reVISIONING Westgate:

A District Form Based Code

Presentation to Edmonds
Economic Development Council

February 15, 2012

City of Edmonds

Green Futures Lab,
University of Washington

Cascade Land Conservancy

Acknowledgements

Team 1 – Fall Quarter Undergrad Class (Fall 2011)

- Elizabeth Abrahamson, Cristina Haworth, Brad Shipley

Team 2 –Student Internships (2011 & 2012)

- Betsy Jacobson –Masters in Urban Planning and Landscape Architect
- Tom Jamieson – Masters in Landscape Architecture
- Julie Kreigh – PhD in Built Environment
- Jeanine Matthews – Masters in Landscape Architecture
- Eric Scharnhorst – Masters in Landscape Architecture
- Brad Shipley –B.S Degree in Community, Environment and Planning

Faculty:

- Jill Sterrett, FAICP - Urban Design and Planning
- Nancy Rottle, ASLA - Landscape Architecture

Presentation Agenda

1. Research & Public Process
2. Westgate Concept Plan
3. Overview of Plan Document
4. Questions and Discussion

Phase One: research & data analysis

Conducted

- An online citizen survey
- Site surveys of land uses & amenities.
- Parking counts
- Walking distance & conditions study
- Maps of study results
- Analysis of user friendliness
- Research on Exemplary Commercial Centers in the PNW
- Coordination with Cascade Land Conservancy

Phase Two:

Listening Session and Audience Response Surveys

Brown University

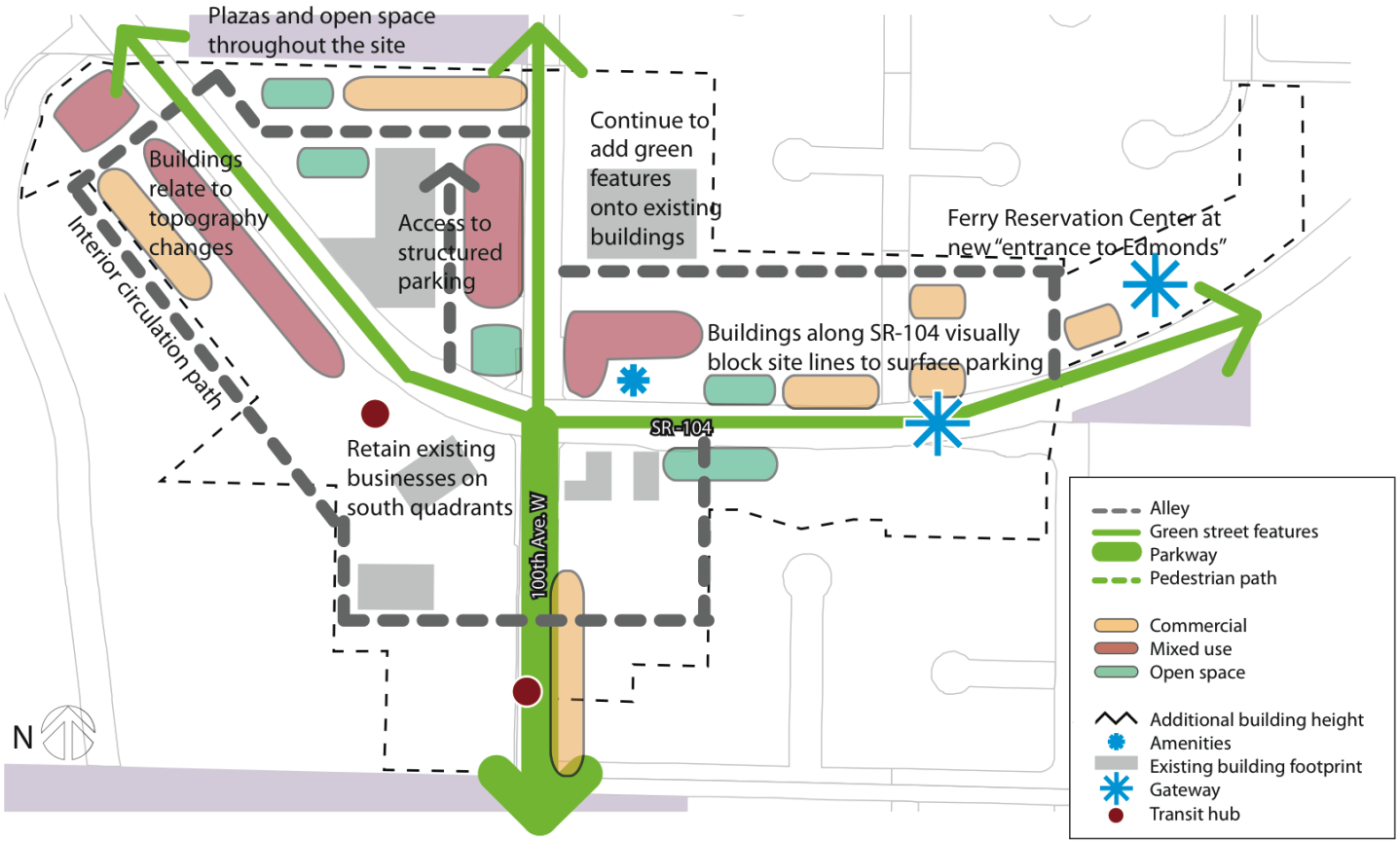
- Listening sessions
- Audience response survey
- Synthesis of survey results
- Form-based code case studies

