



Memorandum

DATE: October 21, 2010

TO: Shoreline Planning Commission

FROM: Joseph W. Tovar, FAICP, Planning and Development Services
Director
Steve Cohn, Project Manager, Senior Planner
Miranda Redinger, Project Manager, Associate Planner *MR*

SUBJECT: Southeast Neighborhoods Subarea Plan Implementation Proposal

Background

On October 21, staff offered some initial thoughts about implementing the SE Neighborhoods Subarea Plan. These ideas included:

1. Existing zoning is retained for the bulk of the properties;
2. Creation of a Neighborhood Mixed Use Zone; and
3. A proposed Planned Area in the SE corner of the Subarea

Most of the October 21 meeting focused on the proposal for the planned area in the SE corner of the Subarea. This meeting will focus on the proposals for the 15th Avenue corridor, and also address some of the concepts that the Commission asked staff to cover in more detail.

15th Avenue Commercial Zoning Implementation

Staff's recommendation is to designate the area on the east and west sides of 15th Ave. (as shown in Attachment 1) as a Neighborhood Mixed Use Zone. The proposed zone is based on the existing MUZ zone, but is a version that is more appropriate for a neighborhood commercial area, and is intended to promote redevelopment by enhancing the economic viability of long-term investment.

Staff's current view is that the Neighborhood MUZ would have the following characteristics:

1. Maximum height -50 feet. Maximum height only attainable if it is developed in a mixed use structure (same as current Neighborhood Business zone)
2. Base Height -35 feet (same as current NB zone)
3. Base allowable density – 48 du acre (current NB allows 24 du/acre)
4. Max density if in a mixed use building – 65 du/acre
5. Transition standards/design review for portions of the development within 100 feet of R-6 and R-8 density

Other items of note for the area adjacent to or near 15th Avenue NE:

1. For the residential area to the east of the commercial district on 15th, consider proposing an R-24 zone as transition rather than a series of zones that each encompass only one property. R-24 is a townhouse zone, which is a reasonable transition, used elsewhere in the city.
2. Neighborhood Business is retained in some areas as a transitional commercial zone. This will tend to have lower intensity development, though that is not assured because NB does allow 50 ft. tall buildings. However, as noted, NB is the existing zoning on these sites.

Questions for the Commission to consider tonight

In considering the approach to creating new zoning categories, staff requests that the Commissioners discuss and provide direction on the following questions at the November 18 meeting:

1. *Should the regulatory language for a version of Mixed Use appropriate in neighborhood commercial areas mandate a specific maximum density and height or alternatively be based on incentives?*
2. *If redevelopment is to be encouraged, what are appropriate maximum heights and densities? Should setbacks and landscape buffering be used? If so, should it only be as a transition to non-commercial areas?*
3. *If height and density is tied to an incentive system, what amenities should be defined as incentives-- open space, affordability, green building, public art? Other?*

4. *How does the Commission want to approach the goal of the subarea plan to provide a variety of housing options? Potential ideas to be considered include:*
 - a. *Permitting a higher percentage of hardscape if residences are made physically accessible from the outside to those with mobility constraints (to allow for ramps, which are considered hardscape).*
 - b. *Encouraging affordable units in multifamily structures by allowing a density bonus for units under a certain size (i.e. one-bedroom or studio).*
 - c. *Providing incentives for cottage housing such as accelerated review in addition to a small density bonus.*
 - d. *Should these options be available throughout the subarea or implemented as a pilot project in a smaller area, such as PLA1C?*

5. *Should developers be encouraged to aggregate lots (either by providing greater density/intensity) or conversely, limiting density on smaller lots, particularly for densities that are unlikely to be achieved on smaller lots?*

Staff responses to questions raised at the previous discussion about Plan implementation

1. **PLA1C-** Commissioner Kaje asked about minimum lot size for R-12 zone. Minimum lot size in 2500 sq. ft, but density requirements are the controlling factor in this case. For example, if you are developing an 8300 square foot lot, you would be limited to a maximum of 2 dwellings on the site. Because of rounding rules, it would require a 9100 square foot lot to obtain 3 dwelling units. If you bought a neighboring lot of 8300 square feet, you could build 5 units on the combined lots in an R-12 zone.

