restoration of excavation in City streets shall be done in accordance with the City of Renton Trench Restoration Requirements, which is available at the Public Works Department Customer Services counter on the 6th floor, Renton City Hall, 1055 South Grady Way.

1-07.17 Utilities and Similar Facilities

Section 1-07.17 is supplemented by adding:

(*****)

Existing utilities indicated in the Plans have been plotted from the best information available to the Engineer. Information and data shown or indicated in the Contract Documents with respect to existing underground utilities or services at or contiguous to the project site are based on information and data furnished to the Owner and the Engineer by owners of such underground facilities or others, and the Owner and the Engineer do not assume responsibility for the accuracy or completeness thereof. **It is to be understood that other aboveground or underground facilities not shown in the Plans may be encountered during the course of the Work.**

All utility valves, manholes, vaults, or pull boxes which are buried shall be conspicuously marked in a fashion acceptable to the Owner and the Engineer by the Contractor to allow their location to be determined by the Engineer or utility personnel under adverse conditions, (inclement weather or darkness).

Where underground main distribution conduits, such as water, gas, sewer, electric power, or telephone, are shown on the Plans, the Contractor, for the purpose of preparing his bid, shall assume that every property parcel will be served by a service connection for each type of utility.

The Contractor shall check with the utility companies concerning any possible conflict prior to commencing excavation in any area. The Contractor shall resolve all crossing and clearance problems with the utility company concerned. No excavation shall begin until all known facilities, in the vicinity of the excavation area, have been located and marked.

In addition to the Contractor having all utilities field marked before starting Work, the Contractor shall have all utilities field marked after they are relocated in conjunction with this project.

Call Before You Dig
The 48-Hour Locators
1-800-424-5555
Or -
811

At least 2 and not more than 10 working days prior to commencing any excavations for utility potholing or for any other purpose under this Contract, the Contractor shall notify the Underground Utilities Location Center by telephone of the planned excavation and progress schedule. The Contractor is also warned that there may be utilities on the project that are not part of the One Call system. They must be contacted directly by the Contractor for locations.

The Contractor shall make arrangements 48 hours in advance with respective utility owners to have a representative present when their utility is exposed or modified, if the utility chooses to do so.

Existing utilities for telephone, power, gas, water, and television cable facilities shall be adjusted or relocated by the appropriate utility company unless otherwise noted in the Plans. These adjustments may be completed before the Contractor begins Work, or may be performed in conjunction with the Contract Work. The Contractor shall be entirely responsible for coordination with the utility companies and arranging for the movement or adjustment, either temporary or permanent, of their facilities within the project limits. See also Section 1-05.14 of these Special Provisions.

If or when utility conflicts occur, the Contractor shall continue the construction process on other aspects of the project whenever possible. No additional compensation will be made to the Contractor for reason of delay caused by the actions of any utility company, and the Contractor shall consider such costs to be incidental to the other items of the Contract.

Utility Potholing

Potholing may be included as a bid item for use in determining the location of existing utilities in advance of the Contractor's operations. If potholing is not included as a bid item then it shall be considered incidental to other Work. The Contractor shall submit all potholing requests to the Engineer for approval, at least 2 working days before potholing is scheduled. Additionally, the Contractor shall provide potholing at the Engineer's request.

In no way shall the Work described under Utility Potholing relieve the Contractor of any of the responsibilities described in Section 1-07.17 of the Standard Specifications and Special Provisions, and elsewhere in the Contract Documents.

1-07.17(1) Site Specific Potholing

Section 1-07.17(1) is a new section:

(*****)

Site Specific Potholing is intended to be additional potholing as directed by the Engineer, which is in addition to potholing included as incidental for utility installation. Where underground utilities are found to be in the way of construction, such condition shall not be deemed to be a changed or differing site condition, and if necessary, pipe alignment or grade shall be modified. No payment will be made unless potholing has been performed prior to trench excavation, and witnessed by the Engineer. Different utilities may be found to occupy a common trench. Any two or more utilities separated by 3 feet or less shall constitute one locate. Where multiple utilities exist in close proximity, the Contractor shall be paid for one locate for every 5 feet of exploration trench. The quantity for this

item is included to provide a common proposal for bid purposes. The actual quantity used in construction may vary from that amount. The unit price will not be adjusted if the actual quantity used varies by more than 25 percent.

The contractor shall perform for this potholing a minimum of five working days prior to crossing to allow for potential revisions. The contractor shall not have cause for claim of down-time or any other additional costs associated with 'waiting' if the owner provides design revisions (related to the information supplied per this section) within three working days after the contractor provides the surveyed elevations.

In no way shall the Work described under Site Specific Potholing relieve the Contractor of any of the responsibilities described in Section 1-07.17 of the Standard Specifications and Special Provisions, and elsewhere in the Contract Documents.

1-07.17(3) Interruption of Services

Section 1-07.17(3) is a new section:

(*****)

Whenever in the course of the construction operation it becomes necessary to cause an outage of utilities, it shall be the Contractor's responsibility to notify the affected users and the Engineer not less than 48 hours in advance of such outage. The Contractor shall make reasonable effort to minimize the duration of outages, and shall estimate the length of time service will be interrupted and so notify the users. In the case of any utility outage that has exceeded or will exceed four hours, user contact shall again be made. Temporary service, if needed, will be arranged by the Contractor at no cost to the Owner.

Overhead lighting outages shall not exceed 24 hours. All cost to the Contractor for providing temporary overhead lighting to meet above requirements shall be incidental to the various unit and Lump sum items of the Contract; no separate payment will be made.

1-07.17(4) Resolution of Utility Conflicts

(*****)

Section 1-07.17(4) is a new section:

In no way shall the work described under Resolution of Utility Conflicts relieve Contractor of any of the responsibilities described in Section 1-07.17 of the Standard Specifications and Special Provisions, and elsewhere in the Contract Documents. If or when utility conflicts occur, Contractor shall continue the construction process on other aspects of the project whenever possible.

If "Resolution of utility conflicts" is included as a bid item in Section 1-09.14, it shall be used to resolve any new identified utility conflicts not otherwise shown on the Contract Drawing or Specifications that are identified during the course of construction.

1-07.18 Public Liability and Property Damage Insurance

Section 1-07.18 is deleted replaced by the following new section and subsections:

(*****)

1-07.18(1) General

The Contractor shall obtain and maintain in full force and effect, from the Contract Execution Date to the Completion Date, public liability and property damage insurance with an insurance company(ies) or through sources approved by the State Insurance Commissioner pursuant to RCW 48.

The Contractor shall not begin work under the Contract until the required insurance has been obtained

and approved by the Contracting Agency. Insurance shall provide coverage to the Contractor, all subcontractors, Contracting Agency and the Contracting Agency's consultant. The coverage shall protect against claims for bodily injuries, personal injuries, including accidental death, as well as claims for property damages which may arise from any act or omission of the Contractor or the subcontractor, or by anyone directly or indirectly employed by either of them.

If warranted work is required the Contractor shall provide the City proof that insurance coverage and limits established under the term of the Contract for work are in full force and effect during the period of warranty work.

The Contracting Agency may request a copy of the actual declaration pages(s) for each insurance policy effecting coverage(s) required on the Contract prior to the date work commences.

Failure of the Contractor to fully comply during the term of the Contract with the requirements described herein will be considered a material breach of contract and shall be caused for immediate termination of the Contract at the option of the Contracting Agency.

All costs for insurance shall be incidental to and included in the unit or Lump Sum prices of the contract and no additional payment will be made.

1-07.18(2) Coverages

All coverage provided by the Contractor shall be in a form and underwritten by a company acceptable to the Contracting Agency. The City requires that all insurers:

1. Be licensed to do business within the State of Washington.
2. Coverage to be on an "occurrence" basis (Professional Liability and Pollution coverage are acceptable when written on a claims-made basis). The City may also require proof of professional liability coverage be provided for up to two (2) years after the completion of the project.
3. The City may request a copy of the actual declaration page(s) for each insurance policy affecting coverage(s) required by the Contract prior to the date work commences.
4. Possess a minimum A.M. best rating of AVII (A rating of A XII or better is preferred.) If any insurance carrier possesses a rating of less than AVII, the City may make an exception.

The City reserves the right to approve the security of the insurance coverage provided by the insurance company(ies), terms, conditions, and the Certificate of Insurance.

Failure of the Contractor to fully comply during the term of the Contract with these requirements will be considered a material breach of contract and shall be cause for immediate termination of the contract at the option of the City.

The Contractor shall obtain and maintain the minimum insurance coverage set forth below. By requiring such minimum insurance, the City of Renton shall not be deemed or construed to have assessed the risks that may be applicable to the Contractor. The Contractor shall assess its own risks and if it deems appropriate and/or prudent, maintain higher limits and/or broader coverage.

Coverage shall include:

- A. Commercial General Liability - ISO 1993 Form or equivalent. Coverage will be written on an occurrence basis and include:
 - Premises and Operations (including CG2503; General Aggregate to apply per project, if applicable)
 - Explosion, Collapse, and Underground Hazards.
 - Products/Completed Operations
 - Contractual Liability (including Amendatory Endorsement CG 0043 or equivalent which includes defense coverage assumed under contract)
 - Broad Form Property Damage

- Independent Contractors
- Personal/Advertising Injury
- Stop Gap Liability
- B. Automobile Liability including all
 - Owned Vehicles
 - Non-Owned Vehicles
 - Hired Vehicles
- C. Workers' Compensation
 - Statutory Benefits (Coverage A) - Show Washington Labor & Industries Number
- D. Umbrella Liability (when necessary)
 - Excess of Commercial General Liability and Automobile Liability. Coverage should be as broad as primary.
- E. Professional Liability - (whenever the work under this Contract includes Professional Liability, including Advertising activities) the (CONTRACTOR) shall maintain professional liability covering wrongful acts, errors and/or omissions of the (CONTRACTOR) for damage sustained by reason of or in the course of operations under this Contract.
- F. Pollution Liability - the City may require this coverage whenever work under this Contract involves pollution risk to the environment. This coverage is to include sudden and gradual coverage for third party liability including defense costs and completed operations.

Contractor shall name City of Renton, and its officers, officials, agents, employees and volunteers as Additional Insured (ISO Form CG 2010 or equivalent). The Contractor shall provide City of Renton Certificates of Insurance prior to commencement of work. The City reserves the right to request copies of insurance policies, if at their sole discretion it is deemed appropriate. Further, all policies of insurance described above shall:

- A. Be on a primary basis not contributory with any other insurance coverage and/or self-insurance carried by City of Renton.
- B. Include a Waiver of Subrogation Clause.
- C. Severability of Interest Clause (Cross Liability)
- D. The Contractor shall provide the Contracting Agency and all Additional Insured's with written notice of any policy cancellation, within two business days of their receipt of such notice.
- E. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days notice to the Contractor to correct the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.

1-07.18(3) Limits

LIMITS REQUIRED

Providing coverage in these stated amounts shall not be construed to relieve the Contractor from liability in excess of such limits. The Contractor shall carry the following limits of liability as required below:

<u>Commercial General Liability</u>	
General Aggregate*	\$2,000,000 **
Products/Completed Operations Aggregate	\$2,000,000 **
Each Occurrence Limit	\$1,000,000
Personal/Advertising Injury	\$1,000,000
Fire Damage (Any One Fire)	\$50,000
Medical Payments (Any One Person)	\$5,000
Stop Gap Liability	\$1,000,000

* General Aggregate to apply per project
 (ISO Form CG2503 or equivalent)
 **Amount may vary based on project risk

<u>Automobile Liability</u>	
Bodily Injury/Property Damage (Each Accident)	\$1,000,000
<u>Workers' Compensation</u>	
Statutory Benefits - Coverage A (Show Washington Labor and Industries Number)	Variable
<u>Umbrella Liability</u>	
Each Occurrence Limit	\$1,000,000
General Aggregate Limit	\$1,000,000
Products/Completed Operations Aggregate	\$1,000,000
<u>Professional Liability (If required)</u>	
Each Occurrence/ Incident/Claim	\$1,000,000
Aggregate	\$2,000,000
<u>Pollution Liability (If required) to apply on a per project basis</u>	
Per Loss	\$1,000,000
Aggregate	\$1,000,000

The City may require the Contractor to keep professional liability coverage in effect for up to two (2) years after completion of the project.

The Contractor shall promptly advise the CITY OF RENTON in the event any general aggregates are reduced for any reason, and shall reinstate the aggregate at the Contractor's expense to comply with the minimum limits and requirements as stated above and shall furnish to the CITY OF RENTON a new certificate of insurance showing such coverage is in force.

1-07.18(4) Evidence of Insurance:

Within 20 days of award of the Contract, the Contractor shall provide evidence of insurance by submitting to the Contracting Agency the Certificate of Insurance (ACORD Form 25s or equivalent) conforming to items as specified in Sections 1-07.18(1), 1-07.18(2), and 1-07.18(3) as revised above. Other requirements are as follows:

- A. Strike the following or similar wording: "This Certificate is issued as a matter of information only and confers no rights upon the Certificate Holder".
- B. Strike the wording regarding cancellation notification to the City: "Failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives".
- C. Amend the cancellation clause to state: "Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions."

For Professional Liability coverage only, instead of the cancellation language specified above, the City will accept a written agreement that the consultant's broker will provide the required notification.

1-07.22 Use of Explosives

Section 1-07.22 is supplemented by the following:
 (*****)

Explosives shall not be used without specific authority of the Engineer, and then only under such restrictions as may be required by the proper authorities. Explosives shall be handled and used in strict compliance with WAC 296-52 and such local laws, rules and regulations that may apply. The individual in charge of the blasting shall have a current Washington State Blaster Users License.

The Contractor shall obtain, comply with, and pay for such permits and costs as are necessary in conjunction with blasting operations.

1-07.23 Public Convenience and Safety

1-07.23(1) Construction Under Traffic

Revise the second paragraph to read:

(*****)

To disrupt public traffic as little as possible, the Contractor shall permit traffic to pass through the Work with the least possible inconvenience or delay. The Contractor shall maintain existing roads, streets, sidewalks, driveways, and paths within the project limits, keeping them open, and in good, clean, safe condition at all times. Deficiencies caused by the Contractor's operations shall be repaired at the Contractor's expense. Deficiencies not caused by the Contractor's operations shall be repaired by the Contractor when directed by the Engineer, at the Contracting Agency's expense. The Contractor shall also maintain roads, streets, sidewalks, driveways, and paths adjacent to the project limits when affected by the Contractor's operations. Snow and ice control will be performed by the Contracting Agency on all projects. Cleanup of snow and ice control debris will be at the Contracting Agency's expense. The Contractor shall perform the following:

1. Remove or repair any condition resulting from the Work that might impede traffic or create a hazard.
2. Keep existing traffic signal and highway lighting systems in operation as the Work proceeds. (The Contracting Agency will continue the route maintenance on such system.)
3. Maintain the striping on the roadway at the Contracting Agency's expense. The Contractor shall be responsible for scheduling when to renew striping, subject to the approval of the Engineer. When the scope of the project does not require Work on the roadway, the Contracting Agency will be responsible for maintaining the striping.
4. Maintain existing permanent signing. Repair of signs will be at the Contracting Agency's expense, except those damaged due to the Contractor's operations.
5. Keep drainage structures clean to allow for free flow of water. Cleaning of existing drainage structures will be at the Contracting Agency's expense when approved by the Engineer, except when flow is impaired due to the Contractor's operations.

Section 1-07.23(1) is supplemented by adding the following:

(*****)

The Contractor shall be responsible for controlling dust and mud within the project limits and on any street, which is utilized by his equipment for the duration of the project. The Contractor shall be prepared to use watering trucks, power sweepers, and other pieces of equipment as deemed necessary by the Engineer, to avoid creating a nuisance.

Dust and mud control shall be considered as incidental to the project and no compensation will be made for this section.

Complaints of dust, mud, or unsafe practices and/or property damage to private ownership will be transmitted to the Contractor and prompt action in correcting them will be required by the Contractor.

The Contractor shall maintain the roads during construction in a suitable condition to minimize affects to vehicular and pedestrian traffic. All cost to maintain the roads shall be borne by the Contractor.

At least one-way traffic shall be maintained on all cross-streets within the project limits during working hours. One lane shall be provided in each direction for all streets during non-working hours.

The Contractor shall provide one drivable roadway lane and maintain convenient access for local and commuter traffic to driveways, businesses, and buildings along the line of Work throughout the course of the project. Such access shall be maintained as near as possible to that which existed prior to the commencement of construction. This restriction shall not apply to the paving portion of the construction process.

The Contractor shall notify and coordinate with all property owners and tenants of street closures, or other restrictions which may interfere with their access at least 24 hours in advance for single-family residential property, and at least 48 hours in advance for apartments, offices, and commercial property. The Contractor shall give a copy of all notices to the Engineer.

When the abutting owners' access across the right-of-way line is to be eliminated and replaced under the Contract by other access, the existing access shall not be closed until the replacement access facility is available.

All unattended excavations shall be properly barricaded and covered at all times. The Contractor shall not open any trenches that cannot be completed and refilled that same day. Trenches shall be patched or covered by a temporary steel plate, at the Contractor's expense, except in areas where the roadway remains closed to public traffic. Steel plates must be anchored.

1-07.23(2) Construction and Maintenance of Detours

(*****)

Revise the first paragraph to read:

Unless otherwise approved, the Contractor shall maintain two-way traffic during construction. The Contractor shall build, maintain in a safe condition, keep open to traffic, and remove when no longer needed:

1. Detours and detour bridges that will accommodate traffic diverted from the roadway, bridge, sidewalk, driveway, or path during construction,
2. Detour crossings of intersecting highway, and
3. Temporary approaches.

1-07.24 Rights-of-Way

Delete this section in its entirety, and replace it with the following:

(*****)

Street right-of-way lines, limits of easements, and limits of construction permits are indicated on the Drawings. The Contractor's construction activities shall be confined within these limits unless arrangements for use of private property are made.

Generally, the Contracting Agency will have obtained, prior to bid opening, all rights-of-way and easements, both permanent and temporary, necessary for carrying out the completion of the Work. Exceptions to this are noted in the Contract Documents or brought to the Contractor's attention by a duly issued addendum.

Whenever any of the Work is accomplished on or through property other than public right-of-way, the Contractor shall meet and fulfill all covenants and stipulations of any easement agreement obtained by the Contracting Agency from the owner of the private property. Copies of the easement agreements are included in the Contract Provisions or made available to the Contractor as soon as practical after they have been obtained by the Engineer.

Whenever easements or rights-of-entry have not been acquired prior to advertising, these areas are so noted on the Drawings. The Contractor shall not proceed with any portion of the Work in areas where right-of-way, easements, or rights-of-entry have not been acquired until the Engineer certifies to the Contractor that the right-of-way or easement is available or that the right-of-entry had been received. If the Contractor is delayed due to acts of omission on the part of the Contracting Agency in obtaining easements, rights of entry of right-of-way, the Contractor will be entitled to an extension of time. The Contractor agrees that such delay shall not be a breach of contract.

Each property owner shall be given 48 hours notice prior to entry by the Contractor. This includes entry onto easements and private property where private improvements must be adjusted.

The Contractor shall be responsible for providing, without expense or liability of the Contracting Agency, any additional land and access thereto that the Contractor may desire for temporary construction facilities, storage of materials, or other Contractor needs. However, before using any private property, whether adjoining the Work or not, the Contractor shall file with the Engineer a written permission of the private property owner, and, upon vacating the premises, a written release from the property owner of each property disturbed or otherwise interfered with by reasons of construction pursued under this Contract. The statement shall be signed by the private property owner, or proper authority acting for the owner of the private property affected, stating that permission has been granted to use the property and all necessary permits have been obtained or, in the case of a release, that the restoration of the property has been satisfactorily accomplished. The statement shall include the parcel number, address and date of signature. Written releases must be filed with the Engineer before the Completion Date will be established.

1-07.28 Confined Space Entry

Section 1-07.28 is new:

The Contractor shall:

1. Review and be familiar with the City's Public Works Confined Space Entry Program.
2. Review documented information about the City confined spaces in which entry is intended as listed and described in the City's Attribute and Map Book. This information includes identified hazards for each permit-required confined space.
3. Each contractor shall have their own confined space entry program. Upon request of the City they will provide a statement confirming they are in compliance with their confined space entry program including requirements for confined space training for employees associated with the project in Renton.
4. Be responsible for following all confined space requirements established by the provisions in WAC 296-809 and its chapters.
5. Coordinate entry operations with the City of Renton when employees from the contractor will be working in or near City confined spaces.
6. Discuss entry operations with the City of Renton including the program followed during confined space entry.
7. Debrief the City on any hazards confronted or created at the completion of entry operations.
8. Place signs stating, "Danger, Follow Confined Space Entry Procedure before Entering" at each confined space to be entered. Never leave the confined space open and unattended.

The contractor's or consultant's point of contact with the City in regard to confined space entry will be the City's assigned construction inspector.

1-08 PROSECUTION AND PROGRESS

1-08.0 Preliminary Matters

Section 1-08.0 is a new section with subsection:

(*****)

1-08.0(1) Preconstruction Conference

Section 1-08.0(1) is a new subsection:

(*****)

The Engineer will furnish the Contractor with copies of the Contract Documents per Section 1-02.2 "Plans and Specifications". Additional documents may be furnished upon request at the cost of reproduction. Prior to undertaking each part of the Work the Contractor shall carefully study and compare the Contract Documents, and check and verify pertinent figures shown therein and all applicable field measurements. The Contractor shall promptly report in writing to the Engineer any conflict, error or discrepancy, which the Contractor may discover.

After the Contract has been executed, but prior to the Contractor beginning the Work, a preconstruction conference will be held between the Contractor, the Engineer and such other interested parties as may be invited.

The Contractor shall prepare and submit at the preconstruction meeting:

- ➔ Contractor's plan of operation and progress schedule (3+ copies)
- ➔ Approval of qualified subcontractors (bring list of subcontractors if different from list submitted with bid)
- ➔ List of materials fabricated or manufactured off the project
- ➔ Material sources on the project
- ➔ Names of principal suppliers
- ➔ Detailed equipment list, including "Rental Rate Blue Book" hourly costs (both working and standby rates)
- ➔ Weighted wage rates for all employee classifications anticipated to be used on Project
- ➔ Cost percentage breakdown for lump sum bid item(s)
- ➔ Shop Drawings (bring preliminary list)
- ➔ Traffic Control Plans (3+ copies)
- ➔ Temporary Water Pollution/Erosion Control Plan

In addition, the Contractor shall be prepared to address:

- Bonds and insurance
- Project meetings – schedule and responsibilities
- Provision for inspection for materials from outside sources
- Responsibility for locating utilities
- Responsibility for damage
- Time schedule for relocations, if by other than the Contractor
- Compliance with Contract Documents
- Acceptance and approval of Work
- Labor compliance, payrolls, and certifications
- Safety regulations for the Contractors' and the Owner's employees and representatives
- Suspension of Work, time extensions
- Change order procedures
- Progress estimates, procedures for payment
- Special requirements of funding agencies
- Construction engineering, advance notice of special Work
- Any interpretation of the Contract Documents requested by the Contractor
- Any conflicts or omissions in Contract Documents
- Any other problems or questions concerning the Work
- Processing and administration of public complaints
- Easements and rights-of-entry
- Other contracts

The franchise utilities may be present at the preconstruction conference, and the Contractor should be prepared for their review and discussion of progress schedule and coordination.

1-08.0(2) Hours of Work

Section 1-08.0(2) is a new subsection:
(*****)

Except in the case of emergency or unless otherwise approved by the Contracting Agency, the normal straight time working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 5:00 p.m. of a working day with a maximum 1-hour lunch break and a 5-day Work week. The normal straight time 8-hour working period for the Contract shall be established at the preconstruction conference or prior to the Contractor commencing the Work.

If a Contractor desires to perform Work on holidays, Saturdays, Sundays, or before 7:00 a.m. or after 5:00 p.m. on any day, the Contractor shall apply in writing to the Engineer for permission to Work such times. Permission to Work longer than an 8-hour period between 7:00 a.m. and 5:00 p.m. is required. Such requests shall be submitted to the Engineer no later than noon on the working day prior to the day for which the Contractor is requesting permission to Work.

Permission to Work between the hours of 10:00 p.m. and 7:00 a.m. during weekdays and between the hours of 10:00 p.m. and 7:00 a.m. on weekends or holidays may also be subject to noise control requirements. Approval to continue Work during these hours may be revoked at any time the Contractor exceeds the Contracting Agency's noise control regulations or complaints are received from the public or adjoining property owners regarding the noise from the Contractor's operations. The Contractor shall have no claim for damages or delays should such permission be revoked for these reasons.

Permission to Work Saturdays, Sundays, holidays or other than the agreed upon normal straight time working hours Monday through Friday may be given subject to certain other conditions set forth by the Contracting Agency or the Engineer. These conditions may include but are not limited to: requiring the Engineer or such assistants as the Engineer may deem necessary to be present during the Work; requiring the Contractor to reimburse the Contracting Agency for the cost of engineering salaries paid Contracting Agency employees who worked during such times; considering the Work performed on Saturdays, Sundays, and holidays as working days with regards to the Contract Time; and considering multiple Work shifts as multiple working days with respect to Contract Time even though the multiple shifts occur in a single 24-hour period. Assistants may include, but are not limited to, survey crews; personnel from the material testing labs; inspectors; and other Contracting Agency employees when in the opinion of the Engineer such Work necessitates their presence.

1-08.0(3) Reimbursement for Overtime Work of Contracting Agency Employees

Section 1-08.0(3) is a new subsection:
(*****)

Where the Contractor elects to Work on a Saturday, Sunday, holiday, or longer than an 8-hour Work shift on a regular working day, as defined in the Standard Specifications, such Work shall be considered as overtime Work. On all such overtime Work an inspector will be present, and a survey crew may be required at the discretion of the Engineer. The Contractor shall reimburse the Contracting Agency for the full amount of the straight time plus overtime costs for employees and representative(s) of the Contracting Agency required to work overtime hours.

The Contractor by these Specifications does hereby authorize the Engineer to deduct such costs from the amount due or to become due the Contractor.

1-08.1 Subcontracting

Revise the second paragraph to read:

The Contractor shall not subcontract Work unless the Engineer approves in writing. Each request to subcontract shall be on the form the Engineer provides. If the Engineer requests, the Contractor shall provide proof that subcontractor has the experience, ability, and equipment the Work requires. The Contractor shall require each subcontractor to comply with Section 1-07.9 and to furnish all certificates and statements required by the Contract. The Contractor shall require each subcontractor of every tier to meet the responsibility criteria stated in RCW 39.06, and shall include these

requirements in every subcontract of every tier.

Section 1-08.1 is supplemented as follows:

(*****)

Written requests for change in subcontractors shall be submitted by the Contractor to the Engineer at least 7 calendar days prior to start of a subcontractor's Work.

The Contractor agrees that he/she is fully responsible to the Owner for the acts and omissions of all subcontractors and lower-tier subcontractors, and persons either directly or indirectly employed by the subcontractors, as well as for the acts and omissions of persons directly employed by the Contractor. The Contractor shall be required to give personal attention to the Work that is sublet. Nothing contained in the Contract Documents shall create any contractual relation between any subcontractor and the Owner.

The Contractor shall be responsible for making sure all subcontractors submit all required documentation, forms, etc.

1-08.2 Assignment

The second paragraph of Section 1-08.2 is modified as follows:

(*****)

The Contractor shall not assign any moneys due or to become due to the Contractor hereunder without the prior written consent of the Owner. The assignment, if approved, shall be subject to all setoffs, withholdings, and deductions required by law and the Contract.

1-08.3 Progress Schedule

Section 1-08.3 is supplemented as follows:

(*****)

The progress schedule for the entire project shall be submitted **7 calendar days prior to the Preconstruction Conference**. The schedule shall be prepared using the critical path method (CPM), preferably using Microsoft Project or equivalent software. The schedule shall contain this information, at a minimum:

1. Construction activities, in sufficient detail that all activities necessary to construct a complete and functional project are considered. Any activity that has a scheduled duration exceeding 30 calendar days shall be subdivided until no sub-element has a duration exceeding 30 calendar days.
2. The schedule shall clearly indicate the activities that comprise the critical path. For each activity not on the critical path, the schedule shall show the float, or slack, time.
3. Procurement of material and equipment.
4. Submittals requiring review by the Engineer. Submittal by the Contractor and review by the Engineer shall be shown as separate activities.
5. Work to be performed by a subcontractor, agent, or any third party.
6. Allowances for delays that could result from normal inclement weather (time extensions due to inclement weather will not be allowed).
7. Allowances for the time required by utilities (Owner's and others) to locate, monitor, and adjust their facilities as required.

The Engineer may request the Contractor to alter the progress schedule when deemed necessary in the opinion of the Engineer, in the interest of public safety and welfare of the Owner, or for coordination with any other activity of other contractors, the availability of all or portions of the job site, or special provisions of this Contract, or to reasonably meet the completion date of the project. The Contractor shall provide such revised schedule within 10 days of request.

If, at any time, in the opinion of the Engineer, the progress of construction falls significantly behind schedule, the Contractor may be required to submit a plan for regaining progress and a revised schedule indicating how the remaining Work items will be completed within the authorized contract time.

The Contractor shall promptly report to the Engineer any conditions that the Contractor feels will

require revision of the schedule and shall promptly submit proposed revisions in the progress schedule for acceptance by the Engineer. When such changes are accepted by the Engineer, the revised schedule shall be followed by the Contractor.

Weekly Schedule. The Contractor shall submit a weekly progress schedule to the Engineer which sets forth specific Work to be performed the following week, and a tentative schedule for the second week.

Failure to Maintain Progress Schedule. The Engineer will check actual progress of the Work against the progress schedule a minimum of two times per month. Failure, without just cause, to maintain progress in accordance with the approved schedule shall constitute a breach of Contract. If, through no fault of the Contractor, the proposed construction schedule cannot be met, the Engineer will require the Contractor to submit a revised schedule to the Engineer for acceptance. The approved revisions will thereafter, in all respects, apply in lieu of the original schedule.

Failure of the Contractor to follow the progress schedule submitted and accepted, including revisions thereof, shall relieve the Owner of any and all responsibility for furnishing and making available all or any portion of the job site, and will relieve the Owner of any responsibility for delays to the Contractor in the performance of the Work.

The cost of preparing the progress schedule, any supplementary progress schedules, and weekly schedules shall be considered incidental to the Contract and no other compensation shall be made.

1-08.4 Notice to Proceed and Prosecution of the Work

Section 1-08.4 is replaced with the following:

(*****)

Notice to Proceed will be given after the Contract has been executed and the Contract bond and evidence of insurances have been approved and filed by the Owner. The Contractor shall not commence the Work until the Notice to Proceed has been given by the Engineer. The Contractor shall commence construction activities on the project site within ten days of the Notice to Proceed date. The Work thereafter shall be prosecuted diligently, vigorously, and without unauthorized interruption until physical completion of the Work. There shall be no voluntary shutdowns or slowing of operations by the Contractor without prior approval of the Engineer. Such approval shall not relieve the Contractor from the contractual obligation to complete the Work within the prescribed Contract Time.

1-08.5 Time For Completion

The first five paragraphs of Section 1-08.5 are deleted and replaced with the following:

(*****)

The Work shall be physically completed in its entirety within the time specified in the Contract Documents or as extended by the Engineer. The Contract Time will be stated in "working days", shall begin on the Notice To Proceed date, or the date identified in the Notice to Proceed as "the first working day", and shall end on the Contract Completion date.

A non-working day is defined as a Saturday, a Sunday, a day on which the Contract specifically suspends Work, or one of these holidays: January 1, third Monday of January, Memorial Day, July 4, Labor Day, November 11, Thanksgiving Day, the day after Thanksgiving, and Christmas Day. The day before Christmas shall be a holiday when Christmas Day occurs on a Tuesday or Friday. The day after Christmas shall be a holiday when Christmas Day occurs on a Monday, Wednesday, or Thursday. When Christmas Day occurs on a Saturday, the two preceding working days shall be observed as holidays. When Christmas day occurs on a Sunday, the two working days following shall be observed as holidays. When holidays other than Christmas fall on a Saturday, the preceding Friday will be counted as a non-working day and when they fall on a Sunday the following Monday will be counted as a non-working day. The Contract Time has been established to allow for periods of normal inclement weather that, from historical records, is to be expected during the Contract Time, and during which periods, Work is anticipated to be performed. Each successive working day, beginning with the Notice to Proceed date and ending with the Physical Completion date, shall be charged to the Contract Time as it occurs except a day, or part of a day, which is designated a non-working day or an Engineer determined unworkable day.

The Engineer will furnish the Contractor a weekly report showing (1) the number of working days charged against the Contract Time for the preceding week; (2) the Contract Time in working days; (3) the number of working days remaining in the Contract Time; (4) the number of non-working days; and (5) any partial or whole days the Engineer declared unworkable the previous week. This weekly report will be correlated with the Contractor's current approved progress schedule. If the Contractor elects to work 10 hours a day and 4 days a week (a 4-10 schedule), and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day, then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

The Contractor will be allowed 10 calendar days from the date of each report in which to file a written protest of an alleged discrepancy in the Contract Time as reported. Otherwise, the report will be deemed to have been accepted by the Contractor as correct.

The requirements for scheduling the Final Inspection and establishing the Substantial Completion, Physical Completion, and Completion Dates are specified in Sections 1-05.11 and 1-05.12.

Revise the seventh paragraph to read:

(*****)

The Engineer will give the Contractor written notice of the completion date of the Contract after all the Contractor's obligations under the Contract have been performed by the Contractor. The following events must occur before the Completion Date can be established:

1. The physical Work on the project must be complete; and
2. The Contractor must furnish all documentation required by the Contract and required by law, to allow the Contracting Agency to process final acceptance of the Contract. The following documents must be received by the Project Engineer prior to establishing a completion date:
 - a. Certified Payrolls (Federal-aid Projects)
 - b. Material Acceptance Certification Documents
 - c. Annual Report of Amounts Paid as MBE/WBE Participants or Quarterly Report of Amounts Credited as DBE Participation, as required by the Contract Provisions.
 - d. FHWA 47 (Federal-aid Projects)
 - e. Final Contract Voucher Certification
 - f. Property owner releases per Section 1-07.24

Section 1-08.5 is supplemented as follows:

(*****)

Within 10 calendar days after execution of the Contract by the Contracting Agency, the Contractor shall provide the Contracting Agency with copies of purchase orders for all equipment items deemed critical by the Contracting Agency, including but not limited to signal controller materials, lighting standards, and signal standards required for the physical completion of the Contract. Such purchase orders shall disclose the estimated delivery dates for the equipment.

All items of Work that can be performed without delivery of the critical items shall start and be completed as soon as possible. At that time, the Engineer may suspend the Work upon request of the Contractor until the critical items are delivered to the Contractor, if the Contracting Agency received a purchase order within 10 calendar days after execution of the Contract by the Contracting Agency.

The Contractor will be entitled to only one such suspension of time during the performance of the Work and during such suspension shall not perform any additional Work on the project. Upon delivery of the critical items, contract time will resume and continue to be charged in accordance with Section 1-08.

1-08.6 Suspension of Work

Section 1-08.6 is supplemented as follows:

(*****)

Owner may at any time suspend the Work, or any part thereof, by giving notice to the Contractor in writing. The Work shall be resumed by the Contractor within 14 calendar days after the date fixed in the written notice from the Owner to the Contractor to do so.

The Contractor shall not suspend Work under the Contract without the written order of the Owner.

If it has been determined that the Contractor is entitled to an extension of time, the amount of such extension shall be only to compensate for direct delays, and shall be based upon the Contractor's diligently pursuing the Work at a rate not less than that which would have been necessary to complete the original Contract Work on time.

1-08.7 Maintenance During Suspension

Revise the second paragraph to read:

(*****)

At no expense to the Contracting Agency, the Contractor shall provide through the construction area a safe, smooth, and unobstructed roadway, sidewalk, driveway, and path for public use during suspension (as required in Section 1-07.23 or the Special Provisions). This may include a temporary road or detour.

1-08.9 Liquidated Damages

Section 1-08.9 is supplemented as follows:

(*****)

In addition, the Contractor shall compensate the Owner for actual engineering inspection and supervision costs and any other expenses and legal fees incurred by the Owner as a result of such delay. Such labor costs will be billed to the Contractor at actual costs, including administrative overhead costs.

In the event that the Owner is required to commence any lawsuit in order to enforce any provision of this Contract or to seek redress for any breach thereof, the Owner shall be entitled to recover its costs, including reasonable attorney fees, from the Contractor.

1-08.11 Contractor's Plant and Equipment

Section 1-08.11 is a new Section:

(*****)

The Contractor alone shall at all times be responsible for the adequacy, efficiency, and sufficiency of his and his subcontractor's plant and equipment. The Owner shall have the right to make use of the Contractor's plant and equipment in the performance of any Work on the site of the Work.

The use by the Owner of such plant and equipment shall be considered as extra Work and paid for accordingly.

Neither the Owner nor the Engineer assumes any responsibility, at any time, for the security of the site from the time the Contractor's operations have commenced until final acceptance of the Work by the Engineer and the Owner. The Contractor shall employ such measures as additional fencing, barricades, and watchmen service, as he deems necessary for the public safety and for the protection of the site and his plant and equipment. The Owner will be provided keys for all fenced, secured areas.

1-08.12 Attention to Work

Section 1-08.12 is a new section:

(*****)

The Contractor shall give his personal attention to and shall supervise the Work to the end that it shall be prosecuted faithfully, and when he is not personally present on the Work site, he shall at all times be represented by a competent superintendent who shall have full authority to execute the same, and to supply materials, tools, and labor without delay, and who shall be the legal representative of the Contractor. The Contractor shall be liable for the faithful observance of any instructions delivered to

him or to his authorized representative.

1-09 MEASUREMENT AND PAYMENT

1-09.1 Measurement of Quantities

Section 1-09.1 is supplemented by adding the following:

(*****)

Lump Sum. The percentage of lump sum Work completed, and payment will be based on the cost percentage breakdown of the lump sum bid price(s) submitted at the preconstruction conference.

The Contractor shall submit a breakdown of costs for each lump sum bid item. The breakdown shall list the items included in the lump sum together with a unit price of labor, materials, and equipment for each item. The summation of the detailed unit prices for each item shall add up to the lump sum bid. The unit price values may be used as a guideline for determining progress payments or deductions or additions in payment for ordered Work changes.

Cubic Yard Quantities. The Contractor shall provide truck trip tickets for progress payments only in the following manner. Where items are specified to be paid by the cubic yard, the following tally system shall be used.

All trucks to be employed on this Work will be measured to determine the volume of each truck. Each truck shall be clearly numbered, to the satisfaction of the Engineer, and there shall be no duplication of numbers.

Duplicate tally tickets shall be prepared to accompany each truckload of material delivered on the project. All tickets received that do not contain the following information will not be processed for payment:

- 1 Truck number
- 2 Quantity and type of material delivered in cubic yards
- 3 Drivers name, date and time of delivery
- 4 Location of delivery, by street and stationing on each street
- 5 Place for the Engineer to acknowledge receipt
- 6 Pay item number
- 7 Contract number and/or name

It will be the Contractor's responsibility to see that a ticket is given to the Engineer on the project for each truckload of material delivered. Pay quantities will be prepared on the basis of said tally tickets.

Loads will be checked by the Engineer to verify quantity shown on ticket.

Quantities by Ton. It will be the Contractor's responsibility to see that a certified weight ticket is given to the Inspector on the project at the time of delivery of materials for each truckload delivered. Pay quantities will be prepared on the basis of said tally tickets, delivered to Inspector at time of delivery of materials. Tickets not receipted by Inspector will not be honored for payment.

Each truck shall be clearly numbered to the satisfaction of the Engineer and there shall be no duplication of numbers.

Duplicate tickets shall be prepared to accompany each truckload of material delivered to the project. All tickets received that do not contain the following information will not be processed for payment:

1. Truck number
2. Truck tare weight (stamped at source)
3. Gross truckload weight in tons (stamped at source)
4. Net load weight (stamped at source)
5. Driver's name, date, and time of delivery
6. Location for delivery by street and stationing on each street
7. Place for the Engineer to acknowledge receipt
8. Pay item number
9. Contract number and/or name

1-09.3 Scope of Payment

Section 1-09.3 is supplemented by adding the following:

(*****)

The bid items listed in Section 1-09.14 will be the only items for which compensation will be made for the Work described in each section of the Standard Specifications when the Contractor performs the specified Work. Should a bid item be listed in a "Payment" clause but not in the Proposal Form, and Work for that item is performed by the Contractor and the Work is not stated as included in or incidental to a pay item in the Contract and is not Work that would be required to complete the intent of the Contract per Section 1-04.1, then payment for that Work will be made as for Extra Work pursuant to a Change Order.

The words "Bid Item," "Contract Item," and "Pay Item," and similar terms used throughout the Contract Documents are synonymous.

If the "payment" clause in the Specifications relating to any unit bid item price in the Proposal Form requires that said unit bid item price cover and be considered compensation for certain Work or material essential to the item, then the Work or material will not be measured or paid for under any other unit bid item which may appear elsewhere in the Proposal Form or Specifications.

Pluralized unit bid items appearing in these Specifications are changed to singular form.

Payment for bid items listed or referenced in the "Payment" clause of any particular section of the Specifications shall be considered as including all of the Work required, specified, or described in that particular section. Payment items will generally be listed generically in the Specifications, and specifically in the bid form. When items are to be "furnished" under one payment item and "installed" under another payment item, such items shall be furnished FOB project site, or, if specified in the Special Provisions, delivered to a designated site. Materials to be "furnished," or "furnished and installed" under these conditions, shall be the responsibility of the Contractor with regard to storage until such items are incorporated into the Work or, if such items are not to be incorporated into the Work, delivered to the applicable Contracting Agency storage site when provided for in the Specifications. Payment for material "furnished," but not yet incorporated into the Work, may be made on monthly estimates to the extent allowed.

1-09.6 Force Account

Section 1-09.6 is supplemented as follows:

(*****)

Owner has estimated and included in the proposal, dollar amounts for all items to be paid per force account, only to provide a common proposal for Bidders. All such dollar amounts are to become a part of the Contractor's total bid. However, the Owner does not warrant expressly or by implication that the actual amount of Work will correspond with those estimates. Payment will be made on the basis of the amount of Work actually authorized by the Engineer.

1-09.7 Mobilization

Section 1-09.7 is supplemented as follows:

(*****)

Mobilization shall also include, but not be limited to, the following items: the movement of Contractor's personnel, equipment, supplies, and incidentals to the project site; the establishment of an office, buildings, and other facilities necessary for Work on the project; providing sanitary facilities for the Contractor's personnel; and obtaining permits or licenses required to complete the project not furnished by the Owner.

This item shall also include providing the Engineer and the Inspectors with access to telephone, facsimile machine, and copy machine during all hours the Contractor is working on the jobsite; and a table and chair for their use when needed.

Payment will be made for the following bid item(s):

“Mobilization & Demobilization,” Lump Sum.

1-09.9 Payments

Delete the third paragraph and replace it with the following:

(*****)

Progress payments for completed Work and material on hand will be based upon progress estimates prepared by the Engineer. A progress estimate cutoff date will be established at the preconstruction meeting.

The initial progress estimate will be made not later than 30 days after the Contractor commences the Work, and successive progress estimates will be made every month thereafter until the Completion Date. Progress estimates made during progress of the Work are tentative, and made only for the purpose of determining progress payment. The progress estimates are subject to change at any time prior to the calculation of the final payment.

The value of the progress estimate will be the sum of the following:

1. Unit Price Items in the Bid Form – the approximate quantity of acceptable units of Work completed multiplied by the unit price.
2. Lump Sum Items in the Bid Form – the estimated percentage complete multiplied by the Bid Forms amount for each lump sum item, or per the schedule of values for that item.
3. Materials on Hand – 100 percent of invoiced cost of material delivered to job site or other storage area approved by the Engineer.
4. Change Orders – entitlement for approved extra cost or completed extra Work as determined by the Engineer.

Progress payments will be made in accordance with the progress estimate less:

1. Retainage per Section 1-09.9(1);
2. The amount of Progress Payments previously made; and
3. Funds withheld by the Contracting Agency for disbursement in accordance with the Contract Documents.

Progress payments for Work performed shall not be evidence of acceptable performance or an admission by the Contracting Agency that any Work has been satisfactorily completed.

Payments will be made by check or electronic transfer, issued by the Contracting Agency’s fiscal officer, against the appropriate fund source for the project. Payments received on account of Work performed by a subcontractor are subject to the provisions of RCW 39.04.250.

Section 1-09.9 is supplemented as follows:

(*****)

Applications for payment shall be itemized and supported to the extent required by the Engineer by receipts or other vouchers showing payment for materials and labor, payments to subcontractors, and other such evidence of the Contractor’s right to payment as the Engineer may direct, including “red line” as-built drawings showing work installed by the contractor during the progress payment period.

The Contractor shall submit a progress report with each monthly request for a progress payment. The progress report shall indicate the estimated percent complete for each activity listed on the progress schedule (see Section 1-08.3) and a revised and updated schedule to reflect the most current project completion date.

1-09.9(1) Retainage

Section 1-09.9(1) is supplemented as follows:

(*****)

The retained amount shall be released as stated in the Standard Specifications if no claims have been filed against such funds as provided by law, and if the Owner has no unsatisfied claims against the Contractor. In the event claims are filed, the Owner shall withhold, until such claims are satisfied, a sum sufficient to satisfy all claims and to pay attorney's fees. In addition, the Owner shall withhold such amount as is required to satisfy any claims by the Owner against the Contractor, until such claims have been finally settled.

Neither the final payment nor any part of the retained percentage shall become due until the Contractor, if requested, delivers to the Owner a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof, and, if required in either case, an affidavit that so far as the Contractor has knowledge or information, the release and receipts include all labor and materials for which a lien could be filed: but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactorily to the Engineer to indemnify the Owner against the lien. If any lien remains unsatisfied after all payments are made, the Contractor shall reimburse to the Owner all monies that the latter may be compelled to pay in discharging such lien, including all costs and reasonable engineer's and attorney's fees.

Error! Bookmark not defined.1-09.9(2) Contracting Agency's Right to Withhold and Disburse Certain Amounts

Section 1-09.9(2) is a new section:

(*****)

In addition to monies retained pursuant to RCW 60.28 and subject to RCW 39.04.250, RCW 39.12 and RCW 39.76, the Contractor authorizes the Engineer to withhold progress payments due or deduct an amount from any payment or payments due the Contractor which, in the Engineer's opinion, may be necessary to cover the Contracting Agency's costs for or to remedy the following situations:

1. Damage to another contractor when there is evidence thereof and a claim has been filed.
2. Where the Contractor has not paid fees or charges to public authorities of municipalities, which the Contractor is obligated to pay.
3. Utilizing material tested and inspected by the Engineer, for purposes not connected with the Work (Section 1-05.6).
4. Landscape damage assessments per Section 1-07.16.
5. For overtime Work performed by City personnel per Section 1-08.1(4).
6. Anticipated or actual failure of the Contractor to complete the Work on time:
 - a. Per Section 1-08.9 Liquidated Damages; or
 - b. Lack of construction progress based upon the Engineer's review of the Contractor's approved progress schedule, which indicates the Work will not be complete within the contract time. When calculating an anticipated time overrun, the Engineer will make allowances for weather delays, approved unavoidable delays, and suspensions of the Work. The amount withheld under this subparagraph will be based upon the liquidated damages amount per day set forth in Contract Documents multiplied by the number of days the Contractor's approved progress schedule, in the opinion of the Engineer, indicates the Contract may exceed the Contract Time.
7. Failure of the Contractor to perform any of the Contractor's other obligations under the Contract, including but not limited to:
 - a. Failure of the Contractor to provide the Engineer with a field office when required by the Contract Provisions.
 - b. Failure of the Contractor to protect survey stakes, markers, etc., or to provide adequate survey Work as required by Section 1-05.5.
 - c. Failure of the Contractor to correct defective or unauthorized Work (Section 1-05.8).
 - d. Failure of the Contractor to furnish a Manufacturer's Certificate of Compliance in lieu of material testing and inspection as required by Section 1-06.3.
 - e. Failure to submit weekly payrolls, Intent to Pay Prevailing Wage forms, or correct underpayment to employees of the Contractor or subcontractor of any tier as required by Section 1-07.9.

- f. Failure of the Contractor to pay worker's benefits (Title 50 and Title 51 RCW) as required by Section 1-07.10.
- g. Failure of the Contractor to submit and obtain approval of a progress schedule per Section 1-08.3.

The Contractor authorizes the Engineer to act as agent for the Contractor disbursing such funds as have been withheld pursuant to this Section to a party or parties who are entitled to payment. Disbursement of such funds, if the Engineer elects to do so will be made only after giving the Contractor 15 calendar days prior written notice of the Contracting Agency's intent to do so, and if prior to the expiration of the 15-calendar day period,

- 1. No legal action has commenced to resolve the validity of the claims, and
- 2. The Contractor has not protested such disbursement.

A proper accounting of all funds disbursed on behalf of the Contractor in accordance with this Section will be made. A payment made pursuant to this section shall be considered as payment made under the terms and conditions of the Contract. The Contracting Agency shall not be liable to the Contractor for such payment made in good faith.

1-09.9(3) Final Payment

Section 1-09.9(2) is a new section:

(*****)

Upon Acceptance of the Work by the Contracting Agency, the final amount to be paid the Contractor will be calculated based upon a Final Progress Estimate made by the Engineer. Acceptance by the Contractor of the final payment shall be and shall operate as a release:

- 1. To the Contracting Agency of all claims and all liabilities of the Contractor, other than claims in stated amounts as may be specifically excepted in writing by the Contractor;
- 2. For all things done or furnished in connection with the Work;
- 3. For every act and neglect by the Contracting Agency; and
- 4. For all other claims and liability relating to or arising out of the Work.

A payment (monthly, final, retainage, or otherwise) shall not release the Contractor or the Contractor's Surety from any obligation required under the terms of the Contract Documents or the Contract Bond; nor shall such payment constitute a waiver of the Contracting Agency's ability to investigate and act upon findings of non-compliance with the WMBE requirements of the Contract; nor shall such payment preclude the Contracting Agency from recovering damages, setting penalties, or obtaining such other remedies as may be permitted by law.

Before the Work will be accepted by the Contracting Agency, the Contractor shall submit an affidavit, on the form provided by the Engineer, of amounts paid to certified disadvantaged (DB), minority (MBE) or women business enterprises (WBE) participating in the Work. Such affidavit shall certify the amounts paid to the DB, MBE or WBE subcontractors regardless of tier.

On federally funded projects the Contractor may also be required to execute and furnish the Contracting Agency an affidavit certifying that the Contractor has not extended any loans, gratuity or gift and money pursuant to Section 1-07.19 of these Specifications.

If the Contractor fails, refuses, or is unable to sign and return the Final Progress Estimate or any other documents required for the final acceptance of the Contract, the Contracting Agency reserves the right to establish a completion date and unilaterally accept the Contract. Unilateral acceptance will occur only after the Contractor has been provided the opportunity, by written request from the Engineer, to voluntarily submit such documents. If voluntary compliance is not achieved, formal notification of the impending unilateral acceptance will be provided by certified letter from the Engineer to the Contractor that will provide 30 calendar days for the Contractor to submit the necessary documents.

The 30-calendar day deadline shall begin on the date of the postmark of the certified letter from the Engineer requesting the necessary documents. This reservation by the Contracting Agency to unilaterally accept the Contract will apply to contracts that are completed in accordance with Section 1-08.5 for contracts that are terminated in accordance with Section 1-08.10. Unilateral acceptance of the Contract by the Contracting Agency does not in any way relieve the Contractor of the provisions under contract or of the responsibility to comply with all laws, ordinances, and federal, state, and local

regulations that affect the Contract. The date the Contracting Agency unilaterally signs the Final Progress Estimate constitutes the final acceptance date (Section 1-05.12).

1-09.11 Disputes and Claims

1-09.11(2) Claims

Paragraph 5 is revised as follows:

(*****)

Failure to submit with the Final Application for Payment such information and details as described in this section for any claim shall operate as a waiver of the claims by the Contractor as provided in Section 1-09.9.

1-09.11(3) Time Limitations and Jurisdiction

Paragraph 1, Sentence 1 is revised as follows:

(*****)

...such claims or causes of action shall be brought in the Superior Court of the county where the Work is performed.

1-09.13 Claims and Resolutions

1-09.13(3) Claims \$250,000 or Less

Delete this Section and replace it with the following:

(*****)

The Contractor and the Contracting Agency mutually agree that those claims that total \$250,000 or less, submitted in accordance with Section 1-09.11 and not resolved by nonbonding ADR processes, shall be resolved through litigation, unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13(3)A Administration of Arbitration

Revise the third paragraph to read:

(*****)

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of the county in which the Contracting Agency's headquarters are located. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.

1-09.13(3)B Procedures to Pursue Arbitration

Section 1-09.13(3)B is supplemented by adding:

(*****)

The findings and decision of the board of arbitrators shall be final and binding on the parties, unless the aggrieved party, within 10 days, challenges the findings and decision by serving and filing a petition for review by the superior court of King County, Washington. The grounds for the petition for review are limited to showing that the findings and decision:

1. Are not responsive to the questions submitted;
2. Is contrary to the terms of the contract or any component thereof;
3. Is arbitrary and/or is not based upon the applicable facts and the law controlling the issues submitted to arbitration. The board of arbitrators shall support its decision by setting forth in writing their findings and conclusions based on the evidence adduced at any such hearing.

The arbitration shall be conducted in accordance with the statutes of the State of Washington and court decisions governing such procedure.

The costs of such arbitration shall be borne equally by the City and the Contractor unless it is the board's majority opinion that the Contractor's filing of the protest or action is capricious or without reasonable foundation. In the latter case, all costs shall be borne by the Contractor.

1-09.14 Payment Schedule

Measurement and Payment Schedule for Bid Items in This Project Proposal

Section 1-09.14 is a new section:

(*****)

GENERAL

1-09.14(1) Scope

Section 1-09.14(1) is a new section:

(*****)

- A. Payment for the various items of the bid sheets, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of Work being described, as necessary to complete the various items of the Work all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Administration of the U.S. Department of Labor (OSHA). No separate payment will be made for any item that is not specifically set forth in the Bid Schedules, and all costs therefore shall be included in the prices named in the Bid Schedules for the various appurtenant items of Work.
- B. The Owner shall not pay for material quantities, which exceed the actual measured amount used and approved by the Engineer.
- C. It is the intention of these Specifications that the performance of all Work under the bid for each item shall result in the complete construction, in an accepted operating condition, of each item.

Work and material not specifically listed in the proposal but required in the Plans, Specifications, and general construction practice, shall be included in the bid price. No separate payment will be made for these incidental items.

1-09.14(2) Bid Items

Section 1-09.14(2) is a new section:

(*****)

1-09.14(2)A Mobilization and Demobilization (Bid Item 01)

Section 1-09.14(2)A is a new section:

(*****)

Measurement for "Mobilization and Demobilization" shall be lump sum. The lump sum price shown shall cover the complete cost of: furnishing and installing, complete and in-place, all Work and materials necessary to move and organize equipment and personnel onto the job site; providing and maintaining all necessary support facilities and utilities; obtaining all necessary permits, licenses, bonds, and insurance; preparing all necessary submittals; preparing the site for construction operations; maintaining the site and surrounding areas during construction; providing protection of existing utilities; and conducting final clean-up of the site, all in conformance with the Contract Documents.

Payment for mobilization will be made at the lump sum amount bid (NOT to exceed 80% of bid item price prior to completion of construction) based on the percent of completed Work as defined in the Standard Specifications for Road, Bridge, and Municipal Construction (WSDOT) for mobilization. Payment for the remaining 20% (demobilization) will be made upon completion and final clean up of the construction site. Bid Item 01 may not be more than ten percent (10%) of the total amount of the Bid.

1-09.14(2)B Minor Change (Bid Item 02)

Section 1-09.14(2)B is a new section:

(*****)

Measurement and Payment for "Minor Change" will be as described in Section 1-09.6 for Force Account.

1-09.14(2)C Construction Surveying, Staking, and As-Builts (Bid Item 03)

Section 1-09.14(2)C is a new section:

(*****)

Measurement for "Construction Surveying, Staking, and As-Builts" shall be Lump Sum. The lump sum price shown shall cover the complete cost of: verifying and expanding the project control network provided by the Owner; staking proposed manhole locations; measuring top of pipe elevations at connection points; measuring final pipe elevations prior to backfill; staking original grades to guide backfill activities, and providing settlement monitoring prior to, during, and after excavation and backfill activities.

Payment for "Construction Surveying, Staking, and As-Builts" will be based on the percentage of total Work complete, by dollar value, at the time of measurement.

1-09.14(2)D Excavation Safety Systems (Bid Item 04)

Section 1-09.14(2)D is a new section:

(*****)

Measurement for "Excavation Safety Systems" shall be lump sum. The lump sum price will be complete compensation for all labor, materials, hauling, planning, design, engineering, submittals and equipment necessary to furnish, install, remove and dispose adequate shoring and support for all excavations to provide safe access for workers, prevent soil sloughing, soil loss, damage to pavement, structures, utilities, and ground adjacent to the excavation. "Excavation Safety Systems" shall comply with OSHA, RCW Chapter 49.17 and these Contract Documents. The Contractor shall be responsible at all times for the inspections, safety, maintenance, and adequacy of the "Excavation Safety Systems."

Payment for "Excavation Safety Systems" will be based on the percentage of total Work complete, by dollar value, at the time of measurement.

1-09.14(2)E Temporary Manhole and Installation (Bid Item 05)

Section 1-09.14(2)E is a new section:

(*****)

Measurement for "Temporary Manhole and Installation" shall be per Each. The per Each price will be complete compensation for all labor, materials, equipment, manufacture of one temporary access manhole, hauling, provision of silt curtain, excavation, pipe liquid level monitoring, bypass pumping, transportation of City/Engineer/Assistant/Inspector to and from working platforms, placement and pipe connection of the manhole, pipe, fittings, joint restraints, salvage of the removed pipe segment to the City shops, removal of the manhole, placement of a new segment of DI pipe, disposal of excess excavation soil, backfill, blasting/painting the access tube after construction, and return of the access manhole to the City shops. All items of Work not specifically described in the other bid items shall be included in this bid item. In addition to providing a per Each price for this work, the Contractor shall also identify the number of work days allocated for excavation, installation, and removal of the temporary manhole, to establish a basis for measurement of Bid Item 06, Manhole Installation, Extra Days.

Payment for "Temporary Manhole and Installation" will be at the per Each amount bid.

1-09.14(2)F Manhole Installation, Extra Days (Bid Item 06)

Section 1-09.14(2)F is a new section:

(*****)

Measurement for "Manhole Installation, Extra Days" shall be per Each. The per Each price will be complete compensation for all extra days of labor, materials, equipment, excavation, pipe/pipe connections, pipe/manhole connections, and other necessary work to complete that Work described in Bid Item 05.

Payment for "Manhole Installation, Extra Days" will be for each additional day of work beyond the allocation made for Bid Item 05, "Temporary Manhole and Installation."

1-09.14(2)G Pipe Cleaning (Bid Item 07)

Section 1-09.14(2)G is a new section:

(*****)

Measurement for "Pipe Cleaning" shall be per Day. The per Day price will be complete compensation for all labor, equipment, materials, cleaning, root cutting, internal removal of protruding laterals, removal of hanging gaskets, tankage, transportation, manufacture and installation of a rock catcher at the downstream pump station, daily cleaning of the rock catcher, decanting of sewer liquids to the City's sewer system, and disposal of sewer solids to an approved upland disposal site.

Payment for "Pipe Cleaning" will be for each Day of actual pipe cleaning activities.

1-09.14(2)H Sewer Pipe Inspection by CCTV (Bid Item 08)

Section 1-09.14(2)H is a new section:

(*****)

Measurement for "Sewer Pipe Inspection by CCTV" will be per Day. The per Day price will be complete compensation for all labor, equipment, materials for both pre- and post-cleaning CCTV inspection, provision of record DVDs and report to the Engineer required to complete the Work in accordance with the Contract Documents. Atmospheric testing for manhole access shall be incidental to this Bid item.

Payment for "Sewer Pipe Inspection by CCTV" will be for each Day of actual pipe inspection activities.

1-09.14(2)I Spawning Gravel (Bid Item 09)

Section 1-09.14(2)I is a new section:

(*****)

Measurement for "Spawning Gravel" will be per Ton. The per Ton price will be complete compensation for all labor, equipment, and materials necessary for the placement of a 6-inch layer of spawning gravel across the full limits of each temporary manhole work area and fine grading to return the areas to their original grade.

Payment for "Spawning Gravel" will be for each Ton of gravel placed, according to certified weight tickets.

1-09.14(2)J Bulkhead/Rockery Repair (Bid Item 10)

Section 1-09.14(2)J is a new section:

(*****)

Measurement for "Bulkhead/Rockery Repair" shall be per Day. The per Day price will be complete compensation for all labor, equipment, and materials to reconstruct bulkheads/rockeries that have settled as a result of adjacent pipe and/or manhole excavation. Measurement shall be for each Day of structural restoration work for the rockeries. Work to restore landscaping upland of a restored bulkhead/rockery shall be incidental to the Days of structural repair.

Payment for "Bulkhead/Rockery Repair" will be for each day of structural reconstruction of a rockery/bulkhead.

1-11 RENTON SURVEYING STANDARDS

The following is a new section with new subsections:

(*****)

1-11.1(1) Responsibility for Surveys

All surveys and survey reports shall be prepared under the direct supervision of a person registered to practice land surveying under the provisions of Chapter 18.43 RCW.

All surveys and survey reports shall be prepared in accordance with the requirements established by the Board of Registration for Professional Engineers and Land Surveyors under the provisions of Chapter 18.43 RCW.

1-11.1(2) Survey Datum and Precision

The horizontal component of all surveys shall have as its coordinate base: The North American Datum of 1983/91.

All horizontal control for projects must be referenced to or in conjunction with a minimum of two of the City of Renton's Survey Control Network monuments. The City's surveyor will provide two reference points in the immediate vicinity of each new manhole installation site. The source of the coordinate values used will be shown on the survey drawing per RCW 58.09.070.

The horizontal component of all surveys shall meet or exceed the closure requirements of WAC 332-130-060. The control base lines for all surveys shall meet or exceed the requirements for a Class A survey revealed in Table 2 of the Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys jointly established and adopted by ALTA and ACSM in 1992 or comparable classification in future editions of said document. The angular and linear closure and precision ratio of traverses used for survey control shall be revealed on the face of the survey drawing, as shall the method of adjustment.

The horizontal component of the control system for surveys using global positioning system methodology shall exhibit at least 1 part in 50,000 precision in line length dependent error analysis at a 95 percent confidence level and performed pursuant to Federal Geodetic Control Subcommittee Standards for GPS control surveys as defined in Geometric Geodetic Accuracy Standards & Specifications for Using GPS Relative Positioning Techniques dated August 1, 1989, or comparable classification in future editions of said document.

The vertical component of all surveys shall be based on NAVD 1988, the North American Vertical Datum of 1988, and tied to at least one of the City of Renton Survey Control Network benchmarks. If there are two such benchmarks within 3000 feet of the project site a tie to both shall be made. The benchmark(s) used will be shown on the drawing. If a City of Renton benchmark does not exist within 3000 feet of a project, one must be set on or near the project in a permanent manner that will remain intact throughout the duration of the project. Source of elevations (benchmark) will be shown on the drawing, as well as a description of any benchmarks established.

1-11.1(4) Field Notes

Field notes shall be kept in conventional format in a standard bound field book with waterproof pages. In cases where an electronic data collector is used field notes must also be kept with a sketch and a record of control and base line traverses describing station occupations and what measurements were made at each point.

Every point located or set shall be identified by a number and a description. Point numbers shall be unique within a complete job. The preferred method of point numbering is field notebook, page and point set on that page. Example: The first point set or found on page 16 of field book 348 would be identified as Point No. 348.16.01, the second point would be 348.16.02, etc.

Upon completion of a City of Renton project, either the field notebook(s) provided by the City or the original field notebook(s) used by the Surveyor will be given to the City. For all other Work, Surveyors will provide a copy of the notes to the City upon request. In those cases where an electronic data collector is used, a hard copy print out in ASCII text format will accompany the field notes.

1-11.1(7) Precision Levels

Vertical Surveys for the establishment of benchmarks shall satisfy all applicable requirements of Sections 1-05 and 1-11.1.

Vertical surveys for the establishment of benchmarks shall meet or exceed the standards, Specifications and procedures of third order elevation accuracy established by the Federal Geodetic Control Committee.

Benchmarks must possess both permanence and vertical stability. Descriptions of benchmarks must be complete to insure both recoverability and positive identification on recovery.

1-11.1(8) Radial and Station -- Offset Topography

Topographic surveys shall satisfy all applicable requirements of Section 1-11.1 herein.

All points occupied or back sighted in developing radial topography or establishing baselines for station-offset topography shall meet the requirements of Section 1-11.1 herein.

The drawing and electronic listing requirements set forth in Section 1-11.1 herein shall be observed for all topographic surveys.

1-11.1(9) Radial Topography

Elevations for the points occupied or back sighted in a radial topographic survey shall be determined either by, 1) spirit leveling with misclosure not to exceed 0.1 feet or Federal Geodetic Control Committee third order elevation accuracy Specifications, OR 2) trigonometric leveling with elevation differences determined in at least two directions for each point and with misclosure of the circuit not to exceed 0.1 feet.

1-11.1(10) Station--Offset Topography

Elevations of the baseline and topographic points shall be determined by spirit leveling and shall satisfy Federal Geodetic Control Committee Specifications as to the turn points and shall not exceed 0.1 foot's error as to side shots.

1-11.1(11) As-Built Survey

All improvements required to be "as-built" (post construction survey) per City of Renton Codes, TITLE 4 Building Regulations and TITLE 9 Public Ways and Property, must be located both horizontally and vertically by a Radial survey or by a Station offset survey. The "as-built" survey must be based on the same base line or control survey used for the construction staking survey for the improvements being "as-built". The "as-built" survey for all subsurface improvements should occur prior to backfilling. Close cooperation between the installing Contractor and the "as-builting" surveyor is therefore required.

All "as-built" surveys shall satisfy the requirements of Section 1-11.1(1) herein, and shall be based upon control or base line surveys made in conformance with these Specifications.

The field notes for "as-built" shall meet the requirements of Section 1-11.1(4) herein, and submitted with stamped and signed "as-built" drawings which includes a statement certifying the accuracy of the "as-built".

The drawing and electronic listing requirements set forth in Section 1-11.1(6) herein shall be observed for all "as-built" surveys.

DIVISION 2 EARTHWORK

2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP

2-01.1 Description

Section 2-01.1 is supplemented as follows:

(*****)

The limits of clearing and grubbing (construction limits) shall be defined as being the construction limit lines as shown in the Plans. Where, in the opinion of the Engineer, any trees abutting or adjacent to the limits of clearing and grubbing are damaged and require removal, the Contractor shall remove such trees. Any trees flagged by the Engineer to remain within the clearing and grubbing limits shall be left undamaged by the Contractor's operations. Any flagged trees, which are damaged, shall be replaced in kind at the Contractor's expense.

Existing landscaping outside the construction limits, including but not limited to, sod, rockeries, beauty bark, decorative gravel or rock, bushes, and shrubbery shall be protected from damage.

The property owners shall be responsible for removing and/or relocating irrigation equipment, trees, shrubs, curbing, ornamental plants, and any other decorative landscaping materials within the construction limits that they wish to save. **The Contractor shall give property owners 10 days' written notice prior to removing landscaping materials.** All landscaping materials that remain in the construction limits after that time period shall be removed and disposed of, by the Contractor, in accordance with Section 2-01 of the Standard Specifications, these Special Provisions, and the Plans.

The Contractor shall receive approval from the Engineer prior to removal.

2-01.2 Disposal of Usable Material and Debris

Section 2-01.2 is supplemented as follows:

(*****)

The Contractor shall dispose of all debris by Disposal Method No. 2 – Waste Site.

2-02 REMOVAL OF STRUCTURE AND OBSTRUCTIONS

2-06 SUBGRADE PREPARATION

2-06.5 Measurement and Payment

Section 2-06.5 is supplemented by adding the following:

(*****)

Subgrade preparation and maintenance including watering shall be considered as incidental to the construction and all costs thereof shall be included in the appropriate unit or lump sum contract bid prices.

2-09 STRUCTURE EXCAVATION

2-09.1 Description

Section 2-09.1 is supplemented by adding the following:

(*****)

This Work also includes the excavation, haul, and disposal of all unsuitable materials such as peat, muck, swampy or unsuitable materials, including buried logs and stumps.

2-09.3(1)D Disposal of Excavated Material

Section 2-09.3(1)D is revised as follows:

(*****)

The second paragraph is replaced with:

All costs for disposing of excavated material within or external to the project limits shall be included in the unit contract price for structure excavation, Class A or B.

The third paragraph is replaced with:

If the Contract includes structure excavation, Class A or B, including haul, the unit contract price shall include all costs for loading and hauling the material the full required distance, otherwise all such

disposal costs shall be considered incidental to the Work.

2-09.4 Measurement

Section 2-09.4 is revised and supplemented as follows:

(*****)...

Gravel backfill. Gravel backfill, except when used as bedding for culvert, storm sewer, sanitary sewer, manholes, and catch basins, will be measured by the cubic yard in place determined by the neat lines required by the Plans or by the ton as measured in conformance with Section 1-09.2.

...

2-09.5 Payment

Section 2-09.5 is revised and supplemented as follows:

(*****)

Payment will be made for the following bid items when they are included in the proposal:

“Structure Excavation Class A”, per cubic yard.

“Structure Excavation Class B”, per cubic yard.

“Structure Excavation Class A Incl. Haul”, per cubic yard.

“Structure Excavation Class B Incl. Haul”, per cubic yard.

Payment for reconstruction of surfacing and paving, within the limits of structure excavation, will be at the applicable unit prices for the items involved.

If the Engineer orders the Contractor to excavate below the elevations shown in the Plans, the unit contract price per cubic yard for “Structure Excavation Class A or B” will apply. But if the Contractor excavates deeper than the Plans or the Engineer requires, the Contracting Agency will not pay for material removed from below the required elevations. In this case, the Contractor, at no expense to the Contracting Agency, shall replace such material with concrete or other material the Engineer approves. The unit contract price per cubic yard for the bid items listed as 1 through 4 above shall be full pay for all labor, materials, tools, equipment, and pumping, or shall be included in the unit bid price of other items of Work if “Structure Excavation” or “Structure Excavation Incl Haul” are not listed as pay items in the Contract.

“Shoring or Extra Excavation Class B”, per square foot.

The unit contract price per square foot shall be full pay for all excavation, backfill, compaction, and other Work required when extra excavation is used in lieu of constructing shoring. If select backfill material is required for backfilling within the limits of the structure excavation, it shall also be required as backfill material for the extra excavation at the Contractor’s expense. Any excavation or backfill material being paid by unit price shall be calculated by the Engineer only for the neat line measurement of the excavation and shall not include the extra excavation beyond the neat line.

If there is no bid item for shoring or extra excavation Class B on a square foot basis and the nature of the excavation is such that shoring or extra excavation is required as determined by the Engineer, then shoring or extra excavation shall be considered incidental to the Work involved and no further compensation shall be made.

“Gravel Backfill (Kind) for (Type of Excavation)”, per cubic yard or per ton.

“Controlled Density Fill”, per cubic yard.

When gravel backfill is paid by the ton, the Contractor shall take care to assure to the satisfaction of the Engineer that such per ton backfill is only being used for the specified purpose and not for purposes where backfill is incidental or being paid by cubic yard. Evidence that per ton gravel backfill is not being used for its designated purpose shall be grounds for the Engineer to deny payment for such load tickets.

DIVISION 7 DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER MAINS, AND CONDUITS

7-08 GENERAL PIPE INSTALLATION REQUIREMENTS

7-08.3 Construction Requirements

7-08.3(1)A Trenches

Section 7-08.3(1)A is supplemented by adding the following:

(*****)

Trench Excavation Incl. Haul includes the trench excavation for the storm sewer, sanitary sewer, and water main construction in accordance with the trench limits outlined on the plan drawings. All trench excavated materials shall be disposed of off-site at an approved Contractor-provided disposal site. Excavation outside the excavation limits shown on the plan drawings shall be at no additional expense to the City.

Contaminated Trench Excavation includes the trench excavation of materials characterized as contaminated based on sampling results for the storm sewer, sanitary sewer, and water main construction and in accordance with the trench limits outlined on the plan drawings. This excavated soil shall be managed in accordance with applicable state and federal regulations outlined in the Contract Documents. Handling and disposal of materials shall adhere to all transportation requirements, receive pre-approval from a disposal facility, manifesting, and record keeping, etc., as outlined in the Contractor's Contaminated Soil and Groundwater Handling and Management Plan . The excavations will require a shoring system to limit the volume of excavation. Excavation outside the trench limits shown on the plan drawings shall be at no additional expense to the City.

7-08.3(1)C Bedding the Pipe

Section 7-08.3(1)C is supplemented by adding the following:

(*****)

Pipe bedding for PVC sewer pipe shall consist of clean, granular pea gravel consistent with Section 9-03.12(3). It shall be placed to a depth of 6" over and 6" under the exterior walls of the pipe.

For all pipe bedding, hand compaction of the bedding materials under the pipe haunches will be required. Pipe bedding should provide a firm uniform cradle for support of the pipes. Prior to installation of the pipe, the pipe bedding should be shaped to fit the lower part of the pipe exterior with reasonable closeness to provide uniform support along the pipe. Hand compaction shall be accomplished by using a suitable tamping tool to firmly tamp bedding material under the haunches of the pipe. Care shall be taken to avoid displacement of the pipe during the compaction effort. Pipe bedding material should be used as pipe zone backfill and placed in layers and tamped around the pipes to obtain complete contact.

Bedding material shall meet the requirements of Gravel backfill for Pipe Zone Bedding in accordance with Standard Specification Section 9-03.12(3). Pipe bedding shall be considered incidental to the pipe and no further compensation shall be made.

In areas where the subgrade soils in the trench excavation consist of fine-grained soils, such as silt/clay, or organic rich soils, the Engineer may direct the Contractor to use a geotextile separator fabric be placed over the native soils prior to placement of the pipe bedding. The geotextile shall meet the requirements of Section 9-33.2(1) Table 3 for Separation. Geotextile shall be paid for by other items.

7-08.3(1)D Pipe Foundation

Section 7-08.3(1)D is a new section:

(*****)

Pipe foundation in poor soil: When soft or unstable material is encountered at the subgrade which, in the opinion of the Engineer, will not uniformly support the pipe, such material shall be excavated

to an additional depth as required by the Engineer and backfilled with foundation gravel material placed in maximum 12-inch lifts. Foundation gravel shall be CSBC and conform to the requirements of Section 9-03.9(3) of the Standard Specifications.

Corrections faulty grade: Excess excavation below grade shall be backfilled with foundation gravel as specified above and thoroughly compacted to the required grade line.

7-08.3(2)B Pipe Laying – General

Section 7-08.3(2)B is supplemented by adding the following:

(*****)

Checking of the invert elevation of the pipe may be made by calculations from measurements on the top of the pipe, or by looking for ponding of 1/2" or less, which indicates a satisfactory condition. At manholes, when the downstream pipe(s) is of a larger size, pipe(s) shall be laid by matching the (eight-tenths) flow elevation, unless otherwise approved by the Engineer.

All pipe, fittings, etc. shall be carefully handled and protected against damage, impact shocks, and free fall. All pipe handling equipment shall be acceptable to the Engineer. Pipe shall not be placed directly on rough ground but shall be supported in a manner, which will protect the pipe against injury whenever stored at the trench site or elsewhere. No pipe shall be installed where the lining or coating show defects that may be harmful as determined by the Engineer. Such damaged lining or coating shall be repaired, or a new undamaged pipe shall be furnished and installed.

The Contractor shall inspect each pipe and fitting prior to installation to insure that there are not damaged portions of the pipe. Any defective, damaged, or unsound pipe shall be repaired or replaced. All foreign matter or dirt shall be removed from the interior of the pipe before lowering into position in the trench. Pipe shall be kept clean during and after laying

Where necessary to raise or lower the pipe due to unforeseen obstructions or other causes, the Engineer may change the alignment and/or the grades. Except for short runs, which may be permitted by the Engineer, pipes shall be laid uphill on grades that exceed 10 percent. Pipe, which is laid on a downhill grade, shall be blocked and held in place until sufficient support is furnished by the following pipe to prevent movement.

Unless otherwise required, all pipe shall be laid straight between the changes in alignment, and at uniform grade between changes in grade

Immediately after the pipe joints have been made, proper gasket placement shall be checked with a feeler gage as approved by the pipe manufacturer to verify proper gasket placement.

7-08.3(2)E Rubber Gasketed Joints

Section 7-08.3(2)E is supplemented as follows:

(*****)

Care shall be taken by the Contractor to avoid over pushing the pipe and damaging the pipe or joint system. Any damaged pipe shall be replaced by the Contractor at his expense.

7-08.3(2)H Sewer Line Connections

Section 7-08.3(2)H is supplemented by adding the following:

(*****)

All connections not occurring at a manhole or catch basin shall be done utilizing pre-manufactured tee connectors or pipe sections approved by the Engineer. Any other method or materials proposed for use in making connections shall be subject to approval by the Engineer.

Unless otherwise approved by the Engineer, all connections of lateral sewers to existing mains shall be as follows:

- | | | |
|----|---------------------|--|
| A. | Vitrified Clay Main | Cut in new PVC "Tee" using "Strong-Back" Flexible Couplings (Fernco or approved equal). |
| B. | Concrete Main | Cut in new PVC "Tee" using "Strong-Back" Flexible Couplings (Fernco or approved equal). |
| C. | PVC & C900 PVC Main | Core-drilled with Romac Saddle (or approved equal) or cut in new "Tee" using "Strong-Back" Flexible Couplings (Fernco or approved equal).. |
| D. | Ductile Iron Main | Core-drilled with Romac Saddle (or approved equal). |

Connections (unless booted connections have been provided for) to existing concrete manholes shall be per Section 7-05.3(3).

7-08.3(3)A Backfilling Pipe Trenches

Section 7-08.3(3)A is a new section supplementing 7-08.3(3)
(*****)

To the maximum extent available, suitable material obtained from trench excavation shall be used for trench backfill. All material placed as trench backfill shall be free from rocks or stones larger than 6 inches in their greatest dimension, brush, stumps, logs, roots, debris, and organic or other deleterious materials. No stones or rock shall be placed in the upper three feet of trench backfill. Rock or stones within the allowable size limit incorporated in the remainder of fills shall be distributed so that they do not congregate or interfere with proper compaction.

Contactors shall take special care to obtain good compaction up to the edges of the excavation as the shoring is removed in accordance with the Shoring Plan.

The Contractor shall be responsible for any settlement of backfill, sub-base, and pavement that may occur during the period stipulated in the Contract conditions. All repairs necessary due to settlement shall be made by the Contractor at his expense.

The Contractor shall be responsible for the disposal of any excess excavated material. Special care must be taken to obtain good compaction up to the edges of the excavation as the shoring is removed. Moreover, attention must be paid to ensuring good compaction around manholes.

7-17 SANITARY SEWERS

Error! Bookmark not defined.**7-17.2 Materials**
Section 7-17.2 is replaced with the following:
(*****)

Pipe

Gravity sewer pipe shall be as specified herein and as shown on the Plans. The Contractor shall provide two copies of the pipe manufacturer's technical literature and tables of dimensional tolerances to the Engineer. Any pipe found to have dimensional tolerances in excess of those prescribed or having defects, which prevent adequate joint seal or any other damage, shall be rejected. If requested by the Engineer, not less than three nor more than five lengths of pipe for each size, selected from stock by the Engineer, shall be tested as specified for maximum dimensional tolerance of the respective pipe.

All pipe shall be clearly marked with type, class, and thickness. Lettering shall be legible and

permanent under normal conditions of handling and storage.

Error! Bookmark not defined.**7-17.3 Construction Requirements**

7-17.3(1) Protection of Existing Sewerage Facilities

Section 7-17.3(1) is supplemented by adding the following:

(*****)

During temporary manhole installation and removal, the downstream system shall be protected from construction debris by first excavating at least one foot beyond/below the location of planned cuts in the sewer main. Second, the Contractor shall have a thin metal plate they can place in the cut line of the sewer before they remove the adjacent pipe segment that will prevent a large inrush of water that may carry sediments with it. Third, as shown on the plans, a temporary end cap configured for bypass sewer pumping shall be fitted to the existing pipe ends adjacent to the work area.

