

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Authorize the City manager to Execute an Agreement with Superior Maintenance Solutions in the amount of \$174,193.50 for Right-of-Way Landscape Maintenance Services
DEPARTMENT:	Public Works
PRESENTED BY:	Lance Newkirk, Utility and Operations Manager
ACTION:	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

PROBLEM/ISSUE STATEMENT:

The City presently uses outside contractual services to perform Right-of-Way (ROW) Landscape Maintenance Services. These services include, but are not limited to, edging, irrigation maintenance and repair, line trimming, litter removal, mowing, weeding and general clean up and care for approximately 60 curb miles of improved landscaped areas and bioretention facilities along certain City arterial and collector streets. The current contract for these services ends December 31, 2016.

Staff issued an Invitation To Bid (ITB) for ROW Landscape Maintenance Services that will provide landscape maintenance services for 2017 and includes the option to renew for three (3) additional one (1) year terms. The City received three (3) bids to its ITB. After bid review and reference checks, Superior Maintenance Solutions was deemed the apparent low responsive bidder.

RESOURCE/FINANCIAL IMPACT:

Funding for ROW Landscape Maintenance Services is provided for within the 2017 Streets Operations Repairs and Maintenance budget along with the Surface Water Repairs and Maintenance budget. The apparent low responsive bid received by Superior Maintenance Solutions of \$174,193.50 is within the 2017 appropriated budget authority for these services.

RECOMMENDATION

Staff recommends that Council authorize the City Manager to execute an Agreement for ROW Landscape Maintenance Services with Superior Maintenance Solutions in the amount of \$174,193.50 for 2017 and up to three (3) additional one (1) year terms as negotiated and provided for in future budgets.

Approved By: City Manager **DT** City Attorney **MK**

BACKGROUND

The City has utilized contractual services to perform Right-of-Way (ROW) Landscape Maintenance Services since 1997. These services have increased in scope and complexity over the intervening years. The primary reason for this increase is the reconstruction of Aurora Avenue from 145th to 205th which has added new landscape and bioretention infrastructure to maintain.

In preparing for the 2017 ROW Landscape Maintenance Services contract, staff conducted a full program review. This review examined the areas and frequencies of services, means and methods of service delivery, scope of work parameters, bid schedules and contract language. As part of this effort, staff also sought Council input and guidance on service delivery models and levels of service at the July 25, 2016 Council meeting.

The history of the City's ROW Landscape Maintenance Services program, service delivery models and levels of service discussion with Council is contained within the staff report that can be found at the following link:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2016/staffreport072516-9a.pdf>

DISCUSSION

The City presently uses outside contractual services to perform Right-of-Way (ROW) Landscape Maintenance Services. These services include, but are not limited to, edging, irrigation, line trimming, litter removal, mowing, weeding and general clean up and care for approximately 60 curb miles of improved landscaped areas along City arterial and collector streets. The current contract with Landcare USA, LLC ends December 31, 2016.

Staff issued an Invitation To Bid (ITB) for ROW Landscape Maintenance Services to provide landscape maintenance services for 2017 with the option to renew for three (3) additional one (1) year terms. The City received three (3) sealed bids for this contract. After bid review and reference checks Superior Maintenance Solutions was deemed the apparent low responsive bidder. The bid results are presented on the following table.

Bid Tabulation Summary

Company:	Superior Maintenance Solutions	Landcare USA, LLC	Total Landscape Corporation
Amount:	\$174,193.50	\$248,242.00	\$333,833.00

RESOURCE/FINANCIAL IMPACT

The available budget to perform the 2017 ROW Landscape Maintenance Services Contract is \$266,000. The distribution of appropriated budget for these services between the Street and Surface Water funds is as follows:

Year	Streets Fund	Surface Water Fund	Total
2017	\$236,000	\$30,000	\$266,000

The use of the 2017 budget appropriation for ROW Landscape Maintenance Services includes activities that are additional to this contract and are programmed as presented in the Activity/Expenditure table below.

Activity	Expenditure
Contractual ROW Landscape Maintenance Services	\$174,193.50
Extra Help (Public Works Seasonal Laborers)	55,000.00
Bed Rejuvenation and Replanting	30,000.00
Repair	6,806.50
Total:	\$266,000.00

A description of the activities making up the expenditures outside of the base ROW Landscape Maintenance Services contract is described below.

Extra Help (Public Works Seasonal Laborers) – Two seasonal laborers will be hired and utilized during the growing season (May thru October). The employees will be used to help maintain Arterial and Collector streets and other landscape and vegetation “hot spots”. They will be deployed to areas requiring attention that are off-cycle of the Contractor’s scheduled services and as required elsewhere within the City to allow staff to better manage its landscape and vegetation control responsibilities.

Each extra help employee will work up to 1040 hours per year. The hiring of extra seasonal help will become a reoccurring budget expenditure and will be incorporated into the base budget for 2018.

Bed Rejuvenation and Replanting – Many landscape and bioretention planting beds require rehabilitation beyond the scope of the proposed contract. Replacing mulch and replanting of shrubs and trees will be the focus of this activity. This is considered additive work where staff will work with the Contractor to define the scope of work, pay for the work per the defined labor rates in Bid Schedule B and with an amendment to the contract prior to performing the work.

Staff will use the first year of the contract to gauge if the targeted budget is sufficient to provide the required level of rehabilitation needed to keep the beds functioning as designed. Bed Rejuvenation and Replanting will become a reoccurring budget expenditure and will be incorporated into the base budget for 2018. If targeted funds are not sufficient to rejuvenate and replant the beds, staff will ask for a supplemental budget appropriation for the 2018 budget.