Staff has attached a proposal for cottage housing based on work completed several years ago when a revised city-wide cottage housing ordinance was under consideration (See Attachment 2). Our initial analysis shows that it would be unlikely that 18 units/acre could be realized given lot size and proposed requirements for parking and open space. However, the density could slightly exceed 12 du/acre, so it is possible that some density bonus could be crafted to encourage cottage housing development if the Commission opts to do so.

2. **PLA1B-** Staff continues to think about appropriate zoning for small lots. Preliminary analysis also shows that because of parking requirements and the prohibitive cost of underground parking for small developments, it is difficult to achieve densities greater than 35 units/acre on smaller lots (and that would require stacked units, i.e., apartments or condos). If an area is developed as townhouses, 24-26 du/acre is more likely.

Does the Commission wish to revisit the creation of a zone in between R-24 and R-48, which may be a more realistic development target? An alternative option (as noted in question 5 above) is to only allow higher density on an aggregation of lots, and limit density on smaller lot sizes.

3. **What is a reasonable estimate of development over the next 10-15 years?**

- a. On the 15th Avenue corridor, if the nursing home is redeveloped into another use, there could be in the neighborhood of 200 units on that site; if the Goodwill redevelops, there could be another 100-115. If neither of them redevelop, maybe 1/3 to 1/2 that number might be developed somewhere else along 15th. This would suggest total development of 100-150 units if developed as mixed use or 75-100 units if developed as residential. Because this area is currently developed and the developments are producing income to the property owners, it is unlikely that additional properties would develop in a 10-15 year timeframe if the nursing home or the Goodwill sites redevelop as residential.
- b. Along Bothell Way, there could be about 75-80 new units if McDonalds doesn't redevelop, but some of the other sites do.
- c. In the interior of the SE corner, it is likely that only a portion of the sites would redevelop (for the most part they are under separate ownerships so it will be difficult to consolidate parcels). Staff estimates that the west side of 32nd could redevelop with approximately 26 new units (compared with 20 that could be developed under current zoning), 31st with 26 units (compared with 20 under today's zoning), and the east side 30th with 5-6 units, compared with 4-5 under today's zoning. Under this scenario, traffic would increase somewhat over current levels.

Note: To clarify a point that was made at the last meeting, staff pointed to the Briarcrest Neighborhood Traffic Action Plan as having identified public safety issues in the area. Diana Herbst noted that the study did not consider the impact of additional development in the area. When there is a proposal for public hearing, staff will take another look at potential impacts of development in terms of traffic, and include that information in its staff report on the proposal. When or if a potential development trips certain thresholds, an owner would be required to perform a more specific traffic analysis, and mitigate impacts.

4. What threshold would require an existing single-family home to meet current standards for Low-Impact Development with regard to stormwater?

In preparation for code changes that went into effect with the adoption of the Dept. of Ecology Stormwater Manual, staff prepared two technical guidance pamphlets, one for small impact projects, and one for medium. Generally, a small project is one on a property with less than 35% impervious surface coverage, which involves less than 2,000 sq. ft. of new and/or replaced impervious surface, and disturbs less than 7,000 sq. ft. of land. A small impact project is required to construct stormwater (erosion) pollution prevention, while a medium impact project is required to do that in addition to preparing stormwater site plans, controlling pollutant sources, preserving natural drainage systems and outfalls, and managing stormwater onsite. The Medium Impact Drainage Technical Guidance Pamphlet covers how to develop a drainage plan and includes information about best management practices. Staff can make these available to Commissioners.

5. How does the document *The Thornton Creek Watershed: A Historical Analysis, An Overview of Land Use Changes Through the Years* compare to other documents that reference the Thornton Creek Watershed?

Jill Mosqueda, P.E. prepared a summary of the different documents that discuss this watershed in relation to the SE Neighborhoods Subarea, which is included as Attachment 2. In summary, she notes that the Thornton Creek Historical Analysis did not address this area, but other

studies have. These studies do not indicate any historic or existing streams, wetlands or bogs in the SE portion of the subarea.