During pipe cleaning operations, the contractor shall construct and install a rock catching basket at the pipe inlet to the downstream Lake Washington Lift Station No. 2. The basket shall consist of a five sided box or circular barrel with a bottom and numerous perforations of ½ inch. The rock catcher shall be hung from the surface or placed on the bottom of the wet well such that rocks and gravel over ½” are trapped in the basket and cannot reach the sewage pumps. The Contractor shall check and clean the basket every day during which pipeline cleaning operations are under way. Solids shall be disposed of to an approved upland disposal area. Wash water may be drained to the lift station wet well. Contractor shall design and submit their proposed configuration of the rock catcher.

7-20 TEMPORARY MANHOLES

7-20.1 Description

The Work shall be conducted on the water, and no land access is available at the manhole installation sites. The Contractor shall perform the Work so as to minimize impacts on boat traffic in Lake Washington.

7-20.2 Materials

The temporary cleaning manhole shall be as shown on the contract drawings. The drawings indicate a pipe across the manhole near the crown of the sewer pipes. This is optional and may be configured differently at the Contractor’s option. It is intended to create a radius for hoses and cables leaving the manhole. Contractor to propose and submit a sketch of the proposed configuration.

After completion of cleaning from the temporary manhole, the Contractor shall have the access manhole sandblasted and coated with a rust inhibiting coating. The coating shall be Tnemec V10 in color 1009 Grey, Sherwin Williams Industrial Pro-Cryl Universal Acrylic Primer in color grey, or approved equal. Blasting and surface prep shall conform to the coating manufacturer’s written recommendations.

Spawning gravel for top dressing of backfilled areas shall meet the requirements of Section 9-03.11, Streambed Aggregates, and 9.03.11(1) Streambed Sediment.

7-20.3 Construction Requirements

7-20.3(1) Protection of Water Quality

Dredging operations shall be conducted at all times in such a manner as to cause little or no siltation to adjacent waters. Dredging, pipe laying and trench bedding and backfill operations shall be

enclosed by a floating sedimentation curtain to contain suspended sediments. The Contractor shall inspect sedimentation and turbidity control measures and facilities daily and maintain the system as necessary to prevent off-site migration of turbidity.

The Work involves cutting a free-draining, live sewer underwater. The Contractor shall provide all labor, equipment, and materials necessary for diver protection, to protect the pipelines from excessive inflow rates and the passage of solids into the pipeline, and to protect the Lake from sanitary sewer discharge. Until the segment of pipe to be replaced is removed, this shall be accomplished with the use of a metal plate placed in the alignment of the upstream and downstream cut. Between the time the segment of pipe to be replaced is removed and the time of connection of the new pipeline, both the upstream and downstream existing pipes shall be fitted with a tapped mechanical end cap as shown on the drawings. Inflatable or mechanical plugs fitting inside of the pipe will not be allowed except for inside the temporary manholes during connection of the adjacent pipes to the existing system. Prevent the passage of all sand, gravel, and cobbles.

The Contractor shall monitor the liquid level in the upstream sewer system and maintain that level below the level of the lake. Provide one operating pump and one standby pump with connecting piping and fittings to achieve the required liquid level. The upstream/suction side of the bypass pumping operation shall be equipped with a mechanism to observe the liquid level relative to the lake level. This shall be accomplished either with translucent suction piping, or with an additional fitting with a clear riser tube extended above lake level. At least hourly or as requested by the Engineer, the Contractor shall vent the suction pipe to atmospheric condition, measure the liquid level in the pipe relative to the lake level, report the measurement to the Engineer, and pump down liquid levels exceeding lake level.

During dredging/excavation, any discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, is prohibited. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc. on construction equipment shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters. Proper security shall be maintained to prevent vandalism. In the event of a discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of any spilled material and used cleanup materials. Spills into state water, spills onto land with a potential for entry into state water, or other significant water quality impacts, shall be reported immediately to the Engineer. The Engineer shall immediately notify the Department of Ecology's Northwest Regional Office at (425) 649-7000 (a 24-hour number).

The Engineer will conduct a turbidity testing program during the course of the Work and will immediately advise the Contractor of any results not in compliance with applicable water quality regulations.

7-20.3(2) Aquatic Plant Material

The Contractor shall be responsible for removal of any aquatic plant material required to conduct the Work. The Contractor shall dispose of removed plant material in compliance with all applicable laws and regulations.

7-20.3(3) Excavation and Shoring

The Contractor shall excavate the dredge areas to the lines, grades, and elevations shown on the Contract Drawings or as determined in the field by the engineer after the Contractor measures the top of pipe elevations at the points of connection.

Excavation support systems are required at the following locations:

1. All excavations greater than 4 feet deep.
2. Sewer pipelines and manholes.
3. Adjacent to existing structures, bulkheads, rockeries, utilities, and other sensitive features.
4. Where required by Washington State Department of Labor and Industries regulations, specifically, WAC 296-155 – Part N, Excavation, Trenching, and Shoring.
5. At any other location where personnel are at risk in connection with any construction work below the ground or lakebed level.
6. At other points where excavation could cause displacement or pressure changes which could damage existing structures or utilities.

The Contractor is solely responsible for the following items:

1. Design, planning, furnishing materials, construction, maintenance, and removal of the excavation support system as defined herein.
2. The safety of workers, the protection of adjacent structures, property and utilities, and the installation of adequate supports for all excavations.
3. Costs for any and all damages resulting from construction activities.
4. All submittals and permits required herein.
5. The Contractor shall notify the Engineer immediately in writing of any conditions that occur during construction, which may affect the safety of personnel, the Owner's cost, or the schedule of the project.
6. Monitoring of surrounding ground movement resulting from the excavation support system and construction activities.

Dredged materials shall be placed outside of the excavation or shoring system but within the silt curtain. The Contractor shall pay particular attention to minimizing turbidity and siltation and adherence to water quality requirements. Dredged material shall not be allowed to accumulate against the shoring system unless the loads imposed are within the capacity of the shoring system.

The removal and disposal of minor obstructions shall be anticipated and accomplished, even though not shown or specifically mentioned on the Plans or Specifications. Unexpected objects, such as abandoned pipe, stumps, boulders, concrete debris, I-beams, etc. encountered in the trench excavation shall be removed and disposed of by the Contractor. Removal of unexpected objects will be considered incidental to pipe installation unless the object cannot be removed by the same equipment at hand or the trench width or depth must be increased by 2 feet or more to facilitate removal. Major obstructions encountered that are not shown on the Drawings, or could not have been foreseen by visual inspection of the site prior to bidding, should be immediately brought to the attention of the Engineer. The Engineer will make a determination for proceeding with the work.

The Contractor shall be responsible for removal of any excess material from excavation. The Contractor shall be responsible for compliance with all laws governing the storage and ultimate disposal of all materials and components. The Contractor shall provide City with a copy of all manifests and receipts evidencing proper disposal when required by City or applicable law.

7-20.3(4) Flow Management

It shall be the Contractor's responsibility to maintain operation of the existing sewer system throughout the duration of the project without any interruption of sewer service. The Contractor shall divert all flows around each segment of the pipe subject to cutting, blocking, or removal/replacement. After the work is completed, flow shall be returned to the rehabilitated sewer system. The area affected by the bypass operation shall be fully restored.

Bypass pumping shall be scheduled for continuous operation, should that be necessary to maintain liquid levels in the upstream piping. Back-up equipment shall be on-site and available for periods of maintenance, refueling or failure of the primary bypass pump(s) or diversion system. Bypass pumping shall be done in such a manner as not to damage private or public property, or create a nuisance or public menace. The discharge of raw sewage to the lake or onto public or private property is prohibited. The Contractor shall be liable for all cleanup, damages, and resultant fines should the Contractor's operation cause any backups or overflows.

All bypassing systems shall be approved by the Engineer. A plan for bypassing the existing sewer system shall be submitted by the Contractor for review. The Contractor's plan for bypass pumping shall be satisfactory to the Owner before the Contractor will be allowed to commence bypass pumping. The sewage bypass pumping plan shall include an emergency response plan to be followed in the event of a failure of the bypass pumping. The review of the bypassing system and equipment by the Engineer shall in no way relieve the Contractor of his responsibility and public liability.

The Contractor shall coordinate activities with impacted property owners. Property Owners shall be notified that their side sewer will be out of service for a specified period of time, as approved by the Engineer.

7-20.3(5) Protection of Existing Facilities

The Contractor shall take necessary precautions to prevent damage to existing facilities, such as docks, floats, piers, bulkheads, boat lifts, diving boards, or any other facility. Any facility, which during the course of work, is damaged or becomes a hazard to use due to the Contractor's actions, shall be restored to their original condition.

Repair of rock bulkheads shall be per Section 8-24 Rock and Gravity Block Wall and Gabion Cribbing. Generally, reuse existing rock materials except as needed to replace lower courses of the bulkhead to offset settlement.

7-20.3(6) Installation of Submerged Temporary Manhole

As indicated on the drawings, the Contractor shall expose and measure the top of pipe elevation at the upstream and downstream connection points prior to cutting the pipe. Report the elevations to the Engineer, who will calculate the required subgrade elevation for the manhole. The Contractor shall support the existing sewer pipe in the excavation area until it is time to remove that pipe. All excavation for manhole installation shall be completed while the pipe is supported and prior to cutting any sewer pipes. When the Contractor is ready to cut the pipes and install the manhole, they shall ensure they have all of the relevant pipe spools, fittings, appropriately sized gaskets and all tools and equipment needed to complete the manhole installation in a single day. When the upstream and downstream pipe cuts are made, priority shall be given to protecting water quality and ensuring sediments do not enter the pipelines, as described in 7-20.3(1) and 7-20.3(4). The manhole shall be placed upright on the prepared subgrade and evenly anchored amongst the

ecology blocks. The manhole shall be fully anchored and checked for plumb prior to making any connections to existing piping. Inflatable plugs shall be placed in each manhole pipe stub from inside the manhole so that lake water can be pumped from the manhole prior to pipe connections being made. Complete the pipe connections reestablish sewage flow in the same day as the existing sewer pipes were initially cut. The lake line shall be made operational at the end of each work day.

7-21 CLEANING OF EXISTING SANITARY SEWER (New Section)

(*****)

Section 7-21 shall be added as a new section.

7-21.1 Description

This Work consists of cleaning, removing, and disposing of all debris and obstructions from existing sanitary sewer pipes, manholes, and pump station wet wells within the limits of the project. The cleaning work shall utilize the sewer access points listed on the drawings, which include upland access points, the two temporary manhole locations (#4 and #5) and three existing in-water manholes, for which temporary access risers are available.

7-21.2 Vacant

7-21.3 Construction Requirements

7-21.3(1) Access Tube Installation

Contractors shall at all times conduct its Work to prevent any blockage and minimize surcharging in the sewer manholes and connecting sewer pipelines. Damage to existing facilities as a result of Contractor's Work shall be promptly repaired at Contractor's expense.

The three existing manholes on the Kennydale Lakeline are accessed from Lake Washington. These permanent manholes are accessed via one or more removable aluminum access tubes.

The Contractor shall be responsible for providing all equipment and personnel to transport and install the access tubes. Access tube bases and risers are currently held at King County Wastewater Treatment Division's Duwamish Pump Station (4501 East Marginal Way South). The Contractor shall coordinate with the City and Engineer to retrieve and return the access tubes from/to the County.

The Contractor shall provide new gasket material for each base section and riser section joints. The Contractor shall provide load binders and any connecting bolts/hardware for the access tubes that are not provided with the access tubes.

The following caisson equipment will be made available for the Contractor's use:

- 1 - 54" Base Section
- 1 - 132" Base Section
- 8 - 48" Riser Sections

The access tubes shall be bolted together with a sufficient number of extensions and gaskets to provide a minimum height of two feet above the lake surface when the bottom of the access tube is resting on the manhole's seating ring.

The access tube must be placed on a clean manhole seating ring and secured to the manhole anchors with load binders.

The water in the access tube shall be pumped down below lake level and the access tube checked for any infiltration. If the water level rises, then check the assembly bolts for tightness and readjust the tension on the load binders. If the water level in the access tube remains constant it may then be pumped down completely. The Contractors shall have operable backup pumps on site at all times. The access tube shall be kept dry at all times.

The installed access tubes shall not be left unattended at any time. Access tubes shall not be left on the manholes overnight or outside of working hours.

After the work has been performed from with the access tube, the manhole cover shall be replaced and secured. Pump lake water into the shaft back to the lake level and remove the load binders. Remove the access tube using care not to damage the manhole or access tube in any way.

All King County Metro equipment shall be cleaned with high pressure water blast and returned to the Duwamish Pump Station within five (5) days following completion of the Kenndale Lakeline cleaning and inspection.

7-21.3(2) Cleaning of Sewer Lakeline

The Contractor shall clean the existing and new segments of sewer main for the complete length from the Flush Station to Lake Washington Lift Station No. 2. Utilize high pressure water jets with industry-standard equipment and collect displaced solids by vactoring. Laterals will not be cleaned as part of this project.

The cleaning process shall minimize the length the work extends from each access point to reduce pulling and frictional forces involved.

Cleaning shall remove all sediment, rocks, debris, roots, grease accumulations, obstructions, and all other solids from the sewer line and structures to be cleaned. Cleaning of the sewer and structure interior surfaces shall remove all grease, scale, and encrustation.

Contractor shall take appropriate measures to prevent sediments from cleaning operations being deposited in the downstream sewer main.

1. Sedimentation deposited downstream, as determined by the Engineer, shall be removed at no additional cost to Owner.
2. Contractor shall be thoroughly familiar with all phases of sewer and structure cleaning for the completion of this Contract without causing a health hazard or damage to the sewage system, public and private properties.

No more than 24 hours may elapse between the completion of sewer cleaning operations and commencement of the subsequent CCTV inspection. See Section 7-22.

No chemicals shall be used without written approval of Engineer. In no case shall any chemical additive be used which might be considered hazardous, or might be considered detrimental to

organisms or equipment of a wastewater treatment plant, or detrimental to old or new pipe materials.

Vactoring operations, either with truck or trailer based equipment, shall have the liquid portions decanted, which may be discharged to the Lake Washington Lift Station No. 2 at a rate of up to 150 gallons per minute. This rate is somewhat less than the peak capacity of the lift station in order to account for existing system use during decanting operations. If at any time during discharge of sewage to the lift station, the lift station is unable to keep up with this discharge rate, reduce the discharge rate and report the problem to the Engineer.

7-21.3(3) Disposal of Sediments

Contractor shall be responsible for transporting and disposing, including all disposal fees, of any sediments and material removed from the sewer or structures.

All sediment and debris removed from the sewer shall be disposed off-site in a lawful manner at an appropriate waste facility.

1. Hauling containers shall be watertight.
2. On-site stockpiling of removed material will not be permitted.

Contractor is responsible for obtaining all necessary permits, fees, and approval from all regulatory agencies required to perform the Work, including transport of sediments and testing.

7-22 CCTV INSPECTION OF SEWER PIPELINES (NEW SECTION)

Section 7-22 to be added as a new section.

(*****)

7-22.1 Description

The Work consists of internal television inspection of existing sewer pipelines before and after cleaning of the existing pipe.

7-22.2 Vacant

7-22.3 Construction Requirements

7-22.3(1) Submittal Requirements

Prior to commencement of work, submit an example of this work consisting of 1 DVD or CD of previous sewer inspection work complete with audio commentary and inspection log(s). The submitted DVD or CD shall show operational and structural defects in sewers that are of the same size as the sewers in this project. The video footage and inspection logs will be reviewed to determine if the quality of the CCTV image is acceptable and if defects were properly identified and documented. Samples shall be with the same camera and lighting equipment proposed for the work. Contractor shall be responsible for modifications to his equipment and/or inspection procedures to achieve report material of acceptable quality. No work shall commence prior to approval of the material by the Engineer. Once accepted, the report material shall serve as a standard for the remaining work. The video footage shall be on a medium that is not re-recordable. Contractor shall maintain a copy of all inspection documentation (DVDs/CDs, databases, and logs) for the duration of the work and warranty period.

After completing work, Contractor shall submit to Engineer:

1. 1 copy of the finished DVDs/CDs with a separate DVD/CD for each of the existing sewer pipelines after cleaning.
 - a. The Engineer will review the video footage, not for accuracy of content, but to make sure that the required information is provided and the recording is of acceptable quality.
 - b. If the Engineer determines that the DVD is defective or not of adequate quality, the Contractor shall CCTV inspect again at the Contractor's expense.
2. 1 copy of the finished DVDs/CDs including the CCTV inspection database meeting the following requirements:
 - a. Digital video format capabilities and requirements:
 - i. Digital video files (Inspection Videos) shall be captured and/or recorded in the MPEG 1, 2, or 4 formats or as specified by the Owner.
 1. The Video capture files shall be in MPEG format with linking to the database file(s) (Inspection Observations).
 2. The "Link" of the video capture file to the database observation file is required and each observation shall record the name of the video file and the frame number referencing the time in the video when the inspection was made.
 3. The inspection observation(s) shall link to the video record in real-time.
 4. Video shall include the following at a minimum:
 - a. Date and time inspected.
 - b. Line segment being inspected.
 - c. Project Name & Project Number.
 - d. Segment Location (Address).
 - e. Footage location from Manhole.
 - f. Defect Code and/or Type and Severity Rating.
 - g. Use Owner manhole numbering system, if owners do not have manhole numbers assigned to these manholes, number from upstream to downstream, keeping in order for entire alignment surveyed.
 - ii. A Main, Lateral, or Node Inspection may have one or many linked video files. Video recording can be paused and then restarted without generating a new file.
 - ii. A Main, Lateral, or Node Inspection may have one or many linked video files. Video recording can be paused and then restarted without generating a new file.
 - b. Image (photos) capture format capabilities and requirements:
 - i. The Inspection image files (pictures) shall have the ability to be exported to Industry Standard Formats to include JPEG, BMP, and TIFF formats and be transferable by disk, DVD and/or External Hard drive to an external personal computer utilizing standard viewers and printers.
 - ii. The video image capture module shall be capable of collecting multiple color video frames of the defects found during inspection and then linked to the inspection reports. There shall not be a limitation to the number of pictures allowed per observation.
 - c. Database structure and requirements:
 - i. The inspection database shall include an asset-based architecture which allows multiple inspections to be performed and retained as a historical record for the same physical location (asset). The "project- based"

database architecture shall store and immediately show all inspection history for each asset.

- d. Functional requirements of the software:
 - i. The software shall be NASSCO PACP [4.2] certified and conform to its pipeline assessment procedures.
 - ii. Software shall export to a PACP [4.2] (mdb) format.
 - iii. Contractor must use the Owner's GIS pipe and manhole layers as the base layer for creating the inspection database.

7-22.3(2) Equipment Requirements

Cameras shall be intrinsically safe and shall be operative in 100 percent humidity conditions. Lighting intensity shall be remote controlled and shall be adjusted to minimize reflective glare. Lighting and camera quality shall provide a clear, in-focus picture of the entire inside periphery of the sewer.

Record and store video footage meeting the following requirements:

1. DVD/CD recordings of all sewer line inspections shall be made in high quality MPG Format. CCTV inspections will be delivered entirely in a GraniteNet compatible format database using the latest software version on External HDD.
2. The Audio portion of the composite recording shall be sufficiently free from electrical interference and background noise to provide complete intelligibility of the oral report.
3. All Owner and PACP required header information must be fully and accurately entered on all CCTV reports. Work not following these specifications will be rejected for payment and the Contractor shall be required to re-CCTV the work.

A footage counter device, which measures the distance traveled by the camera in the sewer, shall be accurate to plus or minus 2 feet in 1,000 feet.

Video equipment shall include genlocking capabilities to the extent that computer generated data, (i.e., footage, date, size, address and location, etc.) as determined by the Engineer can be overlaid onto the video, and both indicated on the television monitor and permanently recorded on the inspection videotape.

7-22.3(3) Inspection Access Points

Contractor shall at all times conduct its Work to prevent any blockage and minimize surcharging in the sewer manholes and connecting sewer pipelines. Damage to existing facilities as a result of Contractor's Work shall be promptly repaired at Contractor's expense.

City of Renton Kenndale Lakeline access points are:

1. Temporary manhole #5
2. Temporary manhole #4
3. Flush Station located adjacent to 2727 Mountain View Ave N, Renton, WA, 98056.
4. Submerged manhole in Lake Washington at approximately 3233 Lake Washington Blvd N, Renton, WA 98056.
5. Cleaning lateral located at 3307 Lake Washington Blvd N, Renton, WA 98056.
6. Submerged manhole in Lake Washington at approximately 3307 Lake Washington Blvd N, Renton, WA 98056.

7. Submerged manhole in Lake Washington at approximately 3713 Lake Washington Blvd N, Renton, WA 98056.
8. Cleaning lateral located in City of Renton Kenndale Beach Park (3601 Lk Washington Blvd N, Renton, WA 98056)
9. Lake Washington No. 2 Lift Station adjacent to 3903 Lake Washington Blvd N, Renton, WA 98056.

The Contractor shall obtain access, ingress and egress, from Lake Washington for the entire inspection activity.

7-22.3(4) Inspection Methods

All CCTV operators working on this project shall have current NASSCO PACP certification.

Sewer sections shall be inspected by means of remote CCTV. If a blockage hampers the inspection of the sewer in one direction, then the Contractor shall attempt to complete the section by televising from the other manhole to complete the section. The Contractor must immediately report the obstruction to the Owner or his representative. All CCTV work shall conform to Current NASSCO-PACP standards.

Contractor shall record on the audio track of the CD/DVD narrative of the location, upstream and downstream control points, date, and time of the inspection.

Engineer shall have access to observe the monitor and all other operations at all times. The system of cabling employed to transport the camera and transmit its signal shall not obstruct the camera's view.

The camera shall be pulled through the sewer in either direction, but all inspections at each location shall be in the same direction. Maximum rate of travel shall be 30 feet per minute when recording. Camera must come to a complete stop when documenting defects.

The camera image shall be down the center axis of the pipe when the camera is in motion. Contractor is required to provide a 360-degree view of the pipe interior. Points of interest shall also be inspected videotaped and shall include, but not be limited to, defects, encrustations, mineral deposits, debris, sediment, any location determined not to be clean etc.

All inspection documentation shall include the sewer location.

Engineer will review DVDs/CDs and logs to ensure compliance with the requirements listed in this Specification and Contract Documents. If the sewer line is determined not to be adequately cleaned, as required in this Section, it shall be re-cleaned and CCTV inspected by the Contractor at no additional cost to the Owner.

During CCTV inspections, Contractor shall provide temporary dry conditions in the sewer pipelines. Sewer line shall be pumped out prior to inspection and intermittently as needed to provide dry conditions. Pump discharge shall be to Owner approved location.

DIVISION 8 MISCELLANEOUS CONSTRUCTION

8-02 ROADSIDE RESTORATION

8-02.3(4)A Topsoil Type A

Section 8-02.3(4)A is supplemented with the following:

(*****)

The contractor shall provide a material submittal for topsoil prior to use.

8-02.3(16) Lawn Installation

Section 8-02.3(16) is revised and supplemented as follows:

(*****)

8-02.3(16)A Lawn Installation

Section 8-02.3(16)A has been deleted and superseded with the following:

(*****)

8-02.3(16)A1 Qualifications of Workmen

Provide at least one person who shall be present at all times during execution of the Work and who shall be thoroughly familiar with the type of materials being installed and the best methods for their installation and who shall direct all work performed under this section.

8-02.3(16)A2 Submittals

8-02.3(16)A2a Certification of Material

1. Include seed mix percentages, purity, germination rates, weed experience, and date tested for the preceding. Include complete data on source, size and quality.
2. Supply on-site 12" x 12" sample of each sod specified for inspection and approval in advance by the City.
3. Supply Grower's written recommendations for fertilizer type, rate of application, and frequency.
4. All certificates required by law shall accompany shipments.
5. Upon completion of the installation and prior to final inspection, deliver all certificates to the Engineer.

8-02.3(16)A2b Manufacturer's Certificates of Conformance

1. Supply for Certificates of Conformance for fertilizer being used for the project.

8-02.3(16)A2c Schedule for Installation

1. The Contractor shall coordinate all work with the City and submit a watering plan for the Establishment Period.

8-02.3(16)A3 Product Handling

Deliver all items to the site in their original containers, with all labels intact and legible, at the time of the City's inspection. Coordinate delivery and installation of sod to ensure sod is installed immediately upon delivery.

Use all means necessary to protect new lawn areas before, during, and after installation and to protect the installed work and materials of all other trades.

In the event of damage or rejection, immediately make all repairs and replacements necessary for the approval of the Inspector and at no additional cost to the City.

8-02.3(16)A4 Site Information

If sod is stored onsite, preserve and protect all sod on site prior to and during installation. Protect from wind, drought, unusual weather and vandalism. Store all sod on site within limits of work.

Protect adjacent property, public walks, curbs and pavement from damage. Do not block public access routes with plant material.

8-02.3(16)A5 Sod

The Contractor shall provide sod to all new lawn areas and to those lawn areas requiring restoration from the Contractor's operations. Sod shall conform to section 9-14.6(8) as shown in the Special Provisions.

Error! Bookmark not defined.8-02.3(16)A5a Other Materials

All other materials not specifically described but required for a complete and proper planting installation, shall be selected by the Contractor subject to the approval of the Engineer.

Error! Bookmark not defined.8-02.3(16)A6 Execution

Prior to all work of this section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence. Verify that lawn installation may be completed in accordance with the original design and the referenced standards. In the event of discrepancy, immediately notify the Engineer for specific instructions.

8-02.3(16)A6a Installation Preparation

1. Prepare subgrade in all lawn areas by scarifying to a 8" minimum depth and removing rocks and debris over 1" in diameter. Subgrade soils should be free-draining and without any impervious soils or other materials harmful to plant growth. Notify the Inspector of any subgrade conditions deleterious to plant growth.
2. Spread topsoil to a minimum depth of 6" after settlement in all lawn areas.
3. Thoroughly rototill topsoil to a minimum depth of 6 inches.
4. Fine grade per Contract Specifications in turf areas as indicated on drawings. Rake entire surface to conform to site grading. Grade edges to 1" below adjacent paved surfaces to provide a smooth transition. Roll as necessary to firm grade to satisfaction of the Inspector.
5. Apply fertilizer to the prepared lawn areas at rates recommended by sod grower and lightly rake to incorporate into the soil.

8-02.3(16)A6b Sod Installation

1. Moisten sod bed and roll lightly for compaction.
2. Lay sod strips per supplier's instructions. Tightly butt joints, trim edges to conform to smooth curves and straight lines of pavement. Sod is to be flush with paved surfaces after settlement. Avoid gaps and overlaps and stagger sod joints in a brick-like fashion.
3. Remove any bumps, undulations, or low-high spots with a light rolling.
4. Water daily for a minimum of two weeks to prevent dehydration.

5. Protect all turf areas by erecting temporary fences, barriers, signs, etc. as necessary to prevent trampling.
6. Do not work in, over, or adjacent to planting areas without proper protection and safeguards.

8-02.3(16)B Lawn Establishment

Section 8-02.3(16)B has been deleted and superseded with the following:

(*****)

8-02.3(16)B Lawn Establishment and Final Acceptance

The Contractor shall maintain all new lawn areas in this project; shall be responsible for the survival of turf in acceptable condition and shall maintain all new lawn areas in a neat and orderly fashion until Final Acceptance of the project by the City. The period for Final Acceptance shall be no sooner than the second mowing. The Contractor will be held responsible for all damage or loss caused by his inattention or carelessness. The Contractor shall repair damage caused by traffic, vandalism, weather or other outside causes.

8-02.3(16)B1 Establishment Period

The Establishment Period will commence on the date of Preliminary Acceptance and will extend to Substantial Completion or Final Acceptance by the City of landscape work, whichever is later. Maintenance during this period will include:

1. Watering: Water areas of new turf so they receive adequate water for survival of the plant in a healthy position.
2. Lawns shall be fertilized every six weeks from March through September per Grower's written recommendations. Lawns shall be maintained weed-free.
3. Lawns are to be mowed weekly or as needed to maintain a neat appearance. All grass clippings shall be removed from the site. Maximum height of lawn shall not exceed three inches.
4. Protect all lawn areas against damage, including erosion and trespassing, by providing and maintaining proper safeguards.
5. Debris Control: Debris control shall be accomplished in all landscaped lawn areas on a regular basis, at least weekly or more often where necessary. This will include leaf fall control in Fall period. Policing for paper and litter in all areas shall be conducted at least weekly. During the Fall period leaves, windblown into gutters and catch basins, are considered as litter and shall be removed as debris.

8-02.3(16)B2 Guarantee

All new turf areas shall be guaranteed by the Contractor to be in a healthy condition for a period of one year from the date of Final Acceptance.

8-02.3(16)B3 Final Acceptance

Acceptance of lawn planting as specified shall be based on a uniform stand of grass and a uniform grade at the time of final inspection.

Final inspection of the work of the Section will be made at the time of the Final Inspection of the entire project or earlier, if approved by the Engineer. A final punch list will be issued. Final Acceptance of the new turf areas which are the responsibility of the Contractor will be contingent upon Final Acceptance of the entire project or at the determination of the City if earlier than Final Acceptance of the entire project.

DIVISION 9 MATERIALS

9-30 WATER DISTRIBUTION MATERIALS

9-30.1(1) Ductile Iron Pipe

Section 9-30.1(1) is revised to read as follows:

(*****)

1. Ductile iron pipe shall be centrifugally cast in 18 or 20 foot nominal lengths and meet the requirements of AWWA C151. Ductile iron pipe shall have a double thick cement mortar lining and a 1-mil thick seal coat meeting the requirements of AWWA C104. Ductile iron pipe shall be minimum Standard Thickness Class 52 or the thickness class as shown in the Plans. Flanged ductile iron pipe shall be Class 53 per AWWA C115.
2. Non-restrained joint shall be rubber gasket, push-on type joint (Tyton) or mechanical joint (M.J.) conforming to AWWA C111, unless otherwise specified.
3. Restrained joints shall be as specified in Section 9-30.2(6).
4. Flanged joints shall conform to ANSI B16.1, class 125 drilling pattern, rated for 250 psi working pressure. Flanged ductile iron pipe shall be Class 53 per AWWA C 115. Thicker Classes are acceptable.

The Contractor shall furnish certification from the manufacturer of the pipe and gasket being supplied that the inspection and all of the specified tests have been made and the results thereof comply with the requirements of the above referenced standards.

9-30.2 Fittings

9-30.2(1) Ductile Iron Pipe

Section 9-30.2(1) is supplemented and revised as follows:

(*****)

Fittings for ductile iron pipe shall be ductile iron conforming to AWWA C110, and AWWA C111 or AWWA C153 and shall be cement-lined conforming to AWWA C104. All water main fittings shall be ductile iron, short body, cement lined and for pressure rating of 350 psi for mechanical joint fittings and 250 psi for flange joint fittings, unless otherwise specified. Metal thickness and manufacturing process shall conform to applicable portions of ANSI/AWWA C110/A21.10. Mechanical joint, ductile iron, compact fittings 24 inches and less shall conform to ANSI A21.53 (AWWA C153). Flanged fittings, cast or ductile iron, shall conform to ANSI B16.1, class 125 drilling pattern.

Ductile iron fittings include: tees, crosses, wyes, bends, adapters, sleeves, plugs, caps, offsets, reducers, and ells.

Rubber gaskets for push-on joints (Tyton) or mechanical joint (M.J.) shall conform to ANSI A21.11 / AWWA C111. Gasket materials for flange joints shall be neoprene, Buna N, chlorinated butyl, or cloth-inserted rubber suitable for pressurized water service purposes. Type of connections shall be specified as push-on joint (Tyton), mechanical joint (M.J.), plain end (P.E.), flanged (FL), restrained

joint (RJ) and threaded.

Sleeves less than 12 inches in diameter shall be 12 inches minimum length and shall be mechanical joint. Sleeves greater than 12 inches in diameter shall be of the long body type and shall be 15 inches minimum length and shall be mechanical joint.

Where ductile iron pipe is to be joined to existing cast iron pipe of the same nominal size and the outside diameter of the existing cast iron pipe is 0.05 inches or less from the outside diameter of the ductile iron pipe being joined, the pipe shall be joined with a mechanical joint sleeve.

Where ductile iron pipe is to be joined to existing cast iron pipe of the same nominal size and the outside diameter of the existing cast iron pipe conforms to AWWA 1908 classifications A, B, C, D, or F, the pipe shall be joined with a transition mechanical joint sleeve having a single-piece casting. Threaded pipe and flanges combinations shall not be used.

Bolts in piping and fittings shall be malleable iron, Cor-ten or stainless steel. Bolts and nuts for flanged pipe and fittings shall conform in size and length with ANSI/AWWA C111/A21.11. Stainless steel bolts shall meet the requirements of ASTM A-307, Grade A. Shackle rods shall be Cor-ten or stainless steel all thread 316SS. Stainless steel nuts and bolts shall be type 316SS.

Contractor shall provide Manufacturer's Certificate of Compliance in accordance with Section 1-06.3 Manufacturer's Certificate of Compliance of the Standards Specifications for all fittings and bolts to be used.

9-30.2(2) Galvanized Iron Pipe

Section 9-30.2(2) is a new section and shall read as follows:

(*****)

Where galvanized iron pipe is specified, the pipe shall be standard weight, Schedule 40, steel pipe per Standard Specifications for black and hot-dipped, zinc coated (galvanized) welded and seamless steel pipe for ordinary uses (ASTM A-120). Fittings shall be screwed malleable iron galvanized per ANSI B16.3.

9-30.2(3) Steel Casing Pipe

Section 9-30.2(3) is a new section and shall read as follows:

(*****)

Steel casing shall be black steel pipe conforming to ASTM A 53. Before installation, coat casing exterior with shop-applied anticorrosive coating conforming to AWWA C210. Minimum coating thickness shall be 16 mils dry film thickness (DFT); however, thickness shall not exceed manufacturer's recommended thickness. Coating type shall be a polyamide epoxy-coal tar equal to Tnemec Hi-Build Theme-Tar, Series 46H-413.

Casing wall thickness shall be 0.250 inch for casings 24 inches or less in diameter and 0.375 inch for casings over 24 inches in diameter.

Carrier pipe for water main shall be Restrained Joint Ductile Iron, Class 52.

9-30.2(4) Steel Pipe

Section 9-30.2(4) including title is revised as follows:

(*****)

9-30.2(4) Spacers and Seals for Steel Casing Pipe

Casing spacers shall be "centered positioning" type bands at least 12 inch in width, and shall be either stainless steel or heavy duty fusion bonded epoxy coated steel. Runners shall be 2-inch wide glass reinforced plastic securely bonded to the spacer, and shall be aligned on the spacer along the axis of insertion of the water main into the casing pipe. Runner length shall approximate the width of the spacer. Securing the spacer to the water main shall be in accordance with the manufacturer's instruction. The height of the risers and runners combined shall be sufficient to keep the carrier pipe bell, couplings or fittings at least 0.75 inch from the casing pipe wall at all times and provide at least 1-inch clearance between the runners and the top of the casing wall, to prevent jamming during

installation.

Acceptable spacers and end seals manufacturers are Pipeline Seal and Insulator model S12G-2 for stainless steel and model C12G-2, C8G-2 for fusion-bonded and coated steel, Cascade Waterworks Mfg. Co., Advance Products & Systems, Inc. or approved equal.

9-30.2(6) Restrained Joint

Section 9-30.2(6) including title is revised as follows:

(*****)

9-30.2(6) Restrained Joint Pipe and Fittings

Restrained joints (RJ) ductile iron pipe and fittings, where required on the plans, shall be flexible after assembly and be able to be disassembled. Restrained joints shall meet the following criteria:

1. The restrained joint shall have a positive metal to metal contact locking system without the use of gripping teeth. Gaskets for push-on joint pipe with integrally molded steel or metal teeth or locking segments shall not be allowed as substitutes for restrained-joint pipes.
2. The joint restraint system for the pipe shall be the same as the joint restraint system for the pipe fittings, except as provided in item 3 below.
3. Where restrained joint fittings required on the plans cannot be furnished or where restrained jointed fittings are required in areas that are known to be subject to location adjustments, the Contractor may submit a lay plan showing mechanically jointed fittings with wedge restraint glands for approval. Mechanically jointed pipe with wedge restraint glands shall not be substituted for restrained joint pipe.

9-30.2(7) Bolted, Sleeve-Type Couplings for Plain End Pipe

Section 9-30.2(7) is revised as follows:

(*****)

Transition couplings, reducing couplings, transition reducing couplings, sleeves, flexible couplings shall be compression type by pipe manufacturer: Romac or Ford or approved equal. Stainless steel bolts require anti-seize compound. Heavy hex nuts shall be used.

The long body pattern with a minimum center ring or center sleeve length of 12-inches for pipe less than 12 inches in diameter and equal to or greater than the pipe diameter for pipe greater than 12 inches in diameter. Solid sleeves (greater than 12 inch diameter) shall be a 15 inch minimum length.

APPENDIX A

PERMITS

**DEPARTMENT OF COMMUNITY
AND ECONOMIC DEVELOPMENT**



PLANNING DIVISION
CERTIFICATE OF EXEMPTION
FROM SHORELINE SUBSTANTIAL DEVELOPMENT

DATE: June 18, 2018

PROJECT NUMBER: LUA18-000277, ECF, SME

PROJECT NAME: Kennydale Lakeline Assessment

PROJECT MANAGER: Clark H. Close, Senior Planner

APPLICANT: City of Renton
David Christensen
1055 S Grady Way
Renton, WA 98057

PROJECT LOCATION: Renton Kennydale Area. Along Lake Washington from approximately 2725 Mountain View Ave N (APN 0623059005) to 3905 Lake Washington Blvd N (APN 3342700011).

SEC-TWN-R: NE06-23-5, SE31-24-5 and NW05-23-5

LEGAL DESCRIPTION: Not Applicable (multiple locations)

WATER BODY: Lake Washington Reach E

PROJECT DESCRIPTION: The applicant is requesting a Shoreline Exemption and Environmental (SEPA) Review to evaluate the condition of the Kennydale Lakeline Sewer System. The sewer line is located in the Residential-8 zone in Lake Washington. During the 2018 summer fish window, the project proposes to allow the City of Renton Wastewater Utility to complete a physical inspection of the sewer pipeline at up to thirteen (13) locations, perform pipe sampling, install manholes, and complete pipe cleaning in and along Lake Washington to determine what is needed to properly maintain the system and evaluate replacement options. The results of the evaluation would determine the remaining useful life of the system and may result in recommendations for future improvements. Condition evaluation would include ultrasonic thickness testing at five (5) locations, pipe sampling via the collection of a single coupon on the mainline, collection of up to three (3) coupons on lateral lines, and temporary access to two (2) existing manholes for lake line cleaning. Two (2) additional locations would be accessed, pipe sections would be removed for evaluation, and the section would be replaced with manholes below grade. The project locations are aquatic and all work would be staged from a floating barge and/or boat. Divers would be deployed from the barge/boat to expose the sewer lake line and conduct maintenance activities.

The KLSS was originally constructed in 1972 to provide sanitary sewer service to approximately 55 to 60 lakefront homes along Lake Washington from the north end of Gene Coulon Memorial Beach Park to just south of May Creek. The pipeline evaluation and associated work would be located in Lake Washington Reach E, in select areas with moderate landslide hazards, and in an area with potential cultural resources. Coordination with property owners is anticipated as part of the work.

Pursuant to the City of Renton's Environmental Ordinance and SEPA (RCW 43.21C, 1971 as amended), on (ERC meeting date) the Environmental Review Committee issued a Determination of Non-Significance (DNS) for the Kennydale Lakeline Assessment. A 14-day appeal period commenced on May 21, 2018 and ended on June 8, 2018. No appeals of the threshold determination were filed.

EXEMPTION JUSTIFICATION: An exemption from a Shoreline Management Substantial Development Permit is hereby **Approved** on the proposed project in accordance with RMC 4.9.190C 'Exemption from Permit System' and for the following reasons:

WAC 173.27.040 (2)(b) - Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements. "Normal maintenance" includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. "Normal repair" means to restore a development to a state comparable to its original condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resource or environment. Replacement of a structure or development may be authorized as repair where such replacement is the common method of repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including but not limited to its size, shape, configuration, location and external appearance and the replacement does not cause substantial adverse effects to shoreline resources or environment;

The proposed development is:
Consistent with the policies of the Shoreline Management Act.

Not Applicable to the guidelines of the Department of Ecology where no Master Program has been finally approved or adopted by the Department.

Consistent with the City of Renton Shoreline Master Program.

SIGNATURE & DATE OF DECISION:

DocuSigned by:
Jennifer T. Henning
1522F84079C3492...

Jennifer Henning, AICP, Planning Director
Department of Community & Economic Development

6/18/2018 | 12:01 PM PDT

Date

RECONSIDERATION: Within 14 days of the decision date, any party of record may request that the decision be reopened by the approval body. The approval body may modify his decision if material evidence not readily discoverable prior to the original decision is found or if he finds there was misrepresentation of fact. After review of the reconsideration request, if the approval body finds sufficient evidence to amend the original decision, there will be no further extension of the appeal period. Any person wishing to take further action must file a formal appeal within the 14 day appeal time frame.

APPEALS: The administrative land use decision will become final if not appealed in writing together with the required fee to: Hearing Examiner, City of Renton, 1055 South Grady Way, Renton, WA 98057 on or before 5:00 pm, on **July 2, 2018** (RCW 43.21.C075(3); WAC 197-11-680). RMC 4-8-110 governs appeals to the Hearing Examiner and additional information regarding the appeal process may be obtained from the Renton City Clerk's office, Renton City Hall, 7th Floor, (425) 430-6510.

EXPIRATION: Two (2) years from the date of decision (date signed).

Attachments: SEPA Environmental Review Report with Exhibits 1-6

cc: Dave Christensen (City of Renton) – Contact
Robert Burr - Party of Record
William Hudson - Party of Record
Milt Reimers - Party of Record
Thomas Dahlby - Party of Record
WC Stoneman - Party of Record
Darius & Vicki Richards - Party of Record

**DEPARTMENT OF COMMUNITY
AND ECONOMIC DEVELOPMENT**



ENVIRONMENTAL REVIEW COMMITTEE REPORT

ERC MEETING DATE: May 21, 2018

Project Name: Kennydale Lakeline Assessment

Project Number: PR18-000184

**Land Use Permit
Number:** LUA18-000277, ECF, SME

Project Manager: Clark H. Close, Senior Planner

Applicant/Contact: David Christensen, Wastewater Utility Manager / City of Renton /
dchristensen@rentonwa.gov / 1055 S Grady Way 5th Fl. Renton, WA 98057

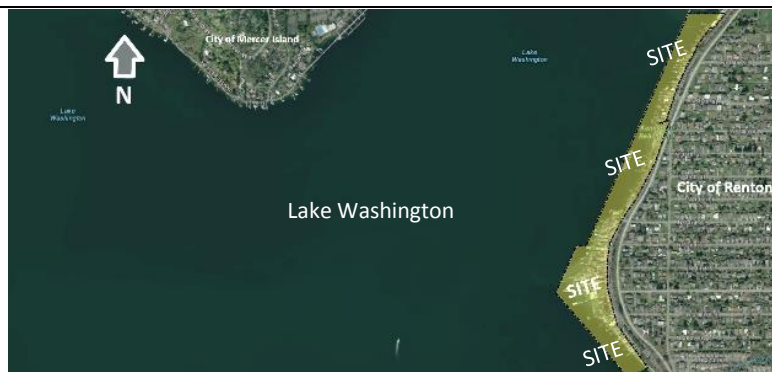
Project Location: Renton Kennydale Area. Along Lake Washington from approximately 2725 Mountain View Ave N (APN 0623059005) to 3905 Lake Washington Blvd N (APN 3342700011).

Project Summary: The applicant is requesting a Shoreline Exemption and Environmental (SEPA) Review to evaluate the condition of the Kennydale Lakeline Sewer System. During the 2018 summer fish window, the project proposes to allow the City of Renton Wastewater Utility to complete a physical inspection of the pipe, perform pipe sampling, install manholes, and complete pipe cleaning in and along Lake Washington to determine what is needed to properly maintain the system and evaluate replacement options. The results of the evaluation would determine the remaining useful life of the system and may result in recommendations for future improvements. The pipeline evaluation and associated work would be located in Lake Washington Reach E, in select areas with moderate landslide hazards, and in an area with potential cultural resources. Coordination with property owners is anticipated with the work.

Exist. Bldg. Area SF: N/A **Proposed New Bldg. Area (footprint):** None
Proposed New Bldg. Area (gross): None

Site Area: N/A **Total Building Area to Remain GSF:** N/A

**STAFF
RECOMMENDATION:** **Staff Recommends that the Environmental Review Committee issue a Determination of Non-Significance (DNS).**



Project Location Map
ERC Report_Kennydale Lakeline AssessmentKennydale Lakeline Assessment

PART ONE: PROJECT DESCRIPTION / BACKGROUND

The applicant, City of Renton Wastewater Utility Systems, is requesting a Shoreline Exemption and Environmental (SEPA) Review to assess the condition of the Kenneydale Lakeline Sewer System (KLSS). The sewer line is located in the Residential-8 zone in Lake Washington (*Exhibit 2*). This maintenance project is intended to complete a physical inspection of the sewer pipeline at up to thirteen (13) locations to determine what is needed to properly maintain the system and evaluate replacement options. Condition evaluation would include ultrasonic thickness testing at five (5) locations, pipe sampling via the collection of a single coupon on the mainline, collection of up to three (3) coupons on lateral lines, and temporary access to two (2) existing manholes for lake line cleaning. Two (2) additional locations would be accessed, pipe sections would be removed for evaluation, and the section would be replaced with manholes below grade. The project locations are aquatic and all work would be staged from a floating barge and/or boat. Divers would be deployed from the barge/boat to expose the sewer lake line and conduct maintenance activities.

In general, the work plan would involve the installation of site isolation best management practices (BMPs), followed by placement of a shoring system, if required, and pipeline excavation using a suction dredge. Once the pipeline is exposed the pipeline would be evaluated and sediment sampling or corrosion/thickness measurement may occur. Depending on the location, one of three types of actions would occur at this point: either 1) a pipeline sample or coupon would be removed for corrosion and thickness testing and repaired with compression fitting; 2) ultrasonic pipeline thickness testing; or 3) a section of pipeline would be removed for testing, and replaced with a manhole. These coupons, collected from several locations, would provide valuable information on the condition of the lake line pipe. One coupon would be collected near 3703 Lake Washington Blvd N. This coupon is at a relatively high elevation along the lake line that is more likely to have been exposed to corrosive atmosphere. Additional coupons would also be collected on laterals in front of 2905 Mountain View Ave N, 3107 Mountain View Ave N, and 3703 Lake Washington Blvd N. Pipeline sampling at these locations may also impact the adjacent properties at 2909 Mountain View Ave N and 3103 Mountain View Ave N (*Exhibits 3 and 4*). These laterals are also at relatively high elevations along the lake line and experience intermittent gas exposure. These coupons would supply information about pipe corrosion under adverse conditions. The results of the evaluation would aid in formulating a conservative estimate of the remaining useful life and vulnerability of the system and may result in recommendations for future improvements. Following pipeline repair, the substrate would be returned to pre-construction conditions and BMPs would be removed. No substantial changes would be made to the overall structure or layout of the pipeline and all elements would be below final grade.

The KLSS was originally constructed in 1972 to provide sanitary sewer service to approximately 55 to 60 lakefront homes along Lake Washington from the north end of Gene Coulon Memorial Beach Park to just south of May Creek. The pipeline evaluation and associated work would be located in Lake Washington Reach E, in select areas with moderate landslide hazards, and in an area with potential cultural resources.

The proposed work follows the Phase 2A of the Lake Line Condition Assessment which included ultrasonic thickness testing and visual inspection of exposed portions of the lake line as well as survey, bulkhead assessment and hydraulic assessment. As part of the hydraulic assessment it was concluded that the hydraulic capacity of the lake line is reduced, indicative of partial blockages in two general areas. These partial blockages are likely the result of solids settlement caused by velocities below those needed for self-cleaning. Current access from the shoreline for cleaning is limited, and settled solids cannot effectively be

removed using the shore-based cleaning protocol. Therefore to address these partial blockages, it is proposed that three (3) existing submerged manholes on the lake line be temporarily accessed for cleaning. Temporary access from the lake surface would be obtained with steel riser sections connected to the manhole structure.

Once accessed, wastewater from the manholes and adjacent sections of the lake line would be removed prior to cleaning. It is proposed that the cleaning process would use a jetter hose to flush solids toward the manhole where they would be removed by a vacuum. Closed circuit television (CCTV) inspection would be performed before and after cleaning to evaluate the effectiveness of the cleaning procedure. Properties at 2827, 2909, 3111, and 3119 Mountain View Ave N, would experience short-term construction impacts due to their proximity to the manhole location. The two (2) new proposed manholes would be at low points along the undulating sewer to facilitate solids removal. Their locations would facilitate cleaning of a partial blockage believed to be impacting the southern portion of the pipe. The three (3) existing submerged manholes would be used to clean the northern blockage. The proposed manholes would be buried to comply with anticipated permit requirements.

Flexible couplings would be installed on the lake line approximately 10 feet from the manhole to enable localized lowering of the sewer profile and ensure that the manhole cover is below the lakebed. This would allow the manholes to be installed without permanently modifying the lakebed, which would trigger a more intensive permitting process and likely preclude this work from being performed in this summer. The proposed work would be conducted between July 16, 2018 and September 30, 2018 (work windows for fish protection for Lake Washington) and would include a condition assessment on parts of the pipe not currently exposed. This assessment would enable additional analyses of the pipe material to determine the amount of corrosion and remaining useful life of the pipe to aid in the City's strategic planning process.

A summary of the work plan includes the following steps:

1. Surround the work area with a floating silt curtain, starting with a collapsed curtain and expanding it so as to eliminate fish from the work area. Once expanded to enclose the work area, the bottom of the silt curtain would be anchored to the lake bed with sandbags at four foot intervals. The curtain would remain in place throughout the work and for a sufficient period after the work to allow the vast majority of sediments to settle.
2. Conduct turbidity monitoring adjacent to the work zone before, during, and after the work. Results would be documented and any noted exceedances would lead to a) adjustment of work practices, or b) stoppage of the work until suitable adjustments can be made.
3. Place a shoring box along the pipeline surrounding the excavation zone. The shoring box would settle down to the base of the excavation as the work progresses.
4. Expose the buried pipeline by suction dredging within the shoring system. Dredging would be conducted using a boat/barge-mounted trash pump. Excavated materials would be placed outside the shoring but within the silt curtain perimeter.
5. Reduced water usage would be requested of home owners adjacent to the sewer prior to commencement of work. Flush the pipeline with municipal water to remove most of the sewage prior to cutting the pipe.
6. Cut a 4-6-inch diameter hole from the pipe for thickness and corrosion testing. Seal the hole with a pipe repair coupling.

7. Cut through the pipe at the downstream end of the work zone and place a plate to seal the downstream pipe from excessive lake water intrusion. Cut through the pipe at the upstream end of the work zone and removing the existing pipe between the cuts.
8. Replace the removed pipe section with a new pipe segment that includes a manhole to facilitate future cleaning operations. The manholes would be left below the lake bed (*Exhibit 5*). Install repair couplings to join and seal the replacement segment to the existing pipeline.
9. Return the sewer system to normal operation. Check for leaks and ensure KLSS is functioning properly.
10. Suction dredge excavated materials back into the excavation zone while removing the shoring system. Shovel/rake/hydrojet finished surface to original grade.
11. Wait until sediments have settled from the work area before removing the floating silt curtain.

Several permits would be required for either maintenance of the existing line or for conducting a conditions assessment for the existing line, which would include in-water work and disturbance of the lakebed. The following other government approvals/permits would be required: US Army Corp of Engineers (“Corps”) permit to meet requirements of the Rivers and Harbors Act Section 10 and Section 404 of the Clean Water Act, Hydraulic Project Approval (HPA) for projects located near or within a Water of the State, Section 401 Water Quality Certification from Washington State Department of Ecology (“Ecology”) (possibly required), and Hydraulic Project Approval (HPA) from Washington Department of Fish & Wildlife (WDFW). The Joint Aquatic Resource Permit Application (JARPA) process is used to request the HPA, CWA Section 401 Certification, Section 404, and Section 10 permits. Issuance of Section 404 and Section 10 permits by the Corps is contingent on completion of the National Environmental Policy Act (NEPA) and the federal Endangered Species Act (ESA) processes. Additional SEPA review is anticipated for future improvements, maintenance, or replacement of the Kennydale system after the scope and schedule for those improvements are known.

PART TWO: ENVIRONMENTAL REVIEW

In compliance with RCW 43.21C.240, the following environmental (SEPA) review addresses only those project impacts that are not adequately addressed under existing development standards and environmental regulations.

A. Environmental Threshold Recommendation

Based on analysis of probable impacts from the proposal, staff recommends that the Responsible Officials:

Issue a DNS with a 14-day Appeal Period.

B. Exhibits

- Exhibit 1 ERC Report
- Exhibit 2 Location Map
- Exhibit 3 Vicinity Map
- Exhibit 4 Location Reference Table
- Exhibit 5 Lake Line Manhole Plans
- Exhibit 6 Environmental Conditions Report

C. Environmental Impacts

The proposal was circulated and reviewed by various City Departments and Divisions to determine whether the applicant has adequately identified and addressed environmental impacts anticipated to occur in conjunction with the proposed development. Staff reviewers have identified that the proposal is likely to have the following probable impacts:

1. Earth

Impacts: The project site is located in Lake Washington, waterward of the Ordinary High Water Line. The KLSS corridor is approximately 4,800 linear feet (*Exhibit 6*). The shoreline in the proposed work area runs primarily parallel to the highly modified shoreline, approximately 4,500 linear feet. The shoreline consists of riprap, gabion walls, vertical bulkheads, gravel beaches from south of Coleman Point, at the Lake Washington Flush Station, north to May Creek. Overwater structures include docks associated with single-family residences and a log boom delineating the designated swimming area at Kenneydale Beach Park.

The adjacent uplands are residential, relatively flat and rolling. Slopes along the shoreline range from flat (less than 15 percent slope) to gently or moderately sloping (less than 40 percent slopes), with a majority of the shoreline having 15 to 25 percent slopes. Slopes in each project location are less than 1 percent, indicating low risks to the existing moderate landslide hazards. The project is not located near steep slopes and would not affect steep slopes. The bathymetry of the lake is gradual in the project vicinity with water depths between 6 and 20 feet.

The sediment characteristics underlying the water along the vessel routes in the study area include sand, gravel, and cobble, along with various combinations of these sediment types. Excavation would be limited to the volumes sufficient to expose the sewer pipe. Excavated areas would be no larger than 20 feet wide by 36 feet long by 6 feet deep. Up to approximately 279 cubic yards of material may be excavated. The applicant estimates between 5 and 234 cubic yards of excavation depending upon the activity proposed at each site. Material would be stockpiled inside the floating turbidity curtain. After completing inspection and repair at each location, excavated sediments would be used to return the lakebed to its original grade.

According to the applicant, no erosion is expected as a result of this project. Excavation and site restoration would occur over approximately five (5) working days at each location. A sediment curtain would be used to prevent material from being discharged beyond the project site. Excavation would be limited to the smallest amount necessary to expose the pipe and conduct inspections and/or make repairs.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

2. Air

Impacts: It is anticipated that some temporary air quality impacts associated with the assessment and excavation work of the KLSS would occur. The project would require a work barge/boat which includes water-jetting or suction dredge to perform underwater excavation. Emissions from project construction would be limited to roughly three (3) gasoline generators during daily operations plus outboard boat engines for site access and environmental monitoring during operations.

Upstream sewage would be diverted to Pump Station #14 wet well for storage and the pipeline would be flushed with freshwater prior to commencing with the work. This would ensure that no sewer gases are released into the environment. Should the work take long enough to fill the wet well, Vactor vacuum trucks would be available to empty the wet well and dispose of the sewage in another sewer service area. This would ensure that no waste would enter Lake Washington.

Maintenance of the equipment to meet State and Federal air quality requirements would serve to mitigate the potential adverse impacts. No further site specific mitigation for the identified impacts from typical vehicle and construction exhaust is required.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

3. Environmental Health

a. Environmental Health Hazards

Impacts: The project would include removing coupons from the sewer pipeline for testing. Best management practices related to the handling and storage of any environmental health hazards would be implemented during the sewer line inspection to avoid and minimize any potential hazards. The workers' health would be protected during demolition activities by applicable regulations regarding removal of hazardous materials from Washington State Department of Labor and Industries, the Environmental Protection Agency and the Washington State Department of Ecology.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

b. Noise

Impacts: Temporary, short-term impacts are anticipated from transit to and from the inspection site from outboard engines, the operation of water jet/suction dredge equipment, and generators required to operate the equipment or compressors providing air to underwater workers. Project-related noise is anticipated to attenuate to background levels within 283 feet of the project. No changes to noise levels would occur following the completion of the project. The equipment noise would be regulated through the City's adopted noise level regulations per Chapter 8-7, RMC. Permitted work hours in or near residential areas are restricted to the hours between seven o'clock (7:00) a.m. and eight o'clock (8:00) p.m. Monday through Friday. Work on Saturdays is restricted to the hours between nine o'clock (9:00) a.m. and eight o'clock (8:00) p.m. No work is permitted on Sundays. The applicant indicated that all the construction noise impacts are anticipated to occur during daylight hours. No unusual noise impacts are proposed, which would require further levels of mitigation.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

4. Aesthetics

Impacts: During inspection and repair activities, a barge/boat would be located at the site. These vessels would not be higher than 10 feet above the water level and would be onsite for up to five (5) days at each location. Upon completion, all structures and repair work on the sewer pipeline would be buried below grade in the bed of Lake Washington.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

5. Historic and Cultural Preservation

Impacts: In the SEPA Checklist (“Checklist”), the applicant indicated that there are no historic structures or sites present in the project area. However, historic and pre-historic settlements are known to have existed around Lake Washington. The proposed excavation, maintenance and repair activity would be limited to the disturbance area of the already buried pipeline within the lake bed. Probes would be used to confirm the pipe’s location prior to excavation. The Checklist concludes that because the pipeline was installed in 1972, all relevant lake sediments have been considered previously disturbed and thus the applicant is not anticipating the discovery of any historic artifacts in the anticipated area of excavation. If any historic or archaeological resources are encountered during implementation of maintenance activities, work would be stopped in accordance with RCW 27.53.060 and 27.44.020 and a professional archaeologist would be called to assess the significance of the find.

No comments were received from the Washington State Department of Archeology and Historic Preservation.

Mitigation Measures: No further mitigation recommended.

Nexus: N/A

D. Comments of Reviewing Departments

The proposal has been circulated to City Department and Division Reviewers. Where applicable, their comments have been incorporated into the text of this report.

- ✓ **Copies of all Review Comments are contained in the Official File and may be attached to this report.**

The Environmental Determination decision will become final if the decision is not appealed within the 14-day appeal period (RCW 43.21.C.075(3); WAC 197-11-680).

Environmental Determination Appeal Process: Appeals of the environmental determination must be filed in writing together with the required fee to: Hearing Examiner, City of Renton, 1055 South Grady Way, Renton, WA 98057, on or before 5:00 p.m. on June 8, 2018. RMC 4-8-110 governs appeals to the Hearing Examiner and additional information regarding the appeal process may be obtained from the City Clerk’s Office, Renton City Hall – 7th Floor, (425) 430-6510.



**DEPARTMENT OF COMMUNITY
AND ECONOMIC DEVELOPMENT**

ENVIRONMENTAL (SEPA) DETERMINATION OF NON-SIGNIFICANCE (DNS)

PROJECT NUMBER: LUA18-000277, ECF, SME

APPLICANT: David Christensen / (425) 430-7212 / 1055 Grady S Way, Renton, WA 98057

PROJECT NAME: Kennydale Lakeline Assessment

PROJECT DESCRIPTION: The applicant is requesting a Shoreline Exemption and Environmental (SEPA) Review to evaluate the condition of the Kennydale Lakeline Sewer System (KLSS). During the 2018 summer fish window, the project proposes to allow the City of Renton Wastewater Utility to complete a physical inspection of the pipe, perform pipe sampling, install manholes, and complete pipe cleaning along Lake Washington to determine what is needed to properly maintain the system and evaluate replacement options. The results of the evaluation would determine the remaining useful life and vulnerability of the system and may result in recommendations for future improvements. The KLSS was originally constructed in 1972 to provide sanitary sewer service to approximately 55 to 60 lakefront homes along Lake Washington from the north end of Gene Coulon Memorial Beach Park to just south of May Creek. The pipeline evaluation and associated work would be located in Lake Washington Reach E, areas of moderate landslide hazards and in an area of potential cultural resources. Coordination with property owners is anticipated as part of the work. The applicant submitted an Environmental Conditions Report with the application.

PROJECT LOCATION: Renton Kennydale Area. Along Lake Washington from approximately 2725 Mountain View Ave N (APN 0623059005) to 3905 Lake Washington Blvd N (APN 3342700011).

LEAD AGENCY: City of Renton
Environmental Review Committee
Department of Community & Economic Development

The City of Renton Environmental Review Committee has determined that it does not have a probable significant adverse impact on the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(c). This Determination of Non-Significance is issued under WAC 197-11-340. Because other agencies of jurisdiction may be involved, the lead agency will not act on this proposal for fourteen (14) days.

Appeals of the environmental determination must be filed in writing on or before 5:00 p.m. on June 8, 2018. Appeals must be filed in writing together with the required fee with: Hearing Examiner, City of Renton, 1055 South Grady Way, Renton, WA 98057. Appeals to the Examiner are governed by RMC 4-8-110 and more information may be obtained from the Renton City Clerk's Office, (425) 430-6510.

PUBLICATION DATE: MAY 25, 2018

DATE OF DECISION: MAY 21, 2018

SIGNATURES:



DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT

DocuSigned by:
Gregg A. Zimmerman
8C74AD07BEBB45E...
Gregg Zimmerman, Administrator
Public Works Department

5/17/2018 | 1:33 PM
Date

DocuSigned by:
Rick M. Marshall
78841F96A3D244D...
Rick M. Marshall, Administrator
Renton Regional Fire Authority

5/17/2018 | 1:13 PM
Date

DocuSigned by:
Kelly Beymer
66EC1E23C7044F7...
Kelly Beymer, Administrator
Community Services Department

5/17/2018 | 2:02 PM
Date

DocuSigned by:
Chip Vincent
49DB37706A9477...
C.E. Chip Vincent, Administrator
Department of Community & Economic Development

5/17/2018 | 1:32 PM
Date



REFERENCE NUMBER:
 APPLICANT NAME: City of Renton, WA
 PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
 LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
 SHEET 1 OF 7
 DATE: 1-31-2018

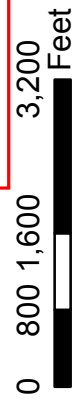
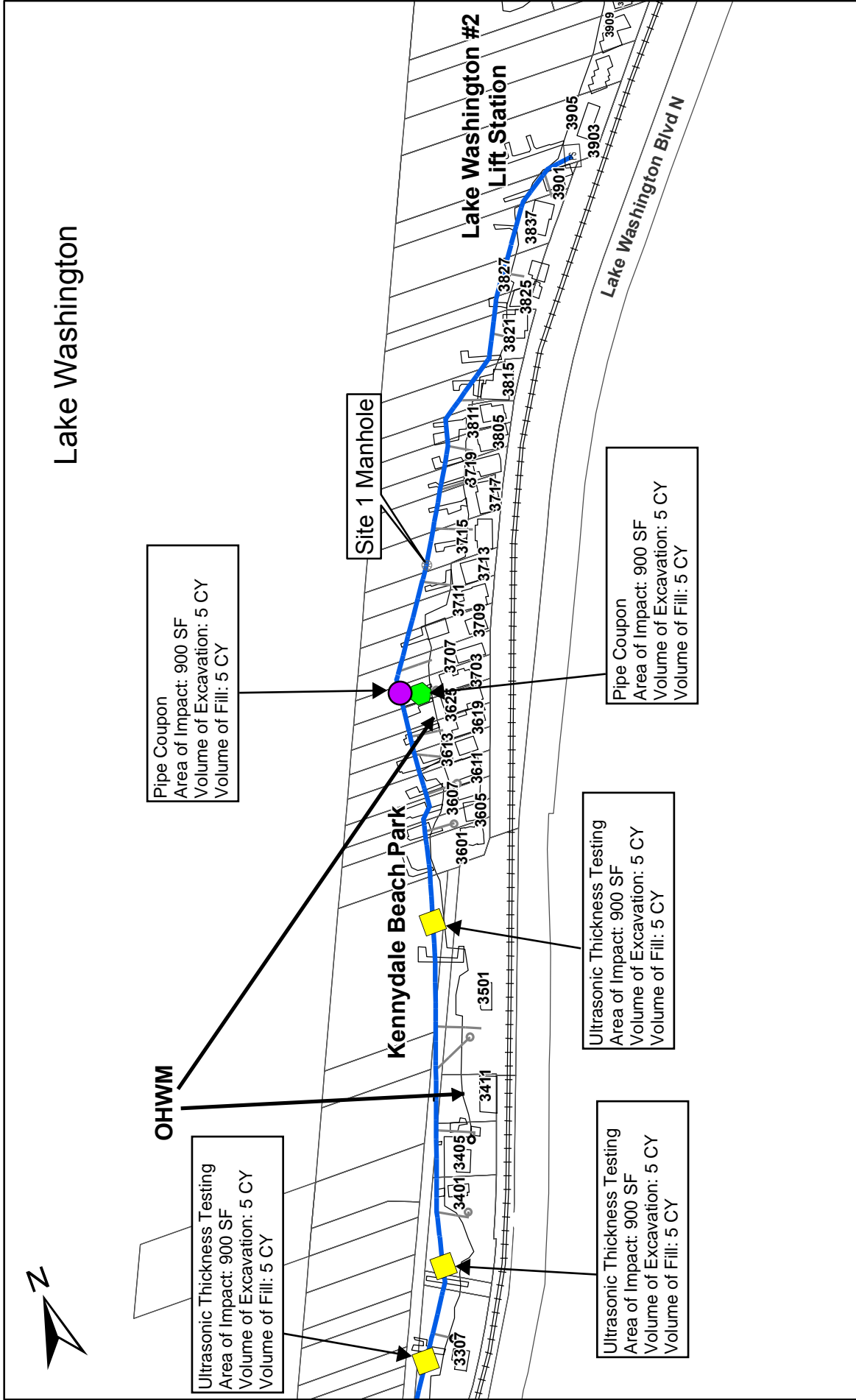


FIGURE 1
LOCATION MAP

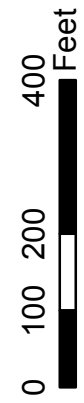
EXHIBIT 2



REFERENCE NUMBER:
APPLICANT NAME: City of Renton, WA
PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
SHEET 3 OF 7
DATE: 1-31-2018

- Legend**
- Mainline Coupon
 - Ultrasonic Thickness Testing
 - ◆ Lateral Coupon

FIGURE 3
VICINITY MAP

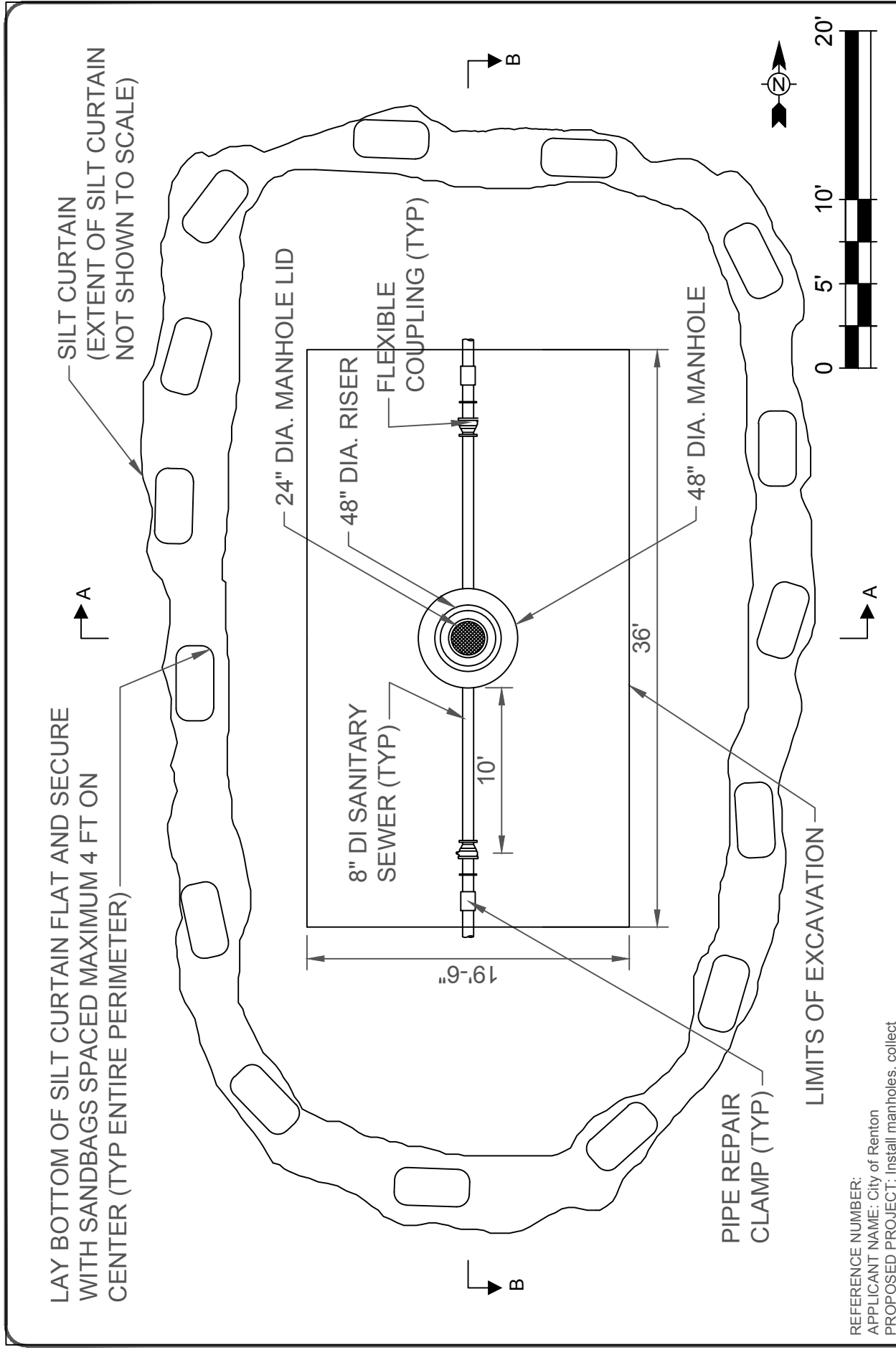


Work Performed	Approximate Latitude/Longitude	Parcels Impacted	Addresses
Manhole Installation	47.517663,-122.210646	3342103985	2905 Mountain View Ave N
		3342103953	2909 Mountain View Ave N
		3342104009	2827 Mountain View Ave N
Main Line Coupon	47.519782,-122.210761	3342103860	3111 Mountain View Ave N
		3342103855	3115 Mountain View Ave N
		3342103845	3119 Mountain View Ave N
Lateral Coupon	47.524637,-122.207548	3342700270	3703 Lake Washington Blvd N
		3342103985	2905 Mountain View Ave N
		3342103953	2909 Mountain View Ave N
Ultrasonic Thickness Testing	47.519402,-122.210915	3342103890	3103 Mountain View Ave N
		3342103880	3107 Mountain View Ave N
		3342700270	3703 Lake Washington Blvd N
Ultrasonic Thickness Testing	47.524635,-122.207415	3342103895	3101 Mountain View Ave N
		3342103805	3213 Mountain View Ave N
		3124059077	3307 Lake Washington Blvd N
Ultrasonic Thickness Testing	47.522364,-122.208507	3124059076	3401 Lake Washington Blvd N
		3342103580	3501 Lake Washington Blvd N

REFERENCE NUMBER:
 APPLICANT NAME: City of Renton, WA
 PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.

LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
 SHEET 4 OF 7
 DATE: 1-31-2018

Figure 4
Location Reference Table



LAY BOTTOM OF SILT CURTAIN FLAT AND SECURE WITH SANDBAGS SPACED MAXIMUM 4 FT ON CENTER (TYP ENTIRE PERIMETER)

SILT CURTAIN (EXTENT OF SILT CURTAIN NOT SHOWN TO SCALE)

24" DIA. MANHOLE LID

48" DIA. RISER

8" DI SANITARY SEWER (TYP)

FLEXIBLE COUPLING (TYP)

48" DIA. MANHOLE

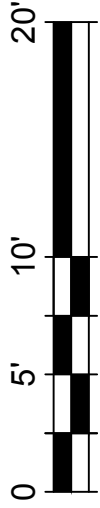
19'-6"

10'

36'

PIPE REPAIR CLAMP (TYP)

LIMITS OF EXCAVATION

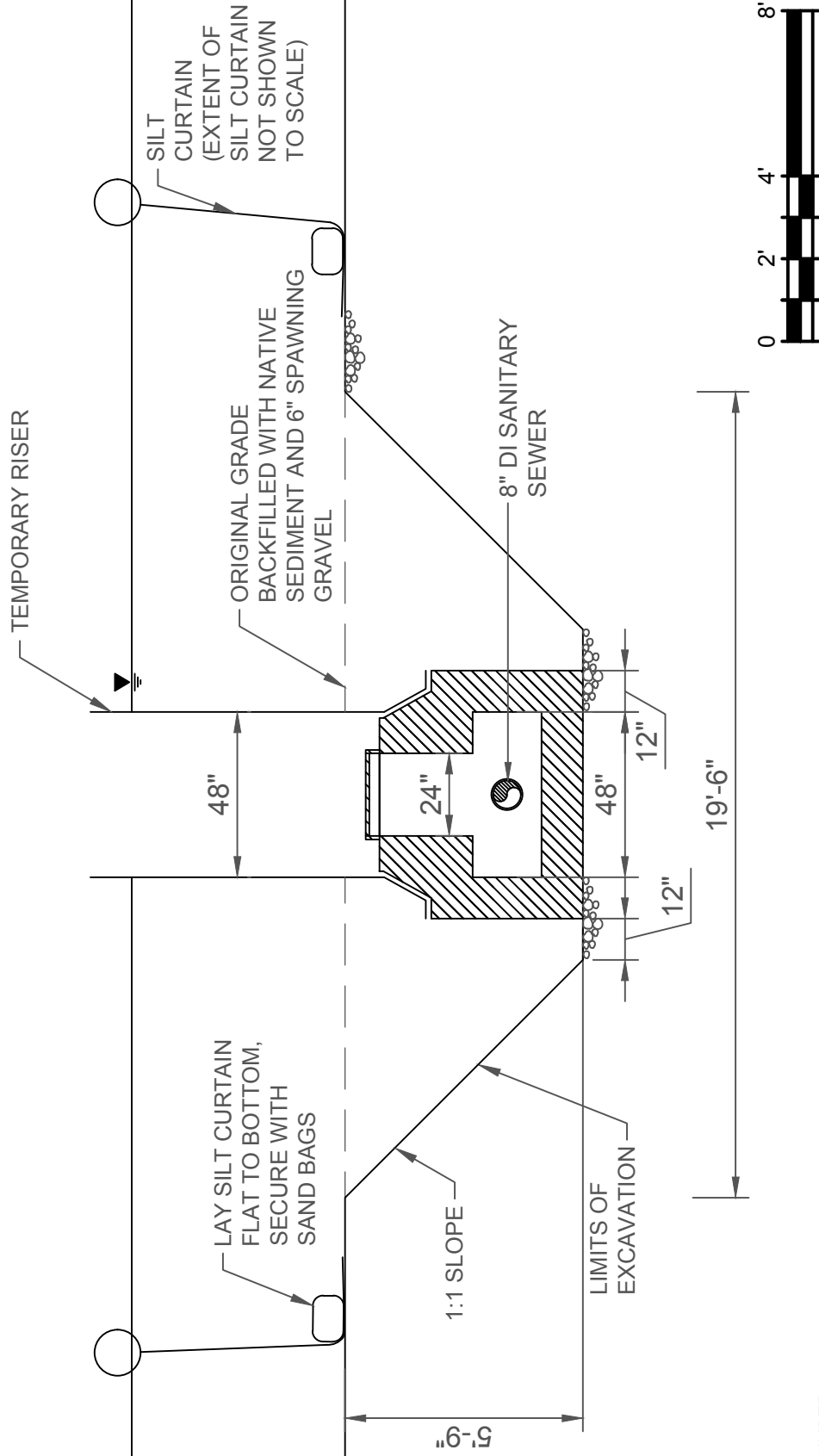


TETRA TECH
 www.tetratech.com
 1420 FIFTH AVENUE, SUITE 600
 SEATTLE, WA 98101
 206.883.9300

CITY OF RENTON
LAKE LINE MANHOLE PLAN

FIGURE 5

REFERENCE NUMBER:
 APPLICANT NAME: City of Renton
 PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
 LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
 SHEET 5 OF 7
 DATE: 1-31-2018

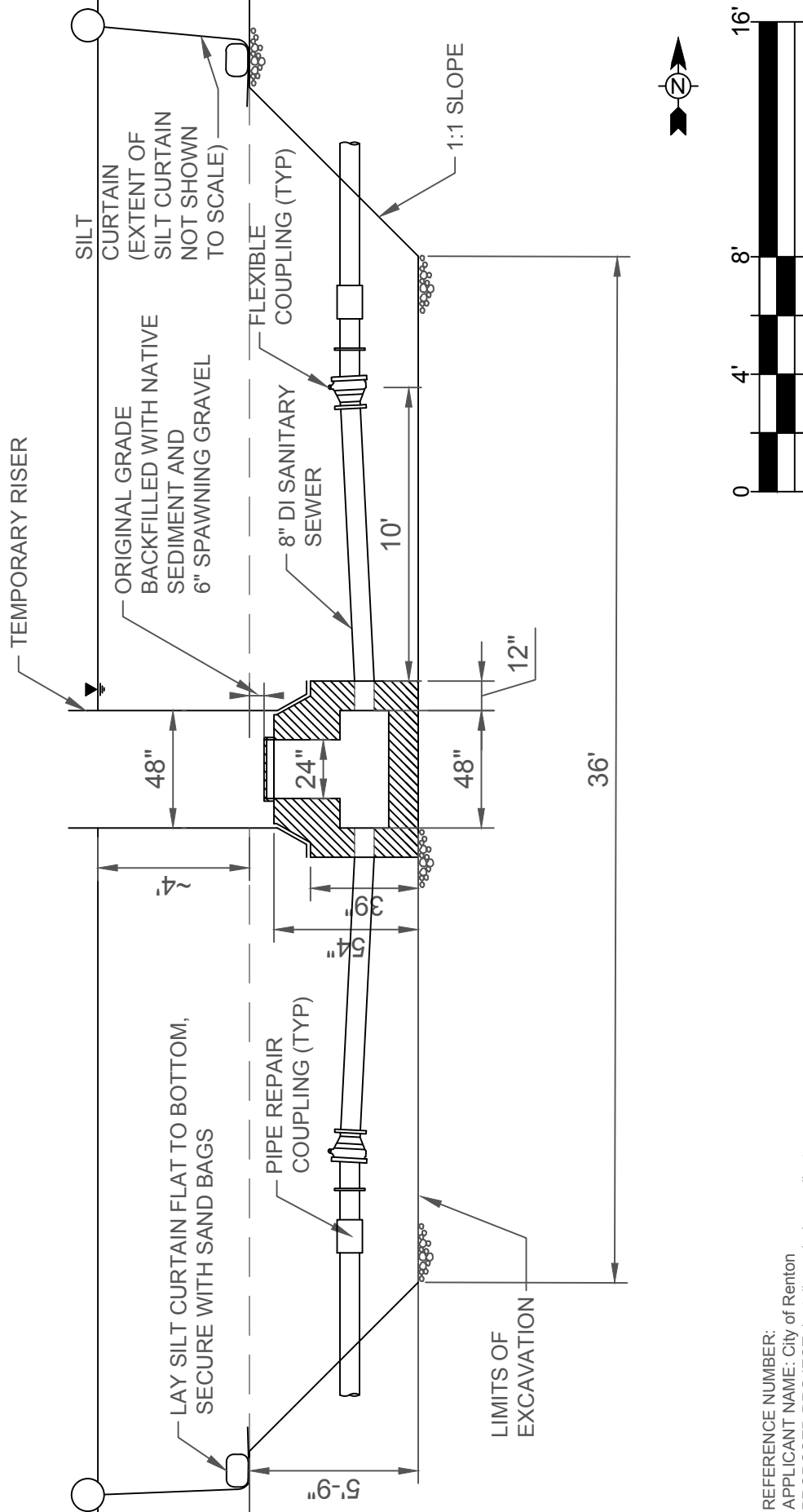


REFERENCE NUMBER:
 APPLICANT NAME: City of Renton
 PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
 LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
 SHEET 6 OF 7
 DATE: 1-17-2018

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 1420 FIFTH AVENUE, SUITE 600
 SEATTLE, WA 98101
 206.883.9300

CITY OF RENTON
LAKE LINE MANHOLE SECTION A-A

FIGURE 6



CITY OF RENTON
**LAKE LINE MANHOLE
 SECTION B-B**

FIGURE 7

TETRA TECH
 www.tetratech.com
 1420 FIFTH AVENUE, SUITE 600
 SEATTLE, WA 98101
 206.883.9300

REFERENCE NUMBER:
 APPLICANT NAME: City of Renton
 PROPOSED PROJECT: Install manholes, collect pipe coupons, and perform ultrasonic thickness testing on sewer lake line.
 LOCATION: Lake Washington between 2727 Mountain View Ave N and 3903 Lake Washington Blvd N, Renton, WA 98056
 SHEET 7 OF 7
 DATE: 1-31-2018



CONFLUENCE

ENVIRONMENTAL COMPANY



Kennydale Lakeline Sewer System ENVIRONMENTAL CONDITIONS REPORT

Prepared for:
City of Renton
April 6, 2017





HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: June 18, 2018
Project End Date: June 17, 2023

Permit Number: 2018-4-426+01
FPA/Public Notice Number: N/A
Application ID: 14975

PERMITTEE	AUTHORIZED AGENT OR CONTRACTOR
City of Renton: Utility Systems Division ATTENTION: David Christensen 1055 S Grady Way Renton, WA 98057	Confluence Environmental Company ATTENTION: Chris Czesla 146 N Canal St Seattle, WA 98103-8652

Project Name: Kennydale Lakeline Sewer System Evaluation

Project Description: This maintenance project is intended to clean the pipeline and evaluate sewer pipeline conditions at up to thirteen locations. Condition evaluation will include ultrasonic thickness testing at five locations, collection of a single coupon on the mainline, collection of up to three coupons on lateral lines, and temporary access at three existing manholes for lakeline cleaning. Two additional locations will be accessed, pipe sections will be removed for evaluation, and the sections will be replaced with manholes below grade. The project locations are aquatic and all work will be staged from a floating barge or boat. Divers will be deployed from the boat/barge to expose the sewer lakeline and conduct maintenance activities. Work at each location will follow a similar approach which will be customized based on site conditions. In general, the work plan will involve the installation of site isolation best management practices (BMPs), followed by placement of a shoring system, if required, and pipeline excavation using a suction pump. Following pipeline repair, the substrate would be returned to pre-construction conditions and BMPs would be removed.

