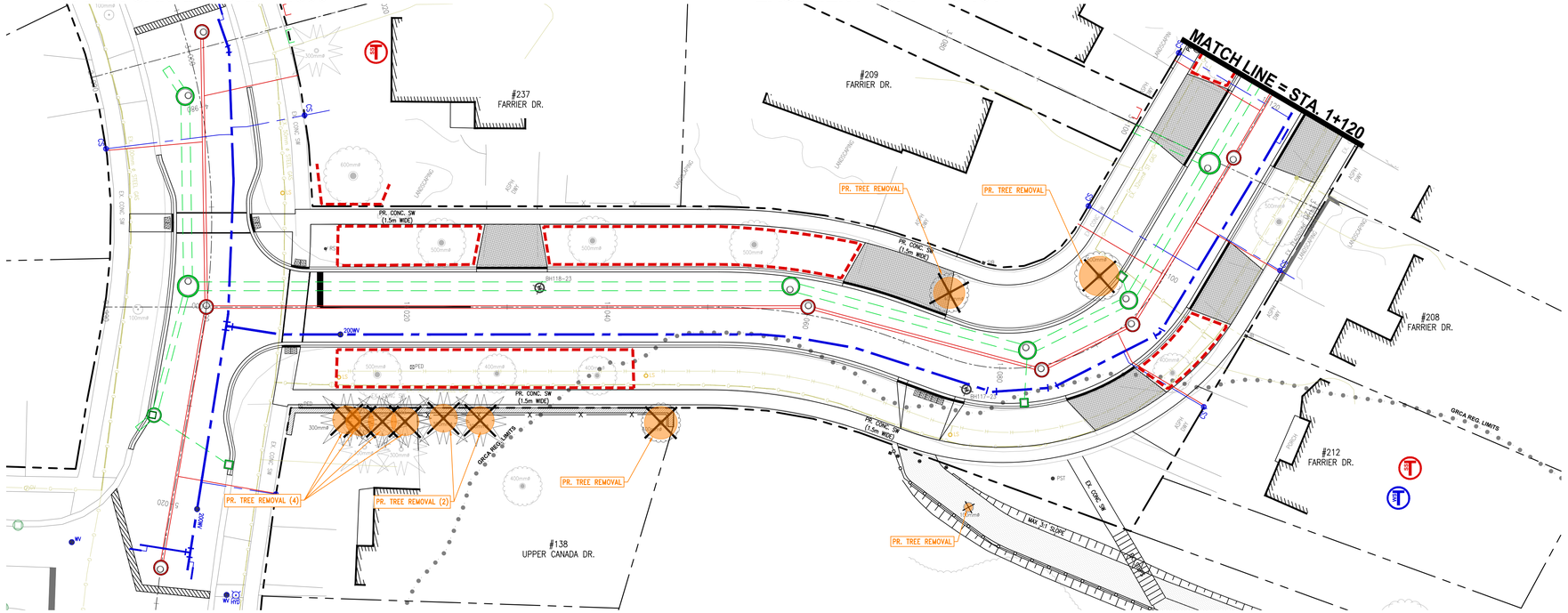
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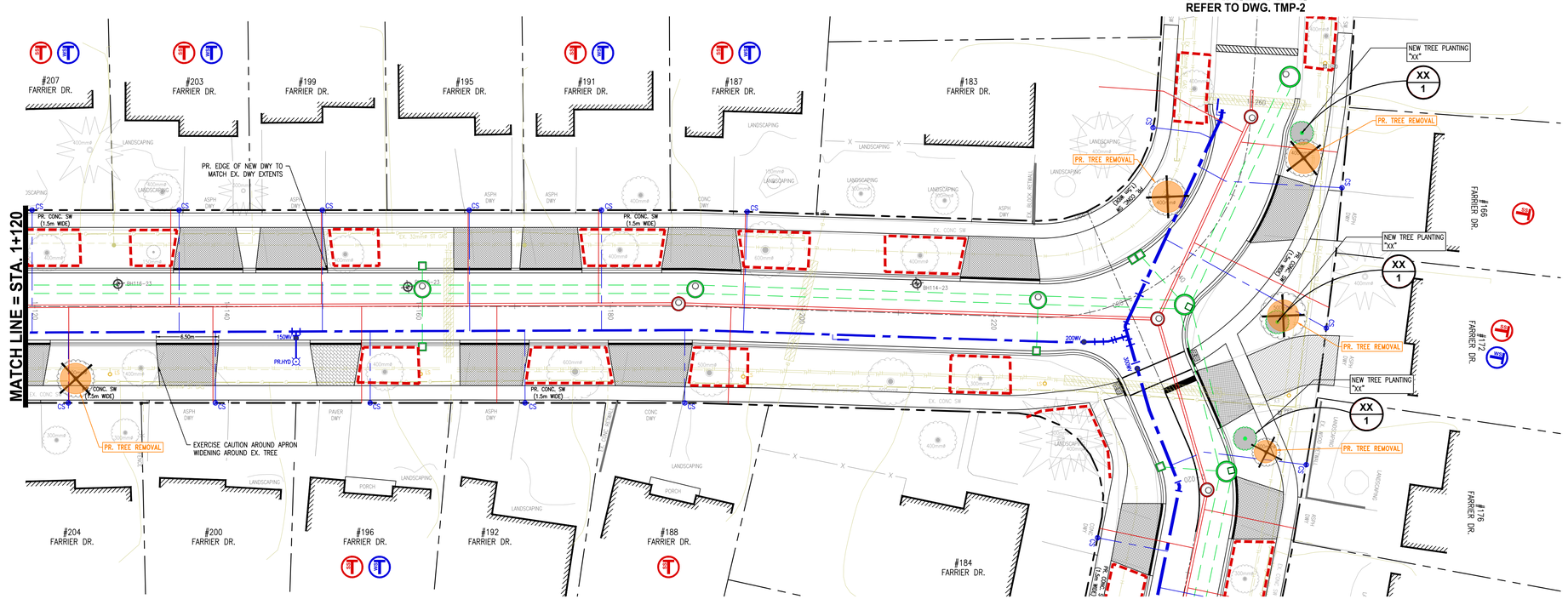
EASEMENT No. 1 - G-181