Repair – Normal wear and tear and damage (not caused by the Contractor) to backflow assemblies, drainage and tree grates, irrigation piping, sprinkler heads, porous pavers and other landscape and bioretention infrastructure require repairs. Examples of potential repairs can include vandalism, non-accident vehicle damage (driving over sprinkler heads), or storm damage.

This activity too will become a reoccurring expenditure. Staff will monitor repair expenses the first year of this contract and seek a supplemental budget appropriation for the 2018 budget, if it is deemed necessary.

RECOMMENDATION

Staff recommends that Council authorize the City Manager to execute an Agreement for ROW Landscape Maintenance Services with Superior Maintenance Solutions in the amount of \$174,193.50 for 2017 and up to three (3) additional one (1) year terms as negotiated and provided for in future budgets.

ATTACHMENTS

Attachment A – SMS Bid Schedule A & B

Attachment B – Scope of Work with Appendixes A - E

Attachment A

BID PROPOSAL SHEET (Page 2 of 4)

2017 Right of Way Landscape Maintenance Services Contract

Bid 8625

BASE BID ITEMS SUMMARY, SCHEDULE A

Table No.	Item Description	Bid Quantity	Bid Unit	Annual Total Amount (Combined Cost of Service)
1	Aurora Ave N and Adjacent Street Locations	1	LS	\$ 118,587. ⁵⁸
1a	Bioretention and Surface Water Features	1	LS	\$ 27,674. ⁹²
2	Arterial & Collector Streets	1	LS	\$ 23,281. ⁰⁰
3	Table 3 - Irrigation Systems	1	LS	\$ 4,650. ⁰⁰

TOTAL BASE BID \$ 174,193.⁵⁰
(In Figures)

One Hundred Seventy Four thousand one hundred ninety three dollars
(Total Base Bid to be written in words) and fifty cents.

COMPANY NAME SMS - Superior Maintenance Solutions

BID PROPOSAL SHEET (Page 3 of 4)

**2017 Right of Way Landscape Maintenance
Services Contract**

Bid 8625

HOURLY RATES FOR ADDITIONAL WORK, SCHEDULE B

The rates below are for worked described within:

V. Scope of Work

- Section I, B, 1
- Section I, C, 1

Classifications	Hourly Rate
Laborer	\$ <u>35.00</u> /HR
Supervisor	\$ <u>42.50</u> /HR
Arborist	\$ <u>50.00</u> /HR
Irrigation Technician	\$ <u>50.00</u> /HR

COMPANY NAME SMS- Superior Maintenance Solutions

Attachment B

V. SCOPE OF WORK

SCOPE OF WORK

SECTION I – GENERAL PROVISIONS

A. Intent

In accordance with the provisions herein, the City of Shoreline intends to award a one (1) year contract (with option to renew for up to three (3) consecutive years) to the most responsible and responsive bidder(s) for Right-of-Way landscape maintenance services.

B. Definitions:

1. **“Additional Work”** shall mean additional work requested and authorized by the Project Manager to increase quantities of maintenance service; or rehabilitate, repair or replace bioretention, irrigation and landscaping infrastructure maintained as part of this contract.
2. **“Approved”** shall mean approved by the City or the Project Manager.
3. **“Equal or equivalent”** shall mean a material or method equal to or better than the required materials or methods.
4. **“Bioretention box”** shall mean an engineered bioretention system located under a street or sidewalk which have a tree, shrub or other vegetation planted in them and that performs pollutant removal via filtration and adsorption.
5. **“Bioretention facility”** shall mean a shallow planted or engineered holding area designed to detain or retain stormwater before it is infiltrated or discharged downstream into engineered or natural conveyances and includes, but is not limited to, rain gardens, bioswales, bioretention boxes and supporting components like drainage inlets and outlets, check dams, drainage grates, and etcetera.
6. **“City Manager”** shall mean the chief executive officer of the City of Shoreline.
7. **“Curb inlets”** shall mean openings in the road curb which stormwater flows.
8. **“Hardscapes”** shall mean asphalt, concrete, gravel surfaces and includes curb and gutter, medians, sidewalks, retaining walls, parking areas, paths, pavers, and streets.
9. **“Irrigation”** shall mean the artificial provision of water by hand or through plumbing components to sustain plant and tree life.
10. **“Landscape planter beds”** shall mean non-turf, improved areas that include woody plant material such as bark, mulch, shrubs, trees, and ground cover plantings.

11. **“Median”** shall mean the strip of land between the lanes of opposing traffic on a divided street with defined hardscape or landscape amenities.
12. **“Mulch”** shall mean a City approved wood based mulch product consisting of 50% shredded bark and 50% compost that is spread over the ground in a landscape bed to protect the plants or help them grow, suppress weed growth, retain soil moisture, and for water quality treatment.
13. **“Non-Performance”** shall mean a failure of the Contractor to abide by or fulfill the terms of a contract, a failure which may lead to a breach of contract.
14. **“Overflow structure”** shall mean a pipe or other designed feature that conveys excess stormwater to an approved discharge point.
15. **“Penalty for Non-Performance”** shall mean a monetary assessment levied against the Contractor for failure to abide by or fulfill the terms of a contract after having been being notified by the City of non-performance issue and failing to take corrective action within 48 hours of City notification.
16. **“Planter Strip”** shall mean that part of a street right-of-way between the abutting property line and the curb or traveled portion of the street, exclusive of any sidewalk.
17. **“Project Manager”** shall mean City of Shoreline Streets Superintendent or their duly designated representative.
18. **“Right-of-Way”** shall mean property granted or reserved for public use where, for purposes of this contract, landscape infrastructure resides.
19. **“Street Trees”** shall mean those trees which are located within the public right-of-way between the abutting property line and the curb or traveled portion of the street including medians.
20. **“Tree grate”** shall mean a metal grating set around a street tree designed to protect tree roots, manage stormwater and maintain neat, orderly and safe sidewalks.
21. **“Turf”** shall mean any grass or grass like plant grown within the public right-of-way between the abutting property line and the curb or traveled portion of the street.
22. **“Weirs”** shall mean natural or manufactured structures designed to reduce stormwater flow velocities to promote infiltration.
23. **“Workbook”** shall mean a Microsoft Excel file containing multiple worksheets.
24. **“Worksheet”** shall mean a single Microsoft Excel spreadsheet that contains cells organized by rows and columns.