PROVISIONS

1. This STANDARD Hydraulic Project Approval (HPA) is issued for the inspection and maintenance of an underground sewer line at up to 13 locations waterward of the ordinary high water line in Lake Washington. Washed, well-rounded 2" minus gravels will be placed over the tops of the restored excavation locations, as needed, to ensure no net loss of fish habitat.

TIMING - PLANS - INVASIVE SPECIES CONTROL

2. TIMING LIMITATION: You may begin the project immediately and you must complete the project by June 17, 2023, provided that all work below the OHWL is only performed between July 15 through September 30 of a given year.

3. APPROVED PLANS: You must accomplish the work per plans and specifications submitted with the application and approved by the Washington Department of Fish and Wildlife, except as modified by this Hydraulic Project Approval. You must have a copy of these plans available on site during all phases of the project construction.

4. INVASIVE SPECIES CONTROL: Follow Level 1 Decontamination protocol for low risk locations. Thoroughly remove visible dirt and organic debris from all equipment and gear (including drive mechanisms, wheels, tires, tracks, buckets and undercarriage) before arriving and leaving the job site to prevent the transport and introduction of invasive species. Properly dispose of any water and chemicals used to clean gear and equipment. For contaminated or high risk sites please refer to the Level 2 Decontamination protocol. You can find this and additional information in the Washington Department of Fish and Wildlife's "Invasive Species Management Protocols", available online at <http://wdfw.wa.gov/publications/search.php?Cat=Aquatic Invasive Species>.

NOTIFICATION REQUIREMENTS



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: June 18, 2018

Permit Number: 2018-4-426+01

Project End Date: June 17, 2023

FPA/Public Notice Number: N/A

Application ID: 14975

5. **POST-CONSTRUCTION NOTIFICATION:** You, your agent, or contractor must contact the Washington Department of Fish and Wildlife by e-mail at HPAapplications@dfw.wa.gov; mail to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946 within thirty days after completing the work. The notification must include the permit number and, if possible, photographs of the completed project sites which demonstrate that the sites were returned to pre-project condition or better.

6. **FISH KILL/ WATER QUALITY PROBLEM NOTIFICATION:** If a fish kill occurs or fish are observed in distress at the job site, immediately stop all activities causing harm. Immediately notify the Washington Department of Fish and Wildlife of the problem. If the likely cause of the fish kill or fish distress is related to water quality, also notify the Washington Military Department Emergency Management Division at 1-800-258-5990. Activities related to the fish kill or fish distress must not resume until the Washington Department of Fish and Wildlife gives approval. The Washington Department of Fish and Wildlife may require additional measures to mitigate impacts.

STAGING, JOB SITE ACCESS, AND EQUIPMENT

7. Retain all natural habitat features encountered on the bed including large woody material. You may move these natural habitat features during project activities but you must place them near the preproject location before leaving the job site. If non-native materials (rip rap, angular rocks, other garbage/debris) are encountered in the isolated work areas during project activities, remove these items from the lake and dispose of them in an appropriate upland location.

8. Confine the use of equipment to the specific locations and work corridor shown in the approved plans. If during field verification activities it is discovered that the locations vary significantly from what is shown in the plans, consult with the Habitat Biologist before proceeding.

9. Station and operate equipment used for this project landward of the ordinary high water line or on a barge or boat.

10. Equipment used for this project may operate waterward of the ordinary high water line, provided the drive mechanisms (wheels, tracks, tires, etc.) do not enter or operate waterward of the ordinary high water line.

11. Check equipment daily for leaks and complete any required repairs in an upland location before using the equipment in or near the water.

12. Use environmentally acceptable lubricants composed of biodegradable base oils such as vegetable oils, synthetic esters, and polyalkylene glycols in equipment operated in or near the water.

13. Operate and anchor vessels and barges during construction in a manner that protects native aquatic vegetation and prevents grounding.

CONSTRUCTION-RELATED SEDIMENT, EROSION AND POLLUTION CONTAINMENT

14. Install a containment boom/turbidity curtain so that it surrounds each in-water inspection area for the duration of the work at that location. Secure the curtains with sandbags and ensure that no fish are trapped in the isolation area before proceeding.

15. Prevent project contaminants, such as petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials, from entering or leaching into waters of the state.

16. Route construction water (wastewater) from the project to an upland area above the limits of anticipated floodwater. Remove fine sediment and other contaminants before discharging the construction water to waters of the state.

17. Deposit all trash from the project at an appropriate upland disposal location.

CONSTRUCTION MATERIALS

18. Use only clean well-rounded 2" minus gravels or another comparable fish-friendly substrate mix as fill material (no trash, debris, car bodies, tires, asphalt, concrete, etc.).

19. Use of angular rock is not permitted in any part of this project.

FISH LIFE REMOVAL

20. All persons participating in capture and removal must have training, knowledge, and skills in the safe handling of



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: June 18, 2018
Project End Date: June 17, 2023

Permit Number: 2018-4-426+01
FPA/Public Notice Number: N/A
Application ID: 14975

fish life.

- 21. Capture and safely move fish life from the work area to the nearest suitable free-flowing water.
- 22. If electrofishing is conducted, a person with electrofishing training must be on-site to conduct or direct all electrofishing activities.

LAKEBED EXCAVATION

- 23. This HPA authorizes you to excavate only enough material as is necessary for the purposes of the project. The material is not authorized to leave Lake Washington and must be returned to its original location in the excavation zone prior to the completion of the project.
- 24. Deposit excavated materials in the area within the containment boom/turbidity curtain to ensure that sediment filled water is isolated from the rest of Lake Washington.
- 25. Upon the return of the sediments to their pre-project location, the bed must be raked and leveled to pre-project conditions to ensure that it does not contain pits, potholes, or large depressions.
- 26. Place washed, well-rounded fish-friendly gravels on top of the excavated areas after backfilling to ensure no net loss of fish habitat.

DEMOBILIZATION AND CLEANUP

- 27. To minimize sediment delivery to the lake, do not remove the turbidity curtain from the work area until all in-water work is completed and the water has cleared to pre-project conditions.
- 28. Remove temporary sediment control methods after job site is stabilized or within three months of project completion, whichever is sooner.
- 29. Replace native aquatic vegetation (except invasive or noxious weeds) damaged or destroyed by construction with at least a 1:1 ratio using a proven methodology.
- 30. Upon completion of the project, remove all materials or equipment from the site and dispose of all excess spoils and waste materials in an upland area above the limits of anticipated floodwater.

LOCATION #1: , , WA						
WORK START: June 18, 2018			WORK END: June 17, 2023			
<u>WRIA</u>		<u>Waterbody:</u>			<u>Tributary to:</u>	
08 - Cedar - Sammamish		Lake Washington			Ship Canal	
<u>1/4 SEC:</u>	<u>Section:</u>	<u>Township:</u>	<u>Range:</u>	<u>Latitude:</u>	<u>Longitude:</u>	<u>County:</u>
E 1/2	31	24 N	05 E	47.523317	-122.208437	King
<u>Location #1 Driving Directions</u>						

APPLY TO ALL HYDRAULIC PROJECT APPROVALS



HYDRAULIC PROJECT APPROVAL

Washington Department of
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PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: June 18, 2018

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Project End Date: June 17, 2023

FPA/Public Notice Number: N/A

Application ID: 14975

This Hydraulic Project Approval pertains only to those requirements of the Washington State Hydraulic Code, specifically Chapter 77.55 RCW. Additional authorization from other public agencies may be necessary for this project. The person(s) to whom this Hydraulic Project Approval is issued is responsible for applying for and obtaining any additional authorization from other public agencies (local, state and/or federal) that may be necessary for this project.

This Hydraulic Project Approval shall be available on the job site at all times and all its provisions followed by the person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work.

This Hydraulic Project Approval does not authorize trespass.

The person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work may be held liable for any loss or damage to fish life or fish habitat that results from failure to comply with the provisions of this Hydraulic Project Approval.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a civil penalty of up to one hundred dollars per day and/or a gross misdemeanor charge, possibly punishable by fine and/or imprisonment.

All Hydraulic Project Approvals issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this Hydraulic Project Approval is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.

MINOR MODIFICATIONS TO THIS HPA: You may request approval of minor modifications to the required work timing or to the plans and specifications approved in this HPA unless this is a General HPA. If this is a General HPA you must use the Major Modification process described below. Any approved minor modification will require issuance of a letter documenting the approval. A minor modification to the required work timing means any change to the work start or end dates of the current work season to enable project or work phase completion. Minor modifications will be approved only if spawning or incubating fish are not present within the vicinity of the project. You may request subsequent minor modifications to the required work timing. A minor modification of the plans and specifications means any changes in the materials, characteristics or construction of your project that does not alter the project's impact to fish life or habitat and does not require a change in the provisions of the HPA to mitigate the impacts of the modification. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a minor modification through APPS. A link to APPS is at <http://wdfw.wa.gov/licensing/hpa/>. If you did not use APPS you must submit a written request that clearly indicates you are seeking a minor modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234, or by email to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.



HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
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Project End Date: June 17, 2023

FPA/Public Notice Number: N/A

Application ID: 14975

MAJOR MODIFICATIONS TO THIS HPA: You may request approval of major modifications to any aspect of your HPA. Any approved change other than a minor modification to your HPA will require issuance of a new HPA. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a major modification through APPS. A link to APPS is at <http://wdfw.wa.gov/licensing/hpa/>. If you did not use APPS you must submit a written request that clearly indicates you are requesting a major modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send your written request by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You may email your request for a major modification to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.

APPEALS INFORMATION

If you wish to appeal the issuance, denial, conditioning, or modification of a Hydraulic Project Approval (HPA), Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the department employee who issued or denied the HPA to discuss your concerns. Such a discussion may resolve your concerns without the need for further appeal action. If you proceed with an appeal, you may request an informal or formal appeal. WDFW encourages you to take advantage of the informal appeal process before initiating a formal appeal. The informal appeal process includes a review by department management of the HPA or denial and often resolves issues faster and with less legal complexity than the formal appeal process. If the informal appeal process does not resolve your concerns, you may advance your appeal to the formal process. You may contact the HPA Appeals Coordinator at (360) 902-2534 for more information.

A. INFORMAL APPEALS: WAC 220-660-460 is the rule describing how to request an informal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete informal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request an informal appeal of that action. You must send your request to WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. WDFW must receive your request within 30 days from the date you receive notice of the decision. If you agree, and you applied for the HPA, resolution of the appeal may be facilitated through an informal conference with the WDFW employee responsible for the decision and a supervisor. If a resolution is not reached through the informal conference, or you are not the person who applied for the HPA, the HPA Appeals Coordinator or designee may conduct an informal hearing or review and recommend a decision to the Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

B. FORMAL APPEALS: WAC 220-660-470 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule.



HYDRAULIC PROJECT APPROVAL

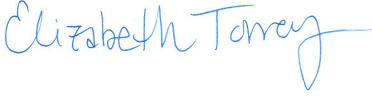
Washington Department of
Fish & Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Issued Date: June 18, 2018
Project End Date: June 17, 2023

Permit Number: 2018-4-426+01
FPA/Public Notice Number: N/A
Application ID: 14975

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request a formal appeal of that action. You must send your request for a formal appeal to the clerk of the Pollution Control Hearings Boards and serve a copy on WDFW within 30 days from the date you receive notice of the decision. You may serve WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, you may request a formal appeal within 30 days from the date you receive the Director's or designee's written decision in response to the informal appeal.

C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.

Habitat Biologist	Elizabeth.Torrey@dfw.wa.gov		for Director
Elizabeth Torrey	425-313-5681		WDFW

City of Renton
Kennydale Lake Line Sewer Improvement and Cleaning
Issued July XX, 2018

Addendum No. 1

The following changes are made to the contract documents:

1. Second Cover Page, between the lines reading “Contract Forms” and “Conditions of the Contract,” **ADD** the following line: “Emergency Declaration.”
2. Table of Contents, **CHANGE** the line that reads, “* Schedule of Prices” to read “* Pricing Proposal.”
3. Table of Contents, **CHANGE** the line that reads “(symbol) Contract Agreement” to read “(symbol) Emergency Agreement.”
4. Table of Contents, after the line that reads, “Emergency Agreement” **ADD** a line that reads, “Resolution 4345 – Emergency Declaration.”
5. Agreement Form, **CHANGE** the title to read, “Emergency Agreement.”
6. Emergency Agreement, between the first paragraph that begins, “THIS AGREEMENT...” and the second paragraph that begins “Now, therefore...” **ADD** the following paragraph.

Emergency Declaration and Council Resolution (attached).

On May 30, 2018, pursuant to RCW 39.04.280 and Renton Policy and Procedure 250-02 paragraph 6.10 the Mayor issued a written Declaration of Emergency. On June 11, 2018 the Renton City Council approved Resolution 4345 finding and ratifying the Emergency Declaration waiving competitive bidding requirements and **authorizing** the City to Award all necessary **contracts** for the emergency work.

7. Emergency Agreement, **CHANGE** the line that reads, “Now therefore the parties agree as follows:” to bold.
8. Special Provisions, Section 1-11, Renton Surveying Standards, **ADD** the following:

Section 1-11.1 (12) – Settlement Monitoring

The Contractor shall conduct a settlement monitoring program for facilities adjacent to the each of the two temporary manhole locations. The same points shall be measured each day indicated. Points in grass or landscaping can be marked with hub and tack to be removed at the conclusion of the monitoring program. Hard surfaces such as bulkheads or docks can be marked with a non-permanent marker or by reference to a

distinct point on the surface. Measurements shall be made to the nearest 0.01 feet and reported to the Engineer the day after they are made. All measurements shall be made relative to a fixed reference point in the road east of houses, to avoid the possibility of errors resulting from the settlement of the reference points themselves. Note the time of day at which the survey is made. The Contractor's surveyor shall measure the following items at the listed times:

- i. Bulkheads, at 5 locations centered on the point adjacent to the manhole.
- ii. Ten feet upland of the bulkheads at five points adjacent to those on the bulkhead.
- iii. Docks, at 10 foot spacing for all edges of docks within 50 feet of the limits of excavation.
- iv. Measure prior to any excavation, once each day on which the temporary manhole is in place, the first day after backfill is complete and seven days after the backfill is complete.

9. Special Provisions, (add language regarding screening for sand at the LS and/or potentially vactoring the LS sump before turning the pumps on)

10. Special Provisions, Section 7-21.3 (2), Cleaning of the Sewer Lakeline, after the paragraph that starts, "Contractor shall take appropriate measures...", **ADD** the following paragraph:

"Prior to September 3, 2018, cleaning from the existing upland access point at Kennydale Beach Park shall occur only between the hours of 7am and 11am. After September 3, 2018, no such time restriction exists."

11. Special Provisions, Section 7-21.3 (1) Access Tube Installation, after the sixth paragraph that starts, "The access tubes shall be bolted...", **ADD** the following three paragraphs:

The Contractor shall provide and install a new gasket in the base of the access tube replacing any gasket that may be in place. The gasket shall be as described on Drawing No. 6, Notes 7 and 9.

For the three existing in-water manholes, the Contractor shall replace the gaskets in the stainless steel lid prior to the final installation of the manhole lid.

For the three existing in-water manholes, the Contractor shall install new marker buoys. The buoys shall be approximately one foot in diameter, colored orange, and attached to the anchor provided on the side of the manhole with 1/8-inch stainless steel cable. Cable ends should be swaged and attached at either end with locking rings.

12. Special Provisions, Section 7-20.3 (6), Installation of Submerged Temporary Manhole, after the first paragraph, **ADD** the following paragraph:

The Contractor shall remove the existing pipe between the points of connection on either side of the temporary manhole. The pipe segment shall be placed on one of the work barges where the Engineer will identify subsections of the pipe for subsequent testing

under another contract. The Contractor shall cut the pipe to the indicated length. The sections shall be double wrapped in heavy plastic and placed in a shipping crate with wood or foam supports to limit shifting. The box shall be labeled "Pipe Sample No. X, Kennydale Sewer Lake Line." The packaged sections shall be delivered to the City's maintenance shops. Two pipe samples are to be collected, one from each temporary manhole site. Sections are to be two feet in length.

13. Special Provisions, Section 7-20.3 (5) Protection of Existing Facilities, **ADD** the follow paragraph between the first and second paragraphs:

The Contractor shall take preconstruction photographs of all facilities and structures in the vicinity of their work, with special attention to the items in the previous paragraph. The photos shall be minimum 10MB, and individually labeled with site address upon which the facility is located. The purpose of the photographs is to establish preconstruction condition and allow comparison to post construction conditions. A minimum of 20 photographs shall be taken at each work site, including cleaning locations. Submit the photographs to the Engineer for review in electronic format before the mobilization of equipment to the first work site."

14. Appendix A, Permits, after the HPA permit (4 pages), **ADD** the "Expected Permit Conditions for the Army Corps of Engineers permit."

Kennydale Lakeline Sewer Improvement, Phase II
Project No: WWP - 27 - 4010

Submitted By: Ballard Marine Construction

Initials: _____

Date: _____

Pricing Proposal

Number of Days for Manhole Installation/Removal: _____

Item No.	Description	No.	Units	Unit Price (Words)	Extended Price (Figures)
1	Mobilization and Demobilization	1	LS		
2	Minor Change	1	FA	Twenty-Five Thousand and no/100's	\$ 25,000.00
3	Construction Surveying, Staking, and As-Builts	1	LS		
4	Excavation Safety Systems	1	LS		
5	Temporary Manhole and Installation	2	EA		
6	Manhole Install., Extra Days	1	DAY		
7	Pipe Cleaning	22	DAY		
8	Sewer Pipe Inspection by CCTV	11	DAY		
9	Spawning Gravel	50	TON		
10	Bulkhead/Rockery Repair	2	DAY		

Total Proposed Price _____

Tax at 10.0% _____

Total Price with Tax _____

CITY OF RENTON

KENNYDALE LAKELINE SEWER IMPROVEMENT AND CLEANING

JUNE 2018

1420 FIFTH AVE, SUITE 600
 SEATTLE, WA 98101
 PH: (206) 883-9300



www.tetrattech.com

PROJECT LOCATION:
 RENTON, WA

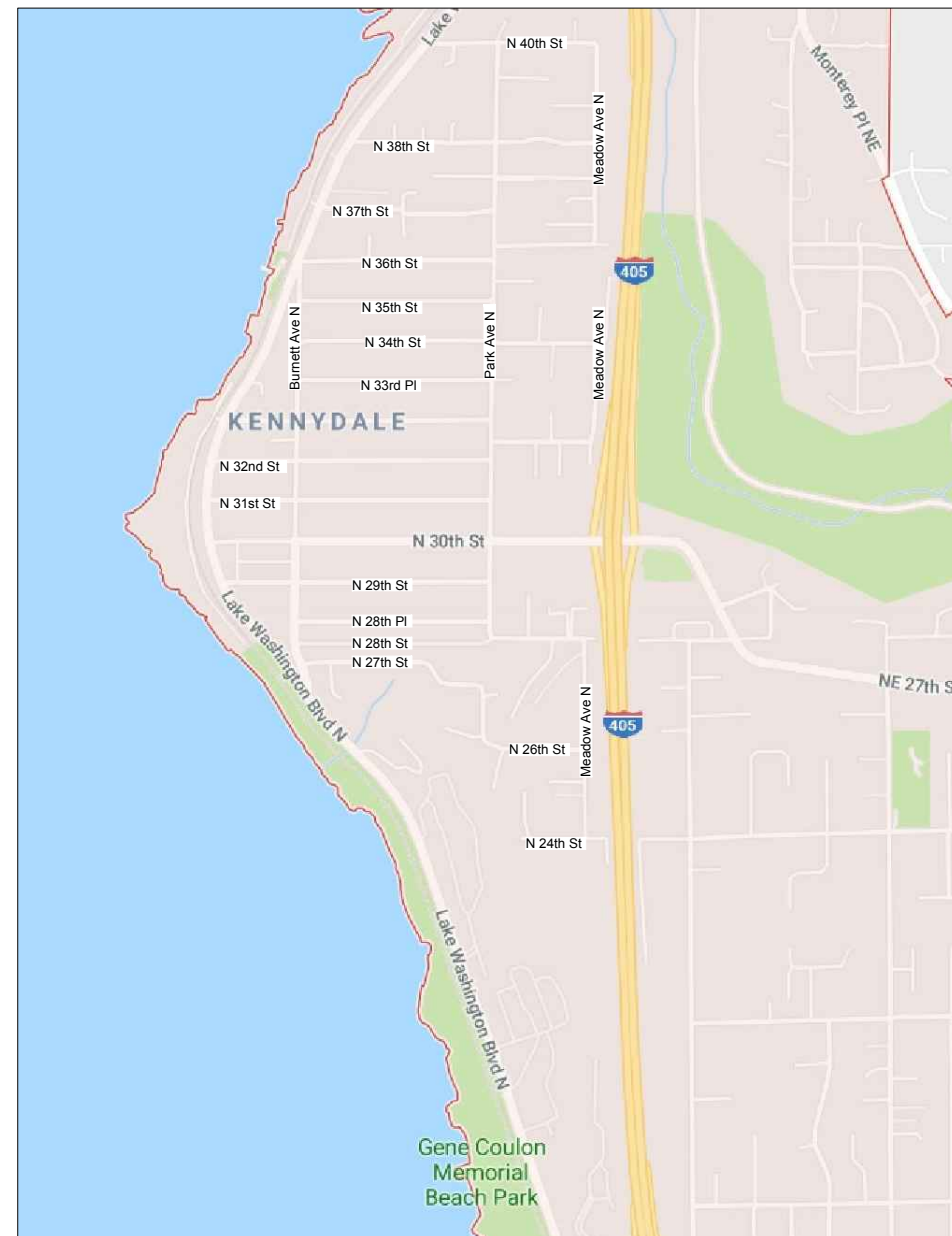
CLIENT INFORMATION:
 1055 S GRADY WAY
 RENTON, WA 98057
 PH: (425) 430-6400

Tt PROJECT No.:
 135-01621-16001

CLIENT PROJECT No.:
 WWP-27-004010

PROJECT DESCRIPTION / NOTES:
 INSTALL TWO IN-WATER MANHOLES
 CLEAN AND INSPECT LAKE LINE SEWER

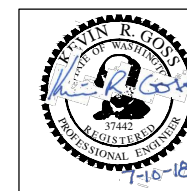
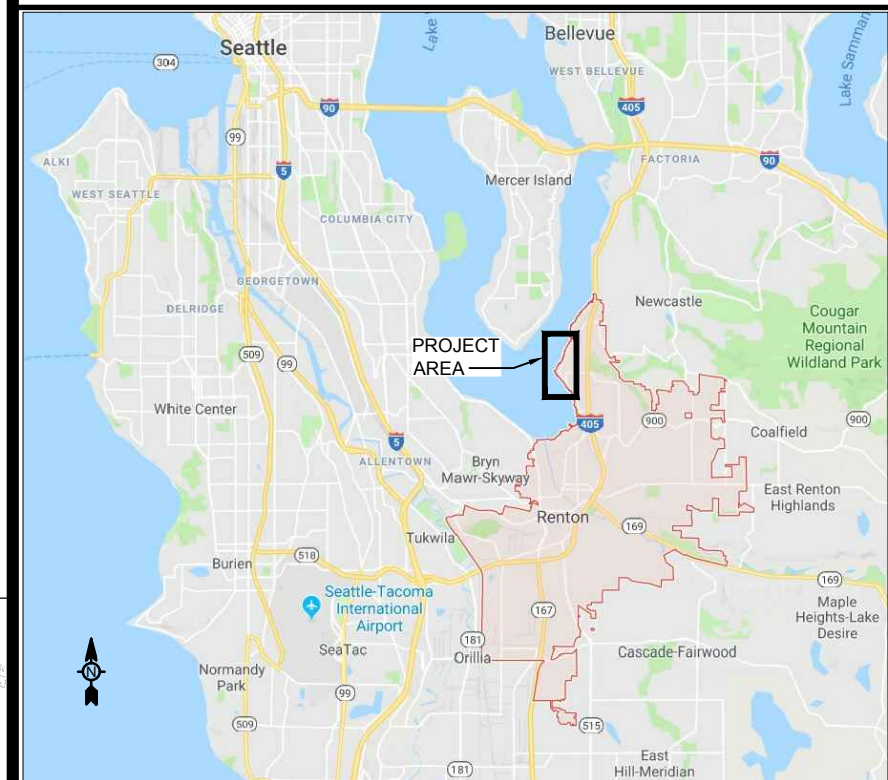
ISSUED: 10 JULY 2018



LOCATION MAP

DRAWING INDEX	
Sheet Number	Sheet Title
1	COVER SHEET
2	SYMBOLS AND ABBREVIATIONS
3	MANHOLE SITE PLANS
4	MANHOLE DETAILS AND SECTIONS (SHEET 1 OF 2)
5	MANHOLE DETAILS AND SECTIONS (SHEET 2 OF 2)
6	ACCESS TUBE SECTIONS & DETAILS
7	SEWER CLEANING PLAN
8	CLEANING PROFILE & SCHEDULE

VICINITY MAP:



ABBREVIATIONS

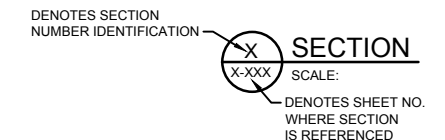
Table of abbreviations and their corresponding full names, organized in three columns. Includes terms like PERCENT, ELEVATION, UNDERGROUND POWER, etc.

LEGEND

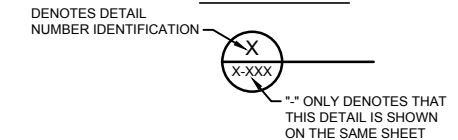
Legend table showing symbols for various features such as MONUMENT IN CASE, SURFACE MONUMENT, SEWER, FENCE, etc.



SECTION REFERENCE



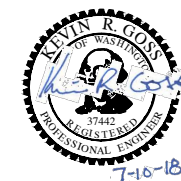
SECTION TITLE



DETAIL REFERENCE

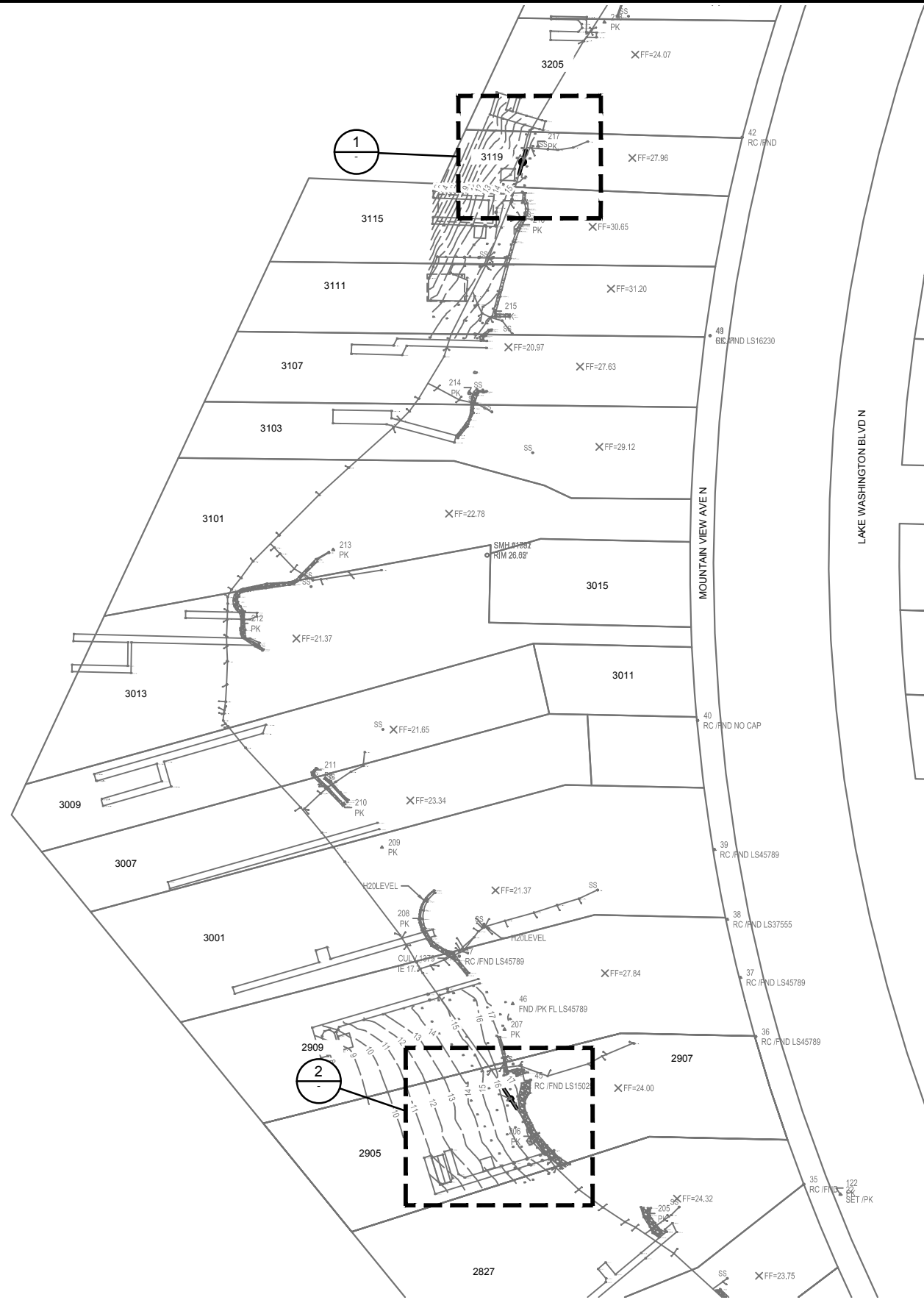
S-04010NN

Table with 2 columns and 2 rows, containing the text 'IN COMPLIANCE WITH CITY OF RENTON STANDARDS'.



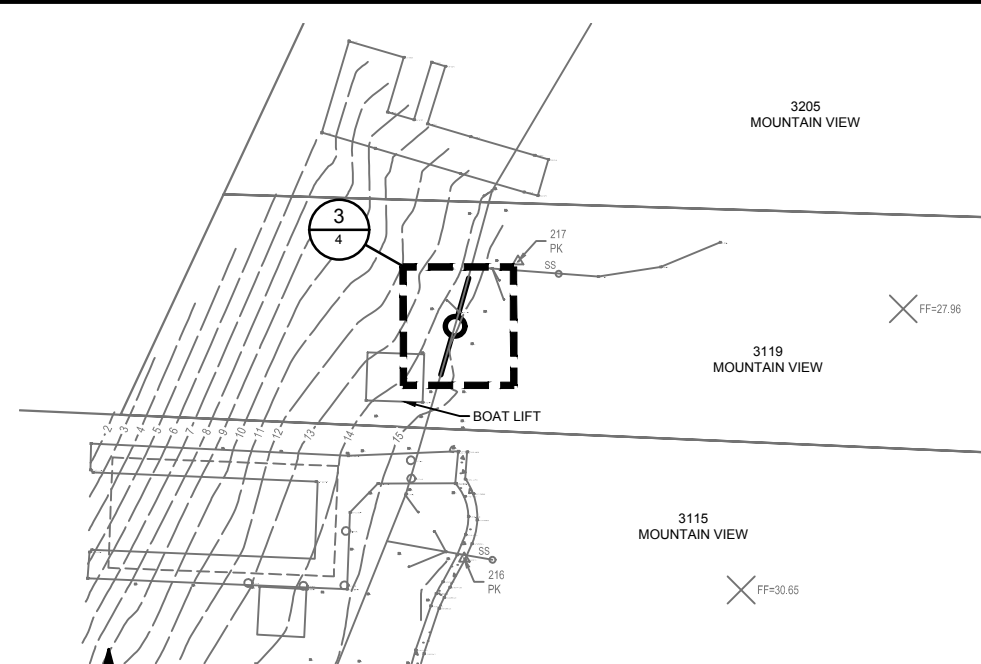
Project information table including scales (NTS, 1 inch = 40 feet), vertical and horizontal datum information, and a revision table with columns for NO., REVISION, BY, DATE, and APPR.

Project metadata table including DATE (6/4/18), FIELDWORK, PAGE (2), DRAWING NO., and SHEET (2 OF 8).



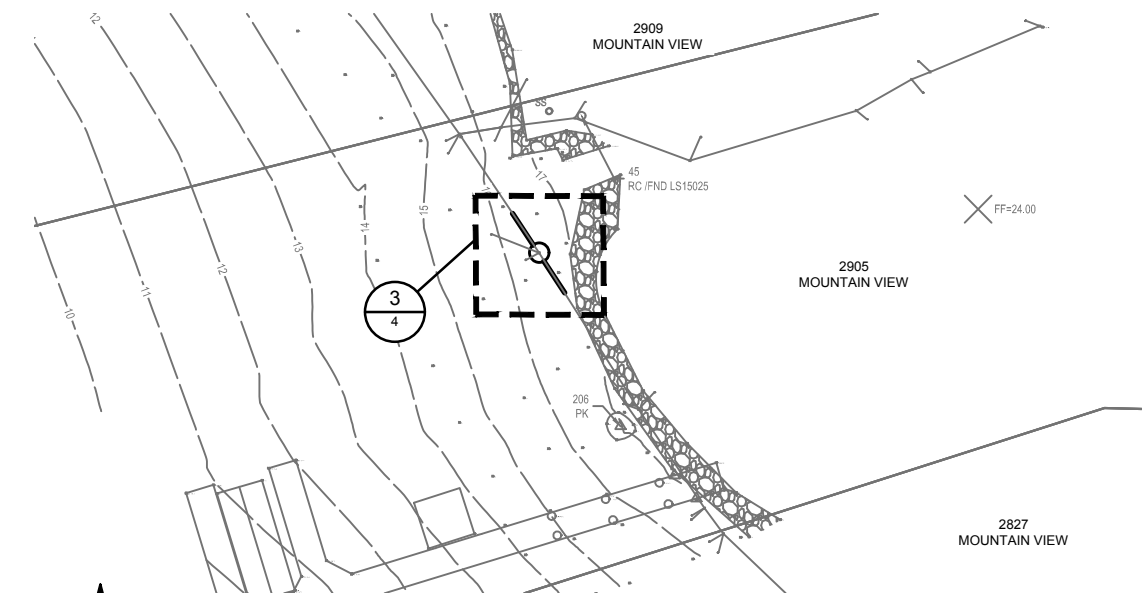
MANHOLE INSTALLATION LOCATION PLAN

SCALE: 1" = 60'



1 MANHOLE SITE 4 - 3119 MOUNTAIN VIEW AVE N

SCALE: 1" = 20'



2 MANHOLE SITE 5 - 2905 MOUNTAIN VIEW AVE N

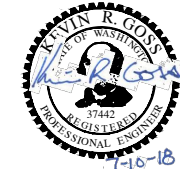
SCALE: 1" = 20'

NOTES:

1. BACKFILL MANHOLE AND PIPE EXCAVATION TO BOTTOM OF ACCESS TUBE PRIOR TO CLEANING.
2. ENGINEER WILL PROVIDE LOCATIONS OF PROJECT CONTROL POINTS PRIOR TO CONSTRUCTION.

S-04010NN

IN COMPLIANCE WITH CITY OF RENTON STANDARDS



CITY OF RENTON
Planning/Building/Public Works Dept.



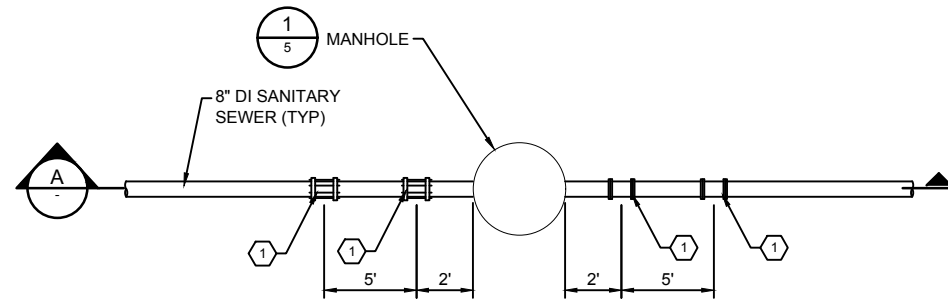
VERTICAL: NAD 83
HORIZONTAL: NAD 83/1991

SCALE: AS SHOWN
ONE INCH AT FULL SCALE IF NOT ONE INCH SCALE ACCORDINGLY

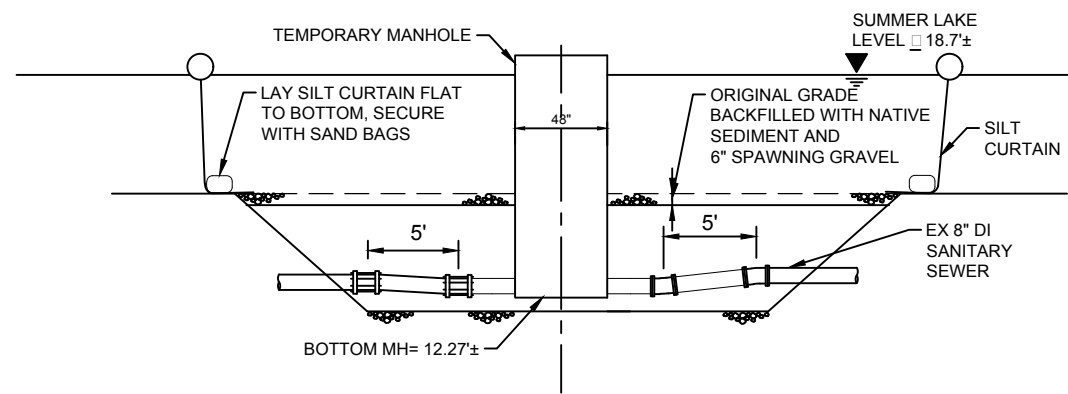
NO.	REVISION	BY	DATE	APPR

KENNYDALE LAKE LINE SEWER IMPROVEMENTS AND CLEANING
MANHOLE SITE PLANS

DATE	6/4/18
PAGE	3
DRAWING NO.	3
SHEET	3 OF 8



3 MANHOLE DETAIL - SITE 4
SCALE: NTS



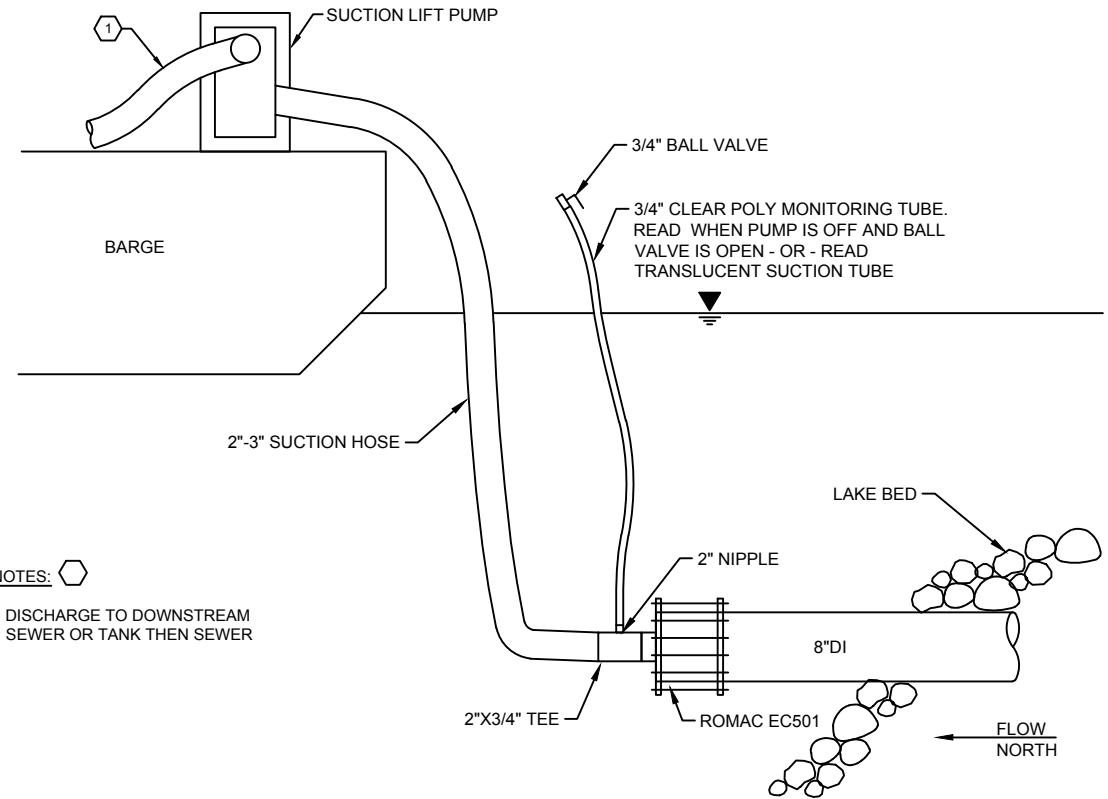
A MANHOLE SECTION- SITE 4
SCALE: NTS

NOTES:

1. EXPOSE EXISTING SEWER AT PROPOSED CONNECTION POINTS, 9 FEET TO EITHER SIDE OF CENTER OF MANHOLE LOCATION.
2. MEASURE TOP OF PIPE ELEVATION AND PIPE O.D. AT EACH CONNECTION POINT.
3. ENGINEER WILL CALCULATE REQUIRED SUBGRADE ELEVATION FOR BASE OF MANHOLE.
4. SUPPORT EXISTING SEWER PIPE DURING EXCAVATION.
5. EXCAVATE TO MANHOLE BASE DEPTH.
6. IN A ONE-DAY OPERATION:
 - a. CUT AND CAP EXISTING SEWER AT EACH CONNECTION POINT.
 - b. MONITOR AND PUMP FLOW DURING PIPE BLOCKAGE.
 - c. REMOVE PIPE SPOOL, SALVAGE TO CITY SHOP.
 - d. PLACE TEMPORARY MANHOLE AND ANCHOR WITH ECOLOGY BLOCKS.
 - e. PLACE INFLATABLE PLUGS IN MANHOLE PIPE STUBS FROM INSIDE.
 - f. CONNECT MANHOLE PIPE STUBS TO EXISTING SEWER.
 - g. PUMP OUT TEMP. MANHOLE.
 - h. DEFLATE PLUGS AND ESTABLISH SEWER FLOW
7. AFTER CLEANING, IN A ONE-DAY OPERATION:
 - a. INSTALL INFLATABLE PLUGS IN EACH MANHOLE PIPE STUB.
 - b. REMOVE CONNECTING PIPE SPOOLS BETWEEN MANHOLES STUBS AND EXISTING PIPE.
 - c. CAP EXISTING SEWER AT EACH CONNECTION POINT.
 - d. MONITOR AND PUMP FLOW DURING PIPE BLOCKAGE.
 - e. DEWATER MANHOLE INTO DOWNSTREAM SEWER OR BAKER TANK.
 - f. REMOVE INFLATABLE PLUGS AND FLOOD TEMP. MANHOLE.
 - g. REMOVE ECOLOGY BLOCKS AND MANHOLE.
 - h. BACKFILL TO SUBGRADE AND INSTALL NEW PIPE SPOOL ACROSS WORK AREA TO REESTABLISH FLOW.
8. COMPLETE BACKFILL TO 6-INCHES BELOW ORIGINAL GRADE.
9. TOP DRESS TO ORIGINAL GRADE WITH SPAWNING GRAVEL MIX.

KEYNOTES:

1. ROMAC 501 WITH ROMAC 611 JOINT RESTRAINTS.
- 2.



KEYNOTES:

1. DISCHARGE TO DOWNSTREAM SEWER OR TANK THEN SEWER

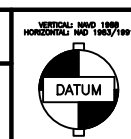
B POTENTIAL BYPASS PUMP SETUP
SCALE: NTS



S-04010NN	
IN COMPLIANCE WITH CITY OF RENTON STANDARDS	

NO.	REVISION	BY	DATE	APPR

SURVEYED:	SCALE:
DESIGNED: KRG	NTS
DRAWN: MJS	ONE INCH AT FULL SCALE IF NOT ONE INCH SCALE ACCORDINGLY
CHECKED: DS	
APPROVED: KRG	



CITY OF RENTON
Planning/Building/Public Works Dept.

KENNYDALE LAKE LINE SEWER IMPROVEMENTS AND CLEANING
MANHOLE DETAILS AND SECTIONS
SHEET 1 OF 2

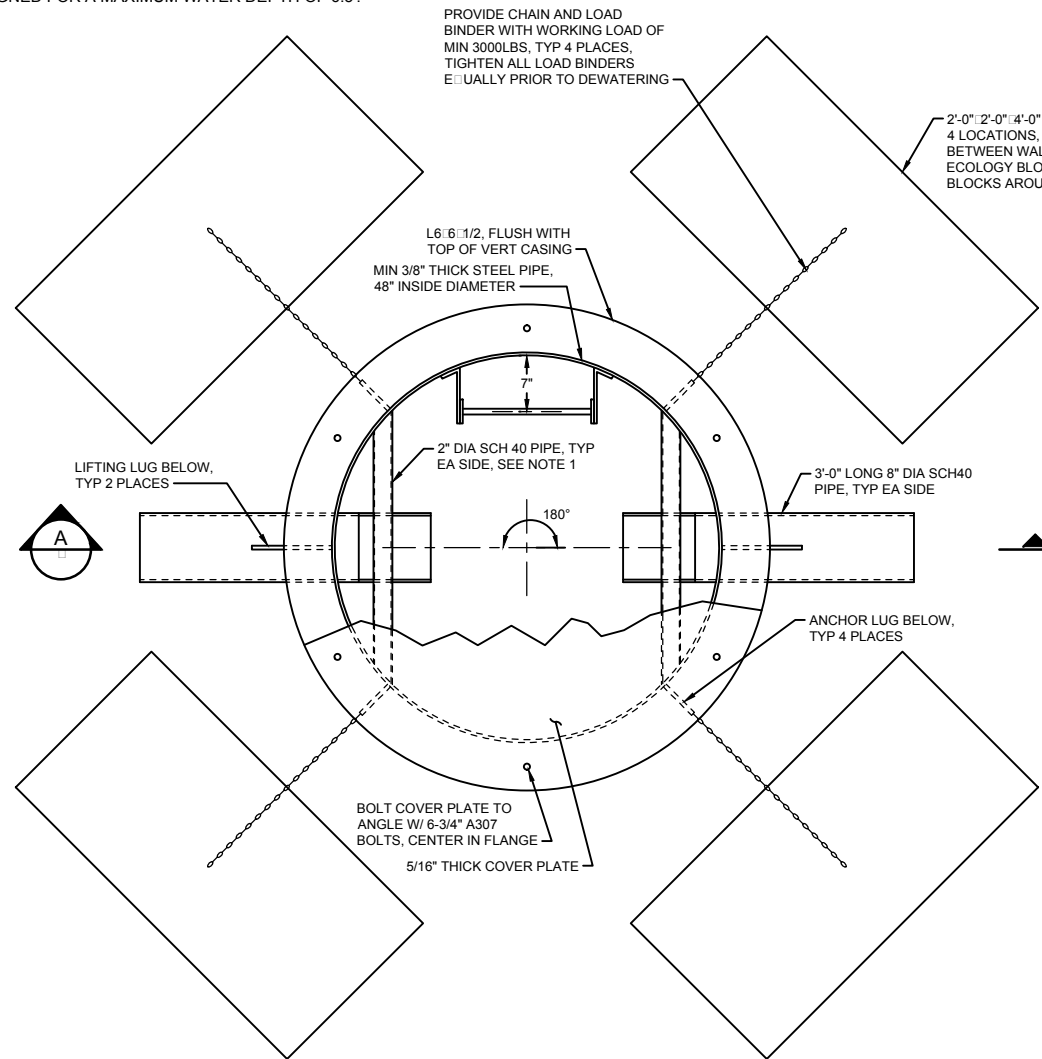
DATE:	6/4/18
FIELD NO.:	
PAGE:	4
DRAWING NO.:	
SHEET:	4 OF 8

GENERAL NOTES:

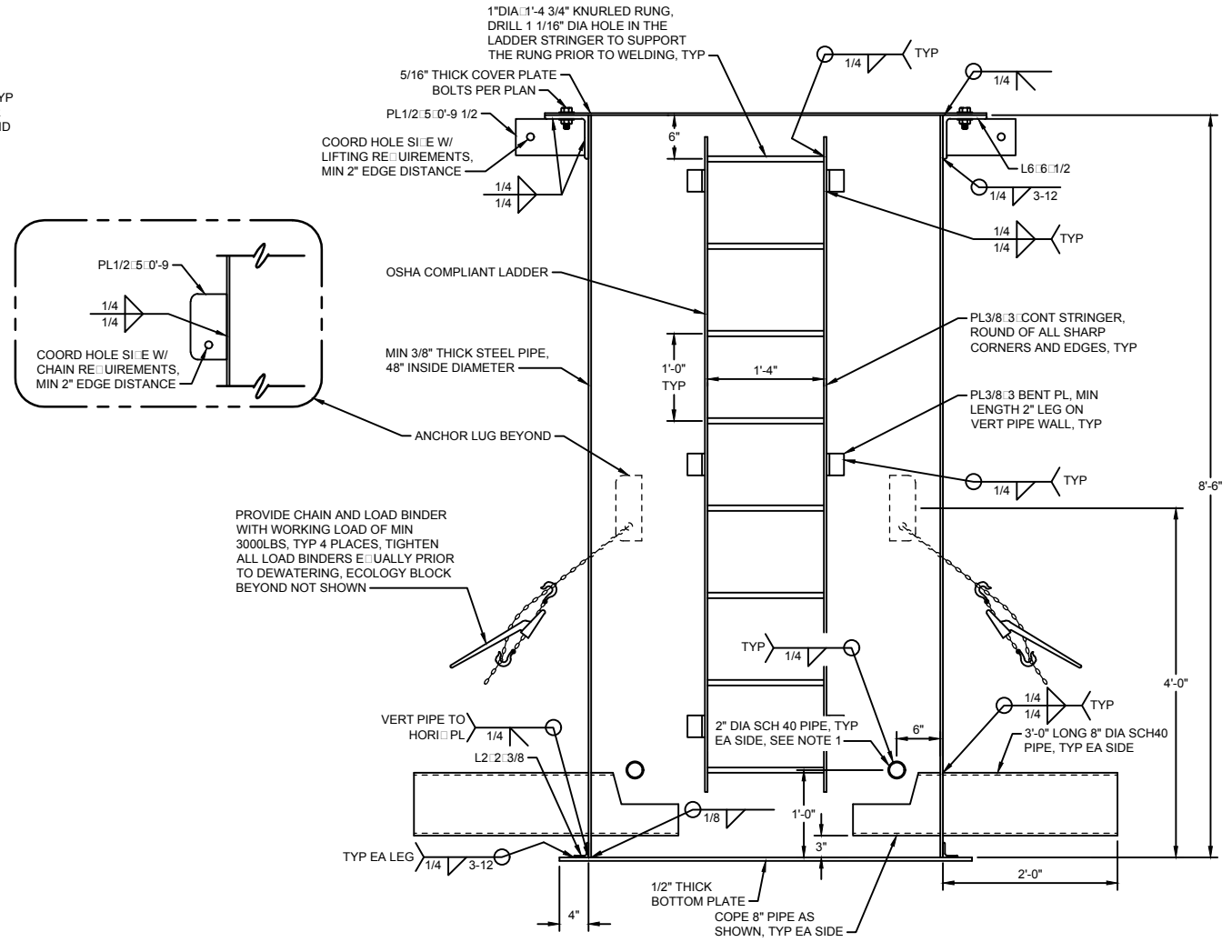
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2015 WASHINGTON STATE BUILDING CODE AND ANY LOCAL AMENDMENTS. THE ABOVE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.
- STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURE. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND SUPPORTS AS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND MAINTENANCE OF TEMPORARY SUPPORTS.
- STEEL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS AS CONTAINED IN THE 14TH EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION. WELDING SHALL CONFORM TO AWS D1.1 "STRUCTURAL WELDING CODE - STEEL".
- STRUCTURAL BARS, PLATES, AND ANGLES, INDICATED ON THE DRAWINGS SHALL BE STEEL MEETING ASTM A36 SPECIFICATIONS. PIPE SMALLER THAN 30" IN DIAMETER SHALL BE STEEL MEETING ASTM A53 GRADE B SPECIFICATIONS. PIPE LARGER THAN 30" IN DIAMETER SHALL BE STEEL MEETING ASTM A36 SPECIFICATIONS.
- JOINTS OR SPLICES IN STEEL THAT ARE NOT SHOWN SHALL BE COMPLETE JOINT PENETRATION WELDS ACROSS THE FULL SECTION.
- STRUCTURES DESIGNED FOR A MAXIMUM WATER DEPTH OF 6.5'.

NOTES:

- PIPE TO EASE CORNER FOR CLEANING AND CCTV HOSES AND CABLES. COORDINATE WITH CLEANING AND INSPECTION CONTRACTOR(S) AND MODIFY FOR PURPOSE.



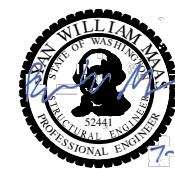
1 MANHOLE PLAN
SCALE: 1"=1'-0"



A MANHOLE SECTION
SCALE: 1"=1'-0"

S-04010NN

IN COMPLIANCE WITH CITY OF RENTON STANDARDS



NO.	REVISION	BY	DATE	APPR

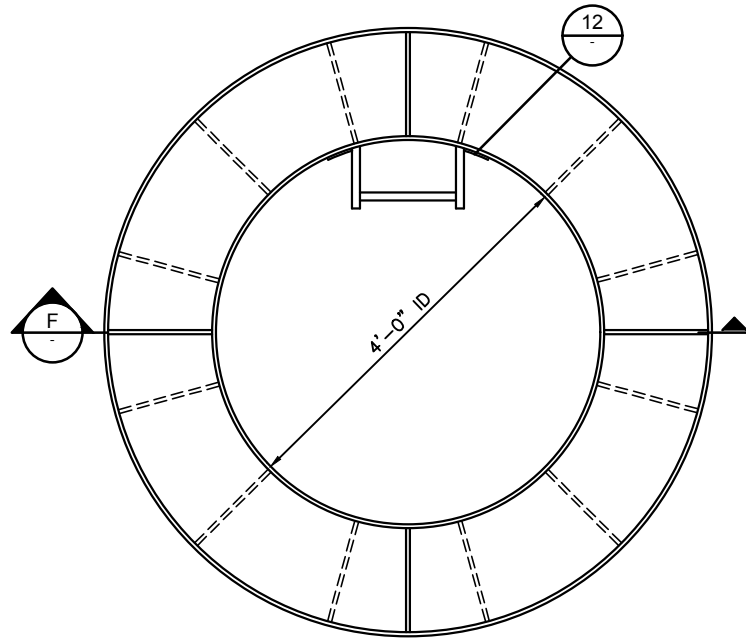
SURVEYED:	SCALE:
DESIGNED: RWM	NTS
DRAWN: RWM	ONE INCH AT FULL SCALE IF NOT ONE INCH SCALE ACCORDINGLY
CHECKED: DS	DATUM
APPROVED: HRN	

VERTICAL: NAD 83 HORIZONTAL: NAD 83/1991

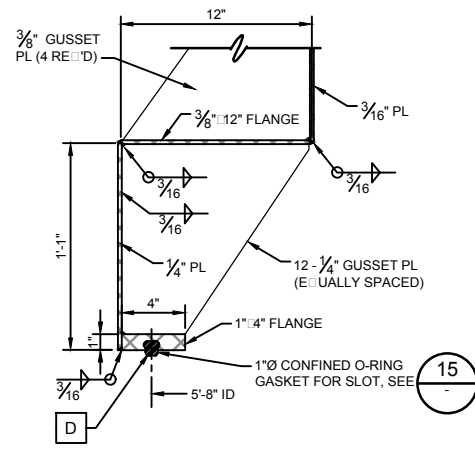
CITY OF RENTON
Planning/Building/Public Works Dept.

KENNYDALE LAKE LINE SEWER IMPROVEMENTS AND CLEANING
MANHOLE DETAILS AND SECTIONS
SHEET 2 OF 2

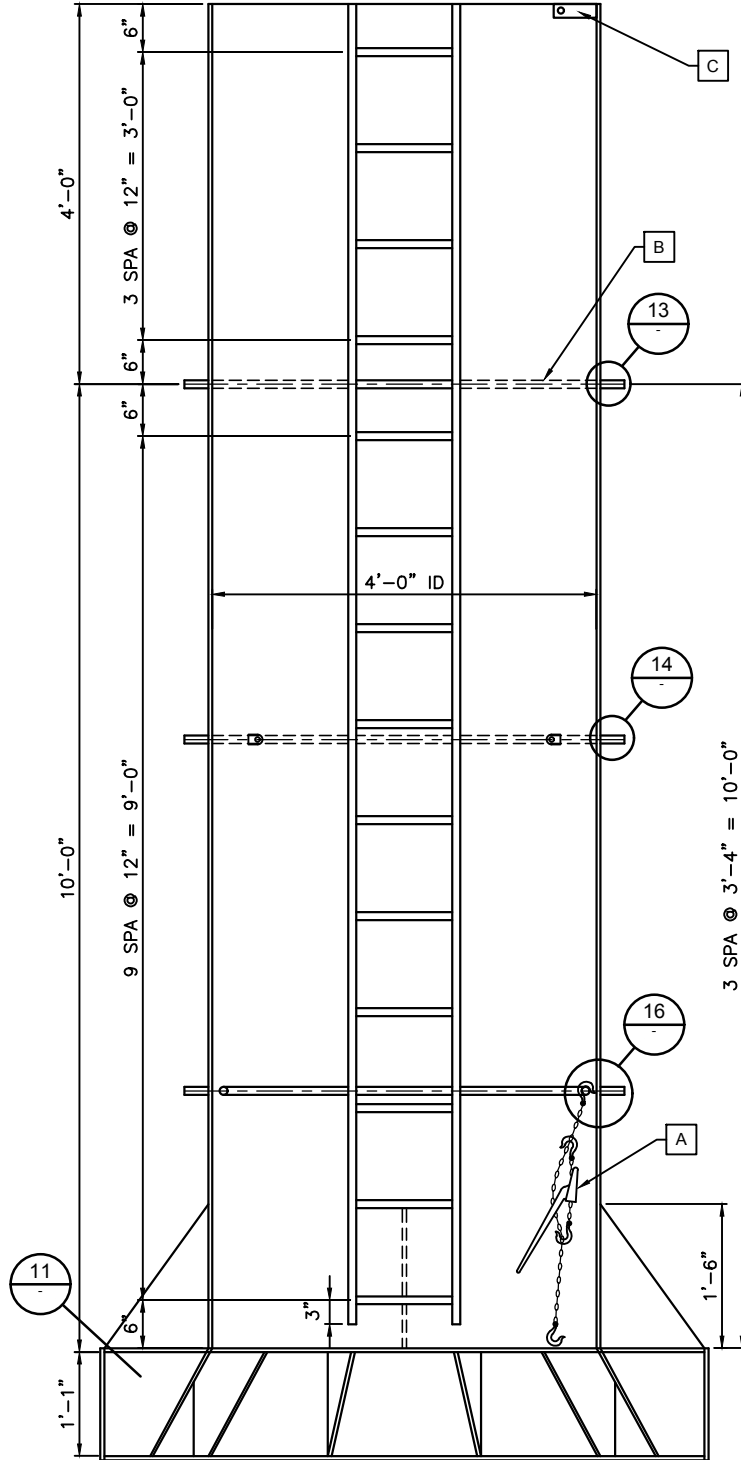
DATE:	7/10/18
FIELD NO.:	
PAGE:	5
DRAWING NO.:	
SHEET:	5 OF 8



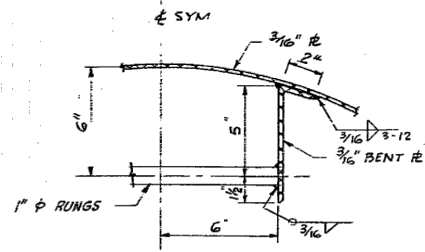
PLAN VIEW
SCALE: NTS



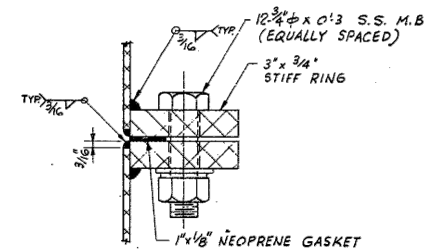
GUSSET PLATE
DETAIL
SCALE: NTS



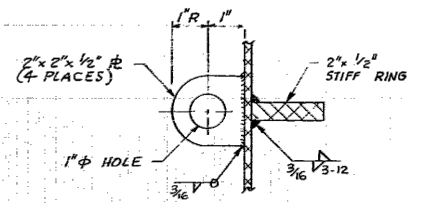
ACCESS TUBE SECTION
SCALE: NTS



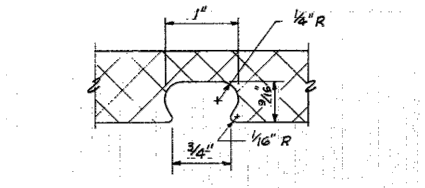
LADDER CONNECTION
DETAIL
SCALE: NTS



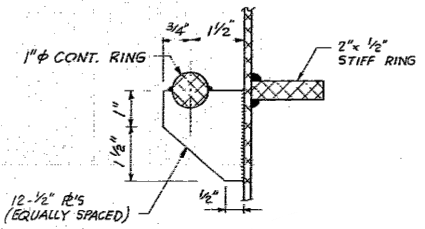
EXTENSION CONNECTION
DETAIL
SCALE: NTS



RING DETAIL
SCALE: NTS



GASKET SLOT
DETAIL
SCALE: NTS



DETAIL
SCALE: NTS

NOTES:

- ACCESS TUBE INFORMATION FOR REFERENCE ONLY, NOT FOR MANUFACTURE.
- ADDITIONAL RISER SECTIONS AVAILABLE.

GENERAL NOTES:

- ACCESS TUBE TO BE PROVIDED BY OWNER.
- PUMP WATER OUT OF ACCESS TUBE ONCE ACCESS TUBE HAS BEEN SECURED TO TOP OF MANHOLE. INTERIOR OF ACCESS TUBE SHALL BE INSPECTED PRIOR TO OPENING OF MANHOLE LID TO ENSURE ANY LEAKS ARE DETECTED.
- INTERIOR OF ACCESS TUBE SHALL BE KEPT DRY AT ALL TIMES WHILE MANHOLE IS OPEN.
- FLANGE SURFACES SHALL BE MACHINED FLAT AFTER FABRICATION AND SHALL BE MATCH DRILLED.
- THE BOTTOM FLANGES OF THE ACCESS TUBE SHALL BE IN A COMMON PLANE WITH THE MATCHING STAINLESS STEEL SEATING RING. MAXIMUM DEVIATION INCLUDING SURFACE VARIATION SHALL BE 1/16".
- WELDS SHALL BE 3/16" FILLET CONTINUOUS UNLESS OTHERWISE NOTED.
- NEOPRENE GASKETS SHALL BE CEMENTED TO THE UPPER FLANGE WITH AN INSOLUBLE CEMENTING MATERIAL AS RECOMMENDED BY THE GASKET MANUFACTURER.
- ALL METAL SHALL BE ALUMINUM EXCEPT AS NOTED.
- FURNISH ONE COMPLETE SPARE SET OF GASKETS, O-RING & FLAT FOR AN ASSEMBLY OF 1-10' & 4-4' SECTIONS OF ACCESS SHAFT. GASKETS SHALL BE PACKAGED IN PROTECTIVE WRAPPING AS RECOMMENDED BY GASKET MANUFACTURER AND MARKED "GASKETS - ACCESS SHAFT".

KEY NOTES:

- A. SECURE ACCESS TUBE TO TOP OF MANHOLE WITH LOAD BINDERS CONNECTED TO FOUR (4) HOLD DOWN ANCHORS ON MANHOLE AND INTERIOR OF ACCESS TUBE. TIGHTEN LOAD BINDERS UNTIL ACCESS TUBE IS SEATED SECURELY ON MANHOLE WITH NO MOVEMENT. CONTRACTOR TO PROVIDE LOAD BINDERS AND CHAIN.
- B. PROVIDE SUFFICIENT NUMBER OF EXTENSIONS TO ALLOW ACCESS TUBE TO EXTEND TWO FEET ABOVE WATER SURFACE.
- C. AFFIX TEMPORARY ROLLER FOR JETTER HOSE OR CCTV CABLE TO MINIMIZE LATERAL FORCES ON ACCESS TUBE.
- D. CONTRACTOR TO REPLACE EXISTING O-RING GASKET AS REQUIRED TO PROVIDE A WATERTIGHT SEAL.

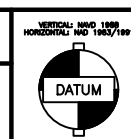
S-04010NN

IN COMPLIANCE WITH CITY OF RENTON STANDARDS



NO.	REVISION	BY	DATE	APPR

SURVEYED:	SCALE:
DESIGNED: KRG	NTS
DRAWN: MJS	
CHECKED: DS	
APPROVED: KRG	



KENNYDALE LAKE LINE SEWER IMPROVEMENTS AND CLEANING ACCESS TUBE SECTIONS & DETAILS	DATE: 6/5/18
	PAGE: 6
	SHEET: 6 OF 8

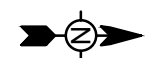


GENERAL NOTES:

1. LAKELINE SEWER PIPE SHALL BE CLEANED FROM PUMP STATIONS, ON-LAND CLEANOUTS, AND SUBMERGED MANHOLES AS DESCRIBED IN SPECIFICATIONS.
2. SUBMERGED MANHOLES SHALL BE ACCESSED VIA DEWATERED ACCESS TUBE SECURED TO THE TOP OF MANHOLE AS INDICATED IN DRAWINGS AND SPECIFICATIONS.
3. SOLID MATERIAL DISLODGED THROUGH JETTING SHALL BE REMOVED FROM PUMP STATIONS AND SUBMERGED MANHOLES THROUGH VACUUMING AND DISPOSED PER SPECIFICATIONS.
4. CONTRACTOR SHALL FABRICATE AND INSTALL A ROCK CATCHING DEVICE AT THE LAKE WASHINGTON LIFT STATION NO. 2 PRIOR TO STARTING CLEANING. DURING CLEANING, THE ROCK CATCHER SHALL BE EMPTIED AND CLEANED DAILY.
5. CITY AND ENGINEER ARE WORKING TO IDENTIFY CLEANOUTS AND LATERAL ACCESS POINTS THAT CAN BE USED TO MONITOR THE LIQUID LEVEL IN THE LAKE LINE. SEE SPECIFICATIONS REGARDING REQUIREMENTS AND BYPASS PUMPING.
6. CCTV INSPECTIONS SHALL TAKE PLACE BOTH BEFORE CLEANING AND WITHIN 24 HOURS AFTER CLEANING OF EACH RUN AS DESCRIBED FURTHER IN THE SPECIFICATIONS.

LEGEND

- PUMP STATION
- SUBMERGED MANHOLE
- ON-LAND CLEANOUT



LAKELINE CLEANING PLAN
SCALE: 1" = 150'



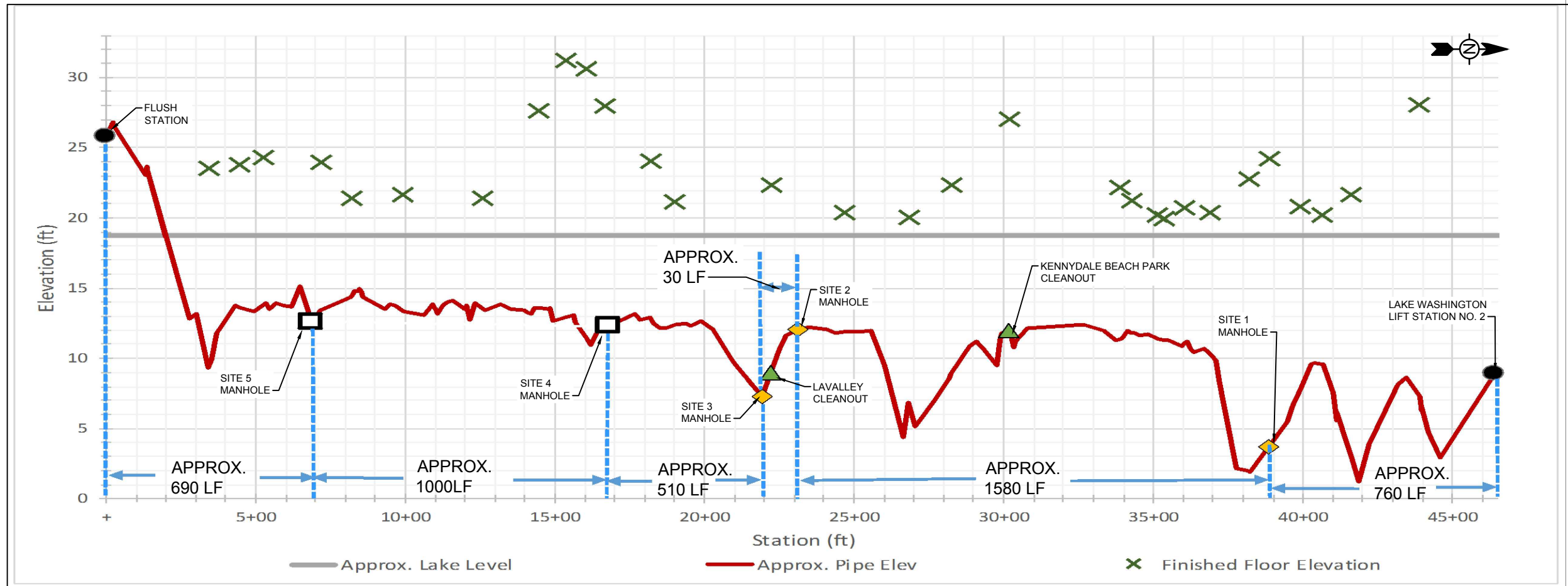
S-04010NN	
IN COMPLIANCE WITH CITY OF RENTON STANDARDS	

NO.	REVISION	BY	DATE	APPR	APPROVED

DESIGNED: KRG	SCALE: 1" = 150'
DRAWN: MJS	VERTICAL: NAD 1983
CHECKED: DS	HORIZONTAL: NAD 1983/1991
APPROVED: KRG	

CITY OF RENTON
Planning/Building/Public Works Dept.

KENNYDALE LAKE LINE SEWER IMPROVEMENTS AND CLEANING SEWER CLEANING PLAN	DATE: 6/5/18 PAGE: 7 SHEET: 7 OF 8
--	--



LAKELINE CLEANING PROFILE

LAKELINE CLEANING SCHEDULE

ACCESS TYPE	FACILITY	CLEANING DIRECTION	ADDRESS
CLEANOUT IN VAULT	FLUSH STATION	NORTH	2725 MOUNTAIN VIEW AVE N
SUBMERGED MANHOLE	SITE 5 MANHOLE	NORTH/SOUTH	2905 MOUNTAIN VIEW AVE N
SUBMERGED MANHOLE	SITE 4 MANHOLE	NORTH/SOUTH	3119 MOUNTAIN VIEW AVE N
SUBMERGED MANHOLE	SITE 3 MANHOLE	SOUTH	3233 MOUNTAIN VIEW AVE N
CLEANOUT	LAVALLEY	SOUTH	3307 MOUNTAIN VIEW AVE N
SUBMERGED MANHOLE	SITE 2 MANHOLE	NORTH/SOUTH	3307 MOUNTAIN VIEW AVE N
CLEANOUT	KENNYDALE BEACH PARK	SOUTH	3501 LAKE WASHINGTON BLVD
SUBMERGED MANHOLE	SITE 1 MANHOLE	NORTH/SOUTH	3715 LAKE WASHINGTON BLVD
WET WELL	LAKE WASHINGTON LIFT STATION #2	SOUTH	3903 LAKE WASHINGTON BLVD

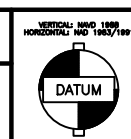
S-04010NN

IN COMPLIANCE WITH CITY OF RENTON STANDARDS



NO.	REVISION	BY	DATE	APPR

SURVEYED:	SCALE:
DESIGNED: KRG	N/A
DRAWN: MJS	
CHECKED: DS	
APPROVED: KRG	



KENNYDALE LAKE LINE SEWER IMPROVEMENTS AND CLEANING CLEANING PROFILE & SCHEDULE

DATE:	6/7/18
PAGE:	8
DRAWING NO.:	8
SHEET:	8 OF 8

Appendix D

SUBMITTAL / REQUEST FOR INFORMATION



SUBMITTAL RESPONSE

PROJECT: **Kennydale Lakeline Sewer Improvement and Cleaning**
 PROJECT #: **135-01621-16001**
 SUBMITTAL #: **001**
 SPEC SECTION: **9-30 Water Distribution Materials**
 DATE RECEIVED: **13 – Sept – 2018**
 DATE RETURNED: **20 – Sept – 2018**

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input checked="" type="checkbox"/>	See This Letter <input type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: **09/20/2018** By: **KRG**

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

#	Spec or Drawing No.	Description	Comment	1	2	3	4	5
1	9-30.1(1)	Material	Permanent pipe material must be Ductile Iron.					X
2	N/A	N/A	No exception taken to other materials in submittal.	X				
3								
4								
5								



SUBMITTAL RESPONSE

PROJECT: **Kennydale Lakeline Sewer Improvement and Cleaning**
 PROJECT #: **135-01621-16001**
 SUBMITTAL #: **001A**
 SPEC SECTION: **9-30 Water Distribution Materials**
 DATE RECEIVED: **13 – Sept – 2018**
 DATE RETURNED: **20 – Sept – 2018**

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input checked="" type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input type="checkbox"/>	See This Letter <input type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: **09/20/2018** By: **KRG**

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

#	Spec or Drawing No.	Description	Comment	1	2	3	4	5
1	9-30.1(1)	Material	Permanent pipe material must be Ductile Iron.	X				
2								
3								
4								
5								



SUBMITTAL RESPONSE

PROJECT: **Kennydale Lakeline Sewer Improvement and Cleaning**
 PROJECT #: **135-01621-16001**
 SUBMITTAL #: **002**
 SPEC SECTION: **Temporary Manhole**
 DATE RECEIVED: **13 – Sept – 2018**
 DATE RETURNED: **20 – Sept – 2018**

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input type="checkbox"/>	See This Letter <input checked="" type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: **09/20/2018** By: **KRG**

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

#	Spec or Drawing No.	Description	Comment	1	2	3	4	5
1		Temp MH	Received for the record, not reviewed					
2								
3								
4								
5								



SUBMITTAL RESPONSE

PROJECT: **Kennydale Lakeline Sewer Improvement and Cleaning**
 PROJECT #: **135-01621-16001**
 SUBMITTAL #: **003**
 SPEC SECTION: **Spawning Gravel**
 DATE RECEIVED: **14 – Sept – 2018**
 DATE RETURNED: **20 – Sept – 2018**

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input checked="" type="checkbox"/>	See This Letter <input type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: **09/20/2018** By: **KRG**

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

#	Spec or Drawing No.	Description	Comment	1	2	3	4	5
1	9-03.11(1)	Fish Mix	Aggregate is too fine. Sieve analysis shows the aggregate mix does not meet spec.					X
2								
3								
4								
5								



SUBMITTAL RESPONSE

PROJECT: **Kennydale Lakeline Sewer Improvement and Cleaning**
 PROJECT #: **135-01621-16001**
 SUBMITTAL #: **004**
 SPEC SECTION: **Dive Operations Plan**
 DATE RECEIVED: **13 – Sept – 2018**
 DATE RETURNED: **20 – Sept – 2018**

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input type="checkbox"/>	See This Letter <input checked="" type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: **09/20/2018** By: **KRG**

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

1		DOP	This submittal was provided for information and was not subjected to a detailed review. Upon cursory review, it appears to represent the work intended by the contract.					
2			<p>Note the following observations from the installation of the three existing manholes in approximately 2003: Read from the previous Geotech report that they experienced the following at each site:</p> <ul style="list-style-type: none"> • Site 1 <ul style="list-style-type: none"> ○ Soft sediment (silts, organic debris) • Site 2 <ul style="list-style-type: none"> ○ Sand and gravel • Site 3 <ul style="list-style-type: none"> ○ Sand and gravel with cobbles <p>In the conclusions it reads that “hydro jet probing indicated cobbles, rocks and possibly till below the fine-grained, surficial lakebed sediments.”</p>					
3			During cutting and removal/replacement of couplings, the goal is to minimize the amount of water that enters the lake line. To the extent practical, use a plate to cover pipe end until temporary or permanent pipe connections can be completed.					