FARRIER DRIVE

PLANT MATERIAL LIST					
KEY	BOTANICAL NAME	COMMON NAME	CALIPER	CONDITION	QUANTITY

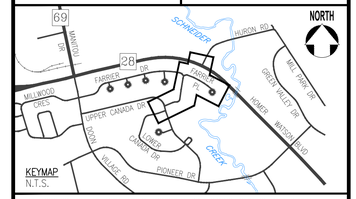
FARRIER DR.
REFER TO DWG. TMP-2



FARRIER DRIVE

FARRIER PL.
REFER TO DWG. TMP-2

true**NORTH** | construction**NORTH**



KEYMAP
N.T.S.

THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

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LEGEND:

- TREE TO REMAIN
- SIGNIFICANT TREE TO REMAIN
- TREE REMOVAL
- STUMP TO BE REMOVED
- PROPOSED TREE PLANTING
- TREE PROTECTION FENCING
- PROPOSED SANITARY AND/OR WATER SERVICES TO BE INSTALLED TRENCHLESSLY TO AVOID CONFLICTS WITH TREES, PLANTING BEDS, ETC.
- 00 — TREE IDENTIFICATION NUMBER
- AN / 00 — PLANT KEY / QUANTITY

TPZ – TREE PROTECTION ZONE
RHCZ – ROOT HABITAT CONSERVATION ZONE

TREES / STUMPS IDENTIFIED FOR REMOVAL ON THIS PLAN ARE TO BE REMOVED BY CONTRACTOR UNLESS NOTED ON DRAWING. SPECIAL CONDITIONS MAY APPLY FOR TREES ADJACENT TO HYDRO LINES.