Phase Three: Design Workshop and Draft Plans

- Public design workshop with local professionals
- Review of what we had heard from the public
- Draft site design: Life, Space, Buildings
- 3 teams Westgate

Design Workshop

Westgate



WG3: Westgate Create

Public Sentiment

Main Topics	Five Corners	Westgate
Building Scale	2-3 stories w/ housing	3-4 stories w/ housing
Public Space	Increasing public space was the most popular recommendation for improvement (all ages). Examples suggested were plazas, sitting space, green space.	
Walking/Biking	Improve walkability by creating safe environment for people of all ages.	
Traffic	Roundabout has general public support. Concerns about increased congestion noted.	No prominent issues with automobile traffic
Services	Community desires better restaurants, street cafés, and a bakery. Business fronts should be at the sidewalk.	
Amenities	Landscaping on sidewalks, street trees, and use of native plant species	

Phase 4:

Refining and Selecting Preferred Alternative - Westgate

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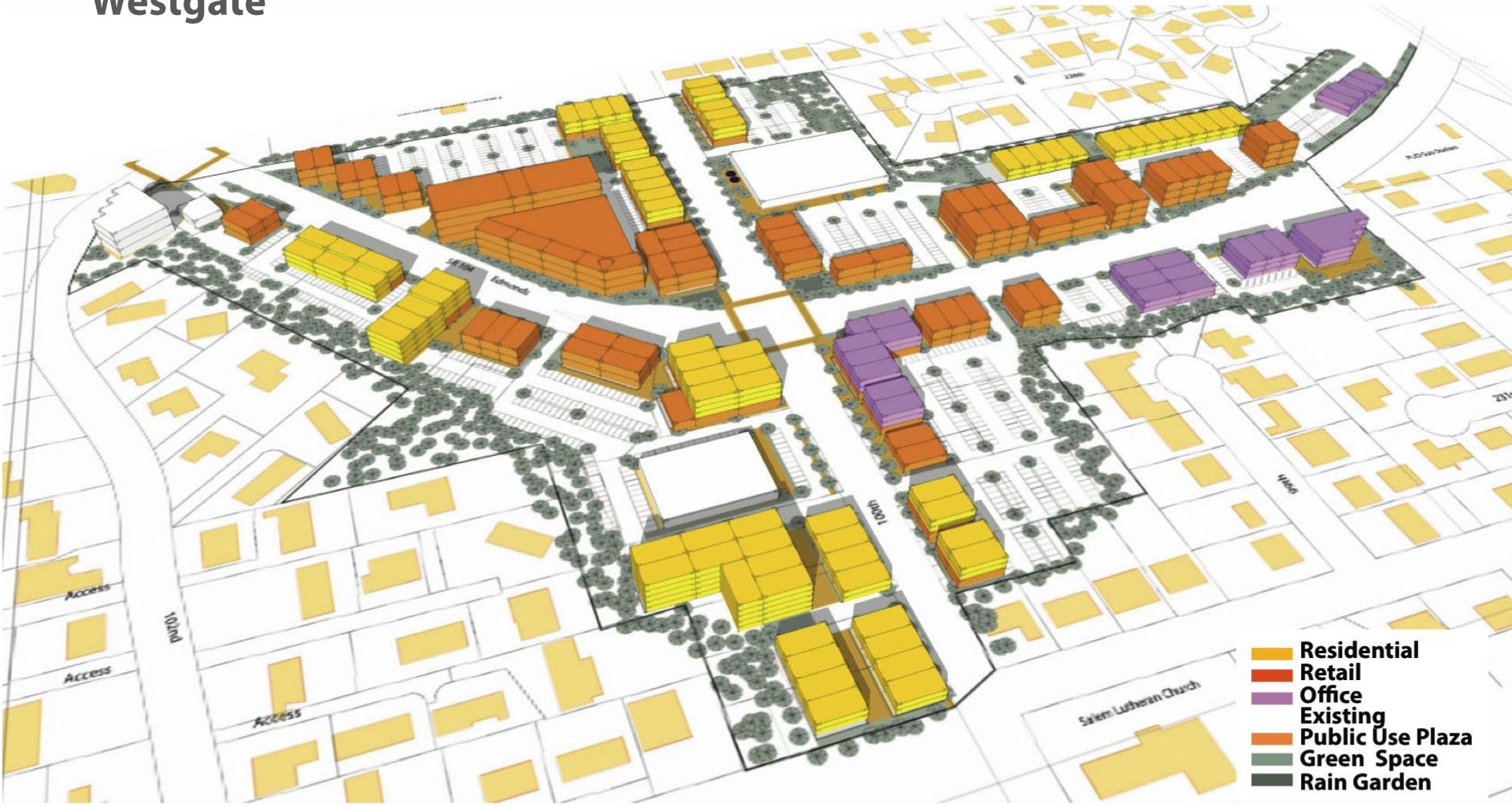
Illustrative Building Massing

Westgate



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Illustrative Plan

Westgate

ILLUSTRATIVE SITE PLAN

Comparison of Existing and Potential

Existing Development (All shown in sq. ft.)		Potential New Development (Sq. ft. and # of dwellings)	
Retail	165,804	Retail (new)	249,700
		Retail (retained)	54,700
Office	28,634	Office	167,600
Services	34,844		
Residential	5,881	B&B	32,400
		Live Work	24 units
		Residential	180 units
Total sq. ft.	235,163	Total sq. ft.*	504,400