SUBMITTAL RESPONSE

PROJECT: **Kennydale Lakeline Sewer Improvement and Cleaning**
 PROJECT #: **135-01621-16001**
 SUBMITTAL #: **005**
 SPEC SECTION: **Emergency Management Plan**
 DATE RECEIVED: **16 – Sept – 2018**
 DATE RETURNED: **20 – Sept – 2018**

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input type="checkbox"/>	See This Letter <input checked="" type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: **09/20/2018** By: **KRG**

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

#	Spec or Drawing No.	Description	Comment	1	2	3	4	5
1		EMP	Submitted for information purposes only, not reviewed					
2								
3								
4								
5								



EMERGENCY MANAGEMENT PLAN

**Kennydale Lakeline Sewer Improvement
Renton, WA
Contract/PO # WWP-27-4010**

Submission Date: September 16, 2018

Revision #: 00

Prepared For:

John Hobson
City of Renton, Wastewater Utility
425-430-7279

Prepared By:

Ballard Marine Construction, LLC
Aimee Sanchez, Operations Coordinator
Ballard Project Number 1018039

CONFIDENTIALITY NOTE

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A. Emergency Transport Plan

The supervisor will assess the scene and activate EMS by dialing 911 if advanced medical care beyond the capabilities of onsite personnel may be required.

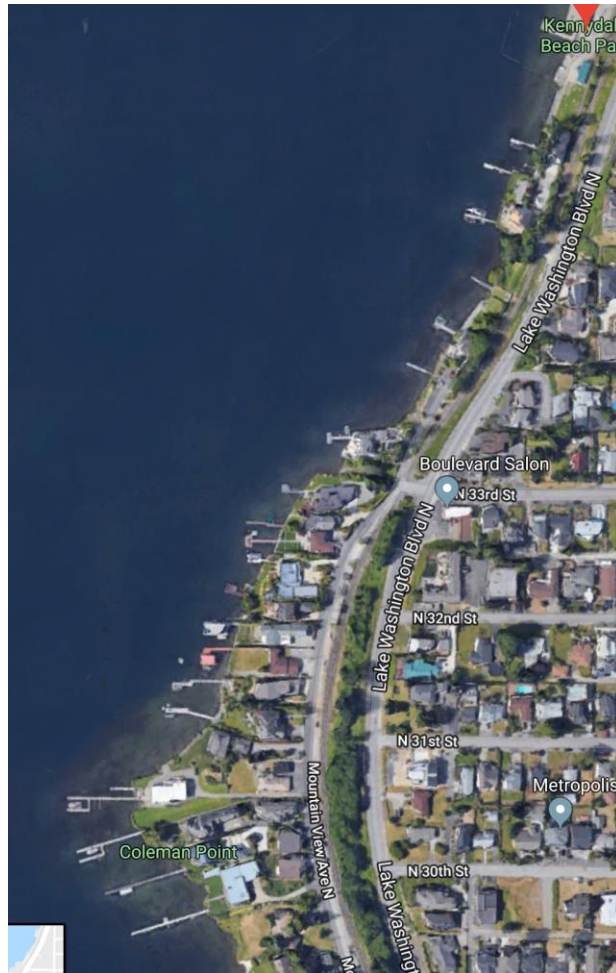
The supervisor will deploy rescuer(s) to assist and/or further assess the situation; only if deployment does not put the rescuer(s) in harms way. The injured worker will then be taken to a safe area where they will receive first aid from certified crew members. In the event of a diving injury, the standby diver will be deployed at the Dive Supervisor's discretion and will assist getting the primary diver strapped into the stokes litter or on a spine board at the surface (and/or egress via onsite ladder) as needed. The diver will be lifted from the water for first aid and/or medical treatment.

Life Threatening Injuries – Injured person will be taken to the nearest hospital for emergency care via ambulance or medevac. EMS will be notified via 911 dispatch by the supervisor.

EMS may transport to a different hospital depending on ER capacity, availability and specialty needed for type of injury. A crew member will accompany the victim to act as a point of contact for management.

Non-Life Threatening Injuries – Injured person will be taken to the nearest medical facility via the company work truck that is parked Coleman Point, 3007 Mountain View Ave N, Renton, WA 98056

EMS PICK-UP AREA:



B. Nearest Recompression Chamber

Divers Institute of Technology, Inc
4315 11th Ave, NW Seattle, WA 98107

206-783-5542

See EMP Enclosure 1 – Driving Directions to DIT

C. Nearest Hospital for Non-Dive Related Injuries

Valley Medical Center: Emergency Room
400 S 43rd St, Renton, WA 98055

425-228-3450

See EMP Enclosure 2 – Driving Directions to Valley Medical Center

D. Emergency Contact Information

All project personnel will communicate with each other verbally on the project site.. Emergencies will be activated by dialing 911 for emergency assistance..

Renton Regional Fire Authority Station 13
18002 108th Ave SE, Renton, WA 98055

425-430-7000

Renton Police Department
1055 S Grady Way, Renton, WA 98057

425-430-7500

Divers Alert Network (DAN)
Call local EMS before you call DAN

919-684-9111

Commander 13th Coast Guard District
(WA/OR)

206-220-7001

When emergency services have been called, a designated member of the crew will notify Ballard’s management by calling the first person on the list below. If that person does not answer, the next person will be called, and so on, until notification has been achieved.

EMERGENCY CONTACTS		
Name	Mobile Phone	Job Title
Robert Stanton	360-953-4379	Senior Project Manager, Northwest Division
John Snowden	360-409-9574	Senior Project Manager, Northwest Division
Aimee Sanchez	360-216-3621	Operations Coordinator, Northwest Division
Rebekah Troxell	360-989-0920	Corporate Safety Manager
Dean Reynolds	360-609-8330	Chief Operations Officer
OSHA	800-321-6742	Report a fatality or life threatening situation
Washington L & I	800-423-7233	Report a fatality or serious injury

E. Topside Emergency Procedures (T-EP):

“Designated Person” means a person designated by the supervisor during an emergency situation.

T-EP-1

FIRE IN EQUIPMENT

STEP	PROCEDURE	ACTION REQUIRED BY
1	Abort all operations	Supervisor
2	Evacuate personnel to a safe area (if possible)	Supervisor
3	Extinguish fire (if possible)	Designated Person
4	Call for emergency assistance (if required)	Supervisor/Designated Person
5	Determine the extent of the damage	Supervisor/Designated Person
6	Notify client and BMC management	Supervisor

T-EP-2

DROWNING / NEAR DROWNING

STEP	PROCEDURE	ACTION REQUIRED BY
1	Abort all operations	Supervisor
2	Retrieve person from water if safe to do so	Any Available Person
3	Call for emergency assistance (if required)	Designated Person
4	Replace wet clothing with warm/dry clothing or blankets	Any Available Person
5	Administer FA/CPR as needed	Trained Crew Member
6	Notify client and BMC management	Supervisor

NOTE: Any victim of near drowning must be seen by a medical professional after recovery from the water.

T-EP-3

INJURY / ILLNESS

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify the supervisor immediately	Injured Person/Witness
2	Abort all operations (for serious/life-threatening injuries)	Supervisor
3	Call for emergency assistance (if required)	Designated Person
4	Administer FA/CPR as needed	Trained Crew Member
5	Notify client and BMC management	Supervisor

F. Diving Emergency Procedures (D-EP):

EPs; Ref: EM 385 1-1; 30.A.15

D-EP-1

LOSS OF BREATHING MEDIA / CONTAMINATED AIR SOURCE

STEP	PROCEDURE	ACTION REQUIRED BY
1	Instruct diver to go on bailout (if required)	Supervisor/Rack Operator/Diver
2	Direct air flow to the diver's pneumo	Supervisor/Rack Operator
3	Shift to secondary breathing supply	Supervisor/Rack Operator
4	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
5	Insert pneumo under diver's neck dam (if required)	Diver/Standby Diver
6	Go to bell/stage/egress point	Diver/Standby Diver
7	Terminate dive	Supervisor/Rack Operator
8	Notify client and BMC management	Supervisor

D-EP-2

LOSS OF DIVER COMMUNICATIONS

STEP	PROCEDURE	ACTION REQUIRED BY
1	Attempt to establish line pull signals	Supervisor/Tender/Diver
2	Direct air flow to the diver's pneumo	Supervisor/Rack Operator
3	Shift to secondary breathing supply (to rule out CO poisoning)	Supervisor/Rack Operator
4	Terminate dive and surface if line pull signals are returned	Supervisor/Rack Operator
5	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
6	Follow down line, stage or main diver's umbilical to bottom	Standby Diver
7	Locate main diver and report findings to the Dive Supervisor	Standby Diver
	Provide lifesaving care (as required)	Standby Diver
8	Prepare main diver to leave bottom	Standby Diver
9	Terminate dive	Supervisor/Rack Operator

D-EP-3

FOULED OR ENTRAPPED DIVER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Do not panic or ditch equipment	Diver
2	Attempt to free yourself	Diver
3	Notify topside of the situation	Diver
4	Determine extent of fouling or entrapment	Supervisor/Diver
5	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
6	Terminate dive if diver is shaken or standby diver was required	Supervisor/Rack Operator

D-EP-4

INJURED DIVER IN THE WATER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify topside of the situation	Diver
2	Determine the nature and extent of the injury	Diver
3	Call for emergency assistance (if required)	Designated Person
4	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
5	Assist diver and administer first aid (as required)	Standby Diver
6	Remain with the diver until they are on surface	Standby Diver
7	If breathing stops, free flow helmet and purge regulator	Standby Diver
8	Terminate dive	Supervisor/Rack Operator
9	Begin decompression (if needed) except when the injury presents a greater risk to the diver than omitting decompression	Supervisor/DMT/Physician
10	Notify client and BMC management	Supervisor

D-EP-5

SEVERANCE OF DIVER'S UMBILICAL

PROCEDURE A: SEVERANCE OF GAS HOSE ONLY

STEP	PROCEDURE	ACTION REQUIRED BY
1	Activate bail out bottle	Diver
2	Notify topside of the situation	Diver
3	Direct air flow to the diver's pneumo	Supervisor/Rack Operator
4	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
5	Insert pneumo under diver's neck dam (if required)	Diver/Standby Diver
6	Go to bell/stage/egress point	Diver/Standby Diver
7	Activate and use emergency gas (if in bell or stage)	Diver/Standby Diver
8	Terminate Dive	Supervisor/Rack Operator
9	Notify client and BMC management	Supervisor

PROCEDURE B: COMPLETE SEVERANCE OF UMBILICAL

STEP	PROCEDURE	ACTION REQUIRED BY
1	Activate bail out bottle	Diver
2	Initiate line pull signals if the strength member is in tact	Diver
3	Alert and brief standby diver (deploy immediately)	Supervisor/Rack Operator
4	Follow down line or stage cable to bottom, do not follow umbilical unless it is severed on deck and the severed end is accessible	Standby Diver
5	Locate main diver and insert pneumo under neck dam (if required) or perform a hose change out (if equipped)	Standby Diver
6	Go to bell/stage/egress point	Diver/Standby Diver
7	Prepare main diver to leave bottom	Standby Diver
8	Terminate dive	Supervisor/Rack Operator
9	Notify client and BMC management	Supervisor

NOTE: Follow D-EP-6 Steps for Lost Diver if severance of umbilical results in loss of communication and conditions do not allow for positive confirmation of diver's location upon descent or approach to work site.

D-EP-6

LOST AND UNCONSCIOUS DIVER WITH COMPLETE SEVERANCE OF UMBILICAL

STEP	PROCEDURE	ACTION REQUIRED BY
1	Activate bail out bottle	Diver
2	Alert and brief standby diver (deploy immediately)	Supervisor/Rack Operator
3	Search for main diver at last known location	Standby Diver
4	Locate main diver and insert pneumo under neck dam (if required) or perform a hose change out (if equipped)	Standby Diver
5	Call for emergency assistance (if required)	Designated Person
6	Terminate dive	Supervisor/Rack Operator
7	Administer FA/CPR as needed	Trained Crew Member
8	Notify client and BMC management	Supervisor

NOTE: Treat an unconscious diver for AGE or serious decompression sickness unless the possibility of such a condition can be ruled out without question. A diver who surfaces unconscious and recovers when exposed to fresh air shall receive a neurological evaluation to rule out arterial gas embolism.

D-EP-7

FIRE IN EQUIPMENT

STEP	PROCEDURE	ACTION REQUIRED BY
1	Extinguish fire (if possible)	Designated Person
2	Evacuate personnel to a safe area (if required)	Supervisor
3	Call for emergency assistance (if required)	Supervisor/Designated Person
4	Determine the effect of fire on the diver	Supervisor/Designated Person
5	Terminate dive (if required)	Supervisor/Rack Operator
6	Notify client and BMC management	Supervisor

D-EP-8

UNCONTROLLED ASCENT

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify topside of situation (if possible)	Diver
2	Forcibly exhale all the way to surface	Diver
3	Take up the diver's slack as quickly as possible	Tender
4	Recover diver to dive platform	Tender
5	Perform a neurological exam to rule out AGE/DCS	Supervisor/DMT
6	Treat on appropriate USN Treatment Table (if required)	Supervisor/DMT
7	If No-D dive, observe diver on surface for 1 hour, treat any symptoms	Supervisor/DMT
8	Notify client and BMC management	Supervisor

NOTE: If decompression is omitted, treat for omitted decompression in accordance with EP-9.

D-EP-9

OMITTED DECOMPRESSION

STEP	PROCEDURE	ACTION REQUIRED BY
1	Reference USN Table 9-3 for air or USN Table 14-2 for mixed gas	Supervisor/Rack Operator
2	Immediately recompress the diver	Supervisor/DMT
3	Take diver to appropriate depth in chamber according to USN tables	Chamber Operator
4	If no symptoms or complete resolution of symptoms, complete decompression on the selected treatment table	Chamber Operator
5	Treat any symptoms during or following treatment as a recurrence	Supervisor/Chamber Operator
6	Notify client and BMC management	Supervisor

D-EP-10

VITAL EQUIPMENT FAILURE – DIVER IN THE WATER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify Dive Supervisor of equipment failure	Equipment Operator/Monitor
2	Notify diver of problem	Supervisor/Rack Operator
3	Develop a plan of action	Supervisor/Equipment Operator
4	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
5	Alert and brief dive support personnel	Supervisor/Rack Operator
6	Activate plan	Supervisor/Rack Operator
7	Terminate dive	Supervisor/Rack Operator
8	Notify client and BMC management	Supervisor

D-EP-11

DECOMPRESSION SICKNESS ON SURFACE

STEP	PROCEDURE	ACTION REQUIRED BY
1	Report signs or symptoms to Dive Supervisor immediately	Diver/Witness
2	Administered 100% oxygen by non-rebreather mask at 15 liters/min	Trained Crew Member
3	Conduct neurological exam if diver is not acutely distressed	Supervisor/DMT
4	Recompress and treat according to USN treatment guidelines: A. TT 6 – Type 1 or pain only DCS B. TT 6A – Type 2 or neurological impairment C. TT 6 – Recurrence	Supervisor/DMT
5	Notify and consult with Hyperbaric Physician	Supervisor/DMT
6	Notify client and BMC management	Supervisor

NOTE: Divers must complete a new diving physical examination after treatment.

D-EP-12

DECOMPRESSION SICKNESS IN WATER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify the Dive Supervisor immediately (if capable)	Diver/Rack Operator
2	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
3	Descend 10ft deeper than the depth where symptoms onset	Diver/Standby Diver
4	Start decompression and increase stop times: 1. Multiply remaining stop times by 1.5	Supervisor/Rack Operator
5	If symptoms continue on surface, treat on TT 6	Supervisor/Chamber Operator
6	Notify client and BMC management	Supervisor

NOTE: DO NOT descend more than two 10ft stops deeper than the first table stop. Divers must complete a new diving physical examination after treatment.

D-EP-13

OXYGEN TOXICITY IN WATER

PROCEDURE A: ONSITE CHAMBER, SYMPTOMS AT 20FT OR 30FT STOPS

STEP	PROCEDURE	ACTION REQUIRED BY
1	Alert and brief standby diver (deploy immediately)	Supervisor/Rack Operator
2	Initiate surface decompression	Supervisor/Chamber Operator
3	Shift primary supply to air during ascent to surface	Supervisor/Rack Operator
4	Compute required O ₂ periods: 1. Multiply the remaining O ₂ time required at in-water stops by 1.1 2. Divide the total by 30 min 3. Round up to the nearest ½ period	Supervisor/Rack Operator
5	Complete decompression in the chamber	Chamber Operator
6	Notify client and BMC management	Supervisor

NOTE: Follow D-EP-14 Oxygen Toxicity In Chamber if Oxygen Toxicity presents in the chamber.

PROCEDURE B₁: NO AVAILABLE CHAMBER, SYMPTOMS AT 30FT STOP

STEP	PROCEDURE	ACTION REQUIRED BY
1	Alert and brief standby diver (deploy immediately)	Supervisor/Rack Operator
2	Ascend 10ft to the 20ft stop depth	Diver/Standby Diver
3	Shift primary supply to air during ascent to surface to reduce PPO ₂	Supervisor/Rack Operator
4	Ventilate both divers at 20ft starting with the affected diver	Standby Diver
5	Compute the required stop time at 20ft: 1. Multiply the missed stop time at 30ft by the ratio of air to O ₂ stop time at 30ft 2. Add this time to the required 20ft stop time on an air table	Supervisor/Rack Operator
6	Complete decompression at 20ft	Supervisor/Rack Operator
7	Notify client and BMC management	Supervisor

PROCEDURE B₂: NO AVAILABLE CHAMBER, SYMPTOMS AT 20FT STOP

STEP	PROCEDURE	ACTION REQUIRED BY
1	Alert and brief standby diver (deploy immediately)	Supervisor/Rack Operator
2	Shift primary supply to air	Supervisor/Rack Operator
3	Ventilate both divers starting with the affected diver	Standby Diver
4	Compute the remaining stop time on air at 20ft: 1. Multiply the remaining stop time on O ₂ at 20ft by the ratio of air to O ₂ stop time at 20ft	Supervisor/Rack Operator
5	Complete decompression at 20ft	Supervisor/Rack Operator
6	Notify client and BMC management	Supervisor

D-EP-14

OXYGEN TOXICITY IN CHAMBER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Remove the BIBS mask at first sign of symptoms	Diver/Inside Tender
2	Wait for all symptoms to completely subside, after convulsions, wait until the diver is fully relaxed and breathing normally	Chamber Operator/Inside Tender
3	Decompress (ascend) 10ft at 1ft/min	Chamber Operator
4	Resume breathing O ₂ at shallower depth at the point of interruption	Diver
5	Complete chamber periods from shallower depth	Chamber Operator
6	Notify client and BMC management	Supervisor

NOTE: Consider all time on air as dead time. If symptoms present again after ascending 10ft, complete decompression on air. Compute remaining time on air according to USN Dive Manual Paragraph 9-12.8.

D-EP-15

ARTERIAL GAS EMBOLISM

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify the Dive Supervisor of signs or symptoms immediately	Diver/Witness
2	Compress to 60ft in chamber or call for medevac for diving emergency	Supervisor/Chamber Operator
3	If symptoms resolve after :20, complete TT6	Chamber Operator
4	If unchanged severe or worsening condition, compress to depth of relief or significant improvement, not to exceed 165ft	Chamber Operator
5	Complete treatment according to USN Dive Manual guidance	Chamber Operator
6	If more time needed at depth of relief, contact hyperbaric physician	Supervisor/DMT
7	For life threatening symptoms and more time needed at 60 feet; remain at 60 feet for at least 12 hours then decompress on Table 7	Chamber Operator
8	Notify client and BMC management	Supervisor

D-EP-16

EMERGENCY EVACUATION

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify diver of emergency and terminate dive	Supervisor/Rack Operator
2	Manage omitted decompression by USN Table 9-3 or 14-2 (as required)	Supervisor/Rack Operator
3	Evacuate all unnecessary personnel to a safe location	Supervisor
4	Notify client and BMC management	Supervisor

D-EP-17

DROWNING / NEAR DROWNING

STEP	PROCEDURE	ACTION REQUIRED BY
1	Remove diver from water	Tender
2	Call for emergency assistance	Designated Person
3	Manage omitted decompression according to USN Table 9-3 or 14-2 (as required)	Supervisor/Rack Operator
4	Administer FA/CPR as needed	Trained Crew Member
5	Notify client and BMC management	Supervisor

NOTE: Any victim of near drowning must be seen by a medical professional after recovery from the water.

D-EP-18

INJURY / ILLNESS OF TOPSIDE CREW MEMBER WITH DIVER IN THE WATER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify diver of injury/accident	Supervisor/Rack Operator
2	Terminate dive (as required)	Supervisor/Rack Operator
3	Call for emergency assistance (as required)	Designated Person
4	Administer FA/CPR as needed	Trained Crew Member
5	Notify client and BMC management	Supervisor

D-EP-19

PERSON OVERBOARD / PERSON IN THE WATER (PIW)

STEP	PROCEDURE	ACTION REQUIRED BY
1	Alert project personnel, don't take your eyes off the person	Witness/Bystander
2	Toss a throw ring or floating object next to the person	Witness/Bystander
3	Maneuver vessel to person in water's location (if needed) – keep running prop clear of any and all persons in the water	Vessel Operator
4	Shut off vessel motors before coming alongside of person in water	Vessel Operator
5	Haul persons to vessel/shore with life line and throw ring	Available Rescuer/Deck Hand
6	Recover person in water at the stern of the vessel	Deck Hand
7	Get person to heated vessel or truck cab – whichever is closer	Available Rescuer/Vessel Operator
8	Remove wet clothing, put on warm dry clothes	Available Rescuer
9	Treat for hypothermia (seek medical attention as required)	Trained Crew Member
10	Notify client and BMC management	Supervisor

D-EP-20

VESSEL CAPSIZING

PROCEDURE A: PERSON(S) IN WATER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Make sure your PFD is securely fastened	Person(s) in Water
2	Swim to safety and get out of the water	Person(s) Near Shore/Dive Platform
3	Use floating objects to get as far out of the water as possible	Person(s) Who Can't Swim to Safety
4	DO NOT PANIC IF THE BOAT SINKS OR FLOATS AWAY	All Personnel
5	Hold onto floating objects to help support your body weight	Person(s) in Water
6	Float together in a group - do not attempt to swim or tread water	Person(s) Who Can't Swim to Safety
7	Float and stay calm until help arrives	Person(s) in Water
8	Stay calm and cooperate with rescuers	Person(s) in Water

PROCEDURE B: RESCUERS ON VESSEL, SHORE OR STRUCTURE

STEP	PROCEDURE	ACTION REQUIRED BY
1	Abort current operations	Supervisor
2	Turn the cabin heater on in the vessel or a truck cab onshore	Available Rescuer
3	Toss throw ring or floating object on a line to persons in water	Available Rescuer
4	Haul persons to vessel with life line and throw ring	Available Rescuer
5	Place rescued persons in heated vessel or truck cab	Available Rescuer
6	Remove wet clothing, put on warm dry clothes	Available Rescuer/Rescued Person(s)
7	Treat for hypothermia (seek medical attention as required)	Available Rescuer
8	Notify client and BMC management	Supervisor

Google Maps 3007 Mountain View Ave N, Renton, WA 98056 to 4315 11th Ave NW, Seattle, WA 98107

Drive 19.4 miles, 31 min



3007 Mountain View Ave N
Renton, WA 98056

Get on I-405 N from Lake Washington Blvd N

- ↑ 1. Head north on Mountain View Ave N
5 min (1.5 mi)

- ↗ 2. Turn right to stay on Mountain View Ave N
0.2 mi

- ↶ 3. Turn left onto Lake Washington Blvd N
79 ft

- ↑ 4. Continue onto N 44th St
0.8 mi

- ↗ 5. Turn right to merge onto I-405 N
0.2 mi

- 0.2 mi

Continue on I-405 N. Take I-90 W and WA-99 N to Bridge Way N in Seattle

- ↗ 6. Merge onto I-405 N
22 min (16.3 mi)

- ↘ 7. Use the right 2 lanes to take exit 11 to merge onto I-90 W toward Seattle/Mercer Island
3.2 mi

- ↶ 8. Keep left to stay on I-90 W
7.0 mi

- ↶ 9. Keep left at the fork, follow signs for E Martinez Dr
1.1 mi

- ↗ 10. Use any lane to turn right onto Edgar Martinez Dr S
0.2 mi

- ↗ 11. Turn right onto 1st Ave S/Dave Niehaus Way S
0.2 mi

- ↶ 12. Turn left onto S Royal Brougham Way
0.1 mi

- ↗ 13. Turn right to merge onto WA-99 N
322 ft

- 4.4 mi

Take N 39th St and Leary Way NW to 11th Ave NW

- ↗ 14. Keep right to continue on Bridge Way N
6 min (1.6 mi)

- ↶ 15. Slight left to stay on Bridge Way N
341 ft

- ↶ 16. Turn left onto N 38th St
164 ft

- ↗ 17. Turn right onto Fremont Way N
213 ft

- ↶ 18. Use the right lane to turn slightly left onto N 39th St
0.2 mi

- ↗ 19. Turn right onto Leary Way NW
0.5 mi

- i
 Pass by HD Supply White Cap (on the left in 0.3 mi)

0.6 mi

- i
 Pass by BevMo! (on the right)

0.2 mi

- i
 Destination will be on the right

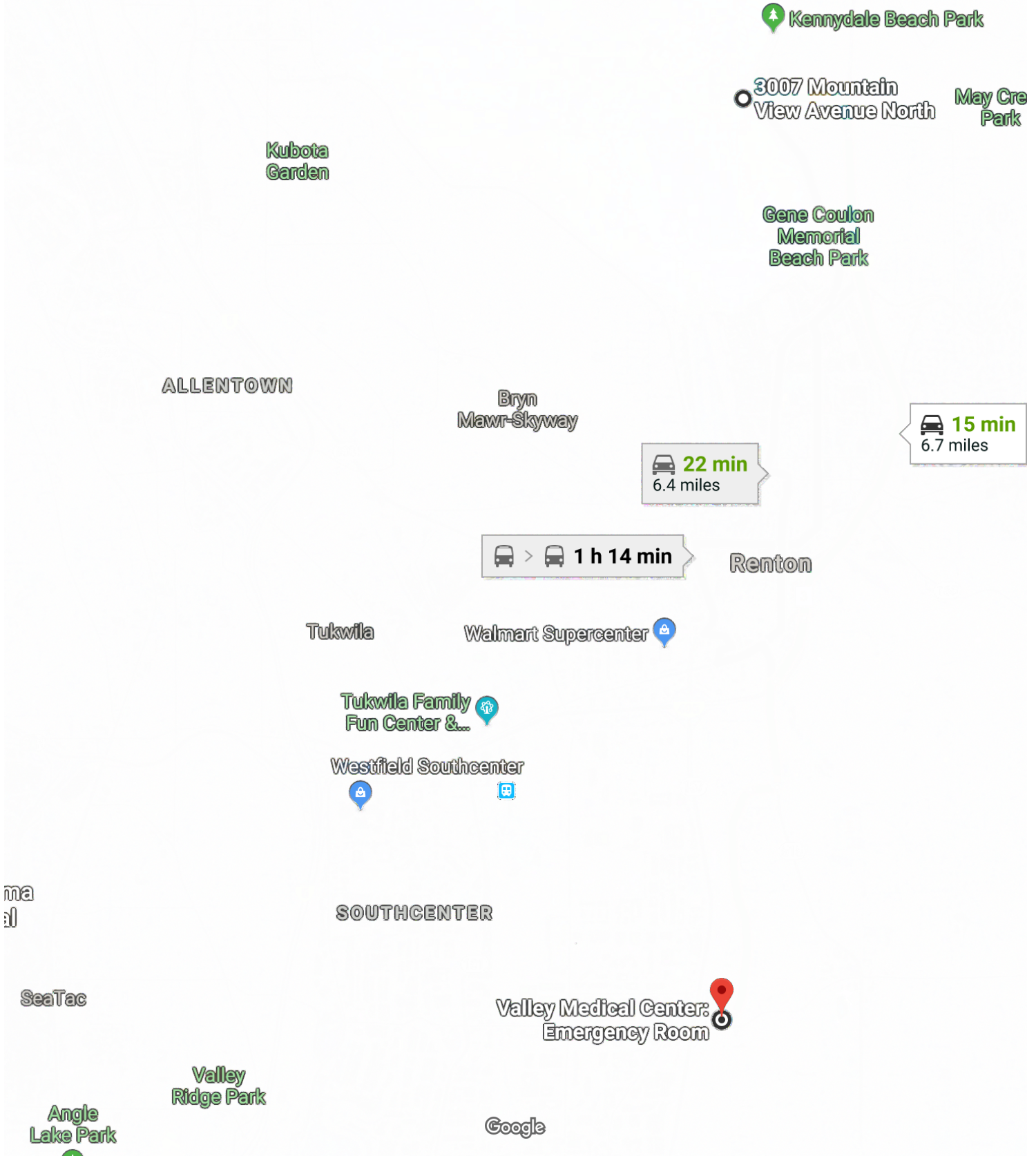
0.2 mi

- ↶ 21. Turn left onto 11th Ave NW
456 ft

4315 11th Ave NW

Seattle, WA 98107

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.



Follow Mountain View Ave N to Lake Washington Blvd N

- ↑

1. Head north on Mountain View Ave N

1 min (0.2 mi)
- ↻

2. Turn right to stay on Mountain View Ave N

0.2 mi
- ↻

79 ft

79 ft

Take I-405 S to S 21st St

- ↻

3. Turn right onto Lake Washington Blvd N

9 min (4.9 mi)
- ↶

4. Turn left onto N 30th St

0.2 mi
- ↗

5. Turn right onto the Interstate 405 S ramp

0.5 mi
- ↗

6. Merge onto I-405 S

0.2 mi
- ↘

7. Take exit 3 for WA-515/Talbot Road S

3.0 mi
- ↶

8. Use the left 2 lanes to turn slightly left onto WA-515 S/Talbot Rd S (signs for Talbot Road S)

i Continue to follow WA-515 S

0.4 mi
- 0.6 mi

0.6 mi

Take Talbot Rd S to your destination

- ↻

9. Turn right onto S 21st St

5 min (1.6 mi)
- ↑

10. Continue onto Talbot Rd S

0.2 mi
- ↻

11. Turn right

1.3 mi
- ↶

12. Turn left

148 ft
- ↻

13. Turn right

i Destination will be on the right

246 ft
- 135 ft

135 ft

Valley Medical Center: Emergency Room

400 S 43rd St, Renton, WA 98055

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.



SUBMITTAL RESPONSE

PROJECT: **Kennydale Lakeline Sewer Improvement and Cleaning**
 PROJECT #: **135-01621-16001**
 SUBMITTAL #: **001**
 SPEC SECTION: **9-30 Water Distribution Materials**
 DATE RECEIVED: **13 – Sept – 2018**
 DATE RETURNED: **20 – Sept – 2018**

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input checked="" type="checkbox"/>	See This Letter <input type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: **09/20/2018** By: **KRG**

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

#	Spec or Drawing No.	Description	Comment	1	2	3	4	5
1	9-30.1(1)	Material	Permanent pipe material must be Ductile Iron.					X
2	N/A	N/A	No exception taken to other materials in submittal.	X				
3								
4								
5								



SUBMITTAL RESPONSE

PROJECT: **Kennydale Lakeline Sewer Improvement and Cleaning**
 PROJECT #: **135-01621-16001**
 SUBMITTAL #: **001A**
 SPEC SECTION: **9-30 Water Distribution Materials**
 DATE RECEIVED: **13 – Sept – 2018**
 DATE RETURNED: **20 – Sept – 2018**

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input checked="" type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input type="checkbox"/>	See This Letter <input type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: **09/20/2018** By: **KRG**

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

#	Spec or Drawing No.	Description	Comment	1	2	3	4	5
1	9-30.1(1)	Material	Permanent pipe material must be Ductile Iron.	X				
2								
3								
4								
5								



SUBMITTAL RESPONSE

PROJECT: **Kennydale Lakeline Sewer Improvement and Cleaning**
 PROJECT #: **135-01621-16001**
 SUBMITTAL #: **002**
 SPEC SECTION: **Temporary Manhole**
 DATE RECEIVED: **13 – Sept – 2018**
 DATE RETURNED: **20 – Sept – 2018**

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input type="checkbox"/>	See This Letter <input checked="" type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: **09/20/2018** By: **KRG**

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

#	Spec or Drawing No.	Description	Comment	1	2	3	4	5
1		Temp MH	Received for the record, not reviewed					
2								
3								
4								
5								



SUBMITTAL RESPONSE

PROJECT: **Kennydale Lakeline Sewer Improvement and Cleaning**
 PROJECT #: **135-01621-16001**
 SUBMITTAL #: **003**
 SPEC SECTION: **Spawning Gravel**
 DATE RECEIVED: **14 – Sept – 2018**
 DATE RETURNED: **20 – Sept – 2018**

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input checked="" type="checkbox"/>	See This Letter <input type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: **09/20/2018** By: **KRG**

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

#	Spec or Drawing No.	Description	Comment	1	2	3	4	5
1	9-03.11(1)	Fish Mix	Aggregate is too fine. Sieve analysis shows the aggregate mix does not meet spec.					X
2								
3								
4								
5								



SUBMITTAL RESPONSE

PROJECT: *Kennydale Lakeline Sewer Improvement and Cleaning*
 PROJECT #: *135-01621-16001*
 SUBMITTAL #: *004*
 SPEC SECTION: *Dive Operations Plan*
 DATE RECEIVED: *13 – Sept – 2018*
 DATE RETURNED: *20 – Sept – 2018*

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input type="checkbox"/>	See This Letter <input checked="" type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: *09/20/2018* By: *KRG*

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

1		DOP	This submittal was provided for information and was not subjected to a detailed review. Upon cursory review, it appears to represent the work intended by the contract.					
2			Note the following observations from the installation of the three existing manholes in approximately 2003: Read from the previous Geotech report that they experienced the following at each site: <ul style="list-style-type: none"> • Site 1 <ul style="list-style-type: none"> ○ Soft sediment (silts, organic debris) • Site 2 <ul style="list-style-type: none"> ○ Sand and gravel • Site 3 <ul style="list-style-type: none"> ○ Sand and gravel with cobbles In the conclusions it reads that “hydro jet probing indicated cobbles, rocks and possibly till below the fine-grained, surficial lakebed sediments.”					
3			During cutting and removal/replacement of couplings, the goal is to minimize the amount of water that enters the lake line. To the extent practical, use a plate to cover pipe end until temporary or permanent pipe connections can be completed.					



SUBMITTAL RESPONSE

PROJECT: **Kennydale Lakeline Sewer Improvement and Cleaning**
 PROJECT #: **135-01621-16001**
 SUBMITTAL #: **005**
 SPEC SECTION: **Emergency Management Plan**
 DATE RECEIVED: **16 – Sept – 2018**
 DATE RETURNED: **20 – Sept – 2018**

1	NO EXCEPTIONS TAKEN
2	NOTE MARKINGS
3	COMMENTS ATTACHED -- CONFIRM
4	COMMENTS ATTACHED -- RESUBMIT
5	REJECTED

No Exception Taken <input type="checkbox"/>	Note Markings <input type="checkbox"/>
Comments Attached – Confirm <input type="checkbox"/>	Comments Attached – Resubmit <input type="checkbox"/>
Rejected <input type="checkbox"/>	See This Letter <input checked="" type="checkbox"/>

The purpose of this review is to verify general conformance with the design concept of the project and general compliance with the information given in the contract documents. The absence of comments on any particular item, assembly, or installation, shall not be construed as acceptance of these items. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for dimensions, which shall be confirmed and correlated at the jobsite; fabrication processes and technique of construction; coordination of his work with that of all other trades; safety of methods, and the satisfactory performance of his work. This review does not in any way or to any extent relieve the contractors of their contractual obligation to comply with any and all aspects of the contract documents.

Date: **09/20/2018** By: **KRG**

EXCEPTIONS TAKEN TO SUBMITTED INFORMATION AND GENERAL COMMENTS NOTED BELOW:

#	Spec or Drawing No.	Description	Comment	1	2	3	4	5
1		EMP	Submitted for information purposes only, not reviewed					
2								
3								
4								
5								



EMERGENCY MANAGEMENT PLAN

**Kennydale Lakeline Sewer Improvement
Renton, WA
Contract/PO # WWP-27-4010**

Submission Date: September 16, 2018

Revision #: 00

Prepared For:

John Hobson
City of Renton, Wastewater Utility
425-430-7279

Prepared By:

Ballard Marine Construction, LLC
Aimee Sanchez, Operations Coordinator
Ballard Project Number 1018039

CONFIDENTIALITY NOTE

The information contained in this document is legally privileged, confidential and intended only for the use of the individual and/or entity named above. This document may not be copied, duplicated, transferred or forwarded to anybody but the recipient. If you are not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this document is strictly prohibited. If you have received this document in error, please notify us by telephone and destroy the original document.

A. Emergency Transport Plan

The supervisor will assess the scene and activate EMS by dialing 911 if advanced medical care beyond the capabilities of onsite personnel may be required.

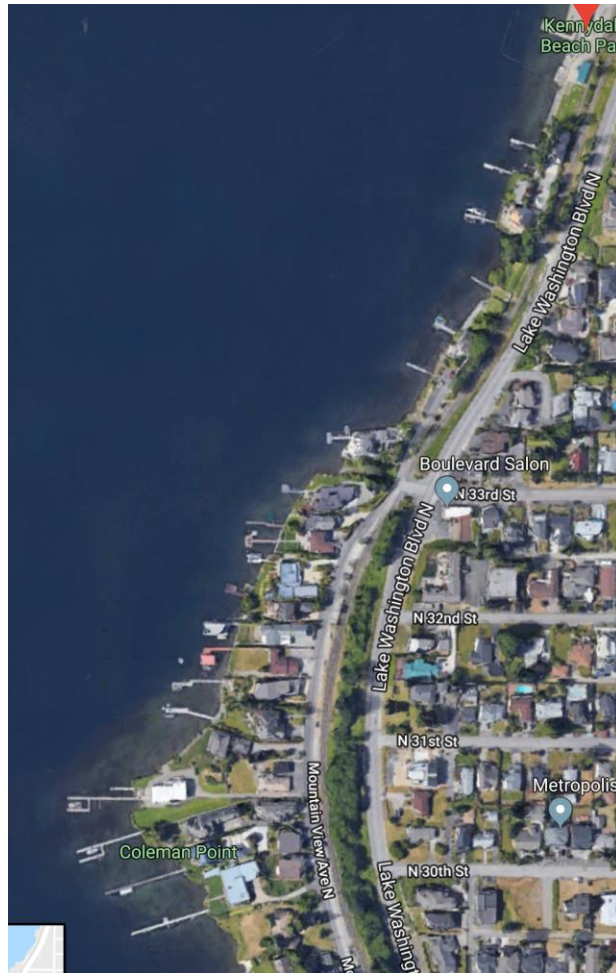
The supervisor will deploy rescuer(s) to assist and/or further assess the situation; only if deployment does not put the rescuer(s) in harms way. The injured worker will then be taken to a safe area where they will receive first aid from certified crew members. In the event of a diving injury, the standby diver will be deployed at the Dive Supervisor's discretion and will assist getting the primary diver strapped into the stokes litter or on a spine board at the surface (and/or egress via onsite ladder) as needed. The diver will be lifted from the water for first aid and/or medical treatment.

Life Threatening Injuries – Injured person will be taken to the nearest hospital for emergency care via ambulance or medevac. EMS will be notified via 911 dispatch by the supervisor.

EMS may transport to a different hospital depending on ER capacity, availability and specialty needed for type of injury. A crew member will accompany the victim to act as a point of contact for management.

Non-Life Threatening Injuries – Injured person will be taken to the nearest medical facility via the company work truck that is parked Coleman Point, 3007 Mountain View Ave N, Renton, WA 98056

EMS PICK-UP AREA:



B. Nearest Recompression Chamber

Divers Institute of Technology, Inc
4315 11th Ave, NW Seattle, WA 98107

206-783-5542

See EMP Enclosure 1 – Driving Directions to DIT

C. Nearest Hospital for Non-Dive Related Injuries

Valley Medical Center: Emergency Room
400 S 43rd St, Renton, WA 98055

425-228-3450

See EMP Enclosure 2 – Driving Directions to Valley Medical Center

D. Emergency Contact Information

All project personnel will communicate with each other verbally on the project site.. Emergencies will be activated by dialing 911 for emergency assistance..

Renton Regional Fire Authority Station 13
18002 108th Ave SE, Renton, WA 98055

425-430-7000

Renton Police Department
1055 S Grady Way, Renton, WA 98057

425-430-7500

Divers Alert Network (DAN)
Call local EMS before you call DAN

919-684-9111

Commander 13th Coast Guard District
(WA/OR)

206-220-7001

When emergency services have been called, a designated member of the crew will notify Ballard’s management by calling the first person on the list below. If that person does not answer, the next person will be called, and so on, until notification has been achieved.

EMERGENCY CONTACTS		
Name	Mobile Phone	Job Title
Robert Stanton	360-953-4379	Senior Project Manager, Northwest Division
John Snowden	360-409-9574	Senior Project Manager, Northwest Division
Aimee Sanchez	360-216-3621	Operations Coordinator, Northwest Division
Rebekah Troxell	360-989-0920	Corporate Safety Manager
Dean Reynolds	360-609-8330	Chief Operations Officer
OSHA	800-321-6742	Report a fatality or life threatening situation
Washington L & I	800-423-7233	Report a fatality or serious injury

E. Topside Emergency Procedures (T-EP):

“Designated Person” means a person designated by the supervisor during an emergency situation.

T-EP-1

FIRE IN EQUIPMENT

STEP	PROCEDURE	ACTION REQUIRED BY
1	Abort all operations	Supervisor
2	Evacuate personnel to a safe area (if possible)	Supervisor
3	Extinguish fire (if possible)	Designated Person
4	Call for emergency assistance (if required)	Supervisor/Designated Person
5	Determine the extent of the damage	Supervisor/Designated Person
6	Notify client and BMC management	Supervisor

T-EP-2

DROWNING / NEAR DROWNING

STEP	PROCEDURE	ACTION REQUIRED BY
1	Abort all operations	Supervisor
2	Retrieve person from water if safe to do so	Any Available Person
3	Call for emergency assistance (if required)	Designated Person
4	Replace wet clothing with warm/dry clothing or blankets	Any Available Person
5	Administer FA/CPR as needed	Trained Crew Member
6	Notify client and BMC management	Supervisor

NOTE: Any victim of near drowning must be seen by a medical professional after recovery from the water.

T-EP-3

INJURY / ILLNESS

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify the supervisor immediately	Injured Person/Witness
2	Abort all operations (for serious/life-threatening injuries)	Supervisor
3	Call for emergency assistance (if required)	Designated Person
4	Administer FA/CPR as needed	Trained Crew Member
5	Notify client and BMC management	Supervisor

F. Diving Emergency Procedures (D-EP):

EPs; Ref: EM 385 1-1; 30.A.15

D-EP-1

LOSS OF BREATHING MEDIA / CONTAMINATED AIR SOURCE

STEP	PROCEDURE	ACTION REQUIRED BY
1	Instruct diver to go on bailout (if required)	Supervisor/Rack Operator/Diver
2	Direct air flow to the diver's pneumo	Supervisor/Rack Operator
3	Shift to secondary breathing supply	Supervisor/Rack Operator
4	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
5	Insert pneumo under diver's neck dam (if required)	Diver/Standby Diver
6	Go to bell/stage/egress point	Diver/Standby Diver
7	Terminate dive	Supervisor/Rack Operator
8	Notify client and BMC management	Supervisor

D-EP-2

LOSS OF DIVER COMMUNICATIONS

STEP	PROCEDURE	ACTION REQUIRED BY
1	Attempt to establish line pull signals	Supervisor/Tender/Diver
2	Direct air flow to the diver's pneumo	Supervisor/Rack Operator
3	Shift to secondary breathing supply (to rule out CO poisoning)	Supervisor/Rack Operator
4	Terminate dive and surface if line pull signals are returned	Supervisor/Rack Operator
5	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
6	Follow down line, stage or main diver's umbilical to bottom	Standby Diver
7	Locate main diver and report findings to the Dive Supervisor	Standby Diver
	Provide lifesaving care (as required)	Standby Diver
8	Prepare main diver to leave bottom	Standby Diver
9	Terminate dive	Supervisor/Rack Operator

D-EP-3

FOULED OR ENTRAPPED DIVER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Do not panic or ditch equipment	Diver
2	Attempt to free yourself	Diver
3	Notify topside of the situation	Diver
4	Determine extent of fouling or entrapment	Supervisor/Diver
5	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
6	Terminate dive if diver is shaken or standby diver was required	Supervisor/Rack Operator

D-EP-4

INJURED DIVER IN THE WATER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify topside of the situation	Diver
2	Determine the nature and extent of the injury	Diver
3	Call for emergency assistance (if required)	Designated Person
4	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
5	Assist diver and administer first aid (as required)	Standby Diver
6	Remain with the diver until they are on surface	Standby Diver
7	If breathing stops, free flow helmet and purge regulator	Standby Diver
8	Terminate dive	Supervisor/Rack Operator
9	Begin decompression (if needed) except when the injury presents a greater risk to the diver than omitting decompression	Supervisor/DMT/Physician
10	Notify client and BMC management	Supervisor

D-EP-5

SEVERANCE OF DIVER'S UMBILICAL

PROCEDURE A: SEVERANCE OF GAS HOSE ONLY

STEP	PROCEDURE	ACTION REQUIRED BY
1	Activate bail out bottle	Diver
2	Notify topside of the situation	Diver
3	Direct air flow to the diver's pneumo	Supervisor/Rack Operator
4	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
5	Insert pneumo under diver's neck dam (if required)	Diver/Standby Diver
6	Go to bell/stage/egress point	Diver/Standby Diver
7	Activate and use emergency gas (if in bell or stage)	Diver/Standby Diver
8	Terminate Dive	Supervisor/Rack Operator
9	Notify client and BMC management	Supervisor

PROCEDURE B: COMPLETE SEVERANCE OF UMBILICAL

STEP	PROCEDURE	ACTION REQUIRED BY
1	Activate bail out bottle	Diver
2	Initiate line pull signals if the strength member is in tact	Diver
3	Alert and brief standby diver (deploy immediately)	Supervisor/Rack Operator
4	Follow down line or stage cable to bottom, do not follow umbilical unless it is severed on deck and the severed end is accessible	Standby Diver
5	Locate main diver and insert pneumo under neck dam (if required) or perform a hose change out (if equipped)	Standby Diver
6	Go to bell/stage/egress point	Diver/Standby Diver
7	Prepare main diver to leave bottom	Standby Diver
8	Terminate dive	Supervisor/Rack Operator
9	Notify client and BMC management	Supervisor

NOTE: Follow D-EP-6 Steps for Lost Diver if severance of umbilical results in loss of communication and conditions do not allow for positive confirmation of diver's location upon descent or approach to work site.

D-EP-6

LOST AND UNCONSCIOUS DIVER WITH COMPLETE SEVERANCE OF UMBILICAL

STEP	PROCEDURE	ACTION REQUIRED BY
1	Activate bail out bottle	Diver
2	Alert and brief standby diver (deploy immediately)	Supervisor/Rack Operator
3	Search for main diver at last known location	Standby Diver
4	Locate main diver and insert pneumo under neck dam (if required) or perform a hose change out (if equipped)	Standby Diver
5	Call for emergency assistance (if required)	Designated Person
6	Terminate dive	Supervisor/Rack Operator
7	Administer FA/CPR as needed	Trained Crew Member
8	Notify client and BMC management	Supervisor

NOTE: Treat an unconscious diver for AGE or serious decompression sickness unless the possibility of such a condition can be ruled out without question. A diver who surfaces unconscious and recovers when exposed to fresh air shall receive a neurological evaluation to rule out arterial gas embolism.

D-EP-7

FIRE IN EQUIPMENT

STEP	PROCEDURE	ACTION REQUIRED BY
1	Extinguish fire (if possible)	Designated Person
2	Evacuate personnel to a safe area (if required)	Supervisor
3	Call for emergency assistance (if required)	Supervisor/Designated Person
4	Determine the effect of fire on the diver	Supervisor/Designated Person
5	Terminate dive (if required)	Supervisor/Rack Operator
6	Notify client and BMC management	Supervisor

D-EP-8

UNCONTROLLED ASCENT

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify topside of situation (if possible)	Diver
2	Forcibly exhale all the way to surface	Diver
3	Take up the diver's slack as quickly as possible	Tender
4	Recover diver to dive platform	Tender
5	Perform a neurological exam to rule out AGE/DCS	Supervisor/DMT
6	Treat on appropriate USN Treatment Table (if required)	Supervisor/DMT
7	If No-D dive, observe diver on surface for 1 hour, treat any symptoms	Supervisor/DMT
8	Notify client and BMC management	Supervisor

NOTE: If decompression is omitted, treat for omitted decompression in accordance with EP-9.

D-EP-9

OMITTED DECOMPRESSION

STEP	PROCEDURE	ACTION REQUIRED BY
1	Reference USN Table 9-3 for air or USN Table 14-2 for mixed gas	Supervisor/Rack Operator
2	Immediately recompress the diver	Supervisor/DMT
3	Take diver to appropriate depth in chamber according to USN tables	Chamber Operator
4	If no symptoms or complete resolution of symptoms, complete decompression on the selected treatment table	Chamber Operator
5	Treat any symptoms during or following treatment as a recurrence	Supervisor/Chamber Operator
6	Notify client and BMC management	Supervisor

D-EP-10

VITAL EQUIPMENT FAILURE – DIVER IN THE WATER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify Dive Supervisor of equipment failure	Equipment Operator/Monitor
2	Notify diver of problem	Supervisor/Rack Operator
3	Develop a plan of action	Supervisor/Equipment Operator
4	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
5	Alert and brief dive support personnel	Supervisor/Rack Operator
6	Activate plan	Supervisor/Rack Operator
7	Terminate dive	Supervisor/Rack Operator
8	Notify client and BMC management	Supervisor

D-EP-11

DECOMPRESSION SICKNESS ON SURFACE

STEP	PROCEDURE	ACTION REQUIRED BY
1	Report signs or symptoms to Dive Supervisor immediately	Diver/Witness
2	Administered 100% oxygen by non-rebreather mask at 15 liters/min	Trained Crew Member
3	Conduct neurological exam if diver is not acutely distressed	Supervisor/DMT
4	Recompress and treat according to USN treatment guidelines: A. TT 6 – Type 1 or pain only DCS B. TT 6A – Type 2 or neurological impairment C. TT 6 – Recurrence	Supervisor/DMT
5	Notify and consult with Hyperbaric Physician	Supervisor/DMT
6	Notify client and BMC management	Supervisor

NOTE: Divers must complete a new diving physical examination after treatment.

D-EP-12

DECOMPRESSION SICKNESS IN WATER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify the Dive Supervisor immediately (if capable)	Diver/Rack Operator
2	Alert and brief standby diver (deploy as required)	Supervisor/Rack Operator
3	Descend 10ft deeper than the depth where symptoms onset	Diver/Standby Diver
4	Start decompression and increase stop times: 1. Multiply remaining stop times by 1.5	Supervisor/Rack Operator
5	If symptoms continue on surface, treat on TT 6	Supervisor/Chamber Operator
6	Notify client and BMC management	Supervisor

NOTE: DO NOT descend more than two 10ft stops deeper than the first table stop. Divers must complete a new diving physical examination after treatment.

D-EP-13

OXYGEN TOXICITY IN WATER

PROCEDURE A: ONSITE CHAMBER, SYMPTOMS AT 20FT OR 30FT STOPS

STEP	PROCEDURE	ACTION REQUIRED BY
1	Alert and brief standby diver (deploy immediately)	Supervisor/Rack Operator
2	Initiate surface decompression	Supervisor/Chamber Operator
3	Shift primary supply to air during ascent to surface	Supervisor/Rack Operator
4	Compute required O ₂ periods: 1. Multiply the remaining O ₂ time required at in-water stops by 1.1 2. Divide the total by 30 min 3. Round up to the nearest ½ period	Supervisor/Rack Operator
5	Complete decompression in the chamber	Chamber Operator
6	Notify client and BMC management	Supervisor

NOTE: Follow D-EP-14 Oxygen Toxicity In Chamber if Oxygen Toxicity presents in the chamber.

PROCEDURE B₁: NO AVAILABLE CHAMBER, SYMPTOMS AT 30FT STOP

STEP	PROCEDURE	ACTION REQUIRED BY
1	Alert and brief standby diver (deploy immediately)	Supervisor/Rack Operator
2	Ascend 10ft to the 20ft stop depth	Diver/Standby Diver
3	Shift primary supply to air during ascent to surface to reduce PPO ₂	Supervisor/Rack Operator
4	Ventilate both divers at 20ft starting with the affected diver	Standby Diver
5	Compute the required stop time at 20ft: 1. Multiply the missed stop time at 30ft by the ratio of air to O ₂ stop time at 30ft 2. Add this time to the required 20ft stop time on an air table	Supervisor/Rack Operator
6	Complete decompression at 20ft	Supervisor/Rack Operator
7	Notify client and BMC management	Supervisor

PROCEDURE B₂: NO AVAILABLE CHAMBER, SYMPTOMS AT 20FT STOP

STEP	PROCEDURE	ACTION REQUIRED BY
1	Alert and brief standby diver (deploy immediately)	Supervisor/Rack Operator
2	Shift primary supply to air	Supervisor/Rack Operator
3	Ventilate both divers starting with the affected diver	Standby Diver
4	Compute the remaining stop time on air at 20ft: 1. Multiply the remaining stop time on O ₂ at 20ft by the ratio of air to O ₂ stop time at 20ft	Supervisor/Rack Operator
5	Complete decompression at 20ft	Supervisor/Rack Operator
6	Notify client and BMC management	Supervisor

D-EP-14

OXYGEN TOXICITY IN CHAMBER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Remove the BIBS mask at first sign of symptoms	Diver/Inside Tender
2	Wait for all symptoms to completely subside, after convulsions, wait until the diver is fully relaxed and breathing normally	Chamber Operator/Inside Tender
3	Decompress (ascend) 10ft at 1ft/min	Chamber Operator
4	Resume breathing O ₂ at shallower depth at the point of interruption	Diver
5	Complete chamber periods from shallower depth	Chamber Operator
6	Notify client and BMC management	Supervisor

NOTE: Consider all time on air as dead time. If symptoms present again after ascending 10ft, complete decompression on air. Compute remaining time on air according to USN Dive Manual Paragraph 9-12.8.

D-EP-15

ARTERIAL GAS EMBOLISM

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify the Dive Supervisor of signs or symptoms immediately	Diver/Witness
2	Compress to 60ft in chamber or call for medevac for diving emergency	Supervisor/Chamber Operator
3	If symptoms resolve after :20, complete TT6	Chamber Operator
4	If unchanged severe or worsening condition, compress to depth of relief or significant improvement, not to exceed 165ft	Chamber Operator
5	Complete treatment according to USN Dive Manual guidance	Chamber Operator
6	If more time needed at depth of relief, contact hyperbaric physician	Supervisor/DMT
7	For life threatening symptoms and more time needed at 60 feet; remain at 60 feet for at least 12 hours then decompress on Table 7	Chamber Operator
8	Notify client and BMC management	Supervisor

D-EP-16

EMERGENCY EVACUATION

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify diver of emergency and terminate dive	Supervisor/Rack Operator
2	Manage omitted decompression by USN Table 9-3 or 14-2 (as required)	Supervisor/Rack Operator
3	Evacuate all unnecessary personnel to a safe location	Supervisor
4	Notify client and BMC management	Supervisor

D-EP-17

DROWNING / NEAR DROWNING

STEP	PROCEDURE	ACTION REQUIRED BY
1	Remove diver from water	Tender
2	Call for emergency assistance	Designated Person
3	Manage omitted decompression according to USN Table 9-3 or 14-2 (as required)	Supervisor/Rack Operator
4	Administer FA/CPR as needed	Trained Crew Member
5	Notify client and BMC management	Supervisor

NOTE: Any victim of near drowning must be seen by a medical professional after recovery from the water.

D-EP-18

INJURY / ILLNESS OF TOPSIDE CREW MEMBER WITH DIVER IN THE WATER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Notify diver of injury/accident	Supervisor/Rack Operator
2	Terminate dive (as required)	Supervisor/Rack Operator
3	Call for emergency assistance (as required)	Designated Person
4	Administer FA/CPR as needed	Trained Crew Member
5	Notify client and BMC management	Supervisor

D-EP-19

PERSON OVERBOARD / PERSON IN THE WATER (PIW)

STEP	PROCEDURE	ACTION REQUIRED BY
1	Alert project personnel, don't take your eyes off the person	Witness/Bystander
2	Toss a throw ring or floating object next to the person	Witness/Bystander
3	Maneuver vessel to person in water's location (if needed) – keep running prop clear of any and all persons in the water	Vessel Operator
4	Shut off vessel motors before coming alongside of person in water	Vessel Operator
5	Haul persons to vessel/shore with life line and throw ring	Available Rescuer/Deck Hand
6	Recover person in water at the stern of the vessel	Deck Hand
7	Get person to heated vessel or truck cab – whichever is closer	Available Rescuer/Vessel Operator
8	Remove wet clothing, put on warm dry clothes	Available Rescuer
9	Treat for hypothermia (seek medical attention as required)	Trained Crew Member
10	Notify client and BMC management	Supervisor

D-EP-20

VESSEL CAPSIZING

PROCEDURE A: PERSON(S) IN WATER

STEP	PROCEDURE	ACTION REQUIRED BY
1	Make sure your PFD is securely fastened	Person(s) in Water
2	Swim to safety and get out of the water	Person(s) Near Shore/Dive Platform
3	Use floating objects to get as far out of the water as possible	Person(s) Who Can't Swim to Safety
4	DO NOT PANIC IF THE BOAT SINKS OR FLOATS AWAY	All Personnel
5	Hold onto floating objects to help support your body weight	Person(s) in Water
6	Float together in a group - do not attempt to swim or tread water	Person(s) Who Can't Swim to Safety
7	Float and stay calm until help arrives	Person(s) in Water
8	Stay calm and cooperate with rescuers	Person(s) in Water

PROCEDURE B: RESCUERS ON VESSEL, SHORE OR STRUCTURE

STEP	PROCEDURE	ACTION REQUIRED BY
1	Abort current operations	Supervisor
2	Turn the cabin heater on in the vessel or a truck cab onshore	Available Rescuer
3	Toss throw ring or floating object on a line to persons in water	Available Rescuer
4	Haul persons to vessel with life line and throw ring	Available Rescuer
5	Place rescued persons in heated vessel or truck cab	Available Rescuer
6	Remove wet clothing, put on warm dry clothes	Available Rescuer/Rescued Person(s)
7	Treat for hypothermia (seek medical attention as required)	Available Rescuer
8	Notify client and BMC management	Supervisor

Google Maps 3007 Mountain View Ave N, Renton, WA 98056 to 4315 11th Ave NW, Seattle, WA 98107

Drive 19.4 miles, 31 min



3007 Mountain View Ave N
Renton, WA 98056

Get on I-405 N from Lake Washington Blvd N

- ↑ 1. Head north on Mountain View Ave N
5 min (1.5 mi)

- ↗ 2. Turn right to stay on Mountain View Ave N
0.2 mi

- ↶ 3. Turn left onto Lake Washington Blvd N
79 ft

- ↑ 4. Continue onto N 44th St
0.8 mi

- ↗ 5. Turn right to merge onto I-405 N
0.2 mi

- 0.2 mi

Continue on I-405 N. Take I-90 W and WA-99 N to Bridge Way N in Seattle

- ↗ 6. Merge onto I-405 N
22 min (16.3 mi)

- ↘ 7. Use the right 2 lanes to take exit 11 to merge onto I-90 W toward Seattle/Mercer Island
3.2 mi

- ↶ 8. Keep left to stay on I-90 W
7.0 mi

- ↶ 9. Keep left at the fork, follow signs for E Martinez Dr
1.1 mi

- ↗ 10. Use any lane to turn right onto Edgar Martinez Dr S
0.2 mi

- ↗ 11. Turn right onto 1st Ave S/Dave Niehaus Way S
0.2 mi

- ↶ 12. Turn left onto S Royal Brougham Way
0.1 mi

- ↗ 13. Turn right to merge onto WA-99 N
322 ft

- 4.4 mi

Take N 39th St and Leary Way NW to 11th Ave NW

- ↗ 14. Keep right to continue on Bridge Way N
6 min (1.6 mi)

- ↶ 15. Slight left to stay on Bridge Way N
341 ft

- ↶ 16. Turn left onto N 38th St
164 ft

- ↗ 17. Turn right onto Fremont Way N
213 ft

- ↶ 18. Use the right lane to turn slightly left onto N 39th St
0.2 mi

- ↗ 19. Turn right onto Leary Way NW
0.5 mi

- i
 Pass by HD Supply White Cap (on the left in 0.3 mi)

0.6 mi

- i
 Pass by BevMo! (on the right)

0.2 mi

- i
 Destination will be on the right

0.2 mi

- ↶ 21. Turn left onto 11th Ave NW
456 ft

4315 11th Ave NW

Seattle, WA 98107

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.



Follow Mountain View Ave N to Lake Washington Blvd N

- ↑

1. Head north on Mountain View Ave N

1 min (0.2 mi)
- ↗

2. Turn right to stay on Mountain View Ave N

0.2 mi
- ↘

79 ft

79 ft

Take I-405 S to S 21st St

- ↗

3. Turn right onto Lake Washington Blvd N

9 min (4.9 mi)
- ↙

4. Turn left onto N 30th St

0.2 mi
- ↗

5. Turn right onto the Interstate 405 S ramp

0.5 mi
- ↗

6. Merge onto I-405 S

0.2 mi
- ↘

7. Take exit 3 for WA-515/Talbot Road S

3.0 mi
- ↙

8. Use the left 2 lanes to turn slightly left onto WA-515 S/Talbot Rd S (signs for Talbot Road S)

Continue to follow WA-515 S

0.4 mi
- 0.6 mi

Take Talbot Rd S to your destination

- ↗

9. Turn right onto S 21st St

5 min (1.6 mi)
- ↑

10. Continue onto Talbot Rd S

0.2 mi
- ↗

11. Turn right

1.3 mi
- ↙

12. Turn left

148 ft
- ↗

13. Turn right

Destination will be on the right

246 ft
- 135 ft

Valley Medical Center: Emergency Room

400 S 43rd St, Renton, WA 98055

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Appendix E
CONSTRUCTION DAILY REPORTS / WATER
QUALITY MONITORING



CITY OF RENTON

**KENNYDALE LAKELINE SEWER SYSTEM
EVALUATION**

PHASE 2B EMERGENCY RESPONSE PLAN

(DRAFT)

September 2018

CITY OF RENTON

KENNYDALE LAKELINE SEWER SYSTEM EVALUATION

PHASE 2B EMERGENCY RESPONSE PLAN

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1.0 PURPOSE

The purpose of this document is to provide a ready reference for response to emergency events that may occur during the Phase 2b construction and assessment of the Lakeline sewer system.

2.0 PROJECT CONTACTS

Contact information for team members and agencies are provided in Table 1.

3.0 LOCATION OF EMERGENCY MEDICAL CARE

When life-threatening emergency is suspected, please call 911 immediately! The care facilities closest to the project area are shown in Figure 1.

Valley Medical Center Emergency Department (Hospital)

Address: 400 S 43rd St, Renton, WA 98055 Phone:
425.251.5185

Renton Landing Clinic Urgent Care

Address: 1205 N 10th Street—Suite A, Renton, WA 98057 Phone:
425.656.4211

Provides services for minor ailments, such as a sprained ankle or a laceration requiring sutures.

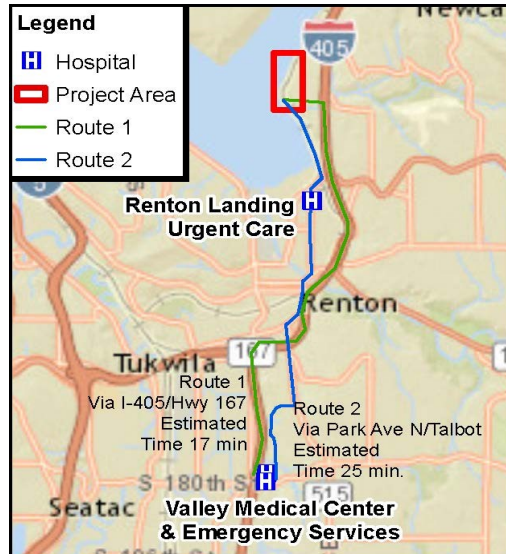


Figure 1 Location of Medical Care Facilities

Table 1 Project Contact List City of Renton Kennydale Lakeline Sewer System Evaluation Phase 2B				
Organization	Name	Title/Project Role	Office Phone	Cell Phone
City of Renton	David Christensen	Project Manager	425-430-7212	206-276-4912
City of Renton	Stan Job	Wastewater & Surface Water Supervisor	425-430-7400	425-282-2398
City of Renton	Rocky Sittner	Lead Maintenance Worker	425-430-7400	425-902-2004
City of Renton	John Hobson	Primary Owner's Rep	425-430-7279	
City of Renton	Shane Couty	Flush/Lift Station Lead Operator		425-766-6185
City of Renton	Jayson Galloway	Flush/Lift Station Operator		425-757-4107
Carollo	Lara Kammereck	Project Manager	206-538-5157	206-353-2938
Carollo	Conner Mancosky	Project Engineer	206-538-5168	
Carollo	Daniel Reisinger	Project Engineer	206-538-5156	206-412-1251
Tetra Tech	David Scott	Project Manager	206-883-9418	206-972-3458
Tetra Tech	Kevin Goss	Project Engineer	206-883-9348	206-399-4034
Tetra Tech	Alexandra Der	Project Engineer	206-883-9444	208-994-8727
Tetra Tech	Steve Piccolo	Construction Observer		206-402-7316
Tetra Tech	Lisa Fortney	Administration	206-883-9358	
Confluence Environmental	Chris Czieszla	Environmental, Permitting, Regulatory Assessment	206-321-6537	
Bravo	Tony Calhoon	CCTV	425-424-9000	206-396-5486
Ballard Marine	John Snowden	Project Manager	360-695-5163	360-210-2316
Ballard Marine	Craig Milburn	Dive Crew Supervisor/ Site Superintendent		337-296-4016
V&A	Noy Phannavong	UT Testing/Coupon	510-987-8115	510-935-3188
Department of Ecology		Regulatory Agency	425- 649-7000	

In the event that Stan cannot be reached in an emergency call Renton Maintenance Shops at 425-430-7400.

4.0 FIELD ACTIVITIES, POTENTIAL RISKS, AND MITIGATION

Phase 2B construction and assessment work as well as the associated risks are described in this section.

4.1 Temporary Manhole Installation

The temporary manholes will be installed at locations previously determined by the consultant team. Once the locations are determined in the field, the Ballard Marine will begin construction for installing the temporary manholes followed by cleaning.

4.1.1 Potential Risks

The potential risks of the temporary manhole installations are:

- Pipe breakage within the lake,
- Sewage will end up in the lake,
- Increased turbidity stirred up from construction, and
- Drowning.

4.1.2 Risk Mitigation

To mitigate these risks the Ballard Marine will implement the following:

- The Ballard Marine will obtain all necessary pipe, fittings, and equipment in advance of construction starting.

4.2 Mainline Cleaning and CCTV

Once the temporary manholes are installed, the Ballard Marine will begin a pre-CCTV then continue onto cleaning the mainline and end with another CCTV observation.

4.2.1 Potential Risks

The potential risks of survey and bulkhead review are:

- Pipe breakage within the lake,
- Jetting nozzle
- Loss of CCTV within Lakeline or lateral, and
- Drowning

4.2.2 Risk Mitigation

To mitigate these mainline cleaning and CCTV risks the following will be implemented:

- Taking care when cleaning.

- Taking care when using CCTV
- Life preservers.

4.4 Pipe Condition Assessment

Ultrasonic Thickness (UT) Testing will be completed by placing an electronic sensor on the laterals at locations that become exposed through excavation by the diver.

Pipe Material Sample Collection, coupon, will be acquired on in water. After exposing the sewer, ultrasonic thickness testing will be conducted, and the pipe coupon will be removed. The pipe will be repaired with a clamp provided by Ballard Marine upon the removal of the coupon. 4-inch repair clamps will be on hand provided by Ballard Marine.

4.4.1 Potential Risks

The potential risks of this activity are:

- Electrocutation from sensor.
- Drowning.
- Water-based Coupon test pit safety – laid back soils fall

4.4.2 Risk Mitigation

To mitigate these risks, the following will be implemented:

- Use proper hand wear while handling sensors.
- Use personal flotation device while above water.
- Caution around open test pit. Backfill test pit before crew leaves site.

5.0 EMERGENCY RESPONSE PROCEDURES

This section describes the response to be executed for various emergencies:

5.1 Pipe Blockage

In the event of temporary blockage the following response will be executed.

- Where the Consultant is leading the field work resulting in blockage, the Consultant will provide immediate telephone notice to the City (Stan Job, Wastewater & Surface Water Supervisor or Rich Marshall, Maintenance Manager) and then the Consultant project manager. In the event that Rich or Stan cannot be reached in an emergency call Renton Maintenance Shops at 425-430-7400.
- The Ballard Marine will be on site to respond to relieve the blockage with a Vacuum/ Jet Truck.
- City will manage and maintain temporary system shutdown conditions to the extent possible during the repair.
- The City will manage the repair operation and determine the limits of the pipe replacement in consultation with Consultant staff.
- Ballard Marine will provide a replacement section of 8-inch ductile iron pipe cut to length as required for the repair location and Romac Industries 501 transition couplings with gasket materials.

5.2 Overflow

In the event of overflow the following response will be executed.

- Where the Consultant is leading the field work resulting in overflow, the Consultant will provide immediate telephone notice to the City (Stan Job, Wastewater & Surface Water Supervisor or Rich Marshall, Maintenance Manager) and then the Consultant project manager. In the event that Rich or Stan cannot be reached in an emergency call Renton Maintenance Shops at 425-430-7400.
- Where the blockage/overflow is reported by a resident, the person that receives the call will gather detailed information; such as the caller's name, phone number and address. Person receiving the call will notify Public Works management, Stan Job, Wastewater & Surface Water Supervisor, or Rich Marshall, Maintenance Manager. In the event that Rich or Stan cannot be reached in an emergency call Renton Maintenance Shops at 425-430-7400.
- During the normal work shift, the City maintenance crew will be dispatched to respond to relieve the blockage with a Vacuum/ Jet Truck and clean up the site as needed.
- After hours, calls are dispatched through the Renton Police Department and an "oncall" operator will be notified to respond.

- City will manage and maintain temporary system shutdown conditions to the extent possible during the repair. City will post signs and notify effected residents.
- Where other methods of removing the blockage/equipment are not successful then remove and replace a section of pipe. Implement procedures for addressing in-water or onshore pipe damage as applicable.
- The City will manage the repair operation and determine the limits of the pipe replacement in consultation with Consultant staff.
- Ballard Marine will provide a replacement section of 6-inch and 8-inch ductile iron pipe cut to length as required for the repair location and Romac Industries 501 transition couplings with gasket materials.
- Once cleanup is completed, the Department of Ecology will be notified and given details of the overflow (spill) detailing the area effected, how the spill was contained and the cleanup procedures performed.

5.3 In-Water Pipe Damage

In the event of pipe damage in the Lake the following response will be executed.

- Where the Consultant is leading the field work resulting in damage the Consultant will provide immediate telephone notice to City operations staff and then the Consultant project manager.
- The City will manage the repair operation and determine the limits of the pipe replacement in consultation with Consultant staff.
- City will manage and maintain temporary system shutdown conditions to the extent possible during the repair, as discussed above.
- City will notify and coordinate with regulatory and permit agencies as required.
- Ballard Marine will provide a replacement section of 6-inch and 8-inch ductile iron pipe cut to length as required for the repair location and Romac Industries 501 transition couplings with gasket materials.

5.4 Onshore Pipe Damage

In the event of pipe damage onshore the following response will be executed.

- The City will manage the repair operation and determine the limits of the pipe replacement in consultation with Consultant staff.
- City will manage and maintain temporary system shutdown conditions to the extent possible during the repair.
- City will notify and coordinate with regulatory and permit agencies as required.

- City will provide a replacement section of 6-inch and 8-inch ductile iron pipe cut to length as required for the repair location and Romac Industries 501 transition couplings with gasket materials.

5.5 Risk of Station Interruption

In the event of flushing station or lift station equipment issue City staff will manage and maintain temporary system shutdown conditions. Consultant field staff will provide immediate notification to Consultant Project Manager.

5.6 Pipe Collapse

In the event of pipe collapse during coupon extraction the following response will be executed.

- Where the Consultant is leading the field work resulting in damage, the Consultant will provide immediate telephone notice to City operations staff and then the Consultant project manager.
- The City will manage the repair operation and determine the limits of the pipe replacement in consultation with Consultant staff.
- City will manage and maintain temporary system shutdown conditions to the extent possible during the repair.
- City will notify and coordinate with regulatory and permit agencies as required.
- City will provide a replacement section of 4-inch, 6-inch and 8-inch ductile iron pipe cut to length as required for the repair location and Romac Industries 501 transition couplings with gasket materials.

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Monday, 24 September 2018 (by Steve Piccolo)

Weather: Sunny & calm, changing to NW breeze at 10-15 mph (est)

Temperature (deg F): 50s – 60s

Water conditions: Flat, changing to max wave ~ 0.5 ft

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, & manhole extension aboard
- Work boat

0835: BMC picked me up via boat at Gene Coulon Park and took me to the Renton Rowing Center (RRC) dock, where the two barges (excavation and cleaning) were moored.

0900: Motor to the MH5 site to locate lakeline sewer and assess site. Meet Chris Cziebla & Chris Soncarty from Confluence Environmental (CE) and Dan Reisinger from Carollo.

0925: BMC recommends that MH5 be relocated 10-15 feet north of design location to allow adequate room for barge. Change OK'd by CE and Carollo personnel on site.

~1020: Begin moving barge with excavator from RRC to MH5 site.

1045: Barge arrives at MH5 site and is brought as close to shore as possible.

1140: Silt curtain is installed around anticipated location of MH5.

1225: Surveyors arrive briefly, then depart for additional gear before returning.

1245: BMC takes boat to reconnoiter other manhole sites. All but MH1 seem to have been located. (MH4 site location is assumed, based on contract drawing.) Only MH3 appears to be comfortably accessible for work from barge.

1315: Surveyors having trouble finding their control point.

1405: After getting an approximate location from surveyor, diver exposes lakeline sewer with compressed air.

1530: BMC having very difficult time following sewer near MH5 lakeshore.

1550: BMC & surveyors complete lakeline location work at MH5 site. Surveyors also document location of adjacent shoreline retaining wall.

~1600: Spuds on excavating barge lowered to prevent movement.

1620: BMC returned to RRC and lowered FlexiFloat spuds to secure barge carrying educator truck and Baker tanks.

1630: BMC departs for the day.

Turbidity Sampling

1440: At rear of barge, 90 ft west of silt curtain (Sta 1) = 0.63 NTU

1450: <20 ft NW of silt curtain (Sta 2) = 1.01 NTU

1535: ~40 ft south of silt curtain along shore in worst silt plume (Sta 3); sample site was also subject to natural sediment suspension from wave action = 8.03 NTU. This sample was collected at end of in-lake work.

1540: At Sta 2 = 2.43 NTU

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Tuesday, 25 September 2018 (by Steve Piccolo)

Weather: Sunny & calm, changing to NW breeze at 10 mph (est)

Temperature (deg F): 50s – 60s

Water conditions: Flat, changing to max wave < 0.5 ft

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, & manhole extension aboard
- Work boat

0710: After brief return to dock for parking permit issue, BMC personnel and I head out in boat to MH5 site from Renton Rowing Center (RRC).

0745: While awaiting arrival of observers from surroundings utilities and municipalities, BMC visited the other MH sites for additional assessment and soundings. All sites appear to be accessible by barge. Soundings (ft): MH4 site ~ 2, MH3 = 6, MH2 = 1, MH1 ~14 (MH was not positively located; sounding was made at marker buoy). Although MH2 is in very shallow water, it appears that the lake bottom drops off steeply enough to allow for sufficiently close approach of the barges.

0830: Site MH5 visit by over two dozen observers.

1130: In consultation among BMC, Bravo, Tetra Tech, Carollo, and City of Renton personnel, the approach for MH5 site work was modified to include fabrication of a U-shaped insert to the lakeline to bring the temporary MH5 within reach of the barges. PVC pipe and 45-deg bends will be used to construct the piping detour.

1220: All BMC personnel return to shore at the RRC to acquire the necessary materials for the new piping at the MH5 and MH4 sites. No return to the MH5 site until tomorrow morning.

Turbidity Sampling

1150: ~80 ft west of silt curtain = 0.63 NTU

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Wednesday, 26 September 2018 (by Steve Piccolo)

Weather: Foggy with N breeze of ~10 mph, changing to Sunny with N breeze of ~5 mph (est)

Temperature (deg F): 50s – 70

Water conditions: Max wave < 0.5 ft

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat

0700: While Craig (BMC) left the Renton Rowing Center (RRC) to pick up the remaining materials for the temporary pipe fabrication at MH5, the remaining BMC crew departed to the MH5 site to offload the pipes and fittings placed aboard yesterday.

0745: Offloading of materials to barge complete.

0800: Work begins attaching flanges to temporary manhole.

0840: Connor Mancosky (Carollo) on site to perform turbidity tests.

0915: Renton maintenance staff on site to remove driftwood from 2909 Mountain View Ave N.

0920: Boat departs barge for the RRC to pick up remaining supplies.

0940: Boat returns to MH5 site with remaining fittings. It develops that the vendor failed to include the entire order in the boxes, so another trip was required in the afternoon to pick up the omitted items.

1000: Pneumatic saws used to cut PVC pipe into smaller sections for fabrication of diversion piping.

1030: Begin gluing PVC pipe sections to 45-deg elbows to produce sufficiently long radius bends to accommodate cleaning operations.

1045: Lift station debris basket fabricated.

1100: Craig estimates lakeline cut/tie-in will occur Friday morning.

1155: Set MH5 in lake.

1240: Bolt pipe assemblies to MH5. These actually constitute approximately half of total diversion piping, the lower half of the U-shaped temporary piping (with MH5 at the base). The second half, which will include the connections to the lakeline, have yet to be fabricated.

1400: After checking the relationship of the temporary piping to the lakeline, it was determined that the entire assemblage should be rotated slightly to assure that both legs are approximately equal in length. This modification will also result in better alignment between the lakeline and the PVC piping.

1415: After checking to make sure that the revised orientation was acceptable (leg lengths differ by only a few inches), four ecology blocks were placed evenly around MH5 and attached to anchor the manhole in place.

1435: MH5 anchoring procedure complete.

1440: Set lid atop MH5 and bolt in place.

~1450: Begin fabricating remaining PVC pipe assemblies.

1545: Connor (Carollo) departs for the day after it was confirmed that BMC would perform no more work in the water.

1615: Remaining diversion piping assemblies completed.

1635: After securing barge, BMC returned to the RRC dock.

1645: Most BMC personnel depart for the day.

1655: Craig notes that it is likely that BMC and Bravo will work on Saturday.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	1004	0.5	
10-N	1008	0.8	
10-S	1014	1.28	
10-S	1233	0.53	

BGD	1237	0.54	
Inside silt curtain	1313	8.7	
10-S	1317	0.57	
10-N	1328	8.6	Likely biomatter; no silt plume
10-S	1353	0.6	
10-S	1445	1.15	
10-S	1455	0.52	
10-N	1459	1.15	
BGD	1503	0.78	

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
 BGD is background
 PC is point of compliance (150 ft from silt curtain)

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Thursday, 27 September 2018 (by Steve Piccolo)

Weather: Clear & calm, changing to Sunny with NW breeze at ~15 mph (est)

Temperature (deg F): 50s – 70s

Water conditions: Max wave < 0.5 ft

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat

0715: Arrive at barge from Renton Rowing Center (RRC).

0740: After plugging the ends, the remainder of the north leg of the PVC diversion piping is floated into approximate position and sunk. This is followed by a similar handling of the south leg piping.

0800: Diver begins bolting remainder of north leg to portion attached to MH5.

0830: When all diversion piping is bolted into place, divers commence excavating lakeline at the connection points using a hydraulic jet pump and air probes.