TOPSOIL AND GRASS WITHIN TREE PROTECTION ZONES TO REMAIN

SURVEY

CONDITION SURVEY BY CITY OF KITCHENER OCTOBER, 2024.
FIELDBOOK # 00-000

BENCHMARK

CONCRETE MONUMENT LOCATED IN THE SE CORNER OF BLOCK A (REG. PLAN 1376) BEING 15 FEET WEST OF THE SW CORNER OF LOT No. 51 ON FARRIER PLACE.

ELEV. = 299.999m.

NO.	REVISION	BY	MM/DD/YY
3	ISSUED FOR 90% DESIGN	DP	09.12.25
2	ISSUED FOR 60% DESIGN	S.E.O.	08.05.25
1	ISSUED FOR 30% DESIGN	S.E.O.	04.08.25

The Corporation Of The
CITY OF KITCHENER

Development Services

Engineering Division

TREE MANAGEMENT PLAN

FARRIER DRIVE

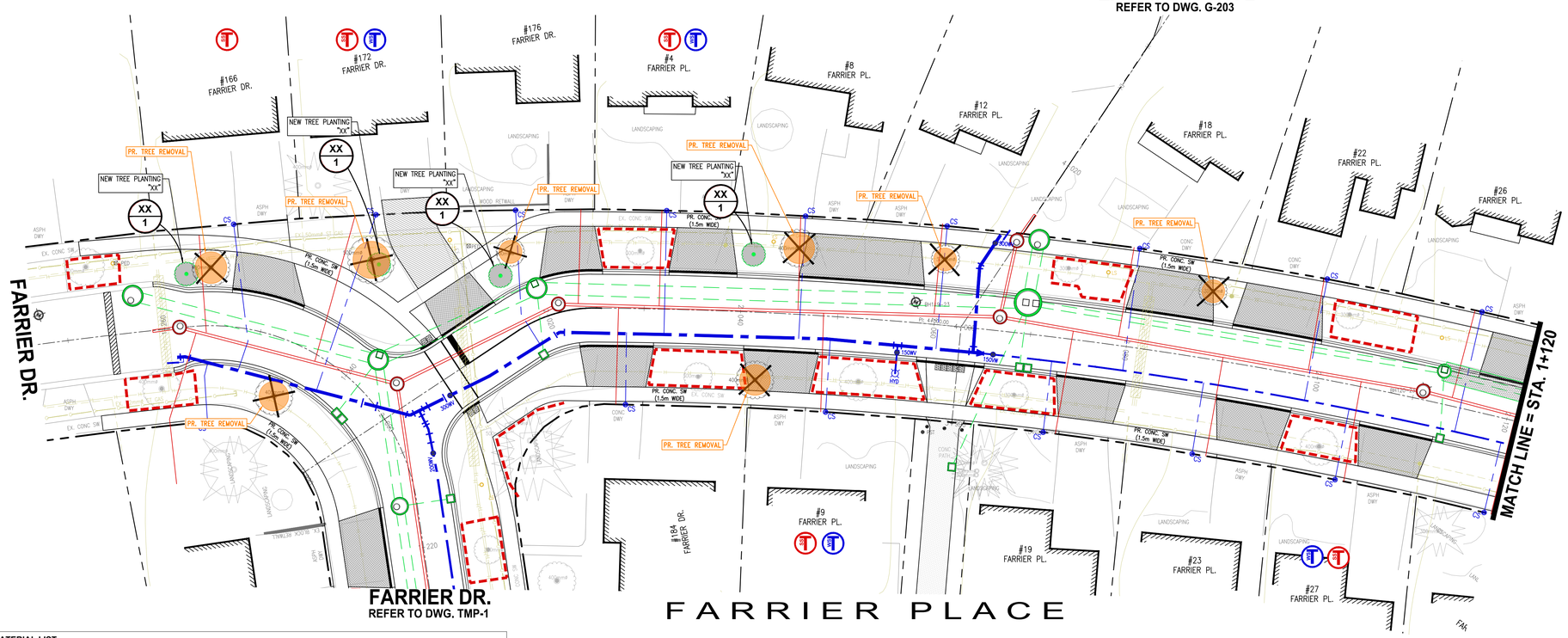
FROM UPPER CANADA DR. TO STA. 1+270

DESIGNED BY:	APPROVED BY:	DRAWN BY:
S.E.O.	K. MICK	S.E.O.