C. Contract Conditions

1. Additional Work

If additional work or services are desired by the City, which goes outside the agreed scope of services, an amendment to the contract shall be executed. The additional work or services requested should be specified by the City and the Contractor shall receive hourly labor compensation per bid schedule pricing. Written approval by the City shall be obtained prior to the start of any additional work.

2. Award

All provisions set forth in the Bid solicitation shall be included as part of this contract.

3. Changes

Should any changes in the maintenance frequencies, schedule and/or the specifications be required, the Contractor shall refer same to the City in writing for approval before work which deviates from the original requirements is started. In event of disagreement on the necessity of such changes, the City's decision shall be final.

4. Chemical Application

The Contractor is prohibited from using herbicide chemicals on this project.

5. Contract Oversight

Contractor's operations and activities pursuant to a contract awarded from this bid shall be overseen and coordinated by the City's Project Manager or their duly designated City representative.

6. Contractor's Staff Identification

The Contractor shall provide an identification system for personnel assigned to City sites and facilities which clearly indicate to City representatives and the public the name of the Contractor responsible for landscape and maintenance services. All maintenance vehicles used by the contractor being clearly marked with company name.

All employees or those conducting business under the authority of the Contractor shall wear Department of Labor and Industries approved footwear, long trousers (no shorts or cutoffs), and shirts which protect the shoulders and upper arms (no tank-tops or cut off sleeves). Contractor employees must wear ANSI-107 compliant garments. All employees will have the Contractor's name clearly printed on the employee's uniform. The employee identification system shall be furnished at the Contractor's expense.

7. Invoices

Contractor shall include with their monthly invoice a description of work performed. This description shall include the specific work activities completed during the billing period, the date of completion, the name(s) of the employee(s) completing each activity, hours worked on each activity, any unusual conditions noted, and any other comments. Contractor will only be paid for work performed.

8. Replacement Costs

The Contractor shall replace, at Contractor's own expense, any lawn, groundcover, trees, shrubs, or other plant materials requiring replacement through negligence resulting from Contractor's failure to provide maintenance in accordance with the provision herein. Plant materials supplied by the contractor shall be of first quality condition and shall be guaranteed by the Contractor for one year.

The Contractor shall be held responsible for damage done to irrigation system components and plant material due to maintenance activities and the operation of tools, equipment, and vehicles. All damaged components will be repaired at the Contractor's expense.

9. Waste/Material Disposal

The Contractor shall select his/her own sites for disposal of debris and unsuitable materials collected under the conditions of this contract. In no case shall debris and unsuitable materials be disposed upon City property or any property contiguous thereto. The Contractor is solely responsible for any and all damages, fines or penalties for improper disposal of waste material, and for any other actions which he/she performs. Contractor holds the City faultless and free from liability for any and all damages and costs incurred as a result of Contractor's actions. It shall be the responsibility of the Contractor to pay all fees and costs incurred in the disposal of waste material.

10. Work Schedule

The Contractor shall establish a weekly work schedule, showing when work at a specific location will be performed. The schedule must be approved by the City's Project Manager prior to commencing work. Daily communication is required giving crew location of their work area for the day, provided to the Project Manager or duly designated City representative.

11. Penalty for Non-Performance

A standard monetary penalty shall be deducted from the Contractor's payment request for non-performance. The amount of the penalty shall be fifty dollars (\$50.00) per occurrence. To establish a non-performance penalty the Project Manager shall notify the designated Contractor representative by telephone and email documenting any deficiency or deficiencies in Performance and required corrective actions. To avoid the "Penalty for Non-Performance, the Contractor shall correct all deficiencies and notify the Project Manager within two (2) business days after receiving notification

12. Termination

The City reserves the right to terminate this Agreement at any time, with or without cause by giving ninety (90) days' notice to Contractor in writing.

In the event this Agreement is terminated by the City, the Contractor shall be entitled to payment for work completed to the effective date of termination, less all payments previously made. No payment shall be made by the City for any expenses incurred

or work done following the effective date of termination unless authorized in advance in writing by the City.

The Contractor reserves the right to terminate this Agreement with not less than one hundred eighty (180) days written notice, or in the event outstanding invoices are not paid within thirty (30) days. Should the Contractor terminate the contract within twelve (12) months of the date of contract award, the Contractor shall be deemed ineligible to bid on future work of a similar nature within the City for a period of twenty-four (24) months, as calculated from the date of contractor's written notification of contract termination.

If the Contractor is unavailable to perform the scope of services, the City may, at its option, cancel this Agreement immediately.