1020: After nearly 2 hours of continuous excavation, the most apparent increased turbidity outside the silt curtain is along the north side – which is also the wind direction. Some, if not most, of this increase appears to result from divers crossing the curtain and the ejection of turbid water over the curtain by the jet pump. In response, work protocol was altered to eliminate divers from crossing over the curtain.

1100: Diver confirmed that the outside diameter of the lakeline is the same as that of the ductile iron pipe replacement.

1150: Excavation ceases temporarily for lack of fuel to power the air compressor and water jet.

1255: Two hundred feet of additional silt curtain is delivered to the MH5 site. The boat, which was awaiting a fuel run return at RRC, is recalled to barge from RRC dock.

1335: Fuel run completed, but only gasoline could be obtained (no diesel).

1340: Gas powered equipment returned to service. Excavation resumes with jet pump and air probes. (Based on progress so far, Craig Milburn [BMC superintendent] anticipates that excavation work will continue into/thru Saturday.)

1610: Excavation stops for the day.

1640: After retrieving & storing all equipment and securing the barge, BMC returns to the RRC.

Turbidity Sampling

Station	Time	Turbidity (NTU)
BGD	0735	0.4
S (just outside silt curtain)	0740	1
S (just outside silt curtain)	0820	0.6
N (just outside silt curtain)	0850	3.36
S (just outside silt curtain)	0852	0.72
N (just outside silt curtain)	0910	1.27
10-N (visible silt plume)	0928	4.64
10-N (visible silt plume)	0930	10.6
N (just outside silt curtain)	1014	3.2
USC N (just outside silt curtain)	1016	3.48
N (just outside silt curtain)	1020	5.23
PC-W	~1100	1.32
PC-SW	~1100	0.74
PC-S	~1100	0.61
PC-NW	~1100	0.55
BGD	~1200	0.69
20-NW	~1200	10.4
30-N	~1200	5.74
20-NW	~1240	3.19
BGD	1245	0.65
30-N	1247	5.58
PC-NW	1457	0.81
100-SW	1501	0.76
PC-S	1504	0.93

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
 BGD is background
 PC is point of compliance (150 ft)

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Friday, 28 September 2018 (by Steve Piccolo)

Weather: Clear; N breeze ~5 mph, changing to N breeze at ~20 mph (est)

Temperature (deg F): 50s – 70s

Water conditions: Max wave ~0.5 ft

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat

0710: After loading new supplies on boat, depart Renton Rowing Center (RRC) for barge at MH5 site.

0720: Notable improvement in turbidity just outside silt curtain from departure yesterday.

0730: Took background turbidity sample (see).

0735: Work underway on repairs to jet pump. (Bolts attaching it to frame rusted and broke.) Divers preparing for entry. Equipment fueled.

0750: Renton maintenance personnel on site to assist BMC installing debris basket in lift station wet well. John Hobson (Renton) and Cynthia Lamoth (Skyway) also arrived on site.

0815: Dan Reisinger and Lara Kammereck (Carollo) arrive on site.

0850: Other visitors begin arriving at MH5 site (3 total).

0900-0905: Took nearshore turbidity samples (see).

0920: Begin excavation at south connection with water jet.

0940: Begin excavation at north connection with air probe.

1005-1015: More turbidity tests (see). Weighted bottom of silt curtain at south end to mitigate silt plume.

1030: Lateral from 2907 Mountain View Ave N was located. It is several feet south of the south connection point.

1040: BMC personnel return from installing debris basket in lift station wet well.

1100: BMC making further modifications to south end of silt curtain to reduce silt plume.

1115: Jet pump and air probe turned off. There are now 3 divers hand digging with shovels.

1200-1205: More turbidity tests (see). Sudden increase in wave action before samples were collected near shore.

1205: Air probe returned to service.

~1230: Divers out of water. More fuel (gasoline & diesel) delivered to site.

1320: Divers back in water; excavating resumes.

1340: Four divers now in water, all working to excavate the pipe connection areas.

1430: Final decision made not to cut lakeline tomorrow.

1440-1445: More turbidity tests (see).

1450: Excavation with water jet & air probe ceases; continues with hand shovels. Begin jet pump repair.

1520-1530: Take Point of Compliance turbidity samples (see).

1600: Jet pump repaired and tested, but soon clogs again. At end of day, BMC estimates excavation for lakeline tie-in is 75% complete.

1700: BMC secures barge, returns to RRC, and departs for the day.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0730	0.51	
10-N	0900	0.68	Near shore
10-S	0905	11.9	Near shore
10-N	1005	1.84	Near shore
10-S	1010	23.9	Near shore
30-S	1015	16.0	Near shore; pronounced silt plume

30-S	1200	27.7	Near shore; sudden increase in wave action
10-N	1205	5.36	Near shore; obvious plant component to sample
10-N	1440	7.34	Near shore; considerable plant component
25-S	1445	79.5	Near shore
PC-NW	1520	0.64	
PC-SW	1525	1.14	
PC-S	1530	0.72	

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction

BGD is background

PC is point of compliance (150 ft from silt curtain)

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Saturday, 29 September 2018 (by Steve Piccolo)

Weather: Partly/Mostly Cloudy; S breeze ~10 mph, changing to calm, changing to ~15 mph

Temperature (deg F): 50s – 60s

Wave conditions: Minimal to about 1 ft

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat

0700: Depart Renton Rowing Center (RRC) for barge at MH5 site.

0720: Silt immediately outside curtain settled several feet overnight.

0725-0745: Took initial turbidity samples (see).

0730: BMC performs maintenance on jet pump and prepares gear for day's activities.

0810: Jet pump placed in operation.

0820: Divers in water. Excavation commences with water jet and air probe. Currently, the north pipe connection is almost completely excavated; the south connection is considerably less so.

0915: A third diver enters the water to assist in moving a boulder out of the way of the south leg of the diversion piping. They succeed.

0940-0955: Took turbidity samples (see).

1010: Excavation continues with one diver using the water jet and two using hand shovels.

1015: At Craig Milburn's (BMC superintendent) request, I left voice messages for John Hobson (City of Renton) and Kevin Goss (TetraTech) notifying them of BMC's intent to begin cutting the lakeline shortly after 0800 Monday, 1 October.

1120: Divers report that all excavations (connection points and adjacent trenches for the PVC pipes) are very close to target depth and width. They are very confident of having everything ready for a Monday morning tie-in.

1135: All divers out of the water.

1205: Divers back in water; excavation resumes.

1215: As the breeze has diminished during the day, and the lake surface has become much calmer, a pollen-like material can be seen on and throughout the water. This is likely responsible for the wildly varying results when turbidity testing the same sample multiple times.

1330-1345: Took final near/mid turbidity samples (see).

1400-1410: Took day's Point of Compliance turbidity samples (see).

1430: Jet pump stopped.

1445: Air probe off. Last diver out of the water.

1535: BMC secures barge and all equipment, returns to RRC from the barge at MH5 site, and departs for the "weekend."

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0725	~6	Due to suspended biomatter, readings on same sample varied from 1.5 NTU to "overrange".
10-N	0740	~5.5	Near shore
10-S	0745	~4.1	Near shore
10-N	0940	~31	Near shore
10-S	0945	~2.4	Near shore
70-NW	0955	~0.7	
15-S	1330	~1.7	Near shore
15-N	1335	~16	Near shore
70-NW	1345	~0.7	
PC-NW	1400	~0.5	
PC-SW	1405	~0.4	
PC-S	1410	~0.4	

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background
PC is point of compliance (150 ft from silt curtain)

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Monday, 1 October 2018 (by Steve Piccolo)

Weather: Cloudy/Showers; S breeze ~5-10 mph (est)

Temperature (deg F): 50s – 60s

Wave conditions: Max wave <0.5 ft

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat

0705: After loading supplies on boat, depart Renton Rowing Center (RRC) for barge at MH5 site.

0720: Notable silt settlement outside curtain, apparent settlement inside curtain.

0725: Begin setting up jet pump.

0740: City of Renton personnel arrive on site.

0740-0750: Took initial turbidity samples (see).

0755: Started jet pump; first diver in water.

0800: Second diver in water. Begin excavation touch-up.

0810: Stop jet pump. Attach mount for pneumatic saw to north leg of PVC diversion pipe.

0815: Begin cutting required segment off end of PVC north leg of diversion piping.

0825: Begin first lakeline cut flush with end of PVC pipe on north leg of diversion piping.

0905: Saw blade breaks; replacement blade installed.

0910: First lakeline cut on north connection complete.

0930: Begin second lakeline cut for north leg of diversion piping.

0940: Second cut completed.

0945: Cut lakeline segment (52¹/₄ inches long) pulled to shore. Plugs installed in lakeline sewer pipe. Cut pipe segment appears to be in very good condition, both inside and outside.

0950: Begin installing lakeline/PVC coupling for north leg of diversion piping.

1105: Third diver enters water to begin pipe cuts for south leg diversion piping connection. Starts with preliminary jetting of connection site.

1120: Coupling completed on north connection. Begin installing restrainer.

1130: Begin cutting lakeline for south connection of diversion piping.

1140: Part of the tie down mechanism for the pneumatic saw broke. Situation is easily remedied.

1150: North connection restrainer finished. After tightening associated flanges and placing rock bags on PVC piping, the north leg will be complete.

1200: First lakeline cut for south connection is done.

1205: North leg of diversion piping for MH5 is now complete.

1235: Second lakeline cut for south connection is finished.

1240: Cut lakeline segment (87¹/₄ inches long, including a bell & spigot joint) for south connection is removed from lake. Condition appears similar to that of north connection segment. South segment is cut in two to facilitate handling. Plugs are installed in lakeline sewer pipe.

1250: Work begins on installing south PVC/lakeline coupling for MH5.

1350-1400: Took turbidity samples (see). Due to inclement weather conditions, limited boat availability, and low turbidity test results near the silt curtain, no Point of Compliance samples were collected today.

1415: South PVC/lakeline coupling complete. Difficulties arose from severe angle of lakeline cut. Restrainer installation begins.

1420: John Hobson (City of Renton) said the flushing station will remain out of service until tomorrow morning, when City crew will restart it and verify that all is well.

1430: Center lakeline section (between connections) remains capped on both ends.

1520: South leg diversion pipe coupling is completed. Rock bags are placed on the PVC pipe and the flanges receive final tightening.

1535: South leg of the MH5 diversion piping is complete.

1620: After securing barge and equipment against the predicted high winds, BMC returns to RRC and departs for the day.

Note: Two factors influence the site work options for tomorrow. In conversations with the homeowner at 3115 Mountain View Ave N (immediately south of the MH4 location), John Hobson learned that they will be hosting a wedding at their house tomorrow. John assured them that no work would take place at MH4 tomorrow, so as not to disrupt the proceedings. Also, weather forecasts predict winds of 20-25 knots on the lake, which would make moving the barges in tight quarters dangerous.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0740	~0.7	
10-N	0745	~4.5	Near shore
10-S	0750	~1	Near shore
10-N	1350	~5	Near shore
10-S	1355	~0.5	Near shore
70-NW	1400	~0.75	

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction

BGD is background

PC is point of compliance (150 ft from silt curtain)

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Tuesday, 2 October 2018 (by Steve Piccolo)

Weather: Partly Cloudy; S breeze at ~10 mph, increasing to ~25 mph

Temperature (deg F): 50s – 60s

Wave conditions: Max wave ~2 ft (whitecaps)

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat

0705: After overcoming dead boat batteries and loading supplies, depart Renton Rowing Center (RRC) for MH5 site.

0720: Reconnoiter MH2 to MH4 sites for further consideration of barge placements.

0730: Arrive at MH5 site barge and unload supplies.

0740: Remove metal cover from MH5.

0755: Cut out wooden cover for MH5 and bolt it in place. The cleaning barge personnel (Bravo) do not have the equipment to handle the heavy metal cover.

0810-0820: Take turbidity samples (see).

0820: Boat returns to RRC to drop off two crew members to obtain additional supplies. These crew members do not return to the barge today. This action is taken because strong breezes prevent the safe movement of the barges as planned.

0850: BMC crew monitors the water level inside MH5 when the flushing station is turned on. Water level inside the manhole rose slowly to within ~1 foot of the rim before Renton maintenance crew shut it down. Level fell much faster than it rose after flushing station was turned off.

1015: After a 2nd flushing station flow test that yielded results similar to the first, Renton maintenance staff investigated the operation and realized that normally the flushing rate is controlled as a function of line pressure, with the flushing rate generally falling within the 45-55 gpm range. The inclusion of the manhole reduced the line pressure so that the pumping rate increased to ~90 gpm (pump maximum). They reset the pump control to manual at 50 gpm, and the maximum level in MH5 topped out at 3-4 feet above lake level before being shut down. As a result of these

findings, John Hobson (City of Renton) decided that the flushing station would be operated only in manual mode – and only at appropriate times – while this lakeline cleaning project is underway.

1100: Since BMC was unable to perform its intended tasks today because of the adverse weather conditions, they spent time reorganizing and remodeling the shipping container that serves as office, storage facility, and shelter on the barge.

1245: After securing the barge, BMC returned to RRC, and departed for the day to shop for supplies necessary to accomplish upcoming tasks.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0810	~1	
10-N	0815	~30	Near shore
10-S	0820	~1.1	Near shore

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Wednesday, 3 October 2018 (by Steve Piccolo)

Weather: Cloudy; Calm, changing to N breeze at ~10 mph (est)

Temperature (deg F): 30s – 50s

Wave conditions: Max wave ~0.5-0.75 ft

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat
- Cleaning barge, with educator truck, CCTV truck, and Baker tanks (all unused)

0700: Load boat at Renton Rowing Center (RRC) with supplies (in addition to those loaded yesterday afternoon), then motor out to barge at MH5 site.

0730: Unload boat using excavator.

0745: Prepare to move dive/excavating barge. Tie workboat to stern.

0755: Raise spuds and back barge out of MH5 site.

0825: Drop spuds to relocate dive barge temporarily near MH3.

0835: Mount lights atop excavator.

0850: Return to RRC in workboat to get cleaning barge.

0910: Rig towlines for cleaning barge.

0915: Raise spuds and move cleaning barge away from dock.

0940: Repair hole in small (Jon) boat.

1015: Towboat repositions at stern of cleaning barge for push into MH5 site.

1100: Spuds down on cleaning barge at MH5 site.

1110: Secure walkway from cleaning barge to MH5. Pick up crewmember.

1120: BMC back on dive/cleaning barge.

1140: After a brief lunch break, BMC unloads Jon boat and outboard engine from workboat.

1145: Secure workboat to stern of dive barge for push to MH4 site.

1155: Raise spuds and move dive barge out.

1210: Spuds down on dive barge at MH4 site.

1225: Enclose anticipated MH4 site with silt curtain.

1250: Begin probing MH4 site manually for lakeline.

~1320: Received permission from property owner at 3205 Mountain View Ave N (property immediately north of MH4 site) to walk on her dock.

1330-1340: Took turbidity samples (see).

1345: Possibly located lakeline.

1410: Mount marker lights on 4 corners of dive barge.

1425: Suspected lakeline alignment marked. Confirmation requires excavation, which cannot be attempted until a fish assessment is made and the sewer line and surrounding improvements (rock retaining walls, docks, etc.) are surveyed.

1525: After performing equipment maintenance and repair, BMC leaves dive barge for cleaning barge. Drop off 3 crew at cleaning barge to mount corner marker lights and to deliver fall arrest & other PPE for Bravo personnel. Continue on to Gene Coulon Memorial Beach Park to pick up Grant Novak (CE).

1600: Grant arrives at park; boat departs for MH4 site.

1610: Transferred 3 crew at MH5 site from barge to shore (car parked there).

1615: Grant OKs MH4 site for noninterference with salmon.

1650: Return Grant to Coulon Park and the rest of the crew to RRC. Depart for the day.

Turbidity Sampling at MH4 Site

Station	Time	Turbidity (NTU)	Comments
BGD	1330	~0.7	
10-W(N)	1335	~1	
10-W(S)	1340	~1.4	

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Thursday, 4 October 2018 (by Steve Piccolo)

Weather: Cloudy with N breeze at ~5 mph, changing to Sunny & Calm

Temperature (deg F): 40s ~ 60

Wave conditions: Minimal

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo - 2

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning barge, with educator truck, CCTV truck, and Baker tanks

0715: After waiting well past 0700 for Bravo personnel (who were expected to arrive at 0630), BMC leaves the Renton Rowing Center (RRC) for the dive barge at the MH4 site.

0740: BMC learns that Bravo thought departure time was 0800, so workboat heads back to RRC to pick them up. Crew prepares for work at MH4 after site survey is made. They are also grinding edges on replacement outboard engine propeller blades to change out current bent props.

0745: Put Jon boat in lake, mount outboard, and motor to MH5 site.

0755-0805: Take turbidity samples at MH4 site (see).

0800: Bravo arrives at MH5 site and starts all equipment. They first plan to CCTV lakeline with a wheeled (powered) camera. The initial setup, intended for 8-inch pipes, is deemed unable to cope with the 45-deg PVC bends.

0845: Bravo mounts a powered/wheeled camera designed for 6-inch pipes on its CCTV cable.

0935: Bravo evacuates water from MH5, resulting in the flotation of the PVC diversion piping. This tilts MH5 and pulls the attached ecology blocks off the lakebed. (There are flanged connections between MH5 and the diversion piping.) Renton maintenance personnel start the flushing station to help sink the PVC piping and right MH5.

1030: Romac PVC/lakeline coupling on the south leg of the diversion piping starts leaking air. This was the coupling that was problematic due to the angled cut of the lakeline sewer.

1040: All PVC piping once again on, or very near, the lakebed.

1120: While options on how to address the problems at MH5 are being considered, BMC returns to the dive barge at MH4 and prepares to move it to MH5.

1135: Start moving dive barge.

1215: Dive barge drops spuds next to Bravo barge at MH5 site.

1235: Three members of BMC crew head to RRC to get vehicles for shopping ventures to acquire supplies for pipe anchors and related tools (e.g., pneumatic impact hammer). On the dive barge, the remaining crew begins fabricating anchor saddles for the PVC pipes.

1315: Surveyors arrive at MH5 site and are transported by boat to the MH4 site.

1400-1410: Take turbidity samples at MH5 site (see).

~1430: Both surveyors and Bravo crew depart for the day.

1520: BMC crew returns to dive barge at the MH5 site from equipment/supplies shopping excursion.

1530: All BMC crewmembers work toward fabricating the required components for the pipe anchorage system, giving the impression of a very busy machine shop.

1700: BMC secures barges, returns to RRC, and departs for the day.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0755	~0.5	At MH4 site
10-W(N)	0800	~0.6	At MH4 site
10-W(S)	0805	~0.6	At MH4 site
BGD	1400	~0.5	At MH5 site
10-W(N)	1405	~1	At MH5 site
25-SW	1410	~0.8	At MH5 site

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction

BGD is background

PC is point of compliance (150 ft from silt curtain)

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Friday, 5 October 2018 (by Steve Piccolo)

Weather: Cloudy with S breeze at ~5 mph, changing to Rainy & Calm

Temperature (deg F): 40s – 50s

Wave conditions: Minimal

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo - 2

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning barge, with educator truck, CCTV truck, and Baker tanks

0700: Depart from Renton Rowing Center (RRC) with both BMC and Bravo crews.

0730-0740: Take initial turbidity samples at MH5 site (see).

0730: BMC crew resumes fabrication of pipe anchor assemblies.

0805: Remove lid from MH5 and enhance attachment of walkway to 4"x4" at MH end.

0830: Prepare diving equipment for use.

0905: Diver in water. Starts installing pipe anchors on north leg of PVC diversion piping.

0955: Saddle anchors installed on north leg of MH5 diversion piping.

1000: Bravo checking out its equipment and operational procedures.

1030: Craig Milburn, BMC superintendent, is called to go into town for a random drug test. The only other crewmember with the necessary credentials to supervise a dive operation is the person currently diving. Thus, a break in the pipe anchoring work occurs as task reassignments take place.

1050: Per Alexandra Der (Tt), Carollo/Tt will request that BMC collect a coupon from the crown of the lateral at 2905 Mountain View Ave N. (Subsequent conversations with Craig Milburn reveal that he is aware of this request and is awaiting receipt of a pneumatic drill to perform the work. He refused BMC's suggestion to use an electric drill.)

1120: All 6 steel saddle pipe anchors are now installed (3 each leg, between the 45-degree bends). Begin installing tie-downs over the 4 central 45-degree bends using the same type of earth anchors, but connected with ratchet straps.

1200: Craig returns from his random drug test. Diver finishes installing ratchet straps over the diversion piping.

1210: Bravo dewateres MH5. Diversion anchors hold, but MH5 floats a couple of inches.

1215: Bravo CCTVs line south from MH5. Original crawler camera too large to make it past the second 45-degree bend. Replace with smaller camera, which goes into lakeline until blocked by debris at ~70 feet from MH5. No obvious leakage noted at suspect coupling between PVC and ductile iron pipe. The subsequent CCTV inspection of the north leg ends at the final 45-degree bend when the camera was submerged, and the operator couldn't tell if it was upright.

1325-1330: Take turbidity samples at MH5 site (see).

1345: Bravo begins jetting line to the south. Manages to reach over 400 feet from MH5 – almost all of the available hose length. Manhole tilts 15-20 degrees when pulling hose back. Hose couplings snag on the bends.

1515: Bravo finishes jetting south from MH5.

1530: Bravo performs CCTV inspection south from MH5 again. The suspect coupling at the PVC/DIP interface was definitely leaking this time, perhaps aggravated by the jetting operation. Powered camera was finally blocked by rocks at ~330 feet from MH5, located at or near the bottom of one of the many low points in the pipe profile. According to the Bravo crew, the small rocks and debris encountered in other low points cannot be removed by jetting, which is unable to move such heavy solids upslope.

~1545: Crew unloads and stores more silt curtain from delivery truck.

1630: Discussion with the Bravo crew confirmed their view that additional cleaning efforts on the lakeline south from MH5 would not result in a significant improvement in the sewer's cleanliness, but it would definitely increase the risk of damage to the PVC diversion piping.

1715: BMC and Bravo secure the barges, return to the RRC, and depart for the day.

Turbidity Sampling at MH5 Site

Station	Time	Turbidity (NTU)	Comments
BGD	0730	~0.6	
10-W(N)	0735	~0.8	
25-SW	0740	~0.6	
10-W(N)	1325	~0.8	
25-SW	1330	~0.6	

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Monday, 8 October 2018 (by Steve Piccolo)

Weather: Cloudy/Light Rain & Calm

Temperature (deg F): 50s

Wave conditions: Glassy/Minimal

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo - 2

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning barge, with educator truck, CCTV truck, and Baker tanks

0710: After loading boat, BMC and Bravo crews depart Renton Rowing Center (RRC) for barges at MH5 site.

0730-0740: Take initial turbidity samples at MH5 site (see).

0730: Bravo prepares its equipment. BMC prepares to send diver into water. Dewatering MH5 on Friday resulted in flotation forces that pulled multiple anchors on the north leg of the PVC diversion piping. The failed anchors were the smaller earth anchor sizes. (BMC bought out the store's entire inventory of these anchors; there were no more available at any size.)

0750: Take turbidity sample inside MH5 silt curtain; result almost the same as outside (see).

0805: Diver enters water.

0830: Diver out of water after tying PVC pipe to large anchors.

0845: BMC cutting ductile iron pipe (DIP) for MH5 north connection replacement pipe section. Bravo awaiting mechanic to address computer interlock issue on jetting/educator truck.

0850: BMC loads silt curtain & sandbags into workboat for installation at additional sites.

0915: Members of BMC crew depart barge to install silt curtains at UT sites. Bravo begins CCTV inspection of north leg of piping from MH5 (again) after dewatering MH5.

0930: Bravo abandons CCTV inspection attempt when camera submerges just before final 45-degree bend. Bravo truck mechanics arrive.

1015: Mechanics repair Bravo truck.

1020: Bravo begins jetting of north piping from MH5.

1055: Bravo reaches maximum distance north (~430 feet) from MH5 on its jetting effort. This distance is slightly more than what was achieved jetting to the south, but the resistance against the hose was considerably greater. And the hose suffered at least two cuts during this operation.

1155: Begin post-jetting CCTV inspection of north piping. Major accumulation of debris (including pipe liner?) at ~39 feet (inside PVC). Later encountered screen strainer just a short way into the lakeline. Pipe condition appeared to improve (both pipe itself and debris) the further the camera progressed.

1255: Maximum extent of CCTV inspection achieved at ~257 feet north from MH5. There was no blocking problem (pipe appeared clean), just the result of accumulated drag on the camera cable.

1320: Self-service maintenance of the dive barge portable toilet as the contents were removed by using the eductor truck on the Bravo barge.

1330: Chris Czesla (CE) arrives to inspect the silt curtains at the UT sites, as well as a clear MH4 site.

1345: Rocky Sittner (Renton) plans to CCTV the south end of the lakeline early tomorrow morning. He hopes that since the flushing station has been offline for days, in-line sedimentation will improve visibility. Rocky hopes to conclude his work by ~0815 tomorrow, after which BMC will start to re-establish the DIP lakeline.

1415: Chris C (CE) OKs the four silt curtain enclosures established today. He will return tomorrow to check the final one.

1430: Silt curtain detail returns to barge.

1445-1450: Take turbidity samples (see).

~1500: BMC installs final silt curtain.

1530: BMC continues preparations for tomorrow's activities.

1610: BMC & Bravo secure barges, return to RRC, and depart for the day.

Turbidity Sampling at MH5 Site

Station	Time	Turbidity (NTU)	Comments
BGD	0730	~0.5	
10-W(N)	0735	~0.7	
25-SW	0740	~0.6	
Adjacent MH5	0750	~0.9	Inside silt curtain
10-W(N)	1445	~3.4	
25-SW	1450	~0.6	

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Tuesday, 9 October 2018 (by Steve Piccolo)

Weather: Cloudy with N breeze at ~5-10 mph

Temperature (deg F): 50s

Wave conditions: <0.5 ft

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning barge, with educator truck, CCTV truck, and Baker tanks

0710: Traffic accidents on area highways delayed crew arrivals at the Renton Rowing Center (RRC), so departure was later than usual. The two Bravo crew also showed up, apparently under the mistaken impression that they were to perform the work planned by Rocky Sittner (Renton).

0720: Before docking at the barges, the BMC workboat cruises north from MH5 to assess the condition of all the silt curtains installed yesterday. All OK.

0730: After docking at the MH5 site barges, preparations get underway to restore the lakeline at MH5. However, a call to Kevin Goss (Tt) on the final word about the disposition of piping at MH5 revealed a recent e-mail from John Hobson (Renton PM) directing BMC to remove only MH5, leaving all PVC diversion piping in place.

0800: After confirmation of the desired course of action from John Hobson, BMC sends crew to buy necessary parts for PVC spool piece across current MH5 location.

0810-0820: Take initial turbidity samples at MH5 site (see).

0830: BMC prepares to move Bravo barge to allow access to MH5 with excavator on dive barge.

0840: Spuds up on Bravo barge. Move barge to cove by MH2 & MH3.

0940: Spuds up on dive barge. Move next to MH5.

1025: First diver enters water at MH5; unbolts manhole flange connections.

1035: Second diver in water to assist.

1050: Begin removing ecology blocks (measured as 3 ft x 2 ft x 2 ft) anchoring manhole.

1100: Remove manhole; insert plugs in open diversion piping.

1125: Remainder of crew returns with flanges, etc. necessary to reconnect PVC piping across gap created by removing MH5.

1140: Cut PVC spool piece and glue on flanges.

1210: Diver enters water and bolts PVC spool piece in place.

1240: Spool piece installation complete.

1250: Take turbidity samples at MH5 site (see).

1305: Raise spuds on dive barge and depart the MH5 site.

1320: Arrive at MH4 site.

1330-1410: Take initial turbidity samples at MH4 site (see).

1340: Set up and start jet pump.

1350: Set up and start air probe.

1355: First diver in water.

1400: Second diver in water. Excavation of lakeline underway.

1435: Lakeline located.

1510: Contrary to previous information, the lakeline is actually buried about 3 feet deep and is closer to shore than originally thought. Due to its proximity to the rock retaining wall at the shoreline, some sort of shoring system is indicated.

1525: First diver out of water. Second diver continues, mostly using hydraulic dredge.

1555-1600: Take turbidity samples at MH4 site (see).

1645: Dredging ceases. Diver marks pipe with buoy and exits water. Lakeline appears to be ~12 feet from barge and 6-7 feet from rock wall on shore.

1715: BMC secures barge, returns to RRC, and departs for the day.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0810	~0.5	At MH5 site
10-W(N)	0815	~0.8	At MH5 site
25-SW	0820	~0.7	At MH5 site
10-W	1250	~1.4	At MH5 site
10-W(N)	1330	~1.3	At MH4 site
10-W(S)	1335	~0.8	At MH4 site
BGD	1410	~0.7	At MH4 site
10-W(N)	1555	~0.7	At MH4 site
10-W(S)	1600	~0.6	At MH4 site

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Wednesday, 10 October 2018 (by Steve Piccolo)

Weather: Cloudy & Calm, changing to Sunny with N breeze at ~5 mph

Temperature (deg F): 40s – 60s

Wave conditions: Minimal

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning barge, with educator truck, CCTV truck, and Baker tanks (unused)

0705: Depart Renton Rowing Center (RRC) with full gasoline cans.

0715: Arrive dive barge at MH4 site.

0720: Start equipment and prepare for dive.

0730-0740: Take initial turbidity samples at MH4 site (see).

0745: Diver enters water; resumes excavating around lakeline with dredge and air probe.

0815: Remove water jet pump from workboat and retrieve Jon boat & outboard engine from Bravo barge.

0830: Place water jet pump in Jon boat. This pump is incapable of any appreciable suction lift, so it must be placed close to the water surface level.

0835: Drive workboat to fuel dock for fill-up.

0845: Diver encounters lateral connection for 3119 Mountain View Ave N. Attach buoy ~ 2 feet south of flange immediately south of lateral.

0945: Crew returns from fueling workboat.

1100: Receive approval from Alexandra Der (Tt) and Dan Reisinger (Carollo) to collect lateral coupon from 3119 Mountain View Ave N instead of the nearby location indicated in the contract documents.

1150: Diver exits water. Latest depth estimate for lakeline is a fairly consistent 2 feet below the lakebed.

1210: Replacement diver enters water. Lakeline excavation resumes.

1235: Rocky Sittner (Renton) calls to inform me that he will be off work 11-12 Oct. During those days, we should notify Jacob of any activity that directly affects the lakeline (e.g., installing MH4, line cleaning, etc.).

1330: All crewmembers not currently diving or assisting are presently involved in various barge-related tasks.

1545-1550: Take turbidity samples (see).

1610: Diver exits water.

1700: BMC secures barge & equipment, returns to RRC, and departs for the day.

Turbidity Sampling at MH4 Site

Station	Time	Turbidity (NTU)	Comments
BGD	0730	~0.8	
10-W(N)	0735	~0.7	
10-W(S)	0740	~0.9	
80-W(N)	1545	~0.7	
80-W(S)	1550	~1.5	Hydraulic/air-lift dredge overshooting silt curtain

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Thursday, 11 October 2018 (by Steve Piccolo)

Weather: Foggy & Calm, changing to Sunny & Very Light Breeze

Temperature (deg F): 40s - 60s

Wave conditions: Glassy to Minimal

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning barge, with educator truck, CCTV truck, and Baker tanks (unused)

0645: Telcon with John Hobson (Renton) conveys City's desire to remove diversion piping at MH5 site and restore lakeline.

0705: Depart Renton Rowing Center (RRC) for barge at MH4 site.

0725: After very slow trip (due to fog), arrive at barge and prepare to move to MH5 site.

0830-0910: Project conference call.

0925: Spuds up on BMC barge. Commence move to MH5 site.

0945: Spuds down on BMC barge at MH5 site.

1000: Renton maintenance crew turns flushing station off.

1020: Set up jet pump on shore.

1020-1030: Take initial turbidity samples at MH5 site (see).

1025: First diver in water.

1035: Second diver in water. Divers start removing pump anchors.

1140: First section of diversion piping disconnected and removed. (This piping consists of approximately half of the north leg and was directly connected to MH5.)

1205-1210: Take turbidity samples at MH5 site (see).

1230: Disconnect and remove MH5 replacement PVC spool piece.

1300: Craig (BMC superintendent) thinks it is increasingly unlikely that the crew will be able to make the final restoration of the lakeline today. Thus, BMC is preparing a PVC pipe segment to span the south diversion piping/lakeline connection point.

1350: First diver exits water. All anchors are free of diversion piping, but one anchor has not been removed from lakebed.

1355: Second diver exits water. Final restoration of north diversion piping/lakeline connection is complete.

1415: Replacement divers enter water. They continue work on disassembling the diversion pipe. Crew on barge fabricates a temporary 2-part PVC section to span the south diversion piping/lakeline connection point.

1525: Divers exit water. Final PVC connection piece cut to size.

1540: Divers back in water with final PVC connection segment.

1550-1555: Take turbidity samples at MH5 site (see).

1630: Finalize lakeline temporary restoration.

1710: BMC secures barge, returns to RRC, and departs for the day.

Turbidity Sampling at MH5 Site

Station	Time	Turbidity (NTU)	Comments
BGD	1020	~0.5	
10-W(N)	1025	~0.5	
10-W	1030	~0.6	
12-N	1205	~5	Considerable pollen
12-S	1210	~2	Considerable pollen
40-NW	1550	~2	Considerable pollen
40-W	1555	~0.7	Considerable pollen

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Friday, 12 October 2018 (by Steve Piccolo)

Weather: Clear & Calm, changing to Sunny with North Breeze at ~15 mph

Temperature (deg F): 40s – 60s

Wave conditions: Minimal, increasing to slightly less than 1 foot

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning barge, with educator truck, CCTV truck, and Baker tanks (unused)

0705: Depart Renton Rowing Center (RRC) for barge at MH5 site.

0720: Prepare for day's activities.

0730-0740: Take initial turbidity samples at MH5 site (see).

0745: First diver in water. He will remove the temporary PVC section at the south diversion piping/lakeline connection, plug the sewer, then make a clean square cut of the south lakeline pipe.

0805: Joel Vasey (Bravo) arrives on site, requesting a ride to the Bravo barge so that he can retrieve some equipment for another job tomorrow. BMC crew takes him over and back in the workboat.

0915: Diver begins cutting south lakeline to provide a face perpendicular to the pipe. (The existing cut is at a rather severe angle.)

0935: Diver completes lakeline cut, then measures gap for final ductile iron pipe (DIP) connection.

0950: Diver and assistant exit water.

1050: Finish cutting 92-inch DIP segment for insertion into lakeline gap at south diversion piping/lakeline connection point.

1100: Three divers enter water to position and connect final DIP segment.

1150: Divers complete restoration of lakeline at MH5 site and exit water. All dive-related equipment shut down and removed from water (as applicable).

1215-1220: Take turbidity samples at MH5 site (see).

1230: Diver enters water to begin removing remaining PVC pipe, with the excavator performing the heavy lifting.

1310: Diver exits water after removing all PVC pipe at the MH5 site.

1325: After finishing lunch, crew prepares to move barge.

1330: Spuds up on BMC barge; begin move to MH4 site.

1425: After a difficult time positioning the barge in the tight MH4 site with a light breeze, the spuds drop about 10 feet shy of the desired location. This final increment will be made in calm conditions.

1430: Load MH5 PVC diversion piping on workboat for transfer to Bravo barge.

1505-1510: Take turbidity samples at MH4 site (see).

1545: BMC cleans & secures barge, returns to RRC, and departs for the weekend.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0730	~0.5	At MH5 site.
12-W(N)	0735	~0.6	At MH5 site.
12-W	0740	~0.4	At MH5 site.
12-N	1215	~2.6	At MH5 site. Substantial pollen.
12-S	1220	~1.6	At MH5 site.
10-W(N)	1505	~3	At MH4 site.
10-W(S)	1510	~3	At MH4 site.

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Monday, 15 October 2018 (by Steve Piccolo)

Weather: Clear & Calm, changing to Sunny with North Breeze at ~10 mph

Temperature (deg F): 40s – 60s

Wave conditions: Minimal, increasing to slightly less than 1 foot

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation barge, with excavator, temporary manhole, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning barge, with educator truck, CCTV truck, and Baker tanks (unused)

0700: Depart Renton Rowing Center (RRC) for barge at MH4 site.

0720: Prepare to move barge ~10 feet to final location at site.

0725: Move barge final increment to working position.

0730-0740: Take initial turbidity samples at MH4 site (see).

0745: One crewmember returns to shore to run critical errands.

0750: Prepare equipment for divers.

0825: First diver in water; cleans up lakeline excavation with hydraulic dredge.

0945: After completing lakeline cuts, diver attaches pipe segment to nylon slings for removal by excavator.

1000: Remove pipe segment and plug open ends of lakeline.

1015: Cut PVC segments to serve as intermediate connections between temporary manhole and lakeline.

1020: Unsuccessful attempt to place ecology block on far side of MH4 location due to insufficient reach of excavator boom.

1035: Move barge ~5 feet closer to shore.

1050: Set ecology blocks (3 total) prior to placing MH4. Excavator alarm sounds when placing far block.

1115: Make approximate set of MH4. Diver will perform additional dredging to allow final placement.

1210: Manhole is now lined up properly, but the efforts to get it there have filled in some gravel below. Manhole is currently about 4 inches high. Diver will clear out material beneath to permit vertical alignment.

1250: When attempts to attain the correct vertical alignment of connecting pipes failed by manipulating MH4, the crew lifts the lakeline to get the match. This effort also fails, so the next approach involves removing the manhole and using the excavator to remove the excess material.

1450-1455: Take turbidity samples at MH4 (see).

1505: After much difficulty, MH4 is finally fully connected to the lakeline.

1625: Install and tighten coupling restrainers and anchor tie-downs.

1630: All divers out of water.

1705: Secure barge & equipment, return to RRC, and depart for the day.

1705: BMC secures barge & equipment, returns to RRC, and departs for the day.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0730	~0.8	At MH4 site.
10-W(N)	0735	~0.8	At MH4 site.
10-W(S)	0740	~0.7	At MH4 site.
40-W(N)	1450	~0.6	At MH4 site.
40-W(S)	1455	~0.6	At MH4 site.

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Tuesday, 16 October 2018 (by Steve Piccolo)

Weather: Clear & Calm, changing to Sunny with Light Variable Breezes

Temperature (deg F): 40s – 70s

Wave conditions: Minimal, increasing to about one-half foot

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo - 3

Equipment on site:

- Excavation/diving (BMC) barge, with excavator, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with educator truck, CCTV truck, and Baker tanks

0705: Depart Renton Rowing Center (RRC), deliver Bravo crew to their barge, then arrive at the BMC barge by the MH4 site.

0720: On the BMC barge, place large bag of pea gravel against lake side of MH4 to provide additional stability during jetting operations.

0745: Spuds up on BMC barge. Begin move to MH5 site.

0810: Spuds down on BMC barge at MH5 site.

0820: Take workboat to Bravo barge, located by MH2 and MH3.

0830: Spuds up on Bravo barge. Begin move to MH4.

0915: Bravo barge in final position at MH4 site. This is a very tight location for this barge, which is larger than the BMC barge.

0935-1000: Take turbidity samples at MH5 site (see).

0945: Three BMC crew go ashore to get supplies to build barge-to-MH4 access bridge.

1030: Cut cover of temporary manhole to provide a bolted anchor at MH4 for access bridge.

1130: Those ashore return to BMC barge with building supplies.

1145: After collecting tools and the rest of the BMC crew, all BMC personnel go to the Bravo barge to construct an access bridge to MH4. This access bridge also

provides significant additional structural support for the temporary manhole. It is designed to minimize tipping forces – and the resultant movement – of the manhole during cleaning operations.

1200-1210: Take turbidity samples at MH4 site (see).

1250: Static wastewater level inside MH4 = $80\frac{3}{4}$ inches down from rim at north (downstream) tab. Lake level = $43\frac{1}{2}$ inches down from rim at north (downstream) tab. Flushing station is not running.

1315: Conversations with John Hobson & Rocky Sittner (Renton) and Bravo crew resulted in an agreed approach to obtaining the static water levels inside MH4 during flushing station operation. The flushing station will be operated manually at minimum flow when the station crew first arrives at around 0630 tomorrow. Renton crew will monitor manhole for overflows before Bravo arrives (at about 0715). Bravo crew will measure liquid level in MH4 (at north tab) before beginning operations at about 0800. A similar liquid level measurement will be taken after the cleaning operations from MH4 are completed. Renton field crew will shut down the flushing station while CCTV inspection and cleaning operations are underway in the lakeline.

1355: After completing the barge-to-MH4 bridge, the BMC crew returns to their barge at the MH5 site. They reportedly plan to clean up the area within the silt curtain of such items as sand bags and pipe anchors as a prelude to backfilling excavations and placing the fish mix rock.

1400: Bravo evacuates the water from MH4, then CCTVs the lakeline to the south. Pipe is surcharged for the vast majority of the inspection. Per the eductor truck operator, this is at least partially the result of water in the downstream (north) leg flowing back into MH4 at a rate exceeding the truck's ability to handle. Much of this water appears quite clear. (Lake water entering sewer?) As a result, Bravo plans to plug the north leg of pipe tomorrow prior to re-inspecting.

1530: At 402 feet on the CCTV, Bravo decides to pull back. The camera was stirring up too much light debris in the surcharged pipe for the operator to know the crawler's situational attitude. At this distance from the manhole, he deems it too risky to continue.

1550: CCTV camera retrieved at MH4. No substantial accumulations of heavy solids were observed anywhere along this stretch of lakeline.

1655: Secure barges & equipment, return to RRC, and depart for the day.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0935	~0.7	At MH5 site.
10-W(N)	0955	~0.7	At MH5 site.
10-W(S)	1000	~0.7	At MH5 site.
BGD	1200	~0.5	At MH4 site.
10-W(N)	1205	~0.6	At MH4 site.
30-W(S)	1210	~0.7	At MH4 site.

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Wednesday, 17 October 2018 (by Steve Piccolo)

Weather: Foggy & Calm, changing to Sunny & Calm

Temperature (deg F): 40s ~ 70

Wave conditions: Glassy

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo - 2

Equipment on site:

- Excavation/diving (BMC) barge, with excavator, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with educator truck, CCTV truck, and Baker tanks

0650: Receive call from John Hobson (Renton) reporting that lakeline lift station experienced unusually high flows (~4 times normal) last night. Field crew wonders if activity at MH4 is responsible. Note that MH4 level yesterday was about 37 inches below lake level.

0705: Depart Renton Rowing Center (RRC) for Bravo barge at MH4.

0720: Bravo starts equipment. Renton field crew notifies us that flushing station was just started. BMC crew continues to MH5 site, where they plan to resume filling excavations with fish mix rock.

0745: Water inside MH4 silt curtain cleared dramatically overnight. All exposed piping, etc. at site is now visible.

0805: Level readings at north tab of MH4: lake = $43\frac{1}{2}$ inches; manhole = $48\frac{1}{2}$ inches.

0830: City shuts down flushing station and level inside MH4 begins falling shortly thereafter.

0835: Barge is approximately 1 inch farther away from MH4 than yesterday afternoon.

0850: City personnel on site question the integrity of the Romac coupling on the north side of MH4, based on observations from shore.

0900-0910: Take turbidity samples at MH4 site (see).

0945: All of the exposed pipe at the MH4 site has a layer of sediment on the crown except at the edge of the Romac coupling on the north side of the manhole. The suspicion is that water movement from a leak swept this site clean.

1010: A BMC diver visually inspects the suspect coupling and confirms the leak, verified by sand placed nearby being sucked inside the joint.

1040: BMC brings SCUBA gear for diver to work repairing leak.

1200: Efforts to correct the leak problem ultimately fail as the final tightening procedure pulls the coupling out of the desired position. More equipment and effort is required, so the BMC dive barge will be moved back to MH4.

1250: BMC dive barge arrives back at MH4 site.

1320: Diver re-enters water from BMC barge, this time with compressor-supplied air.

1330: Rotate MH4 slightly using access bridge to provide better alignment for problem coupling. Lakeline at MH4 location originally include a field joint with a slight deflection.

1415: Coupling re-established, diver proceeds with installation of restrainers.

1440: Connection finalized; diver exits water.

1455: Dewater MH4 with eductor truck.

1500: Commence jetting south lakeline pipe at MH4. Manhole tilt on pull-back of the jetting hose is almost imperceptible. However, manhole still floats slightly when dewatered.

1520: All 450 feet of jetting hose made it up the lakeline.

1555: Per Craig Milburn (BMC superintendent), coupon collection is now scheduled for Friday, 19 October at MH5 (only).

1600: CCTV inspection of the Romac coupling on north side of MH4 reveals a substantial leak. However, based on Bravo crew's dewatering efforts, this leak is noticeably less than yesterday's.

1630: BMC crew stops distributing fish mix rock at MH5 site for the day. According to Craig, fish mix on hand is insufficient to address needs of MH5 and MH4. He will get more.

1655: Secure barges & equipment, return to RRC, and depart for the day.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0900	~0.5	At MH4 site.
10-W(N)	0905	~0.6	At MH4 site.
10-W(S)	0910	~0.5	At MH4 site.

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Thursday, 18 October 2018 (by Steve Piccolo)

Weather: Partly Cloudy & Calm, changing to Mostly Sunny & Calm

Temperature (deg F): 40s – 60s

Wave conditions: Glassy to Minimal

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo - 2

Equipment on site:

- Excavation/diving (BMC) barge, with excavator, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with educator truck, CCTV truck, and Baker tanks

0705: Depart Renton Rowing Center (RRC) for Bravo barge at MH4.

0715: BMC continues to dive barge at MH5 site. Bravo starts equipment.

0730-0740: Take turbidity samples at MH4 (see).

0755: BMC moves dive barge back to MH4 site.

0830: Diver begins repair work on leaking Romac coupling on north side of MH4.

0920: Diver removes PVC segment and plugs sewer. He then excavates area with hydraulic dredge to provide access for bolt tightening under pipe.

1100: Multiple fittings of the PVC segment results in trim modifications for a better result.

1220: Diver finishes Romac coupling leak repair.

1230: Bravo evacuates contents of MH4, then jets lakeline to the south, quickly running out all 450 feet of hose.

1300: Jetting hose pullback complete.

1305: CCTV inspection of north pipe from MH4 reveals a completely dry Romac coupling.

1320: Bravo CCTVs south lakeline from MH4. There is much less surcharged pipe than during the original inspection on 16 October.

1400: BMC moves dive barge back to MH5 site.

1415: Bravo abandons pipe inspection south from MH4 when camera is unable to pass 45-degree bend at ~566 feet. No major obstructions observed in this portion of the lakeline. The most prevalent heavy solids appear to be pieces of pipe lining.

1425-1430: Take turbidity samples at MH4 site (see).

1515: Begin CCTV inspection of lakeline on north side of MH4.

1525: A gasket from an 8-inch pipe plug lies in the pipe at ~50 feet from the manhole, obstructing the way forward. Bravo abandons the inspection at this point. However, Joel (Bravo CCTV inspector) manages to trap and retrieve gasket with the camera. (The BMC diver encountered great difficulty in removing the associated plug; the gasket came off in the process and could not be captured.)

1545: Restart CCTV inspection of north lakeline from MH4.

1615: CCTV lakeline inspection reaches maximum extent at pipe bend ~ 485 feet from MH4. Much of this pipe section was surcharged. There appeared to be very few instances of heavy solids, none of which offered much impediment to progress. Considerable soft growth was observed on pipe walls.

1635: BMC brings workboat to Bravo barge after exposing & marking 6-inch lateral and distributing more fish mix rock at MH5 site.

1655: Secure barges & equipment, return to RRC, and depart for the day.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0730	~0.7	At MH4 site.
10-W(N)	0735	~0.6	At MH4 site.
10-W(S)	0740	~0.6	At MH4 site.
10-W(N)	1425	~0.6	At MH4 site.
10-W(S)	1430	~0.5	At MH4 site.

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Friday, 19 October 2018 (by Steve Piccolo)

Weather: Foggy & Calm, changing to Sunny & Calm

Temperature (deg F): 40s – 60s

Wave conditions: Glassy to Minimal

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo - 3

Equipment on site:

- Excavation/diving (BMC) barge, with excavator, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with educator truck, CCTV truck, and Baker tanks

0700: Depart Renton Rowing Center (RRC) for Bravo barge at MH4.

0715: BMC continues to dive barge at MH5 site. Bravo starts equipment.

0720: Bravo connects new hose extension and begins decanting portside Baker tank into MH4.

0740-0750: Take turbidity samples at MH4 (see).

0825: Finish decanting port Baker tank; begin decanting starboard Baker tank. Rocky & Jake (Renton) close valve on lateral at 3213 Mountain View Ave N. They ask to be notified prior to jetting so that they can monitor the valve/lateral.

0915: Finish decanting starboard Baker tank, then dewater MH4.

0930: Another Bravo worker (Preston) arrives via workboat with more hose (layflat type – not jetting) and fittings. Start jetting lakeline to north of MH4. All 550 feet go out very fast. (N.B. This is the correct hose length on the truck reel; the operator mistakenly thought that it contained 450 feet. Previous reports referenced the wrong amount.)

1020: Finish jetting (twice). Begin CCTV inspection of lakeline north of MH4.

1140: Retrieve camera after CCTV inspection. The camera was stopped by the same pipe bend as yesterday's pre-cleaning inspection (at ~485 feet). The biggest difference, since the vast majority of this portion of the lakeline is surcharged, is the complete lack of visibility after the cleaning procedures. It is impossible to assess the condition of the pipe in this situation, although the camera did not seem to encounter any difficulties in proceeding along the line before this problem bend.

1335: BMC delivers more jetting hose to Bravo's barge with their workboat. Bravo adds 200 feet to the 550 feet already on their truck reel. This is just about the maximum possible 1-inch hose that can be accommodated on the reel; any more would pose clearance problems at the bottom of the reel.

1350: Begin jetting lakeline south from MH4.

1410: Jetting could proceed no further with ~45 feet of hose remaining on the reel. This corresponds to roughly 675 feet of lakeline south of MH4.

1420: BMC begins to collect coupon from lateral at 2905 Mountain View Ave N (at the MH5 site).

1450: BMC finishes drilling coupon.

1500: BMC completes lateral repair.

1505: Flushing station starts. Bravo stops decanting starboard Baker tank (which they had just begun).

1520: Craig (BMC) reports that the band clamp repair at the lateral coupon site is not holding against the flushing station flow. The City then shuts down the flushing station and Bravo resumes decanting the starboard Baker tank.

1620: After BMC made modifications to the band clamp, the City restarts the flushing station. The repair performs much better, but it still cannot be considered a permanent repair. The City shuts down the flushing station for the weekend, and BMC makes plans to install a more robust repair in the near future.

1655: Secure barges & equipment, return to RRC, and depart for the day.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0740	~0.5	At MH4 site.
10-W(N)	0745	~0.6	At MH4 site.
10-W(S)	0750	~0.7	At MH4 site.

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Saturday, 20 October 2018 (by Steve Piccolo)

Weather: Partly Cloudy with N breeze at ~5mph, changing to Cloudy with N breeze at ~10 mph

Temperature (deg F): 40s – 50s

Wave conditions: ~0.5 feet

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation/diving (BMC) barge, with excavator, manhole access tube, assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with eductor truck, CCTV truck, and Baker tanks

0700: Depart Renton Rowing Center (RRC) for BMC barge at MH5.

0715: After brief stop, collecting necessary tools, continue to Bravo barge at MH4.

0725: Arrive Bravo barge at MH4 site and begin disconnecting & removing manhole access bridge.

0740: Pull bridge onto barge; replace lid on MH4.

0750: Return to barge at MH5. Prepare for silt curtain removal.

0815: Collect 4 of the 5 silt curtains placed for the ultrasonic thickness (UT) tests and return them to the Bravo barge. The 5th silt curtain remains to allow for the possibility of collecting a lakeline pipe coupon.

0920: Put jet pump and associated hoses on workboat for use in dredging prior to installation of replacement pipe clamp for lateral at 2905 Mountain View Ave N (site of pipe coupon collected on 19 Oct). The dredging is necessary to allow adequate access under the lateral.

0930: Prepare manhole access tube for installation.

1000: John Snowden (BMC) arrives with Romac replacement band clamps for lateral pipe coupon repair.

1020: Begin dredging around band clamp for lateral coupon repair replacement.

1025-1035: Take turbidity samples at MH5 site.

1100: Diver finishes installing Romac replacement band clamp.

1110: Craig and 2 other crewmembers reconnoiter MH3 area for acceptable weather conditions for barge move.

1125: Prepare to move BMC (dive) barge.

1130: Spuds up, and dive barge departs MH5 site.

1150: Spuds down on dive barge at MH3.

1155: Set up video camera system for dive.

1215: Diver enters water to clean tops of MH2 & MH3. MH2 has only 2 functioning handles (out of 4) to secure lid to lakeline.

1250: Place access tube over MH3.

1340: Secure access tube to MH3.

1355: Make & install lid for access tube at MH3. Due to adverse wind conditions, no attempt was made to move Bravo barge to MH3.

1425: Secure BMC barge & equipment, return to RRC, and depart for the (remaining) weekend.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	1025	~0.5	At MH5 site.
10-W(N)	1030	~1.6	At MH5 site.
10-W(S)	1035	~2.5	At MH5 site.

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Monday, 22 October 2018 (by Steve Piccolo)

Weather: Foggy & Calm, changing to Hazy & Calm

Temperature (deg F): 40s – 50s

Wave conditions: Glassy

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo – 2

Equipment on site:

- Excavation/diving (BMC) barge, with excavator and assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with eductor truck, CCTV truck, and Baker tanks

0705: Depart Renton Rowing Center (RRC) in heavy fog and proceed slowly to barges.

0730: Drop off Bravo crew to barge at MH4 site, then continue to BMC barge at MH3. The fog is currently too thick to move the barges, so both crews wait until visibility improves. BMC crew maintains equipment.

0830: John Hobson (Renton) agrees to BMC's request to run flushing station and check integrity of band clamp repair to lateral at 2905 Mountain View Ave N (by MH5).

1045: John Hobson reports that the band clamp on the lateral repair by MH5 displays no sign of leaking when the flushing station is running.

1220: As the fog lifts, BMC moves the dive barge from MH3.

1230: Park BMC barge temporarily between MH3 and MH4.

1245: Move Bravo barge from MH4 to MH3.

1330: Evacuate water from MH3 access tube.

1345: With flushing station off, Bravo cracks open hatch of MH3 to release residual line pressure.

1415: Bravo removes hatch and pumps down MH3.

1420: Place CCTV camera in pipe from MH3. Camera reveals slight leakage from access tube connection.

1430: BMC moves dive barge to MH4 site.

1435: Sediment dam at ~8 feet impedes camera progress in pipe from MH3 to lakeline. Inspection abandoned.

1445: BMC begins work on replacement pipe section for segment of lakeline removed for installation of MH4.

1505: Jet first 25-30 feet south from MH3. Cleaning seems to remove considerable material.

1515: Recommence CCTV inspection of pipe south from MH3. Pipe is largely surcharged for first 26 feet (maximum extent of inspection), and it appears to contain substantial heavy solids, including many rocks.

1605: Remove all equipment from MH3 and replace hatch.

1630: BMC crewmembers arrive and replace MH3 lid.

1655: Secure barges & equipment, return to RRC, and depart for the day.

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Tuesday, 23 October 2018 (by Steve Piccolo)

Weather: Cloudy/Foggy with Light SW Breeze

Temperature (deg F): 40s – 50s

Wave conditions: Minimal

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo – 2

Equipment on site:

- Excavation/diving (BMC) barge, with excavator and assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with eductor truck, CCTV truck, and Baker tanks

0705: Depart Renton Rowing Center (RRC) for Bravo barge.

0715: After brief stop, collecting necessary tools, continue to Bravo barge at MH4.

0745: BMC moves to dive barge at MH4. Part of the crew resumes work on DIP replacement for the lakeline segment removed for the MH4 installation. (Heavy fog begins rolling into the area.)

0750: The remainder of the BMC crew returns to RRC in an attempt to procure a short access tube for MH2.

0810-0820: Take turbidity samples at MH4 site (see).

0910: John Hobson (Renton) reports that he finally made contact with the King County employee (Carson Cox) in charge of the manhole access tubes. Carson will be at the storage facility at 1130 (after a training class) to give a short access tube to BMC for installation at MH2.

1000: BMC continues work on temporary (PVC) and permanent (DIP) replacements for MH4 and its associated connecting piping.

1010: Joel Vasey (Bravo) reports that he has reached the lakeline with the CCTV camera from MH3.

1035: At MH4, BMC moves the large gravel bag and removes the 3 ecology blocks as a prelude to removal of the temporary manhole.

1130: BMC unbolts MH4 at the pipe flanges, lifts out the manhole, and caps the open ends of the lakeline. A diver then measures the distance between the flanges for the temporary PVC pipe connection.

1200: Prepare the temporary flanged PVC pipe segment to close the gap created by the removal of MH4. Attempt (unsuccessfully) to bolt pipe in position.

1240: Return PVC pipe segment to barge and reduce length slightly.

1300: Rest of BMC crew returns with short manhole access tube.

1330: Replace gasket, then place short manhole access tube on workboat at boat launch by MH2.

1345: Flip access tube onto MH2. Anchor it in place.

→ Per Joel Vasey: Bravo successfully jetted and CCTV-inspected the 510 feet between MH3 and MH4. The rocks observed yesterday in the first 26 feet are largely gone. About 90% of the pipe inspected was out of the water, as opposed to approximately the reverse percentage when inspecting in the opposite direction. Pipe condition was judged to be slightly better than previously inspected stretches of lakeline. It appeared that the line sags typically corresponded with lateral tees or wyes.

1415: Refuel workboat at Seattle Boat.

~1430: Finish installing PVC spool piece at MH4 lakeline temporary repair.

1510: Pick up BMC crewmember at Gene Coulon Park after he drove the company truck back from the short access tube delivery at MH2.

1530: BMC workboat ties up to Bravo barge for repositioning. Bravo dewateres MH3. Close hatch and attach lid to MH3.

1605: BMC moves Bravo barge to MH2, then relocates and secures access bridge to the manhole.

1630: Secure barges & equipment, return to RRC, and depart for the day.

Turbidity Sampling

Station	Time	Turbidity (NTU)	Comments
BGD	0810	~0.7	At MH4 site.
10-W(N)	0815	~0.7	At MH4 site.
10-W(S)	0820	~0.6	At MH4 site.

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Wednesday, 24 October 2018 (by Steve Piccolo)

Weather: Partly Cloudy & Calm, changing to Cloudy with S Breeze at 5-10 mph

Temperature (deg F): 40s ~ 60

Wave conditions: Minimal

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation/diving (BMC) barge, with excavator, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with eductor truck, CCTV truck, and Baker tanks

0710: After waiting for the Bravo crew to arrive, John Snowden (BMC) called Craig to inform him that the Bravo crew would be working another job today. BMC then departed the Renton Rowing Center (RRC).

0720: After collecting the towlines from the Bravo barge, BMC rigs the dive barge for movement.

0730: Move BMC (dive) barge from MH4 site to a point slightly farther offshore to facilitate transfer of the fish mix rock shipment due to arrive within an hour.

0740: Rearrange items on dive barge deck to accommodate new fish mix.

0810: Tugboat “Carolyn H” arrives with a load of fish mix.

0835: Finish transferring fish mix to BMC barge.

0840: Move dive barge to MH3.

0900: Arrive MH3.

0915: Remove lid and attach lifting bolts to MH3 access tube.

0925: Diver disconnects anchors and MH3 access tube is lifted aboard BMC barge.

0940: Reconnoiter site conditions at MH1.

0955: Prepare the manhole access tube extension for attachment to the tall access tube. This extended tube is required for MH1.

1030: Spuds up on BMC barge; begin move to MH1.

1050: Spuds down on BMC barge at MH1.

1105: Attach extension to tall manhole access tube.

1135: Diver enters water at MH1 to prepare for access tube attachment. Lakeline is completely exposed about 1¹/₂ feet above lakebed at MH1. This is definitely a snag hazard and is subject to damage from dragged anchors, etc.

1210: Anchor access tube to MH1.

1225: Attach lid to MH1.

1230-1255: Take turbidity samples at MH5 site (see).

1300: Remove silt curtain at MH5 site, then load aboard workboat.

1330: Unload silt curtain onto Bravo barge.

1335: Return to BMC barge.

1410: Secure barge & equipment, return to RRC, and depart for the day.

Turbidity Sampling at MH5 Site

Station	Time	Turbidity (NTU)	Comments
BGD	1230	~0.6	South breeze for all samples
12-N	1235	~0.5	Nearshore
-3-N	1240	~9	Inside silt curtain; nearshore; significant pollen
12-S	1250	~0.6	Nearshore
-3-S	1255	~2	Inside silt curtain; nearshore

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Thursday, 25 October 2018 (by Steve Piccolo)

Weather: Drizzle & Calm, changing to Showery with light breeze from south

Temperature (deg F): 50s

Wave conditions: Glassy/Minimal

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo - 2

Equipment on site:

- Excavation/diving (BMC) barge, with excavator, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with eductor truck, CCTV truck, and Baker tanks

0705: Depart Renton Rowing Center (RRC).

0720: Arrive Bravo barge and remove lid from MH2 access tube.

0730: Pump out water trapped above closed hatch.

0735: City shuts down flushing station.

0740: BMC begins moving dive barge from MH1 to MH4.

0755: Remove MH2 hatch.

0805: Begin dewatering MH2.

0810: Spuds down on dive barge at MH4.

0815: Begin CCTV inspection from MH2 to MH1. Lakeline drops down ~3 ft from MH2 (see photo P2640146). Inspection abandoned at ~635 feet because nothing noteworthy was observed and the vast majority of the inspection was under water. The hope is that the situation will improve after dewatering from MH1.

0830-0930: Weekly conference and follow-up calls.

0950: CCTV camera back at MH2 after inspection run to the north.

1000: Begin CCTV inspection from MH2 toward MH3 spur intersection.

1010: Inspection abandoned at ~26 feet when camera started piling up heavy solids. Virtually entire inspection was under water with extensive light solids throughout.

1020: CCTV camera is stuck ~13 feet from MH2.

~1030: Begin installing final ductile iron pipe replacement section at MH4 location.

1055: Bravo finally retrieves stuck CCTV camera at MH2.

1200: Bravo jets 100+ feet from MH2 toward MH4.
BMC completes permanent lakeline repair at MH4 site.

1230: Decant Baker tanks to reduce draft prior to moving Bravo barge. (Barge grounded at MH2 due to weight of stored water from jetting and dewatering activity.)

1255: City starts flushing station to allow check of liquid level in lakeline at MH2. Bravo stops decanting and waits until level in lakeline stabilizes. Flushing flow rate is 45-50 gpm. Access tube rim to lake level = 21 inches; access tube rim to wastewater level = 45 inches. Wastewater was 3-4 inches below MH2 flange (which is tilted slightly).

1315: BMC moves Bravo barge from MH2 to MH1.

1400: Spuds down at MH1. BMC takes workboat to dive barge at MH4 and transfers Alexandra Der (Tt) from shore to barge.

1430: Diver begins dredging around lateral for 3119 Mountain View Ave N at MH4 site.

1435-1445: Take turbidity samples at MH4 site (see).

1440: Joel Vasey (Bravo) reports significant leakage at bottom of MH1 access tube. He is unable to handle inflow and requests assistance.

~1450: Configuration of lateral at MH4 site makes collection of pipe coupon a risky venture, since it is uncertain that there is sufficient room to install the 8-inch-wide repair band clamp (see photo P2640153). BMC decides to abandon attempt.

1500: BMC sends diver to assess situation at MH1. He tries tightening access tube to base. This ultimately proves to be a fruitless pursuit, and BMC eventually decides to remove and remount access tube tomorrow.

1505: At MH4 site, distribute fish mix rock to fill excavation.

1530: Finish adding fish mix rock to MH4 site (6 large bags total).

1605: Remove access tube from MH2, place it on workboat, and return it to dive barge.

1640: Collect Bravo crew from MH1; secure barges and equipment.

1705: Return to RRC and depart for the day.

Turbidity Sampling at MH4 Site

Station	Time	Turbidity (NTU)	Comments
BGD	1435	~0.5	
30-W(N)	1440	~0.5	At workboat tie-up
10-W(S)	1445	~0.7	

Notes: X-Y, where X=distance in feet from silt curtain & Y= direction
BGD is background

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Friday, 26 October 2018 (by Steve Piccolo)

Weather: Showers with 15 mph South Wind

Temperature (deg F): 50s – 60s

Wave conditions: < 1 foot

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo - 3

Equipment on site:

- Excavation/diving (BMC) barge, with excavator, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with eductor truck, CCTV truck, and Baker tanks

0700: Depart Renton Rowing Center (RRC).

0715: Arrive Bravo barge at MH1. Leave 3 BMC crew. Continue on to BMC barge at MH4 site.

0750: At BMC barge, gather required equipment and supplies for MH1 access tube leak repair, place on workboat, and return to MH1.

0755: Prepare to stop leak at base of MH1 access tube by caulking the connection interface with greased sisal and then wrapping it with plastic.

0855: After completing efforts to stop leak and then dewatering manhole, remove hatch.

0900: BMC departs MH1 to attach buoy to MH3.

0905: Bravo begins jetting lakeline south from MH1. This cleaning is apparently removing numerous rocks from the pipe. The jetting hose encounters something pretty solid at ~250 feet.

0920: Sudden increase to high lakeline flow.

0925: BMC attaches subsurface marker buoy to MH3 and removes final UT test/pipe coupon silt curtain. They reportedly spend most of the remainder of the day on housekeeping activities and preparations for the impending barge return through the Ballard Locks early next week.

0955: Finish lakeline jetting attempt and replacing hatch on MH1, then address problem with suction function on eductor truck.

1035: With the truck problem resolved, Bravo re-opens MH1 hatch.

1055: Begin CCTV inspection of lakeline north from MH1. Pipe descends immediately out of manhole.

1105: Abandon CCTV attempt and remove camera.

1110: Resume jetting lakeline to the south.

1120: After jetting only a very short distance, pull hose and re-insert CCTV camera. This pipe appears to be the worst of any segment inspected so far: grease accumulations, deformed gasket, missing pipe lining, etc. Grease on camera lens greatly degrades view.

1140: Pipe condition improves markedly past 100 feet, although there are still areas of significant soft adhesions. Pipe walls worsen appreciably past 130 feet.

1200: Terminate inspection at 185 feet when crawler fails to proceed in a cast iron (?) pipe with deteriorating walls. No inline obstruction encountered here.

1225: Retrieve crawler, refit with smaller wheels, and re-insert into lakeline heading south from MH1.

~1235: Crawler is stuck underwater at ~70 feet, cause unknown.

1300: Josh arrives to augment Bravo crew.

1320: Free crawler to proceed up pipe.

1350: Terminate CCTV inspection due to line debris at ~210 feet.

1405: Begin jetting south lakeline again.

1455: Finish jetting at hard stop around 350 feet from MH1, the maximum distance achieved so far. Start CCTV inspection again.

1520: End CCTV inspection at ~188 feet, almost exactly the same place as the previous inspection using large crawler wheels. Up to this point, the pipeline was much cleaner than during previous inspections.

1530: Start decanting Baker tanks. BMC arrives at Bravo barge and performs miscellaneous housekeeping tasks.

1645: Replace hatch and lid on MH1.

1705: Secure barges and equipment, drop off Josh at MH5 site, return to RRC, and depart for the day.

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Saturday, 27 October 2018 (by Steve Piccolo)

Weather: Foggy & Calm, changing to Cloudy with variable breezes at 10 mph

Temperature (deg F): 40s ~ 60

Wave conditions: Glassy, changing to < 0.5 foot

Working personnel: Ballard Marine Construction (BMC) – 6, Bravo - 3

Equipment on site:

- Excavation/diving (BMC) barge, with excavator, manhole extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with eductor truck, CCTV truck, and Baker tanks

0700: Depart Renton Rowing Center (RRC).

0715: Arrive Bravo barge at MH1. Remove manhole lid.

0725: BMC departs for dive barge at MH4 site. Bravo prepares to resume jetting and CCTV inspections.

0750: Bravo dewateres MH1, then removes hatch.

0810: Begin CCTV inspection of lakeline south from MH1.

0820: Bravo can no longer evacuate eductor truck using onboard pump. They employ the portable freshwater pump to empty truck.

0830: CCTV crawler camera unable to proceed past ~185 feet. Pipe walls are narrowed due to encrustations.

0850: Begin CCTV inspection of lakeline north from MH1. Wide joint at Romac-type coupling encountered at 2¹/₂ feet, then pipe drops down, resulting in submergence of camera until ~65 feet. Considerable material (appears to be mostly organic) apparent. Conditions improve after 150 feet. Camera under water again at ~230 feet, never emerging again as the inspection finally stops at ~420 feet due to lack of forward progress.

~1010-1145: David Scott (Tt) aboard Bravo barge. He subsequently visits dive barge.

1030: Remove CCTV camera from lakeline.

1040: Start jetting lakeline north from MH1.

~1100: Decant eductor truck.

1200: Re-inspect lakeline north from MH1.

1225: Terminate CCTV inspection at ~223 feet – prior to re-submergence. Pipe is noticeably cleaner after jetting; loss of additional pipe lining is apparent. The jetting was almost entirely low pressure (700-800 psig).

~1245: Decant Baker tanks.

1415: Bravo prepares barge for move through Ballard Locks.

1445: BMC arrives at Bravo barge. They tie up to move barge and replace hatch & lid on MH1. (They tightened the manhole bolts yesterday.)

1505: Begin moving Bravo barge to overnight parking spot near Lake Washington Lift Station 2.

1545: Move BMC dive barge to MH1.

1610: Secure barge & equipment, return to RRC, and depart for the day.

City of Renton

Kennydale Lakeline Sewer Improvement and Cleaning

Report for Sunday, 28 October 2018 (by Steve Piccolo)

Weather: Rainy, changing to Partly Cloudy, with South Breeze at 5-10 mph

Temperature (deg F): 40s – 50s

Wave conditions: < 0.5 foot

Working personnel: Ballard Marine Construction (BMC) – 6

Equipment on site:

- Excavation/diving (BMC) barge, with excavator, manhole extension access tubes and extension, assorted accessories aboard
- Work boat, Jon boat
- Cleaning (Bravo) barge, with eductor truck, CCTV truck, and Baker tanks

0705: Depart Renton Rowing Center (RRC).

0720: Arrive BMC dive barge at MH1. Remove manhole lid and attach lifting bolts and cables to access tube extension.

0740: Diver unbolts access tube extension.

0805: Remove manhole access tube extension.

0815: Attach lifting bolts and cables to MH1 access tube; remove plastic wrap leak repair and access tube anchors.

0835: Remove MH1 access tube.

0855: Diver spreads large bag of fish mix rock below exposed lakeline on either side of MH1.

0920: Install subsurface marker buoy on MH1.

0930: Move BMC dive barge to temporary locale by Kennydale Beach Park. The BMC barge is scheduled to be taken through the Ballard Locks later today, since it was learned that the large lock closes at 0900 (not 2100) on Monday, 29 October.

1000: Remove MH4 silt curtain. Area inside curtain was still quite turbid, but it dispersed/cleared rapidly after curtain removal.

1035: Return all crew not required for barge transit to RRC. Remaining crew assists tugboat with Bravo barge and takes BMC barge to Union Bay.

Appendix F

V&A CONSULTING ENGINEERS REPORT

Technical Memorandum

City of Renton Kenndale Lakeline Sewer Phase 2A and 2B Pipe Evaluation Report



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Date: January 16, 2019



V&A Project No. 16-0109

In the promotion of environmental consciousness, this document is designed to be printed double-sided, if at all. V&A strives to do all it can to be a green company. Think twice before printing. Reduce. Reuse. Recycle.

1 Introduction

V&A was retained by Carollo Engineers to conduct a condition assessment of the Kennydale Lakeline Sewer (Lakeline) for the City of Renton, Washington (City). V&A's assessment of the Lakeline was performed in two phases as described in the subsequent sections. This report presents the results of both Phases 2A and 2B of the condition assessment with the objective of determining if the Lakeline has at least 10 years of remaining useful life (RUL). These results will be used by the Carollo team to guide the project towards further Lakeline improvements and/or the evaluation of Lakeline system replacement alternatives.

1.1 Phase 2A

Tetra Tech and Ballard Marine guided and assisted V&A during the Phase 2A field visit from September 26 through September 28, 2017. As the liaison, Tetra Tech coordinated with the homeowners for property access and use of docks close to locations where the pipe was exposed along the lake bottom. Ballard Marine provided a dive boat and divers to investigate portions of exposed pipe submerged in 3 feet of water or more. V&A staff used waders to assess portions of the Lakeline in shallower water. The scope of Phase 2A included the following items:

- Performing ultrasonic testing (UT) of the pipe wall thickness at sections of pipe that are exposed, both on the mainline and laterals. Testing locations were predetermined by others.
- Performing visual investigations on the exterior condition of the pipe with assistance from divers (Ballard Marine).
- Obtaining one pipe wall coupon for laboratory metal analysis (coupon drilled by Ballard Marine).
- Analyzing the results of the UT measurements, laboratory testing results, and historical information to estimate the RUL of the Lakeline. The RUL estimate is based on the measured remaining wall thickness, observed conditions and an assumed nominal thickness.
- Extrapolate conditions to portions of the Lakeline not directly assessed by V&A to the extent possible.

V&A presented its findings for Phase 2A in a technical memorandum titled "City of Renton Kennydale Lakeline Sewer – Ultrasonic Testing and Pipe Evaluation Report," dated October 31, 2017. This report incorporates the Phase 2A report with updates as needed. Updates within the Phase 2A sections are noted within the text.

1.2 Phase 2B

For Phase 2B, two pipe samples from the Lakeline's 8-inch mainline and one coupon from a 6-inch Lakeline lateral were sent to V&A for laboratory testing and analysis (pipe samples and coupon obtained by Ballard Marine). The pipe samples and coupon were received on November 14, 2018. In addition, CCTV video of the mainline was provided to V&A for review. V&A's scope for Phase 2B included:

- Coordinating laboratory tests and analyzing results.
- Reviewing CCTV data.

- Updating the estimated RUL based on the new information gained from the above data.

1.3 Kennydale Lakeline Sewer System

The Lakeline was originally constructed in 1972 and consists of an 8-inch in-lake portion (mainline), an 8-inch out-of-lake portion, 6-inch laterals, lateral cleanouts, lateral isolation valves, a flush station (Flush Station), and a lift station (Lake Washington No. 2) with a 6-inch force main. Total length of the 8-inch Lakeline is approximately 4,700 feet. There are 39 lateral connections serving approximately 55 homes. Original technical provisions called for cast iron (CI) piping for all aspects of the Lakeline System. All CI pipe was to be cement mortar lined and sealed.

2 Phase 2A

2.1 Visual Evaluations in the Field

Qualitative visual assessments were conducted by V&A from shallow water depths, the shoreline, and the boat to the extent possible. Where the pipe was in deeper water (greater than approximately 3 feet), V&A directed Ballard Marine to investigate conditions using a video monitor and audio communications from the dive boat. Visual assessment focused on the condition of the metallic pipe surface, joints, and any fittings that were exposed. Defects, such as metallic corrosion, pitting, coating blisters, and coating failures were documented with digital photographs, as applicable. Visual assessments are subjective in nature and are based on V&A's experience evaluating metallic pipelines in water and soil environments.

Lakeline laterals were also assessed using closed-circuit television (CCTV) by Bravo Environmental (Bravo). In some instances, the CCTV assessment reached the tee or wye fitting connections to the mainline. V&A reviewed the CCTV video files and reports and provided comments pertaining to the corrosion condition of the laterals and mainline fittings.

2.1.1 8-inch Mainline Observations

The Lakeline was assessed at exposed (submerged) locations near eight parcels along the shoreline. Generally, the top half and/or off-shore side of the pipe were exposed at these locations. In this exposure condition, it appears that electrolytic corrosion is occurring to the metal surface of the Lakeline. This classic form of corrosion occurs in immersion situations or cyclical wetting conditions and is mostly driven by how much oxygen reaches the metal surface. Another possible corrosion mechanism for the cast iron/ductile iron Lakeline is graphitization, which involves the gradual leaching out of iron from the cast iron (CI) or ductile iron (DI) pipe, leaving a network of graphite behind. This graphite is semi-soft and does not retain the strength of the original iron matrix.

Surface conditions on the exposed mainline varied from good condition, with a few spots of tuberculation, to uniform corrosion scaling with tuberculation in approximately 1/16-inch to 1/4-inch layers. Note that iron can expand to several times its original volume as it corrodes. Upon removal of the scale and tuberculation with a steel wire brush, minor to moderate pitting was observed. The depths of these pits range from 0.01 to 0.125 inches.

The exterior of the pipe exhibited a dimpled surface at some locations, which is typically indicative of DI pipe. However, based on the laboratory test results on the pipe samples, only the pipe at the Flush Station is believed to be DI pipe.

Photo 2-1 through Photo 2-6 show the exterior surface conditions of the mainline. Additional photos are presented in Appendix C.



Photo 2-1. As-found condition of mainline with minor corrosion tubercles



Photo 2-2. Area of scaling and tuberculation on mainline; large rocks around mainline at 2811 Mountain View Ave. North



Photo 2-3. Surface of mainline after scaling and corrosion was removed



Photo 2-4. Moderate pitting and graphitized layer after wire-brushing surface



Photo 2-5. Pitting and graphitization



Photo 2-6. Typical pipe surface

Most of the Lakeline joints between individual pipe segments appeared to be bell and spigot (push-on) joints. Observed lateral connections were joined to the mainline with mechanical joints, either with wye or tee fittings. The bolts and gland rings of these connections exhibited corrosion, but remained in fair to good condition upon removal of the corrosion products and surface debris.

Given the alignment of the Lakeline, the risk of third-party and/or external damage is significant. These risks include:

- Large rocks and rip-rap positioned on top of the pipe or near the pipe
- Unsupported areas under the pipe in some areas (could cause movement of the pipe in unrestrained portions)
- Very close proximity to dock pilings and boat lift foundations

Photo 2-7 through Photo 2-11 show the joint conditions of the mainline and external conditions that pose a risk of damage to the pipe. Additional photos are presented in Appendix C



Photo 2-7. Typical bell and spigot joints between pipe segments



Photo 2-8. Typical mechanical joints at wye and tee fittings for lateral connections



Photo 2-9. Rip-rap directly adjacent to and above Lakeline at 2811 Mountain View Ave. North



Photo 2-10. Unsupported bottom of Lakeline where shoreline has steep dropoffs



Photo 2-11. Lakeline sits only inches from dock piling near 3719 and 3805 Lake Washington Blvd. North

As part of the CCTV assessments of the Lakeline laterals by Bravo, the tee or wye fittings at the mainline connections at 3217 Mountain View Avenue North and 3619 Lake Washington Boulevard North were visible. The following observations were noted:

- Surface corrosion was present on the interior surface of the wye or tee connection to the mainline at 3217 Mountain View Avenue North, as shown in Photo 2-12.
- Internal surface corrosion and deposits were present in the wye or tee connection to the mainline at 3619 Lake Washington Boulevard North, as shown in Photo 2-13.



Photo 2-12. Wye or tee fitting connection to mainline at 3217 Mountain View Ave. North



Photo 2-13. Wye or tee fitting connection to mainline at 3619 Lake Washington Blvd. North

Table 2-1 summarizes the observations at the nine mainline locations where the pipe was assessed.

Table 2-1. Summary of Visual Observations for Evaluated Mainline Locations

Location	Length Exposed, approx. (feet)	Observations
Flush Station	5	Pipe coupon collected; appears to be DI pipe; 0.05 to 0.10 inches of graphite scale
2811 Mountain View Ave. North	37	Two bell/spigot joints; corrosion scaling w/ pits up to 0.060 inch; large rocks around pipe; rip-rap directly above pipe; pipe not supported around full circumference just past north joint
3001 Mountain View Ave. North	35	One bell/spigot joint; tee for lateral connection
3411 Lake Washington Blvd. North	31	Two bell/spigot joints; pipe exposed on offshore side
3703 Lake Washington Blvd. North	12	Bell/spigot joints w/ mechanical joints at tee for laterals; close proximity to dock piling
3719 & 3805 Lake Washington Blvd. North	25	Bell/spigot joint; pits up to 0.125 inch deep; close proximity to dock piling;
3825 & 3827 Lake Washington Blvd. North	50	Bell/spigot joint; close proximity to dock piling; repair clamp (installed at some time in the past)

2.1.2 Flush Station

The City excavated and exposed the Lakeline just outside of the Flush Station. A water main was also exposed in the excavation pit. A 3-inch-diameter pipe coupon was drilled at the top of the Lakeline and sent to a laboratory for analysis (see Section 2.2 for coupon testing results).

