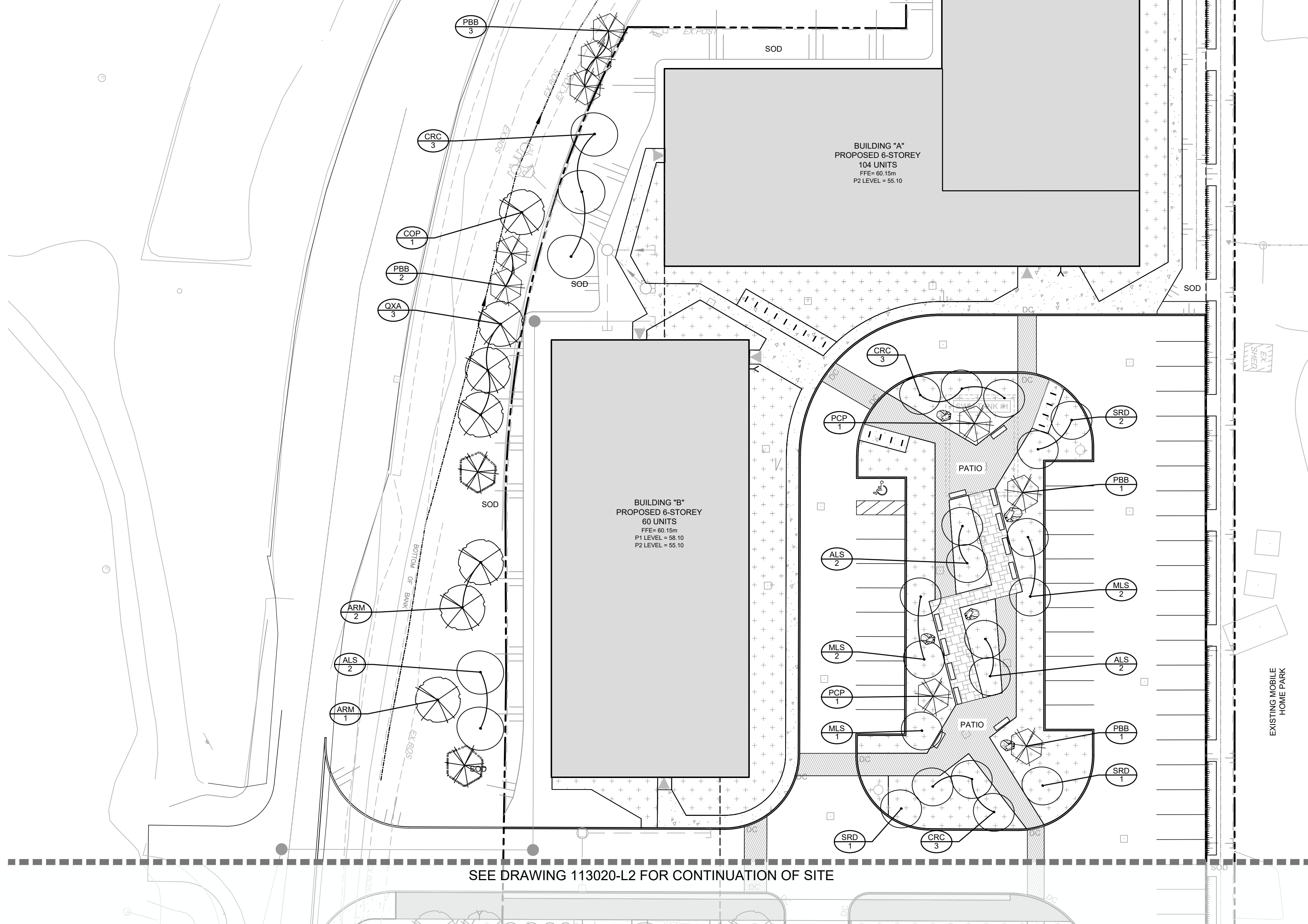


Reforestation - 20m HT MAX- Plant List					
%	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COND SPACING
<b>Coniferous Trees</b>					
10%	3	<i>Abies balsamea</i>	Balsam Fir	0.60m Ht	PT 2.0m O.C.
5%	2	<i>Larix laricina</i>	Tamarack	0.60m Ht	PT 2.0m O.C.
10%	3	<i>Pinus banksiana</i>	Jack Pine	0.60m Ht	PT 2.0m O.C.
<b>Deciduous Trees</b>					
5%	2	<i>Acer rubrum</i>	Red Maple	1.20m Ht	PT 2.0m O.C.
5%	2	<i>Celtis occidentalis</i>	Hackberry	1.20m Ht	PT 2.0m O.C.
10%	3	<i>Amelanchier canadensis (Single stem)</i>	Shadblov Serviceberry	1.20m Ht	PT 2.0m O.C.
10%	3	<i>Sorbus decora</i>	Showy Mountain-Ash	0.60m Ht	PT 2.0m O.C.
5%	2	<i>Populus tremuloides</i>	Trembling Aspen	1.20m Ht	PT 2.0m O.C.
<b>Deciduous Shrubs</b>					
10%	3	<i>Aronia melanocarpa</i>	Black Chokeberry	0.60m Ht	PT 2.0m O.C.
10%	3	<i>Rosa palustris</i>	Swamp Rose	0.60m Ht	PT 2.0m O.C.
10%	3	<i>Rhus aromatica</i>	Fragrant Sumac	0.60m Ht	PT 2.0m O.C.
10%	3	<i>Spiraea alba</i>	White Meadowsweet	0.60m Ht	PT 2.0m O.C.

Reforestation - 14m HT MAX- Plant List					
%	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COND SPACING