SECTION II – MAINTENANCE SPECIFICATIONS

A. Project Description

1. The Contractor shall furnish all labor (including Contractor's staff time for "administering the contract"), tools, specialized equipment, materials (note: the City prohibits the use of herbicides), disposal of waste material generated by the work, supervision, traffic control, transportation and other items necessary for the complete maintenance and landscaping tasks within the identified City of Shoreline Right-of-Way maintenance areas. The areas to be maintained within the Right-of-Way include, but are not limited to: bioretention, hardscapes, irrigation, landscape planter beds, medians, planter strips, street trees, and turf areas.
2. The work to be performed under this Contract is organized within four Microsoft Excel workbooks. Each Project Workbook includes worksheet tabs for: project location, frequency of requested maintenance service, monthly maintenance work schedule report, inspection schedule for the City Project Manager, and a project summary cost that totals the monthly and annual cost for each workbook. The four workbook tables are:
 - a) Table 1 – Aurora Avenue North and Adjacent Streets
(Location Map – Appendix A)
 - b) Table 1a – Bioretention and Surface Water Features
(Location Maps (4) – Appendix B & Appendix E – Bioretention Instructions)
 - c) Table 2 – Arterial and Collector Streets
(Location Map – Appendix C)
 - d) Table 3 – Irrigation Systems
(Location Map – Appendix D)

Please Note: Frequency of maintenance services may change between project locations, please pay close attention to the project worksheets as not all project worksheets are the same.

3. The contractor is required to coordinate and schedule work based on the maintenance frequency identified on the project worksheets within the workbook tables, or as directed from the City Project Manager.

B. Work Coordination

1. The Contractor shall submit, on the Friday before the scheduled work week, a completed weekly work schedule showing the work that is to be done the following week. The Contractor shall use the Monthly Maintenance Work Schedule Report, located in the table workbooks, to identify the project locations they will be working. An email to the Project Manager with the following workweeks schedule is the preferred method of notification, but a hand presented copy is also permissible. The Contractor's supervisor shall email or phone contact the Project Manager every morning that work is scheduled to be performed on this contract, confirming project locations or discussing adjustments to the work schedule. **The supervisor or crew lead must be on site whenever the Contractor's crews are working.**
2. The City Project Manager will inspect work performed by the Contractor on a regular basis. In the event of work performance deficiencies, the City Project Manager will notify the Contractor. Notification may be verbal or written.

C. Field Operations

1. The Contractor will ensure that employees comply with all applicable City of Shoreline and Washington State regulations and practices.
2. Lane closures will not be allowed between the hours of 7:00 a.m. and 9:00 a.m. and between 3:00 p.m. and 6:00 p.m. It is advisable that equipment intensive work such as mowing, edging and blowing be performed during non-peak traffic times.
3. Hazardous conditions shall be immediately remedied or secured to prevent further damage and/or protect public from injury. It is the Contractor's responsibility to provide close supervision of maintenance operations and management of the site. Un-remedied hazardous conditions shall be reported to the City Project Manager in a timely manner.
4. The safety of workers, passersby, and the public shall be paramount. Contractor shall perform all work in such a manner as to meet all accepted standards for safe practices during their operations and to safely maintain and manage equipment, machines, materials or other hazards consequential or related to the work.
5. Any damage to City structures or plant material due to Contractor negligence will be remedied by the Contractor, at his or her expense, in a timely manner.

6. The Contractor shall bring to the attention of the Project Manager any dead plants or diseased or damaged trees. The Project Manager may direct the Contractor to remove the dead or damaged vegetation. The Contractor is responsible for providing labor and equipment to remove all plants and trees under this contract.

If directed by the Project Manager to replace the dead or damaged plants and trees the replacement plants or trees is considered Additional Work. The Contractor shall receive hourly labor compensation per bid schedule pricing for installing replacement plants or trees. Plants and trees to be replaced shall be of equivalent size and variety, and trees of equivalent variety and size up to 15 gallons. The Contractor shall be compensated for the actual cost of acquiring the replacement plants and trees, Washington State Sales Tax and a 5% procurement and delivery fee.

7. Incidents, altercations or accidents involving the public, Contractor employees or City employees shall be reported to the City Project Manager in a timely manner. Project Manager, at his or her discretion, may require a written report from the Contractor describing the incident or accident.

D. Traffic Control

1. Contractor shall prepare and submit for approval, site specific traffic control plans. Traffic control plans shall include at a minimum:
 - a) Street names
 - b) Channelization devices
 - c) Sign location and type
 - d) Taper lengths
 - e) Sign spacing
 - f) Channelization device spacing
 - g) Flagger/spotter identification as needed
2. Traffic control plans shall include pedestrian access pathways as needed. Traffic control plans require a minimum of five (5) working days for review.
3. Only training with Washington State Department of Transportation (WSDOT) Traffic Control Supervisor (TCS) card and WSDOT training curriculum is recognized in the State of Washington. The Contractor's TCS shall be certified by one of the following organizations:

The Northwest Laborers-Employers Training Trust 27055 Ohio Ave. Kingston, WA 98346 (360) 297-3035	Evergreen Safety Council 401 Pontius Ave. N. Seattle, WA 98109 1-800-521-0778 or (206) 382-4090
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<p>The American Traffic Safety Services Association 15 Riverside Parkway, Suite 100 Fredericksburg, Virginia 22406-1022 Training Dept. Toll Free (877) 642-4637 Phone: (540) 368-1701</p>	
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SECTION III – Maintenance Task Descriptions

A. Landscape Beds and Medians

1. Litter Removal
All litter, debris, garbage, and animal feces shall be picked up and removed from all project locations.