A 4-inch by 8-inch reducer and restrained mechanical joint connected the Flush Station discharge to the 8-inch Lakeline. The reducer and joint were in good condition.

Upon close examination of the pipe surface, it was apparent that the material of the Lakeline in the excavation pit is ductile iron. This is evident by the dimple pattern on the exterior surface of the pipe, as shown in Photo 2-16. The exterior surface of the Lakeline showed a graphite scale layer of approximately 0.05 to 0.10 inches thick.

The interior of the Lakeline, as observed from the pipe coupon hole, appeared to have corrosion staining on the cement mortar lining. It should be noted that the Lakeline at this location is likely only exposed to lake water during flushing (not exposed to raw sewage). Interior conditions here may not be representative of other portions of the Lakeline exposed to sewage.

Photo 2-14 through Photo 2-19 show the observations from the Flush Station site. Additional photos are presented in Appendix C.

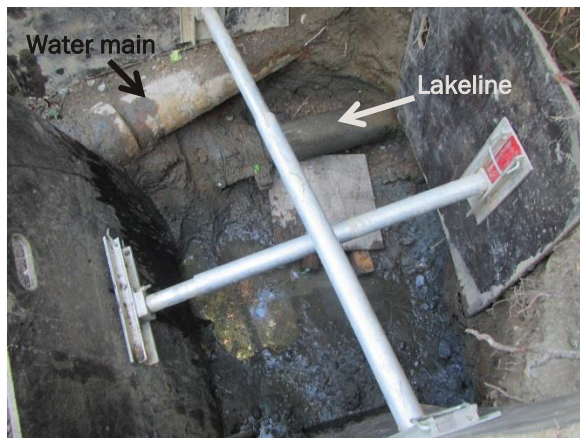


Photo 2-14. Excavation pit with Lakeline and water main



Photo 2-15. 4x8-inch reducer and restrained joint in good condition



Photo 2-16. Dimple pattern (DI pipe); pitting and graphitization



Photo 2-17. Pipe coupon hole



Photo 2-18. Interior of Lakeline looking towards 4x8-inch reducer; appears to be corrosion staining on cement lining



Photo 2-19. Interior of Lakeline looking downstream; appears to be corrosion staining on lower half of pipe

2.1.3 Laterals

Lakeline laterals were assessed at two parcels, 3501 and 3717 Lake Washington Boulevard North. The lateral at 3501 had mechanical joints. The laterals exhibited minor to moderate surface corrosion. Photo 2-20 and Photo 2-21 show the condition of the evaluated laterals. Additional photos are presented in Appendix C



Photo 2-20. Lateral in wet/dry zone at Kennydale Beach Park (3501 Lake Washington)



Photo 2-21. Corrosion on lateral at 3717 Lake Washington Blvd. North

Lakeline laterals were also assessed by Bravo using CCTV. V&A reviewed the CCTV video files and reports. The following observations were noted from the review:

- The apparently CI/DI portion of most laterals was smooth/uniform and fairly clean, as seen in Photo 2-22. Some had grease buildups, apparently at the normal water surface elevation.
- Air pockets were observed on some laterals, as shown in Photo 2-23.
- Staining was observed on some laterals, as shown in Photo 2-24.



Photo 2-22. Typical lateral interior



Photo 2-23. Apparent air pocket in lateral



Photo 2-24. Staining on lateral interior

2.2 Lab Analysis Results of Pipe Coupon from Flush Station

One 3-inch-diameter pipe coupon was drilled from the top of the Lakeline at the Flush Station excavation site and sent to a laboratory for analysis. The coupon was evaluated by the following laboratory procedures:

1. Visual examination
2. Metallography
3. Chemical analysis
4. Mechanical testing – tensile test
5. Mechanical testing – Charpy V-notch impact test
6. Brinell hardness testing

Figure 2-1 shows the interior and exterior surfaces of the pipe coupon with markings for specimens used for various tests.



Figure 2-1. Pipe Coupon as Received by Laboratory

The cement mortar lining remained adhered to the interior surface of the coupon when it was removed. The lining separated cleanly around the edges of the coupon. However, the interior surface showed corrosion staining, which is an indication that the existing cement mortar lining may be deteriorated and no longer protecting the pipe from corrosion. As shown in Figure 2-2 and Figure 2-3, it appears that there is scattered pitting on the interior metal surface (under the mortar lining) with depths up to 0.02 inch.

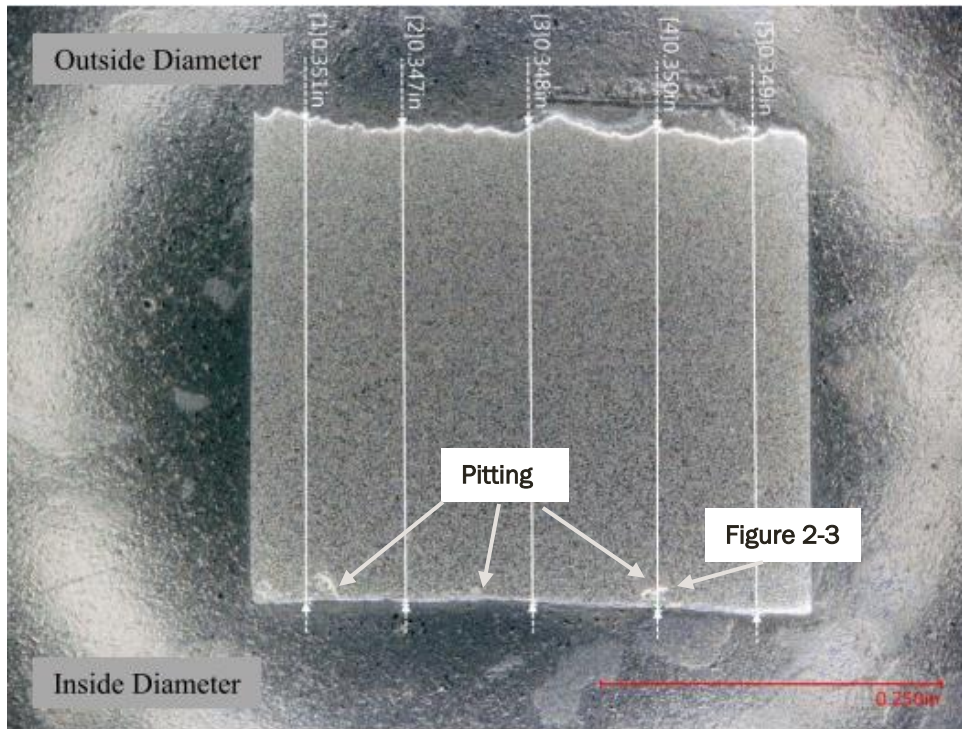


Figure 2-2. Radial Cross Section Showing Wall Thickness and Pits on Interior Surface

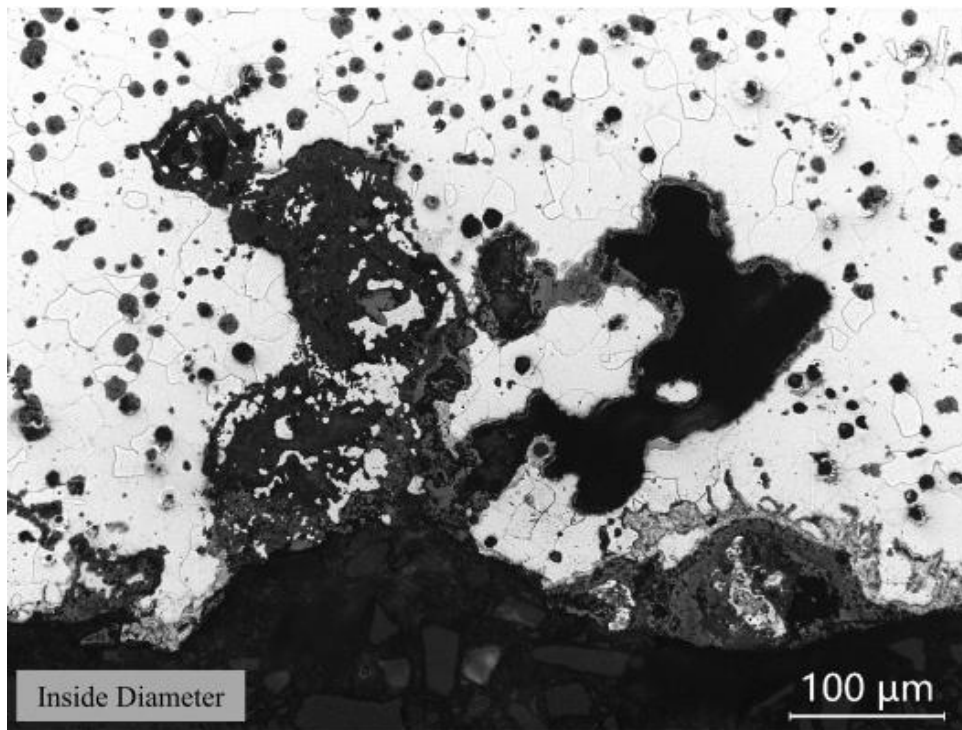


Figure 2-3. Magnified Image of Pitting on Interior Surface

The results of the laboratory analysis indicate that the pipe coupon is of ductile iron material meeting the mechanical property requirements of AWWA C151-81 (ANSI A21.51-81), Grade 60-42-10. AWWA C151 was used because it is applicable to the ductile iron pipe at the coupon location. Tensile strength of the pipe coupon was 69,700 pounds per square inch (psi), which is greater than the minimum requirement of 60,000 psi. Yield strength of the pipe coupon was 51,000 psi, which is greater than the minimum requirement of 42,000 psi. The measured elongation of 14% exceeded the minimum requirement of 10%. These properties, particularly the elongation, show the ductility of the material.

The wall thickness of the pipe coupon was measured at five locations, resulting in an average wall thickness of 0.349 inches. Both the chemical composition and the microstructure of the pipe coupon are consistent with ductile iron. Results of the pipe coupon chemical analysis, Charpy V-notch impact testing, and Brinell hardness testing are presented in Appendix A. Figure 2-4 shows a micrograph of the cross-section of the pipe coupon, etched to show grain boundaries and presence of graphite nodules in the ferrite matrix.

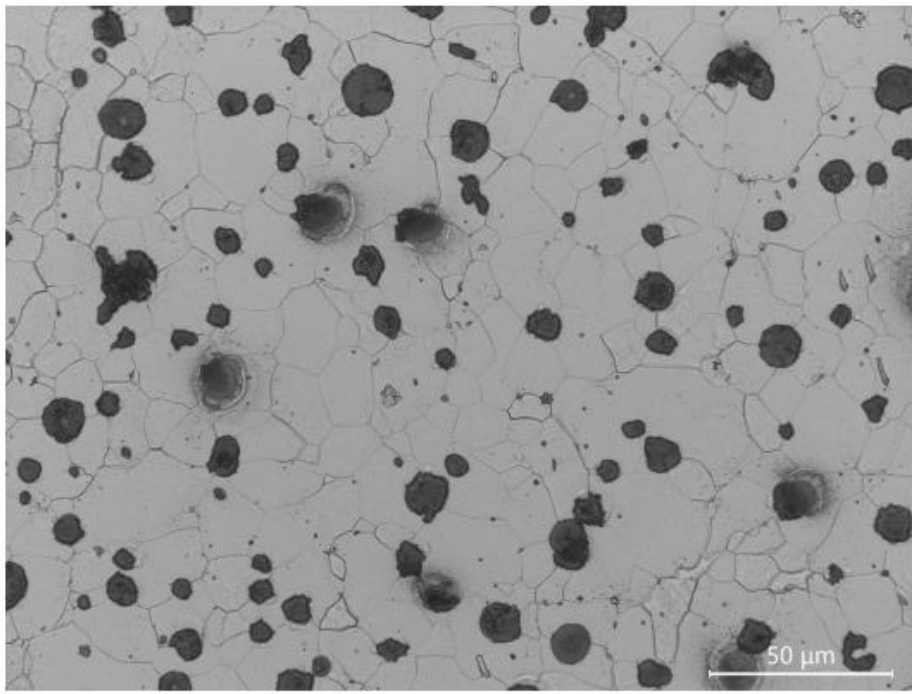


Figure 2-4. Optical Micrograph of Pipe Coupon Etched with 2% Nital

2.3 Ultrasonic Testing and Remaining Useful Life Analysis

Ultrasonic thickness testing was conducted on the Lakeline and laterals using two separate ultrasonic instruments. An Olympus Epoch XT ultrasonic flaw detector was used in the excavation at the Flush Station. A Cygnus Dive waterproof ultrasonic thickness gauge was used for the remainder of the measurements. The gauges were calibrated to the velocity of sound in cast iron or ductile iron. This section has been updated to include the Phase 2B findings, which determined that cast iron pipe was used at the Phase 2B sampling locations. Because the Lakeline was specified to be cast iron pipe, the pipe material was assumed to be cast iron at all ultrasonic test locations, except the Flush Station, where the pipe material is known to be ductile iron. The measurements were recalibrated as needed using the known ratio of sound velocities between the two materials. The type of UT that was performed is known as A-scan UT. This type of testing is a spot measurement; the pipe thickness may vary at other locations on the pipe.

The individual ultrasonic thickness measurements are presented in Appendix B. In general, the measurements were in the same range as the previous ultrasonic measurements collected in 1999 by others, as documented in the November 2000 “Kennydale Lakefront Sewer Predesign Report” by Tetra Tech/KCM.

Wall thickness measurements can be used to calculate the corrosion rate of metal if the thickness at a previous point in time (such as the time of installation) and the elapsed time are known. For this study, corrosion rates in inches per year (in./yr.) were calculated based on an installation date of 1972 for the Lakeline and laterals. The thickness at installation was estimated as described below. The corrosion rate can then be extrapolated to determine when the pipe will reach the minimum required thickness for the given service conditions. For this analysis, the following assumptions were made:

- The pipe material was cast iron at all test locations except for the Flush Station. In comparison to the original calculations in the Phase 2A report, which assumed ductile iron at all locations, this is more conservative.
- Several different pipe classes were in use along the Lakeline and laterals. The pipe classes were selected based on the measured data. A more conservative assumption would have been to assume that the pipe was the thickest observed class at all locations. A sensitivity analysis (see Appendix B) shows that this choice did not have a significant impact on the controlling value for remaining useful life (i.e., the lowest remaining useful life calculated at any point on the line).
- The pipe is expected to fail (reach end of life) by perforation (holes) from localized corrosion. This is consistent with the localized nature of the pitting observed on the pipe. Therefore, the minimum required (end-of-life) thickness for the pipe is 0.000 inches. While generalized corrosion may be occurring, it is assumed that this will not control the end of the useful life, so the thickness required to resist internal pressure and external loading was not considered.
- Pitting of 1/8-inch depth was assumed to be present at each test location. That is, the calculated thickness loss is 1/8 of an inch greater than would be calculated from the nominal thickness and ultrasonic measurements. Adding this 1/8-inch pitting makes the results more conservative (lower remaining useful life) and accounts for the localized but widespread nature of the pitting. This pit depth is based on pitting that was measured at a few locations on the exterior of the pipe.
- The corrosion rate is constant (linear), and past and future conditions remain the same. In reality, the corrosion rate can often slow down over time, which would give the pipe a longer remaining useful life.

Table 2-2 summarizes the field ultrasonic thickness measurements and remaining useful life estimates. For the Phase 2B update to these calculations, the “current year” (2017) was not updated, so the remaining useful life runs from 2017. The minimum calculated remaining useful life estimate is **18 years (from 2017)** for the Lakeline test locations and **10 years (from 2017)** for the test locations on the laterals. These estimates are strongly influenced by the assumption of 1/8-inch-deep pitting at each test location. The actual pit depth coinciding with the low ultrasonic thickness measurements may be less. For example, if the pitting were assumed to be negligible at each ultrasonic test location, the minimum calculated remaining useful life estimates would be 46 to 66 years (see Appendix B).

This analysis is for planning purposes only, and should not be used to predict when the pipe will fail or collapse. It is emphasized that the calculated remaining useful life values presented in this section are based on observed conditions, measured data, and the stated assumptions.

Table 2-2. Ultrasonic Thickness Data and Remaining Useful Life Summary

Site/ Street Number	Type	Measured Thickness Readings, in.				Assumed Pipe Data		Max. Thick- ness Loss, in. (a)	Max. Thick- ness Loss, pct. (a)	Max. Corrosion Rate, in./yr. (a)	Min. Remaining Useful Life, yr. (a) (b)
		Min.	Avg.	Max.	Num- ber	Class	Nom. Thick- ness, in.				
Main											
Flush Sta.	Pipe	0.270	0.332	0.358	9	53	0.36	0.215	60%	0.0048	30
2811	Pipe	0.338	0.404	0.428	13	23	0.44	0.227	52%	0.0050	42
3001	Pipe	0.268	0.360	0.396	11	20 – 22	0.35 – 0.41	0.207	59%	0.0046	31
3411	Pipe	0.260	0.305	0.362	11	20	0.35	0.215	61%	0.0048	28
3703	Pipe	0.300	0.376	0.416	12	22	0.41	0.235	57%	0.0052	34
3703	Wye	0.679	0.679	0.679	1	–	0.60	0.046	8%	0.0010	542
3719/3805	Pipe	0.298	0.379	0.452	19	20 – 23	0.35 – 0.44	0.193	51%	0.0043	44
3719/3805	Wye	0.622	0.622	0.622	1	–	0.60	0.103	17%	0.0023	217
3825/3827	Pipe (S)	0.244	0.356	0.432	38	21 – 22	0.38 – 0.41	0.291	71%	0.0065	18
3825/3827	Wye	0.658	0.658	0.658	2	–	0.60	0.067	11%	0.0015	358
3825/3827	Pipe (N)	0.358	0.389	0.414	3	22	0.41	0.177	43%	0.0039	59
Laterals											
3501	Pipe	0.192	0.280	0.388	15	21 – 22	0.35 – 0.38	0.313	82%	0.0070	10
3717	Pipe	0.280	0.283	0.286	3	21	0.35	0.195	56%	0.0043	36

(a) Thickness loss includes 1/8-inch-deep pitting. The corrosion rate and remaining useful life were calculated from the resulting thickness loss values.

(b) The remaining useful life estimates run from 2017, the year the testing was performed, not from the time of this Phase 2B update.

3 Phase 2B

V&A received two mainline pipe samples and one lateral coupon from Ballard Marine. The samples and coupon are described below:

- Manhole 4 sample: 8-inch-diameter, 40-inch-long mainline sample cut from the 20-foot segment removed as part of construction of Manhole 4.
- Manhole 5 sample: 8-inch-diameter, 40-inch-long mainline sample cut from the 20-foot segment removed as part of construction of Manhole 5. This sample included a bell-and-spigot (rubber gasketed) joint.
- Lateral coupon: 3-inch-diameter coupon from 6-inch-diameter lateral. Specific location is unknown.

The samples and coupon were visually assessed by V&A and tested for metallurgical properties by Anamet, Inc. (Anamet). In addition, Voss Laboratories, Inc. (Voss) performed a joint pull test on the Manhole 5 sample.

3.1 Visual Assessment of Mainline Samples and Lateral Coupon

Qualitative visual assessments were conducted on the mainline pipe samples and lateral pipe coupon. Defects such as metallic corrosion, pitting, and lining defects were documented with digital photographs.

The mainline samples and lateral coupon exhibited a dimpling pattern on the exterior surface that would typically indicate ductile iron pipe material (Photo 3-1). However, optical micrographs from Anamet revealed that the microstructure is consistent with gray cast iron material. The micrographs are presented in Section 3.3. The Manhole 5 bell was marked “PS 72,” so it is assumed that the pipe was made by Pacific States Cast Iron Pipe in 1972, which was a transitional time between gray iron and ductile iron pipe.

The Manhole 4 sample was missing its internal lining. It is unknown how long the lining had been missing. There was moderate graphitization on the interior surface of the pipe (Photo 3-2). The exterior surface of the sample was uncoated, but only exhibited minor corrosion pitting (Photo 3-3). See Section 3.3 for corrosion wall loss evaluation.

The Manhole 5 sample was composed of an intact bell and spigot joint and was lined with a 1/8-inch-thick cement mortar lining (Photo 3-4). The mortar was present throughout most of the interior surface, except around the interior joint surfaces where corrosion pitting had occurred (Photo 3-5). Although the mortar lining was semi-soft and had a slightly acidic surface pH of 5, it was not easily removed, even with an electric wire brush. Upon removal of the lining, scattered corrosion pitting was observed. The exterior surface of the sample was uncoated and also exhibited scattered pitting (Photo 3-6). The gap in the joint ranged from 0 inches (closed) on one side to 0.6 inches wide on the opposite side. This indicates a slight deflection in the joint.

The lateral coupon had a 1/8-inch-thick cement mortar lining (Photo 3-7). The lining was tannish in color, brittle, and had a slightly acidic surface pH of 5. It could be scraped off easily with a blunt tool. Removal of the lining revealed corrosion pitting. These findings indicate that the lining is in poor

condition and is not protecting the pipe interior. The exterior surface of the coupon was uncoated, but only showed minor pitting (Photo 3-8).



Photo 3-1. Typical dimple pattern on mainline samples and coupon; however, this is not ductile iron pipe.



Photo 3-2. Graphitization on interior surface of Manhole 4 sample.

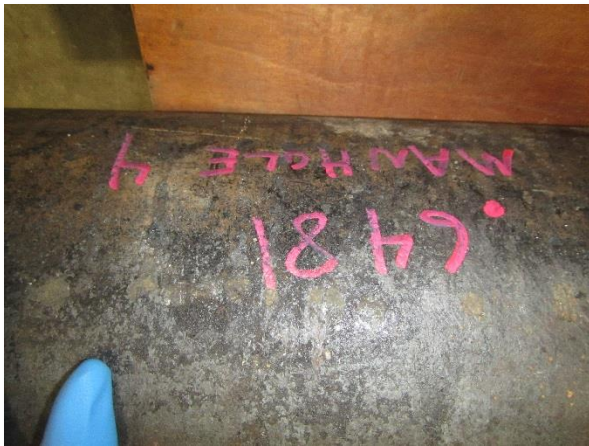


Photo 3-3. Exterior surface of Manhole 4 sample with a few scattered minor pits.



Photo 3-4. Cement mortar lining on interior of Manhole 5 sample.



Photo 3-5. Corroded surfaces near joint of Manhole 5 sample; lining failed around joint.



Photo 3-6. Exterior surface of Manhole 5 sample with scattered minor pitting.



Photo 3-7. Deteriorated cement mortar lining on lateral coupon.



Photo 3-8. Exterior surface of lateral coupon with minor pitting corrosion.

3.2 Pull Test and Assessment of Manhole 5 Sample Joint

The Manhole 5 sample was cut to a length of about 18 inches including the bell-and-spigot joint to facilitate a pull test on the joint. Voss performed the pull test to document the maximum load required to separate the bell end from the spigot end and to allow viewing of the internal joint surface and gasket. Voss used a universal testing machine (UTM) to perform the test.

The UTM had reached 8,750 pounds when the spigot end of the pipe failed at one of the bolt holes used to hold the joint in the machine. The pipe joint had pulled apart approximately 0.5 inches at the time of the failure. More information and photographs of the test apparatus and failed section are presented in Appendix E.

The joint was returned to Anamet so it could be sectioned longitudinally (Photo 3-9) for assessment of the gasket and joint surfaces. Corrosion was present on both surfaces exposed to the wastewater inside the joint, but the seating surfaces under the gasket itself were relatively clean (Photo 3-10 and Photo 3-11). V&A believes that the excessive load required to pull the joint apart was due to corrosion of the internal joint surfaces. The rubber gasket was pliable and in good condition with no observed cracking (Photo 3-12). There was also an additional sealant applied outside the gasket (Photo 3-10).



Photo 3-9. Manhole 5 Sample sectioned longitudinally to expose joint and rubber gasket.

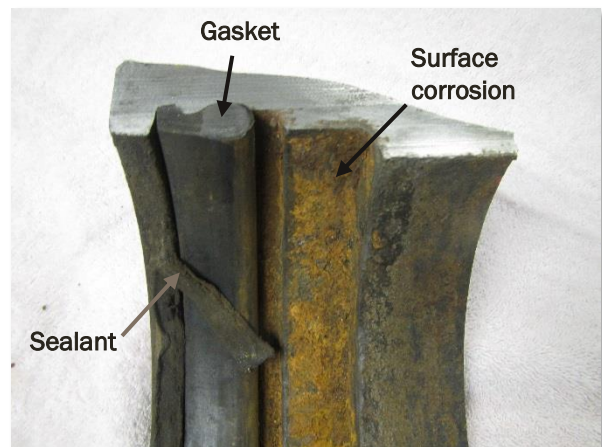


Photo 3-10. Surface corrosion inside joint; rubber gasket in good condition; additional sealant.



Photo 3-11. Corrosion on spigot end of pipe exposed to water inside joint (left); relatively clean strip under gasket (center).



Photo 3-12. Rubber gasket was pliable and in good condition with no cracks. Photo shows the inside surface of the gasket half, bent inside-out.

3.3 Lab Analysis Results of Mainline Samples and Lateral Coupon

Laboratory tests on the mainline samples and lateral coupon included microstructural examination (metallography), wall thickness measurements, pit depth measurements, chemical composition testing, Charpy impact testing, hardness testing, tensile strength testing, modulus of rupture testing, and secant modulus of elasticity testing. The samples and coupon were initially tested according to AWWA C151-81 (ANSI A21.51-81), which is for ductile iron pipe. However, optical micrographs (microstructural examination) and the Charpy impact tests indicate that the mainline samples and lateral coupon were made from gray cast iron. Therefore, Talbot strip tests, which is a strength test specific to cast iron pipes (per ANSI A21.6), were also conducted. This section summarizes the results of the laboratory tests based on Anamet's report (provided in Appendix D).

Microstructural examination was performed on the mainline samples and lateral coupon. The resulting micrographs indicate a microstructure consisting of graphite flakes, ferrite, and pearlite that are consistent with spun-cast gray cast iron. Figure 3-1 shows a representative optical micrograph from the Manhole 4 sample. Similar microstructures were observed on the other specimens.

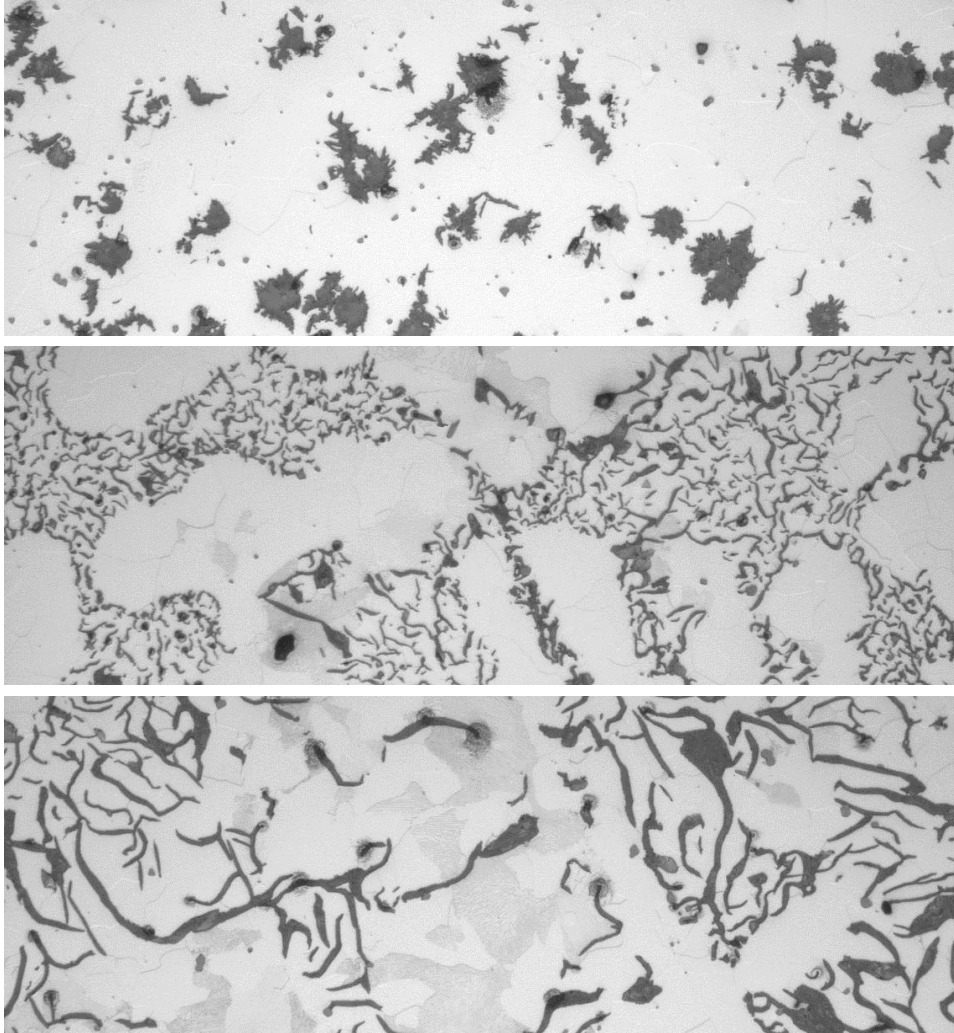


Figure 3-1. Representative optical micrographs from Manhole 4 sample. Pipe exterior at top; center of cross-section in center; pipe interior at bottom. Magnification is approximately 500x. Similar microstructures were observed on all other Phase 2B specimens.

The wall thickness of the specimens was measured using point micrometers. The interior and exterior surfaces of the specimens were also examined for corrosion pitting. Table 3-1 shows the maximum depth of corrosion for the specimens and the average measured wall thicknesses, as measured in areas without corrosion.

Table 3-1. Corrosion Wall Loss Evaluation

Specimen	Maximum Depth of Corrosion, in.	Wall Thickness, in. (a)
Manhole 4 Interior	0.118	0.362 – 0.376
Manhole 4 Exterior	0.016	
Manhole 5 Spigot Interior	0.020	0.385 – 0.398
Manhole 5 Spigot Exterior	0.012	
Manhole 5 Bell Interior	0.051	0.360 – 0.376
Manhole 5 Bell Exterior	0.008	
Lateral Coupon	0.020	0.409 – 0.420
Lateral Coupon	0.016	

(a) Wall thickness measured in areas without corrosion wall loss.

Figure 3-2 shows the optical micrograph on the interior surface of the Manhole 4 sample as an example of how the corrosion wall loss measurements were performed. Other micrographs examining corrosion wall loss for the other Phase 2B specimens are provided in Appendix D.

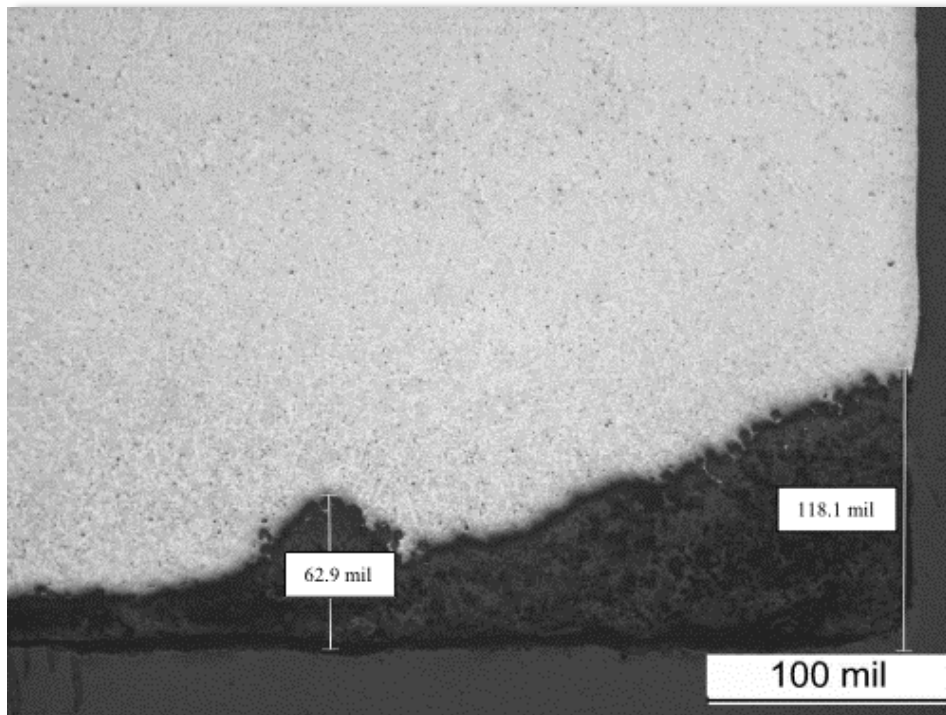


Figure 3-2. Corrosion wall loss measurement on interior surface of Manhole 4 sample using optical micrograph

Quantitative chemical analysis was performed on the specimens. The results were similar across the specimens, except the lateral coupon had higher silicon content. The specimens met the maximum limits for phosphorus (0.90% by weight) and sulfur (0.12% by weight) per ANSI 21.6-1975. Complete chemical analysis results are presented in Appendix D.

Tensile strength, impact tests, and hardness were performed per AWWA C151 (ANSI A21.51). However, as the microstructure showed, the mainline samples and lateral coupon were made from gray cast iron; thus, this specification is not applicable for comparing requirements for these specimens. These results are presented in Appendix D.

Talbot strip tests were performed on the mainline samples. Two specimens each were tested on the Manhole 4 and Manhole 5 samples per ANSI A21.6. Table 3-2 presents the results of the Talbot strip tests. The specimens from the Manhole 4 sample met the requirement for modulus of rupture, but the Manhole 5 sample was up to 26% below the requirement. The specimens met the requirement for secant modulus of elasticity.

Table 3-2. Summary of Talbot Strip Tests for Pipe Samples

Parameter	Manhole 4-1	Manhole 4-2	Manhole 5-1	Manhole 5-2	Requirements of ANSI A21.6-1975
Support Span (in)	10	10	10	10	-
Loading Span (in)	3.333	3.333	3.333	3.333	-
Maximum Deflection (in)	0.4310	0.4066	0.2671	0.2617	-
Maximum Load (lbs)	446	393	412	295	-
Secant Modulus of Elasticity (psi)	40,300	41,600	39,800	29,800	>40,000 psi
Modulus of Rupture (psi)	3,640,000	4,390,000	6,190,000	4,850,000	<12,000,000 psi

3.4 CCTV Observations of 8-inch Mainline

The Lakeline mainline was assessed using closed-circuit television (CCTV) by Bravo Environmental (Bravo). V&A reviewed the CCTV video files. This section provides comments pertaining to the corrosion condition of the mainline. Of the 3,211 feet of mainline CCTV video that was reviewed, approximately 50 percent of the video had poor visibility due to the camera being submerged at sags in the mainline. Table 2-1 summarizes the limits of the CCTV videos reviewed by V&A.

Table 3-3. CCTV Videos Reviewed by V&A

Section No.	Upstream Manhole	Downstream Manhole	Direction of Survey	Length of Survey, feet
4	Flush Station	New MH 5	Upstream	329
6	New MH 5	New MH 4	Downstream	257
9	New MH 5	New MH 4	Upstream	565
12	New MH 4	MH 3	Downstream	484
15	New MH 4	MH 3	Upstream	509
17	MH 2	MH 1	Downstream	635
18	MH 2	MH 1	Upstream	210
22	MH 1	Pump Station	Downstream	222

Several areas of cement mortar lining delamination were observed in the CCTV footage (Photo 3-13). The bare metal surface at some areas of missing lining appeared to be smooth and relatively free of corrosion (Photo 3-13). This suggests that the Lakeline cleaning prior to the CCTV may have removed loose lining material in these areas. Debris, which appeared to be chunks of lining (Photo 3-14), observed in several video segments also support this suggestion.

At apparent high points where the Lakeline does not flow full, moderate to significant corrosion was observed on the interior surface (Photo 3-15 and Photo 3-16). It is likely that sewer gases have deteriorated the lining and corroded the underlying metal substrate in these areas.

Corrosion deposits near joints were observed in several places (Photo 3-17), even in segments where the lining appeared to be intact. This commonly occurs since the cement mortar lining is often discontinuous or roughly applied at the pipe ends, making it a weak spot in the lining that allows corrosion to initiate. Joint separation and offsets and deflections were also observed in some segments (Photo 3-18 and Photo 3-19). The separated joint shown in Photo 3-19 appears to have been repaired with a repair clamp on the exterior. The Lakeline rests on a relatively uneven lakebed compared to typical bedding in pipe trenches and is partially exposed in some reaches. This makes the pipe highly susceptible to movement, which can cause separation and offsets as well as deflections at the unrestrained bell-and-spigot joints of the mainline. Infiltration was observed at an offset joint approximately 60 feet upstream of Manhole 5 (Photo 3-20). This joint connects the old pipe to the new pipe segment constructed as part of the construction of Manhole 5.

Photo 3-13 through Photo 3-20 show the typical and notable observations from V&A's review of the mainline CCTV videos.



Photo 3-13. Typical lining delamination with smooth metal surface behind.



Photo 3-14. Debris and sediment, some of which appears to be chunks of cement mortar lining material.



Photo 3-15. Typical moderate to significant corrosion at high point (brown area); black area appears to be stained mortar lining.



Photo 3-16. Typical moderate to significant corrosion at high points (brown area).



Photo 3-17. Typical corrosion deposits at joint.



Photo 3-18. Typical offset joint.

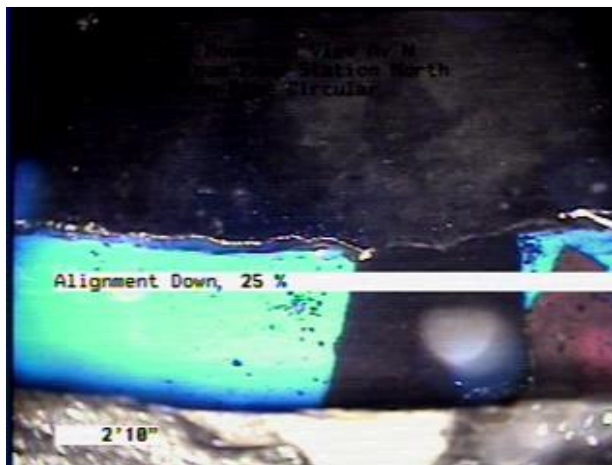


Photo 3-19. Separated joint with repair clamp.

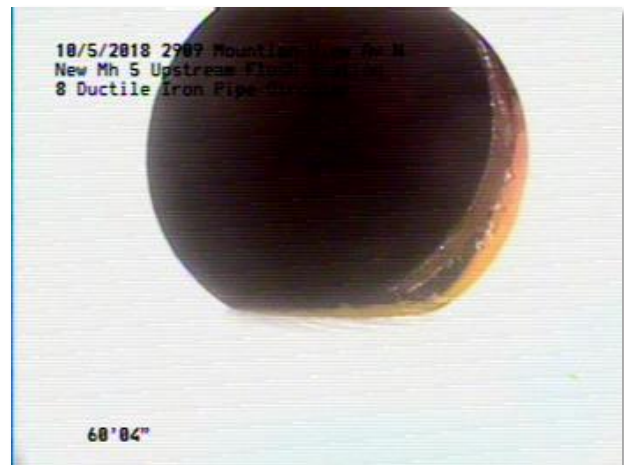


Photo 3-20. Infiltration at offset joint between new and old pipe segment at approximately 60 feet upstream of Manhole 5.

3.5 Updates to Remaining Useful Life Analysis

3.5.1 Ultrasonic Testing

The remaining useful life was first evaluated in Phase 2A based on the ultrasonic thickness testing results that were obtained. Phase 2B affected this evaluation by showing that the pipeline, except at the Flush Station, is probably cast iron pipe, rather than ductile iron, as was assumed in the Phase 2A report. The updated remaining useful life calculations based on the ultrasonic testing results are shown in Section 2.3.

3.5.2 Pipe Samples and Coupon

The remaining useful life for the Phase 2B pipe samples was calculated from the wall thickness measurements shown in Section 3.3 and Appendix D. The results are shown in Table 3-4.

The remaining useful life results for these samples are generally longer than those calculated from the ultrasonic thickness data because the 1/8-inch pit depth assumption was not used for the exterior surface. Instead, the actual pit depth measurements were used for the exterior surface, and these were much shallower than 1/8 of an inch. Also contributing to the higher remaining useful life values is the fact that the internal corrosion measured on the pipe samples was within the moderate to less-severe range of wall loss as measured via ultrasonic testing.

Table 3-4. Remaining Useful Life for Pipe Samples

Pipe Sample	Min. Remaining Thickness, in. (a)	Max. Measured Thickness, in. (b)	Max. Thickness Loss, in.	Max. Thickness Loss, pct.	Corrosion Rate (in./yr.)	Remaining Useful Life, yr.
Manhole 4	0.228	0.376	0.148	39%	0.0033	69
Manhole 5 spigot	0.353	0.398	0.045	11%	0.0010	353
Manhole 5 bell	0.301	0.376	0.075	20%	0.0017	181
Lateral coupon	0.373	0.420	0.047	11%	0.0010	357

(a) Minimum remaining thickness calculated from minimum measured thickness in non-corroded areas, less maximum measured corrosion depth on both exterior and interior surfaces. See Section 3.3 and Appendix D.

(b) See Section 3.3 and Appendix D.

3.5.3 Wall Thickness for Internal Pressure

Discussions with Carollo indicated that the possibility of pressurizing the pipeline is being considered in order to provide flushing velocities. Discussions indicated that operating pressures could range from about 10 to 50 or more pounds per square inch (psi). In order to qualitatively see whether pressurizing the pipe could introduce a new failure mode, the remaining wall thickness needed to resist internal pressure was calculated (see Table 3-5) using the procedure given in ANSI A21.1-1967 (AWWA C101-67), "Thickness Design of Cast-Iron Pipe."

The calculations were performed for the 8-inch-diameter mainline pipe. An average operating pressure of 30 psi was used, and the standard 18/40 iron strength was assumed (18,000 psi bursting tensile strength and 40,000 psi full-ring modulus of rupture). Although the laboratory results indicated a modulus of rupture below 40,000 psi, and tensile strengths well above 18,000 psi, neither of the test methods used was exactly that required to determine the bulk strength of the pipe (a full ring crush test or a full-section hydrostatic burst test, respectively). As a result, and because this is a qualitative analysis, the standard 18/40 iron was assumed.

The design method in A21.1 prescribes a factor of safety of 2.5 to be applied to the working pressure and also to the working pressure with a surge allowance of 120 psi. The wall thickness was calculated for three different pressures as shown in the table.

Table 3-5. Example Thicknesses Required for Internal Pressure

Condition	Pressure for Hoop Stress Formula (psi)	Calculated Cast Iron Thickness (in.)*
Operating pressure, no safety factor	30	0.007
Operating pressure, 2.5 safety factor	75	0.017
Operating pressure with surge allowance, 2.5 safety factor	375	0.083

* These thicknesses should not be taken as the minimum needed for any given pipeline operating condition. A more detailed analysis should be conducted in order to determine the minimum required thickness for any given condition. Other factors to consider include actual operating and surge pressures; external loading from backfill and the depth of lake water; stress concentrations from rough, corroded surfaces; joint deflection and movement; and so forth.

Because the calculated thicknesses are very low compared to the 1/8-inch pitting that is assumed to be present along the exterior of the pipe, it appears probable that perforation (leaks) will be the dominant failure mode from corrosion. Therefore, no attempt was made to adjust the remaining useful life calculations (Sections 2.3 and 3.5.2) to take any other failure modes into account.

4 Conclusions and Recommendations

The following conclusions are presented for the Lakeline mainline and laterals based on V&A's document review, visual evaluation, CCTV review, pipe sample analysis, ultrasonic testing, and remaining useful life analysis.

4.1 Summary of Findings

- As determined in Phase 2A, surface conditions on the exposed mainline varied from good condition, with a few spots of tuberculation, to uniform corrosion scaling with tuberculation. The depths of corrosion pitting ranged from 0.01 to 0.125 inches.
- As determined in Phase 2A, the bell and spigot (push-on) joints between individual pipe segments and the mechanical joints at the lateral connections to the mainline were in fair to good condition with respect to external corrosion.
- As determined in Phase 2A, the laterals assessed exhibited minor to moderate surface corrosion on the exterior.
- The mainline is subject to significant risk to third-party and/or external damage.
- The Phase 2A pipe coupon evaluation (from the Flush Station site) resulted in the following:
 - The existing cement mortar lining appears to be deteriorated and no longer protecting the pipe from corrosion. Scattered pitting on the interior metal surface (under the mortar lining) was present with depths up to 0.02 inches.
 - The pipe coupon is of ductile iron material, meeting the mechanical property requirements of AWWA C151-81 (ANSI A21.51-81).
 - The wall thickness of the pipe coupon was measured at five locations, resulting in an average wall thickness of 0.349 inches.
 - Both the chemical composition and the microstructure of the pipe coupon are consistent with ductile iron.
- The Phase 2B pipe sample evaluation (from Manholes 4 and 5 and a lateral) resulted in the following:
 - The existing cement mortar lining appears to be deteriorated and no longer protecting the pipe from corrosion at some locations. Where the lining was missing, there was localized internal corrosion up to about 1/3 of the pipe wall thickness.
 - The pipe is composed of gray cast iron at the three locations. Most of the physical test results met the requirements of ANSI A21.6 (AWWA C106), but the modulus of rupture results were up to 26% below standard at one location. This could mean that the pipe material is weaker than specified.
 - The wall pit depths and wall thickness were measured on cut edges of the pipe samples. Compared to the Phase 2A measurements, the internal corrosion on the samples was minor to typical. Compared to the Phase 2A measurements, the external corrosion on the samples

- was minor. The minimum remaining useful life for the samples was 69 years. The remaining useful life from these samples does not control the overall evaluation because the samples did not contain significant exterior pitting compared to what was found elsewhere.
- Both the chemical composition and the microstructure of the pipe samples are consistent with gray cast iron.
 - The Phase 2A results were revised to conclude that the Lakeline is composed of gray cast iron, rather than ductile iron, as was stated in the Phase 2A report. Gray cast iron is much more brittle than ductile iron.
 - The mainline CCTV results (Phase 2B) and the pipe sample results (Phases 2A and 2B) show that the cement mortar lining is in poor condition or missing on much of the alignment. Even where it is still physically present, it may have lost alkalinity and in turn its ability to protect the pipe from internal corrosion.
 - The offset and separated joints found during the mainline CCTV (Phase 2B) are a cause for concern. These could indicate that the pipe is moving or being stressed.
 - Based on CCTV video of the lateral assessments (Phase 2A), internal surface corrosion was observed on the tee and wye fittings of the mainline. The laterals were mostly in good condition with smooth, uniform interior surfaces. Some laterals had grease buildup, air pockets, and corrosion staining inside.
 - Ultrasonic thickness measurements taken as part of this project were in the same range as the previous ultrasonic measurements collected in 1999. The thickness measurements from this project range from 0.270 to 0.479 inches for the mainline pipe.
 - The minimum calculated remaining useful life estimate is **18 years** for the Lakeline test locations and **10 years** for the test locations on the laterals. These estimates start from the year 2017 (the start date was not updated for this Phase 2B revision).
 - It should be noted that this analysis is for planning purposes only, and should not be used to predict when the pipe will fail or collapse. It is emphasized that the calculated remaining useful life values presented in this section are based on observed conditions, measured data, and the stated assumptions.

4.2 Discussion and Recommendations

- The remaining useful life (RUL) calculated above 10 to 18 years for the laterals and mainline, respectively. These calculated results are strongly influenced by the assumption of 1/8-inch pitting on the exterior of the pipe. While this may appear very conservative based on the measurements, it seems likely that such pitting could coincide with internal corrosion somewhere along the pipeline.
- The RUL was calculated assuming a linear corrosion rate, but it is possible that actual corrosion rates slow down over time. That would mean that the corrosion rate going forward would be less than the corrosion rate that was calculated, and the RUL would be longer.
 - Conversely, there is always the possibility that greater corrosion is present in areas that were not tested.
- Carollo discussed the possibility of pressurizing the pipe to provide flushing. Pressurizing the pipe is likely to reduce the remaining useful life of the pipe, all other things being equal.
 - The remaining useful life was not re-calculated for hoop stress failure. However, since the wall thickness for 30 psi is very thin (0.007 in.), the calculated RUL is controlled by pitting instead of generalized corrosion, and perforation is still expected to be a reasonable and likely failure mode.

- The thickness needed to resist hoop stress was calculated because the proposed pressure is known. Other stresses, which are just as important in reality, could not be estimated. The other important stresses are probably as follows:
 - The load from the backfill and lake water depth.
 - Stresses at deflected joints if the pipe is moving.
 - Impact from boulders, etc. This factor seems more important now that the pipe is known to be made of a brittle material.
- Thrust forces from pressurizing the pipe could result in further movement and deflection of joints. This could overstress the pipe at the joints as described above (considered relatively less likely) or cause leaks (considered relatively more likely). While the sample gasket was apparently still pliable, it is conceivable that the gaskets along the pipeline have set into position, and even a small movement could create a leak path. If the joints move significantly, the corrosion products on the pipe spigots could also be dragged into the gasket seating surface and cause leaks. It is not possible to estimate how likely these possibilities would be.
- Flushing the pipe could remove additional remnants of lining and other deposits that may have been protecting the pipe interior from further corrosion. This could accelerate the internal corrosion (similar to what was observed in the Manhole 4 pipe cross-section).
- The operating pressure at the upstream end of the line is likely to be higher than 30 psi, perhaps more than 50 psi. Surge pressure could also be a factor. The higher the proposed pressure, the less likely it is that perforation will be the probable failure mode.
- Given 1) the sensitivity of the environment around the pipe (particularly if leaks are considered a fatal flaw), 2) the evidence of moderate pipe deterioration, and 3) the fact that the pipe is composed of a brittle material, the pipeline should be considered to be in a moderately fragile state. Ultimately the pipeline should be structurally rehabilitated or replaced. Until then, it should be treated with care, and consideration should be given to monitoring it for leaks, further damage, etc.

Appendix A

Pipe Coupon Laboratory

Report (Phase 2A)



Report No. 5005.5071

October 16, 2017

METALLURGICAL, MECHANICAL, AND CHEMICAL EXAMINATION OF A DUCTILE IRON PIPE COUPON

Customer Authorization: Email 10/4/17
Job No. 16-0109
Renton Lakeline DIP Coupon

Report To: V&A Consulting Engineers
Attn: Noy Phannavong
1000 Broadway, Suite 320
Oakland, CA 94607

1.0 INTRODUCTION

One circular coupon from an 8-inch diameter sewer pipe, identified as “City of Renton DI/CI Pipe, Approximately 8-inches North of Flush Station Valve Vault”, was submitted by V & A Consulting Engineers for metallurgical examination, mechanical testing, and chemical analysis. The purpose of the evaluation was to determine if the pipe coupon was a ductile iron or gray iron, determine if it met the mechanical requirements for ANSI/AWWA C151 A21.51 – 81 Grade 60-42-10, and if any corrosion was observed in the coupon. The coupon was evaluated by the following laboratory procedures:

- 1) Visual examination
- 2) Metallography
- 3) Chemical analysis
- 4) Mechanical testing – Tensile test
- 5) Mechanical testing – Charpy V-Notch impact test
- 6) Brinell hardness testing

The results of the evaluation indicate that the pipe coupon was a ductile iron and it met the mechanical property requirements for ANSI/AWWA C151 A21.51 – 81 Grade 60-42-10. Chemical composition requirements were not provided, however, the chemical composition of the pipe coupon was consistent with ductile iron. Pitting was observed on the inside surface of the pipe coupon.

2.0 EVALUATION

2.1 Visual Examination

The coupon is shown in the as-received condition in Figure 1. The outside pipe surface is shown in Figure 1a while the inside pipe surface is shown in Figure 1b. The boxes in Figure 1a indicate

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sections of the coupon that was cut for a chemical analysis, tensile test, Charpy impact test, and Brinell hardness test. The lines and arrows indicate the locations from which the cross sections were prepared for metallography and a wall thickness measurement.

2.2 Metallography

A radial cross section, as indicated in Figure 1a, was prepared for a metallographic examination and wall thickness measurements. A micrograph of the cross section is shown in Figure 2. The wall thickness was measured at five locations, shown in Figure 2b and the average wall thickness was 0.349 inches. Optical micrographs of the pipe coupon are shown in the polished condition and etched with 2% Nital in Figures 3 – 4. The microstructure consisted of graphite nodules in a ferrite matrix, typical of a ductile iron. Pitting was observed on the inside surface of the pipe coupon, indicated by the boxes in Figure 2a. Optical micrographs of the pitting are presented in Figure 5 and measured approximately 0.02 inches deep.

2.3 Chemical Analysis

Quantitative chemical analysis by optical emission spectroscopy and combustion was performed on the pipe coupon. The results of the chemical analysis are presented in Table 1. No chemical requirements were provided, but the chemistry was consistent with a typical ductile iron.

2.4 Mechanical Testing – Tensile Testing and Impact Testing

A tensile test and Charpy V-Notch impact test was performed on the pipe coupon from the locations indicated in Figure 1a. The results of the tensile test are presented in Table 2 and the pipe coupon had met the tensile requirements for ANSI/AWWA C151/A21.51-81, Grade 60-42-10. The results of the Charpy V-Notch impact test are presented in Table 3, the pipe met the impact requirements for ANSI/AWWA C151/A21.51-81, Grade 60-42-10. Due to the limited size of the coupon, two substandard sized Charpy V-Notch impact specimens were machined and tested. The minimum impact toughness requirement was corrected to compensate for a substandard sized impact specimen.

2.5 Brinell Hardness Testing

Brinell hardness testing was performed a coupon from the pipe location indicated in Figure 1a. The results of the hardness test are presented in Table 4. The coupon had an average hardness of 156 HBW. No hardness requirements were provided.



3.0 CONCLUSIONS¹

The following conclusions are based upon the submitted samples and the evidence gathered:

1. The pipe coupon met the mechanical property requirements for ANSI/AWWA C151 A21.51 – 81 Grade 60-42-10.
2. The chemical composition of the pipe coupon was consistent with ductile iron.
3. The microstructure of the pipe coupon consisted of graphite nodules in a ferrite matrix and is consistent with ductile iron.
4. Pitting was observed on the inside diameter of the pipe coupon, measuring approximately 0.02 inches in depth.

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Reviewed by:

Audrey A. Fasching, Ph.D., P.E.
Senior Materials Engineer

¹ The conclusions in this report are based upon the available information and evidence provided by the client and gathered by Anamet, within the scope of work authorized by the client, and they are hereby presented by Anamet to a reasonable degree of engineering and scientific certainty. Anamet reserves the right to amend or supplement its conclusions or opinions presented in this report should additional data or information become available, or further work be approved by the client.



Table 1
Results of Quantitative Chemical Analysis of Pipe Coupon

Element	Pipe Coupon (wt%)
Carbon (C)	3.19
Chromium (Cr)	0.04
Copper (Cu)	0.10
Iron (Fe)	Principle Constituent
Magnesium (Mg)	0.03
Manganese (Mn)	0.27
Nickel (Ni)	0.04
Phosphorus (P)	0.06
Silicon (Si)	2.90
Sulfur (S)	0.010
Titanium (Ti)	0.01
Vanadium (V)	0.01

Table 2
Results of Tensile Testing

Mechanical Property		Pipe Coupon	Minimum Requirements for ANSI/AWWA C151/A21.51-81, Grade 60-42-10
Tensile Strength	Psi	69,700	60,000
Yield Strength	Psi	51,000	42,000
Elongation in 2.0 Gage	%	14	10



Table 3
Results of Charpy V-Notch Impact Testing at 70°F

Impact Specimen #	Energy Absorbed (ft • lbs)	Minimum Requirements (ft • lbs) ¹
1	5	5
2	5	5

Note 1: The minimum requirement has been corrected to compensate for a substandard size impact specimen.

Table 4
Results of Brinell Hardness

Reading	Brinell Hardness (HBW)
1	156
2	156
3	156
Average	156

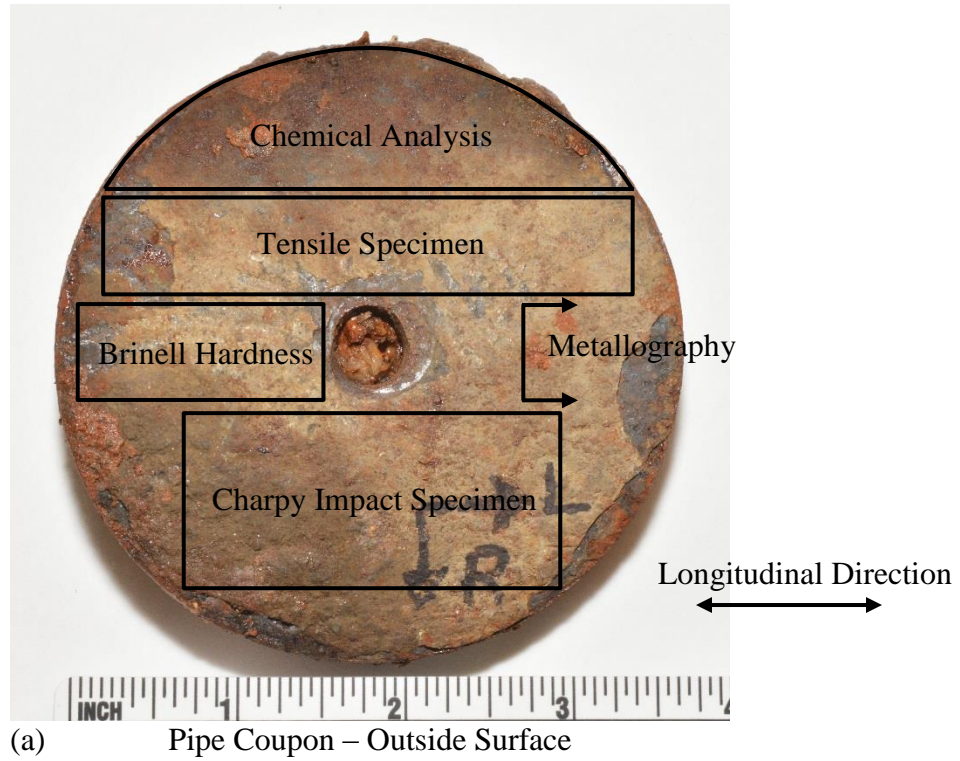
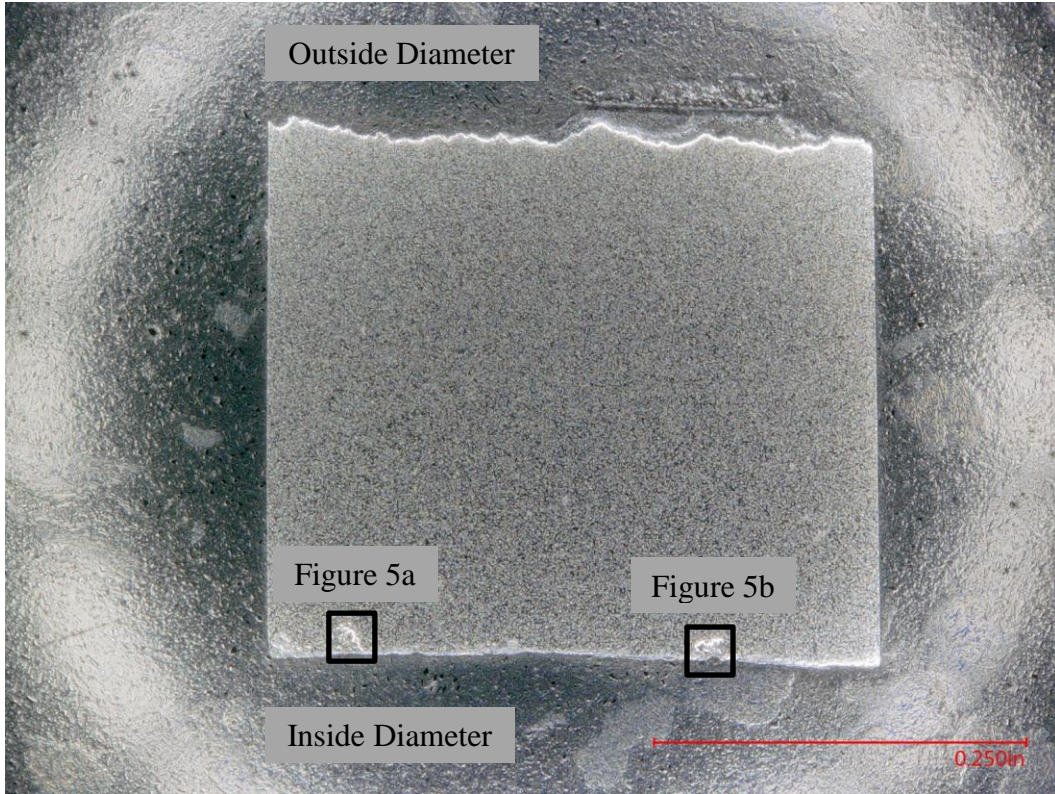
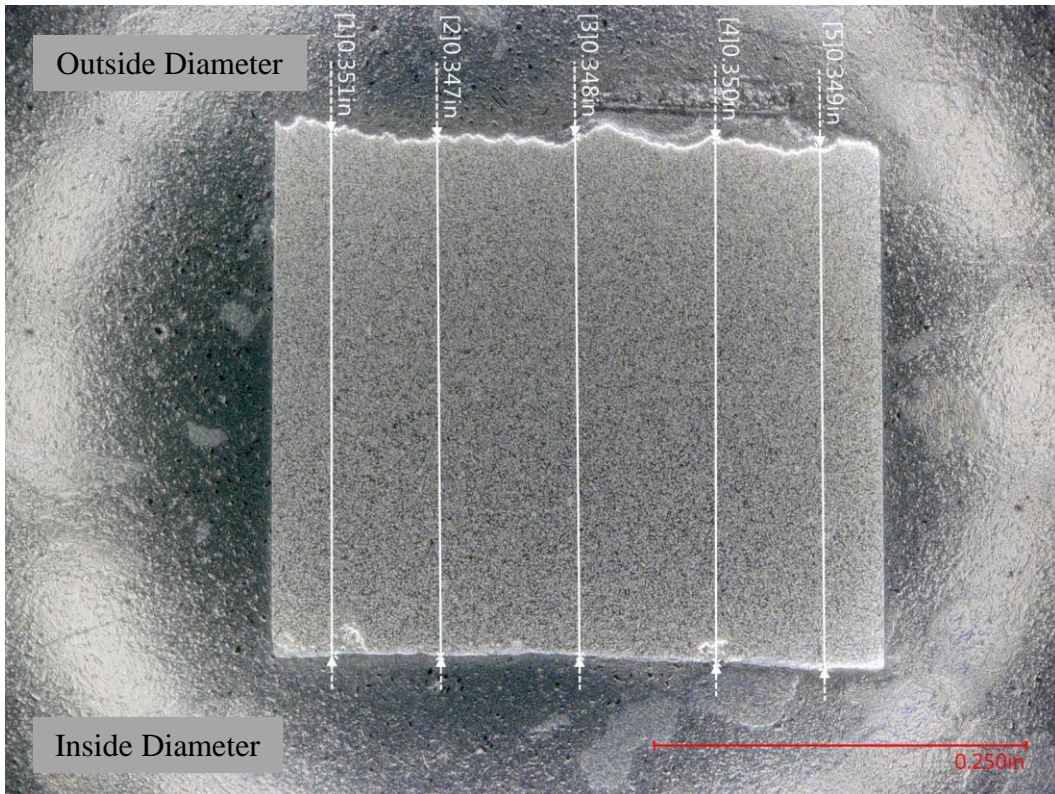


Figure 1 Photographs of the pipe coupon in the as-received condition (a) outside surface and (b) inside surface.

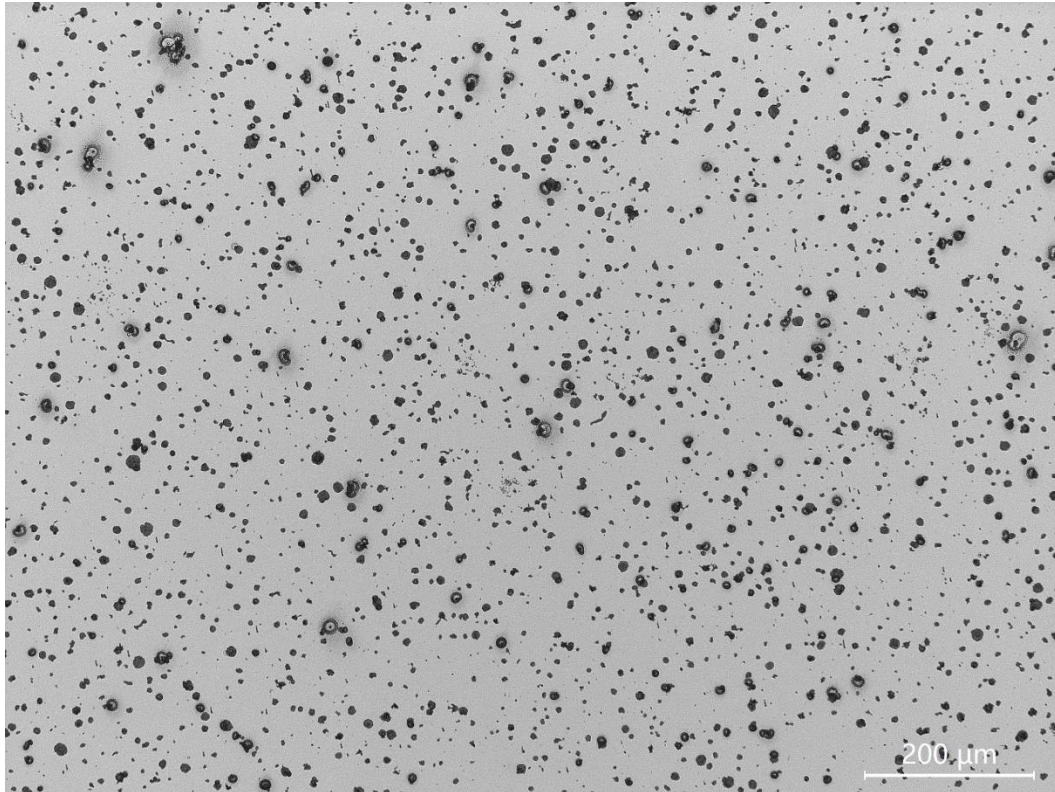


(a) Radial Cross Section

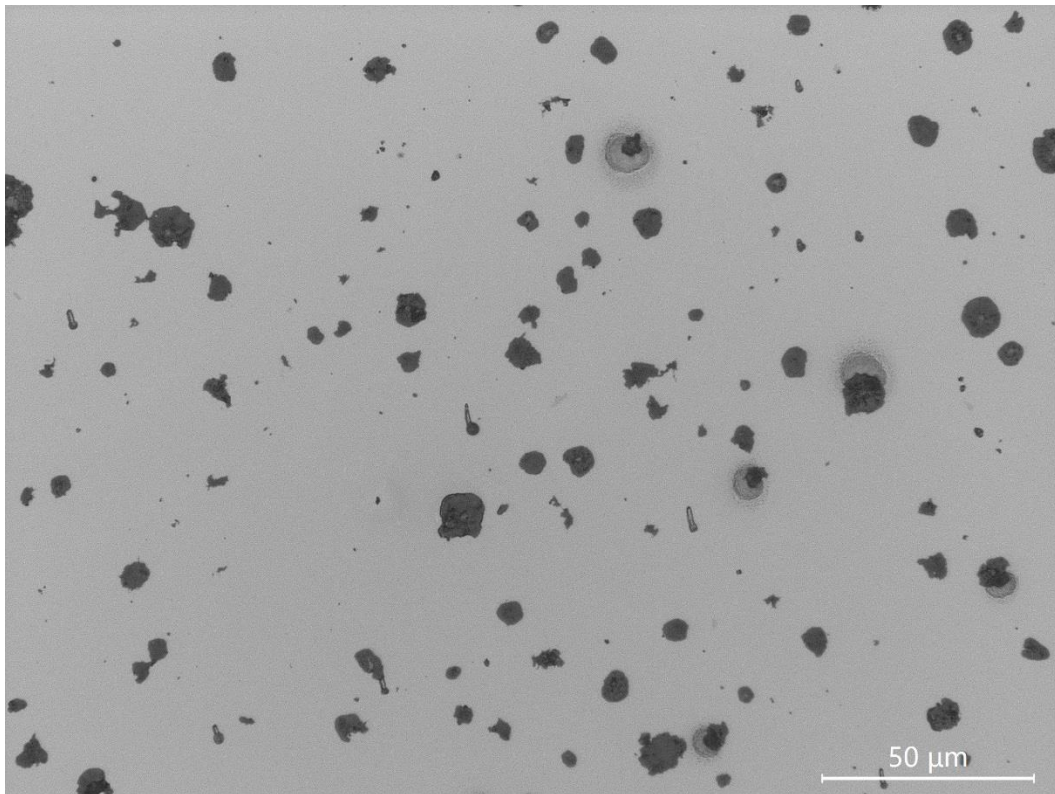


(b) Radial Cross Section with annotated Wall Thickness

Figure 2 Digital images of the mounted cross section.

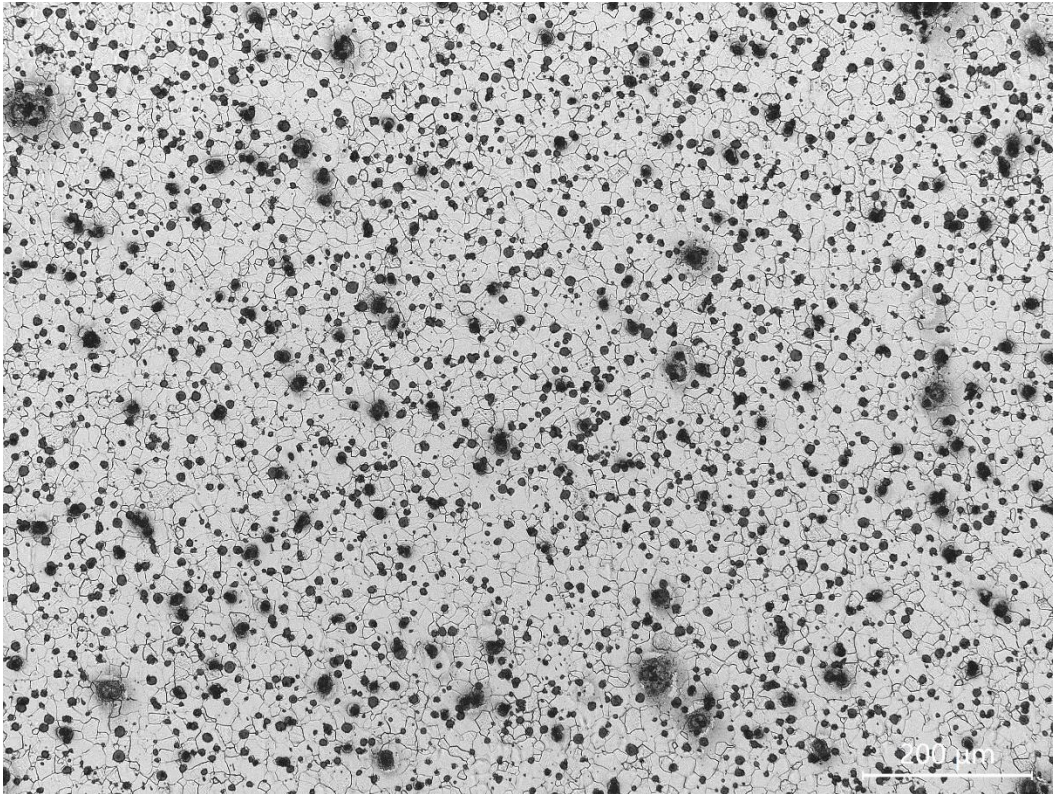


(a) Pipe Coupon Cross Section – As Polished

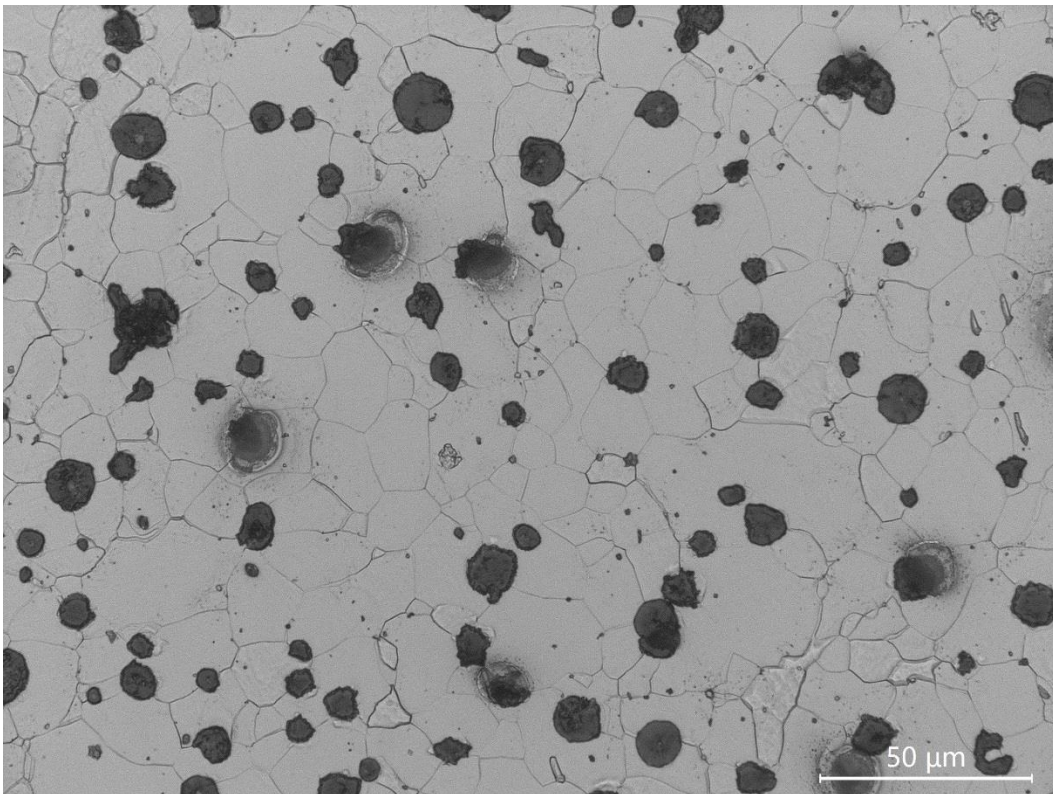


(b) Pipe Coupon Cross Section – As Polished

Figure 3 Optical micrographs of the pipe coupon in the polished condition.

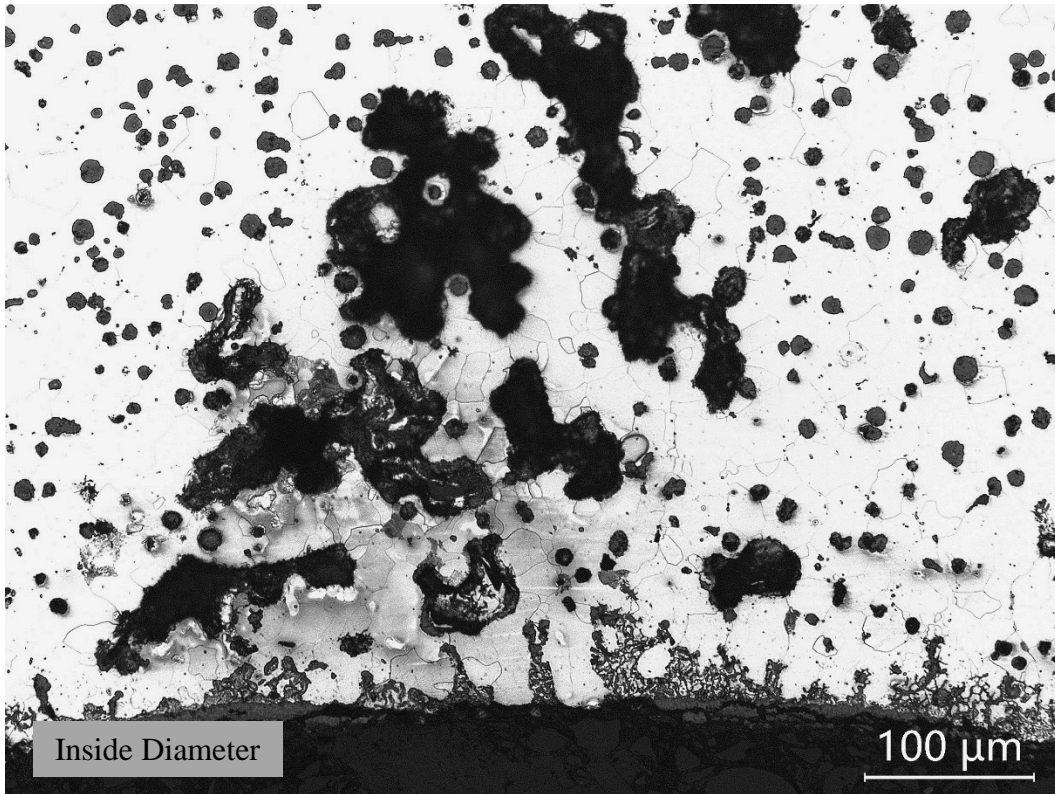


(a) Pipe Coupon Cross Section – 2% Nital Etch

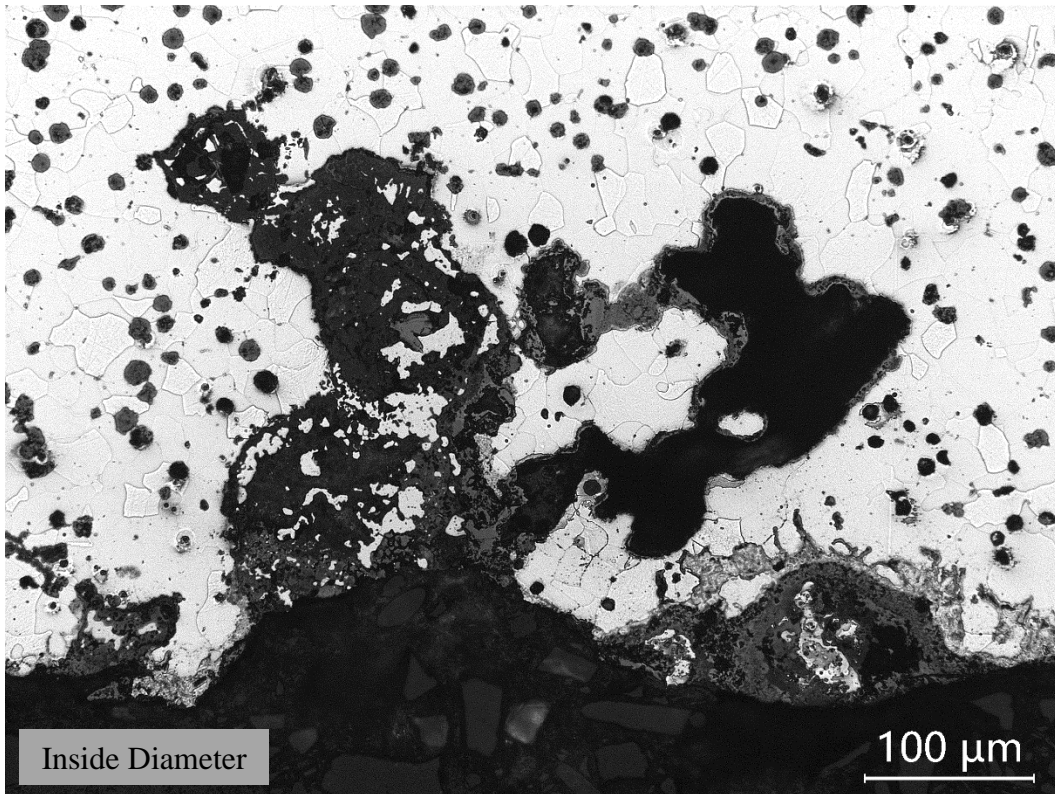


(b) Pipe Coupon Cross Section – 2% Nital Etch

Figure 4 Optical micrographs of the pipe coupon etched with 2% Nital.