<b>Coniferous Trees</b>					
5%	4	<i>Thuja occidentalis</i>	Eastern White Cedar	0.60m Ht	PT 2.0m O.C.
<b>Deciduous Trees</b>					
5%	4	<i>Cladrasis kentukea (formerly Yutea)</i>	Yellow wood	1.20m Ht	PT 2.0m O.C.
10%	8	<i>Crataegus mollis</i>	Downy Hawthorn	1.20m Ht	PT 2.0m O.C.
10%	8	<i>Amelanchier canadensis (Single stem)</i>	Shadblov Serviceberry	1.20m Ht	PT 2.0m O.C.
10%	8	<i>Sorbus decora</i>	Showy Mountain-Ash	0.60m Ht	PT 2.0m O.C.
<b>Deciduous Shrubs</b>					
5%	4	<i>Aronia melanocarpa</i>	Black Chokeberry	0.60m Ht	PT 2.0m O.C.
5%	4	<i>Comptonia peregrina</i>	Sweet Fern	0.60m Ht	PT 2.0m O.C.
5%	4	<i>Clethra alnifolia</i>	Summersweet	0.60m Ht	PT 2.0m O.C.
5%	4	<i>Cornus sericea</i>	Red Osier Dogwood	0.60m Ht	PT 2.0m O.C.
10%	8	<i>Rosa palustris</i>	Swamp Rose	0.60m Ht	PT 2.0m O.C.
5%	4	<i>Rhus aromatica</i>	Fragrant Sumac	0.60m Ht	PT 2.0m O.C.
5%	4	<i>Rhus typhina</i>	Staghorn Sumac	0.60m Ht	PT 2.0m O.C.
5%	4	<i>Spiraea alba</i>	White Meadowsweet	0.60m Ht	PT 2.0m O.C.
10%	8	<i>Rubus odoratus</i>	Flowering Raspberry	0.60m Ht	PT 2.0m O.C.
5%	4	<i>Symphoricarpos alba</i>	Snow berry	0.60m Ht	PT 2.0m O.C.