2. Mulch
Aerate mulch layer by hand cultivator. Inspect and verify mulch depth of between two (2) inches and three (3) inches of cover. Notify City Project Manager when mulch layer is less than two (2) inches. Addition of mulch is considered additional work and will be tasked separately.

3. Shrubs
Shrubs shall be trimmed to provide a maintained appearance. All shrubs and vegetation in planters and islands shall be pruned regularly to not exceed thirty (30) inches in height (measured from road grade) and not hang over sidewalks and or curbing.

4. Trees
Lift tree grate and remove all litter, debris, garbage and weeds. Tree suckers and volunteer seedlings shall be removed as necessary. Trees within a landscaped area shall be kept grass free eighteen (18) inches from the tree base.

5. Trimming
Vegetation/ground covers shall be trimmed to prevent encroachment into the streets on a horizontal and vertical plane. Horizontal vegetation shall be maintained at the edge of hard surfaces without encroaching onto sidewalks, curbs, medians and defined landscape planter areas. Vertical vegetation clearance shall be maintained at now lower than eight (8) feet for sidewalks, ten (10) feet for bicycle lanes, and fourteen (14) feet over roadway surface.

6. Weeding
Landscaped areas shall be free of leaves, litter, debris, weeds, spent blooms and diseased, insect infestation or dead plants and/or trees. Bed areas shall be kept in weed free condition including volunteer native vegetation. All beds shall be weeded by manual and/or mechanical means and mulch fluffed by hand raking after weed removal to cover any bare spots.

B. Turf

1. Litter Removal

All litter, debris, garbage, and animal feces shall be picked up and removed prior to mowing and line trimming activities.

2. Edging

Turf areas shall be edged at sidewalks and curbs. Caution shall be used to prevent chipping of concrete structures by edging equipment. Hard surfaces shall be cleaned free of grass and debris resulting from this task.

3. Line Trimming

Grass around posts, fences, trees, shrubs, vaults, valve boxes, and other obstacles shall be trimmed. All grass areas on slopes, banks and uneven terrain that is not suitable for push mowing shall be trimmed to less than two (2) inches in height. Hard surfaces shall be cleaned free of grass and debris resulting from this task. Any property damage resulting from the use of trimming equipment or an approved equal or equivalent shall be the responsibility of the Contractor.

4. Mowing

Contractor shall remove and dispose of all paper, rubbish, or debris from a mow area prior to mowing. Turf areas shall be cut or trimmed to a height between one and one-half inches and two inches (1 ½"-2" inches). Collection of grass clippings is required to prevent grass clumps from being left on the turf. Hard surfaces shall be cleaned free of grass and debris resulting from this task. All mowing must be started and finished on day of schedule.

C. Hardscapes (Medians, Sidewalks, Pathways, and Curb Ramps)

1. Litter Removal

All litter, debris, garbage, and animal feces shall be picked up and removed from all medians, sidewalks, pathways, pavers, and curb ramps.

2. Permeable Pavers

Sidewalks with permeable brick pavers shall be free of all leaves, litter, debris, and weeds. The permeable brick pavers shall be weeded by mechanical means. The pavers shall maintain a horizontal and flat surface (level plain) by means of resetting pavers as needed.

3. Weeding

All vegetation in sidewalks, curbs, paved islands and other hard surface cracks, voids, and expansion joints shall be removed using mechanical or non-herbicidal methods.

D. Bioretention Facilities

1. Rain Garden Planter and Bioswales

- a) Berms/Check Dams/Weirs
Remove debris and sediment build up in front of berms, check dams, and/or weirs to ensure proper flow of stormwater within cell or structure.
- b) Drainage Inlets and Outlets
Remove debris, mulch and sediments built up in front of or blocking drainage inlets and outlets.
- c) Erosion
Repair erosion channels within bioretention facilities through hand raking of mulch to cover bare spots or through the addition of mulch.
- d) Litter and Weed Removal
All litter, leaves, debris, garbage, and animal feces shall be picked up and removed from all bioretention facilities.

Bioretention facilities shall be free of weeds, leaves, and spent blooms. Diseased, insect infested or dead plants and/or trees shall be removed including volunteer native vegetation. All beds shall be weeded by manual and/or mechanical means and the mulch aerated by hand cultivator after weed removal to cover any bare spots.

- e) Mulch
Inspect and verify mulch depth of between two (2) inches and three (3) inches of cover. Notify City Project Manager when mulch layer is less than two (2) inches. Addition of mulch is considered additional work and will be tasked separately.
- f) Shrubs
Shrubs shall be trimmed to provide a maintained appearance. All shrubs and vegetation in bioretention facilities shall be pruned regularly to not exceed thirty (30) inches in height (measured from road grade) and not hang over bioretention facility edges.
- g) Trees
Tree suckers and volunteer seedlings shall be removed as necessary. Trees within a bioretention facility shall be kept vegetation and grass free eighteen (18) inches from the tree base.
- h) Hand Watering
Many Rain Garden Planters and Bioswale locations do not have automated irrigation systems. However, quick couplers to allow standard hose connections are provided near those locations where automated irrigation is not available. Contractor shall hand water shrubs and trees per identified frequency.

