

#D-108 RETAINING WALLS

SUPPLEMENTAL STAFF REPORT

SUMMARY: This Supplemental Staff Report provides responses to issues that were raised by a party of record via email after the Planning Commission meeting regarding amendments to the Renton Municipal Code Development Regulations (Title IV). It also includes additional information that staff has identified as being necessary to include in the analysis for amendments.

General Description

City staff observed that Title IV does not have standards for retaining walls. This has allowed retaining walls to be constructed with virtually no regulation except Building Code; therefore, while the structural integrity of walls is regulated, the visual effects of retaining walls are unregulated. The Planning Division requested that regulations be created.

The following summarized key revisions to RMC 4-4-040, Fences and Hedges, RMC 4-11-060, Definitions F, and RMC 4-11-180, Definitions R, are proposed:

- Introduce definitions for “fence,” “retaining wall,” and “rockery” to ensure regulations are applied appropriately.

FENCE: An outdoor physical and/or visual barrier, railing, or other upright structure erected above ground and separating an area of ground. For the purpose of administering this Title, a wall shall be considered to be a fence unless the wall resists the lateral displacement of soil or other materials, in which case it shall qualify as a retaining wall.

RETAINING WALL: A wall designed to resist lateral earth and/or fluid pressures, including any surcharge, in accordance with accepted engineering practice. For the purposes of this Title, a “rockery” or “rock wall” is a type of retaining wall. Structural components of stormwater facilities shall not be interpreted to be a retaining wall.

RETAINING WALL HEIGHT: The vertical distance measured from the bottom of the footing to the finish grade at the top of the wall (i.e., upper soil grade).

RETAINING WALL HEIGHT, EXPOSED: The vertical distance measure from the finish grade at the bottom of the wall (i.e., lower soil grade) to the finish grade at the top of the wall (i.e., upper soil grade). This height does not include the depth of footing below grade.

ROCKERY: One or more courses of rocks stacked against an exposed soil face to protect the soil face from erosion and sloughing. The bottom course of rocks bears on the foundation soils and the upper rocks bear partially or entirely on the rocks below. A rockery is also known as a “rock wall.”

- Introduce standards for retaining walls, such as:
 - Allowed materials
 - Setbacks
 - Terracing design
 - Grading above retaining walls
 - Landscaping
 - Fences upon or adjacent to retaining walls

C. GENERAL FENCE, ~~AND HEDGE~~, AND RETAINING WALL STANDARDS: ~~REQUIREMENTS:~~

1. Fence Height – Method of Measurement:

- a. Fences:** The height shall be measured from the top elevation of the top board rail or wire to the ground. In cases where a wall is used instead of a fence, height shall be measured from the top surface of the wall to the ground on the high side of the wall.
 - i. Grade Differences:** Where the finished grade is a different elevation on either side of a fence the height may be measured from the side having the highest elevation.
 - ii. Fences on Berms:** A berm ~~may~~ shall not be constructed with a fence on it unless the total height of the berm plus the fence is less than the maximum height allowable for the fence if the berm were not present.
- b. Hedges:** The height shall be measured from the topmost portion of vegetation to the ground.
- c. Retaining Walls:** The standards of this Section refer to exposed retaining wall height, which is the vertical distance measure from the finish grade at the bottom of the wall (i.e., lower soil grade) to the finish grade at the top of the wall (i.e., upper soil grade).
 - i. Fences on Retaining Walls:** A fence shall not be constructed on top of a retaining wall unless the total combined height of the retaining wall and the fence does not exceed the allowed height of a standalone fence.
 - (A) Exception – Guardrail:** If a guardrail is required by the Building Official the applicant shall demonstrate to the satisfaction of the Administrator

that the height of the retaining wall is the lowest necessary and that terracing is infeasible; the height of the guardrail shall be the lowest necessary to satisfy the Building Official, but in no case shall the combined height of a retaining wall and required guardrail exceed nine feet (9') in residential zones, or twelve feet (12') in commercial and industrial zones.

(B) Exception – 50% Transparent Fences: Fences that provide at least fifty percent (50%) transparency, as viewed perpendicularly to the face of the fence, may be allowed directly on top of a retaining wall. However, chain link fencing is excluded from allowed fence material for this application.

ii. Fences and Hedges Adjacent to Retaining Walls: Fences and hedges adjacent to retaining walls with a combined fence and retaining wall height that exceeds the allowed height of a standalone retaining wall shall be set back from one another by a minimum of two feet (2'); this area shall be landscaped as if it were a terrace. If a fence is placed any distance within the property line, the property owner continues to be responsible for his/her property on both sides of the fence.

2. Retaining Wall Standards:

a. Materials: Retaining walls shall be composed of brick, rock, textured or patterned concrete, or other masonry product that complements the proposed building and site development. Other materials may be used with the approval of the Administrator.

b. Setback from Public Rights-of-Way: There shall be a minimum three-foot landscaped setback at the base of retaining walls abutting public rights-of-way. Landscaping shall include a mixture of shrubs and groundcover (trees are optional) in conformance with the standards of RMC 4-4-070H.4.

c. Terracing: Terracing is the act of forming hillside into a number of level flat areas (terraces) between retaining walls, which is often used when the maximum height of a single retaining wall is insufficient. The following standards shall apply to terraced slopes:

i. Terrace Width: The width of any terrace shall be equal to the height of the tallest of the two retaining walls; however, the minimum terrace width shall be two feet (2') and the maximum required width shall be five feet (5'). Terrace

width shall be measured from the back edge of a lower retaining wall to the foremost edge of the immediately succeeding and higher retaining wall.

