D#104 MAXIMUM LOT AREA, BUILDING COVERAGE, AND IMPERVIOUS SURFACE AREA

General Description

This docket item is to amend the development regulations for lot sizes so that they better correlate to the density. Additionally, the recommended amendments help improve the incremental changes between zones in regards to lots sizes, building coverage, and impervious surface area. All of these changes help to improve perceptions of bulk and massing of buildings.

Impact Analysis

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

Increasing the minimum lot size required in the R-4 zone and for subdivisions of parcels larger than one acre in the R-8 zone could change the rate of growth, development, and conversion of land. It is likely that there are lots that would not be able to subdivide if the proposed amendments are adopted. However, a significant amount of development occurs on parcels that are smaller, such as ½ acre or less. A ½ acre is 21,780 square feet, in the R-4 zone a ½ acre parcel could subdivide into two lots, with both the proposed new lot size 9,000 square feet or with the existing minimum lot size of 8,000 square feet. In the R-4 zone, lots that are 16,000 – 17,999 square feet that could subdivide with 8,000 square foot lots would no longer be able to subdivide with the proposed larger minimum lot size of 9,000 square feet.

For the R-8 zone, the proposed amendments only affect minimum lot sizes for development that occurs on parcels larger than 1 acre. In the R-8 zone, lots that are smaller than one acre are required to already have 5,000 square feet minimum lot size so the proposed amendments should not have an impact on those properties. For parcels that are larger than one acre, there will be fewer lots created if the proposed larger lot size is adopted. For example (not considering right-of-way dedication and other required public improvements that reduce the developable area), a two acre parcel could subdivide into 19 lots with the 4,500 square foot minimum, but only 17 lots if the minimum lot size is 5,000 square feet. However, in this example it is important to note that the density of 8 units per acre would only allow 16 units to be created.

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

Not applicable. There are no anticipated effects on the City's capacity to provide adequate public facilities created by the proposed changes.

Effect on the rate of population and employment growth

It is reasonable to assume that if fewer lots are created for new single family housing, then the rate of population growth would be less than under existing conditions. However, the difference should not be particularly signficant. For many parcels, the proposal does not change the number of lots that could be created. The City has significant capacity to accommodate our growth targets. The proposal does not have an effect on employment growth.

Whether Plan objectives are being met as specified or remain valid and desirable
The Comprehensive Plan seeks to promote new residential development and neighborhoods that are "visually attractive, safe, and healthy environments in which to live". This docket item helps to ensure that neighborhoods are visually attractive.

Effect on general land values or housing costs
In circumstances where the number of lots a parcel can be subdivided into decreases, there may be a decrease in the amount the property owner could sell the property to a developer for. This assumes the sale is based on the number of lots the parcel can be subdivided into. However, a property that has the potential to be subdivided doesn't have to be purchased only in order to be subdivided, it could be purchased by a person who wishes to have a large lot. Additionally, density would have limited the development potential of the parcel not simply the required lot size. In regards to housing costs, the effect is dependent on how large of a house the builder elects to build. In cases where the buildable area is completely utilized, then the resulant larger house will likely be sold for more money. However, a smaller house could also be constructed which could potentially be sold for less money.

For parcels with no potential for subidivision (such as a 6,000 square foot lot in the R-8), there will be no effect on their land value or housing costs.

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 changes have no bearing on growth management, Comprehensive Plan, or the Countywide Planning Policies. All of these require that urban jursidictions accommodate growth, but allow jusisdicttions to determine how their growth will be accomodated. Although larger lots sizes may slightly decrease the number of new single family homes constructed, there will still be new single family homes cosntructed and the City has signficant capacity for new housing units in multi-family and mixed use zones.

Effect on critical areas and natural resource lands
In instances where the maximum allowable impervious area is being increased, it could lessen the impact urbanization has on critical areas.

Discussion
Minimum Lot Size
Currently, the code leaves a significant amount of land area over when calculating using minimum lot size based on the number of square feet in an acre (43,560 square feet). A calculation for the R-4 and R-8 zone and the amount of land that is left over is shown below. The R-10 and R-14 zones do not currently have minimum lot sizes.

