



Talbot Mackenzie & Associates

Consulting Arborists

1150 Cook St, Victoria

Construction Impact Assessment & Tree Preservation Plan

Prepared For: 66 Developments Ltd.

Prepared By: Talbot, Mackenzie & Associates
Michael Marcucci
ISA Certified # ON-1943A
TRAQ – Qualified

Date of Issuance: February 18, 2020 (for review)
February 19, 2020

Reissued: May 12, 2020
(revisions within the May 12, 2020
report are marked with a red asterisk *)

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Jobsite Property: 1150 Cook St, Victoria, BC

Date of Site Visit(s): May 1, 2019 and January, 2020

Site Conditions: No ongoing construction activity.

Summary:

- *This May 12, 2020 report includes the following changes: the location of the water service has shifted 0.5m north towards Horse Chestnut #1 (as a result of CoV Engineering requirements), supplemental watering recommendations have been added and possible BC Hydro requirements have been commented on. If BC Hydro requires underground infrastructure throughout the entire frontage of the site, this could result in significant impacts to at least Chestnut #1.
- The proposal includes constructing a 15-storey condominium and retail tower with underground parking.
- One municipal boulevard flowering plum tree #3 (44cm DBH) and one bylaw protected Elm tree #4 (47cm DBH) are proposed for removal.
- Both Horse Chestnuts on the Cook St boulevard can be retained if our recommendations are followed. We do not anticipate that the canopy loss or root loss will result in either tree declining.
- Horse Chestnut #2 will require clearance pruning from the balconies resulting in approximately 15-20% of its remaining canopy being removed (the canopy has already been severely pruned into a V-shape due to the overhead hydro lines). The overall form will likely look similar to other chestnut trees along Cook St that have been pruned for building clearance and overhead hydro lines.

Scope of Assignment:

- Inventory the existing bylaw protected trees and any trees on municipal or neighbouring properties that could potentially be impacted by construction or that are within three metres of the property line
- Review the proposal to demolish the existing building and construct a 15-storey condominium and retail tower with underground parking.
- Comment on how construction activity may impact existing trees
- Prepare a tree retention and construction damage mitigation plan for those trees deemed suitable to retain given the proposed impacts

Methodology:

- We visually examined the four trees on the property and prepared an inventory in the attached Tree Resource Spreadsheet. Trees were assigned an identification number, but no trees were tagged.
- Information such as tree species, DBH (1.4m), crown spread, critical root zone (CRZ), health, structure, and relative tolerance to construction impacts were included in the inventory.
- *The conclusions reached were based on the information provided within the attached plans from NSDA Architects (Issued for DP, dated May 4, 2020), the Preliminary Servicing Plan (Westbrook Consulting, 20.05.11) and Landscape Plan (Lombard North, April 29, 2020)
- A Tree Protection Site Plan was created using the Servicing Plan provided.

Limitations:

- No exploratory excavations have been conducted and thus the conclusions reached are based solely on critical root zone calculations, observations of site conditions, and our best judgement using our experience and expertise. The location, size and density of roots are often difficult to predict without exploratory excavations and therefore the impacts to the trees may be more or less severe than we anticipate.
- * The proposed location of gas, hydro and telecommunications services has not been confirmed. It is our understanding, based on discussions with the applicant, that BC Hydro will likely install a new hydro pole between the canopies of the two Horse Chestnut trees on Cook St (it is shown on the civil drawings, but the final location is yet to be confirmed by BC Hydro). If BC Hydro requires a new underground duct be installed along the frontage on Cook St (to “future-proof” the frontage), this could have significant health impacts on the trees.

Summary of Tree Resource: There are 3 boulevard trees on the municipal frontage (two chestnuts on Cook St and one plum tree on View St) and one bylaw protected tree on private property (Elm #4).

Trees to be Removed

The following trees will require removal due to construction related impacts:

- #3 Purple Leaf Plum (44cm DBH) – This municipal boulevard tree is located within the proposed driveway entrance.
- #4 Elm (47cm DBH) – This bylaw protected tree is located within the proposed building.

Potential Impacts on Trees

#2 Horse Chestnut (70cm DBH)

This tree is located north of the existing driveway on the Cook St. boulevard. The underground parkade will extend to the property line, 5m west from the centre of the tree. The architect and geotechnical engineer have confirmed that shoring will take place on private property only and over-excavation into municipal property will not be necessary. The asphalt portion of the sidewalk is currently upheaving (likely due to roots) and these cracks extend into private property (Picture #1). Therefore, root loss is expected, especially as Horse Chestnut trees typically have widespread and aggressive root systems. However, considering the relatively small portion of the critical root zone affected (~15%), we anticipate the root loss will not cause a significant health impact (if significant root loss is avoided during curb and sidewalk replacement).

The canopy of the tree has been severely pruned into a V-shape due to the clearance pruning for the overhead hydro lines. As a result, a larger proportion of the remaining canopy is growing over private property. The balconies will extend to 60cm from the property line resulting in approximately 15-20% of the remaining canopy being removed (depending on the desired and allowed clearance distance from the building and final cut locations). All pruning wounds are likely to be less than 10cm in diameter. We recommend the pruning take place at the framing stage of the project and be completed by an ISA Certified Arborist.