2. Bioretention Box

a) Litter and Weed Removal

Lift tree grate and remove all litter, leaves, debris, garbage and weeds. Reinstall tree grate.

b) Curb Inlets

Keep curb inlets free of debris

c) Mulch Replacement

Lift tree grate and remove all litter, debris, garbage and weeds. Remove layer of energy dissipating stones. Remove and replace the upper three (3) inch mulch layer. Reinstall stone layer and tree grate.

d) Trees and Shrubs

Tree suckers and volunteer seedlings or shrub growth shall be removed as necessary. Trees or shrubs within a bioretention box shall be kept vegetation and grass free eighteen (18) inches from the tree or shrub base.

e) Hand Watering

Many Bioretention Box locations do not have automated irrigation systems. However, quick couplers to allow standard hose connections are provided near those locations where automated irrigation is not available. Contractor shall hand water trees per identified frequency.

E. Irrigation System Maintenance and Operation

1. Spring Startup

Startup shall include turning on water meters and valves to pressurize mainlines; checking all components for problems such as leaks or breaks, cleaning and/or adjusting all heads, nozzles and valves and programming the controller.

2. Routine Inspection and Maintenance

Physically inspect the irrigation system. Items to be inspected include valves, mainline, spray heads, coverage patterns, drip lines, flush valves, etc. Contractor is responsible for cleaning of nozzles, adjustments and minor repair of the irrigation system to achieve maximum coverage and minimum overspray. All heads shall be maintained to provide proper arc and trajectory. Problems found during routine inspections that require correction, repair or replacement shall be reported to the Project Manager and a repair proposal submitted for approval.

3. Winterization

Winterization of irrigation systems shall be done using standard Blow Out method using a high volume air compressor with pressure regulator to prevent freezing of valves, heads, pipes and any other components. After Blow Out of the system, backflow device must be drained.

F. Other


1) Trees


Tree pruning and maintenance shall be performed using ANSI A300 guidelines for tree care operations. All tree pruning and maintenance shall be performed only by certified arborists familiar with the practices and hazards of arboriculture and the equipment used in such operations.


- a) Pruning shall be performed to provide unobstructed passage for pedestrians, bicyclists, and motor vehicles and to prevent sight restrictions near intersections. This means branches shall be maintained to eight (8) feet above sidewalks, ten (10) feet above bicycle paths and fourteen (14) feet above vehicular areas.
- b) All trees shall be allowed to grow to their natural genetic form and size, unless specifically exempted.
- c) All trees shall be pruned to promote structural strength and to accentuate the natural form and features of the tree.
- d) Stripping of lower branches (“raising up”) of young trees shall not be permitted. Lower branches shall be retained in a “tipped back” or pinched condition with as much foliage as possible to promote trunk caliper. Lower branches should be cut off only after the tree is able to stand erect without staking or other support.
- e) All Street Trees shall be monitored for symptoms of drought stress during the months of June, July, August, and September. Trees showing drought stress shall be brought to the attention of the City’s Project Manager.