6. How could a cottage housing ordinance and design standards be adapted for use in the SE Neighborhoods Subarea?

Attachment 3 contains a draft version of the cottage housing code that could be adopted and Attachment 4 contains a draft version of the design standards developed for Town Center and adapted for the subarea.

Next Steps

Staff requests that the Planning Commission provide specific direction with regard to the questions and options posed in this report so staff may prepare a detailed recommendation for a public hearing on implementation of the SE Neighborhoods Subarea Plan.

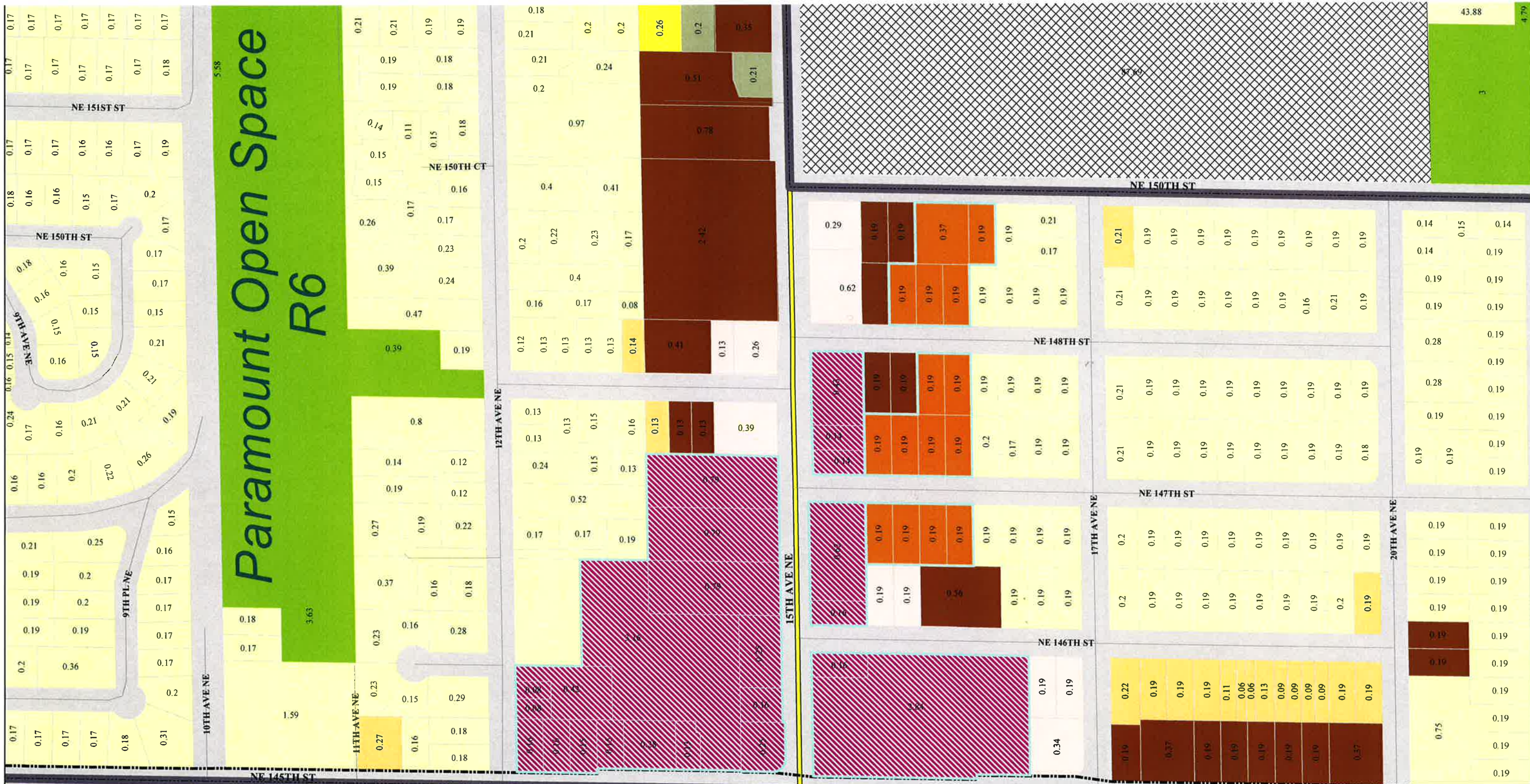
Attachments:

Attachment 1 - Proposed Zoning map of area around 15th Ave.