* not including residential

Contents of the Plan/Form-Based Code

1. Introduction
2. The Regulating Framework
3. Building Types and Standards
4. Civic Investment: Streetscape and Public Space Standards
5. Private Investment: Amenity Spaces and Green Features Standards
6. Administration and Implementation Standards
7. Recommendations

Contents of the Plan - Intent and Goals

1. **Creating mixed-use walkable, compact development that is economically viable, attractive and community-friendly,**
2. Improving **connectedness** for pedestrian and bicycle users,
3. Prioritizing **amenity spaces** for informal and organized gatherings ,
4. Emphasizing green building construction, stormwater infiltration, and a variety of **green features**,
5. Establishing a **flexible regulating system** that creates quality public spaces by regulating building placement and form,
6. Ensuring **civic and private investments** contribute to increased infrastructure capacity and benefit the surrounding neighborhoods and the community
7. Encouraging the development of a variety of **housing choices** available to residents of all economic and age segments.

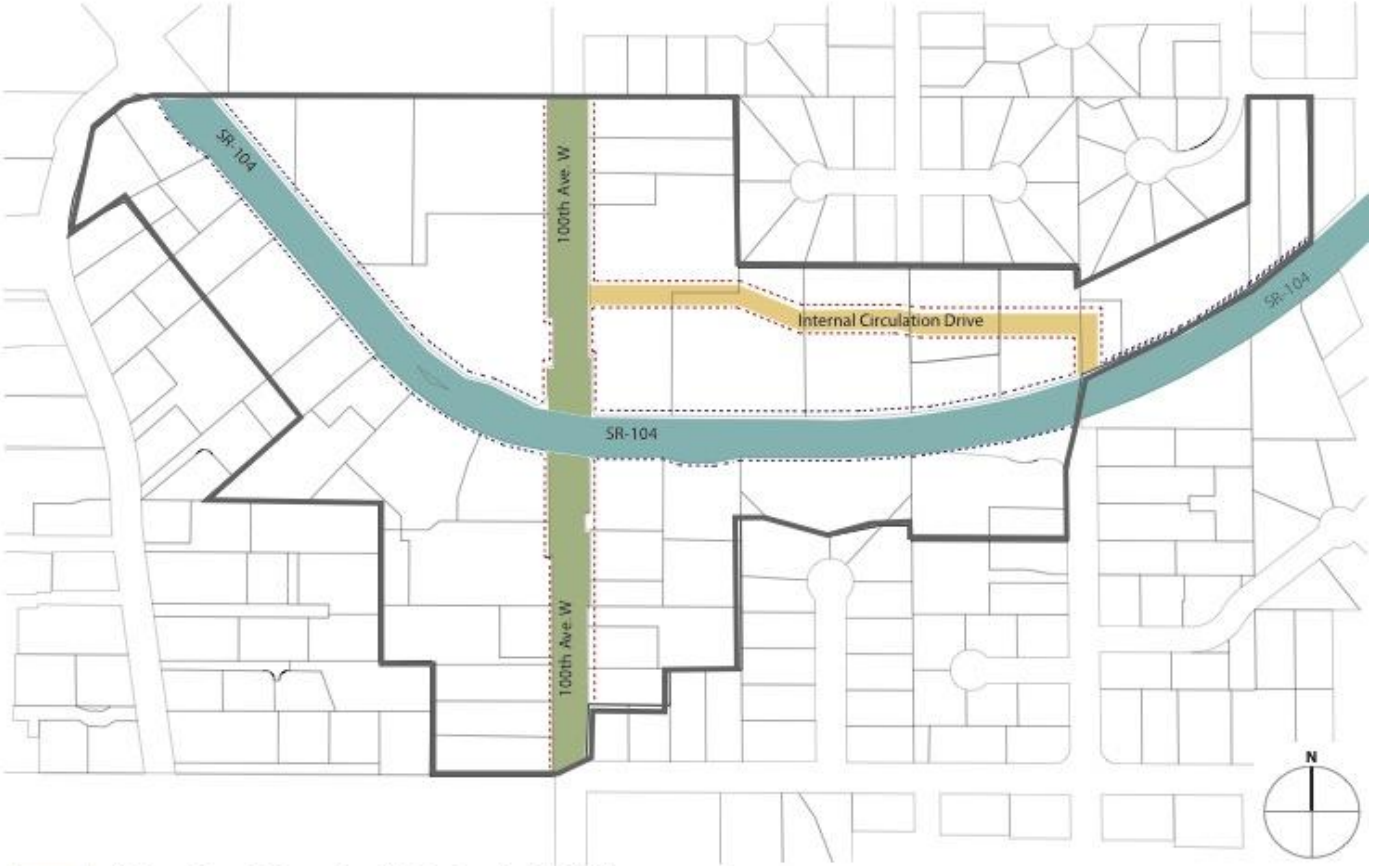
The Regulating Framework

1. Amenity Spaces and Green Feature Types
2. Required Building Lines
3. Street Types
4. Building Types
5. Frontage Types

Amenity Spaces & Green Feature Types

- **Common Areas:** Landscape enhancement at intersection; possible public park; linkages to surrounding areas; setbacks from SR 104
- **"Amenity Space"** (usable plazas, sidewalks, lawns, etc) of 15% per lot, based on analysis of proposed development.
- **Street trees** and parking lot trees: retention of trees on surrounding slopes
- **Stormwater management** through landscape features

Required Building Lines



1) Street Type A: State Road 104 - Required Building Line shall be 8' from the right-of-way (see Section 4.2 Streetscape Standards).