DATE: (MM.DD.YYYY) 03.19.2025
SCALE: HOR.-1:250
SHEET No. 26 of 28
DWG. No. TMP-1

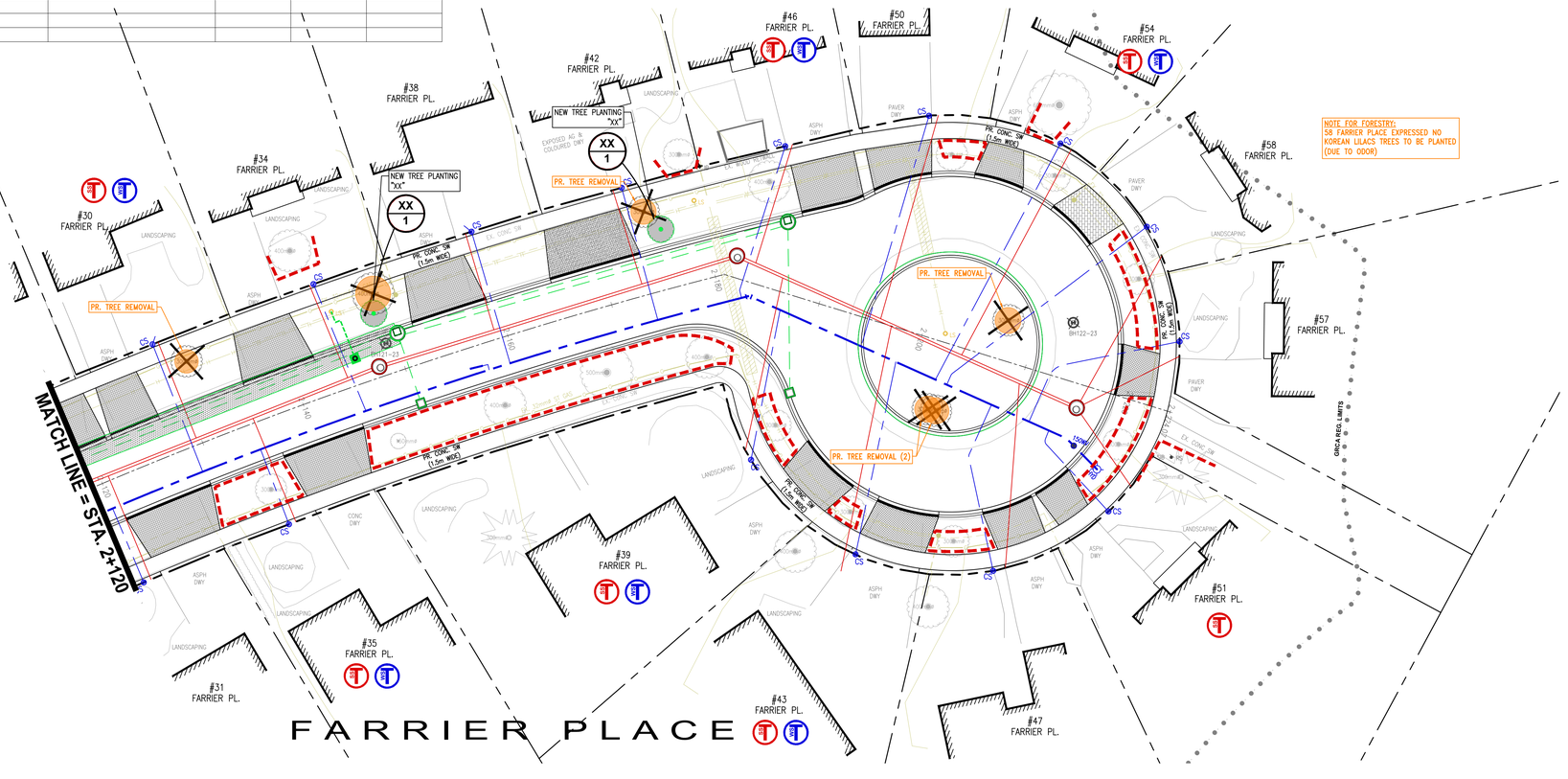
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EASEMENT No. 2
REFER TO DWG. G-203

