

## Canopy Radius

The canopy radii of on-site assessed trees range from nine feet to 16 feet, with an average radius of 12.5 feet.

## Condition

All trees were found to be in *Excellent* condition; there were no structural defects, and the foliage was healthy.

Table 2. Summary of on-site significant trees.

Tree #	Scientific Name / Common Name	DBH (in)	Height (ft)	Canopy Radius (ft)	Viable (Y/N)	TPZ (ft)	Retention Value	Remove (Y/N)
1	Acer platanoides (Norway maple)	12.8	25	15	Y	6.4	Moderate	Y
2	Acer platanoides (Norway maple)	8.9	25	10	Y	4.5	Moderate	N
3	Acer platanoides (Norway maple)	8.4	25	9	Y	4.5	Moderate	N
4	Acer platanoides (Norway maple)	11.5	30	16	Y	6	Moderate	Y

Tree #1 is a Norway maple (*Acer platanoides*) with a diameter of 12.8 inches. This tree was found to be in *Excellent* Health and have *Excellent* Structure. This tree is of Moderate Retention Value due to its condition. The CRZ is 12.8 (rounded to 13) feet from the trunk. This tree will be removed for a new covered walkway to the campus and the new classroom addition.

Tree #2 is another Norway maple (*Acer platanoides*) with a diameter of 8.9 inches. This tree was found to be in *Excellent* Health and have *Excellent* Structure. This tree is of Moderate Retention Value due to its condition. The CRZ is 8.9 (rounded to 9) feet from the trunk. This tree is not planned to be impacted by development. Tree Protection Fencing should be placed around the TPZ, which is at a minimum, four-and-a-half (4.5) feet from the trunk.

Tree #3 is another Norway maple (*Acer platanoides*) with a diameter of 8.4 inches. This tree was found to be in *Excellent* Health and have *Excellent* Structure. This tree is of Moderate Retention Value due to its condition. The CRZ is 8.4 (rounded to 9) feet from the trunk. This tree is not planned to be impacted by development. Tree Protection Fencing should be placed around the TPZ, which is at a minimum, four-and-a-half (4.5) feet from the trunk.

Tree #4 is another Norway maple (*Acer platanoides*) with a diameter of 11.5 inches. This tree was found to be in *Excellent* Health and have *Excellent* Structure. This tree is of Moderate Retention Value due to its condition. The CRZ is 11.5 (rounded to 12) feet from the trunk. This tree will be removed for a new covered walkway to the campus and the new classroom addition.

## Tree Protection Measures

To ensure the survival of the significant trees assessed within this study, these best management practices should be followed during the development phase:

- **Tree protection barriers:** Per KZM 95.34, temporary protective tree fencing should be erected around the Tree Protection Zone, which should not infringe in the interior critical root zone (ICRZ) of protected trees. Protective tree fencing should consist of 6-foot-high chain link fence with signs that state: “Tree and Soil Protection Area, Entrance Prohibited” on all sides of the fence and provide the city phone number for code enforcement to report violations. Protection barriers are to remain on-site until the Planning Official authorizes their removal.
- **Minimize root zone disturbance:** All construction activities, including staging and driving machinery, should be located outside of the ICRZ. If temporary impacts in the critical root zone (CRZ) are unavoidable, the arborist recommends using one of the following temporary measures to minimize soil compaction and root damage:
  - Install six to 12 inches of wood chip mulch over the CRZ.
  - Lay down a ¾-inch thick plywood sheet or steel plates over at least four inches of wood chip mulch.
  - Apply four to six inches of gravel over staked geotextile fabric.
  - Place commercial logging mats on top of a 4-inch mulch layer.

The plywood, steel plates, gravel, geotextile fabric, mats, and all mulch over four-inches thick **must** be removed after the temporary disturbance is finished.

- **Root pruning:** If mechanical excavation occurs near a tree to remain, the arborist recommends using an air or water excavator and root pruning by hand, or by using a mechanical root pruning tool designed to cut roots. Any roots over one inch that are exposed after mechanical excavation should be clean cut by hand.

- **Maintenance:** The impacts of construction are stressful to trees, which may not show the signs of stress for up to five to ten years after being impacted. Applying one to two inches of water to the root zones each week in the summer during construction will help the trees stay healthy throughout construction.
- **Monitoring:** After construction is complete, the tree protection fencing can be removed. Any branches accidentally broken during construction should be pruned. An ISA certified arborist could assist with health assessment, monitoring, and provide management recommendations for the trees post-construction as the trees recover from the impacts of construction and adapt to their new conditions.

## Limitations of This Study

The findings of this report are based on the best available science and are limited to the scope, budget, and site conditions at the time of the assessment. Although the information in this report is based on sound methodology, internal physical flaws (such as cracking or root rot) or other conditions that are not visible cannot be detected with this limited basic visual screening. Trees are inherently unpredictable. Even vigorous and healthy trees can fail due to high winds, heavy snow, ice storms, rain, age, or other causes.