2) Street Type B: 100th Avenue West - Required Building Line shall be 5' from the right-of-way (see Section 4.2 Streetscape Standards).

3) Street Type C: Internal Circulation Drive - Required Building Line shall be 3" from the edge of the prescribed 9' to 12' edge treatment (yards, sidewalks, landscaping, or swales) lining the drive (see Section 5.4 Streetscape Standards).

Required Building Lines for State Road 104 shall be 8' from Right-of-Way

Required Building Lines for 100th Aveneue West shall be 5' from Right-of-Way

Streetscape Standards

100th Avenue West

south of SR - 104

Proposed Approach

The proposed alterations add bike lanes to an existing cycling route. A bioswale on east side of the street treats stormwater. Additonal street trees enhance the pedestrian experience.

Thoroughfare Type:	commercial street with pedestrian enhancements
Movement:	slow
R.O.W Width:	70'
Design Speed:	25 mph
Landscape:	west side - street trees planted 30' on center , east side- bioswale
Traffic Lanes:	10', one each way; 11' center turn lane
Bike Lane:	6' on both sides of street
Parking:	none
Curb to Curb Distance:	43'
Sidewalks:	7'

Table 4.4

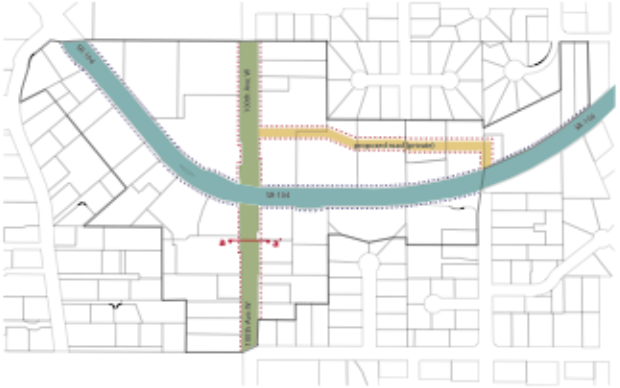


Fig. 4. 4 - Section a - a': looking south from intersection of 100th Ave. and SR-104

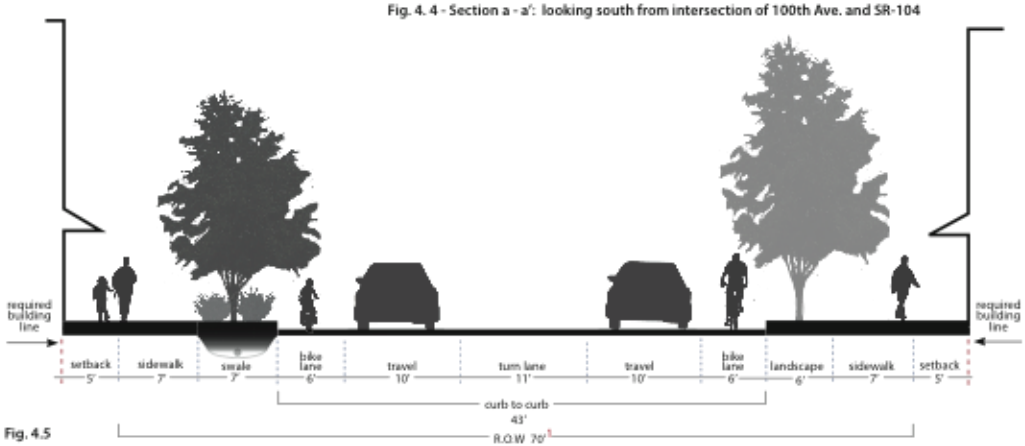


Fig. 4.5

Streetscape Standards

State Road 104

Proposed Approach

The proposed alterations maintain the street's function and designation as a principal arterial while they enhance the street's ecological aspects and improve it as a pedestrian route. Frontage requirements and additional vegetaion will strengthen the character of the street and provide a comfortable sense of enclosure.

Thoroughfare Type:	state highway
Movement:	free
R.O.W Width:	80'
Design Speed:	35 mph
Landscape:	north side - vegetated swale, south side - street trees planted 30' on center
Traffic Lanes:	11', two each way; 11' center turn lane w/ intermittent planted median
Bike Lane:	none
Parking:	none
Curb to Curb Distance:	55'
Sidewalks:	north side 5 - 8'; south side 5'