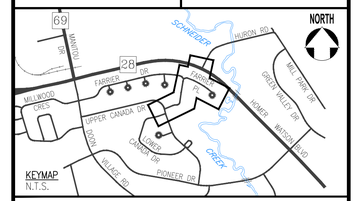


FARRIER DR.
REFER TO DWG. TMP-1

PLANT MATERIAL LIST					
KEY	BOTANICAL NAME	COMMON NAME	CALIPER	CONDITION	QUANTITY



trueNORTH | constructionNORTH



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Development Services

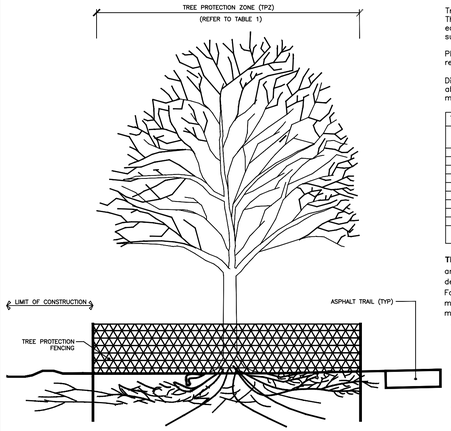
Engineering Division

TREE MANAGEMENT PLAN
FARRIER PLACE
FROM FARRIER DR. TO CUL-DE-SAC

DESIGNED BY:	APPROVED BY:	DRAWN BY:
S.E.O.	K. MICK	S.E.O.

DATE: (MM.DD.YYYY) 03.19.2025
SCALE: HOR.-1:250
SHEET No. 27 of 28
DWG. No. TMP-2

Date: Sep 16, 2025 - 9:40 am Plotted by: DavidPh Filename: S:\Planning\2011-11-430 Project Files\Update Projects (A-Z)\Farrier St\Drawings\DA_Sheet\Farrier_TMP_Sheet1.dwg



A **TREE PRESERVATION DETAIL & NOTES (PARKS AND OPEN AREAS)**
N.T.S.

TREE PROTECTION DETAIL NOTES

Dripline – the area that extends from the trunk of the tree to the outer limits of the crown of the tree.

Tree Protection Zone (TPZ) – the area around the trunk where roots essential for tree health and stability are located. The TPZ is determined based on the measurements indicated in Table 1. TPZs are to be measured from the outside edge of the tree base towards the dripline and may be limited by an existing paved surface, provided the existing paved surface remains intact throughout construction.

Plantable Space – areas designated for tree planting that meet spacing, soil volume, and infrastructure clearance requirements as deemed by the City.

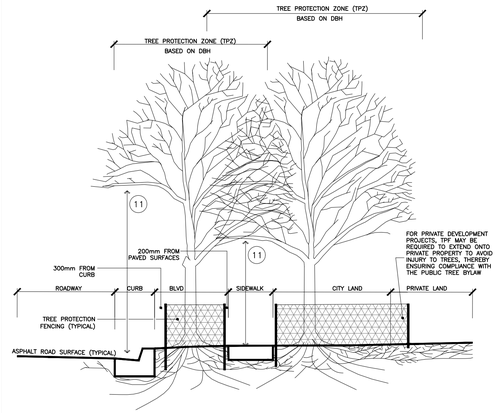
Diameter at breast height (DBH) – the diameter of a trunk of a tree from the outside bark at a height of 1.37m above ground. Where there are multiple trunks, means the square root of the sum of each stem diameter squared measured from the outside bark at a height of 1.37m.

