



SITE PLAN APPROVAL PER MVMC CHAPTER 17.90 NOTICE OF DECISION

A. BACKGROUND INFORMATION:

PROJECT ADDRESS: 2400 Riverside Dr. **PROJECT PARCEL NUMBERS:** P25918

APPLICANT: Harbor Freight Tools

PROJECT DESCRIPTION: The proposal is to construct a new approximately 15,000 square foot pre-fabricated steel commercial building that will be 22 feet in height for a Harbor Freight Hardware Tools retail store. Utilities will be extended throughout the site including: new 8-inch sanitary and storm sewers, a 4-inch water line for fire service, along with natural gas, power, and communication lines. Site access will remain similar to what is existing on the subject site with two access points along Pacific Place and one along Hoag Road. The applicant will create 67 parking spots to be used by customers of the future building. Landscaping will be installed within the new parking areas and around the site frontage on the approximate south half of the site.

APPLICABLE MVMC MVMC 17.90

B. INTENT AND APPROVAL CRITERIA:

The intent of Site Plan review found within MVMC 17.90 is to:

- To promote the public health, safety and general welfare;
- To supplement land use regulations to lessen traffic congestion, promote coordinated development and conserve and restore natural beauty and other natural resources;
- To provide procedural guidelines for review of development with the city;
- To foster communication among all involved in the development of property within the city;
- To ensure uniformity in the application of codes, regulations, policies and other regulatory devices that affect land development;
- To protect the use and enjoyment of surrounding properties;
- To implement the comprehensive plan.

Below is a list of the specific approval criteria Development Services staff evaluates to ensure that the Site Plan intent is satisfied.

1. Does the proposed use comply with the site zoning? Provide details below:		
Retail uses, such as the ones proposed by Harbor Freight, are outright permitted uses in the C-2 zoning district.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
2. Are critical areas as defined within MVMC Chapter 15.40 located on or near the project site? If yes, has the applicant complied with MVMC 15.40?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Geotechnical Report:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Habitat/Wildlife Assessment:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Hydrogeologic Study:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Stream Study:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Wetland Assessment:	<input type="checkbox"/> Yes <input type="checkbox"/> No	

3. Are the zoning code setbacks being complied with? Provide details below:

North (Front): 285'
 East (Side/Rear): 67'
 South (Front): 76'
 West (Front): 127'

Yes No NA

4. Are the parking code requirement found in MVMC 17.84 being complied with? Provide details below:

	RATIO REQUIRED:	S.F. OF USE(S)	# STALLS REQUIRED	# STALLS PROVIDED
# OF PARKING STALLS:	1/400 sq ft net floor area	14,640	37	67
	WIDTH	ONE/TWO WAY	TURNING RADI	FIRE HYDRANT?
DRIVE LANES	Varies, see comments below	Undetermined	Varies, see comments below	See Comments below
	ANGLE SHOWN	LENGTH/WIDTH	COMPACT	ADA
ANGLE/SIZES OF PARKING	90 degree	9' x 19'	None Shown	4 ADA (1 van)
STAFF COMMENTS (IF APPLICABLE):	<p>Site drivelaness vary from 16 feet at the far east side of the site, to 23 feet on the far west side of the site to 24 and 24.5 feet on the south and north sides of the site, respectively.</p> <p>The 23 foot wide driveway on the west side needs to be a minimum of 24 feet if it allows two-way traffic.</p> <p>The site plan needs to be revised such that the City's minimum turning radi of 28 feet inside/45 feet outside is met.</p> <p>The Fire Marshall will require a minimum 26-foot wide driveway to areas accessing fire hydrants.</p> <p>The Fire Marshall will need to approve the driveway at the far east side of the site.</p>			

Yes No NA

Deferred

5. Are the landscaping code requirements found in MVMC 17.93 being complied with? Provide details below:

	GROSS SITE AREA	% REQUIRED	S.F. REQUIRED	S.F. PROVIDED	
AMOUNT OF LANDSCAPING	141,188 s.f.	10%	14,119	21,098	
	WIDTH	TREES/SHRUBS	APPROVED STREET TREE(S)?		
STREET FRONTAGE	10 feet	17 street trees required	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
	PARKING AREA S.F.	% REQUIRED	% PROVIDED COMPLIANT	# TREES R/P	LENTH/WIDTH
PARKING AREA LANDSCAPING	35,584	4% 1,423 S.F.	2,714 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9/12	Compliant
	TYPE I	TYPE II	STORMWATER POND	OTHER	
SCREENING REQUIRED	Not Required	Not Required	Not Applicable		
MONITORING/MAINTENENACE	Yes, see staff notes below				

