



Greenbridge Landscape Maintenance Plan



Greenbridge

KING COUNTY HOUSING AUTHORITY



Seola Gardens

December 2011

Owner/Client:

King County Housing Authority
Greenbridge Owner's Association

Maintenance / Management:

Quantum Management
Brickman – landscape maintenance

Design / Maintenance Plan Consultant:

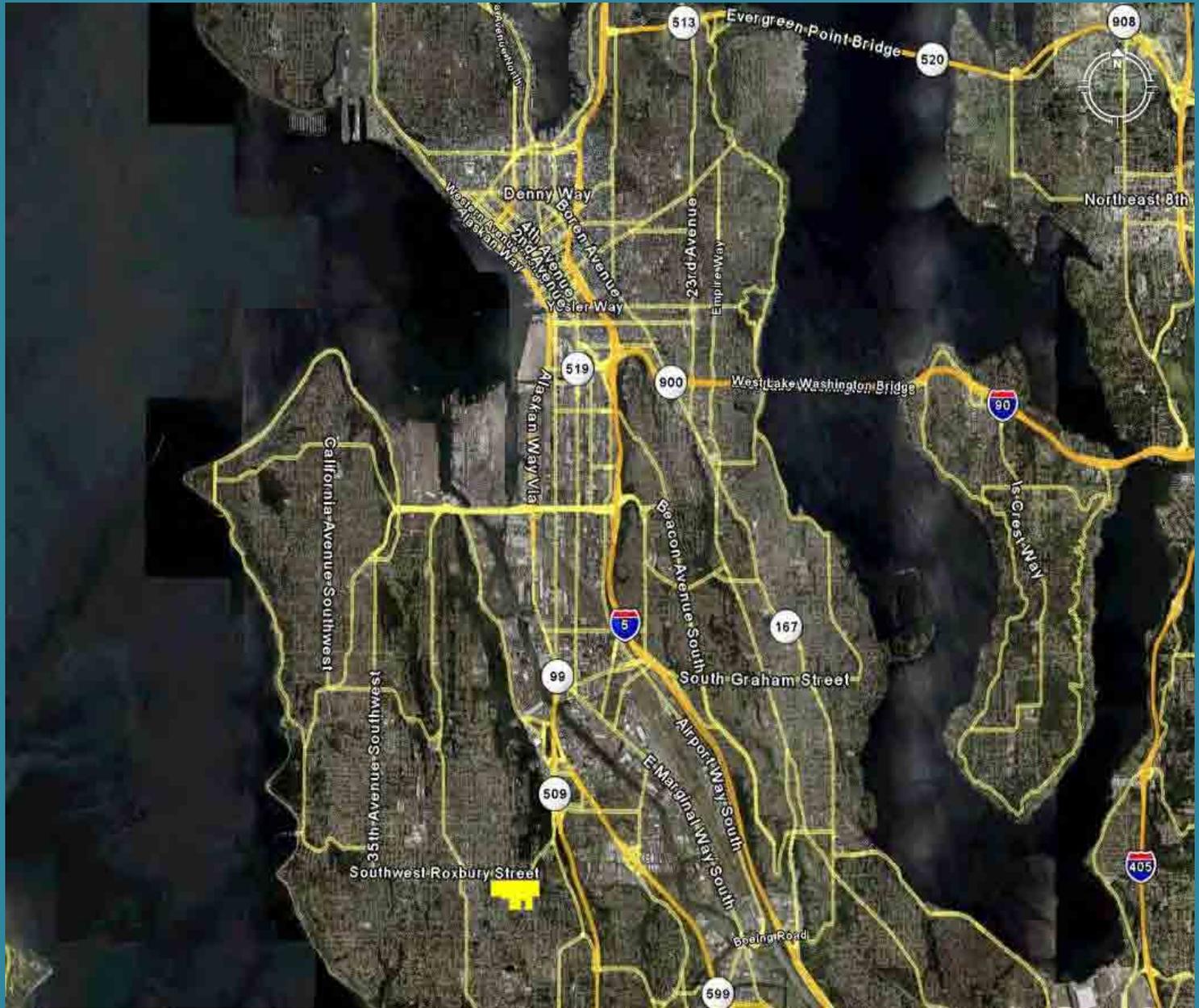
Johnson+Southerland, landscape architecture

With help from:

Stenn Design, In Harmony Landscapes & Cass Turnbull

GREENBRIDGE









SW Roxbury St.

SW 100th St.

SW 102nd St.