- ii. **Terrace Landscaping:** Terraces created between retaining walls shall be permanently landscaped with a mixture of shrubs and groundcover (trees are optional) in conformance with the standards of RMC 4-4-070F. Landscaping provided in front of retaining walls and within terraces shall contribute to any landscaping required by RMC 4-4-070F; the Administrator may grant exceptions for required trees based on land constraints.
- d. **Grading:** The grade of ground immediately above a retaining wall shall be level with the top of the retaining wall for a horizontal distance (measured perpendicularly to the wall) equaling one foot (1') for every one foot (1') in height of the retaining wall.
- e. **Modifications:** Per RMC 4-9-250D, the Administrator may grant modifications to the standards of this Section pertaining to retaining walls. Approval of a modifications permit may include conditions such as, but not limited to increased setbacks, additional landscaping, a requirement to terrace or specific materials to be used.

- Establish a maximum fence, hedge, and retaining wall height in residential zones:

D. STANDARDS FOR RESIDENTIAL USES:

1. **Maximum Height:** In any residential district, the maximum height of any fence, hedge or retaining wall shall be seventy-two inches (72"), subject to further height limitations as specified in this Section.
- Specify that height limitations for fences/hedges within residential properties (e.g., limited height of 48" within the front yard setback) also govern retaining wall height limitations in residential properties.
 - Clarify language related to height limitations for residential uses by using consistent terminology (e.g., some height limitations apply only to the property line, whereas other limitations apply to the entire setback). Staff recommends that height limitations be applicable for the entire depth of any given setback.

For example:

Current Language:

Front Yard Setbacks: Fences, walls or hedges a maximum of forty-eight inches (48") in height may be allowed within the required front yard subject to these provisions.

Proposed Language:

Front Yard Setbacks: Fences, retaining walls or hedges shall not exceed forty-eight inches (48") in height within the front yard setback.

Party of Record Issue: “If the fence and wall height exceed 6’ then the wall and fence must be separated by 5’ and landscaped as if it is a terrace... Terracing walls will eat up a bunch more room.”

Staff Response: Staff recommends reducing the offset from five feet to two feet and allowing an exception for fences to be erected on top of retaining walls if the fence is at least 50% transparent. Permitting a fence that is at least 50% transparency will provide the abutting landowner that has a lower lot elevation with adequate light and air, as opposed to a six feet tall retaining wall with an additional six feet of solid fence that could result in a 12’ tall monolithic structure.

Impact Analysis

Effect on rate of growth, development, and conversion of land as envisioned in the Plan

None

Effect on the City’s capacity to provide adequate public facilities

Not applicable

Effect on the rate of population and employment growth

None

Whether Plan objectives are being met as specified or remain valid and desirable

The following Plan objective is being met:

Objective CD-M: Well-designed landscaping provides aesthetic appeal and makes an important contribution to the health, safety, economy, and general welfare of the community. The City of Renton should adopt regulations that further the aesthetic goals of the City.

Effect on general land values or housing costs

Because there are currently no standards for retaining walls, the proposed amendments might increase housing costs for lots that require retaining walls to achieve a desired lot grade; for example, the requirement to terrace and provide landscaping is a cost that could be avoided by a homeowner under current standards. However, any increase in housing cost would likely be insignificant.

Whether capital improvements or expenditures are being made or completed as expected

Not applicable

Consistency with GMA, the Plan, and Countywide Planning Policies

The proposed revisions are consistent with the GMA and multi-county planning policies of Vision 2040, specifically:

MPP-DP-37: Support urban design, historic preservation, and arts to enhance quality of life, improve the natural and human-made environments, promote health and well-

being, contribute to a prosperous economy, and increase the region's resiliency in adapting to changes or adverse events.

MPP-DP-43: Design communities to provide an improved environment for walking and bicycling.

The proposed revisions are consistent with the Countywide Planning Policies, specifically:

DP-40. Promote a high quality of design and site planning in publicly-funded and private development throughout the Urban Growth Area.

The proposed revisions are consistent with the Comprehensive Plan, specifically:

Policy CD-20. Orient site and building design primarily toward pedestrians through master planning, building location, and design guidelines.

Policy LU-219. Address the mix and compatibility of uses, residential density, conceptual building, site and landscape design, identification of gateway features, signs, circulation, transit opportunities, and phasing through master plan and site plan review process.

Effect on other considerations

None

Staff Recommendation

Amend Renton Municipal Code as described to minimize adverse impacts of retaining walls within the City.

Implementation Requirements

Adopt an ordinance amending RMC 4-4-040, Fences and Hedges, RMC 4-11-060, Definitions F, and RMC 4-11-180, Definitions R.