Table 4.2

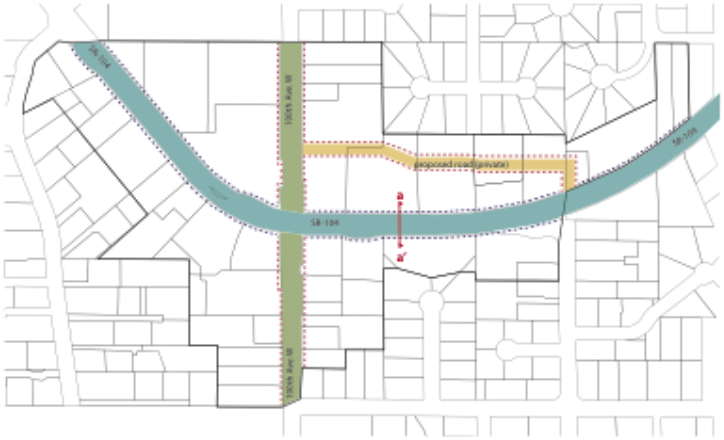
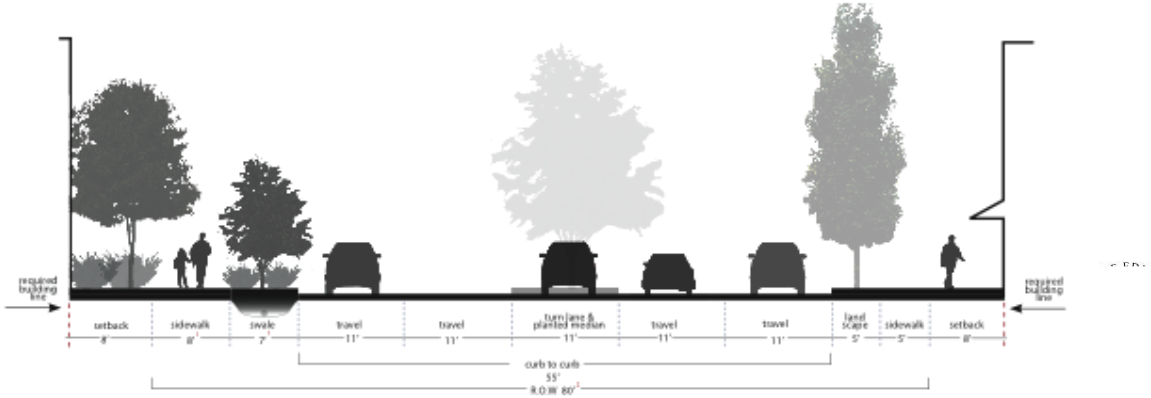


Fig. 4.1 - Section a - a': looking east, in-line with existing bowling alley



Streetscape Standards

Internal Circulation Drive

Proposed Approach

Shared street (or woonerf) concept is intended to provide access to new residential developments, new and existing businesses, and provide pedestrian connectivity as an alternative to SR-104.

Thoroughfare Type:	shared street
Movement:	yield
R.O.W Width:	42'
Design Speed:	10 mph
Landscape:	south side - rain garden fronting businesses
Traffic Lanes:	10', one each way
Bike Lane:	none
Parking:	none
Curb to Curb Distance:	no curbs
Sidewalks:	6'

Table 5.2

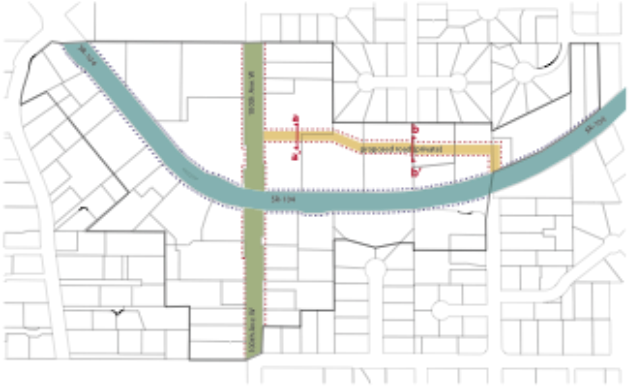


Fig. 5.1 - Sections a - a' & b - b'

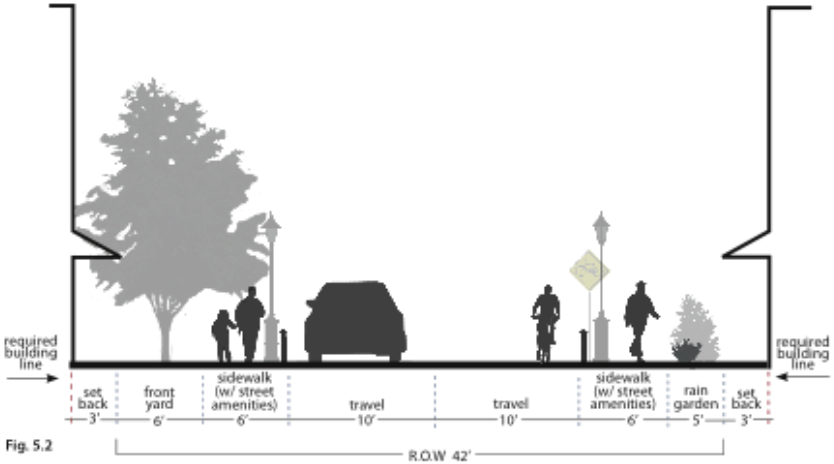


Fig. 5.2

Building Types

1. ***Rowhouse*** - Townhome apartments or condominiums
2. ***Live Work*** - Townhome apartments or condominiums
3. ***Courtyard Residential*** - Apartment or condominium flats
4. ***Side Court*** - Office only, Retail Mixed Use with office or residential above, or Community Service Mixed Use with office or residential above
5. ***Commercial Block*** - Retail only, Office only, Retail Mixed Use with office or residential above, or Community Service Mixed Use with office or residential above