Yes No NA

Deferred

STAFF COMMENTS (IF APPLICABLE):	<p>A total of 17 city approved street trees are required along the west and south landscape areas on this site. These trees are required to be selected from the City's list of approved street trees. The trees shown are not approved street trees, please see the attached street tree list.</p> <p>A two (2) year landscape maintenance bond in the amount of 25% of the cost of the newly installed landscape improvements shall be in place prior to the City issuing a final occupancy permit for the subject development.</p> <p>Staff is aware of complaints from the public about the existing shrubs at the corner of Riverside Drive and Pacific Place causing slight visibility issues; as such, staff strongly recommends removing and replacing these shrubs.</p> <p>Compliance with these provisions of the MVMC will need to be shown through the Fill and Grade application and permit process.</p>
<p>6. Does the proposed development comply with the stormwater requirements found in MVMC 13.33? Provide details below:</p> <p>Unknown, the applicant submitted preliminary information with regard to proposed stormwater facilities to serve the project site. As such, compliance with these provisions of the MVMC needs to be shown through the Fill and Grade application and permit process.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA *Deferred</p>
<p>7. Are all easements/encumbrances shown?</p> <p>The applicant has identified the location of easements identified within the title report provided to the City.</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p>
<p>8. Does the proposed development comply with the City's regulations with regard to dumpsters and their associated enclosures? Provide details below:</p> <p>The applicant has identified a dumpster enclosure that is 18 feet wide and 12 feet deep. This complies with the dimensional requirements for a garbage only pad. Should the applicant wish to also include recycling containers this enclosure will need to be a minimum of 25 feet in width and be 12 feet deep.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p>
<p>9. Is the proposed development located within a regulatory floodplain? If so, list the applicable flood zone, map # and other applicable details below:</p> <p>The site is located within a zone A21</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p>
<p>10. Is the proposed development located within the jurisdiction of the Shoreline Master Program? If so, list the shoreline designation and other applicable details below:</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA</p>
<p>11. Are other permits required for the subject development? If so, list below:</p> <ul style="list-style-type: none"> • Fill and Grade Permit • Right of Way • Building Permit that will also include: Plumbing, Mechanical, Electrical, Fire and Life Safety 	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p>

C. DECISION & CONDITIONS:

Site Plan Approval for **Harbor Freight**, file number: **PL17-035** has been **APPROVED** by the Development Services Department subject to compliance with the standards of the Mount Vernon Municipal Code and the following specific requirements placed on this action that allow this permit to be issued:

1. Staff is deferring the parking and landscaping compliance to the Fill & Grade and/or Building Permit processes. This means that either the Fill and Grade or the Building Permit will need to include site plans that are revised to comply with the comments contained within this document.
2. Staff has attached the comments from the City's Engineering and Fire Departments received during the SEPA comment period because these comments pertain to site plan approval.
3. Staff has attached a copy of the City's approved street trees.



April 28, 2017

Rebecca Lowell, Senior Planner
Development Services Department

Date

D. EXPIRATION/APPEALS/NOTES TO APPLICANT:

Site Plan Approval is a Process I decision per MVMC Chapter 14.05; where a final decision is made by the director or the director's designee without public notice or a public hearing.

This decision may be appealed in an open record appeal hearing to the hearing examiner within 14 days of the date this document was signed by the approval authority, as noted above. The hearing examiner decision may be appealed in a closed record appeal to the city council.

Consistent with MVMC 17.90.100 approval of the site plan shall be effective for 18 months from the date of approval by the SPRC. Upon written application of the owner or representative, the SPRC may extend the approval for an additional six-month period; provided, that no changes have been made in regulations, ordinances, requirements, policies or standards which impact the project.

Further information may be obtained by contacting the Community & Economic Development Department at: 910 Cleveland Ave / P.O. Box 809, Mount Vernon, WA 98273, (360) 336-6214.