8th Avenue SW

6th Avenue SW

4th Avenue SW

Master-planned urban community with:
Parks and Recreation
Elementary School
Early Learning Center
Library
Community Center
Community Resources (YWCA, Highline CC satellite campus)
Mixed-income
On bus line to Downtown Seattle & SeaTac







Place to
LIVE & WORK



Live-work
&
Daycare



Place to
LEARN





Place to PLAY

Place to GARDEN



Place to
CELEBRATE



LANDSCAPE VISION





Dubsea
Coffee

12:50

8 AVE SW











LANDSCAPE ISSUES













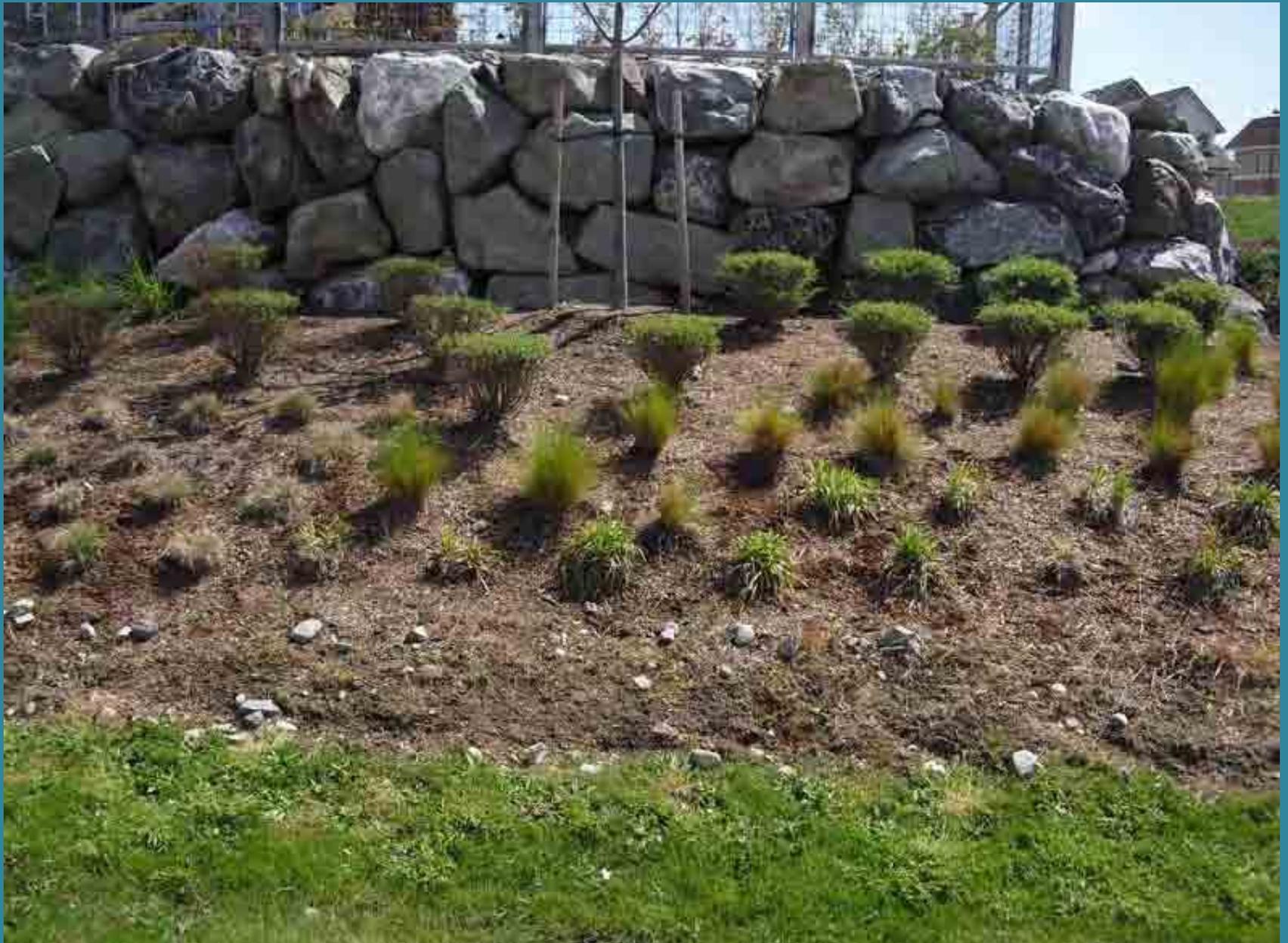


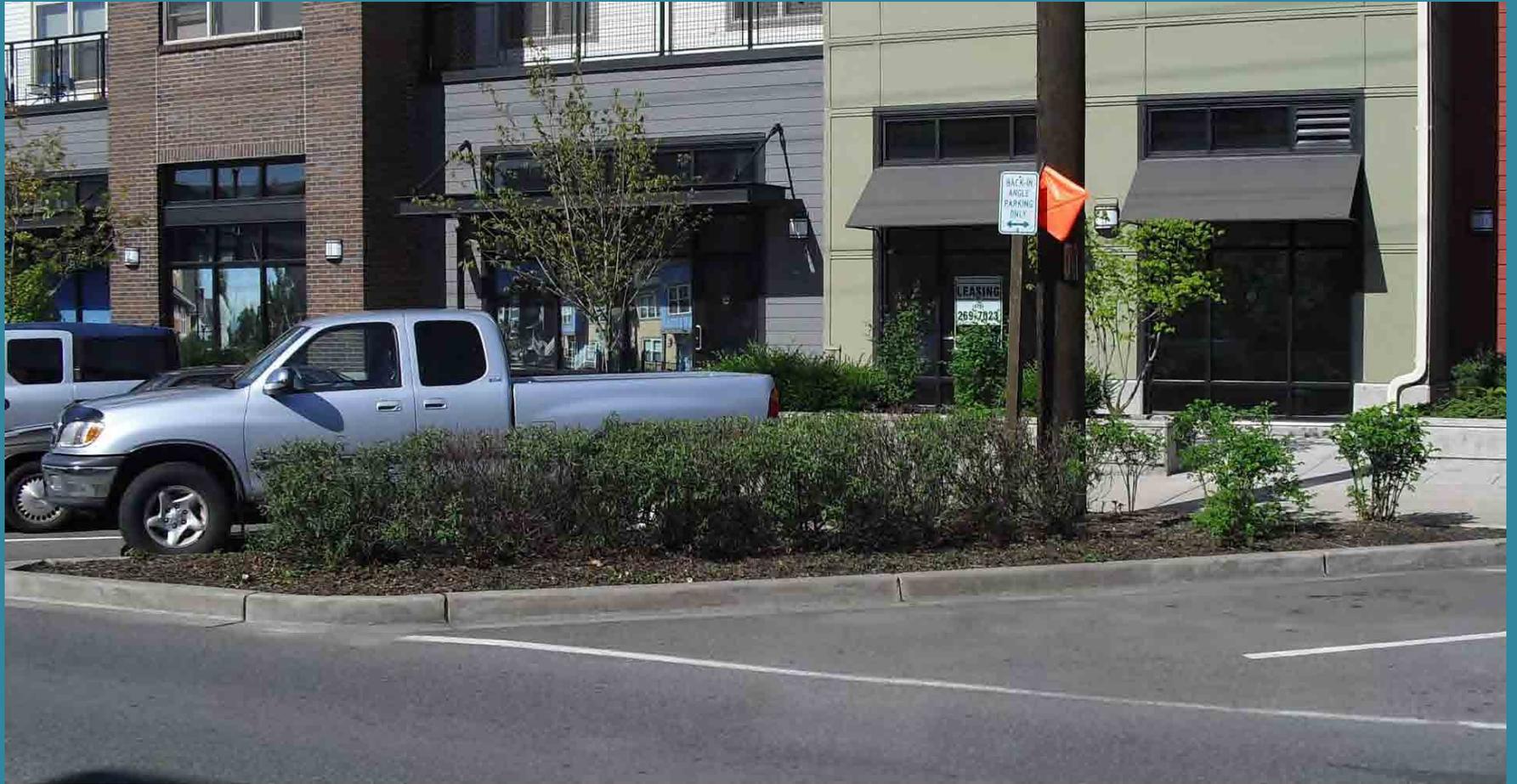














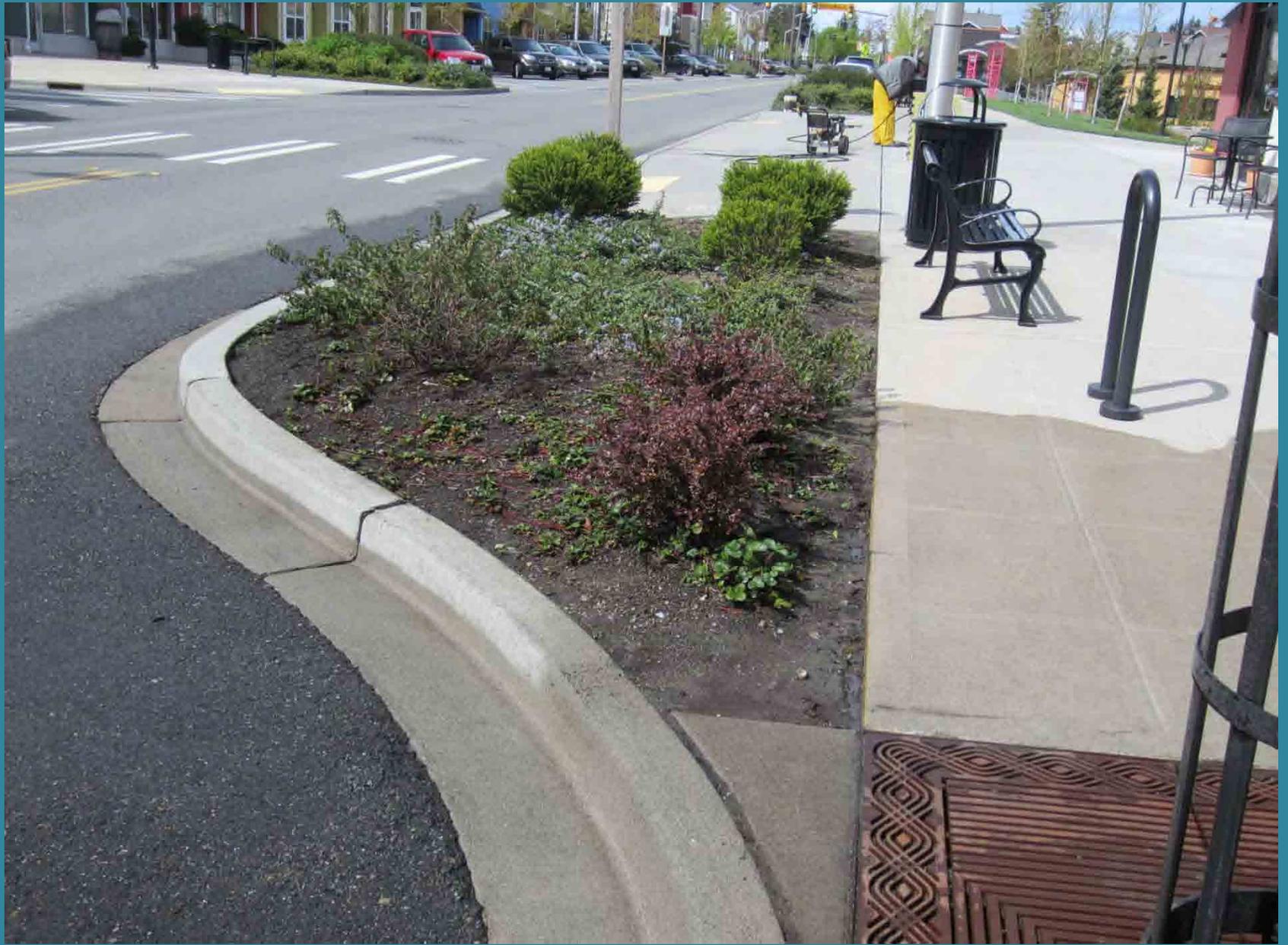
Fashion
House
200-312-2147

YO STYLE
Hair
Design
200-312-2147

A Touch
Of
Class

108

























THE PLAN

Intent of Landscape Maintenance Plan:

1. Address **all players**, providing
2. A **common vision** for the quality and appearance of the landscape
3. A **strategy to make it happen**
4. Guidance on **maintenance practices** and quality control



Goal #1:

Attractive

The entire Greenbridge & Seola Gardens development needs to present itself as a beautiful vibrant neighborhood and nice place for all types of people to live. Developers and buyers of homes for sale must be attracted to invest in the neighborhood because it is such a pleasant well maintained place. This is especially important for community landscapes such as the 8th Avenue "downtown" corridor, parks, trails and rights-of-ways.

What does "attractive" mean at Greenbridge & Seola Gardens? We want a landscape that looks:

- lush and full
- natural looking (but not "out of control")
- well-maintained (but not *too* maintained)

What we DON'T want is a landscape that looks:

- bare or sparse
- unhealthy
- clipped
- formal
- neglected
- impenetrable, dark or scary





Goal #2:

Variety

We want to see plenty of variety, particularly in the residential front yards, to help individualize homes and make the community look “residential” rather than “institutional”.