Appendix A Table 1

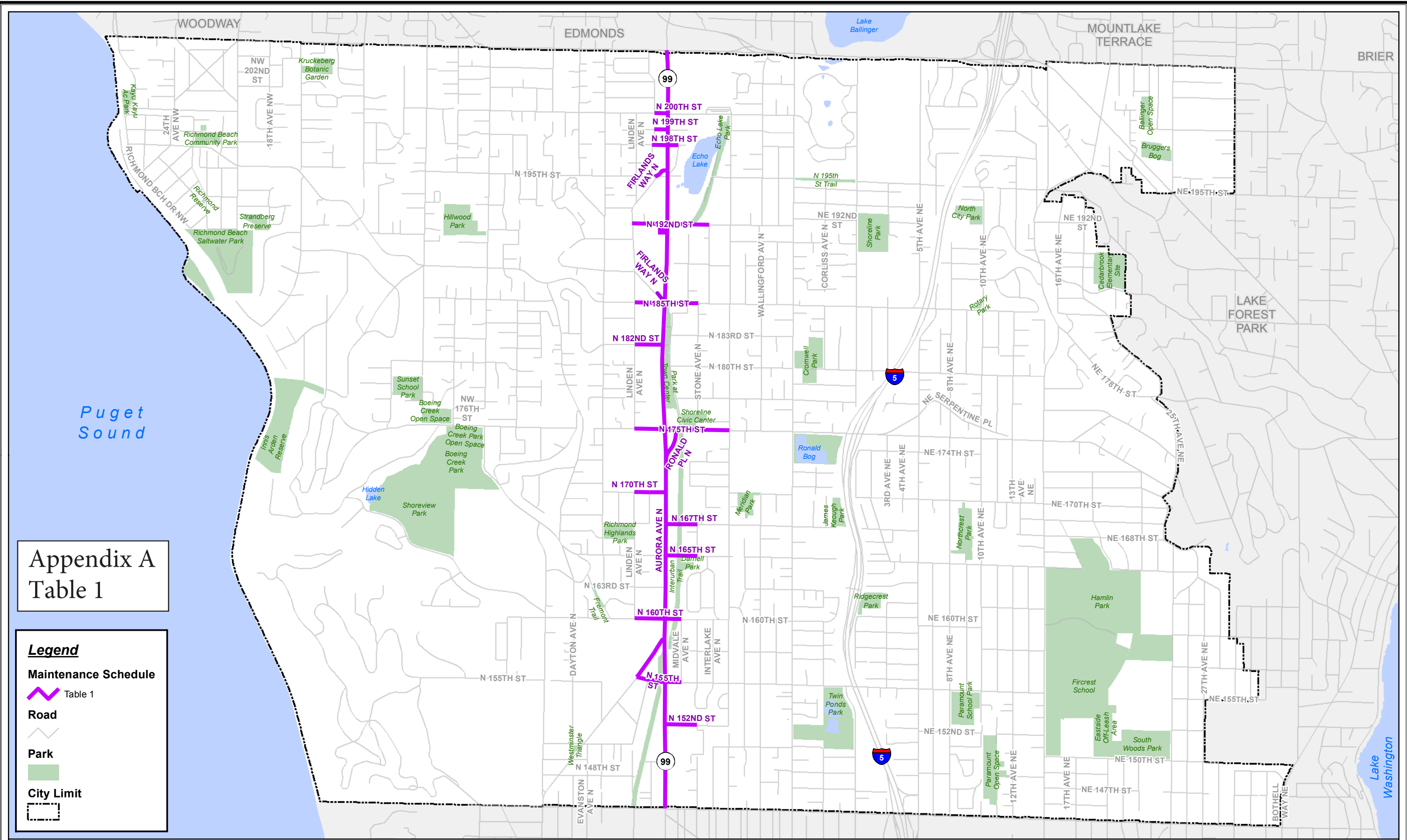
Legend

Maintenance Schedule
 Table 1

Road


Park


City Limit





2017 Right-of-Way Maintenance Service Contract Table 1 - Aurora Ave N and Adjacent Street Locations

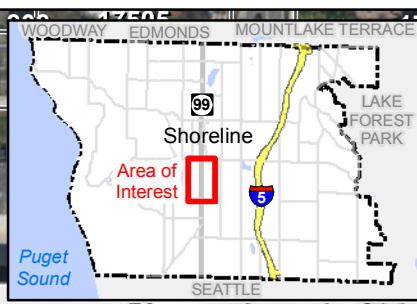
This map is not an official map. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.

0 0.25 0.5 1 Miles

Date: 9/27/2016
 Author: lbiddison

Path: J:\GIS\Projects\Streets\LandscapeAreas\mxd\LSA_MaintContract_Table1_2017.mxd

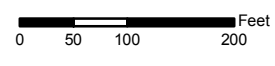




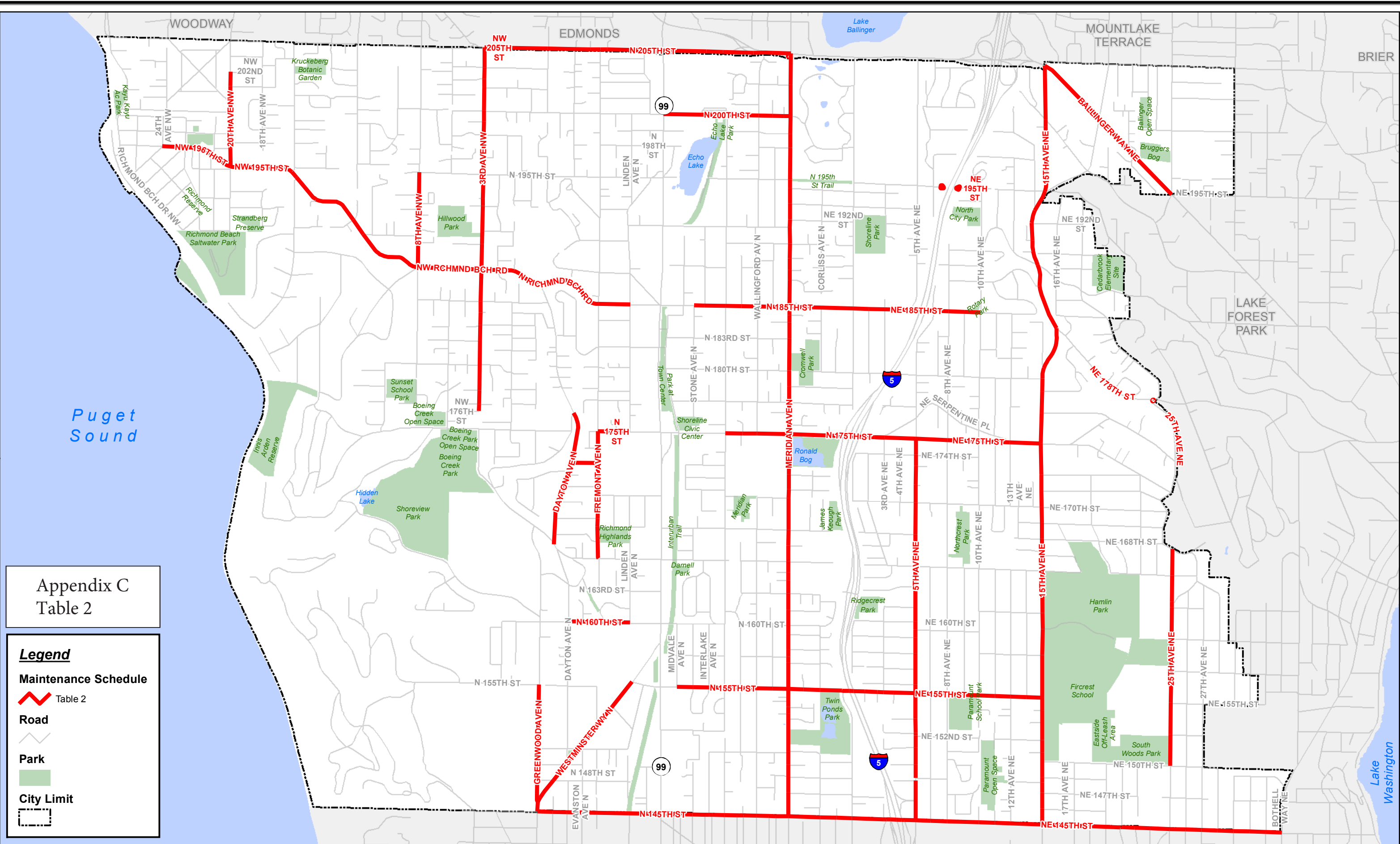
Appendix B
Table 1a
(165th-175th)



This map is not an official map. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.