This report is based on the current observable conditions and may not represent future conditions of the trees. Changes in site conditions, including clearing and grading, will alter the condition of remaining trees in a way that is not predictable.

The conclusions contained within this report have been made for permitting purposes only and are not intended for tree risk assessment purposes.

Please call if you have any questions or if we can provide you with any additional information.

Sincerely,



Jake Robertson

ISA Certified Arborist® PN-8934A

TRAQ

## Site Photos



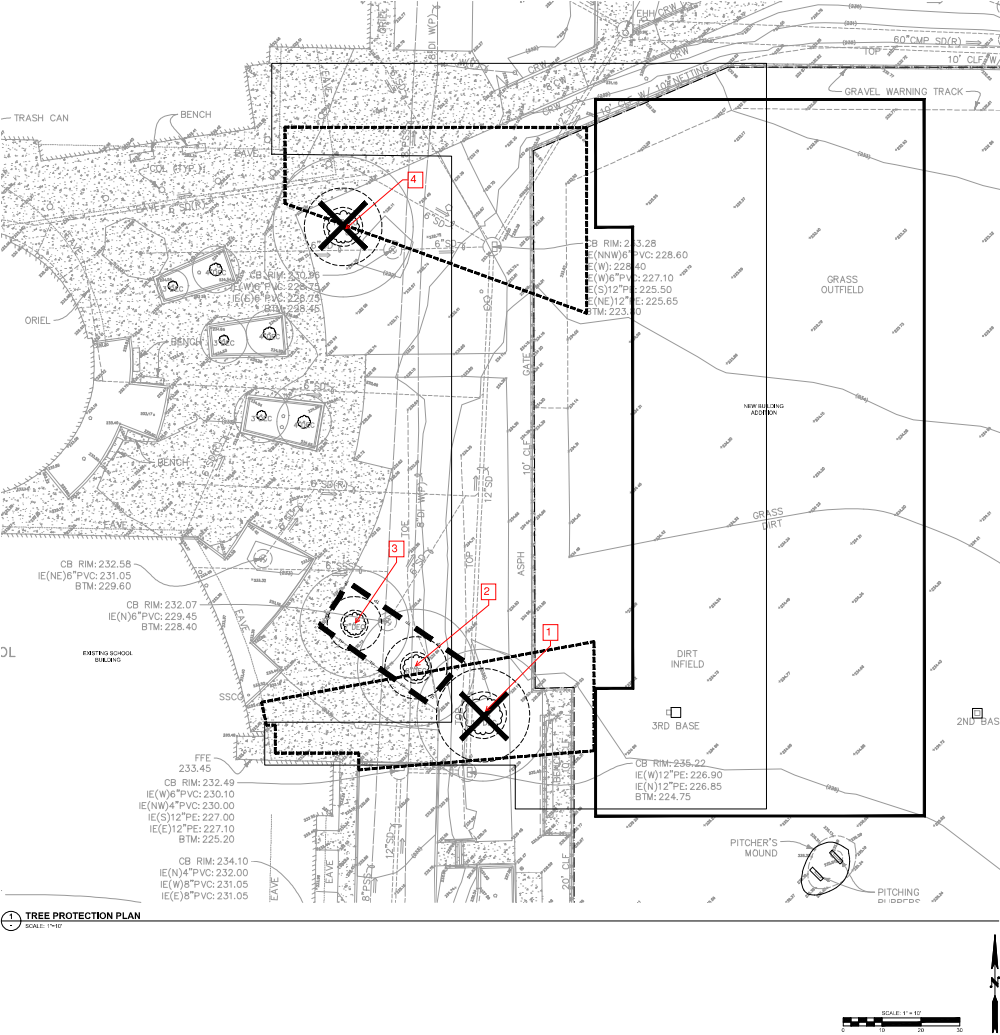
Figure 2. All inventoried Trees #1 – #4 from left to right.



Figure 3. Trees border the subject parcel and are within the parking lot in landscape beds.

## Annotated Tree Map





The Watershed Company arborist visited the site on July 28, 2022 to inventory and assess the trees identified on this survey.

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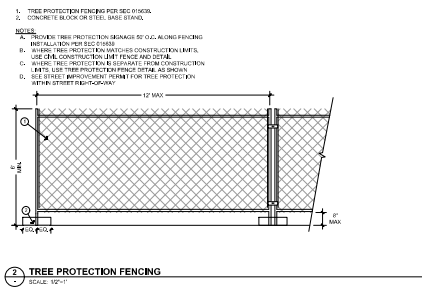
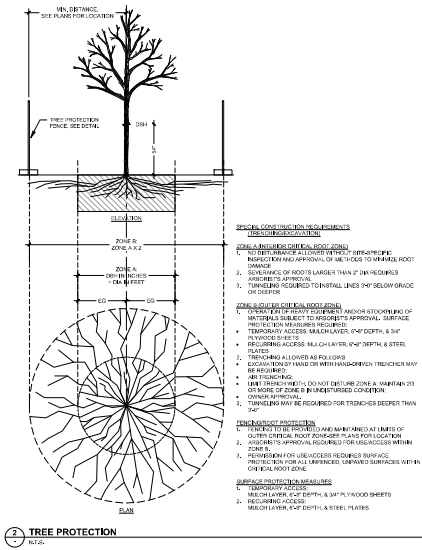
OSBORN CONSULTING