We do not anticipate the tree will decline as a result of the pruning; the form will look similar to the form of the Horse Chestnut trees located south of Horse Chestnut #1 on Cook St (Picture #3). The approximate location of the balcony and expected pruning is shown in Picture #4.

*** Supplemental Watering:** The City of Victoria Parks department has requested supplemental watering of the horse chestnut trees within the boulevard due to the expected changes in site hydrology as a result of the underground parkade excavation. The project arborist should be consulted to determine the frequency of watering, which will be dependent on the time of year construction is taking place. Soil moisture levels should be checked periodically and the watering schedule adjusted accordingly. Supplemental watering will be particularly beneficial during periods of drought in the spring and summer months. If construction occurs during this time, watering once or twice a week would help the tree compensate for the changes in hydrology as well as root loss. Watering should continue until irrigation is installed and functioning. Generally, less frequent but deep and prolonged watering is better than frequent shallow watering in order for the water to penetrate deep into the soil horizons.

Curb Replacement

To minimize impacts to the Horse Chestnuts, if curb replacement is required, we recommend the project arborist supervise the removal of the existing curb and the excavation associated with constructing the new curb. The supervising arborist may recommend working room and curb excavation depths be minimized to preserve significant roots.

Removal of existing driveway – This should be supervised by the project arborist to ensure roots below are not damaged. Depending on when service installation is expected to take place, the project arborist may recommend that portions of the driveway be left in place until close to the end of construction to protect the roots underneath.

Sidewalk Replacement

The asphalt portion of the sidewalk on municipal property is currently cracking in places, indicating potential locations of surface roots from chestnut #2. If the sidewalk requires replacement in this area, to avoid significant root loss, we recommend the guidelines in our “Paved Surfaces Above Tree Roots” specifications be followed. If a greater depth of base material and concrete is desired, this may require the finished grade of the sidewalk be raised above existing grade. Final grading plans of the paved areas outside the retail spaces should take this into account (e.g. if a slope away from the building is desired, the ground floor elevation may have to be raised above the grade of the sidewalk).

*** Services**

All of the services shown on the plans (water, sanitary and storm) have been located outside the critical root zones of the horse chestnut trees with the exception of underground hydro and telecommunications services, which are shown north-west of Chestnut #1. BC hydro has not confirmed the exact location of the proposed pole; locating it as close to the other services while avoiding canopy pruning would be the least impact to the trees. According to the architect, the telecommunication ducts can run immediately west into the building and north to the communications room (instead of within the sidewalk north of the pole).

The water, storm and sanitary services have been located approximately halfway between each of the chestnuts to minimize impacts. Previous iterations of the servicing plan showed the water line 1m north from the storm and sanitary services. Victoria Engineering has requested the water line be located 1.5m from these other services and the current drawing has been revised to show this. With the closest services approximately 8m from each of the chestnut trees, we do not anticipate the root loss will have a significant health impact. The gas line is proposed 9m north of horse chestnut #2 (location to be confirmed by Fortis).

Even though some services are outside their critical root zones, we recommend the project arborist review the excavation prior to backfilling in order to prune any roots severed (as chestnuts typically have wide-spreading root systems).



Picture #1 (left) showing the cracks likely caused by roots of Horse Chestnut #2. All roots within private property will be removed due to the underground parkade excavation to the property line (the edge of the concrete sidewalk at the top and bottom of the photo).

Picture #2 (right) showing the overall V-shaped canopy of chestnut #2. The red line indicates the approximate location of the balconies and the blue line indicates the property line; pruning to the property line would provide 60cm of clearance from the balconies.



Picture #3 showing the Horse Chestnut tree south of the subject property (south of Horse Chestnut #1), on Cook St just north of Fort St. Like many of the chestnut trees along Cook St, this tree has been pruned back beyond the property line for building clearance. The overall form is representative of what Horse Chestnut #2 will likely look like in the future, if the development proceeds. However, in the case of the tree in this picture, the pruning cuts have been made even farther away from the property line than would be necessary for Horse Chestnut #2.



Picture #4: The red line indicates the location of the balconies and the minimum amount of canopy loss. 60cm of clearance from the building would result in pruning cuts made at or behind the property line (blue line).

#1 Horse Chestnut (84cm DBH) – No to minimal canopy pruning is anticipated for this tree. Root loss is expected to be minimal as a result of the underground parkade excavation on private property (less than 10% of the critical root zone will be impacted).

* Additional root loss will occur as a result of the underground hydro and telecommunications services, but we anticipate the tree will recover from this root loss (if they are located as shown on the preliminary servicing drawing).

Mitigation Measures

- **Arborist Supervision:** All excavation occurring within the critical root zones of protected trees should be completed under the direction or supervision of the project arborist. This includes (but is not limited to) the following activities within CRZs:
 - Underground parkade excavation
 - Removal of the existing driveway
 - Installation of the gas, sewer, storm, water, hydro, and telecommunications services
 - * Installation of the irrigation system
 - * Curb and road replacement
- **Pruning Roots:** Any severed roots must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound. Backfilling the excavated area around the roots should be done as soon as possible to keep the roots moist and aid in root regeneration. Ideally, the area surrounding exposed roots should be watered; this is particularly important if excavation occurs or the roots are exposed during a period of drought. This can be accomplished in a number of ways, including wrapping the roots in burlap or installing a root curtain of wire mesh lined with burlap, and watering the area periodically throughout the construction process.
- **Barrier fencing:** The areas surrounding the trees to be retained should be isolated from the construction activity by erecting protective barrier fencing. Where possible, the fencing should be erected at the perimeter of the critical root zones.