Variety in the landscape comes from having a diversity of:

- **Plant species, textures and colors.** Planting themes, or use of a limited palette of plants to provide some consistency in the landscape is desirable. However, avoid creating extensive monocultures across yards or repeating strong planting patterns that would look overly-formal.
- **Seasonal effects.** Maintain a good balance between deciduous plants that dramatize the progression of the seasons and evergreen plants so that the landscape still looks reasonably lush in the winter.
- **Plant heights.** Maintain a layered planting design including low, medium and tall plants. The landscape should evolve towards using more groundcovers and low shrubs adjacent to most pedestrian surfaces. Taller shrubs help make the landscape lush and interesting, but they need to be located further inside planting beds to ensure they have enough room.





Goal #3:

Maintainability

Landscape maintenance and renovation efforts at Greenbridge & Seola Gardens should be focused on practices that will result in a landscape that continues to be beautiful and diverse while requiring less and less maintenance as it matures. Landscape maintenance at Greenbridge & Seola Gardens needs to be affordable and reasonably carried out by an unskilled workforce, while not compromising other goals.

Maintenance practices should be evaluated on this basis: Does the practice help achieve the Four Landscape Goals or does it create more maintenance for the future? For instance, the practice of topping tall shrubs stimulates regrowth and creates an endless loop of maintenance, while not achieving the attractiveness sub-goals of “natural-looking, lush” etc.

This goal comes in to play particularly when plants need to be replaced, by making “right plant/right place” and “right-sized plant” choices.





Like This

Goal #4:

Sustainability

Goals #3 and #4 are very closely related. Choices that are good for the planet often align with choices that make the landscape more maintainable.

- Manage the irrigation to reduce water use and to reduce costs.
- Choose plants that will last and won't need to be replaced.
- Maintain soil fertility by using compost and minimizing use of fertilizers.
- Maintain a lush, healthy landscape that absorbs rainwater, has plants that cool and cleanse the air, provides habitat for birds and appropriate small animals, and promotes health and well-being in humans.
- Hand weed and promote full coverage of soil by plants to minimize use of herbicides.



Not This

Landscape Strategy - In Brief

Clear decision-making process. The Greenbridge & Seola Gardens Owners Association Directors are responsible for setting priorities and making decisions regarding landscape management. The Directors will call upon consultants (an arborist and horticulturist or landscape architect) for advice and the asset managers/regional manager/property manager for budgeting information. The consultants will work with the Director to stay informed of goals and concerns and talk with the maintenance supervisor to understand current landscape conditions, practices and concerns. Direction for landscape management will flow from the Director to Facility Managers and Asset Managers to the Landscape Contractor. (see Roles and Responsibilities, page 7)

Continual observation. The GOA/SGOA Director and asset managers/regional manager/property manager will observe the landscape to see that maintenance practices follow the goals, guidelines and that the landscape is looking good. Asset managers/regional managers will report their observations to the GOA/SGOA Director, who will maintain a list of concerns and objectives for discussion with the arborist and landscape architect.

Long-term Right Plant/Right Place adjustments. If plants are not thriving due to their placement, or if they require frequent pruning because they have outgrown their beds, they should be removed or moved. Because there are many plants needing replacement, this should be done in phases as funding is available. Schedule 1-2 weeks every fall for plant removal/transplanting /replacement by the maintenance crew as directed by the consulting landscape architect.

Tree and plant replacement. Maintain a lush landscape by always replacing any trees or plants that are removed. Replacement plants may be different than the plants removed. Replacement plants are to be appropriately selected for maximum plant health and minimal long-term maintenance. Trees should be replaced with trees, usually



in the same location, but in a different location if there are problems with the site.

Groundcovers, perennials and annuals. In many areas throughout Greenbridge & Seola Gardens, larger shrubs that tend to overgrow the adjacent paving will eventually be replaced by an arrangement of plants that keeps the larger-growing shrubs in the center of planters, away from the paving, and uses low-growing plants to fill in the bed closer to the paving. Hardy groundcovers are appropriate in all areas. In high-profile areas such as 8th Street, perennials and annuals that may require a slightly higher level of maintenance and may be used.

Adjustments to irrigation. The GOA/SGOA Director will call upon an irrigation auditor. The adjustments resulting from an irrigation audit may save the organization many thousands of dollars in water per year.

Appropriate pruning practices. Require all workers who will be pruning shrubs and groundcovers to have training in selective pruning from an approved program and to have familiarity with the goals for pruning in this document. Tree pruning will be carried out exclusively by, or under the supervision of, the consulting arborist.

Maintain mulch layer. Continue to maintain 2"-3" of compost mulch throughout the planting beds. Discontinue the practice of frequently raking beds, as raking tends to scrape away the mulch layer. Rake only when necessary to remove excessive leaves and debris. A proper mulch layer will reduce the need for weeding, herbicides, watering and fertilizers.