Residential Building Types

Rowhouses

Courtyard Residential

Live/Work

Commercial Building Types

Side Court

Commercial Block

Height Bonus Locations

Parcels eligible for the additional, second-story, height bonus

Steep slopes over 8 degrees

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Height Bonus Criteria

	Housing Unit Size (see Section 3.4.1)	Cumulative	**4 Points**
Prereq.	**Number of units < 900 sq. ft.,** 10%		Required
Prereq.	**No units ≥ 1,600 sq. ft.**		Required
Credit 1	**Number of units < 900 sq. ft. 20%**		1
Credit 2	**Number of units 900-1000 sq. ft.** 10%		1
Credit 3	**Number of units 1001-1200 sq. ft.** 10%		1
Credit 4	**Number of units 1201-1400 sq. ft.** 10%		1
	Green Building Program		**4 Points**
Prereq.	**Built Green® / LEED®** Certified Rating or equivalent		Required
Credit 1	**LEED®** Silver Rating / **Built Green®** 4-5 / **Evergreen Sustainable Development Standards**		1
Credit 2	**LEED®** Gold Rating		2
Credit 3	**Passive House Standard / LEED®** Platinum Rating		3
Credit 4	**Living Building®**		4
	Green Factor		**5 Points**
Prereq.	**Green Factor Score** 0.3		Required
Credit 1	**Green Factor Score** 0.4		2
Credit 2	**Green Factor Score** 0.5		3
Credit 3	**Green Factor Score** 0.6		4
Credit 4	**Green Factor Score** ≥ 0.8 Sustainable Sites Initiative™,or equivalent		5
	Amenity Space (see Section 2.3)		**4 Points**
Prereq.	**Percentage of amenity space of lot size** 15%		Required
Credit 1	**Percentage of amenity space of lot size** 20%		2
Credit 2	**Percentage of amenity space of lot size** 25%		3
Credit 3	**Percentage of amenity space of lot size** ≥30%		4
	Alternative Transportation	Cumulative	**5 Points**
Prereq.	**Meet street standards, including; bikeway and pedestrian networks, and vehicle parking**		Required
Credit 1	**Car share parking,** minimum 2 parking spots		1
Credit 2	**Charging facility for electric cars**		2
Credit 3	**Indoor bicycle storage and changing facilities**		1
Credit 4	**Priority parking for sub-compact (Smart Cars™ and motorcycles)**		1

One-story Bonus requires 8 Points **Two-story Bonus** requires 12 Points

	Points in 4 categories, including at least one within Green Factor or Amenity Space	Required

Green Features Standards: "Westgate Green Factor"

1. Based on **successful Seattle Green Factor** for Commercial and Multi-Family Zones
2. Flexible system to address **ecological and livability functions**
3. Developer achieves **score by implementing green elements**; minimum score : .30 of lot size
4. **Points can be earned for requirements**, e.g. meeting stormwater code; features such as permeable paving, trees, rainwater irrigation in required setbacks and amenity spaces.

street trees

green street edges

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Green Features Standards: Westgate Green Factor

Applicant / landscape professional

a) tracks quantities on score sheet and submits with plans;

b) certifies that plan meets or exceeds minimum requirements

Points for:

- Soil depth in landscaped areas
- Tree canopy
- Shrubs and ground covers
- Bioretention facilities
- Green roofs
- Permeable paving
- Water features
- Green walls
- Drought tolerant/native plants
- Features visible from public spaces

Revised 12/28/10

Green Factor Score Sheet

SEATTLE × green factor

Project title:

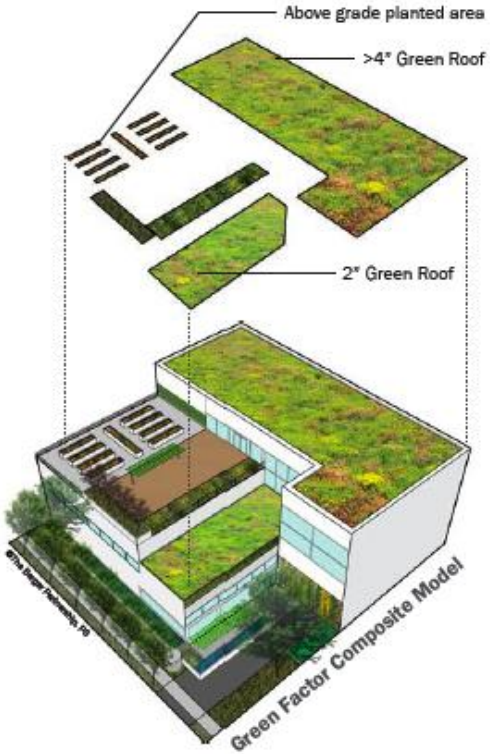
		enter sq ft of parcel			
	Parcel size *(enter this value first)* *	5,000		SCORE	-
	Landscape Elements**	**Totals from GF worksheet**		**Factor**	**Total**
A	**Landscaped areas (select one of the following for each area)**				
1	Landscaped areas with a soil depth of less than 24"		*enter sq ft* 0	0.1	-
2	Landscaped areas with a soil depth of 24" or greater		*enter sq ft* 0	0.6	-
3	Bioretention facilities		*enter sq ft* 0	1.0	-
B	**Plantings (credit for plants in landscaped areas from Section A)**				
1	Mulch, ground covers, or other plants less than 2' tall at maturity		*enter sq ft* 0	0.1	-
2	Shrubs or perennials 2'+ at maturity - calculated at 12 sq ft per plant (typically planted no closer than 18" on center)	*enter number of plants* 0	0	0.3	-
3	Tree canopy for "small trees" or equivalent (canopy spread 8' to 15') - calculated at 75 sq ft per tree	*enter number of plants* 0	0	0.3	-
4	Tree canopy for "small/medium trees" or equivalent (canopy spread 16' to 20') - calculated at 150 sq ft per tree	*enter number of plants* 0	0	0.3	-
5	Tree canopy for "medium/large trees" or equivalent (canopy spread of 21' to 25') - calculated at 250 sq ft per tree	*enter number of plants* 0	0	0.4	-
6	Tree canopy for "large trees" or equivalent (canopy spread of 26' to 30') - calculated at 350 sq ft per tree	*enter number of plants* 0	0	0.4	-
7	Tree canopy for preservation of large existing trees with trunks 6"+ in diameter - calculated at 20 sq ft per inch diameter	*enter inches DBH* 0	0	0.8	-
C	**Green roofs**				
1	Over at least 2" and less than 4" of growth medium		*enter sq ft* 0	0.4	-
2	Over at least 4" of growth medium		*enter sq ft* 0	0.7	-
D	**Vegetated walls**		*enter sq ft* 0	0.7	-
E	**Approved water features**		*enter sq ft* 0	0.7	-
F	**Permeable paving**				
1	Permeable paving over at least 6" and less than 24" of soil or gravel		*enter sq ft* 0	0.2	-
2	Permeable paving over at least 24" of soil or gravel		*enter sq ft* 0	0.5	-
G	**Structural soil systems**		*enter sq ft* 0	0.2	-
		sub-total of sq ft =	*0*		
H	**Bonuses**				
1	Drought-tolerant or native plant species		*enter sq ft* 0	0.1	-
2	Landscaped areas where at least 50% of annual irrigation needs are met through the use of harvested rainwater		*enter sq ft* 0	0.2	-
3	Landscaping visible to passersby from adjacent public right of way or public open spaces		*enter sq ft* 0	0.1	-
4	Landscaping in food cultivation		*enter sq ft* 0	0.1	-
			Green Factor numerator =		-