The barrier fencing must be a minimum of 4 feet in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run between the posts at the top and the bottom of the fencing. This solid frame can then be covered with plywood, or flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e. demolition, excavation, construction), and remain in place through completion of the project. Signs should be posted around the protection zone to declare it off limits to all construction related activity. The project arborist must be consulted before this fencing is removed or moved for any purpose.

- **Minimizing Soil Compaction:** In areas where construction traffic must encroach into the critical root zones of trees to be retained, efforts must be made to reduce soil compaction where possible by displacing the weight of machinery and foot traffic. This can be achieved by one or a combination of the following methods (depending on the size of machinery and the frequency of use):
 - Placing a layer of geogrid (such as Combigrid 30/30) over the area to be used and installing a layer of crushed rock to a depth of 15 cm over top or a layer of hog fuel or

coarse wood chips at least 30 cm in depth and maintaining it in good condition until construction is complete.

- Installing a layer of hog fuel or coarse wood chips at least 20 cm in depth and maintaining it in good condition until construction is complete.
- Placing two layers of 19mm plywood.
- Placing steel plates

- **Paved Surfaces Above Tree Roots (sidewalk):**

If the new paved surfaces within the CRZ of retained trees require excavation down to bearing soil, this could impact the health or stability of the retained trees. If tree retention is desired, a raised paved surface should be constructed in the areas within the critical root zone of the trees.

The objective is to avoid root loss and to instead raise the paved surface and its base layer above the roots. This may result in the grade of the paved surface being raised above the existing grade (the amount depending on how close roots are to the surface and the depth of the paving material and base layers). Final grading plans should take this potential change into account. This may also result in soils which are high in organic content being left intact below the paved area.

Within the CRZs, the project arborist should supervise any excavation associated with constructing these hard surfaces, including the removal of the existing paving. If an excavator machine is used, the project arborist may recommend this be completed in combination with hand-digging and using a flat-edged bucket to avoid accidental root damage.

If significant roots are encountered, excavation should be stopped. Depending on the base material exposed and the desires of the municipality, a geogrid material (such as CombiGrid 30/30 or similar) could be placed over the area to reduce compaction and to disperse weight over soils high in organics and roots. The new base material for the paving should be placed above this material. Ultimately, a geotechnical engineer should be consulted and in consultation with the project arborist, may specify their own materials and methods that are specific to the site's grading, soil conditions and requirements, while also avoiding root loss and reducing compaction to the sub-grade.

- **Mulching:** Mulching can be an important proactive step in maintaining the health of trees and mitigating construction related impacts and overall stress. Mulch should be made from a natural material such as wood chips or bark pieces and be 5-8cm deep. No mulch should be touching the trunk of the tree. See "methods to avoid soil compaction" if the area is to have heavy traffic.
- **Blasting:** Care must be taken to ensure that the area of blasting does not extend beyond the necessary footprints and into the critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face will reduce fracturing, ground vibration, and overall impact on the surrounding environment. Only explosives of low phytotoxicity and techniques that minimize tree damage should be used.

Provisions must be made to ensure that blasted rock and debris are stored away from the critical root zones of trees.

- **Scaffolding:** This assessment has not included impacts from potential scaffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained trees, the project arborist should be consulted. Depending on the extent of pruning required, the project arborist may recommend that alternatives to full scaffolding be considered such as hydraulic lifts, ladders or platforms. Methods to avoid soil compaction may also be recommended (see “Minimizing Soil Compaction” section).
- **Landscaping and Irrigation Systems:** The planting of new trees and shrubs should not damage the roots of retained trees. The installation of any in-ground irrigation system must take into account the critical root zones of the trees to be retained. Prior to installation, we recommend the irrigation technician consult with the project arborist about the most suitable locations for the irrigation lines and how best to mitigate the impacts on the trees to be retained. This may require the project arborist supervise the excavations associated with installing the irrigation system. Excessive frequent irrigation and irrigation which wets the trunks of trees can have a detrimental impact on tree health and can lead to root and trunk decay.
- **Arborist Role:** It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:
 - Locating the barrier fencing
 - Reviewing the report with the project foreman or site supervisor
 - Locating work zones, where required
 - Supervising any excavation within the critical root zones of trees to be retained
 - Reviewing and advising of any pruning requirements for machine clearances
- **Review and site meeting:** Once the project receives approval, it is important that the project arborist meet with the principals involved in the project to review the information contained herein. It is also important that the arborist meet with the site foreman or supervisor before any site clearing, tree removal, demolition, or other construction activity occurs and to confirm the locations of the tree protection barrier fencing.

Please do not hesitate to call us at (250) 479-8733 should you have any further questions.