Attachment 2 - Draft cottage housing code

Attachment 3 - Draft design standards

Attachment 4 - Summary of documents relating to Thornton Creek Watershed



Proposed Zoning for Areas Near 15th and 145th

- | | | | | |
|-------------------|------------------------|----------------------------------|----------------------------------|------------------------------------|
| City Boundary | Principal Arterial | Park | R-24; Residential, 24 units/acre | PA; Planned Area |
| Open Water | Minor Arterial | Unclassified Right of Way | R-48; Residential, 48 units/acre | C; Campus |
| Planning Area | Collector Arterial | Tax Parcel | Planned Area 1-A | NCBD: North City Business District |
| Outside Shoreline | Neighborhood Collector | Proposed Zoning | Planned Area 1-B | O; Office |
| Interstate | Local Street | R-4; Residential, 4 units/acre | Planned Area 1-C | CB; Community Business |
| | | R-6; Residential, 6 units/acre | Planned Area 1-D | NB; Neighborhood Business |
| | | R-18; Residential, 18 units/acre | Planned Area 1-E | I; Industrial |
| | | R-8; Residential, 8 units/acre | Mixed Use Zone | CZ; Contract Zone |
| | | R-12; Residential, 12 units/acre | Mixed Use Zone Residential | |



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Amendments to Section 20.40.300 Cottage Housing

Regulations

- A. For the definition of cottage housing see SMC 20.20.014. The intent of cottage housing is to:
- Place the burden on the developer for the highest quality development rather than the minimum standards and for the City to deny proposals that do not meet this intent;
 - Support the growth management goal of more efficient use of urban residential land;
 - Support development of diverse housing in accordance with Framework Goal 3 of the Shoreline Comprehensive Plan;
 - Increase the variety of housing types available for smaller households;
 - Provide opportunities for small, detached dwelling units within an existing neighborhood;
 - Provide opportunities for creative, diverse, and high quality infill development;
 - Provide development compatible with existing neighborhoods with less overall bulk and scale than standard sized single-family detached dwellings; and
 - Encourage the creation of usable open space for residents through flexibility in density and design.
- B. The total floor area of each cottage unit shall not exceed 1,000 square feet. Total floor area is the area included within the surrounding exterior walls, but excluding any space where the floor to ceiling height is less than six feet. The minimum main floor area for an individual cottage housing unit shall be 700 square feet.
- C. Up to 1.25 cottage housing units may be allowed in place of each single-family home allowed by the base density of the zone.
- D. Cottage housing developments shall have a minimum of four units and a maximum of eight units, not including community buildings.
- E. The height limit for all cottages shall not exceed 18 feet. Cottage having pitched roofs with a minimum slope of six and 12 may extend up to 25 feet at the ridge of the roof. All parts of the roof above 18 feet shall be pitched. Parking structures and community buildings shall not exceed 18 feet.
- F. Cottages shall be oriented around a common open space using covered porches and entries. Cottages fronting on streets shall have an additional entry facing those streets.

The common open space shall be at least 250 square feet per cottage and landscaped primarily with ground cover. Open space with a dimension of less than 20 feet shall not be included in the calculated common open space. Cottages and community building shall be separated at least 30 feet when separated by required open space.