**** Do not count public rights-of-way in parcel size calculation.***

***** You may count landscape improvements in rights-of-way contiguous with the parcel. All landscaping on private and public property must comply with the Landscape Standards Director's Rule (DR 6-2009)***

Element: Green Roofs

Green Roofs offer a dramatic functional improvement over conventional roofs. They provide habitat for insects and birds, improve stormwater quality while reducing runoff quantity, and they reduce the heat island effect. Their use in building design can count toward LEED® certification, reduce heating and cooling costs, and almost double the lifespan of the roof. They are becoming more common and can be useful in educating the public about the benefits of green building practices.



2" to 4" of growth medium

Thin profile green roofs have the advantage of reduced structural load on a building, while offering many of the benefits of a thicker profile roof. Even thin profile roofs can capture and retain 60% of the precipitation that falls on them.

Green Factor defines green roofs as any planting which is on top of a structure at least one floor above the level of the at grade entrance. Green roofs with less than a 2" soil profile will be categorized as landscaping areas with less than 24" of soil.

Graphic Legend
- A: Sedum Mat
- B: 2" Growth Medium
- C: Filter Fabric
- D: Drainage Layer
- E: Waterproofing Layer
- F: Roof

C1

Element - 2-4" Green Roof

Functional Benefits
- Reduction of runoff
- Reduction of heat island
- Habitat creation
- Improved insulation

Environmental Considerations
- Petroleum products
- Requires irrigation

Note - Green Roof can extend roof lifespan to 50-100 Years

Factor - 0.4

1.0 / 0.1 GF

Over 4" of growth medium

Green roofs with a thicker soil profile can support a wider range of plants than a roof with a 2" profile. The increased plant diversity can create a wider range of possible habitats for native insects and birds. Heating and cooling benefits are increased due to increased insulation, and the stormwater are improved. While a wide variety of roof systems are available, proper design, installation and maintenance are crucial to a successful project.

Graphic Legend
- A: Plant Material
- B: >4" Growth Medium
- C: Filter Fabric
- D: Drainage Layer
- E: Waterproofing Layer
- F: Roof

C2

Element - >4" Green Roof

Functional Benefits
- Further runoff reduction
- Reduction of heat island
- More diverse habitat
- Improved insulation