Thank you,



Michael Marcucci
ISA Certified # ON-1943A
TRAQ – Qualified

Talbot Mackenzie & Associates
ISA Certified Consulting Arborists

Attached:

- 1-page tree resource spreadsheet
- 1-page tree protection site plan
- 1-page Preliminary Servicing Plan
- 1-page architectural site plan
- 1-page Landscape Plan
- 1-page paved surfaces specification
- 1-page barrier fencing specification
- 2-page tree resource spreadsheet methodology and definitions

Disclosure Statement

The tree inventory attached to the Tree Preservation Plan can be characterized as a limited visual assessment from the ground and should not be interpreted as a “risk assessment” of the trees included.

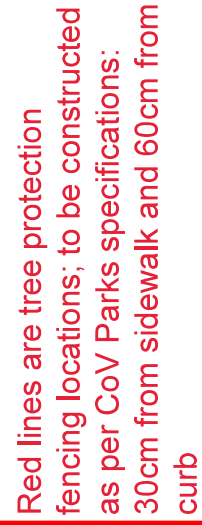
Arborists are professionals who examine trees and use their training, knowledge and experience to recommend techniques and procedures that will improve their health and structure or to mitigate associated risks.

Trees are living organisms, whose health and structure change, and are influenced by age, continued growth, climate, weather conditions, and insect and disease pathogens. Indicators of structural weakness and disease are often hidden within the tree structure or beneath the ground. It is not possible for an Arborist to identify every flaw or condition that could result in failure or can he/she guarantee that the tree will remain healthy and free of risk. Remedial care and mitigation measures recommended are based on the visible and detectable indicators present at the time of the examination and cannot be guaranteed to alleviate all symptoms or to mitigate all risk posed.

1150 Cook St, Victoria
Tree Resource Spreadsheet

Tree ID (no tags)	Common Name	Latin Name	DBH (cm)	Crown Spread (diameter in metres)	CRZ (radius in metres)	Relative Tolerance	Health	Structure	Remarks and Recommendations	Pro per 20
1	Horse Chestnut	<i>Aesculus hippocastanum</i>	84.0	16.0	8.5	G	Fair	Fair/poor	Municipal boulevard tree (ID#26194). South of existing driveway on Cook St. Codominant unions at 3m with extended limbs due to V-shaped canopy; significant clearance pruning for hydro lines above. Multiple cavities at old pruning wounds. Dead limb on east side and small amount of twig dieback throughout canopy.	Pr
2	Horse Chestnut	<i>Aesculus hippocastanum</i>	70.0	17.0	7.0	G	Fair	Fair/poor	Municipal boulevard tree (ID#26193) North of existing driveway on Cook St. Codominant unions at 3m. V-shaped canopy due to significant clearance pruning for hydro lines above. Large pruning wounds. Crossing limbs.	Pr
3	Ornamental Plum	<i>Prunus spp</i>	44.0	10.0	4.5	M	Fair	Fair	Municipal boulevard tree (ID #26195) on View St. Upheaving sidewalk against buttress roots. Some chlorosis of foliage.	Pr
4	Elm	<i>Ulmus spp</i>	47.0	11.0	5.0	G	Good	Fair	Girdling root. Base is 0.5m from 1.5m tall wall. Surface roots. Codominant union at 2m	Pr