Date: April 10, 2017

To: Rebecca Lowell, Senior Planner

From: Ana Chesterfield, Development Services Engineering Manager 

Subject: **PL17-035 - Harbor Freight SEPA Review**

Drainage Report:

- A. The project is required to meet stormwater quality and shall comply with City of Mount Vernon Municipal Code 13.33 and 2012 Department of Ecology Stormwater Manual.
- B. The development requires a stormwater downstream analysis prepared by a licensed civil engineer per the 2014 Department of Ecology Stormwater Manual and MVMC 13.33 to determine and address any downstream issues.
- C. Applicant should note that WWHM2012 (not WWHM3) shall be used to design the treatment systems for the project.
- D. The applicant should also note the use of flow charts for new development and pre-development shall be per DOE 2014 not 2005
- E. Note that the proposed Stormwater Biofiltration System by Modular Wetlands should be a system approved for use by the Department of Ecology.
- F. A Construction General Stormwater permit from Department of Ecology is required for the project. A SWPPP is required.
- G. A SWPPP is required
- H. A soils report from a Geotechnical Engineer is required. The report provided does not address infiltration potential from soils on the site.
- I. The stormwater report does not address Low Impact Development feasibility criteria as required by 2014 Department of Ecology.
- J. An operation and maintenance manual is required before final project closure. The O&M shall lay out scheduled maintenance of Low Impact Development Facilities as well as any other stormwater facilities.

Traffic Analysis Report:

- K. Compliance with the traffic report by Transportation Solutions, Inc. dated March 6th 2017 is required. Civil design shall be reflected accordingly - see sheet 6 of 6 for conditions and recommendations. Any deviations from these conditions shall be approved by the City of Mount Vernon City Engineer. In some instances additional engineering analysis might be required as determined during plan review.

- L. The driveway to the west on Pacific Place is restricted to right-in-right out access only. The design Engineer shall determine the need for additional mitigation. For Example striping and signage might be necessary.
- M. The Driveway to the east on Pacific Place is to be widen and is to be used for ingress and egress of delivery trucks and semi-trucks.

General Comments:

- N. Compliance with City of Mount Vernon Engineering Standard is a requirement
- O. Provide a haul route for review and approval
- P. Show existing utility easement on the civil plans
- Q. New Driveways and sidewalks shall comply with ADA as well as with City of Mount Vernon Engineering Standards
- R. Please ensure the project is using the most current WSDOT Standard Plans for driveways and ramps detail
- S. Underground Fuel tanks were decommissioned in 2010. Show location of monitoring wells on the site.
- T. Ensure the following internal circulation requirements for emergency vehicles and service truck are met - Minimum turning radii to be as follows:
 - a. Fire Apparatus: 28-feet inside and 45-feet outside
 - b. Garbage Trucks: 32.5-feet inside and 46.5 outside
 - c. Overhead Clearance: 25-feet

Note that these comments do not constitute a formal or detailed review of the engineering data and supplemental information supplied for the project. Further and more detailed engineering reviews will be performed once the final plans and reports are submitted for permits.

From: Riggs, Steve
Sent: Monday, April 10, 2017 10:32 AM
To: Lowell, Rebecca
Cc: Hawney, Kirsten
Subject: PL 17-035

Harbor Freight
2400 Riverside Drive.

A couple of items to note.

1. The existing fire hydrant for that property is a 1968 Iowa and will need to be replaced.
2. The water line need to be extended from Pacific along the east side for the property and may dead end at the dividing line of the two lots. When the next building (north lot) is constructed the fire line will extend to Hoag road and tie in. there will be one more fire hydrant installed on the property along the east drive path.
3. The turning radius in the parking lot does not meet fire department requirements. Adjustments are needed to a couple of islands.
4. Emergency radio coverage for the building will be required to be evaluated. The building construction type will have an impact on whether an emergency system has to be installed. A building cannot be fully tested until it is completed, Pre installing conduit throughout the building will be required. If the building meets minimum standards then no emergency system to be installed, If below the conduit is in place to run required wiring to set up the system.

Please let me know if you have any questions.