Difference Between Current Lot Size and One Acre (in square feet)					
	R-4	**R-8** (if parcel larger than 1 acre)	**R-8** (if parcel smaller than 1 acre)	**R-10**	**R-14**
Current Min Lot Size	8,000	4,500	5,000	N/A	N/A
Number of Units Allowed by Density	4	8	8		
Total Sq Ft	32,000	36,000	40,000		
Square Feet in Acre	43,560	43,560	43,560		
Remainder Sq Ft (from an acre)	11,560	7,560	3,560		

In the R-4 and R-8 zone (with the 4,500 square foot minimum lot) the amount of land area left over is more than enough for another lot. One of the effects of this, in particular with short plats (9 or fewer lots), is land is being developed at effectively a higher density. For example, a 16,000 square foot parcel in the R-4 zone could subdivide into two lots and a second 24,000 parcel could subdivide into three lots. The combined 40,000 square foot area of the two parcels can subdivide into five lots, not the four lots that would occur if the 40,000 square foot were one parcel.

The City uses net density for density calculations, so the amount of land required for dedication as right of way, critical areas (if present), and stormwater facilities are removed and then the remaining square footage is what is available for development. However, even with deductions for net density, there is a significant amount of land left. In terms of zoning indicating to existing residents what may occur with new development, it would be beneficial to the surrounding community to increase the minimum lot sizes so that they come closer to aligning with the size of an acre when subdivided.

Currently, there is no minimum lot size in the R-10 and R-14 zones. This was intended to allow for flexibility and to not be overly prescriptive, especially for cottage style housing that often utilizes creative approaches to site design in high density zones. However, in practice the projects that have been proposed would have benefitted from a more prescriptive set of standards. Therefore, it is recommended that minimum lot sizes, as well as setbacks be established in the R-10 and R-14 zones. This will also help to ensure predictability in these zones.

Difference Between Proposed Minimum Lot Size and One Acre (in square feet)				
	R-4	**R-8**	**R-10**	**R-14**
Proposed Min Lot Size (sq ft)	9,000	5,000	4,000	3,000
Number of Units Allowed by Density	4	8	10	14
Square Feet in Acre	43,560	43,560	43,560	43,560
Total Sq Ft	36,000	40,000	40,000	42,000
Remainder Sq Ft (from an acre)	7,560	3,560	3,560	1,560

Maximum Building Coverage

Building Coverage is the percentage of the ground area of a lot a building can take up. For example, a building with 2,500 square foot footprint on a 5,000 square foot lot has 50% building coverage. This calculation does not consider the actual size of the building so multi-story buildings can be larger than what is used to calculate building coverage. So, the 2,500 building with square foot footprint that has 50% building coverage could be a 5,000 square foot two story house (minus ground floor area used as garage space).

Currently, in the R-8 zone the code allow lots that are 5,000 square feet or larger to have either 35% or 2,500 square feet maximum building coverage, whichever is greater. In practice, new houses are built to the greater 2,500 square feet, bringing a 5,000 square foot lot to 50% building coverage. For lots less than 5,000 square feet the maximum building coverage is 50%. The allowance of 35% or 2,500 square feet is also the standard for the R-4 zone, but the R-4 zone lot sizes are significantly larger than the R-8 zone (currently, 8,000 square feet compared to 5,000 square feet). In the R-4 zone, under current code, a structure can have 2,800 square feet building coverage; this is 35% building coverage. This provision should be cleaned up to simply state a percentage and so that it does not apply to the R-4 zone. As shown in the table below, staff calculated the amount of buildable area that is created with the required setbacks for residential zones and matched the recommended maximum lot coverage area to how much of the site is buildable.

Calculation of Current Buildable Area and Maximum Building Coverage				
Zone	**R-4**	**R-8**	**R-10**	**R-14**
Current Min Lot Size (sq ft)	8,000	4,500 or 5,000	-	-
Current Buildable Area (sq ft)	2,800	2,200	-	-
Calculated Building Coverage Possible - Current	35%	48%	-	-
Current Maximum Building Coverage	• ***5,000+ sq ft lots:*** 35% or 2,500 sq ft whichever is greater • **Less than 5,000 sq ft lots:** 50%	• ***5,000+ sq ft lots:*** 35% or 2,500 sq ft whichever is greater • **Less than 5,000 sq ft lots:** 50%	-	-