SEE DRAWING 113020-L2 FOR CONTINUATION OF SITE

**PLANT LIST**

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COND	SPACING
<b>Coniferous Trees</b>						
PCP	6	<i>Pinus cembra 'Algonquin Pillar'</i>	Algonquin Pillar Swiss Stone Pine	200cm Ht	BBC	As Shown
<b>Deciduous Trees</b>						
AC	6	<i>Amelanchier canadensis (Single stem)</i>	Shadblov Serviceberry	50mm Cal	WB	As Shown
ALS	3	<i>Amelanchier laevis 'Spring Flurry'</i>	Spring Flurry Serviceberry	50mm Cal	WB	As Shown
ARM	3	<i>Acer rubrum 'Armstrong Gold'</i>	Armstrong Gold Red Maple	50mm Cal	WB	As Shown
COA	6	<i>Celtis occidentalis 'Prairie Sentinel'</i>	Prairie Sentinel Hackberry	50mm Cal	WB	As Shown
OPA	5	<i>Cornus alternifolia</i>	Ragdoll Dogwood	50mm Cal	WB	As Shown
CRC	1	<i>Crataegus crus-galli 'Inermis'</i>	Thornless Cockspur Hawthorn	50mm Cal	WB	As Shown
MLS	6	<i>Malus 'Spring Snow'</i>	Spring Snow Crabapple	50mm Cal	WB	As Shown
SRD	8	<i>Sorbus decora</i>	Showy Mountain-Ash	50mm Cal	WB	As Shown
OXA	6	<i>Quercus x alba x robur 'Streetspire'</i> (JFS-KWJ)	Streetspire Oak	50mm Cal	WB	As Shown
UF	4	<i>Linus americana 'Frontier'</i>	Frontier Elm	50mm Cal	WB	As Shown
<b>Coniferous Shrubs</b>						
Jco		<i>Juniperus horizontalis 'Plumosa Compacta'</i>	Compact Andorra Juniper	40cm Spr	PT	140cm O.C.
Pm		<i>Pinus mugo 'Slowmound'</i>	Slowmound Mugo Pine	40cm Spr	PT	100cm O.C.

**GRADING**

- Contractor is to verify accuracy of existing topography and survey and report any discrepancies to the Contract Administrator. Commencement of grading is to constitute acceptance of site conditions; no claims for extras will be entertained thereafter.
- Strip topsoil, organic matter, or deleterious material from all areas of the site designated for hard landscaping, or the construction of structures. Strip topsoil to its full depth, exercising caution not to mix topsoil with subsoil.
- Provide drainage as indicated in grading plan. Round all tops and toes of slopes, smoothly. Compact all areas to 95% standard proctor density unless otherwise noted.
- Contractor to excavate to accommodate hard surface and ensure proper depth of excavation as specified on related drawings, contract details and specifications.
- Match existing grades at limit of work.
- Ensure positive surface drainage of all areas within the limit of work, whether indicated or not, and prevent ponding.
- Refer to geotechnical recommendations (if available) prepared by Geotechnical Engineer for subsurface conditions and construction recommendations. Claims for conditions that could have been ascertained by review of geotechnical report will not be considered.
- The Geotechnical Engineer is to inspect compacted subgrade prior to placement of granular material.
- Sub-excavate and replace any soft areas evident from compaction with suitable material that is frost compatible with the existing soils as recommended by the Geotechnical Engineer.
- Remove from site all excess excavated material unless instructed otherwise by Consultant.
- Slopes, unless otherwise noted:
  - Walkways - maximum 12:1 slope (do not exceed 2% cross slopes)
  - Asphalt and concrete surfaces - minimum 1.0% slope; maximum 5% slope.
  - Sod/Seed Areas and Plant Beds - minimum 2% slope; maximum 33% slope.
  - Swales - Flat-bottomed per Contract Drawings and specification, with maximum side slopes of 3:1 and a minimum slope of 8:1.
- New surfaces are to have smooth, safe, and seamless transition of materials, where construction of proposed surfaces adjoins existing materials. This is applicable for all surfaces soft and hard.

**EXISTING CONDITIONS/ SITE PREPARATION**

- Storage of soil stockpile, materials, vehicles, and equipment are not permitted within the municipal road allowance nor within 15m of residential lots.
- Contractor to maintain all temporary construction and sediment control fence to the satisfaction of Contract Administrator for the duration of construction. Contractor is responsible to remove the fence upon completion.
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- Contractor is to ensure that existing residential chain link fence is always protected during construction. If fence is damaged by construction activity, Contractor is to reinstate/repair all fence to pre-construction condition or better to the satisfaction of the Contract Administrator at Contractor expense.
- All parties are to review and document the condition of curbs, sidewalks, street trees and utilities located within the right-of-way prior to the start of construction. The Contractor is to rectify any damages caused by construction at the Contractor expense.
- Costs associated with the above notes, where such costs are not identified specifically on the form of tender (bid form) is deemed included in bid item A1.