- G. Cottages shall provide a minimum private open space of 250 square feet. Private open space that is less than 10 feet wide shall not be included in the area calculation. Private open space should be contiguous to each cottage, directly accessed from the porch or private walk, for the exclusive use of the cottage resident, and oriented toward the common open space. Fencing or hedges bordering private open space shall not exceed two feet in height.
- H. Cottage housing units shall have a covered porch or entry at least 60 square feet in size with a minimum dimension of six feet on any side.
- I. All structures shall maintain no less than ten feet of separation within the cluster. Projections may extend into the required separation as follows:
- Eaves may extend up to 12 inches;
 - Gutters may extend up to four inches;
 - Fixtures not exceeding three square feet in area (e.g., overflow pipes for sprinkler and hot water tanks, gas, and electric meters, alarm systems, and air duct termination; i.e., dryer, bathroom, and kitchens); or
 - On-site drainage systems.
- J. Parking for each cottage shall be provided as follows:
- Two parking stalls for each cottage housing unit and one quest stall for every two units shall be provided. Tandem parking is allowed.
 - Clustered and separated from the private and common area and cottages by landscaping and architectural screen under four feet in height with trellis above six feet in height. Screened from public streets and adjacent residential uses by landscaping and architectural screen.
 - Set back a minimum of 15 feet from a public street.
 - Located in clusters of not more than five abutting spaces.
 - A minimum of 50% of the parking space shall be enclosed.

- K. Setbacks for all structures from the abutting property lines shall be an average of ten feet, but not less than five feet, except 15 feet from a public Right-of-Way or public sidewalk, whichever is greater.
- L. Architectural screens along the property line may be up to six feet in height subject to the sight clearance provisions of SMC 20.70.170, 20.70.180 and 20.70.190(C). no chain link or solid board fences are allowed.
- M. Minor modifications to the Development Code may be approved if they result in a more successful cottage development.

Review Process

1. **Pre-application Meeting** – A meeting with the developer and staff is required prior to application to give initial feedback on cottage housing proposals and to explain the review process and City expectations.
2. **Proposals** – Proposals should include information, such as illustrated and accurate building elevations, cross sections through the property and neighboring property, site/landscape plans, existing site conditions, and site plans and photo elevations of the surrounding property and streetscapes. Construction drawings and permits may be submitted after Design Commission approval.
3. **Neighborhood Meeting** – The developer, architect, and site planner/landscape architect of the selected proposal shall conduct a meeting to facilitate discussion of site and neighborhood analysis, alternative design solutions, and concerns with neighbors to address compatibility. Neighbors that border or across the street from the proposed site are invited. Staff shall attend. Written comments shall be collected and will be included as part of a staff analysis.

Review Criteria

Neighborhood Compatibility – Cottage development proposals must analyze how it will have similar impacts as potential single family development on the same site in terms of lot coverage, floor area, building bulk, setbacks, and parking. It must also illustrate the site and cottages with the surrounding properties and their houses through a site plan and elevations.

Low impact/Green Building Practices – Cottage development proposals must show how storm water will be handled to reduce run-off to predevelopment levels and to minimize the need for on-site detention system by incorporating storm water dispersion and infiltration on site. Proposals with building materials that are energy and resource-efficient will be considered an asset.

Tree Preservation – Cottage development proposals must minimally incorporate 20% of existing, significant, and non-hazardous trees as much as possible into the over-all site design. Other significant trees that will be removed will be replaced with native, 12 foot tree species. All open space areas that are not required by the cottage code shall be preserved or restored with native plant material.

Southeast Neighborhoods Subarea Plan

DRAFT Design Standards

SE Neighborhoods Subarea Design Standards

A. Purpose

This chapter implements the City of Shoreline Comprehensive Plan and Southeast Neighborhoods Subarea Plan and its policies through land use regulations.

B. Applicability

The use and design standards within this chapter apply to all uses and development proposals within the Southeast Neighborhoods Subarea, as delineated on the official zoning maps. Some standards within this chapter apply only to specific types of development and districts as noted. Standards that are not addressed in this chapter will use other sections of the Shoreline Development Code. In the event of a conflict between standards, the standards of this chapter shall prevail.

C. Administrative Design Review

The following development applications in the SE Neighborhoods Subarea shall be subject to an Administrative Design Review (ADR) decision per SMC 20.30:

- Completely new development; or
- Expanding the square footage of an existing structure by 20 percent, as long as the original building footprint is a minimum size of 4,000 square feet; or
- The construction valuation is 50 percent of the existing site and building valuation; or
- Design departures from the following standard within this Chapter will be approved if it is consistent with the purpose of each subsection and it meets or exceeds the standard.
- Administrative Design Review is defined as a Type B decision. SMC Chapter 20.30 sets forth the procedures, decision criteria, public notification, and timing for all Type B decisions.