Calculation of Proposed Buildable Area and Maximum Building Coverage				
Zone	**R-4**	**R-8**	**R-10**	**R-14**
Proposed Min Lot Size (sq ft)	9,000	5,000	4,000	3,000
Proposed Buildable Area (sq ft)	3,150	2,400	2,080	1,650
Calculated Building Coverage Possible - Proposed	35%	48%	52%	55%
Proposed Maximum Building Coverage	35%	50%	55%	65%

Maximum Impervious Surface Area

Impervious surface is ground that is impenetrable. Typically it is impenetrable because the surface has been covered with an artificial material, such as asphalt. However, soil that is highly compacted can also be impervious. Limiting the amount of impervious surface area development can have is done in an attempt to mitigate impacts to water. The impacts to water include increased amount of runoff with pollutants, such as gasoline, but also with more impervious area water is not able to naturally infiltrate and can cause flooding, particularly of

streams. Another impact of impervious surfaces is it collects heat from the sun more than natural ground and cause urbanized areas to often have warmer temperatures than more rural areas.

The amount of impervious surface on a site contributes to the sense of what the built area is. A site that is all parking lot and building is perceived differently than a site that has included pervious areas, especially pervious areas that are well designed and well placed. Pervious ground is ground that water can pass through, but given the City's definition it is typically in practice natural ground. The City of Renton's definition for Impervious Surface is "includ(ing), but not limited to, concrete; asphalt; roofs; walkways; crushed rock; patios; brick, natural stone or other non-pervious pavers (even when set with only sand); decking that is not open grid; open grid decking over impervious areas; driveways; parking lots or storage areas; areas that are graveled or made of packed or oiled earthen materials; or other surfaces that similarly impede the natural infiltration of surface and storm water."

Staff recommends amending the amount of allowable impervious surface area in order to help reduce the perceptions that residential lots are essentially completely built. The proposed changes also reflect the increase in minimum lot size and ensuring the intensity of the zones is tiered. Finally, it is recommended that the more complicated requirements of the R-1 and R-10 zones be amended to be simply one percentage. Recommended changes are shown below.

Current and Proposed Impervious Surface Area		
Zone	**Current Max Impervious Surface Area**	**Proposed Max Impervious Surface Area**
RC	**Lots 5 acres or more:** • 20%. **Lots 10,000 sq ft to 5 acres:** • 55%. For each additional 10,000 sq ft increase in lot size, the impervious coverage shall be decreased by 1.75% to a minimum 20% for a 5 acre lot. **Lots 10,000 sq ft or less:** • 55%	15%
R-1	30%	25%
R-4	55%	50%
R-6	n/a	55%
R-8	75%	60%
R-10	Detached Units: • 75% Attached Units: • 65%	70%
R-14	85%	80%

Miscellaneous Development Standards

With the recommended amendments to lot sizes as indicated previously, there are several other development standards that should be amended in response. For example, given that the R-4 zone minimum lot size is recommended to increase to 9,000 square feet, it is appropriate to increase the side setback to 10 feet. Also, the R-10 and R-14 have previously not had minimum lot sizes, so there were no standards for minimum lot width and depth. Proposed amendments are indicated in the table below. The proposed standards reflect either an increased minimum lot size, the establishment of minimum lot sizes, or increased setbacks to improve the bulk and massing a house has on a lot.

Other Proposed Development Standards Amendments						
	RC	**R-1**	**R-4**	**R-8**	**R-10**	**R-14**
Minimum Lot Width	-	100 ft	-	-	40 ft	30 ft
Minimum Lot Width (corner lots)	-	-	-	-	50 ft	40 ft
Minimum Lot Depth	300 ft	200 ft	100 ft	80 ft	70 ft	60 ft
Front Setback	-	-	-	Alley Loaded Garages: 15 ft Front Loaded Garages: 20 ft	Alley Loaded Garages: 15 ft Front Loaded Garages: 20 ft,	Alley Loaded Garages: 15 ft Front Loaded Garages: 15 ft, except garage must be 20 ft
Rear Setback	-	-	-	-	15 ft	10 ft
Side Setback	-	-	10 ft	-	-	-
Side Setback (along a street)	-	-	30 ft	-	15 ft	15 ft