Prepared by:
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LEGEND



— APPROXIMATE LIMIT OF ASPHALT



— BASALT BAND, SEE LANDSCAPE FOR DETAILS



— CONCRETE SIDEWALK, SEE LANDSCAPE FOR DETAILS



— BRICK PAVERS, SEE LANDSCAPE FOR BRICK COLORS AND PAVERS



— EXISTING TREE TO BE REMOVED



— EXISTING STREET TREE TO BE PROTECTED



— TREE TO BE PLANTED, SEE LANDSCAPE FOR DETAILS

RELOCATE
600mm

REMOVE C

1045 YATES ST
LOT 988
VR26779

1045 YATES ST
LOT 1
VR26779

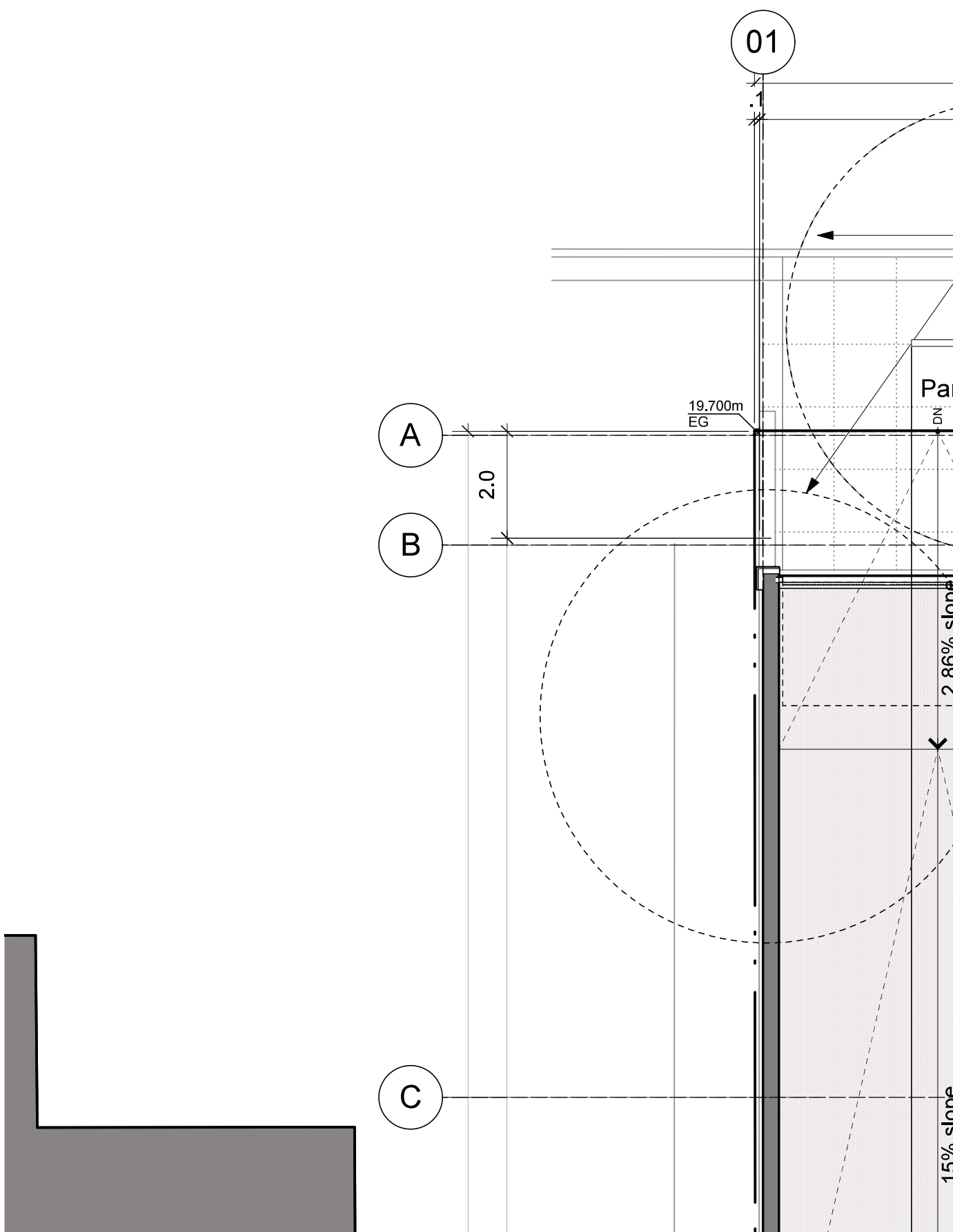
REPAINT STOP BAR
AND CENTERLINE
FOR FULL FRONTAGE

PAINT CURB WHITE

NEW BOULEVARD TREES TO BE
IRRIGATED WITH TREE LOOPS (TYP)

BLEND PROPOSED DRIVEWAY INTO
EXISTING 1039 VIEW STREET DRIVEWAY

VIEW STREET



BC LAND SURVEYORS SITE PLAN OF:

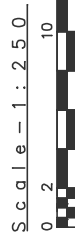
Civic: 1150 Cook Street

Legal Lot 996, Victoria City

AND
The Easterly 1/2 of Lot 997,
Victoria City

Parcel Identifier

009-388-257 (Lot 996) &
009-388-273 (E'y 1/2 of Lot 997)
in the City of Victoria



Distances are in metres.

The intended plot size
of this plan is 11' x 17'.

LEGEND

Elevations are to geodetic datum.