**LEGEND**

- 3-D1 DETAIL SHEET # NOVATECH OR CITY DETAIL NUMBER SEE LIST FOR CODE
- PROPERTY LIMIT
- PROPOSED CONCRETE
- PROPOSED PAVERS
- PLANTING BED
- REFORESTATION - 14m HT MAX.
- PROPOSED DECIDUOUS TREE
- PROPOSED CONIFEROUS TREE
- EXISTING TREE TO REMAIN
- PROPOSED BIKE PARKING
- PROPOSED BENCH
- PROPOSED TRELLIS
- PROPOSED DECORATIVE ROCK ACCENT FEATURES

**TREE PLANTING IN SENSITIVE CLAY**

- The landscape plans have been developed in accordance with the Geotechnical Report Geotechnical Investigation, Nathan F.S. Christie, November 15, 2019, which includes the lettermemo Sok Kim, January 3, 2023, and map Test Hole Location Plan, November 2019 that confirms the categories and locations of clay soils.
  - The following City of Ottawa clay soils guideline applies: Guidelines for Tree Planting in Sensitive Marine Clay Soils (2017).
  - The soil volumes provided are sufficient for a reasonable chance of tree survival. Unless otherwise noted, all new trees on City property meet the minimum soil volume requirements of the following, based on a depth of 1.5m below finished grade, and subtracting the volume of utility trenches.
    - Small tree (mature height up to 7.5m) - 25m<sup>3</sup>/minimum soil volume provided.
    - Medium tree (mature height 7.5-14m) - 30m<sup>3</sup>/minimum soil volume provided.
- Where trees share a continuous greenspace:
- Two (2) small trees - 15m<sup>3</sup>/minimum soil volume provided per tree
  - Two (2) medium trees - 18m<sup>3</sup>/minimum soil volume provided per tree.

**NOVATECH DETAILS**

Found on Sheet L3.

- D1. Standard Deciduous Tree Planting
- D2. Standard Coniferous Tree Planting
- D3. Shrub and Perennial Planting
- D4. Tree Protection Fence
- D5. Reforestation
- D6. Wood Screen Detail
- D7. Bike Layout
- D8. Bench
- D9. Trellis

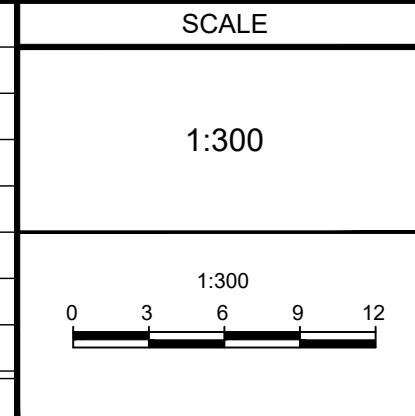
**Deciduous Shrubs**

Key	QTY	Botanical Name	Common Name	Size	Cond	Spacing
Ax1		<i>Aronia x Low Scape Mound (UCONNAM165)</i>	Low Scape Mound Chokeberry	40cm Ht	PT	50cm O.C.
Cah		<i>Clethra alnifolia 'Hummingbird'</i>	Hummingbird Summersweet	50cm Ht	PT	80cm O.C.
Cau		<i>Cornus sanguinea 'Arctic Sun'</i>	Arctic Sun Dogwood	60cm Ht	PT	100cm O.C.
Csa		<i>Cornus sericea 'Farrow'</i>	Arctic Fire Dogwood	60cm Ht	PT	100cm O.C.
co		<i>Diervilla splendens 'Firefly' (BOKOFIRE)</i>	Firefly Bush Honeysuckle	60cm Ht	PT	70cm O.C.
rag		<i>Rhus aromatica 'Gro-Low'</i>	Gro-Low Fragrant Sumac	60cm Ht	PT	160cm O.C.
Sya		<i>Symphoricarpos albus</i>	Snowberry	50cm Ht	PT	100cm O.C.
<b>Perennials</b>						
bfp		<i>Baptisia x 'Solarflare Prairieblues' (Solar Flare)</i>	Solarflare Prairieblues Wild Indigo	1g	PT	60cm O.C.
epp		<i>Echinacea purpurea</i>	Purple Coneflower	1g	PT	45cm O.C.
gpr		<i>Geranium 'Rozanne'</i>	Rozanne Cranesbill	1g	PT	45cm O.C.
ml1		<i>Napeta faassarii 'Walker's Low'</i>	Walker's Low Calmint	9cm	PT	70cm O.C.
rcg		<i>Rudbeckia 'American Gold Rush'</i>	American Gold Rush Rudbeckia	1g	PT	60cm O.C.
tiac		<i>Tiaralia x 'Pink Skyrocket'</i>	Pink Skyrocket Foamflower	1g	PT	45cm O.C.
pae		<i>Parthenocissus quinquefolia 'Engelmannii'</i>	Engelmann's Ivy	1g	PT	70cm O.C.
<b>Ornamental Grasses</b>						
cid		<i>Calamagrostis acutiflora 'Kari Foerster'</i>	Kari Foerster Feather Reed Grass	1g	PT	60cm O.C.
pvn		<i>Panicum virgatum 'Squair'</i>	Squair Switch Grass	1g	PT	60cm O.C.
sh		<i>Sporobolus heterolepis</i>	Rainie Dropsseed	1g	PT	50cm O.C.