Steven V. Riggs
Fire Marshal
City of Mount Vernon
(360) 336-6277

Mount Vernon

Community & Economic Development Department

RECOMMENDED STREET TREE VARIETIES & GENERAL INFORMATION FOR MOUNT VERNON, WA 2012

IN GENERAL: Always select the tree variety that fits available growing space above and below ground and that considers the limitations and attributes of the species. New varieties are continually being evaluated and discovered.; as such, the lists provided herein are reviewed and updated periodically by the City. Also included are planting specifications that the City code requires.

Tree Size and Crown:

The City requires a minimum 2" caliper street trees. The lowest limbs or crown shall be at least 5 feet above grade.

Tree Quality:

All trees shall meet or exceed the most recent American Standards for Nursery Stock. They shall have a central leader or maintain the proper spreading form of that species. They shall exhibit vigorous growth in leaf, twig or bud form, of appropriate color and size. The trunks and limbs shall be free of damage, deadwood and disease. The root systems shall meet or exceed the Standards for their size and shall be free of excessive circling or dead roots. The city shall have the opportunity to inspect trees for acceptance before installation.

Planting Space Width:

Planting trees in **planting widths narrower than four feet** is generally not recommended. However, when no alternative is possible, consult the Arborist for planting and species recommendations. Narrow planting widths severely limit the health and longevity of street tree plantings. The following are general guidelines to follow:

- **Small Trees**-No less than 4-foot wide planting strip.
- **Medium Trees**- No less than 5-foot wide planting strip.
- **Large Trees**-No less than 8-foot wide planting strip.

Planting Space Soil and Drainage:

Street trees utilize the entire planting strip (and more) to grow to any reasonable size. In fact, studies have indicated that for a tree to grow to a functional large canopy size tree, it would need a minimum area that measures 20 feet x 20 feet x 3 feet deep. The entire planting strip should consist of un-compacted and acceptable soils. The planter strips should be well draining or, sub-surface perforated drain pipe surrounded by drain rock should be installed 40-inches deep to ensure drainage. The ridged perforated drain pipe should be connected to a storm drain. Roots might eventually grow under and beyond the sidewalk if soil conditions are favorable but that is not always the case and the planter strip is the first area it will grow into. Other techniques can be used to expand the soil area available to the tree. Lacking adequate soil volume will result in trees that fill up the soil area with roots in 5 or 10 years, like a root bound house plant, and slowly decline.

Tree Installation:

All foreign materials shall be removed from the root ball before planting. The root crown of the tree shall be placed at 1-inch above grade, no higher. A water dam 2-inches high shall be placed around the tree, 18-inches from the trunk. A rectangular area, measuring 5 feet by 5 feet between curb and sidewalk shall be free of grass and covered with 3-inches of woodchips or bark mulch.

Watering:

Immediate and regular watering of newly planted trees is critical to their growth and establishment. Newly planted trees should be thoroughly watered right after planting and then **at least 2 times per week** for the first month of the growing season. Then water at least once per week through the balance of the first summer until October. Watering once per month is also beneficial the second growing season for long-term establishment. Tree Gators are excellent devices to maintain regular and focused application.

The following lists of street trees are organized into these categories:

- Small street trees to 30' with a spreading habit; and small street trees to 30' with a narrow habit.
- Medium street trees to 45' with a spreading habit; and medium street trees to 45' with a narrow habit.
- Large street trees over 45' with a spreading habit.

Small street trees to 30', spreading habit:

(Can be placed under utility lines)

FLOWERING CRABAPPLES:

- Golden Raindrops Crabapple (*Malus transitoria* 'Schmidtcutleaf')
- Royal Raindrops (*Malus* 'JFS-KW5' PP 14375)

FLOWERING PLUMS:

- Krauter Vesuvius Flowering Plum (*Prunus cerasifera* 'Krauter Vesuvius')
- Newport Flowering Plum (*Prunus cerisifera* 'Newport')
- Thundercloud Flowering Plum (*Prunus cerisifera* 'Thundercloud')

FLOWERING CHERRIES:

- Canada Red Chokecherry (*Prunus virginiana* 'Canada Red')
- Cascade Snow Cherry (*Prunus* 'Berry') most disease resistant.
- Kwanzan Oriental Cherry (*Prunus serrulata* 'Kwanzan') Use Root Barrier
- Royal Burgandy Cherry (*Prunus serrulata* 'Royal Burgandy') Use Root Barrier
- Snow Goose Cherry, (*Prunus* Snow Goose) Use Root Barrier