+ - denotes - Existing elevation

CB - denotes - Catch Basin

UPTL - denotes - Utility Pole with

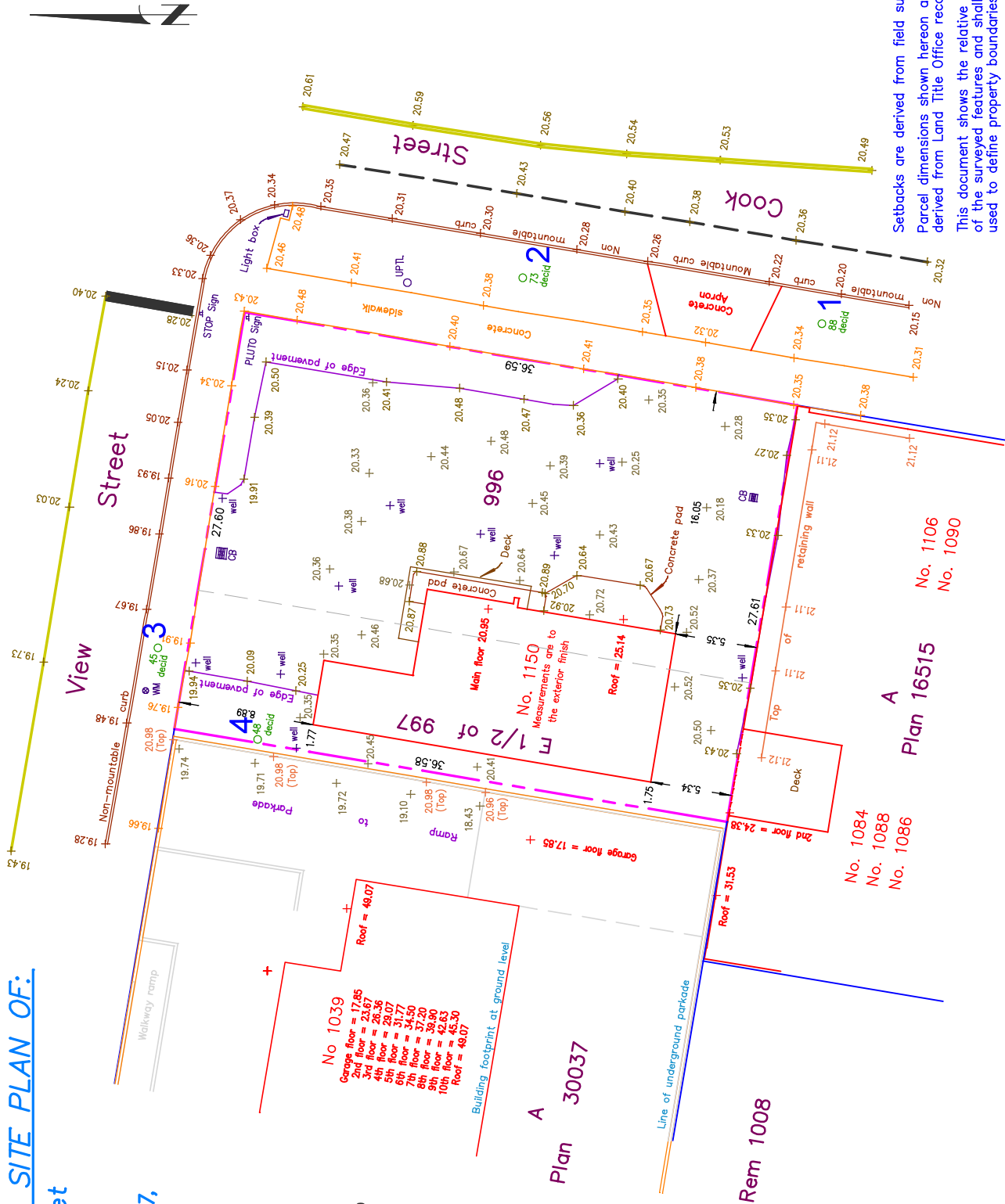
Lamp & Transformer

WM - denotes - Water Meter

Tree diameters are in centimetres.

Lot Area = 1009.9 m²

Date	April 23, 2019
Drawing	Site- 1150 Cook St
File	File : 12973 - 16
POWELL & ASSOCIATES	
B C Land Surveyors	
250-2950 Douglas Street	
Victoria, BC V8T 4N4	
phone (250) 382-8855	



Setbacks are derived from field survey.
Parcel dimensions shown hereon are
derived from Land Title Office records.
This document shows the relative location
of the surveyed features and shall not be
used to define property boundaries.

EXISTING STREET
TREE TO BE REMOVED.
(TYP.)