Criteria for ADR Decisions

1. The design meets the purpose of the applicable code subsection.
2. The design contributes to the SE Neighborhoods Subarea by improving the function, continuity, connection, or pedestrian interest from building to building and site to site.
3. The choice of materials, colors, or architectural elements is compatible or complementing of other development completed under the SE Neighborhoods Subarea design standards.

4. A departure from the design standards creates an interesting or unique development or exceeds the design standards.
5. The proposed development has unusual site constraints so that meeting the design standards is a hardship.
6. The proposed development meets all other development, building, and fire codes.
7. The proposed development is compatible with the Comprehensive Plan.
8. The proposed development will not be materially detrimental to other improvements or development in the vicinity.

SE Neighborhoods Subarea and Uses

A. SE Neighborhoods Subarea Zones

In order to implement the vision of the Comprehensive Plan: SE Neighborhoods Subarea, a Planned Area with five districts.

Districts. Five districts are delineated within the southeast corner of the subarea between Bothell Way to the east, NE 145th St. to the south, 30th Ave. NE to the west, and NE 149th St. to the north that have general and specific designs.

- a. PLA1A: This district is to allow for mixed use development that is compatible with the immediately adjacent residential uses.
- b. PLA1B: This district is to allow for transition between the more intense residential and commercial uses along Bothell Way and the lower residential densities to the north and west.
- c. PLA1C: This district is to allow for cottage housing or other compatible infill uses. The base density shall be limited to 12 dwelling units per acre, with a density bonus of 25% (15 du/acre) if developed as cottage housing according to Development Code Section ___ with a minimum lot size of 1/3 acre.
- d. PLA1D: This district is to allow for compatible infill housing options, while limiting base density to 18 du/acre.
- e. PLA1E: This district is to allow for compatible infill housing options, while limiting base density to 24 du/acre.

B. SE Neighborhoods Subarea Use Table.

(Placeholder)

SE Neighborhoods Subarea Dimensional Standards

A. Dimensions

Table ___ specifies densities and dimensional standards for permitted development in the SE Neighborhoods Subarea.

(Placeholder)

Single Family Neighborhood Protections

A. Purpose

Minimize negative impacts of SE Neighborhoods Subarea development on adjacent single family neighborhoods, while encouraging development of amenities, jobs, connections, etc.

B. Applicability

Unless specifically noted, the standards herein apply to properties within the SE Neighborhoods Subarea, and various Planned Area designations contained therein.

Site Design Standards

A. Purpose

1. Promote and enhance public walking and gathering with attractive and connected development to:
 - b. Promote distinctive design features at high visibility street corners.
 - d. Provide safe routes for the pedestrian and disabled person across parking lots, to building entries, and between buildings.

B. Site Frontage

Site design standards for landscaping, walkways, public places, and open space may be combined if their separate purposes and functions are not compromised.

Development abutting street frontages as designated within the subarea shall meet the following standards. If the building occupies a corner site, then other than building entry, standards apply to both streets.

1. Storefront Street buildings shall be placed at the property line. Buildings may be setback from the property line if a plaza (as specified in SMC 20.92.140) is included between the sidewalk and the building.
 - a. Minimum, ground level, interior space dimension is 12-foot height and 20-foot depth;
 - b. Minimum transparent window area is 60 percent of the ground floor facade between the heights of 30 inches and 8 feet above the ground;
 - c. The primary building entry shall be on a street frontage and, if necessary, recessed to prevent door swings over sidewalk;
 - d. Minimum weather protection at least five feet in depth, along at least 80 percent of the facade width, and over building entries; and
 - e. Surface parking along Storefront Streets is not more than 65 lineal feet of the site frontage. Surface parking along Boulevard Streets is not more than 50% of the site frontage. Parking lots are not allowed at street corners. No parking or vehicle circulation is allowed between the right-of-way and the building front facade. Sites with less than 80 feet lineal feet of frontage are exempt from this standard. See figure 20.92.070(B)(1)(b) for parking configurations. See 20.92.060(F)(3) for parking lot landscape standards.