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**OWNER INFORMATION**  
 8417709 CANADA INC.  
 430 boulevard de l'hôpital, Suite 310  
 Gatineau, QC J8V 1T7  
 NAME: PAUL-ANDRÉ CHARBONNEAU  
 PHONE: (819) 955-8032  
 EMAIL: paul-andre@chartro.ca

No.	REVISION	DATE	BY
3.	ISSUED FOR SPA	JUL 19/24	RJ
2.	ISSUED FOR COORDINATION	MAY 30/24	RJ
1.	ISSUED FOR COORDINATION	FEB 16/24	RJ



DESIGN	FOR REVIEW ONLY
KW	
CHECKED	RJ
DRAWN	
MT	
CHECKED	
KW	
APPROVED	
RJ	

**NOVATECH**  
 Engineers, Planners & Landscape Architects  
 Suite 200, 240 Michael Cowpland Drive  
 Ottawa, Ontario, Canada K2M 1P6  
 Telephone (613) 254-9643  
 Facsimile (613) 254-5867  
 Website www.novatech-eng.com

**LOCATION**  
 CITY OF OTTAWA  
 CHARTO LANDS -3459 & 3479 ST. JOSEPH BOULEVARD

**DRAWING NAME**  
 LANDSCAPE PLAN

**PROJECT No.**  
 113020-00

**REV**  
 REV #3

**DRAWING No.**  
 113020-L1

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**NOVATECH DETAILS**

Found on Sheet L3.

- D1. Standard Deciduous Tree Planting
- D2. Standard Coniferous Tree Planting
- D3. Shrub and Perennial Planting
- D4. Tree Protection Fence
- D5. Reforestation
- D6. Wood Screen Detail
- D7. Bike Layout
- D8. Bench
- D9. Trellis

**RAISED PLANTERS**

- Set trees in raised planters on a bed of heavily compacted growing medium, at the bottom, to eliminate settlement.
- Backfill around the root ball with growing medium in 150mm lifts. Tamp and water each lift to eliminate air pockets or settlement.
- Growing medium to be:
  - 80% commercial screened topsoil
  - 10% peat moss or compost, and
  - 10% perlite.
- Cover top of the planter surface with 75mm of shredded bark mulch.