(a)



(b)

Figure 5 Optical micrographs of the pipe coupon showing pitting on the inside diameter.

Appendix B

Ultrasonic Testing Data

Individual Ultrasonic Thickness Measurements

Table B-1 shows the individual ultrasonic thickness measurements that were collected over the course of Phase 2A. At each site, the visible pipe segments and components were numbered in the downstream direction. The clock positions are also as viewed in the downstream direction. The table also shows the pipe class and nominal thickness that was selected for each segment.

Because of the two different pipe materials (ductile iron and cast iron), there are two columns for the thickness results. The columns for the selected pipe class and nominal thickness are duplicated likewise. The results were updated to reflect the Phase 2B material testing results (see Section 2.3).

Table B-1. Individual Ultrasonic Thickness Measurements

Site/ Street Number	Segment	Location	Clock Pos.	Date (2017)	Meas. Thick- ness, in. (DI)	Meas. Thick- ness, in. (CI)	Pipe Class (DI)	Nom. Thick- ness, in. (DI)	Pipe Class (CI)	Nom. Thick- ness, in. (CI)
Main										
Flush Sta.	1 (pipe)	15" from MJ	12:00	9/27	0.355	-	53	0.36	-	-
Flush Sta.	1 (pipe)	15" from MJ	1:30	9/27	0.333	-	53	0.36	-	-
Flush Sta.	1 (pipe)	15" from MJ	3:00	9/27	0.358	-	53	0.36	-	-
Flush Sta.	1 (pipe)	15" from MJ	4:30	9/27	0.338	-	53	0.36	-	-
Flush Sta.	1 (pipe)	15" from MJ	9:00	9/27	0.353	-	53	0.36	-	-
Flush Sta.	1 (pipe)	27" from MJ	12:00	9/27	0.310	-	53	0.36	-	-
Flush Sta.	1 (pipe)	27" from MJ	3:00	9/27	0.270	-	53	0.36	-	-
Flush Sta.	1 (pipe)	27" from MJ	6:00	9/27	0.322	-	53	0.36	-	-
Flush Sta.	1 (pipe)	27" from MJ	9:00	9/27	0.348	-	53	0.36	-	-
2811	1 (pipe)	4' north of south end of exposed section	12:00	9/26	-	0.388	-	-	23	0.44
2811	1 (pipe)	4' north of south end of exposed section	9:00	9/26	-	0.412	-	-	23	0.44
2811	1 (pipe)	8' north of south end of exposed section	9:00	9/26	-	0.420	-	-	23	0.44
2811	2 (pipe)	16' north of south end of exposed section	12:00	9/26	-	0.418	-	-	23	0.44
2811	2 (pipe)	16' north of south end of exposed section	9:00	9/26	-	0.426	-	-	23	0.44
2811	2 (pipe)	21' north of south end of exposed section	12:00	9/26	-	0.418	-	-	23	0.44
2811	2 (pipe)	21' north of south end of exposed section	9:00	9/26	-	0.416	-	-	23	0.44
2811	2 (pipe)	26' north of south end of exposed section	12:00	9/26	-	0.392	-	-	23	0.44
2811	2 (pipe)	26' north of south end of exposed section	7:00	9/26	-	0.398	-	-	23	0.44
2811	2 (pipe)	26' north of south end of exposed section	9:00	9/26	-	0.406	-	-	23	0.44
2811	3 (pipe)	3' south of north end of exposed section	12:00	9/26	-	0.338	-	-	23	0.44

Site/ Street Number	Segment	Location	Clock Pos.	Date (2017)	Meas. Thick- ness, in. (DI)	Meas. Thick- ness, in. (CI)	Pipe Class (DI)	Nom. Thick- ness, in. (DI)	Pipe Class (CI)	Nom. Thick- ness, in. (CI)
2811	3 (pipe)	3' south of north end of exposed section	9:00	9/26	-	0.390	-	-	23	0.44
2811	3 (pipe)	At north end of exposed section	11:00	9/26	-	0.428	-	-	23	0.44
3001	1 (pipe)	A, 1' north of wye	12:00	9/26	-	0.374	-	-	22	0.41
3001	1 (pipe)	A, 1' north of wye	2:00	9/26	-	0.372	-	-	22	0.41
3001	1 (pipe)	A, 1' north of wye	9:00	9/26	-	0.384	-	-	22	0.41
3001	2 (pipe)	B, 6' north of wye	12:00	9/26	-	0.388	-	-	22	0.41
3001	2 (pipe)	B, 6' north of wye	2:30	9/26	-	0.396	-	-	22	0.41
3001	2 (pipe)	B, 6' north of wye	9:00	9/26	-	0.392	-	-	22	0.41
3001	3 (pipe)	C, 15' north of wye	12:00	9/26	-	0.268	-	-	20	0.35
3001	3 (pipe)	C, 15' north of wye	2:00	9/26	-	0.338	-	-	20	0.35
3001	3 (pipe)	C, 15' north of wye	10:00	9/26	-	0.340	-	-	20	0.35
3001	3 (pipe)	D, 21' north of wye	12:00	9/26	-	0.330	-	-	20	0.35
3001	4 (pipe)	E, centered under dock	12:00	9/26	-	0.376	-	-	22	0.41
3411	1 (pipe)	D, 21' south of dock	6:00	9/26	-	0.260	-	-	20	0.35
3411	1 (pipe)	D, 21' south of dock	11:00	9/26	-	0.274	-	-	20	0.35
3411	2 (pipe)	A, 6' south of dock	12:00	9/26	-	0.286	-	-	20	0.35
3411	2 (pipe)	A, 6' south of dock	9:00	9/26	-	0.272	-	-	20	0.35
3411	2 (pipe)	B, 11' south of dock	12:00	9/26	-	0.330	-	-	20	0.35
3411	2 (pipe)	B, 11' south of dock	9:00	9/26	-	0.334	-	-	20	0.35
3411	2 (pipe)	C, 16' south of dock	12:00	9/26	-	0.274	-	-	20	0.35
3411	2 (pipe)	C, 16' south of dock	9:00	9/26	-	0.328	-	-	20	0.35
3411	3 (pipe)	E, 2' south of dock	12:00	9/26	-	0.362	-	-	20	0.35
3411	3 (pipe)	E, 2' south of dock	6:00	9/26	-	0.308	-	-	20	0.35
3411	3 (pipe)	F, north end of exposed section	12:00	9/26	-	0.332	-	-	20	0.35
3703	1 (pipe)	A, 2' north of south end of exposed section	1:00	9/27	-	0.414	-	-	22	0.41
3703	1 (pipe)	A, 2' north of south end of exposed section	9:00	9/27	-	0.416	-	-	22	0.41
3703	1 (pipe)	A, 2' north of south end of exposed section	11:00	9/27	-	0.406	-	-	22	0.41
3703	1 (pipe)	B, 5' north of south end of exposed section	1:00	9/27	-	0.416	-	-	22	0.41
3703	1 (pipe)	B, 5' north of south end of exposed section	9:00	9/27	-	0.384	-	-	22	0.41
3703	1 (pipe)	B, 5' north of south end of exposed section	11:00	9/27	-	0.370	-	-	22	0.41
3703	2 (pipe)	C, 8' north of south end of exposed section	12:00	9/27	-	0.336	-	-	22	0.41
3703	2 (pipe)	C, 8' north of south end of exposed section	9:00	9/27	-	0.326	-	-	22	0.41
3703	2 (pipe)	C, 8' north of south end of exposed section	11:00	9/27	-	0.300	-	-	22	0.41

Site/ Street Number	Segment	Location	Clock Pos.	Date (2017)	Meas. Thick- ness, in. (DI)	Meas. Thick- ness, in. (CI)	Pipe Class (DI)	Nom. Thick- ness, in. (DI)	Pipe Class (CI)	Nom. Thick- ness, in. (CI)
3703	2 (pipe)	D, 2' south of wye	12:00	9/27	-	0.390	-	-	22	0.41
3703	2 (pipe)	D, 2' south of wye	9:00	9/27	-	0.362	-	-	22	0.41
3703	2 (pipe)	D, 2' south of wye	10:00	9/27	-	0.396	-	-	22	0.41
3703	3 (wye)	E	10:00	9/27	-	0.679	-	-	-	0.60
3719/3805	1 (pipe)	G, just under boat lift of 3719	12:00	9/28	-	0.362	-	-	20	0.35
3719/3805	1 (pipe)	G, just under boat lift of 3719	2:00	9/28	-	0.298	-	-	20	0.35
3719/3805	1 (pipe)	G, just under boat lift of 3719	7:00	9/28	-	0.316	-	-	20	0.35
3719/3805	1 (pipe)	G, just under boat lift of 3719	9:00	9/28	-	0.348	-	-	20	0.35
3719/3805	2 (pipe)	F, 49' south of north end of exposed section	12:00	9/28	-	0.436	-	-	23	0.44
3719/3805	2 (pipe)	F, 49' south of north end of exposed section	7:00	9/28	-	0.428	-	-	23	0.44
3719/3805	2 (pipe)	F, 49' south of north end of exposed section	8:00	9/28	-	0.430	-	-	23	0.44
3719/3805	2 (pipe)	F, 49' south of north end of exposed section	9:00	9/28	-	0.444	-	-	23	0.44
3719/3805	3 (pipe)	D, 14' south of north end of exposed section	9:00	9/28	-	0.372	-	-	23	0.44
3719/3805	3 (pipe)	D, 14' south of north end of exposed section	11:00	9/28	-	0.418	-	-	23	0.44
3719/3805	3 (pipe)	E, 29' south of north end of exposed section	8:00	9/28	-	0.378	-	-	23	0.44
3719/3805	3 (pipe)	E, 29' south of north end of exposed section	8:30	9/28	-	0.382	-	-	23	0.44
3719/3805	3 (pipe)	E, 29' south of north end of exposed section	9:00	9/28	-	0.436	-	-	23	0.44
3719/3805	3 (pipe)	E, 29' south of north end of exposed section	11:00	9/28	-	0.452	-	-	23	0.44
3719/3805	4 (pipe)	B, 2' south of north end of exposed section	12:00	9/28	-	0.348	-	-	20	0.35
3719/3805	4 (pipe)	B, 2' south of north end of exposed section	12:30	9/28	-	0.354	-	-	20	0.35
3719/3805	4 (pipe)	B, 2' south of north end of exposed section	10:00	9/28	-	0.342	-	-	20	0.35
3719/3805	4 (pipe)	C, 12' south of north end of exposed section	12:00	9/28	-	0.332	-	-	20	0.35
3719/3805	4 (pipe)	C, 12' south of north end of exposed section	10:00	9/28	-	0.316	-	-	20	0.35
3719/3805	5 (wye)	A, north end of exposed segment	9:00	9/28	-	0.622	-	-	-	0.60
3825/3827	1 (pipe)	F, 10' south of E	12:00	9/28	-	0.372	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	12:00	9/28	-	0.372	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	1:00	9/28	-	0.366	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	1:00	9/28	-	0.370	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	2:00	9/28	-	0.366	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	2:00	9/28	-	0.372	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	3:00	9/28	-	0.342	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	3:00	9/28	-	0.368	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	8:00	9/28	-	0.370	-	-	21	0.38

Site/ Street Number	Segment	Location	Clock Pos.	Date (2017)	Meas. Thick- ness, in. (DI)	Meas. Thick- ness, in. (CI)	Pipe Class (DI)	Nom. Thick- ness, in. (DI)	Pipe Class (CI)	Nom. Thick- ness, in. (CI)
3825/3827	1 (pipe)	F, 10' south of E	8:00	9/28	-	0.376	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	9:00	9/28	-	0.372	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	9:00	9/28	-	0.374	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	10:00	9/28	-	0.350	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	10:00	9/28	-	0.376	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	11:00	9/28	-	0.372	-	-	21	0.38
3825/3827	1 (pipe)	F, 10' south of E	11:00	9/28	-	0.376	-	-	21	0.38
3825/3827	2 (pipe)	E, just south of joint south of 3825 dock	12:00	9/28	-	0.286	-	-	22	0.41
3825/3827	2 (pipe)	E, just south of joint south of 3825 dock	1:00	9/28	-	0.244	-	-	22	0.41
3825/3827	2 (pipe)	E, just south of joint south of 3825 dock	9:30	9/28	-	0.258	-	-	22	0.41
3825/3827	2 (pipe)	E, just south of joint south of 3825 dock	10:00	9/28	-	0.282	-	-	22	0.41
3825/3827	2 (pipe)	E, just south of joint south of 3825 dock	11:00	9/28	-	0.288	-	-	22	0.41
3825/3827	2 (pipe)	E, just south of joint south of 3825 dock	11:00	9/28	-	0.298	-	-	22	0.41
3825/3827	2 (pipe)	G, between E and F	12:00	9/28	-	0.364	-	-	22	0.41
3825/3827	2 (pipe)	G, between E and F	12:00	9/28	-	0.368	-	-	22	0.41
3825/3827	2 (pipe)	G, between E and F	12:00	9/28	-	0.390	-	-	22	0.41
3825/3827	2 (pipe)	G, between E and F	12:00	9/28	-	0.392	-	-	22	0.41
3825/3827	2 (pipe)	G, between E and F	12:00	9/28	-	0.432	-	-	22	0.41
3825/3827	2 (pipe)	G, between E and F	2:00	9/28	-	0.364	-	-	22	0.41
3825/3827	2 (pipe)	G, between E and F	8:00	9/28	-	0.372	-	-	22	0.41
3825/3827	2 (pipe)	G, between E and F	9:00	9/28	-	0.378	-	-	22	0.41
3825/3827	2 (pipe)	G, between E and F	10:00	9/28	-	0.342	-	-	22	0.41
3825/3827	3 (pipe)	D, directly under 3825 dock	12:00	9/28	-	0.368	-	-	21	0.38
3825/3827	3 (pipe)	D, directly under 3825 dock	9:00	9/28	-	0.370	-	-	21	0.38
3825/3827	3 (pipe)	D, directly under 3825 dock	10:00	9/28	-	0.376	-	-	21	0.38
3825/3827	3 (pipe)	D, directly under 3825 dock	11:00	9/28	-	0.376	-	-	21	0.38
3825/3827	4 (pipe)	C, just south of A	12:00	9/28	-	0.342	-	-	21	0.38
3825/3827	4 (pipe)	C, just south of A	3:00	9/28	-	0.378	-	-	21	0.38
3825/3827	4 (pipe)	C, just south of A	9:00	9/28	-	0.364	-	-	21	0.38
3825/3827	5 (wye)	A	12:00	9/28	-	0.658	-	-	-	0.60
3825/3827	5 (wye)	A	12:30	9/28	-	0.658	-	-	-	0.60
3825/3827	6 (pipe)	B, just north of A	12:00	9/28	-	0.414	-	-	22	0.41
3825/3827	6 (pipe)	B, just north of A	11:00	9/28	-	0.396	-	-	22	0.41

Site/ Street Number	Segment	Location	Clock Pos.	Date (2017)	Meas. Thick- ness, in. (DI)	Meas. Thick- ness, in. (CI)	Pipe Class (DI)	Nom. Thick- ness, in. (DI)	Pipe Class (CI)	Nom. Thick- ness, in. (CI)
3825/3827	6 (pipe)	B, just north of A	11:30	9/28	-	0.358	-	-	22	0.41
Laterals										
3501	1 (pipe)	A, 5' west of wall	12:00	9/26	-	0.216	-	-	21	0.35
3501	1 (pipe)	A, 5' west of wall	3:00	9/26	-	0.226	-	-	21	0.35
3501	1 (pipe)	A, 5' west of wall	10:30	9/26	-	0.216	-	-	21	0.35
3501	2 (pipe)	B, 10' west of wall	1:00	9/26	-	0.368	-	-	22	0.38
3501	2 (pipe)	B, 10' west of wall	10:30	9/26	-	0.192	-	-	22	0.38
3501	2 (pipe)	B, 10' west of wall	10:30	9/26	-	0.388	-	-	22	0.38
3501	2 (pipe)	C, 15' west of wall	12:00	9/26	-	0.332	-	-	22	0.38
3501	2 (pipe)	C, 15' west of wall	1:00	9/26	-	0.256	-	-	22	0.38
3501	2 (pipe)	C, 15' west of wall	11:00	9/26	-	0.316	-	-	22	0.38
3501	2 (pipe)	D, 24' west of wall	11:00	9/26	-	0.234	-	-	22	0.38
3501	2 (pipe)	D, 24' west of wall	11:00	9/26	-	0.236	-	-	22	0.38
3501	2 (pipe)	D, 24' west of wall	11:00	9/26	-	0.280	-	-	22	0.38
3501	3 (pipe)	E, 25' west of wall	12:00	9/26	-	0.282	-	-	21	0.35
3501	3 (pipe)	E, 25' west of wall	1:00	9/26	-	0.332	-	-	21	0.35
3501	3 (pipe)	E, 25' west of wall	11:00	9/26	-	0.332	-	-	21	0.35
3717	2 (pipe)	Second pipe segment	12:00	9/27	-	0.280	-	-	21	0.35
3717	2 (pipe)	Second pipe segment	12:00	9/27	-	0.284	-	-	21	0.35
3717	2 (pipe)	Second pipe segment	12:00	9/27	-	0.286	-	-	21	0.35

Remaining Useful Life – Sensitivity Analysis

The remaining useful life analysis in Section 2.3 was performed several times with changes in the underlying assumptions, in order to determine which factors had a significant impact on the outcome. Table B-2 shows the different scenarios that were evaluated and the results of each. As can be seen, the pit depth assumption had a significant impact on the calculated minimum remaining useful life. The assumptions for pipe class did not affect the overall results significantly. Scenario “A” is the base scenario, which is presented in Section 2.3 and in further detail in Table B-3. Scenarios “B” through “D” are found in Table B-3 through Table B-6 for the purposes of this sensitivity analysis.

These results were updated based on the Phase 2B findings (see Section 2.3). However, the “current year” (2017) was not updated, so the remaining useful life runs from 2017.

Table B-2. Remaining Useful Life – Sensitivity Analysis Scenarios

Scenario	Assumptions			Min. Remaining Useful Life, yr. from 2017	
	Pit Depth	Pipe Material	Pipe Class	Main	Laterals
A (base)	1/8 in.	CI (except DI at Flush Station)	Varies by location	18	10
B	1/8 in.	CI (except DI at Flush Station)	Thickest at all locations*	17	10
C	0	CI (except DI at Flush Station)	Varies by location	66	46
D	0	CI (except DI at Flush Station)	Thickest at all locations*	56	46

* The thickest pipe class suggested by the data for each combination of pipe size and material was used for all locations for that combination of pipe size and material.

Table B-3. Remaining Useful Life – Sensitivity Analysis Scenario A (Base Scenario)

Site/ Street Number	Line	Segment	Mat'l	Measured Thickness Readings, in.				Assumed Pipe Data		Pit Depth, in.	Max. Thick- ness Loss, in. (a)	Max. Thick- ness Loss, pct. (a)	Max. Corrosion Rate, in./yr. (a)	Min. Remaining Useful Life, yr. (a) (b)
				Min.	Avg.	Max.	No.	Class	Nom. Thick- ness, in.					
Flush Sta.	Main	1 (pipe)	DI	0.270	0.332	0.358	9	53	0.36	0.125	0.215	60%	0.0048	30
2811	Main	1 (pipe)	CI	0.388	0.407	0.420	3	23	0.44	0.125	0.177	40%	0.0039	67
2811	Main	2 (pipe)	CI	0.392	0.411	0.426	7	23	0.44	0.125	0.173	39%	0.0038	69
2811	Main	3 (pipe)	CI	0.338	0.385	0.428	3	23	0.44	0.125	0.227	52%	0.0050	42
3001	Main	1 (pipe)	CI	0.372	0.377	0.384	3	22	0.41	0.125	0.163	40%	0.0036	68
3001	Main	2 (pipe)	CI	0.388	0.392	0.396	3	22	0.41	0.125	0.147	36%	0.0033	81
3001	Main	3 (pipe)	CI	0.268	0.319	0.340	4	20	0.35	0.125	0.207	59%	0.0046	31
3001	Main	4 (pipe)	CI	0.376	0.376	0.376	1	22	0.41	0.125	0.159	39%	0.0035	71
3411	Main	1 (pipe)	CI	0.260	0.267	0.274	2	20	0.35	0.125	0.215	61%	0.0048	28
3411	Main	2 (pipe)	CI	0.272	0.304	0.334	6	20	0.35	0.125	0.203	58%	0.0045	33
3411	Main	3 (pipe)	CI	0.308	0.334	0.362	3	20	0.35	0.125	0.167	48%	0.0037	49
3703	Main	1 (pipe)	CI	0.370	0.401	0.416	6	22	0.41	0.125	0.165	40%	0.0037	67
3703	Main	2 (pipe)	CI	0.300	0.352	0.396	6	22	0.41	0.125	0.235	57%	0.0052	34
3703	Main	3 (wye)	CI	0.679	0.679	0.679	1	--	0.60	0.125	0.046	8%	0.0010	542
3719/3805	Main	1 (pipe)	CI	0.298	0.331	0.362	4	20	0.35	0.125	0.177	51%	0.0039	44
3719/3805	Main	2 (pipe)	CI	0.428	0.435	0.444	4	23	0.44	0.125	0.137	31%	0.0030	100
3719/3805	Main	3 (pipe)	CI	0.372	0.406	0.452	6	23	0.44	0.125	0.193	44%	0.0043	58
3719/3805	Main	4 (pipe)	CI	0.316	0.338	0.354	5	20	0.35	0.125	0.159	45%	0.0035	54
3719/3805	Main	5 (wye)	CI	0.622	0.622	0.622	1	--	0.60	0.125	0.103	17%	0.0023	217
3825/3827	Main	1 (pipe)	CI	0.342	0.368	0.376	16	21	0.38	0.125	0.163	43%	0.0036	60
3825/3827	Main	2 (pipe)	CI	0.244	0.337	0.432	15	22	0.41	0.125	0.291	71%	0.0065	18
3825/3827	Main	3 (pipe)	CI	0.368	0.373	0.376	4	21	0.38	0.125	0.137	36%	0.0030	80
3825/3827	Main	4 (pipe)	CI	0.342	0.361	0.378	3	21	0.38	0.125	0.163	43%	0.0036	60
3825/3827	Main	5 (wye)	CI	0.658	0.658	0.658	2	--	0.60	0.125	0.067	11%	0.0015	358
3825/3827	Main	6 (pipe)	CI	0.358	0.389	0.414	3	22	0.41	0.125	0.177	43%	0.0039	59
3501	Lat.	1 (pipe)	CI	0.216	0.219	0.226	3	21	0.35	0.125	0.259	74%	0.0058	16
3501	Lat.	2 (pipe)	CI	0.192	0.289	0.388	9	22	0.38	0.125	0.313	82%	0.0070	10
3501	Lat.	3 (pipe)	CI	0.282	0.315	0.332	3	21	0.35	0.125	0.193	55%	0.0043	37
3717	Lat.	2 (pipe)	CI	0.280	0.283	0.286	3	21	0.35	0.125	0.195	56%	0.0043	36

(a) Thickness loss includes pit depth shown at left. The corrosion rate and remaining useful life were calculated from the resulting thickness loss values.

(b) The remaining useful life estimates run from 2017, the year the testing was performed, not from the time of this Phase 2B update.

Table B-4. Remaining Useful Life – Sensitivity Analysis Scenario B

Site/ Street Number	Line	Segment	Mat'l	Measured Thickness Readings, in.				Assumed Pipe Data		Pit Depth, in.	Max. Thick- ness Loss, in. (a)	Max. Thick- ness Loss, pct. (a)	Max. Corrosion Rate, in./yr. (a)	Min. Remaining Useful Life, yr. (a) (b)
				Min.	Avg.	Max.	No.	Class	Nom. Thick- ness, in.					
Flush Sta.	Main	1 (pipe)	DI	0.270	0.332	0.358	9	53	0.36	0.125	0.215	60%	0.0048	30
2811	Main	1 (pipe)	CI	0.388	0.407	0.420	3	23	0.44	0.125	0.177	40%	0.0039	67
2811	Main	2 (pipe)	CI	0.392	0.411	0.426	7	23	0.44	0.125	0.173	39%	0.0038	69
2811	Main	3 (pipe)	CI	0.338	0.385	0.428	3	23	0.44	0.125	0.227	52%	0.0050	42
3001	Main	1 (pipe)	CI	0.372	0.377	0.384	3	23	0.44	0.125	0.193	44%	0.0043	58
3001	Main	2 (pipe)	CI	0.388	0.392	0.396	3	23	0.44	0.125	0.177	40%	0.0039	67
3001	Main	3 (pipe)	CI	0.268	0.319	0.340	4	23	0.44	0.125	0.297	68%	0.0066	22
3001	Main	4 (pipe)	CI	0.376	0.376	0.376	1	23	0.44	0.125	0.189	43%	0.0042	60
3411	Main	1 (pipe)	CI	0.260	0.267	0.274	2	23	0.44	0.125	0.305	69%	0.0068	20
3411	Main	2 (pipe)	CI	0.272	0.304	0.334	6	23	0.44	0.125	0.293	67%	0.0065	23
3411	Main	3 (pipe)	CI	0.308	0.334	0.362	3	23	0.44	0.125	0.257	58%	0.0057	32
3703	Main	1 (pipe)	CI	0.370	0.401	0.416	6	23	0.44	0.125	0.195	44%	0.0043	57
3703	Main	2 (pipe)	CI	0.300	0.352	0.396	6	23	0.44	0.125	0.265	60%	0.0059	30
3703	Main	3 (wye)	CI	0.679	0.679	0.679	1	--	0.60	0.125	0.046	8%	0.0010	542
3719/3805	Main	1 (pipe)	CI	0.298	0.331	0.362	4	23	0.44	0.125	0.267	61%	0.0059	29
3719/3805	Main	2 (pipe)	CI	0.428	0.435	0.444	4	23	0.44	0.125	0.137	31%	0.0030	100
3719/3805	Main	3 (pipe)	CI	0.372	0.406	0.452	6	23	0.44	0.125	0.193	44%	0.0043	58
3719/3805	Main	4 (pipe)	CI	0.316	0.338	0.354	5	23	0.44	0.125	0.249	57%	0.0055	35
3719/3805	Main	5 (wye)	CI	0.622	0.622	0.622	1	--	0.60	0.125	0.103	17%	0.0023	217
3825/3827	Main	1 (pipe)	CI	0.342	0.368	0.376	16	23	0.44	0.125	0.223	51%	0.0050	44
3825/3827	Main	2 (pipe)	CI	0.244	0.337	0.432	15	23	0.44	0.125	0.321	73%	0.0071	17
3825/3827	Main	3 (pipe)	CI	0.368	0.373	0.376	4	23	0.44	0.125	0.197	45%	0.0044	56
3825/3827	Main	4 (pipe)	CI	0.342	0.361	0.378	3	23	0.44	0.125	0.223	51%	0.0050	44
3825/3827	Main	5 (wye)	CI	0.658	0.658	0.658	2	--	0.60	0.125	0.067	11%	0.0015	358
3825/3827	Main	6 (pipe)	CI	0.358	0.389	0.414	3	23	0.44	0.125	0.207	47%	0.0046	51
3501	Lat.	1 (pipe)	CI	0.216	0.219	0.226	3	22	0.38	0.125	0.289	76%	0.0064	14
3501	Lat.	2 (pipe)	CI	0.192	0.289	0.388	9	22	0.38	0.125	0.313	82%	0.0070	10
3501	Lat.	3 (pipe)	CI	0.282	0.315	0.332	3	22	0.38	0.125	0.223	59%	0.0050	32
3717	Lat.	2 (pipe)	CI	0.280	0.283	0.286	3	22	0.38	0.125	0.225	59%	0.0050	31

(a) Thickness loss includes pit depth shown at left. The corrosion rate and remaining useful life were calculated from the resulting thickness loss values.

(b) The remaining useful life estimates run from 2017, the year the testing was performed, not from the time of this Phase 2B update.

Table B-5. Remaining Useful Life – Sensitivity Analysis Scenario C

Site/ Street Number	Line	Segment	Mat'l	Measured Thickness Readings, in.				Assumed Pipe Data		Pit Depth, in.	Max. Thick- ness Loss, in. (a)	Max. Thick- ness Loss, pct. (a)	Max. Corrosion Rate, in./yr. (a)	Min. Remaining Useful Life, yr. (a) (b)
				Min.	Avg.	Max.	No.	Class	Nom. Thick- ness, in.					
Flush Sta.	Main	1 (pipe)	DI	0.270	0.332	0.358	9	53	0.36	0.000	0.090	25%	0.0020	135
2811	Main	1 (pipe)	CI	0.388	0.407	0.420	3	23	0.44	0.000	0.052	12%	0.0012	336
2811	Main	2 (pipe)	CI	0.392	0.411	0.426	7	23	0.44	0.000	0.048	11%	0.0011	368
2811	Main	3 (pipe)	CI	0.338	0.385	0.428	3	23	0.44	0.000	0.102	23%	0.0023	149
3001	Main	1 (pipe)	CI	0.372	0.377	0.384	3	22	0.41	0.000	0.038	9%	0.0008	441
3001	Main	2 (pipe)	CI	0.388	0.392	0.396	3	22	0.41	0.000	0.022	5%	0.0005	794
3001	Main	3 (pipe)	CI	0.268	0.319	0.340	4	20	0.35	0.000	0.082	23%	0.0018	147
3001	Main	4 (pipe)	CI	0.376	0.376	0.376	1	22	0.41	0.000	0.034	8%	0.0008	498
3411	Main	1 (pipe)	CI	0.260	0.267	0.274	2	20	0.35	0.000	0.090	26%	0.0020	130
3411	Main	2 (pipe)	CI	0.272	0.304	0.334	6	20	0.35	0.000	0.078	22%	0.0017	157
3411	Main	3 (pipe)	CI	0.308	0.334	0.362	3	20	0.35	0.000	0.042	12%	0.0009	330
3703	Main	1 (pipe)	CI	0.370	0.401	0.416	6	22	0.41	0.000	0.040	10%	0.0009	416
3703	Main	2 (pipe)	CI	0.300	0.352	0.396	6	22	0.41	0.000	0.110	27%	0.0024	123
3703	Main	3 (wye)	CI	0.679	0.679	0.679	1	--	0.60	0.000	0.000	0%	0.0000	Indef.
3719/3805	Main	1 (pipe)	CI	0.298	0.331	0.362	4	20	0.35	0.000	0.052	15%	0.0012	258
3719/3805	Main	2 (pipe)	CI	0.428	0.435	0.444	4	23	0.44	0.000	0.012	3%	0.0003	1605
3719/3805	Main	3 (pipe)	CI	0.372	0.406	0.452	6	23	0.44	0.000	0.068	15%	0.0015	246
3719/3805	Main	4 (pipe)	CI	0.316	0.338	0.354	5	20	0.35	0.000	0.034	10%	0.0008	418
3719/3805	Main	5 (wye)	CI	0.622	0.622	0.622	1	--	0.60	0.000	0.000	0%	0.0000	Indef.
3825/3827	Main	1 (pipe)	CI	0.342	0.368	0.376	16	21	0.38	0.000	0.038	10%	0.0008	405
3825/3827	Main	2 (pipe)	CI	0.244	0.337	0.432	15	22	0.41	0.000	0.166	40%	0.0037	66
3825/3827	Main	3 (pipe)	CI	0.368	0.373	0.376	4	21	0.38	0.000	0.012	3%	0.0003	1380
3825/3827	Main	4 (pipe)	CI	0.342	0.361	0.378	3	21	0.38	0.000	0.038	10%	0.0008	405
3825/3827	Main	5 (wye)	CI	0.658	0.658	0.658	2	--	0.60	0.000	0.000	0%	0.0000	Indef.
3825/3827	Main	6 (pipe)	CI	0.358	0.389	0.414	3	22	0.41	0.000	0.052	13%	0.0012	310
3501	Lat.	1 (pipe)	CI	0.216	0.219	0.226	3	21	0.35	0.000	0.134	38%	0.0030	73
3501	Lat.	2 (pipe)	CI	0.192	0.289	0.388	9	22	0.38	0.000	0.188	49%	0.0042	46
3501	Lat.	3 (pipe)	CI	0.282	0.315	0.332	3	21	0.35	0.000	0.068	19%	0.0015	187
3717	Lat.	2 (pipe)	CI	0.280	0.283	0.286	3	21	0.35	0.000	0.070	20%	0.0016	180

(a) Thickness loss includes pit depth shown at left. The corrosion rate and remaining useful life were calculated from the resulting thickness loss values.

(b) The remaining useful life estimates run from 2017, the year the testing was performed, not from the time of this Phase 2B update.

Table B-6. Remaining Useful Life – Sensitivity Analysis Scenario D

Site/ Street Number	Line	Segment	Mat'l	Measured Thickness Readings, in.				Assumed Pipe Data		Pit Depth, in.	Max. Thick- ness Loss, in. (a)	Max. Thick- ness Loss, pct. (a)	Max. Corrosion Rate, in./yr. (a)	Min. Remaining Useful Life, yr. (a) (b)
				Min.	Avg.	Max.	No.	Class	Nom. Thick- ness, in.					
Flush Sta.	Main	1 (pipe)	DI	0.270	0.332	0.358	9	53	0.36	0.000	0.090	25%	0.0020	135
2811	Main	1 (pipe)	CI	0.388	0.407	0.420	3	23	0.44	0.000	0.052	12%	0.0012	336
2811	Main	2 (pipe)	CI	0.392	0.411	0.426	7	23	0.44	0.000	0.048	11%	0.0011	368
2811	Main	3 (pipe)	CI	0.338	0.385	0.428	3	23	0.44	0.000	0.102	23%	0.0023	149
3001	Main	1 (pipe)	CI	0.372	0.377	0.384	3	23	0.44	0.000	0.068	15%	0.0015	246
3001	Main	2 (pipe)	CI	0.388	0.392	0.396	3	23	0.44	0.000	0.052	12%	0.0012	336
3001	Main	3 (pipe)	CI	0.268	0.319	0.340	4	23	0.44	0.000	0.172	39%	0.0038	70
3001	Main	4 (pipe)	CI	0.376	0.376	0.376	1	23	0.44	0.000	0.064	15%	0.0014	264
3411	Main	1 (pipe)	CI	0.260	0.267	0.274	2	23	0.44	0.000	0.180	41%	0.0040	65
3411	Main	2 (pipe)	CI	0.272	0.304	0.334	6	23	0.44	0.000	0.168	38%	0.0037	73
3411	Main	3 (pipe)	CI	0.308	0.334	0.362	3	23	0.44	0.000	0.132	30%	0.0029	105
3703	Main	1 (pipe)	CI	0.370	0.401	0.416	6	23	0.44	0.000	0.070	16%	0.0016	238
3703	Main	2 (pipe)	CI	0.300	0.352	0.396	6	23	0.44	0.000	0.140	32%	0.0031	96
3703	Main	3 (wye)	CI	0.679	0.679	0.679	1	--	0.60	0.000	0.000	0%	0.0000	Indef.
3719/3805	Main	1 (pipe)	CI	0.298	0.331	0.362	4	23	0.44	0.000	0.142	32%	0.0032	94
3719/3805	Main	2 (pipe)	CI	0.428	0.435	0.444	4	23	0.44	0.000	0.012	3%	0.0003	1605
3719/3805	Main	3 (pipe)	CI	0.372	0.406	0.452	6	23	0.44	0.000	0.068	15%	0.0015	246
3719/3805	Main	4 (pipe)	CI	0.316	0.338	0.354	5	23	0.44	0.000	0.124	28%	0.0028	115
3719/3805	Main	5 (wye)	CI	0.622	0.622	0.622	1	--	0.60	0.000	0.000	0%	0.0000	Indef.
3825/3827	Main	1 (pipe)	CI	0.342	0.368	0.376	16	23	0.44	0.000	0.098	22%	0.0022	157
3825/3827	Main	2 (pipe)	CI	0.244	0.337	0.432	15	23	0.44	0.000	0.196	45%	0.0044	56
3825/3827	Main	3 (pipe)	CI	0.368	0.373	0.376	4	23	0.44	0.000	0.072	16%	0.0016	230
3825/3827	Main	4 (pipe)	CI	0.342	0.361	0.378	3	23	0.44	0.000	0.098	22%	0.0022	157
3825/3827	Main	5 (wye)	CI	0.658	0.658	0.658	2	--	0.60	0.000	0.000	0%	0.0000	Indef.
3825/3827	Main	6 (pipe)	CI	0.358	0.389	0.414	3	23	0.44	0.000	0.082	19%	0.0018	196
3501	Lat.	1 (pipe)	CI	0.216	0.219	0.226	3	22	0.38	0.000	0.164	43%	0.0036	59
3501	Lat.	2 (pipe)	CI	0.192	0.289	0.388	9	22	0.38	0.000	0.188	49%	0.0042	46
3501	Lat.	3 (pipe)	CI	0.282	0.315	0.332	3	22	0.38	0.000	0.098	26%	0.0022	129
3717	Lat.	2 (pipe)	CI	0.280	0.283	0.286	3	22	0.38	0.000	0.100	26%	0.0022	126

(a) Thickness loss includes pit depth shown at left. The corrosion rate and remaining useful life were calculated from the resulting thickness loss values.

(b) The remaining useful life estimates run from 2017, the year the testing was performed, not from the time of this Phase 2B update.

Appendix C

Additional Photos

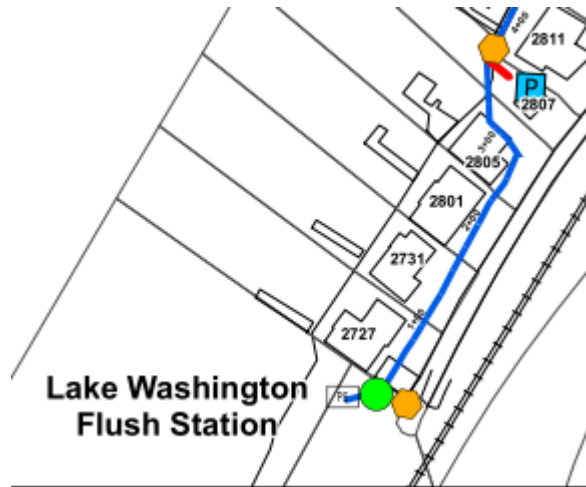
Lake Washington Flush Station

Date assessed: 9/27/2017 and 9/28/2017

Engineers: Michael Johannessen, Noy Phannavong, Ballard Marine

Feature: Mainline

Approximate length assessed: 5 feet



Notes: Pipe coupon collected; appears to be ductile iron pipe; 0.05 to 0.10 inches graphite scale



Photo C-1. Excavation pit; Lakeline below water main



Photo C-2. Lakeline



Photo C-3. Close up of top of Lakeline



Photo C-4. Lower half of Lakeline with graphite scale



Photo C-5. Dimpled surface indicative of DIP

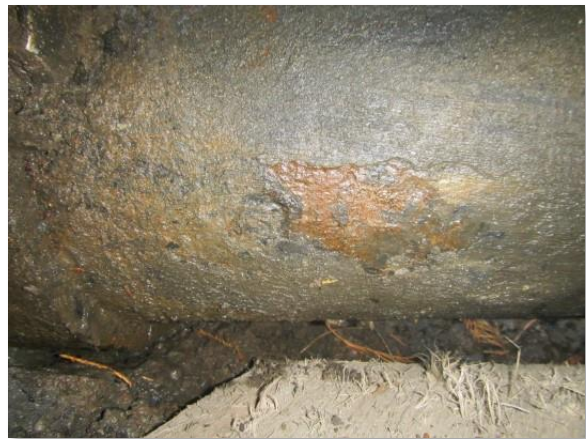


Photo C-6. Electrolytic corrosion on side of Lakeline



Photo C-7. 4"x8" reducer with mechanical joint



Photo C-8. Stainless steel bolts on mechanical joint



Photo C-9. Pipe coupon hole



Photo C-10. Pipe coupon hole



Photo C-11. Interior of Lakeline looking towards reducer



Photo C-12. Interior surface of Lakeline



Photo C-13. Interior of Lakeline looking downstream



Photo C-14. Repair clamp for pipe coupon hole

2811 Mountain View Ave North

Date assessed: 9/26/2017

Engineers: Michael Johannessen, Noy Phannavong, Ballard Marine

Feature: Mainline

Approximate length assessed: 37 feet



Notes: Two bell/spigot joints; appears to be DIP; corrosion scaling w/ pits up to 0.060 inches deep; large rocks around pipe; rip-rap directly above pipe; pipe not supported around full circumference just past north joint



Photo C-15. Corrosion scale/tuberculation; large rocks around pipe



Photo C-16. Close-up of corrosion scale/tuberculation on pipe



Photo C-17. Pitting up to 0.06 inches deep



Photo C-18. Pitting up to 0.06 inches deep; scale/deposits on pipe exterior



Photo C-19. Bell/spigot joint on south end of exposed reach



Photo C-20. Pipe surface underneath scale/deposits reach



Photo C-21. Pitted surface; up to 0.06-inch-deep pits; dimple pattern (DIP)



Photo C-22. Pitted surface; up to 0.06-inch-deep pits



Photo C-23. Bell/spigot joint on north end of exposed reach

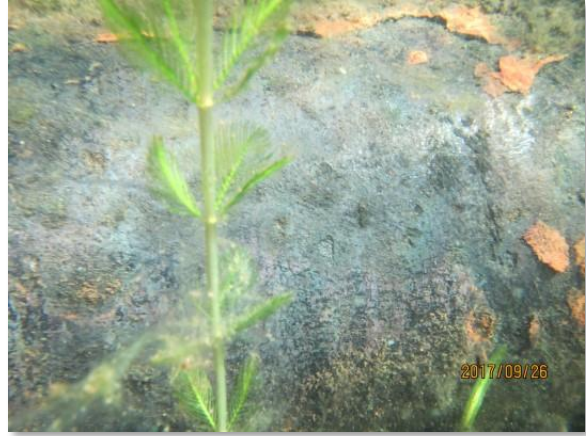


Photo C-24. Pipe surface underneath scale/deposits

3001 Mountain View Ave North

Date assessed: 9/26/2017

Engineers: Michael Johannessen, Noy Phannavong, Ballard Marine

Feature: Mainline

Approximate length assessed: 35 feet



Notes: One bell/spigot joint; tee for lateral connection; corrosion tubercles with pitting up to 0.125 inches deep



Photo C-25. Mainline exposed in shallow water (less than 3 feet deep)



Photo C-26. Mechanical joint for lateral connection partially covered in dirt/debris



Photo C-27. Mechanical joint at fitting



Photo C-28. Top view of mechanical joint



Photo C-29. Bell/spigot joint covered in dirt/debris



Photo C-30. Corrosion tubercles underneath dirt/debris layer



Photo C-31. Corrosion tubercles underneath dirt/debris layer near bell/spigot joint



Photo C-32. Corrosion tubercles underneath dirt/debris layer near bell/spigot joint

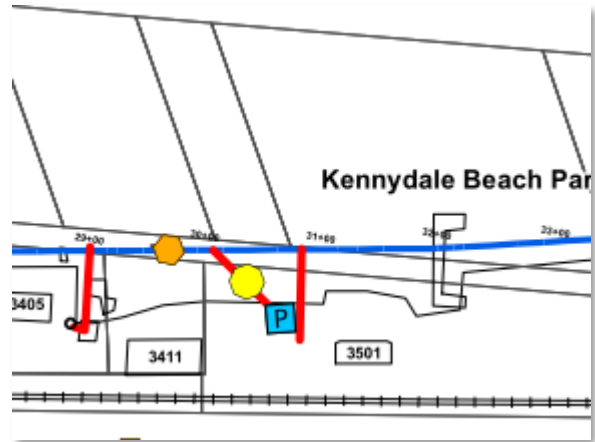
3411 Lake Washington Blvd. North

Date assessed: 9/26/2017

Engineers: Michael Johannessen, Noy Phannavong, Ballard Marine

Feature: Mainline

Approximate length assessed: 31 feet



Notes: Two bell/spigot joints; pipe exposed on offshore side



Photo C-33. Corrosion scale/tuberculation on bell portion of push-on joint



Photo C-34. Corrosion scale/tuberculation on individual pipe segments



Photo C-35. Surface of pipe after corrosion scale/tuberculation was removed



Photo C-36. Corrosion scale/tuberculation on individual pipe segments



Photo C-37. Corrosion scale/tuberculation on bell/spigot joint



Photo C-38. Corrosion scale/tuberculation on bell/spigot joint

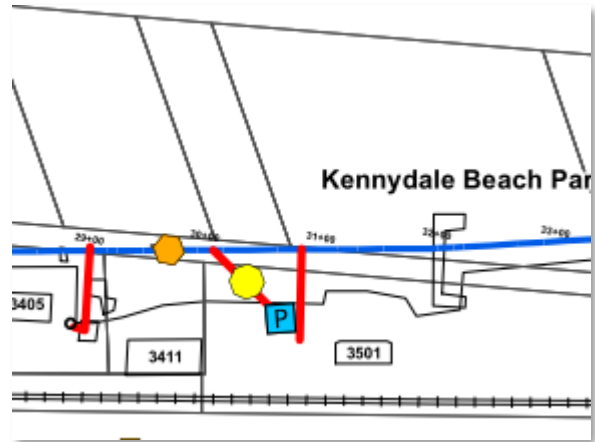
3501 Lake Washington Blvd. North

Date assessed: 9/26/2017

Engineers: Michael Johannessen, Noy Phannavong, Ballard Marine

Feature: Lateral

Approximate length assessed: 24 feet



Notes: Two mechanical joints; DIP; surface corrosion



Photo C-39. Lateral from Kennydale Beach Park



Photo C-40. Tree trunk on top of lateral



Photo C-41. Minor surface corrosion on DIP at wet/dry zone



Photo C-42. Mechanical joint (first from shore)



Photo C-43. Surface corrosion on DIP



Photo C-44. Pipe surface underneath corrosion layer



Photo C-45. Lateral transition into lake bed



Photo C-46. Mechanical joint (second from shore) with surface corrosion on gland ring

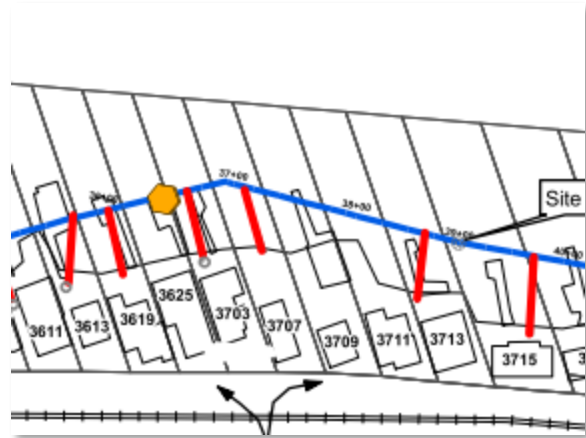
3703 Lake Washington Blvd. North

Date assessed: 9/27/2017

Engineers: Michael Johannessen, Noy Phannavong, Ballard Marine

Feature: Mainline

Approximate length assessed: 12 feet



Notes: Bell/spigot joints w/ mechanical joints at tee; close proximity to dock piling



Photo C-47. Nuts, bolts glands of mechanical joints with corrosion but in fair condition



Photo C-48. Nuts, bolts glands of mechanical joints with corrosion but in fair condition



Photo C-49. Nuts, bolts glands of mechanical joints with corrosion but in fair condition



Photo C-50. Bell/spigot joints with corrosion, but in fair condition



Photo C-51. Mainline transition into lake bed

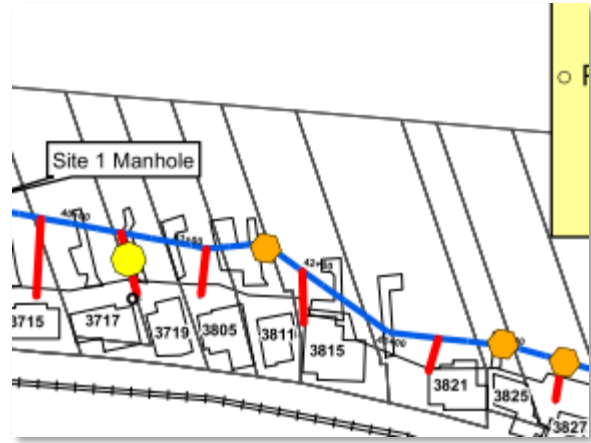
3717 Lake Washington Blvd. North

Date assessed: 9/27/2017

Engineers: Michael Johannessen, Noy Phannavong, Ballard Marine

Feature: Lateral

Approximate length assessed: 5 feet



Notes: Corrosion scale/tuberculation on pipe surface



Photo C-52. Lateral exposed approx. 5 feet from dock



Photo C-53. Corrosion scale/tuberculation; pipe surface after removal of corrosion in fair condition

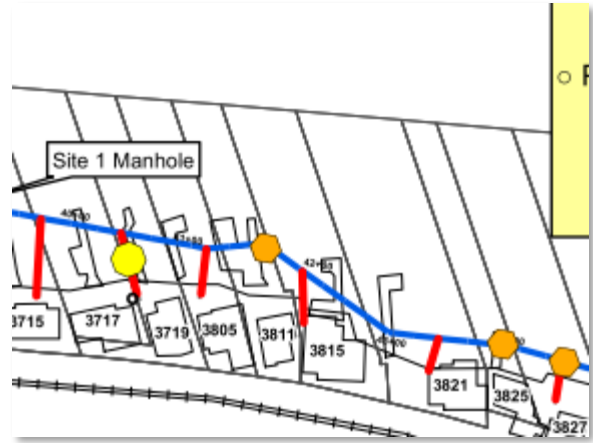
3719 & 3805 Lake Washington Blvd. North

Date assessed: 9/28/2017

Engineers: Michael Johannessen, Noy Phannavong, Ballard Marine

Feature: Mainline

Approximate length assessed: 25 feet



Notes: Bell/spigot joint; appears to be DIP; pits up to 0.125 inches deep; close proximity to dock piling



Photo C-54. Offshore side of mainline exposed



Photo C-55. Corrosion scale/tuberculation underneath dirt/debris

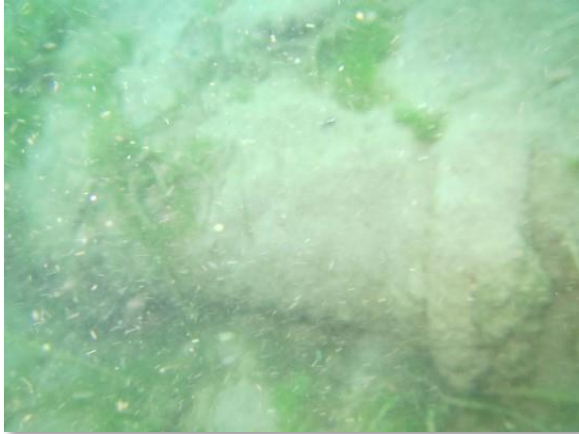


Photo C-56. Dirt/debris on pipe



Photo C-57. Corrosion scale/tuberculation near mechanical joint gland and bolts



Photo C-58. Pipe and joint surface after removal of corrosion products



Photo C-59. Pipe and joint surface after removal of corrosion products; 0.125-inch-deep pit



Photo C-60. 0.125-inch-deep pit



Photo C-61. Corrosion scale/tuberculation on bell/spigot joint



Photo C-62. Scale/tuberculation removed from pipe surface



Photo C-63. Side view of bell portion of push-on joint



Photo C-64. Corrosion scale/tuberculation; dimple pattern on pipe surface (DIP)



Photo C-65. Dimple pattern on pipe surface (DIP)



Photo C-66. Underside of pipe may not be fully supported

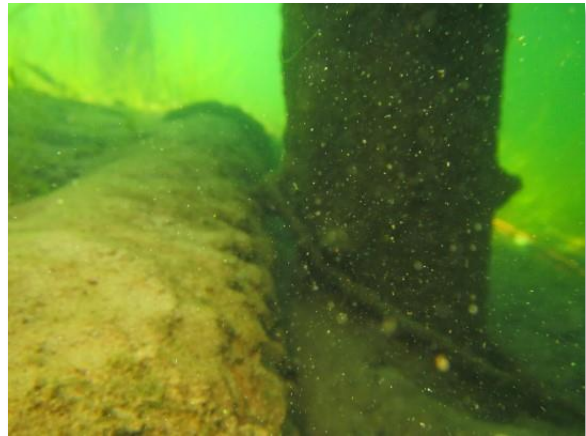


Photo C-67. Pipe sits only a few inches from dock pilings

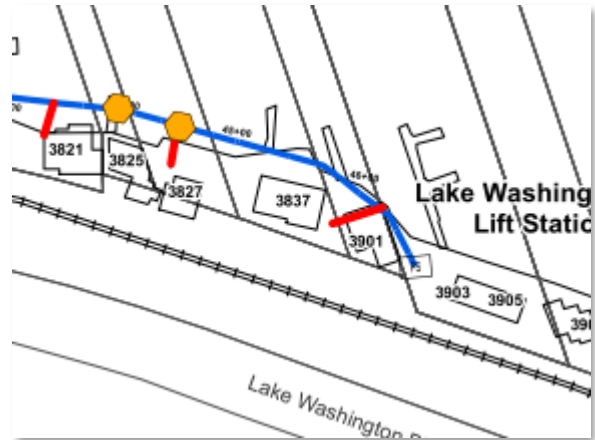
3825 & 3827 Lake Washington Blvd. North

Date assessed: 9/28/2017

Engineers: Michael Johannessen, Noy Phannavong, Ballard Marine

Feature: Mainline

Approximate length assessed: 50 feet



Notes: Bell/spigot joint; appears to be DIP; close proximity to dock piling; repair clamp (installed at some time in the past)



Photo C-68. Mainline covered in dirt/debris; surrounded by vegetation



Photo C-69. Mainline covered in dirt/debris; surrounded by vegetation

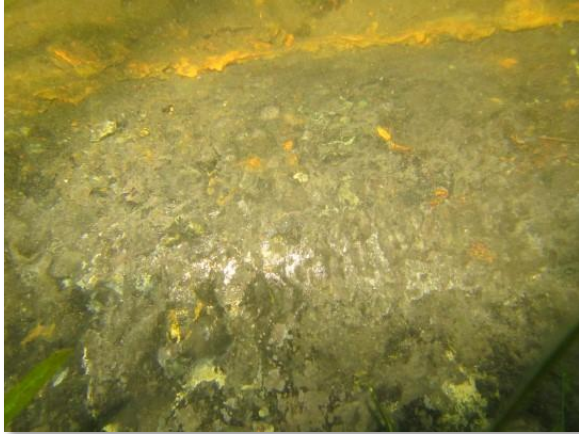


Photo C-70. Surface of pipe after corrosion scale/tuberculation was removed



Photo C-71. Corrosion scale/tuberculation on pipe



Photo C-72. Mainline sits only inches from dock pilings



Photo C-73. 2-foot long repair clamp; appears to be a stainless steel clamp with coated bolts

Appendix D

Pipe Coupon Laboratory Report (Phase 2B)



Report No. 5005.6481

DRAFT

January 11, 2019

METALLURGICAL EVALUATION OF TWO 8-INCH DIAMETER PIPE SECTIONS AND ONE 3-INCH DIAMETER COUPON

Customer Authorization: PO#

Report To: V&A Consulting Engineers
ATTN: Noy Phannavong
1000 Broadway, Suite 230
Oakland, CA 94607

1.0 INTRODUCTION

Two sections of 8-inch diameter pipes and one 3-inch diameter coupon were submitted by V&A Consulting Engineers for metallurgical evaluation. The pipes were identified as Manhole 4 and Manhole 5. The Manhole 5 pipe had a bell housing attached at one end. The client reported that the samples were believed to be made from ductile iron.

The samples were evaluated by the following laboratory procedures:

- 1) Visual Examination and Thickness Measurements
- 2) Hardness Testing
- 3) Chemical Analysis
- 4) Microstructural and Corrosion Examination
- 5) Mechanical Testing

2.0 EVALUATION

2.1 Visual Examination and Thickness Measurements

Photographs of the pipe sections and 3-inch diameter coupon as-received are shown in Figure 1 and Figure 2. The two pipe sections were longitudinally sectioned to expose the inside surfaces, shown in Figure 3 and Figure 5. Examples of corrosion observed on the cut surfaces of Manhole 4 are shown in Figure 4. The cement mortar lining on the inside surface of Manhole 5 and the 3-inch diameter coupon was removed, shown in Figure 6 and Figure 7. Wall thickness measurements were made around the circumference of both pipe sections as well as at multiple locations on the 3-inch diameter coupon with point micrometers. The results are shown in Table 1 and Table 2. These thickness measurements may not in all cases represent the thickness of the uncorroded pipe material because some of the corrosion products were adherent and were not totally removed when these thickness measurements were made. Better measures of extreme cases of the uncorroded remaining wall are in Table 6 wherein measurements were made on metallographic sections.

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2.2 Hardness Testing

Brinell hardness testing was performed on specimens sectioned from Manhole 4, Manhole 5 on the spigot and bell sides as well as from the 3-inch diameter coupon. The results are shown in Table 3.

2.3 Chemical Analysis

A quantitative chemical analysis was performed by spark optical emission spectroscopy (OES) and LECO carbon/sulfur combustion on one specimen each from Manhole 4, the spigot and bell side of Manhole 5 and the 3-inch diameter coupon. The results of the analysis are shown in Table 4. Except for a higher silicon content for the 3-inch coupon, the results were similar.

2.4 Microstructural and Corrosion Examination

Metallography was performed on specimens sectioned from Manhole 4, the spigot and bell side of Manhole 5 as well as from the 3-inch diameter coupon. Representative micrographs are shown in Figure 8 through Figure 10. The microstructures, consisting of graphite flakes, ferrite and pearlite were consistent with spun-cast grey cast iron.

The inside and outside surfaces of the pipe sections were examined for corrosion pitting. Optical micrographs of the corrosion with depth measurements are shown in Figure 11 through Figure 14. Corrosion depth measurements are in Table 5.

Major portions of the inside and outside surfaces of all samples showed overall general corrosion with a few isolated pits. The lowest remaining approximate wall thicknesses in the metallographic sections are in Table 6.

2.5 Mechanical Testing

Tensile testing was performed on one specimen each from Manhole 4, Manhole 5 – Spigot and Manhole 5 – Bell. The results are shown in Table 7.

Charpy V-notch impact testing was performed on three specimens each from Manhole 4, Manhole 5 – Spigot and Manhole 5 – Bell and two specimens from the 3-inch diameter coupon, per AWWA C151. The results are shown in Table 8.



Tensile and impact specimens were prepared and tested per AWWA C151, as it was originally reported to Anamet that the pipes and coupon were made from ductile iron. However, as the microstructures and chemical analysis showed, the pipes and the coupon were made from grey cast iron and this specification is not applicable for comparing requirements to these specimens.

Two Talbot strip test specimens each were machined from Manhole 4 and Manhole 5 per American National Standard for Cast-Iron Pipe Centrifugally Cast in Metal Molds, for Water or Other Liquids, ANSI A21.6-1975 (AWWA C106-75). The results of the tests are in Table 9. Each specimen met the requirements for the secant modulus of elasticity. The specimens from Manhole 4 met the requirements for the modulus of rupture, but the values for specimens from Manhole 5 were below the minimum.

Prepared by:

Reviewed by:

James Bellino
Materials Engineer

M. Dilip Bhandarkar, D.Eng., P.E.,
Senior Materials Engineer/Testing Manager



Table 1
Wall Thickness Measurements on Manhole 4 and 5
Measurements Made with Point Micrometers

Manhole 4 (inches)	Manhole 5 - Spigot (inches)	Manhole 5 - Bell (inches)
0.370	0.396	0.375
0.372	0.397	0.373
0.370	0.395	0.374
0.372	0.396	0.375
0.372	0.398	0.372
0.368	0.394	0.376
0.367	0.394	0.368
0.376	0.389	0.370
0.369	0.385	0.366
0.376	0.390	0.370
0.362	0.393	0.360
0.365	0.394	0.365
Average	0.370	0.393
		0.370

Table 2
Wall Thickness Measurements on 3-Inch Diameter Coupon
Measurements Made with Point Micrometers

3-Inch Diameter Coupon (inches)
0.420
0.416
0.416
0.409
0.413
0.412
0.415
0.417
0.414
Average
0.415

Table 3
Results of Brinell 10/3000 Hardness

Manhole 4 (HBW)	Manhole 5 – Spigot (HBW)	Manhole 5 – Bell (HBW)	3-Inch Diameter Coupon (HBW)
184	131	150	176



Table 4
Results of Quantitative Chemical Analysis of
Specimens from Manhole 4, Manhole 5 and 3-Inch Diameter Coupon

Element	Manhole 4 (wt%)	Manhole 5- Spigot (wt%)	Manhole 5 – Bell (wt%)	3-inch Coupon (wt%)
Aluminum (Al)	≤ 0.005	< 0.01	< 0.01	≤ 0.01
Carbon ¹ (C)	3.67	3.90	3.67	3.49
Chromium (Cr)	0.16	0.11	0.10	0.16
Copper (Cu)	0.28	0.25	0.33	0.33
Manganese (Mn)	0.52	0.52	0.45	0.48
Molybdenum (Mo)	0.02	0.02	0.02	0.03
Nickel (Ni)	0.10	0.09	0.11	0.11
Phosphorus (P)	0.11	0.093	0.091	0.094
Silicon (Si)	1.91	1.64	1.84	2.76
Sulfur ¹ (S)	0.071	0.064	0.074	0.082
Titanium (Ti)	0.02	0.02	0.02	0.02
Vanadium (V)	0.01	0.01	0.01	0.01

¹Determined by LECO carbon/sulfur combustion
All other elements determined by spark optical emission spectroscopy (OES)

Table 5
Corrosion Depth Measurements in Metallography Specimens
Measurements Made Using Leica Software

Specimen ID	Corrosion Depth (mils)
Manhole 4 ID	62.9
	118.1
Manhole 4 OD	11.8
	15.7
Manhole 5 - Spigot ID	15.7
	19.7
Manhole 5 - Spigot OD	11.8
Manhole 5 - Bell ID	51.2
	31.5
	27.6
Manhole 5 - Bell OD	3.9
	7.9
3-inch diameter coupon - ID	11.8
	19.7
3-inch diameter coupon - OD	11.8
	15.7



Table 6
Remaining Wall Thickness Measurements in Metallography Specimens
Measurements Made Using Leica Software

Specimen ID	Remaining Wall Thickness (inch)
Manhole 4	0.252
Manhole 5 - Spigot	0.373
Manhole 5 - Bell	0.319
3-inch Diameter Coupon	0.395

Table 7
Results of Tensile Testing

Mechanical Property		Manhole 4	Manhole 5 – Spigot	Manhole 5 – Bell
Tensile Strength	Ksi	34.8	24.1	29.9

Table 8
Results of Charpy V-Notch Impact Testing

Specimen Dimensions: Wall Thickness x 0.500-inch (12.7mm) x 2.165-inch (55mm)
Notch Depth: 0.079-inch (2.01mm)

Specimen I.D.	Energy Absorbed (ft-lbs)
Manhole 5 - Spigot	2
	2
	2
Manhole 5 - Bell	2
	2
	2
Manhole 4	2
	2
	2
3-Inch Coupon	2
	2

Table 9
Results of Talbot Strip Testing

Specimen ID	Manhole 4 -1	Manhole 4 -2	Manhole 5 -1	Manhole 5-2	Requirements for ANSI A21.6-1975
Support Span (in)	10	10	10	10	
Loading Span (in)	3.333	3.333	3.333	3.333	
Maximum Deflection (in)	0.431	0.407	0.267	0.262	
Maximum Load (lbs)	446	393	412	295	
Indicated Modulus of Rupture (psi)	40,300	41,600	<u>39,800</u>	<u>29,800</u>	>40,000 psi
Secant Modulus of Elasticity (psi)	3,640,000	4,390,000	6,190,000	4,850,000	<12,000,000 psi



Figure 1 Photographs of pipe samples Manhole 4 and Manhole 5 as-received.



(a) Outside surface

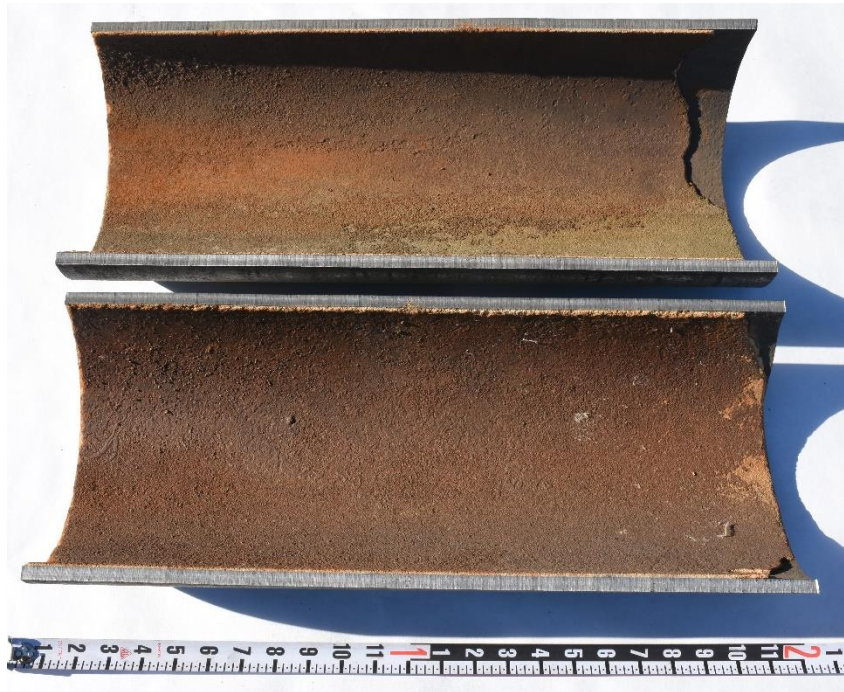


(b) Inside surface

Figure 2 Photographs of the 3-inch diameter coupon as-received.

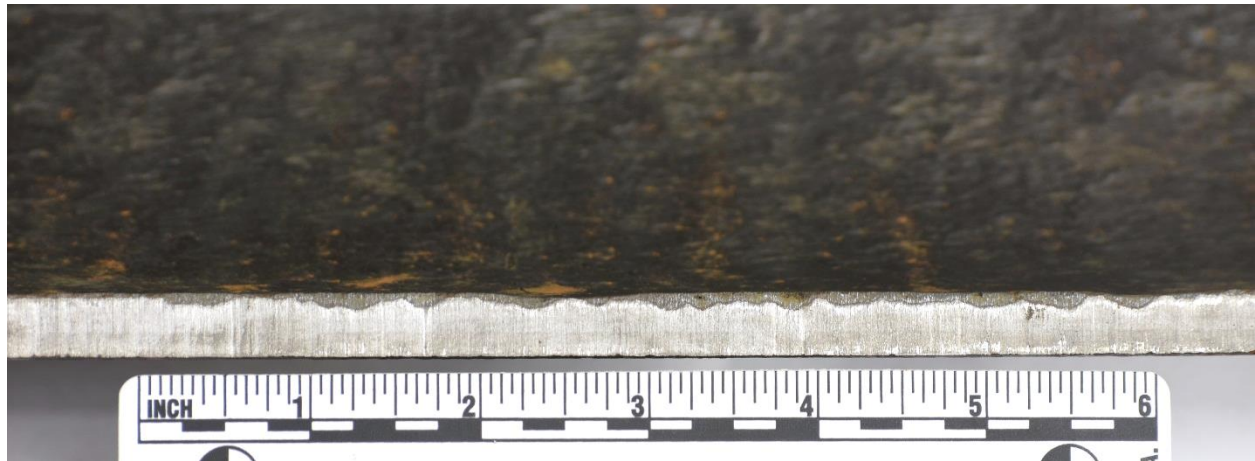


(a) Manhole 4

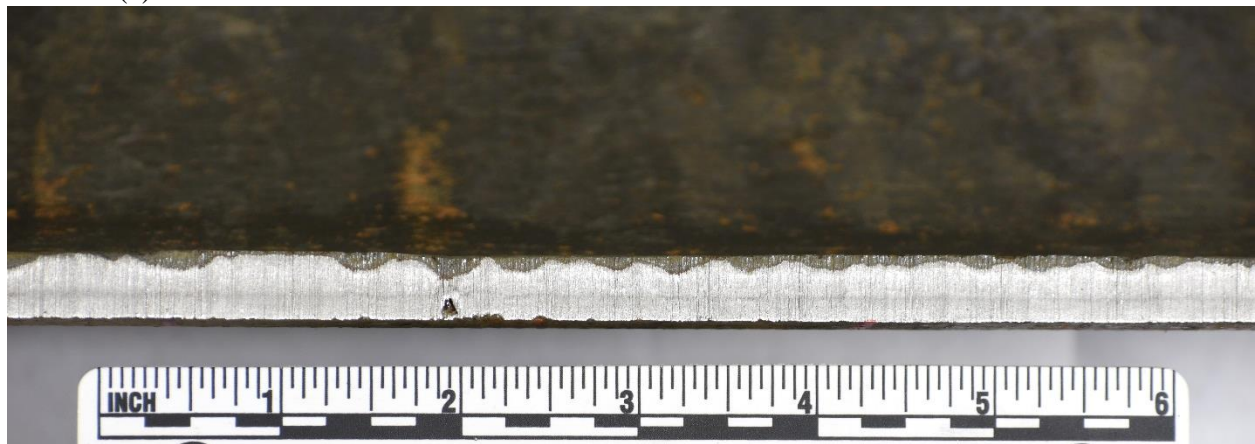


(b) Manhole 5

Figure 3 Photographs of the inside surfaces of pipe sections Manhole 4 and Manhole 5 after longitudinal sectioning.



(a)



(b)

Figure 4 Photographs of the cut surfaces of Manhole 4 showing examples of corrosion from the inside surface (gray regions).

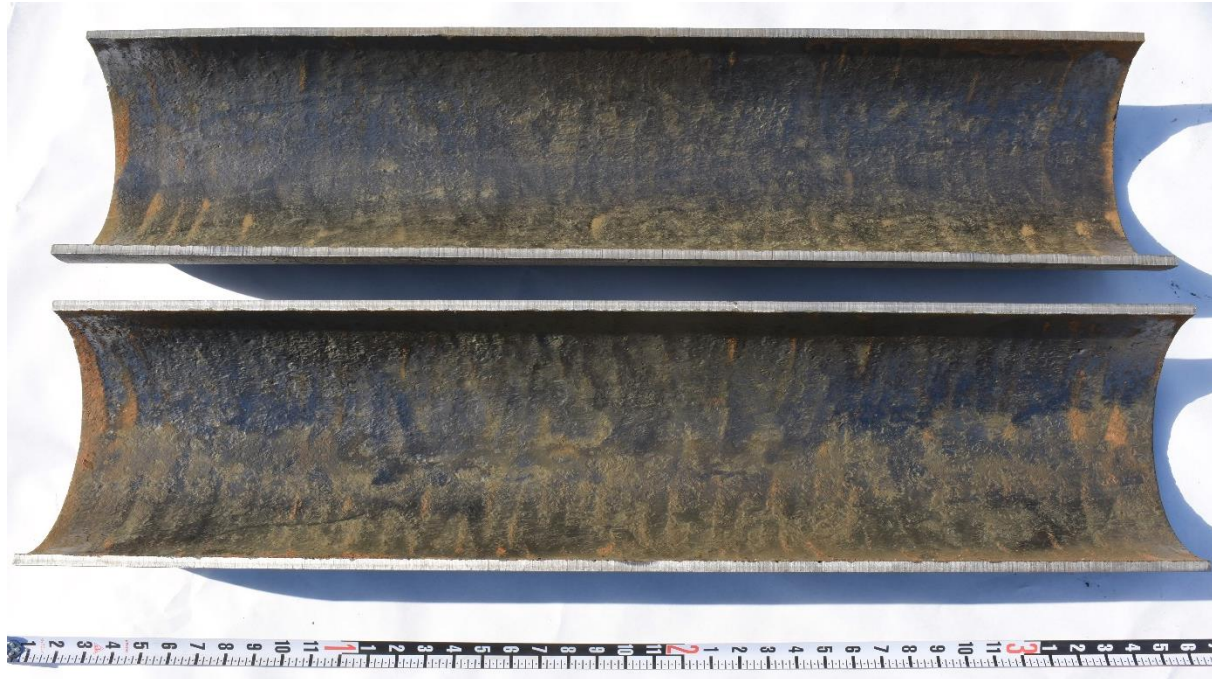


(a)

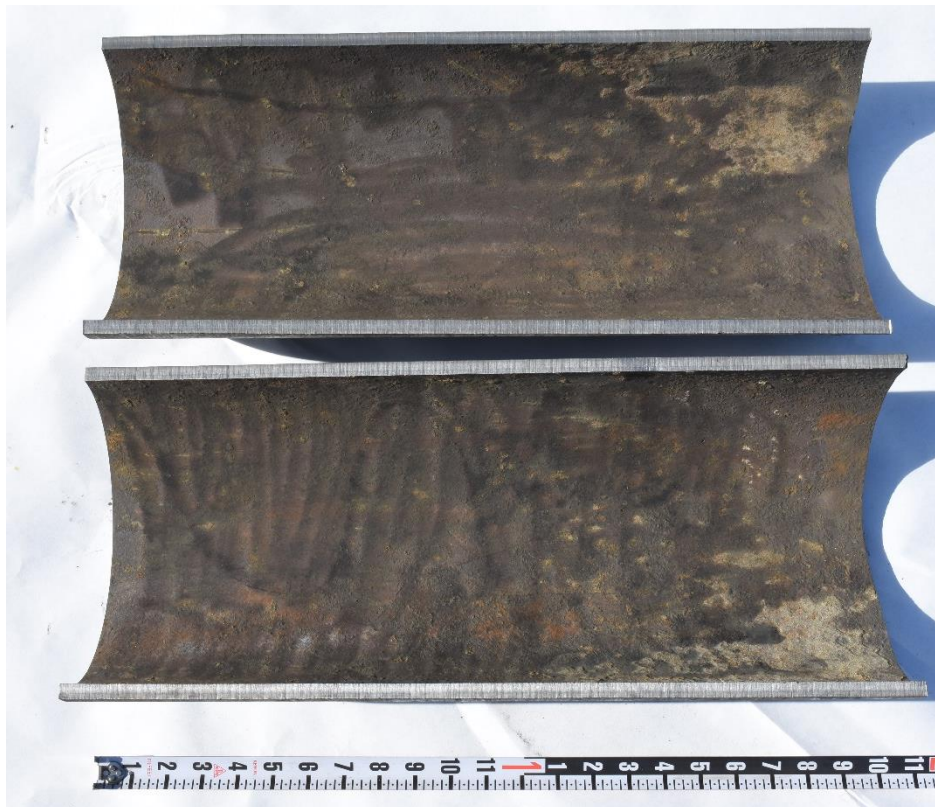


(b)

Figure 5 Photographs of the inside surfaces of the bell side of Manhole 5 after longitudinal sectioning.



(a) Manhole 4



(b) Manhole 5

Figure 6 Photographs of the inside surfaces of pipe sections Manhole 4 and Manhole 5 after wire wheel brushing.

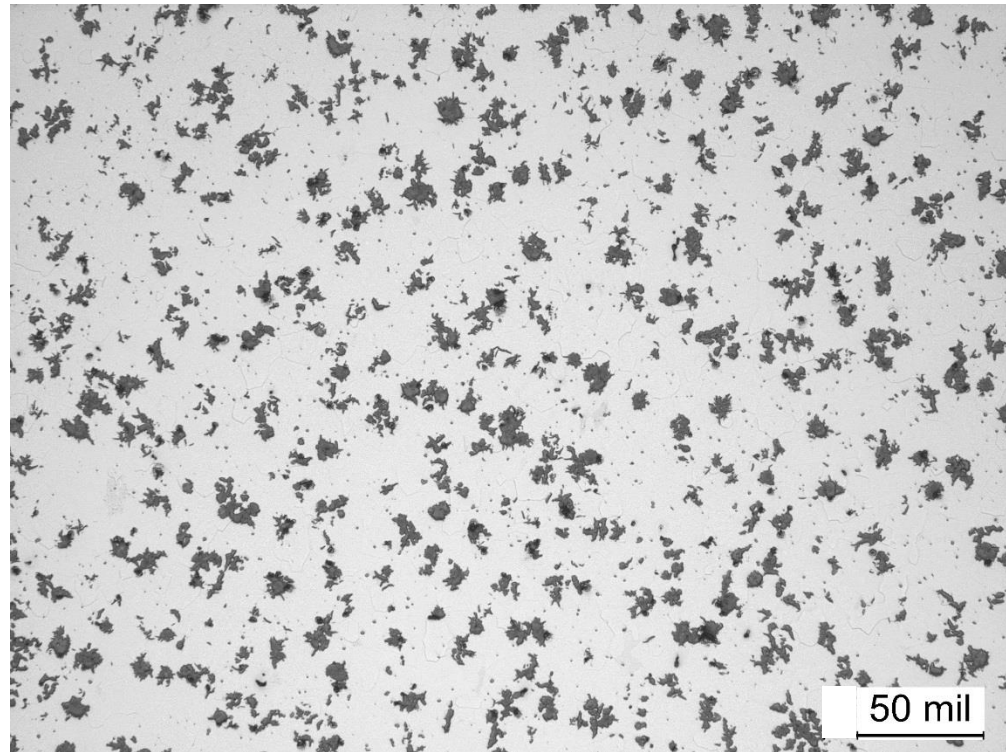


(a)



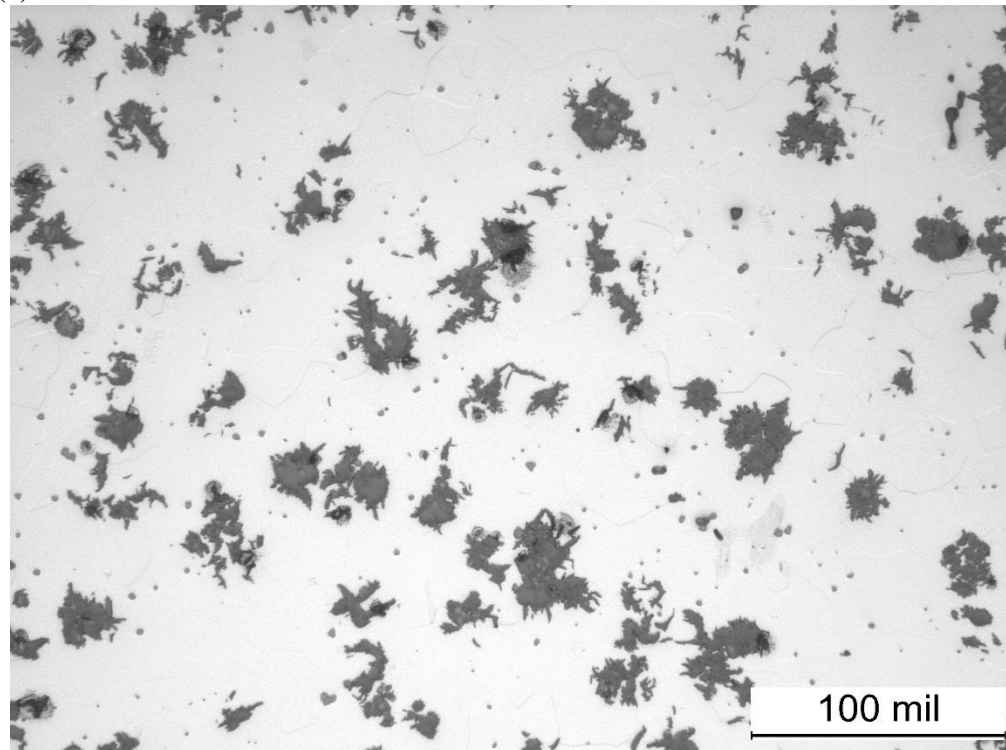
(b)

Figure 7 Photographs of the bell side of Manhole 5 after wire wheel brushing.