Table 1 - Tree Protection Zones

Trunk DBH[1] Range (cm)	Street & Right-of-way Trees: Minimum Setback Radius (m)	Park & Open Area Trees: Minimum Setback Radius (m)
		Whichever of the two is greater:
<20	1.8	Dripline or 1.8
20 to 30	2.4	Dripline or 2.4
31 to 40	3.0	Dripline or 3.0
41 to 50	3.6	Dripline or 3.6
51 to 60	4.2	Dripline or 4.2
61 to 70	4.8	Dripline or 4.8
71 to 80	5.4	Dripline or 5.4
81 to 100	6.0	Dripline or 6.0
>100	6cm of protection for each 1cm of DBH	Dripline or 6cm of protection for each 1cm of DBH

The Public Tree Bylaw (Chapter 690) outlines the prohibitions and requirements for protecting City–owned trees, plantable spaces, and tree protection zones (TPZs), as defined in City standards. The **City of Kitchener Standard Specifications (CKSS 151)** further detail construction requirements near trees, which may be adjusted in consultation with and subject to approval by Urban Forestry (UF). Contractors will be held liable for any unauthorized injury to or removal of a City tree or its protection measures. Because damage may not become apparent until years after construction, it is critical that all preservation methods follow the guidelines below, along with generally accepted arboricultural and construction best practices.

1. Construction activities, grade alterations, and storage of equipment and materials are prohibited within the TPZ, except where approved by UF. All damage to trees shall be reported to UF.
2. All arborist work such as pruning of crown branches or roots within the TPZ shall be conducted by or under the supervision of UF or an ISA Certified Arborist.
3. All roots larger than 2.5cm that require removal are to be cut cleanly with bypass pruners or a pruning saw. Roots over 10cm are not to be cut without UF approval. All exposed roots will be covered as soon as possible to prevent root desiccation.
4. Special work practices for sidewalk and driveway works including hand work, minimal excavation, and hand forming may be required within a TPZ. Changes to the sidewalk design and elevation may be required to protect roots.
5. Soil compaction protection (horizontal hoarding) must be installed over the area of potential impact when temporary encroachment is permitted to facilitate work within a TPZ, as approved by UF. Refer to **TPF-1**.
6. Prior to tree removal or vegetation clearing, the Contractor must confirm that no migratory birds are making use of the site during nesting season (generally April 1 to August 31) to ensure conformance with the Migratory Bird Convention Act.



B **TREE PRESERVATION DETAIL & NOTES (STREETS AND RIGHT-OF-WAYS)**
N.T.S.

TREE PROTECTION DETAIL NOTES

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Plantable Space – areas designated for tree planting that meet spacing, soil volume, and infrastructure clearance requirements as deemed by the City.

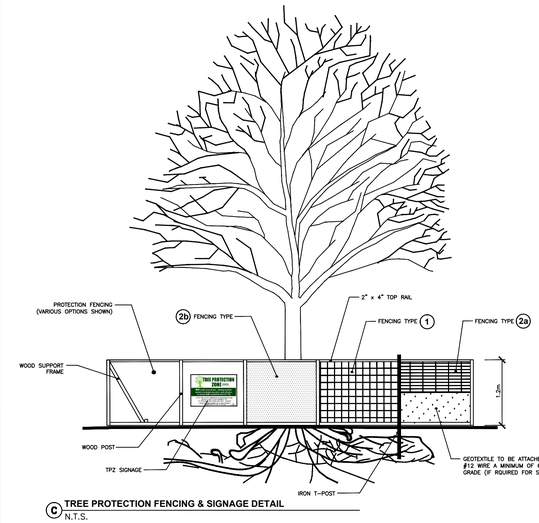
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6. Prior to tree removal or vegetation clearing, the Contractor must confirm that no migratory birds are making use of the site during nesting season (generally April 1 to August 31) to ensure conformance with the Migratory Bird Convention Act.