**PLANT LIST**

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COND	SPACING
<b>Coniferous Trees</b>						
PCP	6	<i>Pinus cembra</i> 'Algonquin Pillar'	Algonquin Pillar Swiss Stone Pine	200cm Ht	BBC	As Shown
<b>Deciduous Trees</b>						
AC	6	<i>Amelanchier canadensis</i> (Single stem)	Shadblow Serviceberry	50mm Cal	WB	As Shown
ALS	3	<i>Amelanchier laevis</i> 'Spring Flurry'	Spring Flurry Serviceberry	50mm Cal	WB	As Shown
ARM	3	<i>Acer rubrum</i> 'Armstrong Gold'	Armstrong Gold Red Maple	50mm Cal	WB	As Shown
COA	6	<i>Celtis occidentalis</i> 'Prairie Sentinel'	Prairie Sentinel Hackberry	50mm Cal	WB	As Shown
OP	5	<i>Cornus alternifolia</i>	Ragdoll Dogwood	50mm Cal	WB	As Shown
CRC	1	<i>Crataegus crus-galli</i> 'Inermis'	Thornless Cockspur Hawthorn	50mm Cal	WB	As Shown
MLS	6	<i>Malus</i> 'Spring Snow'	Spring Snow Crabapple	50mm Cal	WB	As Shown
SRD	8	<i>Sorbus decora</i>	Showy Mountain-Ash	50mm Cal	WB	As Shown
OXA	6	<i>Quercus x alba x robur</i> 'Streetspire' (JFS-KW)	Streetspire Oak	50mm Cal	WB	As Shown
UF	4	<i>Linus americana</i> 'Frontier'	Frontier Elm	50mm Cal	WB	As Shown
<b>Coniferous Shrubs</b>						
Jco		<i>Juniperus horizontalis</i> 'Plumosa Compacta'	Compact Andorra Juniper	40cm Spr	PT	140cm O.C
Pm		<i>Pinus mugo</i> 'Slowmound'	Slowmound Mugo Pine	40cm Spr	PT	100cm O.C

**LEGEND**

3-D1 DETAIL SHEET # NOVATECH OR CITY DETAIL NUMBER SEE LIST FOR CODE

PROPERTY LIMIT

PROPOSED CONCRETE

PROPOSED ASPHALT

PROPOSED PAVERS

RIVER STONE

PLANTING BED

SEDUM PLUGS

PROPOSED DECIDUOUS TREE

PROPOSED CONIFEROUS TREE

EXISTING TREE TO REMAIN

PROPOSED BIKE PARKING

PROPOSED BENCH

PROPOSED GUARDRAIL

PROPOSED TRELLIS

PROPOSED PRIVACY SCREEN

PROPOSED DECORATIVE ROCK ACCENT FEATURES

**TREE PLANTING IN SENSITIVE CLAY**

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    - Small tree (mature height up to 7.5m) - 25m<sup>3</sup>/ minimum soil volume provided.
    - Medium tree (mature height 7.5-14m) - 30m<sup>3</sup>/ minimum soil volume provided.
    - Large tree (mature height 14-21m) - 45m<sup>3</sup>/ minimum soil volume provided.
- Where trees share a continuous greenspace:
- Two (2) small trees - 15m<sup>3</sup>/ minimum soil volume provided
  - Two (2) medium trees - 18m<sup>3</sup>/ minimum soil volume provided per tree.

Deciduous Shrubs		Low Slope Mound (UCONNAM16S)		Low Slope Mound Chokeberry	
Axl				40cm Ht	PT
Cah		<i>Clethra alnifolia</i> 'Hummingbird'		50cm Ht	PT
Cau		<i>Cornus sanguinea</i> 'Arctic Sun'		60cm Ht	PT
Csa		<i>Cornus sericea</i> 'Farrow'		60cm Ht	PT
co		<i>Diervilla splendens</i> 'Firefly' (BOKOFIRE)		60cm Ht	PT
Rag		<i>Rhus aromatica</i> 'Gro-Low'		60cm Ht	PT
Sya		<i>Symphoricarpos albus</i>		50cm Ht	PT
<b>Perennials</b>					
bsp		<i>Baptisia x 'Solarflare Prairieblues'</i> (Solar Flare)		1g	PT
epp		<i>Echinacea purpurea</i>		1g	PT
gpr		<i>Geranium 'Rozanne'</i>		1g	PT
ml		<i>Nepeta faassenii</i> 'Walker's Low'		9cm	PT
rcg		<i>Rudbeckia 'American Gold Rush'</i>		1g	PT
tiac		<i>Tiaralia x 'Pink Skyrocket'</i>		1g	PT
pae		<i>Parthenocissus quinquefolia</i> 'Engelmannii'		1g	PT
<b>Ornamental Grasses</b>					
cdn		<i>Calamagrostis acutiflora</i> 'Kari Foerster'		1g	PT
pvf		<i>Panicum virgatum</i> 'Squair'		1g	PT
sh		<i>Sporobolus heterolepis</i>		1g	PT