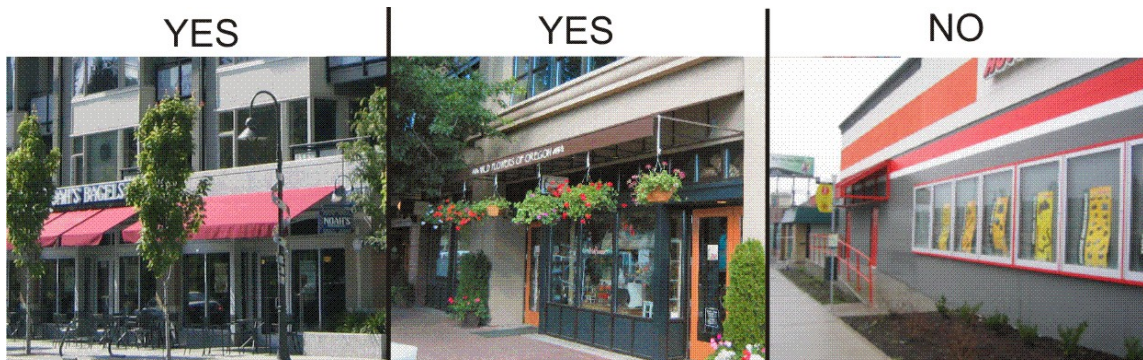


Figure 20.92.070(B)(1)(a). Boulevard and Storefront examples.

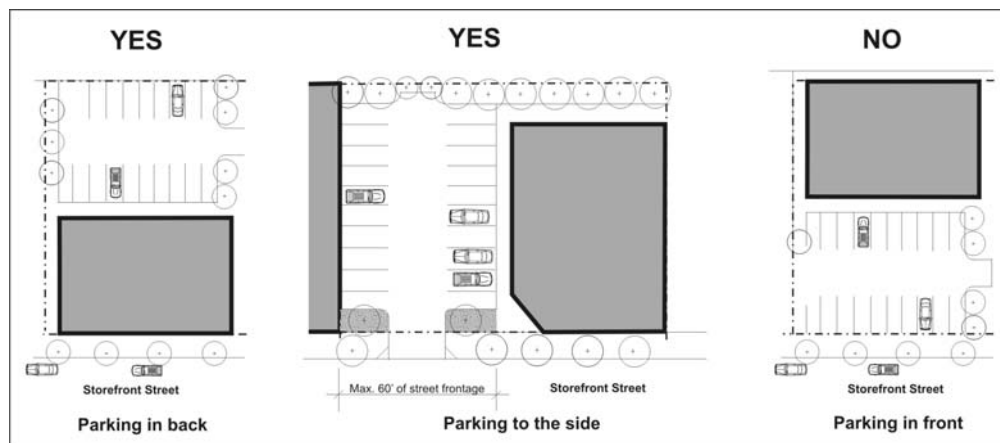


Figure 20.92.070(B)(1)(b). Parking lot locations along Storefront and Boulevard Streets.

C. Vehicle Parking

1. Minimum Off-street Parking

See SMC 20.50.390 for applicable standards. Reductions up to 30% may be approved using combinations of the following criteria.

- On-street parking along the parcel's street frontage.
- A mass transit stop within ¼ mile radius.
- An off-street public parking lot within ¼ mile radius.
- Shared parking agreement with adjoining parcels that has land uses that do not conflict.
- Commute trip reduction program.
- High occupancy vehicle parking.

20.92.070 Building Design Standards

A. Purpose

1. Emphasize a quality building articulation, detailing, and durable materials.
2. Reduce the scale of large buildings and add visual interest.

B. Façade Articulation

1. At least two of the following methods must be employed:
 - a. Use of window and/or entries that reinforce the pattern of 40-foot storefront spaces.
 - b. Use of weather protection awning that reinforce 40-foot storefronts.
 - c. Change of roofline per subsection 4 below.
 - d. Use of revealed vertical piers.
 - e. Change in building material or siding style.



Figure 20.92.180(B). Good and bad storefront articulation examples.