Documentation. The landscape maintenance Supervisor will be required to keep track of how landscape maintenance workers use their time using a monthly activity log, see page 37. The GOA/SGOA Director will review the logs and assess which tasks are being emphasized and if they seem to be the best use of time to achieve the desired landscape results.



Maintenance Schedule

	January	February	March	April	May	June	July	August	September	October	November	December
Strategy												
GOA/SGOA Director - Observation												
Arborist Consultation												
Landscape Architect Consultation												
Pruning Strategy Meeting												
Submit Hours / Tasks Forms	1x per month	1x per month	1x per month	1x per month	1x per month	1x per month	1x per month	1x per month	1x per month	1x per month	1x per month	1x per month
Remove / Replace												
Remove & Replace										allow 1-2 weeks		
Pruning & Trimming												
Tree Pruning (by Arborist)												
Light-Moderate Shrub Pruning (Selective Pruning Only)	light pruning may be done at any time of year											
Heavy Shrub Pruning & Shearing												
Cut Back Perennials												
Cut Back Ornamental Grasses (Deciduous)												
Hand Rake Ornamental Grasses (Evergreen)												

Roles & Responsibilities

Greenbridge & Seola Gardens Landscape Roles & Responsibilities



Greenbridge & Seola Gardens Owners' Association Director. The Director has overall responsibility for the quality and appearance of the Greenbridge or Seola Gardens landscape. Duties include:

- Continual observation to make sure that Greenbridge & Seola Gardens appear to be meeting the 4 Landscape Goals. Discuss concerns with the Asset Managers/Regional Managers and maintain a list of concerns and priorities.
- Call in an arborist for consultation 1 time per year and a horticulturist or landscape architect 2 times per year.
- Make decisions regarding landscape maintenance priorities.
- Provide direction to the Asset Managers (Greenbridge)/Property Managers & Regional Managers (Seola Gardens) and KCHA Facilities Managers for landscape maintenance.
- Review monthly landscape maintenance reports. Over time, assess whether worker time is distributed most productively on various landscape tasks.

Maintenance Schedule

	January	February	March	April	May	June	July	August	September	October	November	December
Lawn Areas												
Mowing	1x per month	2x per month	weekly	weekly	weekly	weekly	weekly	weekly	weekly	2x per month	1x per month	
Soft Edging		1x per month	2x per month	2x per month	2x per month	2x per month	2x per month	2x per month	2x per month	2x per month	1x per month	
Hard Edging		1x per month	1x per month	2x per month	2x per month	2x per month	2x per month	2x per month	2x per month	2x per month	1x per month	1x per month
Fertilizing				1x per month					1x per month			
Post Emergent Weed Control				1x per month					1x per month			
Aeration, Overseeding & Top-Dressing					1x per 3 years							
Lime Application (As Needed For Moss Control)												
General Activities												
Sweep / Blow Walks	2x per month	2x per month	weekly	weekly	weekly	weekly	weekly	weekly	weekly	weekly	2x per month	2x per month
Moss Control on Walks		1x per month								1x per month		
Irrigation				system start up	monitor	monitor	monitor	monitor	monitor	de-activate		
Litter Pickup	*	*	*	*	*	*	*	*	*	*	*	*
Insect & Disease management	upon request											
Storm Debris Cleanup	upon request											
Seasonal Color	upon request											

Maintenance Schedule

	January	February	March	April	May	June	July	August	September	October	November	December
Beds												
Hand Weed	1x per month	2x per month	weekly	2x per month	1x per month							
Pre-emergent Weed Control (Snap-shot)				1x per month						1x per month		
Apply Compost Tea, Nematodes or fertilizer (if necessary)			1x per month				1x per month					
Mulch (add if needed to maintain 2"- 3" Depth)			1x per month									
Fall Leaf Removal										*	*	*
Bioswales												
Line Trim or Mow (4" High Blade)		1x per month	1x per month	2x per month	1x per month							

PLANTING BEDS

Soil

The finish grade of soil should be slightly below adjacent paving or lawn grades. The mulch layer (see below) may taper at edges and should be even with adjacent paving or lawns. Fill slight soil deficiencies with compost or planting soil (see Materials List in Appendix. If soil levels are more than 3" low, fill with planting soil and incorporate it into the top layer of the existing soil.

Weed control

Weed all beds once a month with hand tools. Flame weeders and hot water weeders may also be used with care to avoid damage to other plants.

Pre-emergent herbicides may be used in tree and shrub beds, **no more than 2 times per year.**

- Do not use herbicides in beds that have perennial plants, bulbs, or tender groundcovers.
- Do not use herbicides in beds with new plants for the first two years.
- Herbicides are to be applied only by a licensed applicator.