C **TREE PROTECTION FENCING & SIGNAGE DETAIL**
N.T.S.

TREE PROTECTION FENCING NOTES

Tree Protection Zone **(TPZ)** signage mounted on Gator Board or Corrugated Plastic Sheet must be attached to the outside of the Tree Protection Fencing. Signage must be clearly visible to those entering the site, the minimum size is to be 40cm X 60cm (16" X 24").

TPZ signage must be paid for and installed by the Contractor. Any variations to the TPZ signage shown on this page require approval by Urban Forestry (UF).

Tree Protection Fencing (TPF) must be 1.2m in height and must consist of one of the following options:

1. Where sight lines or visibility may be impeded:
   Orange construction fence secured to 2" X 4" wood frame or iron T–posts @ 2.4m spacing with 2" X 4" top rail for support.
2. Where excavation or fill must be placed temporarily near TPZs:
   a. Paige wire fence strand attached to sediment control fencing and secured to iron T–posts @ 2.4m spacing.
   b. Solid plywood hoarding secured to 2" X 4" wood frame, wood posts, or iron T–posts @ 2.4m spacing.

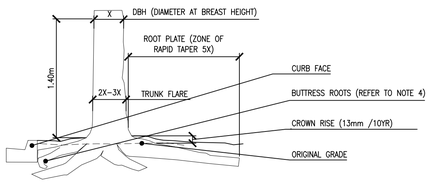
Horizontal hoarding shall be used in locations where movement of equipment through the **TPZ** is required and has been approved by UF. Horizontal hoarding options consist of:

a. Moderate root zone compaction: 3/4" plywood over 150mm of woodchip mulch over staked down permeable geotextile.

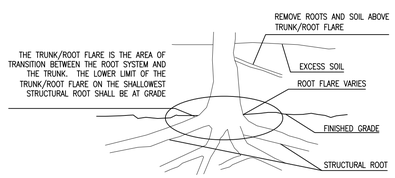
b. Heavy root zone compaction: Steel plate over 150mm of woodchip mulch over 100m of clear stone over staked down permeable geotextile.



TREE PROTECTION ZONE SIGNAGE



E **ROOT PLATE CROSS-SECTION DETAIL**
SCALE: N.T.S.



STRUCTURAL ROOT DEPTH

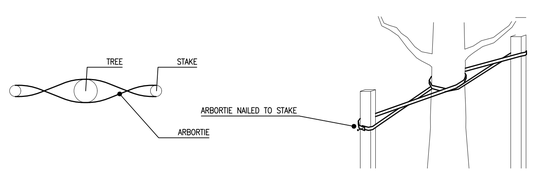
IDENTIFY LOCATION OF TRUNK/ROOT FLARE TO DETERMINE THE DEPTH OF THE PLANTING HOLE. REMOVE SOIL AND ROOTS FROM THE TOP OF THE ROOT BALL TO EXPOSE THE TRUNK/ROOT FLARE. CUT AWAY ROOTS THAT ARE GROWING ABOVE THE COLLAR. WHERE THE REMOVAL OF THE EXCESS SOIL ABOVE THE STRUCTURAL ROOTS WOULD RESULT IN AN UNSTABLE ROOT BALL THE TREE IS TO BE REPLACED BY THE CONTRACTOR AT NO COST TO THE CITY. AT PLANTING, THE TRUNK/ROOT FLARE WILL BE EVEN WITH, OR WITHIN 20mm OF THE TOP OF THE LANDSCAPE SOIL, AND ALL STRUCTURAL ROOTS WILL BE COVERED BY SOIL. EXCESS SOIL IS NOT TO BE ADDED TO THE TOP OF THE ROOT BALL.