VIEW STREET

ST
AP
GR

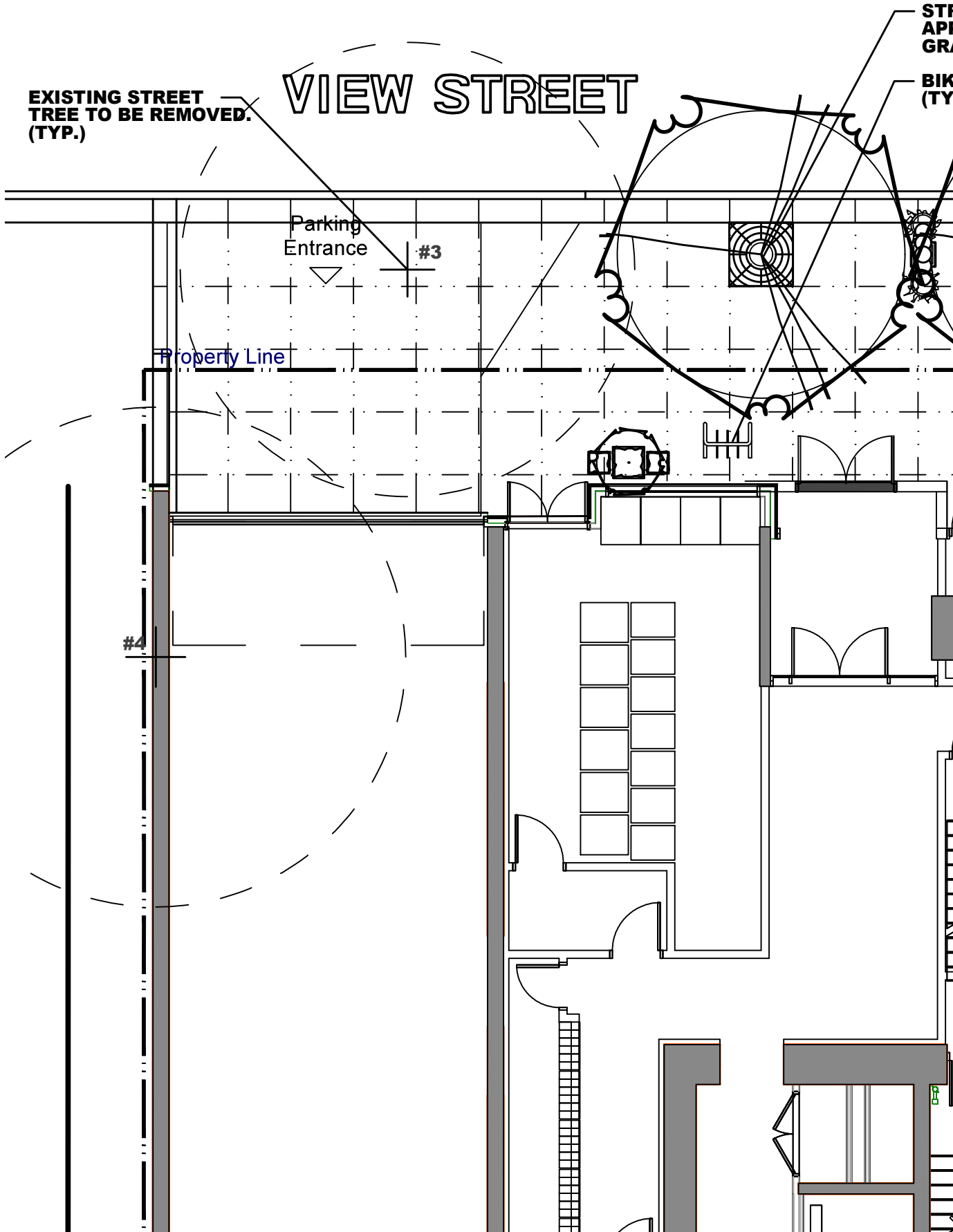
BIK
(TY

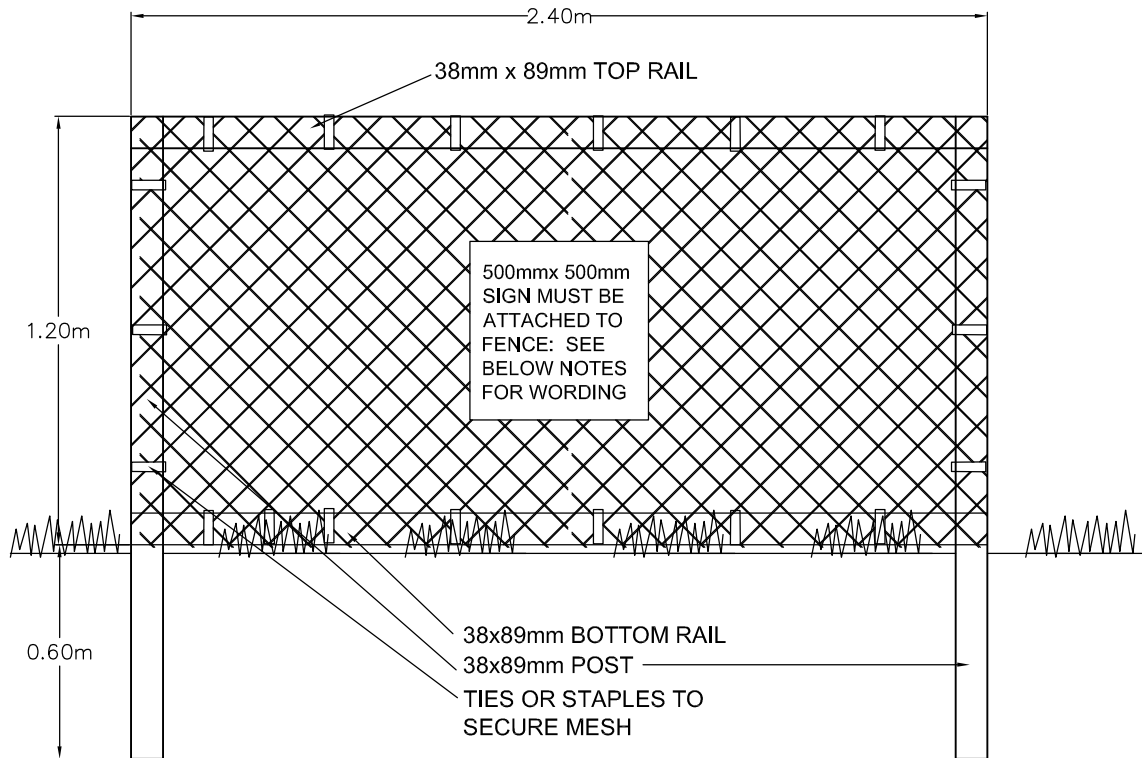
Parking
Entrance

#3

Property Line

#4





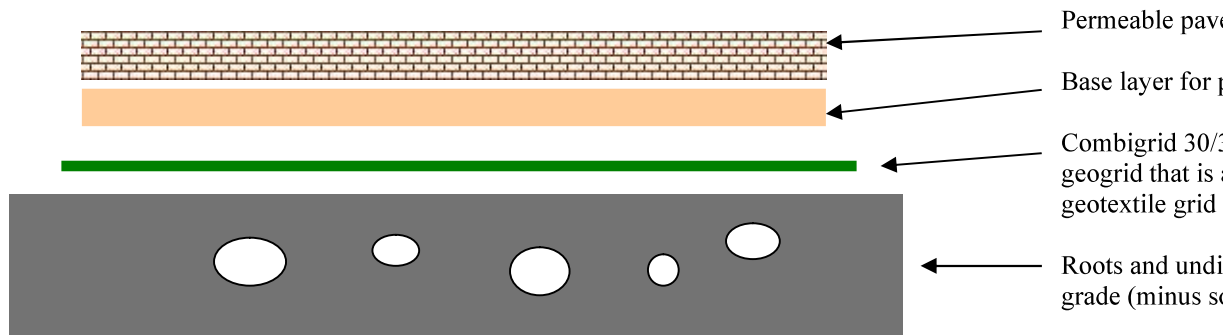
TREE PROTECTION FENCING

1. FENCE WILL BE CONSTRUCTED USING 38 mm X 89mm WOOD FRAME: TOP, BOTTOM AND POSTS * USE ORANGE SNOW-FENCING MESH AND SECURE THE WOOD FRAME WITH "ZIP" TIES OR GALVANIZED STAPLES.
 2. ATTACH A 500mm X 500mm SIGN WITH THE FOLLOWING WORDING: WARNING- TREE PROTECTION AREA. THIS SIGN MUST BE AFFIXED ON EVERY FENCE OR AT LEAST EVERY 10 LINEAR METERS.
- * IN ROCKY AREAS, METAL POSTS (T-BAR OR REBAR) DRILLED INTO ROCK WILL BE ACCEPTED

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Consulting Arborists

Diagram – Permeable paver surface crossing over Critical Root Zone



Specification #1 for Paved Surfaces Over Critical Root Zones (driveway, parking or wa

1. Minimal excavation to remove turf, plant material and/or loose soil for the required permeable surface, under the supervision of a qualified arborist. Excavation to be stopped prior to any significant root loss.
2. A layer of Combigrd 30/30 geotextile is to be installed over the area where the paved surface overlaps with the critical root zone.
3. Construct base layer of well-draining material and permeable surface over geogrid layer to required grade.



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Tree Resource Spreadsheet Methodology and Definitions

Revised November 28, 2019

Tag: Tree identification number on a metal tag attached to tree with nail or wire, generally at eye level. Trees on municipal or neighboring properties are generally not tagged (“NT #”).

DBH: Diameter at breast height – diameter of trunk, measured in centimetres at 1.4m above ground level. For trees on a slope, it is taken at the average point between the high and low side of the slope.

~ Approximate due to inaccessibility or on neighbouring property

Crown Spread: Indicates the diameter of the crown spread measured in metres to the dripline of the longest limbs.

Relative Tolerance Rating: Relative tolerance of the tree species to construction related impacts such as root pruning, crown pruning, soil compaction, hydrology changes, grade changes, and other soil disturbance. This rating does not take into account individual tree characteristics, such as health and vigour. Three ratings are assigned based on our knowledge and local experience with the tree species: Poor (P), Moderate (M) or Good (G).