Mulch

- Thoroughly hand-weed and water beds before applying mulch.
- Maintain a mulch layer on all planting beds at 2"-4" depth. Use Cedar Grove NW Garden Mulch (or approved equal by Landscape Architect or Horticulturist.
- After an initial application, fill in low spots annually.
- Keep mulch a minimum of 6" away from the trunk or stems of plants.

There are several kinds of mulch: compost mulch, medium bark mulch and woodchip mulch. A compost mulch provides nutrients to plants, prevents compaction, evaporation, makes weeds easier to pull, and limits soil runoff. **Where plants are well established and healthy, a medium bark mulch may be used, upon approval of the GOA/SGOA Director.** Bark mulches provide most of the same benefits—preventing evaporation, compaction and runoff—and are better at suppressing weeds. However, bark mulches release nutrients more slowly and can be hydrophylic, meaning they bind up water, keeping it unavailable to young plants, and some kinds of bark are not good for plants. Woodchip mulches provide similar benefits as bark mulches, but are coarse and not considered attractive by some people. Cedar Grove N.W. Garden Mulch is a combination of compost and bark mulches, and will provide optimal benefits.

Fertilizers

In general, trees, shrubs or groundcovers mulched with a compost mulch will not need fertilizer. If plants are not thriving, assess and adjust mulching, irrigation and drainage. If specific plants have been diagnosed as having a nutrient deficiency, they may be treated with compost tea applications or an organic fertilizer that specifically addresses the deficiency, see materials section. Do not use synthetic fertilizers or fertilizers high in elements that are not needed in abundance by plants (discontinue use of 9-9-9 fertilizer +11 iron). The element most often deficient in northwest soils is nitrogen. It would be unusual for plants to need additional potassium or iron in the proportions provided by this fertilizer.

Raking

While it is important to remove trash and excessive plant debris from beds, raking needs to be de-emphasized at Greenbridge & Seola Gardens. Frequent raking gradually scrapes away the compost layer which is so critical to plant health, water conservation and weed control. Raking also disturbs the soil, turning up buried weed seeds which can germinate with better exposure to sunlight.

- Remove trash leaves and debris from beds only as needed.
- Avoid scraping soil and mulch from beds. (Note: as plants fill in, less and less raking will be required).
- Refrain from “pruning up” plants to facilitate raking (it is ok to remove lower branches that are touching the ground and look bedraggled).
- Some leaf accumulation under plants is acceptable.
- Do not use leaf blowers in planting beds.

Leaf Collection

Collect and dispose of leaves as needed throughout the fall season. After the leaf drop is complete, perform a thorough cleanup of all landscape areas.

Pest and Disease Control

A healthy planting environment, correctly selected plants and some degree of tolerance is the best approach to pest control. However, if pests and diseases are impacting plant health and landscape appearance, some controls may be needed (see materials section).

- Protect and enhance naturally occurring beneficial organisms. Avoid unnecessary spraying and broad-spectrum pesticides.
- Use beneficial nematodes to control common lawn and garden pests that spend part of their lives underground, such as grubs, fleas, mole crickets, japanese beetles and weevils.
- Use natural pesticides for aphids, cutworms, leaf-miners whitefly and mites.
- Use non-chemical products to control mildew, including Neem oil and vegetable oil.

Pruning

Goal: Evolve Greenbridge & Seola Gardens to a “minimal pruning” environment. This is in line with all four of our major landscape goals:

- Attractive—aim for a “natural” aesthetic, allowing plants to have their natural forms and growth.
- Variety—allow plants to grow to different sizes, and display a variety of texture, structure and flower characteristics.
- Maintainability—phase out plants that are too big for their location and require frequent pruning.
- Sustainability—use less effort, power and money trimming plants.

Three main strategies govern pruning:

- Trees are to be pruned by the consultant arborist, or under his/her direct supervision.
- Shrubs and groundcovers are to be pruned ONLY by employees of the landscape maintenance contractor who:
 - Have attended an approved training*, or
 - Are a Certified Landscape Technician, and
 - Have passed the Pruning Pop-quiz
- Hold landscape strategy meeting at the beginning of each pruning cycle to review goals.

General Pruning Guidelines

- Let the arborist handle tree pruning, according to the American National Standards Institute A-300 Pruning Standards.
- Pruning of most shrubs will be done according to “selective pruning” techniques. The “shearing” technique is allowed for hedges, but is not generally allowed for any other plants.
- Prune shrubs only as necessary for safety and comfort of residents and visitors and for the health of the plants.