LAKE WASHINGTON SCHOOL DISTRICT  
KIRKLAND MS ADDITION  
439 18th Ave.  
Kirkland, WA 98003

Job No. 181702  
Job Name 220103  
Drawn By: JMS  
Checked By: JMS  
Scale: 1"=10'

TREE PROTECTION PLAN  
TP1.00

SCHEMATIC DESIGN



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OSBORN CONSULTING

LAKE WASHINGTON SCHOOL DISTRICT  
KIRKLAND MS ADDITION  
439 18th Ave.  
Kirkland, WA 98003

Drawn	10/1/20
Check	10/1/20
Design	10/1/20
Project No.	46
Revision	
1	10/1/20

TREE PROTECTION  
DETAILS  
TP1.01

SCHEMATIC DESIGN

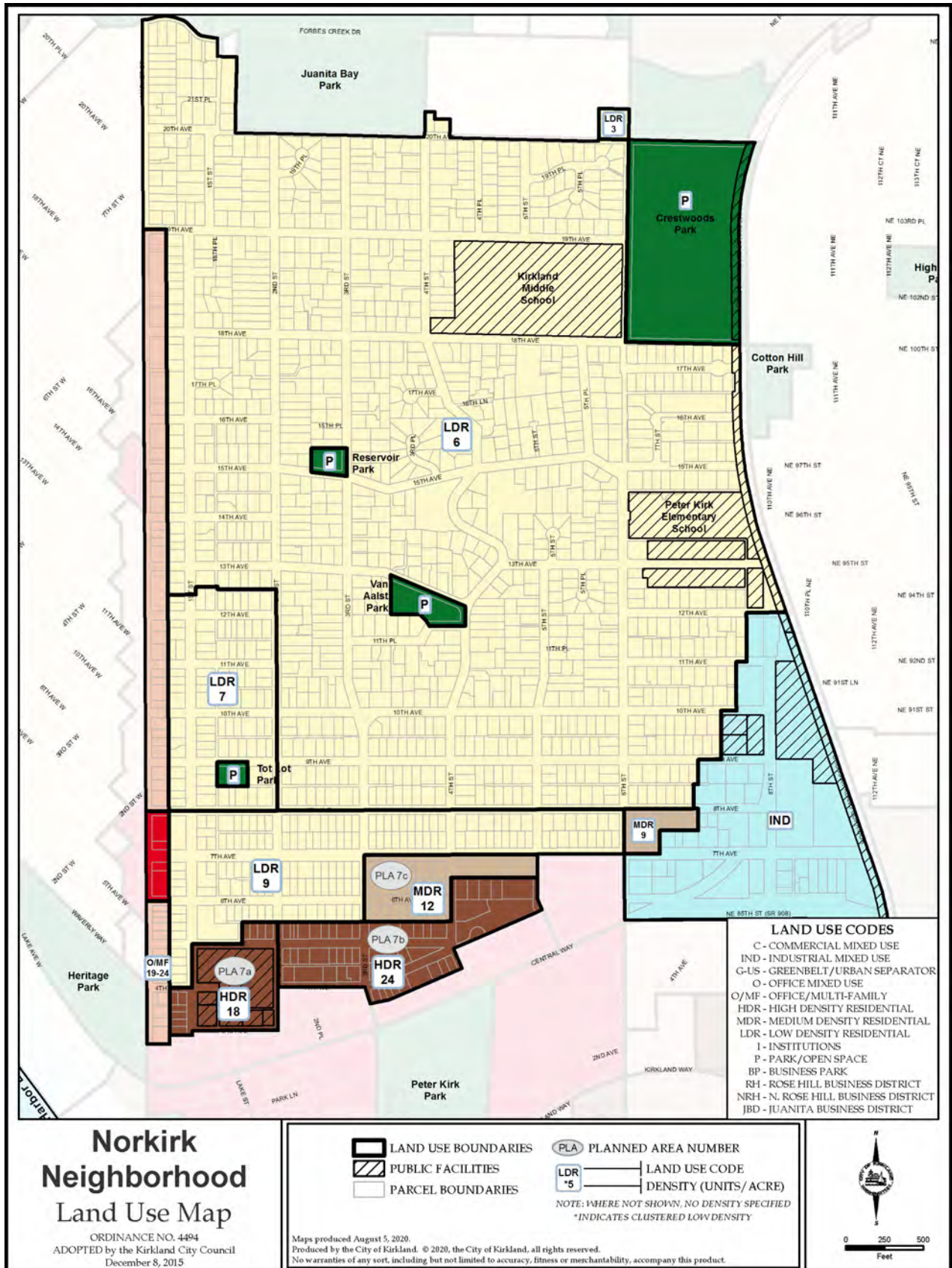


Figure N-3: Norkirk Land Use Map