C. Multifamily Buildings

All multifamily buildings and residential portions of mixed-use buildings shall provide at least three of the following articulation features at intervals minimally every 35 feet of facades facing a street, park, and plaza, gathering public places or common open space.

- a. Repeat distinctive window patterns at intervals less than the required interval.
- b. Vertical building modulation 18 inches deep and 4 feet wide if combined with a change in color or building material or roofline modulation as defined in subsection E below. Otherwise, minimum depth of modulation is 10 feet and minimum width for each modulation is 15 feet. Balconies may be used to meet modulation. .
- c. Above 40 feet, upper level step-backs at least 5 feet and used consistently with other articulation elements along at least 50 percent of the façade.
- d. Distinctive ground floor or lower floor design, consistent articulation of middle floors, and a distinctive roofline.

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Summary of Surface Water References Applicable to SE Corner of the SE Neighborhood

**1. The Thornton Creek Watershed: A Historical Analysis
An Overview of Land Use Changes Through the Years**

Prepared for Seattle Public Utilities

Contract Nbr. R00-24-07-01

Prepared By: Patrick Trotter, PhD, Alan W. Johnson, Kelvin Andrews

Natural Systems Design LLC, Seattle, WA

2009

The report does not mention any wetlands, bogs, or streams in the SE portion of the subarea plan. The SE portion is not included in the Thornton Creek basin; probably because a large portion is part of the Hamlin Creek sub-basin. As an added note, this document does not purport to be a basin study of the hydrology, but rather an historical overview of changes to the basin, mostly within the Seattle city limits.

Report covers the following topics.

A Historical Overview

Focus Areas of the Watershed

The Knickerbocker Reach

The Confluence Reach

Hamlin Creek

Northgate and North Seattle Community College

Ronald Bog

Findings are:

- Prior to development, coniferous forest and wetlands dominated the basin.
- Development progressed through four phases from logging to urbanization.
- Basin hydrology was completely altered by logging and draining of wetlands.
- Increases in impervious surfaces further changed stream hydrology.
- Fish communities vanished or diminished with changes in the basin.

2. Revised Draft Basin wide Flow Control Plan (Prepared for Seattle)

Thornton Creek

Seattle, Washington

Entranco

April 19 2001

Page 3-1 Littlebrook contributes to North Branch Thornton Creek within Seattle city limits. All figures show Littlebrook beginning in Seattle, south of N 145th St. Shows a Littlebrook Creek at about 30th in Seattle Figure 3.1, Figure 4.6. SE area in sub-basin LB-01 Figure 3.2

3. Thornton Creek and West Lake Washington Basins

Characterization Report

City of Shoreline

May 2004

Tetra Tech/KCM

References other studies:

Thornton Creek Watershed Characterization Report, SPU, 2000

Thornton Creek Riparian Corridor Maps, SPU 1999

King County Sensitive Areas Map Folio, 1990

Thornton Creek tributary Flood reduction Study – Preliminary Draft, OTAK, December, 2001.

Presents diagnostic first steps for stream and wetland designations. Specific identification would occur during development review. Figure 2-2 shows the SE neighborhood lying within sub-basin TC-A (Thornton Creek A) and WLW-A (West Lake Washington Basin A) but does not indicate any historic or existing streams, wetlands or bogs in this area. Geology discussion does not mention peat in this area. The West Lake Washington basin does not have above-ground drainages.

4. City of Shoreline

Stream and Wetland inventory and Assessment

Appendices

May 2004

Tetra Tech/KCM, Inc.

Indicates there are no streams, wetlands, or bogs in SE neighborhood.

5. Thornton Creek Watershed Plan

City of Shoreline, Washington

November 2009

R.W. Beck

nhc Northwest Hydraulic Consultants

The Watershed Company

EnviroIssues

Study limited to areas of Thornton Creek with creeks and wetlands. The study does not include the SE neighborhood because Thornton Creek does not run through the SE Neighborhood.

6. City of Shoreline
Surface Water Master Plan
2005
RW Beck

The Master Plan indicates that the area from 28th Av NE to Bothell Way and NE 150th St to NE 145th St. has no major water courses within the City limits. Note that the West Lake Washington Basin boundaries include part of the SE neighborhood.