* A pruning class or seminar conducted by Edmunds Community College, South Seattle Community College or Plant Amnesty.



Pruning Pop Quiz

Pruning Cuts

1. When a cut is made on the branch of a woody shrub or tree that looks like this, it is called a non-selective heading cut:



How will the branch grow in response the next year? Circle the best answer.



A. Growth forced below cut like this:



C. Similar growth from cut upward like this:



B. Fast thick growth from cut upward like this:



D. Nothing grows next year:

2. When a branch is cut as shown in the picture below, it is called a thinning cut:



How will the branch probably grow next year?
Circle the best answer.



A. More growth from tips like this:



C. Nothing grows next year:



B. Regrowth in the same place like this:



D. Fast thick growth from cut upward like this:

Removing & Replacing Plants

WHEN TO REMOVE OR REPLACE PLANTS?

Use the following checklist to assess what to do with plants that are looking unhealthy, crowded, or are otherwise problematic. Plant removal/replacement forms should be included or summarized in the monthly landscape maintenance report. Weeds may be removed at any time.

REMOVE

- Plant has more than 25% dead wood, or
- Plant requires pruning more than 1 time per year (ideally, no more than 1 time every two years) to stay clear of walkways, windows or buildings*, or
- Plant is in a bed that is suffering from overcrowding and the surrounding plants will close the space.
- Plant is invasive and is crowding other plants.

REPLACE

- If it is a tree. (if there is a problem with the site, such as poor drainage, fix the problem before replacing the tree, or find another place for the replacement tree), or
- If it leaves bare dirt that will not be filled in by adjacent plants within 1 year, or
- If it has provided some color, texture, height or other plant interest which is now missing from the bed.

WAIT & WATCH

- Plant has less than 25% dead wood, and/or
- If changes in maintenance (fertilizer, more water) may be expected to help the plant recover.

MOVE

- If it is a plant that can survive transplanting (e.g., ferns, rhododendrons, some trees), and
- Can be used somewhere else at Greenbridge, especially
- In the fall or winter, when transplanting has the best chance of success.

Propose to remove: Plant _____ Quantity _____

Propose to replace w/: Plant _____ Quantity _____

GOA Director Approval: _____ Date: _____



Both of these Strawberry Trees want to grow big. Rather than trimming continually, remove the one closest to the bench and let the one further away grow.



Remove this willow, which is too close to the walk. Replace it with groundcover or perennials

* This is a long term goal. As discussed in the STRATEGY section, the replacement and removal of plants requiring excessive pruning should be phased.

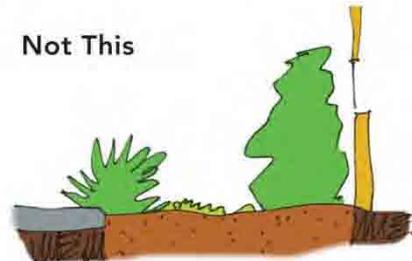
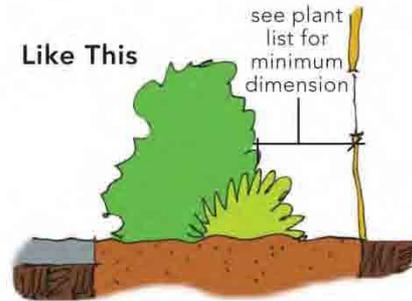
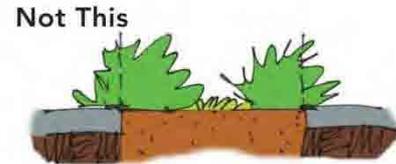
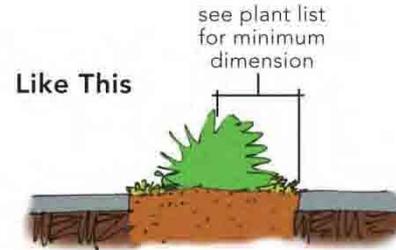
SPACING & LAYOUT

When replacing plants, choose and lay out new plants allowing them room to grow to their eventual size. Do not choose plants that will grow too wide for their beds.

Place shrubs that will grow to be medium and large sized away from the edges of beds. In narrow beds such as along 8th street, place them in the center of the bed so they will have room to grow, without the need for trimming. Use groundcovers and perennials to fill in the space between the shrubs and the paving. As the shrubs grow, it is ok if they take over groundcover and perennial space.

Space medium and large shrubs far enough apart so they won't crowd each other too much when they grow. It is ok if they eventually touch and intermingle a little.

Place large shrubs away from windows.



EARLY OUTCOMES