(a)

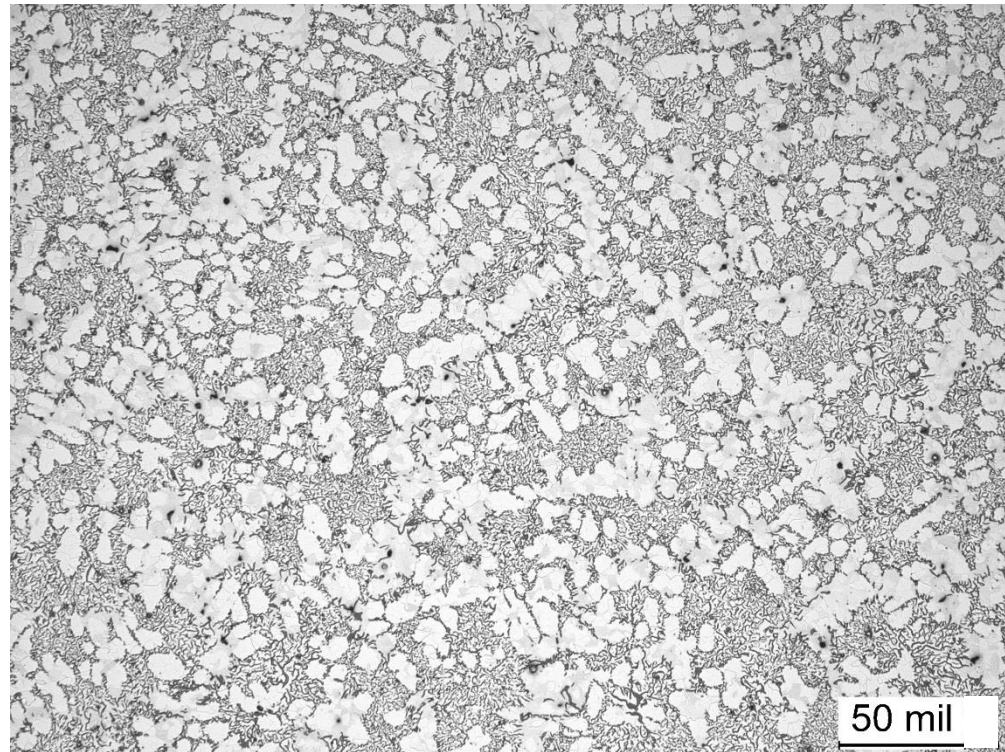
100X



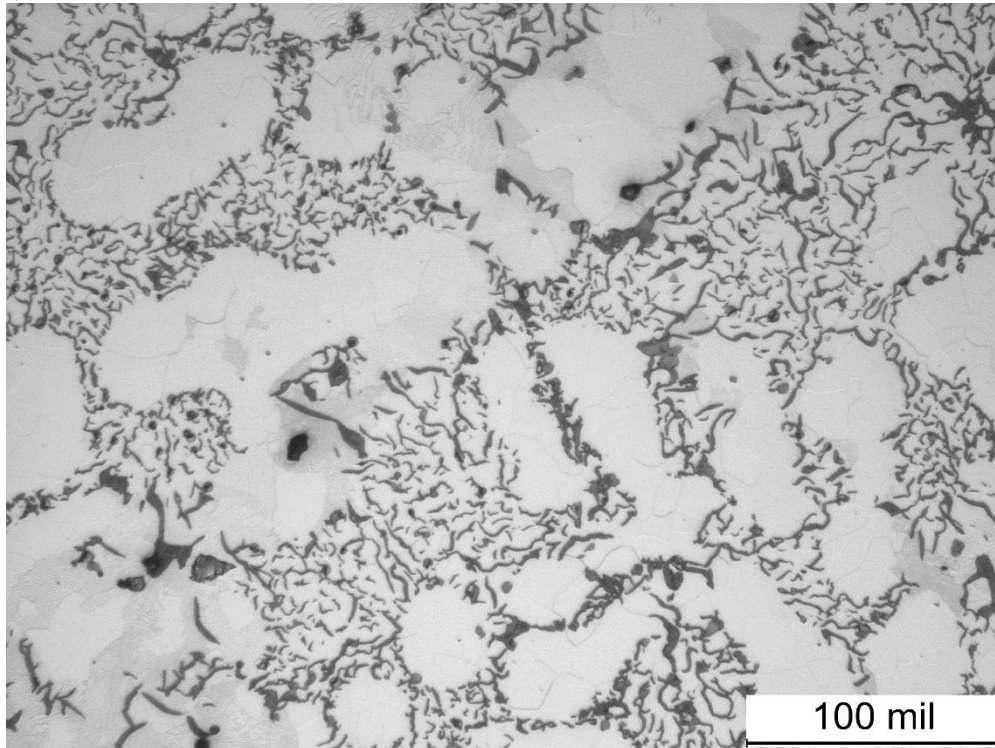
(b)

500X

Figure 8 Representative optical micrographs of specimen from Manhole 4 near the outside surface. Similar microstructures were observed in all other specimens.

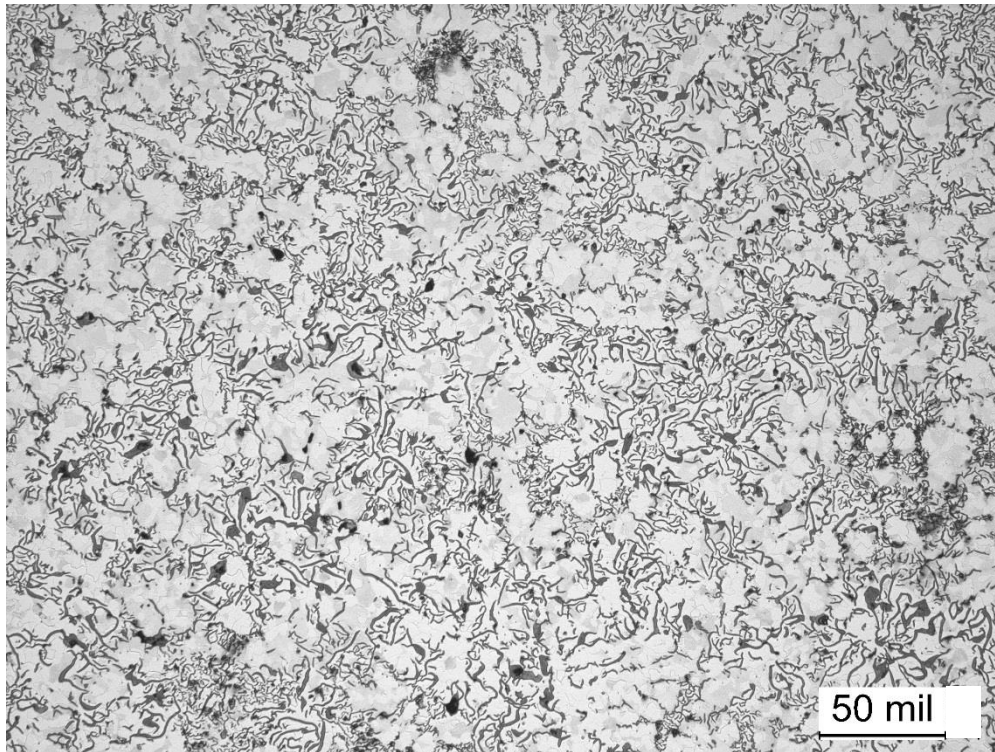


(a) 100X



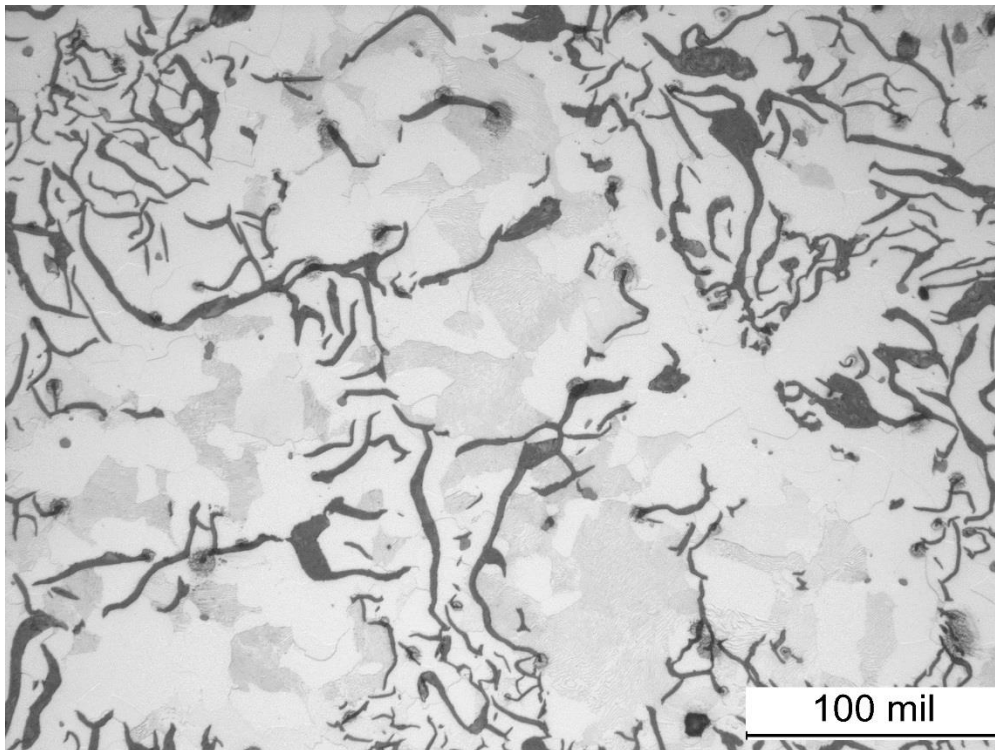
(b) 500X

Figure 9 Representative optical micrographs of specimen from Manhole 4 in the in the central region of the cross section. Similar microstructures were observed in all other specimens.



(a)

100X



(b)

500X

Figure 10 Representative optical micrographs of specimen from Manhole 4 near the inside surface. Similar microstructures were observed in all other specimens.

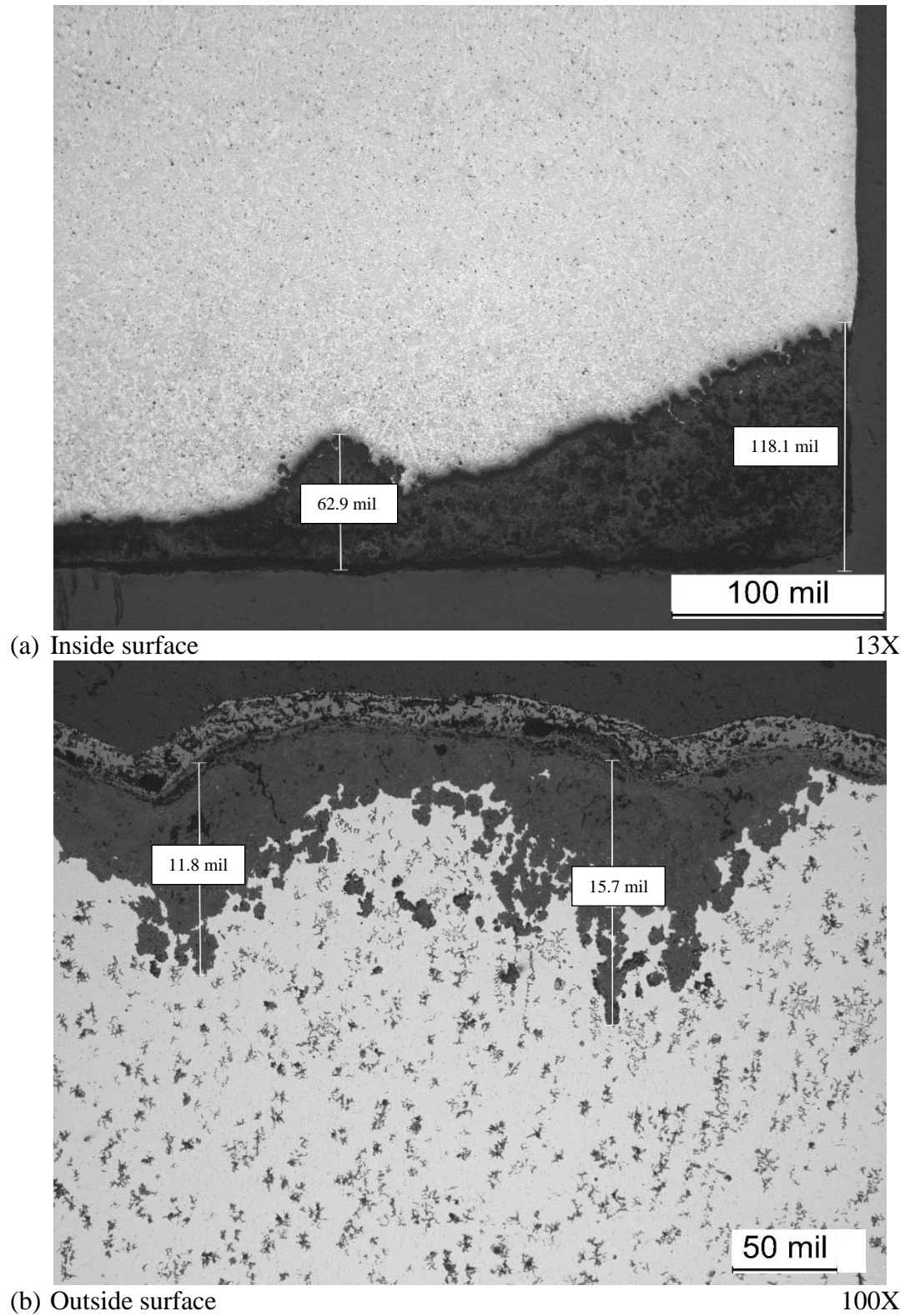


Figure 11 Optical micrographs of corrosion on the (a) inside and (b) outside surfaces of Manhole 4.

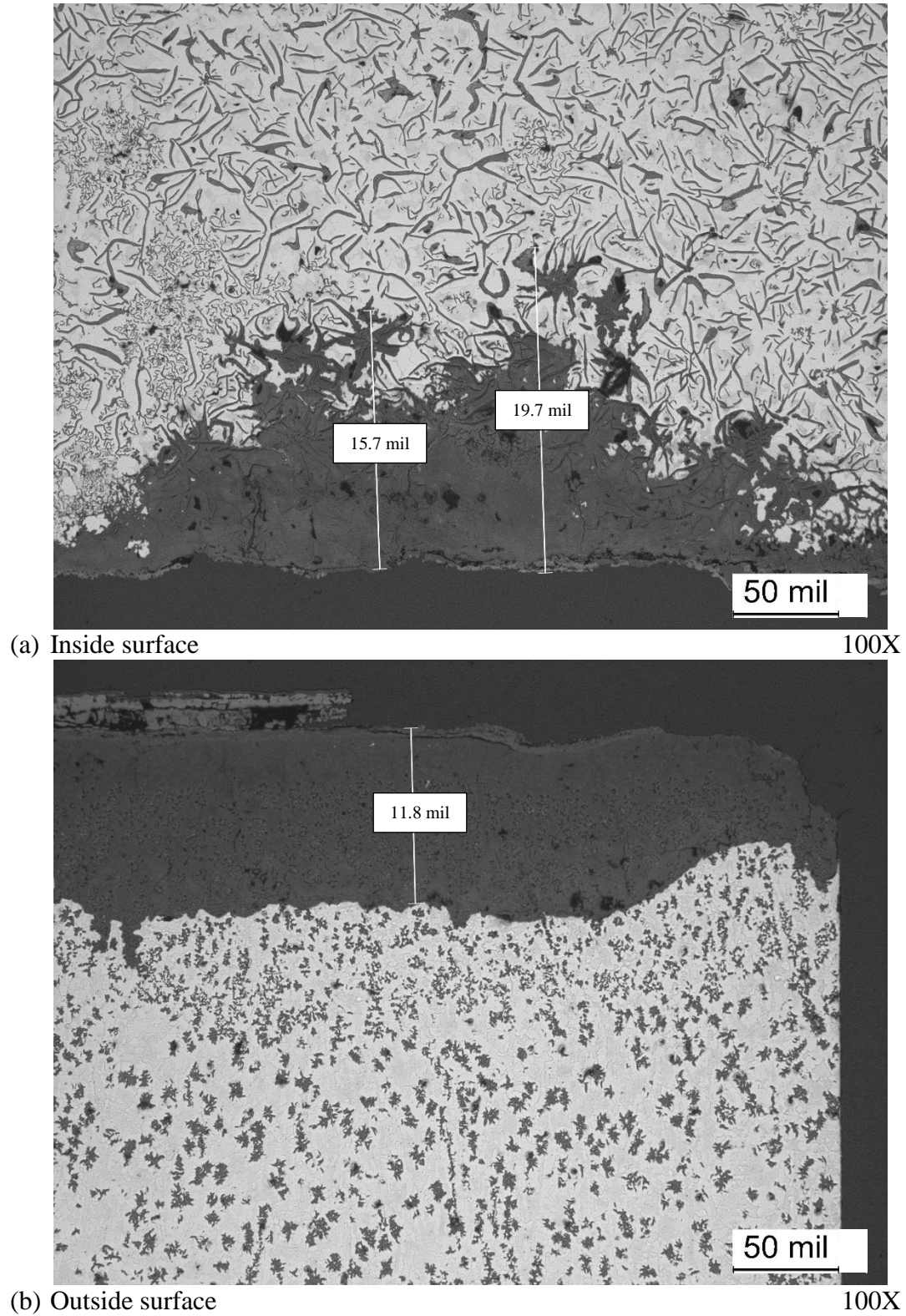


Figure 12 Optical micrographs of corrosion on the (a) inside and (b) outside surfaces of Manhole 5 – Spigot.

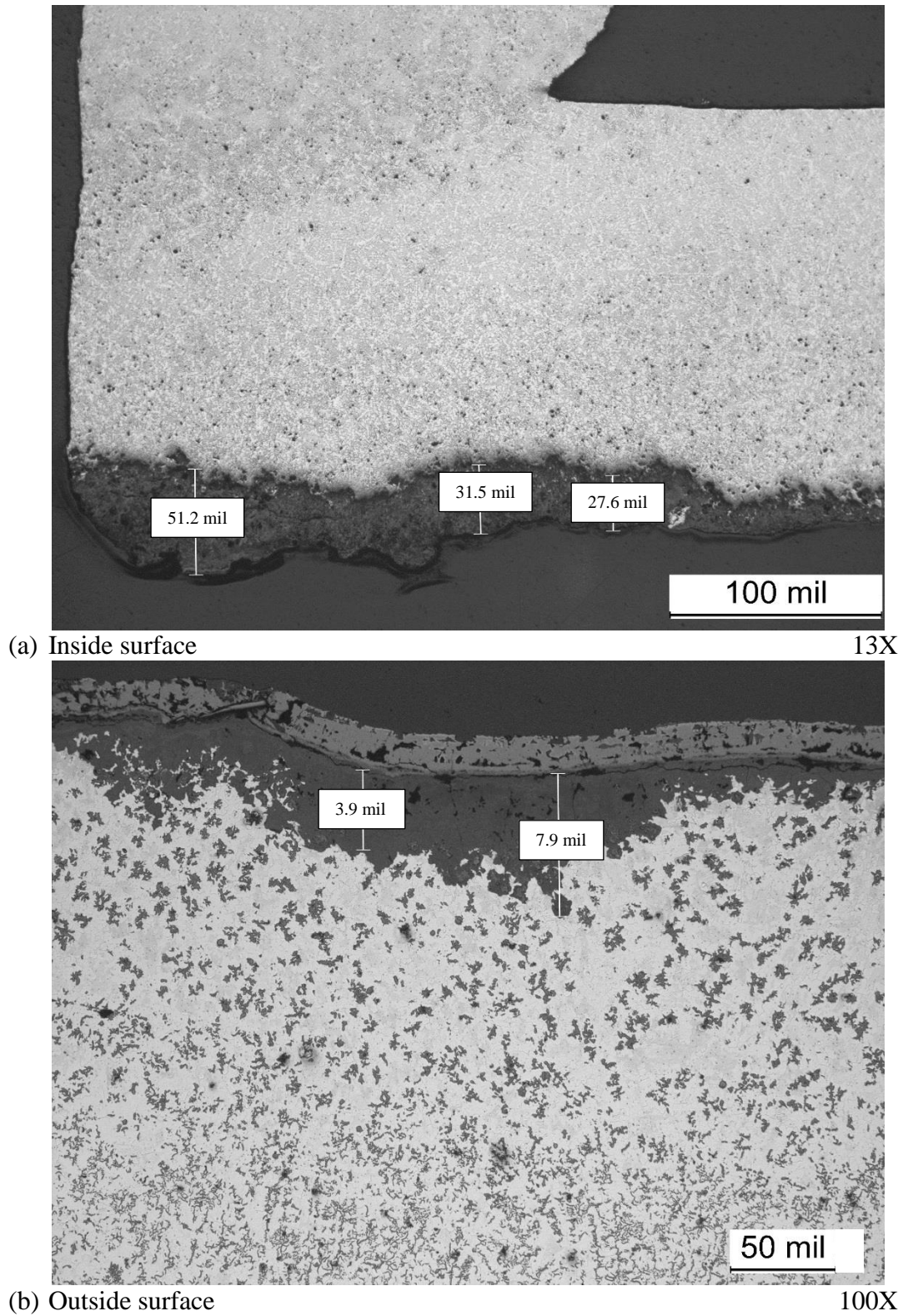


Figure 13 Optical micrographs of corrosion on the (a) inside and (b) outside surfaces of Manhole 5 – Bell.

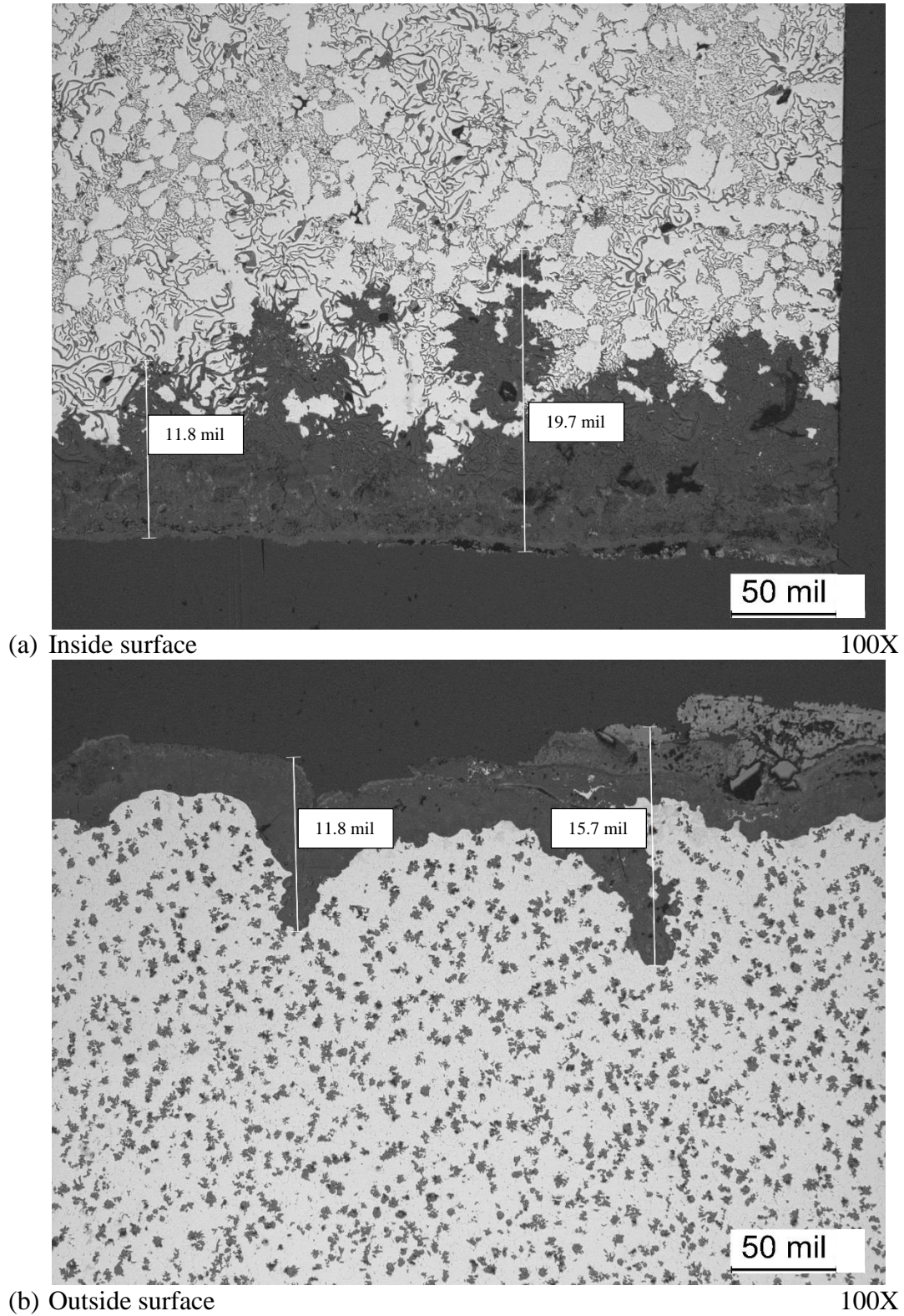


Figure 14 Optical micrographs of corrosion on the (a) inside and (b) outside surfaces of the 3-inch diameter coupon.

Appendix E

Joint Pull-Apart Laboratory

Report

December 12, 2018

VL Project No. 18043

Mr. Noy Phannavong
V&A Consulting Engineers
1000 Broadway, Suite 320
Oakland, CA 94607

RE: Ductile Iron Pipe Section from Renton, Washington

Dear Mr. Phannavong:

As requested, Voss Laboratories, Inc. has completed our laboratory testing attempt to pull the section of pipeline apart. This report includes our test methodology and testing results.

Test Methodology

An eighteen-inch-long section of 8 inch diameter ductile iron pipe containing a bell and spigot joint in the middle of the pipe section was submitted for testing (see photo #1 for general view). The intent of the testing was to separate the pipe pieces to allow inspection of the original joint gasket and to document the maximum load to separate the pipe sections.

Three quarters of an inch diameter holes were drilled diametrically opposite each other at the top and bottom of the pipe specimen. Shackles were bolted to the specimen and the complete assembly was installed in a 120 kip Universal Testing Machine (UTM) as shown in photo #1. The assembly was loaded at a rate of 0.25 inch per minute.

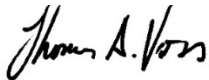
Test Results

The assembly was loaded in tension to a maximum load of 8,750 lbs where the lower pipe section failed at one of the bolt holes as shown in photo #2. The pipe section had pulled apart approximately 0.5 inches at the time of the failure.

If you have any questions, please call.

Very truly yours,

VOSS LABORATORIES, INC.

A handwritten signature in black ink that reads "Thomas A. Voss".

Thomas A. Voss
Civil Engineer



VOSS LABORATORIES, INC.

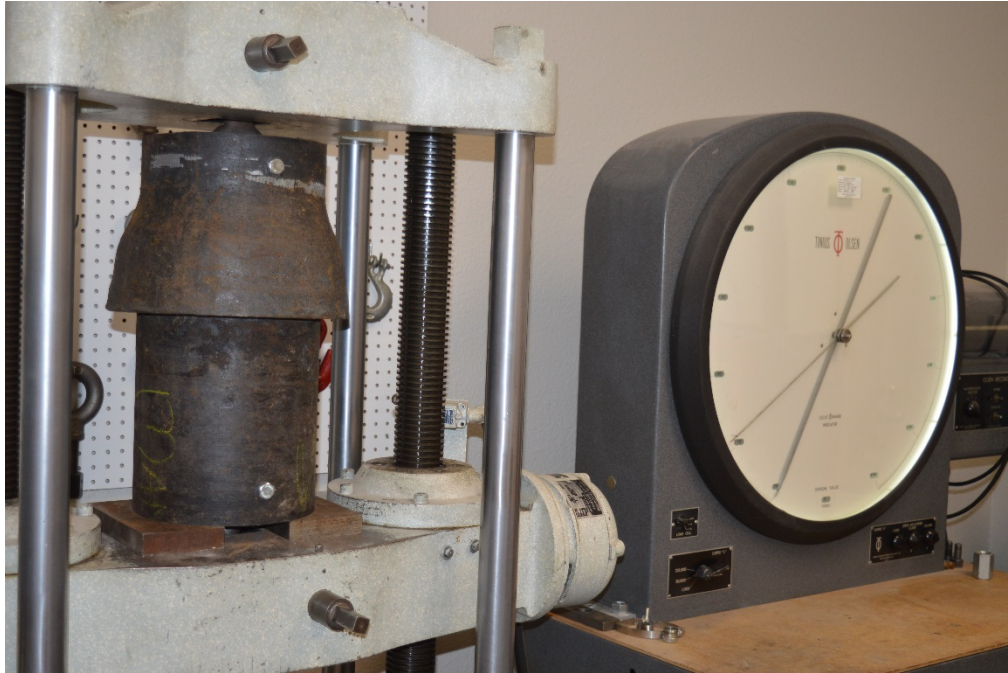


Photo #1 – General view of pipe specimen in UTM



Photo #2 – Failure of pipe at connection bolt hole at 8,750 lbs.



Report No. 5005.6481

January 16, 2019

METALLURGICAL EVALUATION OF TWO 8-INCH DIAMETER PIPE SECTIONS AND ONE 3-INCH DIAMETER COUPON

Customer Authorization: PO# 16-0109 Phase 2B

Report To: V&A Consulting Engineers
ATTN: Noy Phannavong
1000 Broadway, Suite 230
Oakland, CA 94607

1.0 INTRODUCTION

Two sections of 8-inch diameter pipes and one 3-inch diameter coupon were submitted by V&A Consulting Engineers for metallurgical evaluation. The pipes were identified as Manhole 4 and Manhole 5. The Manhole 5 pipe had a bell housing attached at one end. The client reported that the samples were believed to be made from ductile iron.

The samples were evaluated by the following laboratory procedures:

- 1) Visual Examination and Thickness Measurements
- 2) Hardness Testing
- 3) Chemical Analysis
- 4) Microstructural and Corrosion Examination
- 5) Mechanical Testing

2.0 EVALUATION

2.1 Visual Examination and Thickness Measurements

Photographs of the pipe sections and 3-inch diameter coupon as-received are shown in Figure 1 and Figure 2. The two pipe sections were longitudinally sectioned to expose the inside surfaces, shown in Figure 3 and Figure 5. Examples of corrosion observed on the cut surfaces of Manhole 4 are shown in Figure 4. The cement mortar lining on the inside surface of Manhole 5 and the 3-inch diameter coupon was removed, shown in Figure 6 and Figure 7. Wall thickness measurements were made around the circumference of both pipe sections as well as at multiple locations on the 3-inch diameter coupon with point micrometers. The results are shown in Table 1 and Table 2. These thickness measurements may not in all cases represent the thickness of the uncorroded pipe material because some of the corrosion products were adherent and were not totally removed when these thickness measurements were made. Better measures of extreme cases of the uncorroded remaining wall are in Table 6 wherein measurements were made on metallographic sections.

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2.2 Hardness Testing

Brinell hardness testing was performed on specimens sectioned from Manhole 4, Manhole 5 on the spigot and bell sides as well as from the 3-inch diameter coupon. The results are shown in Table 3.

2.3 Chemical Analysis

A quantitative chemical analysis was performed by spark optical emission spectroscopy (OES) and LECO carbon/sulfur combustion on one specimen each from Manhole 4, the spigot and bell side of Manhole 5 and the 3-inch diameter coupon. The results of the analysis are shown in Table 4. Except for a higher silicon content for the 3-inch coupon, the results were similar.

2.4 Microstructural and Corrosion Examination

Metallography was performed on specimens sectioned from Manhole 4, the spigot and bell side of Manhole 5 as well as from the 3-inch diameter coupon. Representative micrographs are shown in Figure 8 through Figure 10. The microstructures, consisting of graphite flakes, ferrite and pearlite were consistent with spun-cast grey cast iron.

The inside and outside surfaces of the pipe sections were examined for corrosion pitting. Optical micrographs of the corrosion with depth measurements are shown in Figure 11 through Figure 14. Corrosion depth measurements are in Table 5.

Major portions of the inside and outside surfaces of all samples showed overall general corrosion with a few isolated pits. The lowest remaining approximate wall thicknesses in the metallographic sections are in Table 6.

2.5 Mechanical Testing

Tensile testing was performed on one specimen each from Manhole 4, Manhole 5 – Spigot and Manhole 5 – Bell. The results are shown in Table 7.

Charpy V-notch impact testing was performed on three specimens each from Manhole 4, Manhole 5 – Spigot and Manhole 5 – Bell and two specimens from the 3-inch diameter coupon, per AWWA C151. The results are shown in Table 8.



Tensile and impact specimens were prepared and tested per AWWA C151, as it was originally reported to Anamet that the pipes and coupon were made from ductile iron. However, as the microstructures and chemical analysis showed, the pipes and the coupon were made from grey cast iron and this specification is not applicable for comparing requirements to these specimens.

Two Talbot strip test specimens each were machined from Manhole 4 and Manhole 5 per American National Standard for Cast-Iron Pipe Centrifugally Cast in Metal Molds, for Water or Other Liquids, ANSI A21.6-1975 (AWWA C106-75). The results of the tests are in Table 9. Each specimen met the requirements for the secant modulus of elasticity. The specimens from Manhole 4 met the requirements for the modulus of rupture, but the values for specimens from Manhole 5 were below the minimum.

Prepared by:

A handwritten signature in cursive script, appearing to read 'James Bellino'.

James Bellino
Materials Engineer

Reviewed by:

A handwritten signature in cursive script, appearing to read 'M. Dilip Bhandarkar'.

M. Dilip Bhandarkar, D.Eng., P.E.,
Senior Materials Engineer/Testing Manager



Table 1
Wall Thickness Measurements on Manhole 4 and 5
Measurements Made with Point Micrometers

Manhole 4 (inches)	Manhole 5 - Spigot (inches)	Manhole 5 - Bell (inches)
0.370	0.396	0.375
0.372	0.397	0.373
0.370	0.395	0.374
0.372	0.396	0.375
0.372	0.398	0.372
0.368	0.394	0.376
0.367	0.394	0.368
0.376	0.389	0.370
0.369	0.385	0.366
0.376	0.390	0.370
0.362	0.393	0.360
0.365	0.394	0.365
Average	0.370	0.393
	0.370	0.370

Table 2
Wall Thickness Measurements on 3-Inch Diameter Coupon
Measurements Made with Point Micrometers

3-Inch Diameter Coupon (inches)
0.420
0.416
0.416
0.409
0.413
0.412
0.415
0.417
0.414
Average
0.415

Table 3
Results of Brinell 10/3000 Hardness

Manhole 4 (HBW)	Manhole 5 – Spigot (HBW)	Manhole 5 – Bell (HBW)	3-Inch Diameter Coupon (HBW)
184	131	150	176



Table 4
Results of Quantitative Chemical Analysis of
Specimens from Manhole 4, Manhole 5 and 3-Inch Diameter Coupon

Element	Manhole 4 (wt%)	Manhole 5- Spigot (wt%)	Manhole 5 – Bell (wt%)	3-inch Coupon (wt%)
Aluminum (Al)	≤ 0.005	< 0.01	< 0.01	≤ 0.01
Carbon ¹ (C)	3.67	3.90	3.67	3.49
Chromium (Cr)	0.16	0.11	0.10	0.16
Copper (Cu)	0.28	0.25	0.33	0.33
Manganese (Mn)	0.52	0.52	0.45	0.48
Molybdenum (Mo)	0.02	0.02	0.02	0.03
Nickel (Ni)	0.10	0.09	0.11	0.11
Phosphorus (P)	0.11	0.093	0.091	0.094
Silicon (Si)	1.91	1.64	1.84	2.76
Sulfur ¹ (S)	0.071	0.064	0.074	0.082
Titanium (Ti)	0.02	0.02	0.02	0.02
Vanadium (V)	0.01	0.01	0.01	0.01

¹Determined by LECO carbon/sulfur combustion

All other elements determined by spark optical emission spectroscopy (OES)

Table 5
Corrosion Depth Measurements in Metallography Specimens
Measurements Made Using Leica Software

Specimen ID	Corrosion Depth (mils)
Manhole 4 ID	61.9
	113.7
Manhole 4 OD	11.8
	15.7
Manhole 5 - Spigot ID	14.9
	18.7
Manhole 5 - Spigot OD	10.2
Manhole 5 - Bell ID	48.5
	31.5
	25.8
Manhole 5 - Bell OD	4.4
	8.0
3-inch diameter coupon - ID	10.2
	17.4
3-inch diameter coupon - OD	10.1
	13.9



Table 6
Remaining Wall Thickness Measurements in Metallography Specimens
Measurements Made Using Leica Software

Specimen ID	Remaining Wall Thickness (inch)
Manhole 4	0.256
Manhole 5 - Spigot	0.374
Manhole 5 - Bell	0.319
3-inch Diameter Coupon	0.398

Table 7
Results of Tensile Testing

Mechanical Property		Manhole 4	Manhole 5 – Spigot	Manhole 5 – Bell
Tensile Strength	Ksi	34.8	24.1	29.9

Table 8
Results of Charpy V-Notch Impact Testing

Specimen Dimensions: Wall Thickness x 0.500-inch (12.7mm) x 2.165-inch (55mm)
Notch Depth: 0.079-inch (2.01mm)

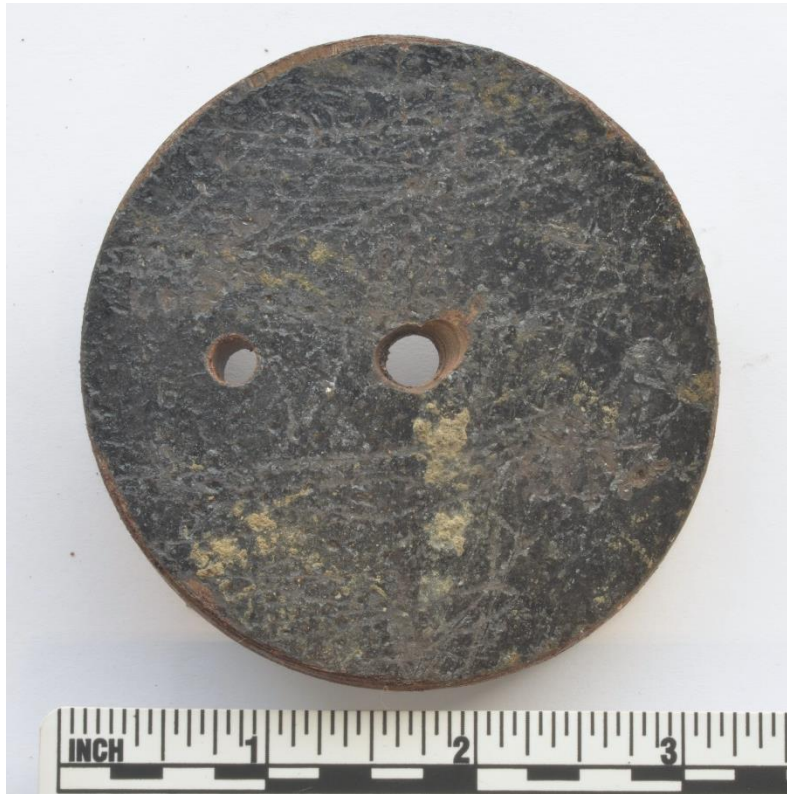
Specimen I.D.	Energy Absorbed (ft-lbs)
Manhole 4	2
	2
	2
Manhole 5 - Spigot	2
	2
	2
Manhole 5 - Bell	2
	2
	2
3-Inch Coupon	2
	2

Table 9
Results of Talbot Strip Testing

Specimen ID	Manhole 4 -1	Manhole 4 -2	Manhole 5 -1	Manhole 5-2	Requirements for ANSI A21.6-1975
Support Span (in)	10	10	10	10	
Loading Span (in)	3.333	3.333	3.333	3.333	
Maximum Deflection (in)	0.431	0.407	0.267	0.262	
Maximum Load (lbs)	446	393	412	295	
Indicated Modulus of Rupture (psi)	40,300	41,600	<u>39,800</u>	<u>29,800</u>	>40,000 psi
Secant Modulus of Elasticity (psi)	3,640,000	4,390,000	6,190,000	4,850,000	<12,000,000 psi



Figure 1 Photographs of pipe samples Manhole 4 and Manhole 5 as-received.



(a) Outside surface

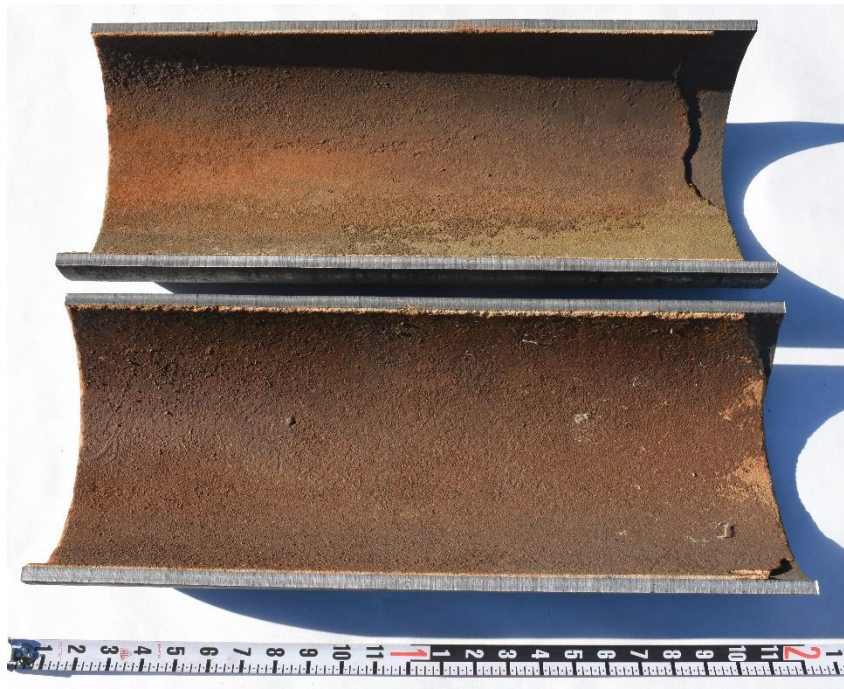


(b) Inside surface

Figure 2 Photographs of the 3-inch diameter coupon as-received.

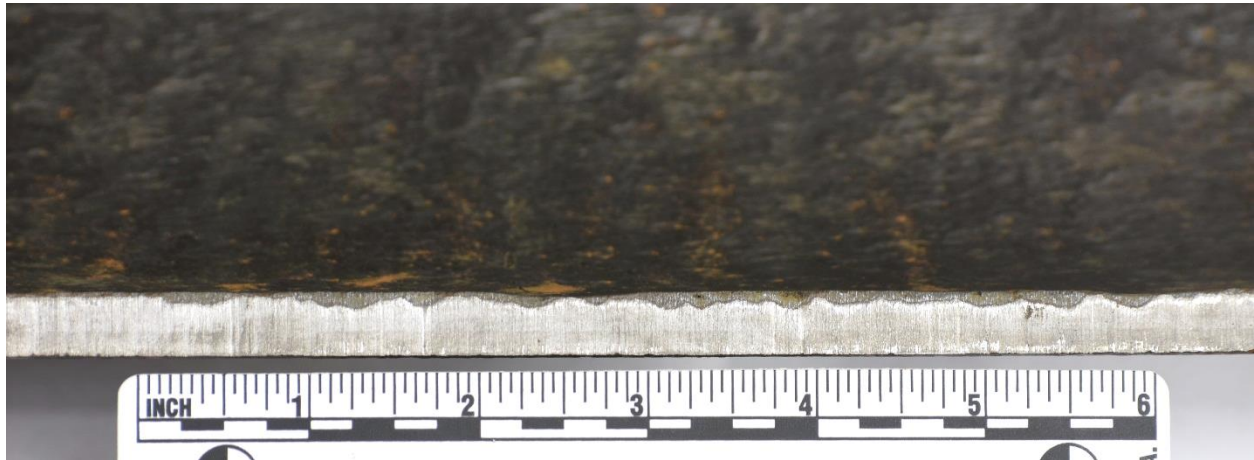


(a) Manhole 4

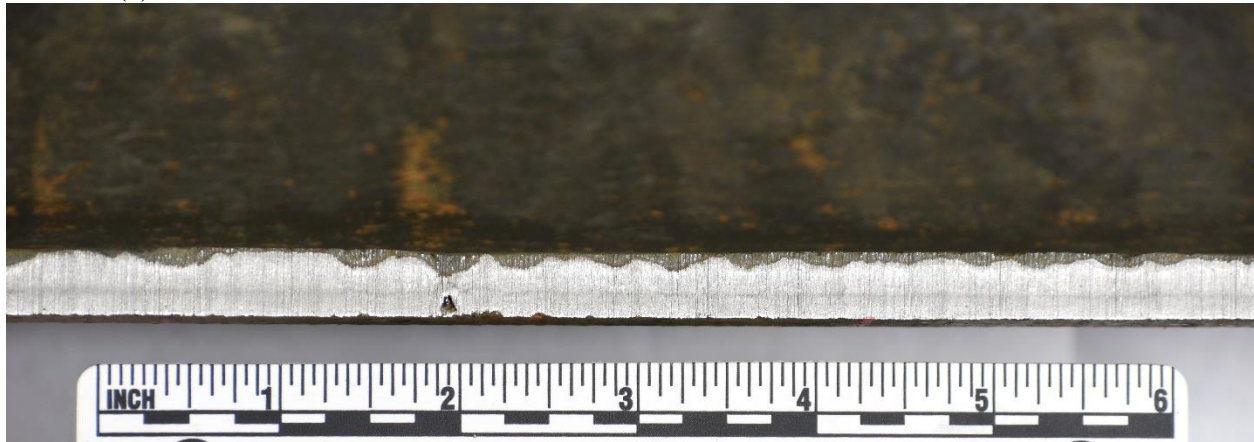


(b) Manhole 5

Figure 3 Photographs of the inside surfaces of pipe sections Manhole 4 and Manhole 5 after longitudinal sectioning.



(a)



(b)

Figure 4 Photographs of the cut surfaces of Manhole 4 showing examples of corrosion from the inside surface (gray regions).

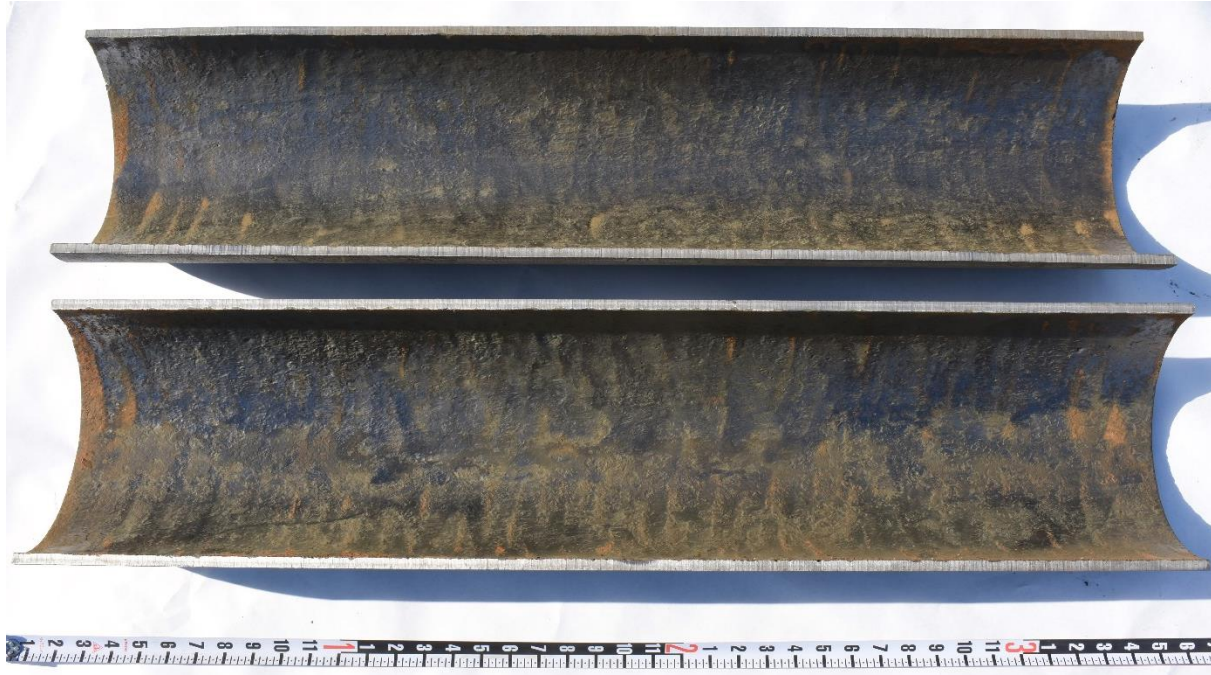


(a)



(b)

Figure 5 Photographs of the inside surfaces of the bell side of Manhole 5 after longitudinal sectioning.



(a) Manhole 4



(b) Manhole 5

Figure 6 Photographs of the inside surfaces of pipe sections Manhole 4 and Manhole 5 after wire wheel brushing.

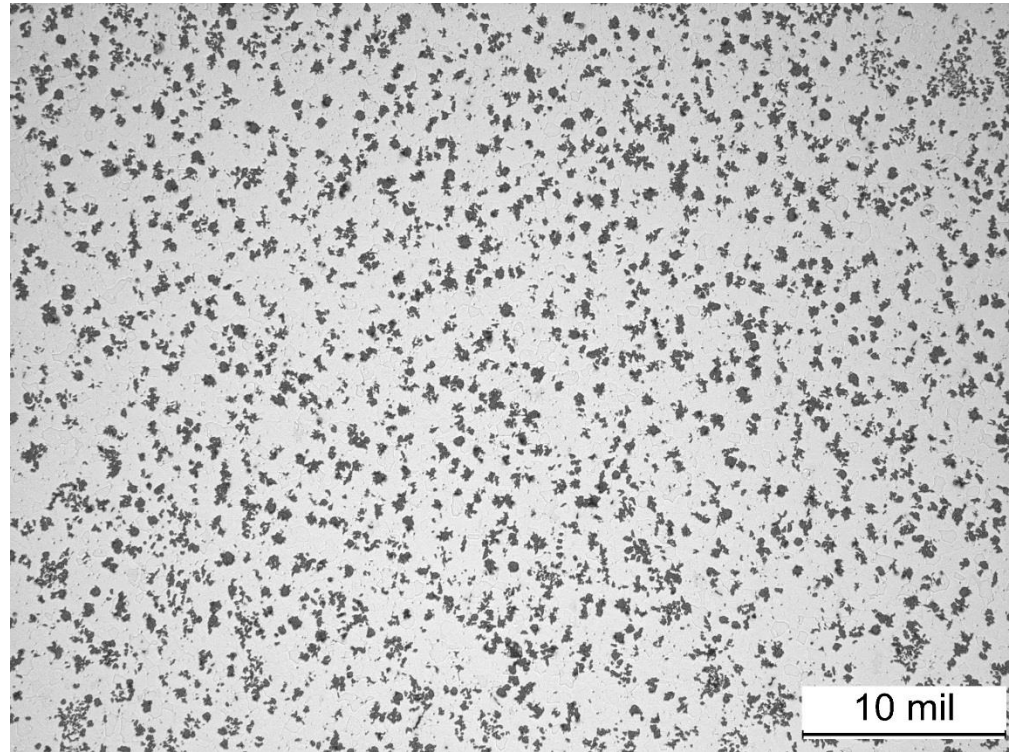


(a)



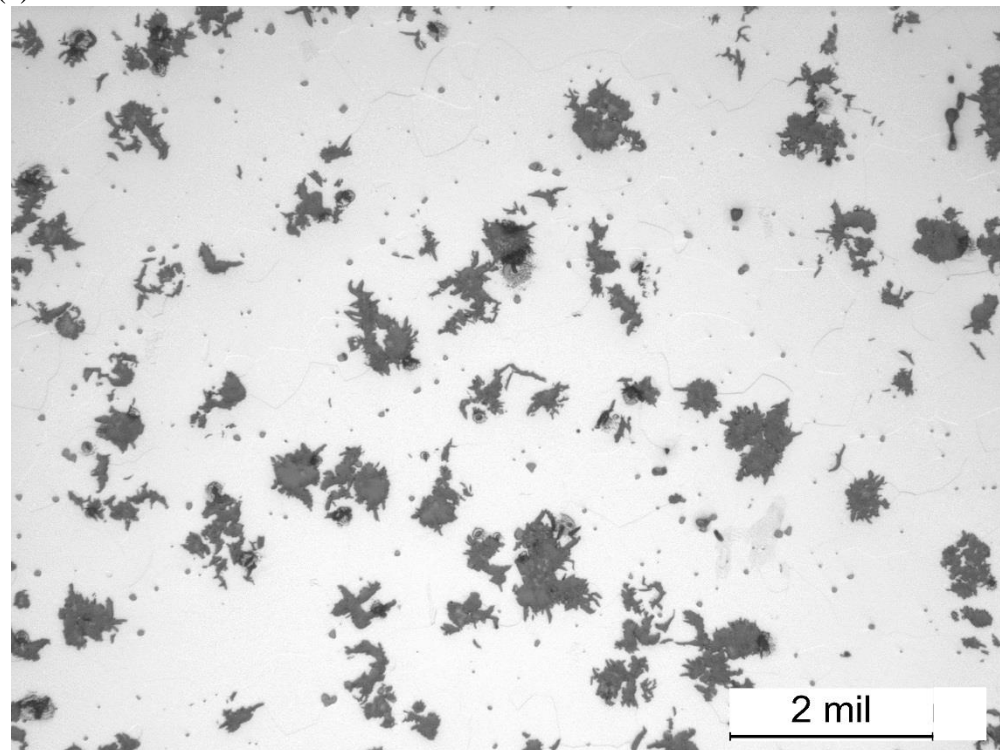
(b)

Figure 7 Photographs of the bell side of Manhole 5 after wire wheel brushing.



(a)

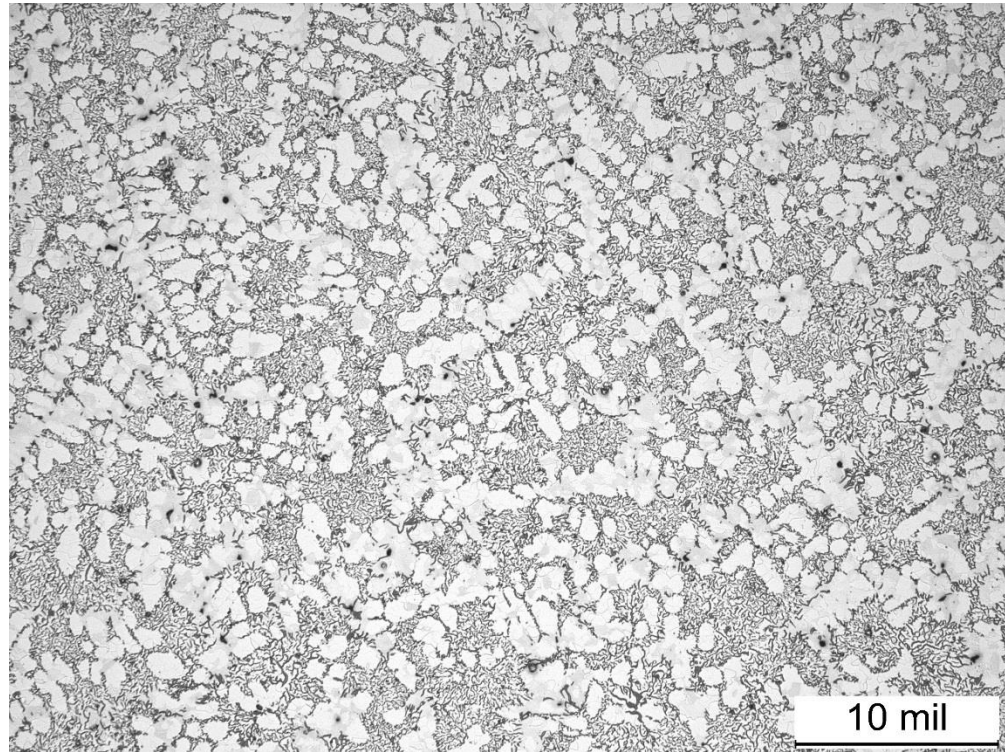
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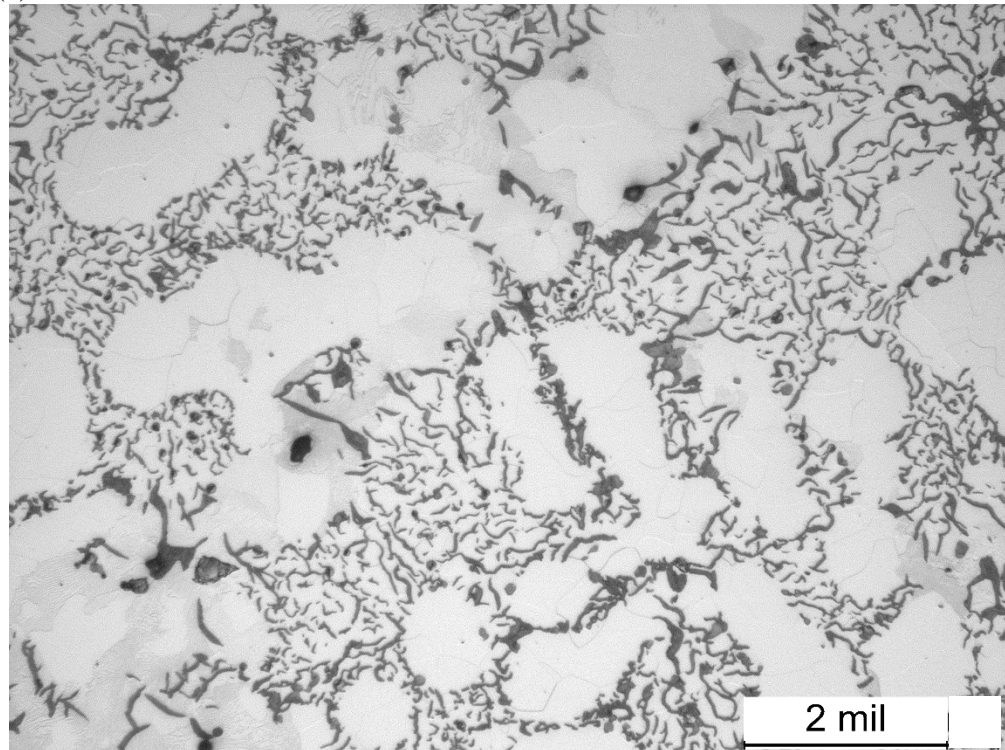
(b)

500X

Figure 8 Representative optical micrographs of specimen from Manhole 4 near the outside surface. Similar microstructures were observed in all other specimens.



(a) 100X



(b) 500X

Figure 9 Representative optical micrographs of specimen from Manhole 4 in the in the central region of the cross section. Similar microstructures were observed in all other specimens.

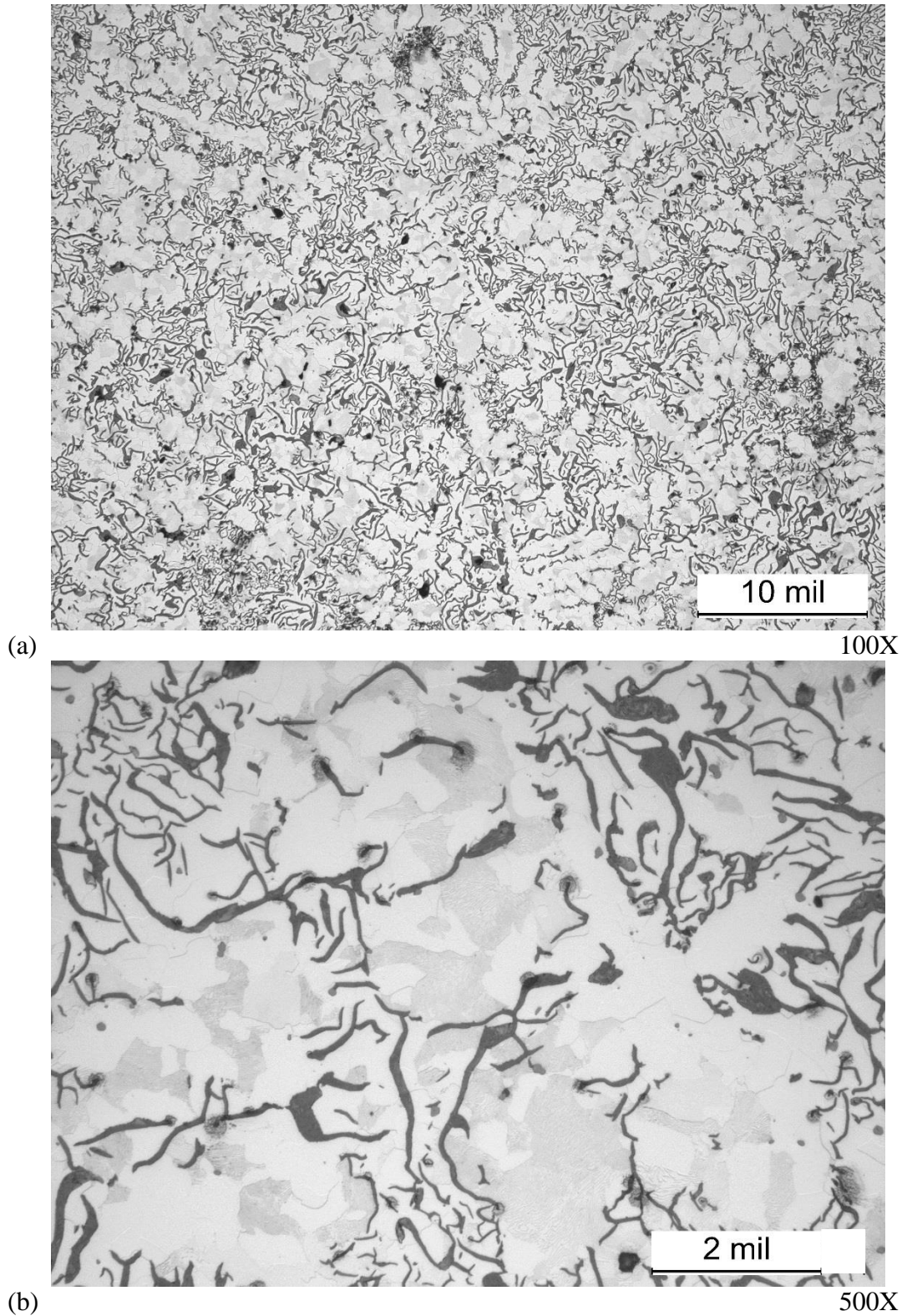


Figure 10 Representative optical micrographs of specimen from Manhole 4 near the inside surface. Similar microstructures were observed in all other specimens.

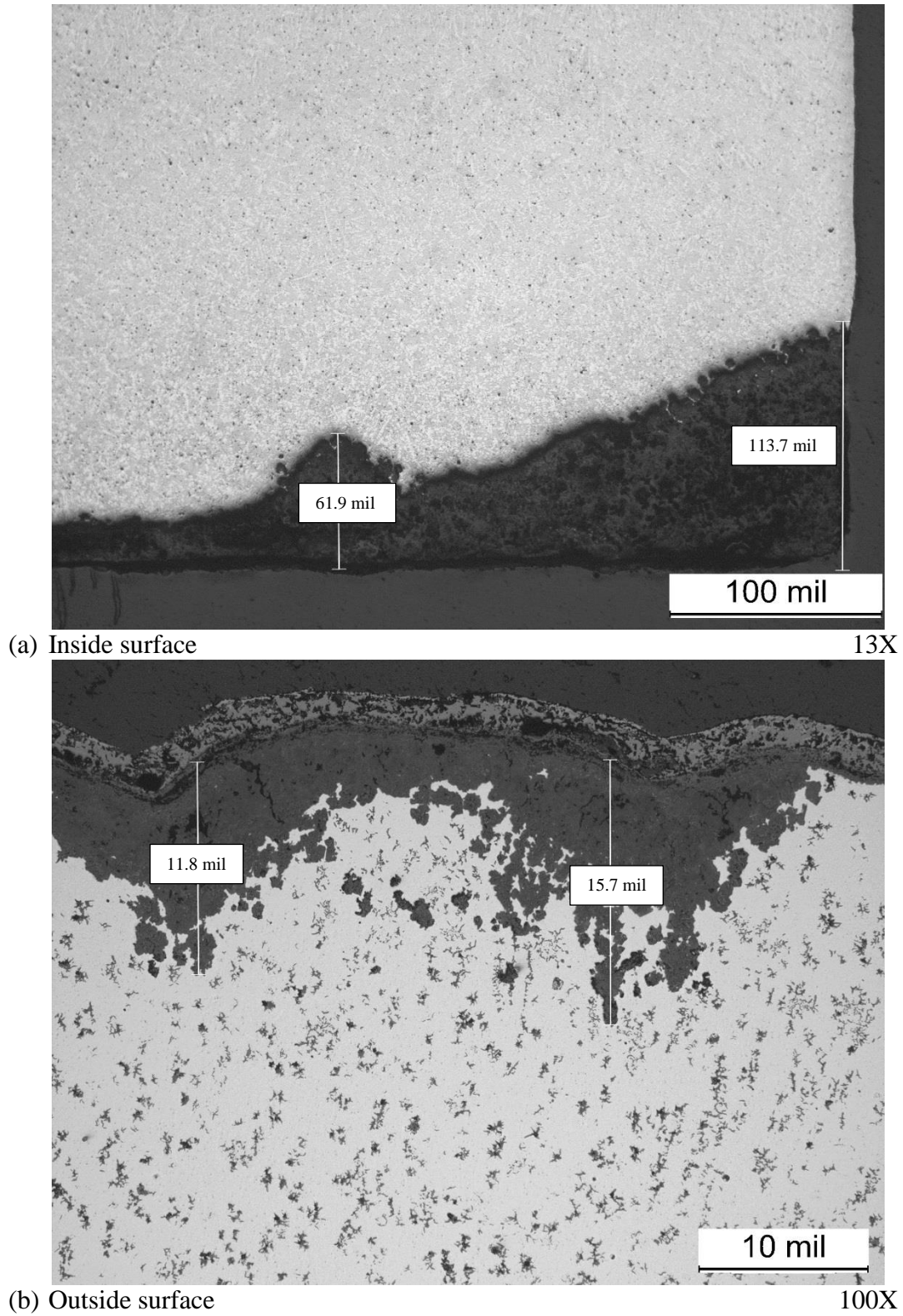


Figure 11 Optical micrographs of corrosion on the (a) inside and (b) outside surfaces of Manhole 4.

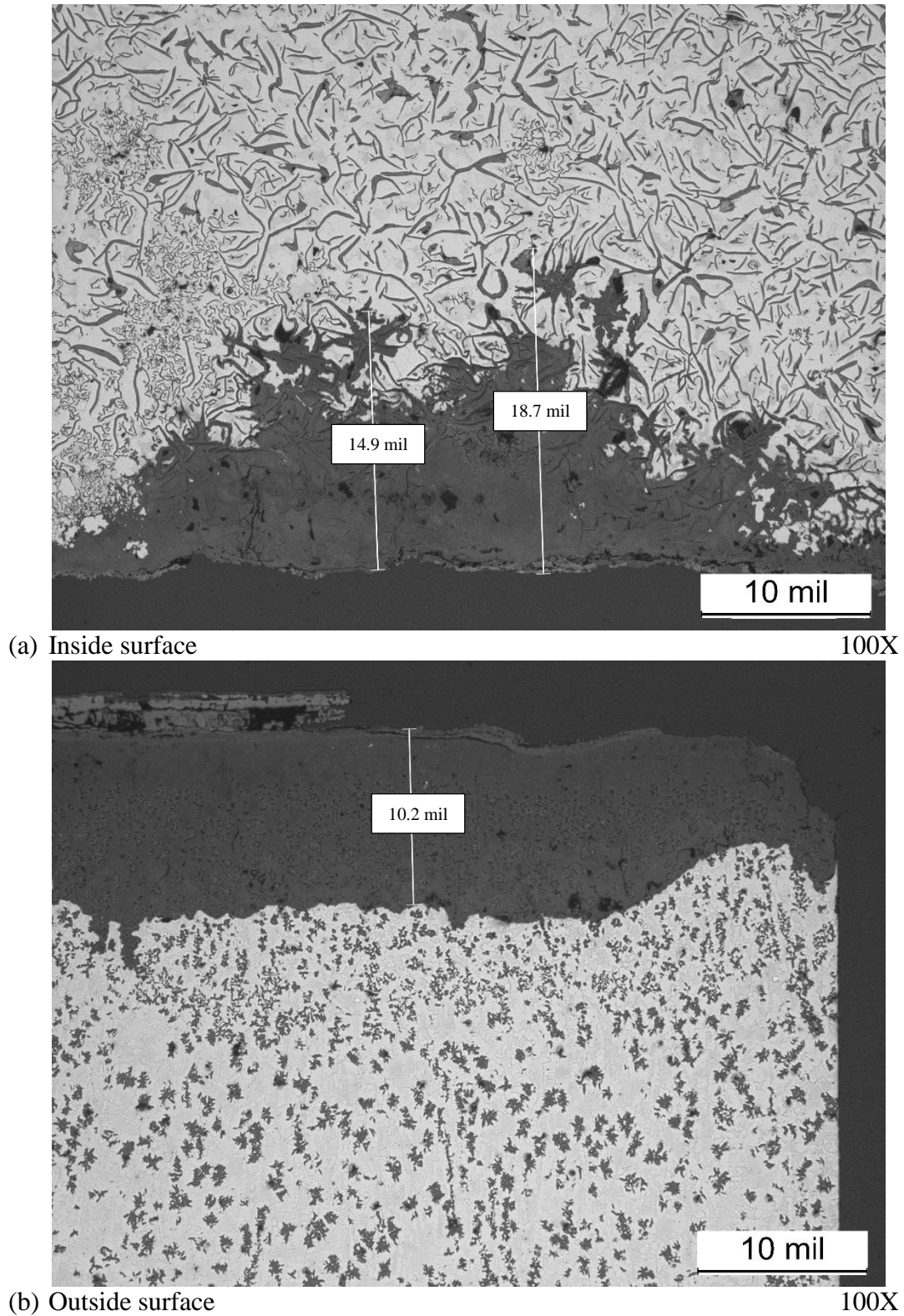
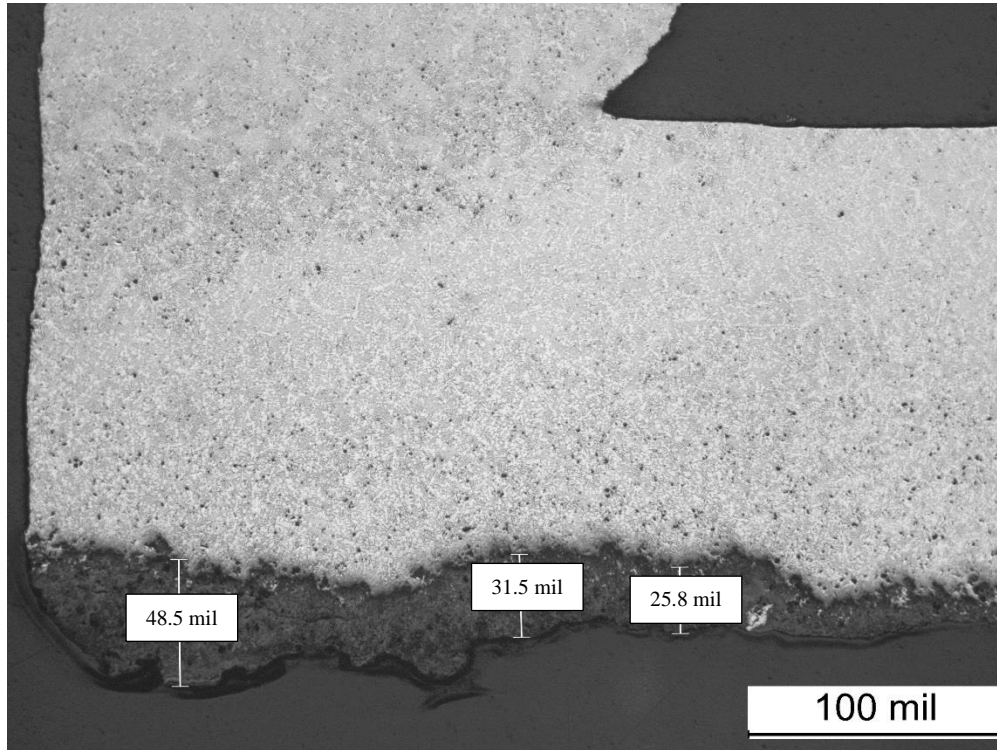
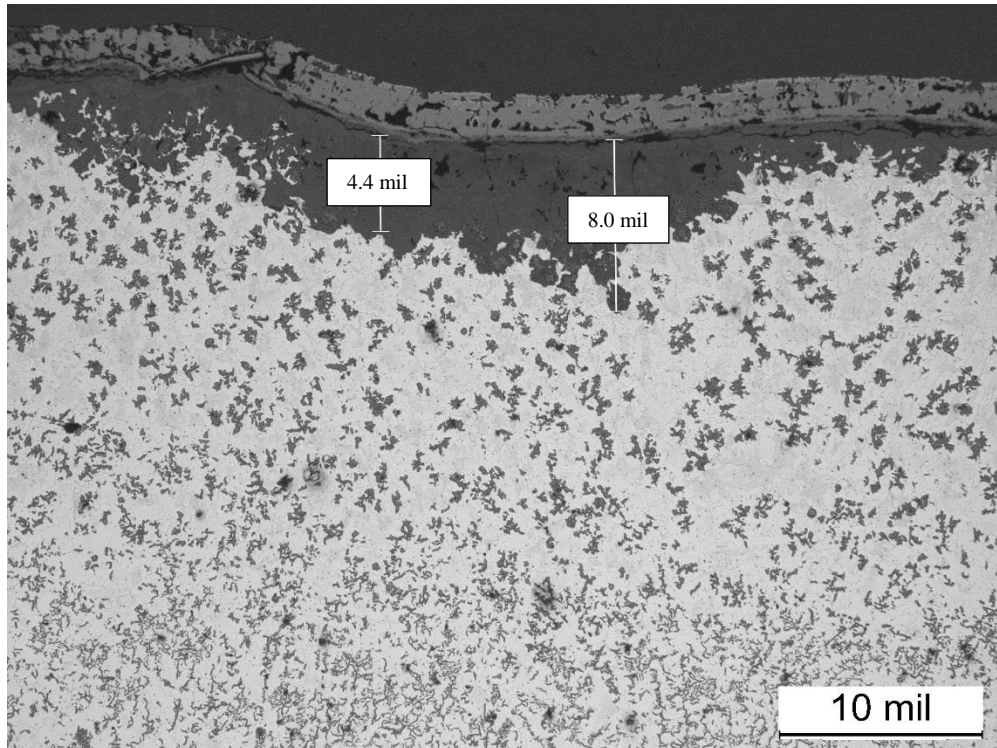


Figure 12 Optical micrographs of corrosion on the (a) inside and (b) outside surfaces of Manhole 5 – Spigot.



(a) Inside surface

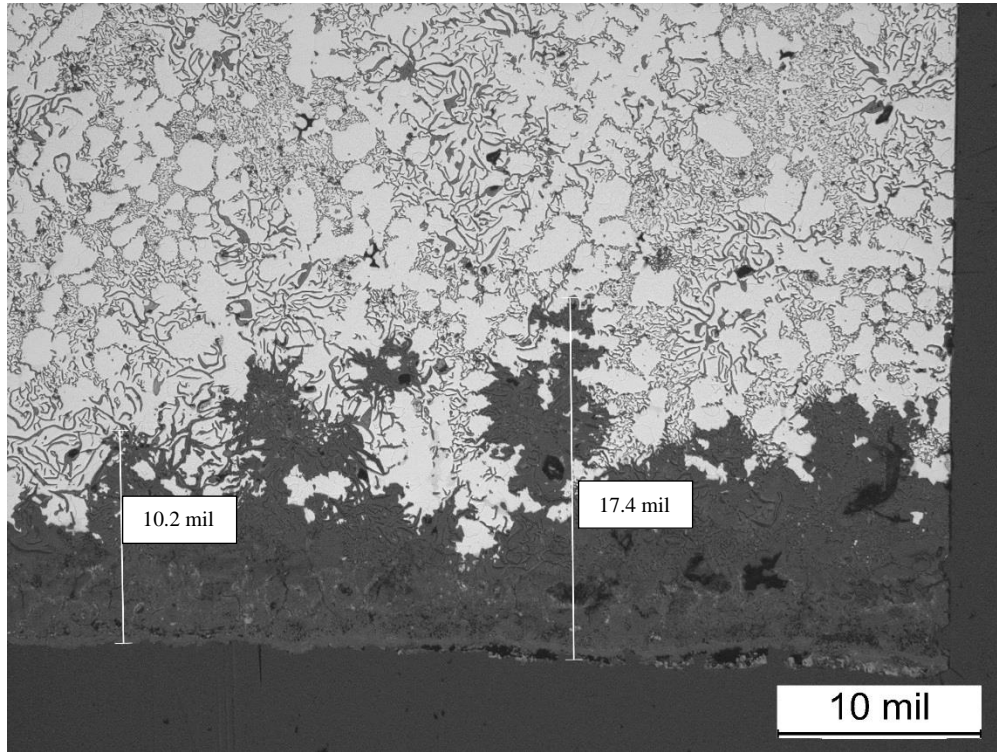
13X



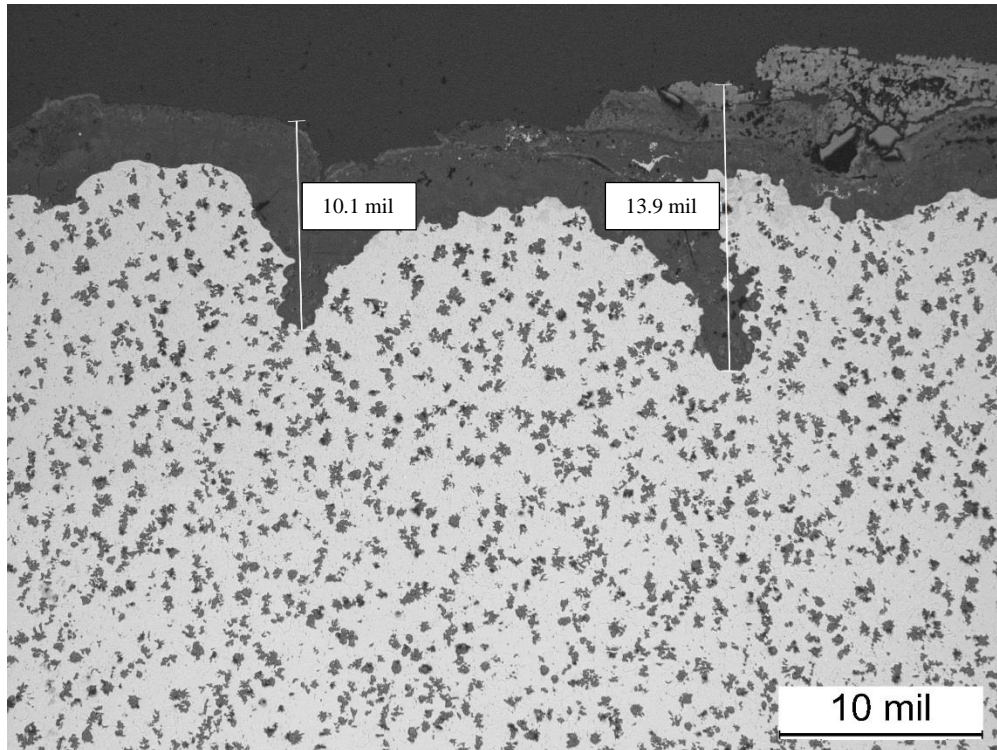
(b) Outside surface

100X

Figure 13 Optical micrographs of corrosion on the (a) inside and (b) outside surfaces of Manhole 5 – Bell.



(a) Inside surface 100X



(b) Outside surface 100X

Figure 14 Optical micrographs of corrosion on the (a) inside and (b) outside surfaces of the 3-inch diameter coupon.