Date: 9/28/2016
Author: lbiddison



Appendix C
Table 2

Legend

Maintenance Schedule
 Table 2

Road

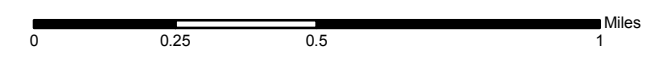
Park

City Limit



2017 Right-of-Way Maintenance Service Contract
 Table 2 - Arterial and Collector Streets

This map is not an official map. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.



Appendix D Table 3

Legend

Irrigation Controller Location
●

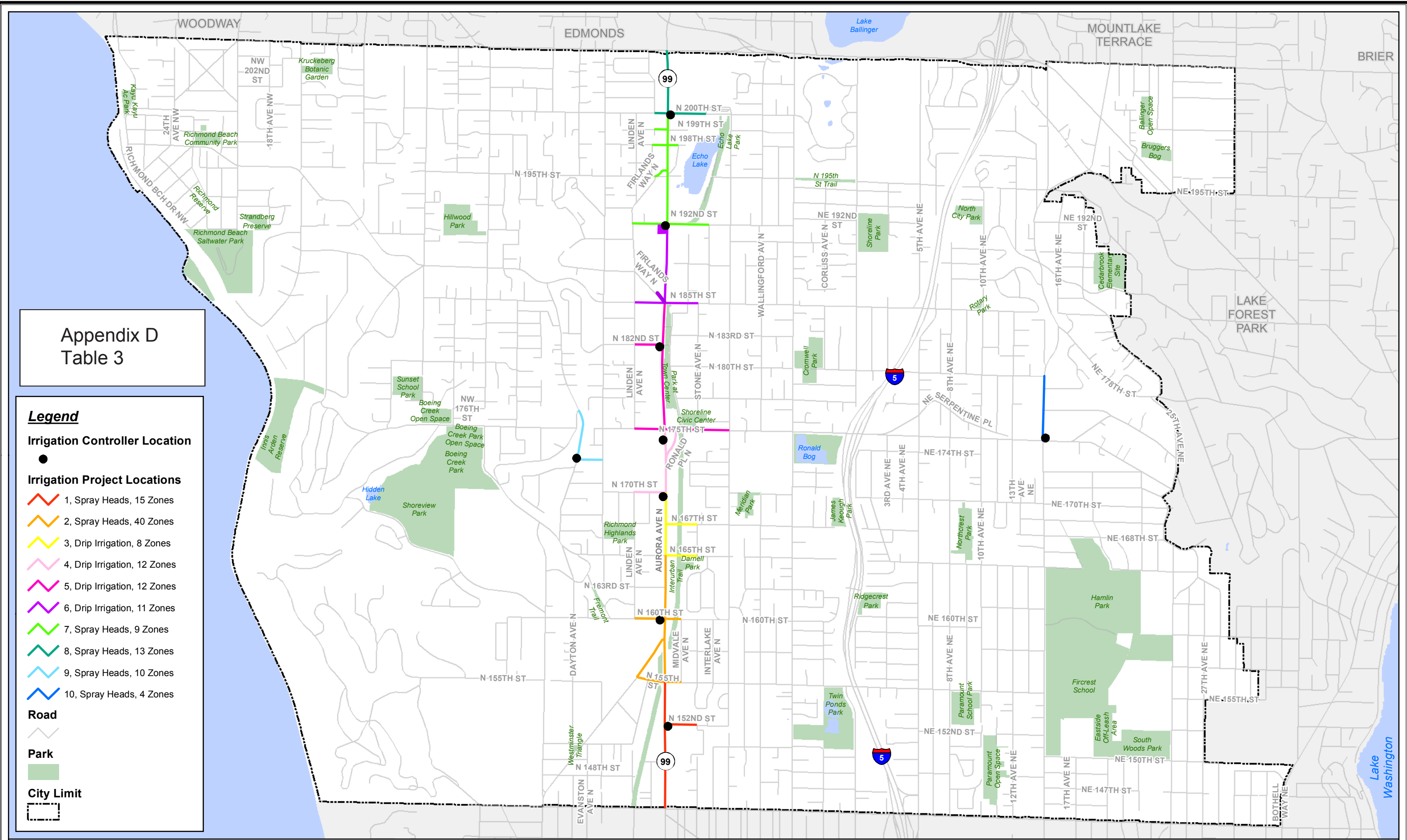
Irrigation Project Locations

- 1, Spray Heads, 15 Zones
- 2, Spray Heads, 40 Zones
- 3, Drip Irrigation, 8 Zones
- 4, Drip Irrigation, 12 Zones
- 5, Drip Irrigation, 12 Zones
- 6, Drip Irrigation, 11 Zones
- 7, Spray Heads, 9 Zones
- 8, Spray Heads, 13 Zones
- 9, Spray Heads, 10 Zones
- 10, Spray Heads, 4 Zones

Road
—

Park
■

City Limit
- - -



This map is not an official map. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.

Appendix E

Bioretention Box Maintenance Instructions



1. Inspection of Bioretention Box and surrounding area



2. Removal of tree grate and erosion control stones



3. Removal of debris, trash and mulch



4. Mulch replacement



5. Clean area around Bioretention Box