Environmental Considerations
- Petroleum products
- Requires irrigation

Note - Green Roof can extend roof lifespan to 50-100 Years

Factor - 0.7

1.0 / 0.1 GF

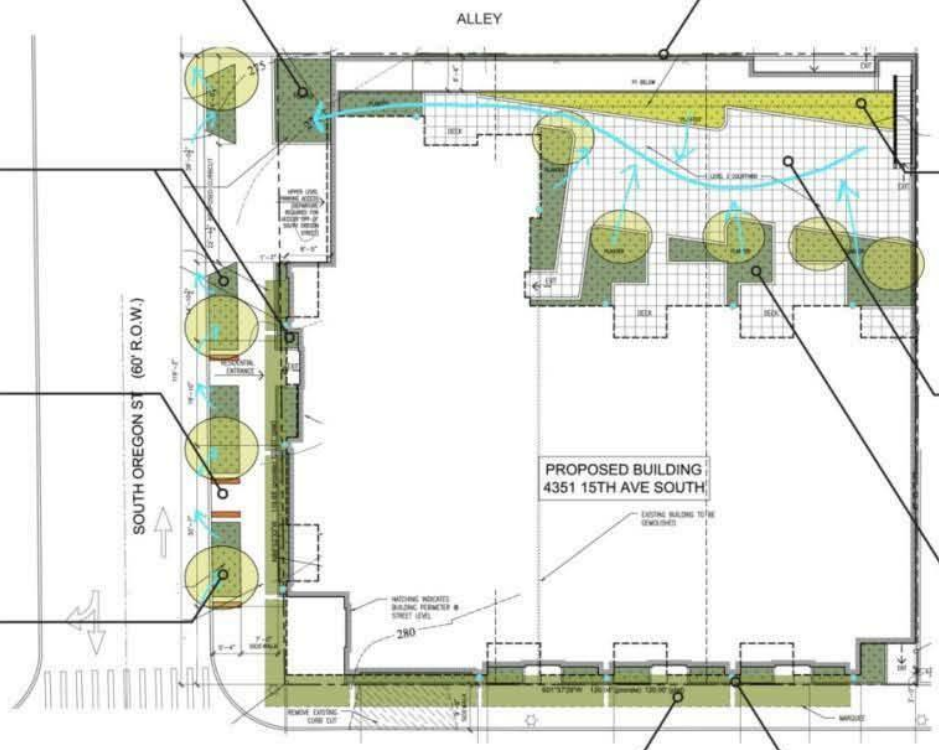
Green Factor Example

BIG PLANTER

LOWER PLANTERS

BENCH NOOK

STREET TREES



GREEN WALL

GARDEN OF LIGHT

COURTYARD

UPPER PLANTERS

GREEN ROOFS

DOWNSPOUTS & RUNNELS

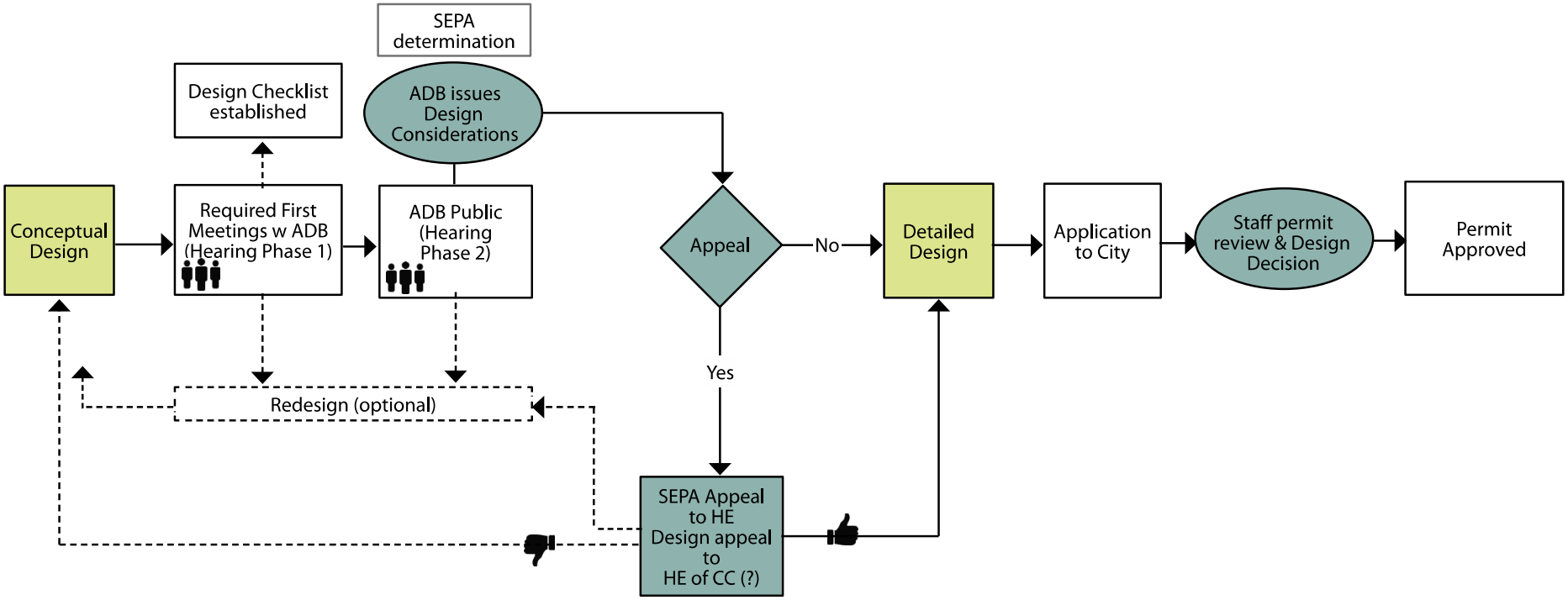
NOTES

DOWNSPOUTS AND GREEN ROOFS CONNECT TO LOWER PLANTERS. STREETSIDE PLANTERS RECEIVE SOUTH OREGON ST. RUNOFF. COURTYARD AND UPPER PLANTERS OVERFLOW TO BIG PLANTER.

1" = 10'0"

Administration & Implementation

Proposed Development	Review Process
1 to 3 Stories	Administrative Review
4 Stories	Administrative Review + Bonus Scoresheet
5 Stories	Administrative Review + Bonus Scoresheet + Design Review



Review Schedule

Tonight: EDC Presentation & Review

Next Few Months: Planning Board to review & refine Plan/FBC

Fall: Public meeting(s)

Year end: City Council decision

Questions and Discussion

THANKS FOR PARTICIPATING!