F **STRUCTURAL ROOT DEPTH DETAIL**
SCALE: N.T.S.

D **DECIDUOUS TREE PLANTING DETAIL**
SCALE: N.T.S.

TREE PLANTING DETAILS

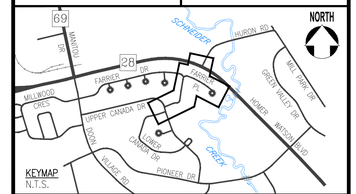
1. All trees will be reviewed and approved by the Urban Forestry representative prior to planting. Damaged trees, trees with poor form or root structure and trees not meeting the Canadian Standards for Nursery Stock will be refused. The contractor is also responsible to ensure that all plant material, including cultivars and tree sizes are provided and installed as stated on this plan. No alternatives, including species, tree size will be accepted unless approved by the Urban Forestry representative.
2. the Urban Forestry representative will mark the location of all tree planting locations, and review with the landscape contractor its expectations regarding proper planting practices, along with the standard depth for structural roots. Trees not planted to the City of Kitchener Standard will be removed and replaced at the contractor's expense.
3. The contractor is responsible for determining the location of all utilities and other obstructions above and below ground.
4. During the transport, storage and planting of the trees, the contractor will use appropriate work practices to not damage the tree or root ball. The contractor will also ensure that the tree does not suffer drought stress during this operation.
5. All twine and burlap will be bio–degradable. If the tree has been reburlaped, the burlap outside of the wire basket will be removed.
6. Trees will be planted in accordance to the planting detail. The depth of the planting hole will be determined by the depth of the root ball. The tree's structural roots will be even with, or within 20mm of the top of the landscape soil. All structural roots will be covered by soil. See Detail E.
7. A 100 mm high and 150 mm wide soil ring will be created at the edge of the tree hole. Excess soil will not be added to the root ball, all excess soil will be removed from the site.
8. 50 mm of an organic mulch will be applied to the surface of the soil ring and root ball. The mounding of soil and mulch within the root ball and against the tree trunk is prohibited.
9. The tree will be watered immediately after planting and the placement of the mulch, with the tree saucer being completely filled with water.
10. An expandable tree cover 200mm high will be placed around the base of the tree.
11. Trees will be staked with two wooden stakes 50mm X 50 mm X 2 m placed outside of the root ball. Flexible ties will be used.
12. Trees not planted to this specification or not at the approved depth, or trees that settle after planting will be removed and replanted at the contractor's expense. If the tree ball cannot be removed from the hole intact to the satisfaction of the Urban Forestry representative, the tree will be replaced at the contractor's full expense.
13. Tree to be watered and mulched immediately following planting.
14. Tree shall bear same relation to finished grade as it bore to previous existing grade, following settlement.



G **TRUNK TIE PLAN DETAIL**
SCALE: N.T.S.

trueNORTH | constructionNORTH

TMP-3



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- TRENCHLESS SAN. SERVICE / TRENCHLESS WAT. SERVICE — PROPOSED SANITARY AND/OR WATER SERVICES TO BE INSTALLED USING TRENCHLESS METHOD
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FIELDBOOK # 00–000

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The Corporation Of The
CITY OF KITCHENER

Development Services
Engineering Division

TREE MANAGEMENT PLAN DETAILS
FARRIER DRIVE & FARRIER PLACE

DESIGNED BY:	APPROVED BY:	DRAWN BY:
S.E.O.	K. MICK	S.E.O.

DATE: (MM.DD.YYYY) 03.19.2025
SCALE: N.T.S.
SHEET No. 28 of 28
DWG. No. TMP-3

Date: Sep. 19, 2025 - 9:40 am Plotted by: DavidPh Filename: S:\Drawing\01-11-436 Project Files\Capital Projects (14-22)\Farrier Dr\Drawing\04_Sheet Files\Farrier_TMP_Sheets.dwg