Critical Root Zone: A calculated radial measurement in metres from the trunk of the tree. It is the optimal size of tree protection zone and is calculated by multiplying the DBH of the tree by 10, 12 or 15 depending on the tree’s Relative Tolerance Rating. This methodology is based on the methodology used by Nelda Matheny and James R. Clark in their book “Trees and Development: A Technical Guide to Preservation of Trees During Land Development.”

- 15 x DBH = Poor Tolerance of Construction
- 12 x DBH = Moderate
- 10 x DBH = Good

This method is solely a mathematical calculation that does not consider factors such as restricted root growth, limited soil volumes, age, crown spread, health, or structure (such as a lean). To calculate the critical root zone of trees with multiple stems below 1.4m, the diameter is considered the sum of 100% of the diameter of the largest stem and 60% of the diameter of the next two largest stems. This however can result in multi-stem trees having exaggerated CRZs. Where noted, sometimes the CRZ for trees with multiple stems will be calculated using the diameter of the trunk below the unions. In specific cases, some CRZs will be approximate (~).

Note that in most cases, our inventories include a Level 1 Limited Visual Assessment, which only comprises a brief assessment to identify obvious defects and conditions. The inspection may have only been completed from one-side of the tree, depending on the defined scope of work, property lines and/or site conditions.

Health Condition:

- Poor – Tree is weak, under significant stress and/or declining
- Fair – Tree has average vigour for its species and site conditions
- Good – Tree is growing well and appears to be free of significant health stress

Structural Condition:

- Poor – Significant structural defects observed
- Fair – Moderate to minor structural concerns; mitigation measures likely feasible
- Good - No visible or only minor structural concerns

Retention Status:

- Removal (or “X”)- Not possible to retain given proposed construction plans
- Retain - It is possible to retain this tree in the long-term given the proposed plans and information available. This is assuming our **recommended mitigation measures are followed**
- Retain * - See report for more information regarding potential impacts
- TBD (To Be Determined) - The impacts on the tree could be significant. However, in the absence of exploratory excavations and in an effort to retain as many trees as possible, we recommend that the final determination be made by the supervising project arborist at the time of excavation. The tree might be possible to retain depending on the location of roots and the resulting impacts, but concerned parties should be aware that the tree may require removal.