HORNBEAMS:

- American Hornbeam (*Carpinus caroliniana*) and cultivars.
- Japanese Hornbeam (*Carpinus japonica*)

OTHER ASSORTED VARIETIES:

- Autumn Brilliance Serviceberry (*Amelanchier x grandiflora* 'Autumn Brilliance')
- Globe Ash (*Fraxinus excelsior* 'Globosa') use Root Barrier
- Jack Pear (*Pyrus calleryana* 'Jaczam')
- Lavalley Hawthorn (*Crataegus x lavalleyi*) with vase shape.
- Crimson Cloud Hawthorn (*Crataegus laevigata* 'Crimson Cloud')
- Paperbark Maple (*Acer griseum*)
- Parrotia Persica (*Persian parrotia*)

Small street trees to 30', narrow habit:

(Can be placed under utility lines)

ASSORTED VARIETIES:

- Red Cascade Mountain Ash (*Sorbus americana* 'Dwarfcrown') to 20'
- Adirondack Crabapple (*Malus* 'Adirondack') to 20'
- *Tschoonoskii Flowering Crab* (*Malus Tschoonoskii*)
- Ruby Vase Parrotia (*Parrotia persica* "Ruby Vase" or 'Venessa')
- Summer Sprite Linden (*Tilia cordata* 'Halka')

Medium street trees to 45', spreading habit:

(Varieties that need root barriers are noted)

ASH:

- Autumn Purple Ash (*Fraxinus americana* 'Junginger') use Root Barrier
- Patmore Ash (*Fraxinus pennsylvanica* 'Patmore') use Root Barrier
- Summit Ash (*Fraxinus pennsylvanica* 'Summit') use Root Barrier

FLOWERING PEARS:

- Aristocrat Callery Pear (*Pyrus calleryana* 'Aristocrat') use Root Barrier
- Redspire Flowering Pear (*Pyrus calleryana* 'Redspire') use Root Barrier

MAPLES:

- Norwegian Sunset Maple ((*Acer truncatum* x *A. platanoides* 'Keithsform') use Root Barrier
- Pacific Sunset Maple (*Acer truncatum* x *A. platanoides* 'Warrenred') use Root Barrier
- Parkway Norway Maple (*Acer platanoides* 'Columnarbroad') and Cleveland. use Root Barrier
- Queen Elizabeth Hedge Maple (*Acer campestre* 'Evelyn') use Root Barrier
- Red Maple (*Acer rubrum*) (selected varieties including Red-point, Northwood, October Glory, Red Sunset, Autumn Flame, Autumn Spire, Brandywine) use Root Barrier

ZELKOVAS:

- Green Vase Japanese Zelkova (*Zelkova serrata* 'Green Vase')
- Village Green Zelkova (*Zelkova serrata* 'Village Green')

ASSORTED VARIETIES:

- American Yellowwood (*Cladrastis kentukea*)
- Chinese Tulip (*Liriodendron chinense*) use Root Barrier
- Emerald City Tulip Tree (*Liriodendron tulipifera* 'JFS-Oz') Use Root Barrier
- Elms (*Ulmus* spp.) (any medium maturing height Dutch Elm Disease Resistant variety) New Horizon (*Ulmus japonica* x *pumila* 'New Horizon'), Emerald Sunshine (*Ulmus propinqua* 'JFS-Bieberich', Triumph (*Ulmus* 'Morton Glossy') Frontier (*Ulmus* 'Frontier') has purple fall color.
- Katsura Tree (*Cercidiphyllum japonicum*)
- Kobus Magnolia (*Magnolia kobus*)
- Little Leaf Linden (*Tilia cordata* 'Green Spire') use Root Barrier
- Sour Gum (*Nyssa sylvatica*) and cultivars
- Whitebeam (*Sorbus aria* 'Magnifica' and 'Majestica')
- Worplesdon Sweetgum (*Liquidambar styraciflua* 'Worplesdon') use Root Barrier

Medium street trees to 45', narrow habit:

(Varieties that need root barriers are noted)

(Narrow is a relative term—some varieties widen as they age)

FLOWERING PEARS:

- Cambridge Flowering Pear (*Pyrus calleryana* 'Cambridge') use Root Barrier
- Chanticleer Pear or Cleveland Select Flowering Pear (*Pyrus calleryana* 'Chanticleer' or 'Cleveland Select') use Root Barrier

MAPLES:

- Karpick Maple (*Acer rubrum* 'Karpick') use Root Barrier
- Armstrong Red maple (*Acer rubrum* 'Armstrong') use Root Barrier
- Bowhall Red Maple (*Acer rubrum* 'Bowhall')[same as *Acer rubrum* 'Scanlon'] use Root Barrier
- Emerald Queen Norway Maple (*Acer platanoides* 'Emerald Queen') as well as Easy Street and Columnar Norway, use Root Barrier

OAKS:

- Crimson Spire Oak (*Quercus alba* x *Q. robur* 'Crimschmidt') use Root Barrier

ASSORTED VARIETIES:

- Cardinal Royal Mountain Ash (*Sorbus aucuparia* 'Michred')
- Chancellor Linden (*Tilia cordata* 'Chancole') use Root Barrier
- Corinthian Linden ('*Tilia cordata*'Corzam') use Root Barrier
- Dawn Redwood (*Metasequoia glyptostroboides*) use Root Barrier
- Emerald Sentinel Sweetgum (*Liquidambar styraciflua* 'Clydesform') use Root Barrier
- Fastigate Arnold Tulip Tree (*Liriodendron tulipifera* 'Fastigiatum') use Root Barrier
- Musashino Zelkova (*Zelkova serrata* 'Musashino')
- Ginkgo (*Ginkgo biloba*, male cultivars only) Autumn Gold, Princeton Sentry, Maygar, Fastigiata, and others- use Root Barrier
- Pyramidal Dawyckii Beech (*Fagus sylvatica* 'Dawyckii') use Root Barrier
- Slender Silhouette Sweetgum, (*Liquidambar styraciflua* 'Slender Silhouette') Use Root Barrier

Large street trees to 45', spreading habit:

(Varieties that need root barriers are noted)

OAKS:

- English Oak (*Quercus robur*) use Root Barrier
- Pin Oak (*Quercus palustris*) use Root Barrier
- Red Oak (*Quercus rubra*) use Root Barrier
- Scarlet Oak (*Quercus coccinea*) use Root Barrier

LARGE TREES CONTINUED:

MAPLES:

- Freemanii maples, (Autumn Blaze, Autumn Fantasy, Celebration, and Marmo) use Root Barrier
- Silver Queen Maple (*Acer saccharinum* 'Silver Queen') use Root Barrier
- Sugar Maple (*Acer saccharum*) (several cultivars) use Root Barrier

ASSORTED VARIETIES:

- Bigleaf Maple (*Acer macrophyllum*) use Root Barrier
- London Plane Tree (*Platanus x acerifolia* 'Exclamation' or 'Ovation',) use Root Barrier
- European Beech (*Fagus sylvatica*)(Green or Purple leaf) use Root Barrier
- Tulip Tree (*Liriodendron tulipifera*) use Root Barrier
- Accolade Elm (*Ulmus japonica x wilsoniana* 'Morton') use

Root Barriers :

Use of root barriers may be recommended depending on tree species, soil types, width of planting strip, and thickness of sidewalk and curb. Root barriers do not guarantee protection from hard surface damage, but have been shown to delay lifting of sidewalks and curbs from roots for many years when properly installed.

Root Barriers are recommended for use with tree varieties with the most aggressive root systems. Root barrier use may be disregarded if the recommended planting width is greater than the planting width recommended for the tree size above or as determined by the City.

Root barrier installation is most effective and beneficial when installed along the edge of a sidewalk and/or curb on either side of the tree to allow the tree roots some growing room before roots contact the root barrier. Placing the root barrier around the root ball at planting time severely restricts the growth of the tree and is not recommended. The tree may not become anchored and stable especially if there is poor draining or impervious soil below the root barrier. Root barrier typically comes in 12-inch, 18-inch and 24-inch depths. Depth to install usually depends on tree species, soils and distance between tree and barrier.



Urban Forestry Services, Inc.

(360) 428-5810 • www.urbanforestryservices.com

The City's arborist, Jim Barborinas, has provided this list of street trees, that he updated in 2012 for the City.