Engineers, Planners & Landscape Architects  
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LOCATION  
CITY OF OTTAWA  
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DRAWING NAME  
**LANDSCAPE PLAN**

PROJECT No. 113020-00  
REV # 3  
DRAWING No. 113020-L2

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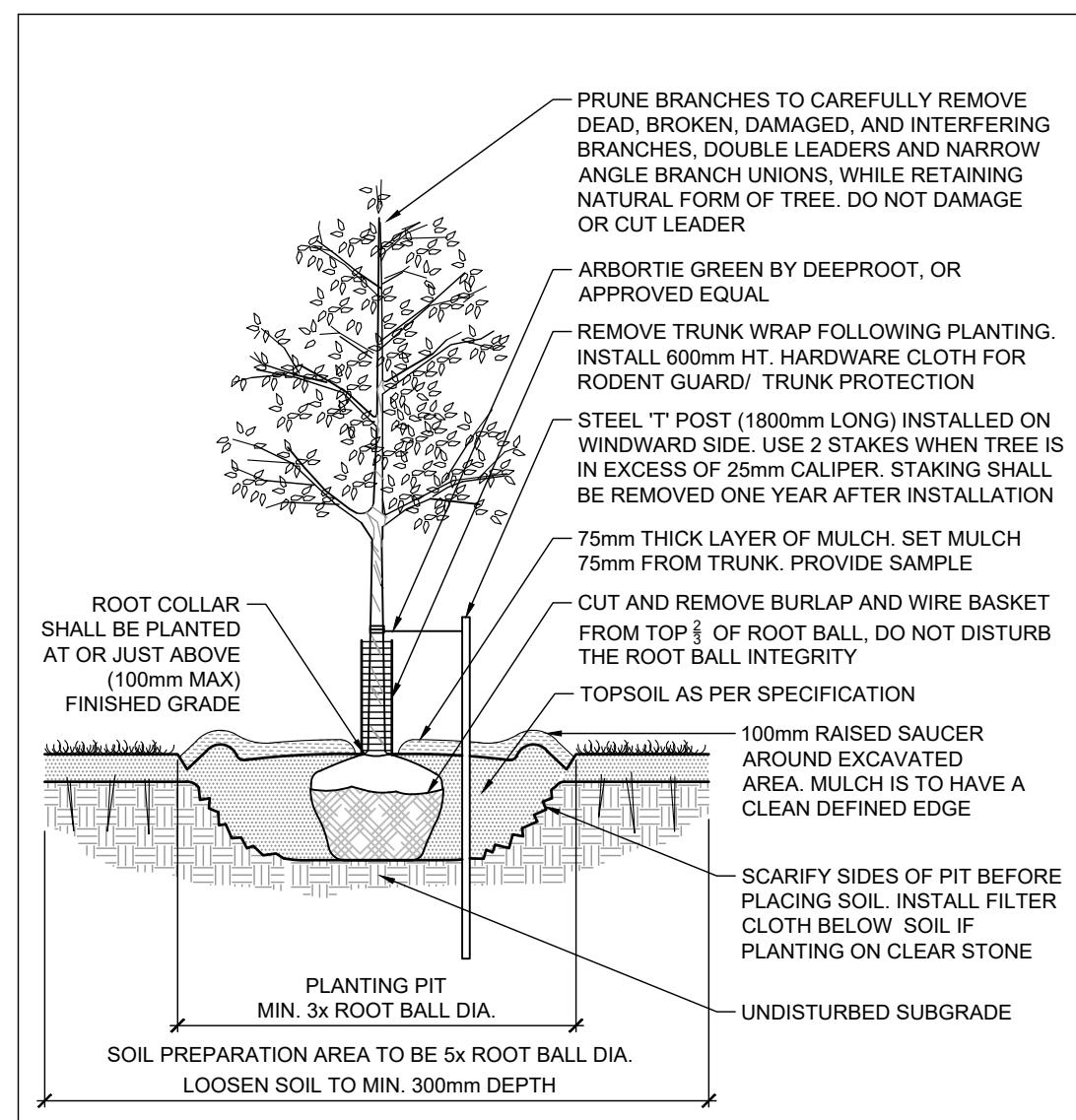
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SCALE  
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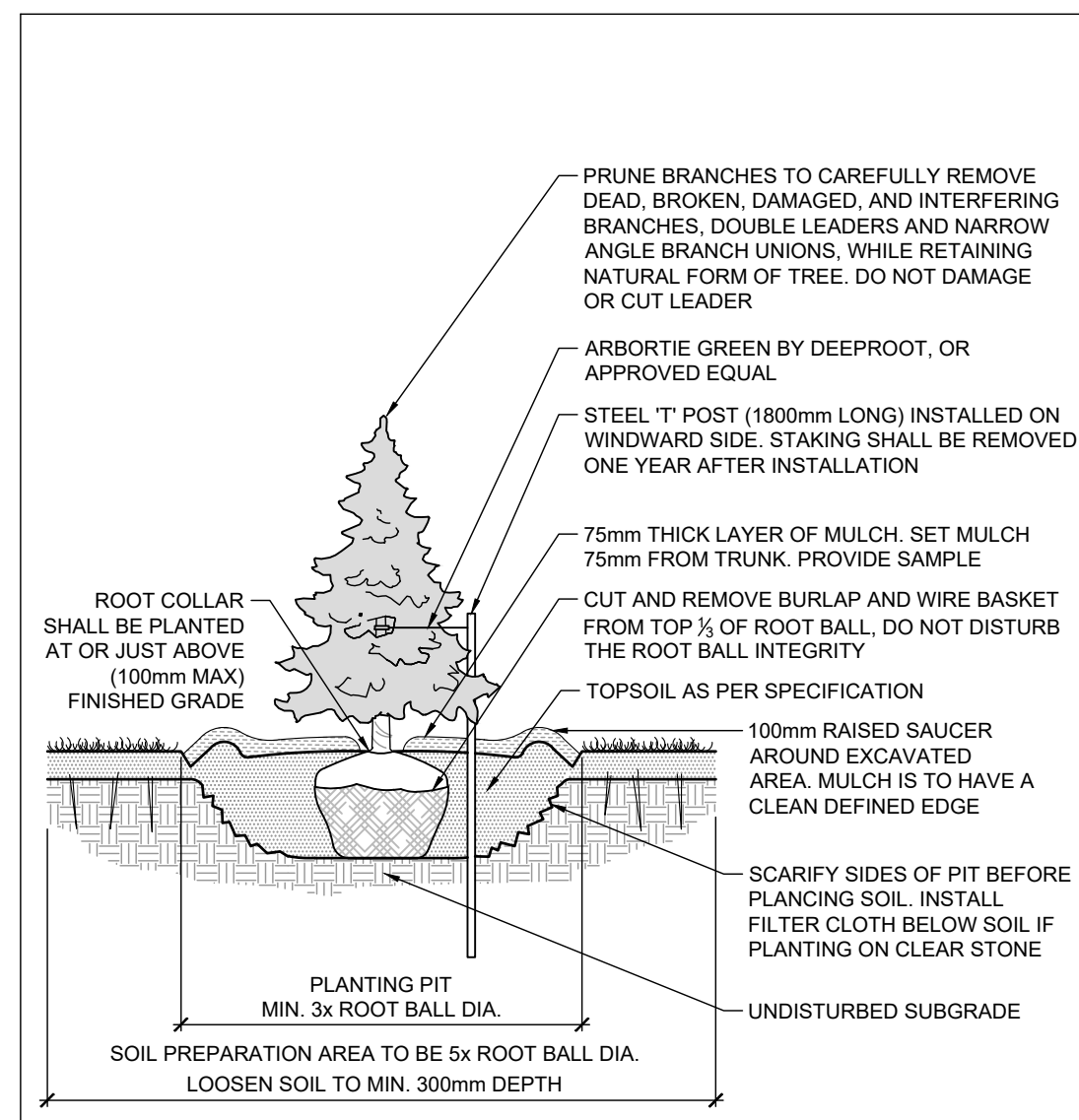
DESIGN: KW  
CHECKED: RJ  
DRAWN: MT  
CHECKED: KW  
APPROVED: RJ

**FOR REVIEW ONLY**

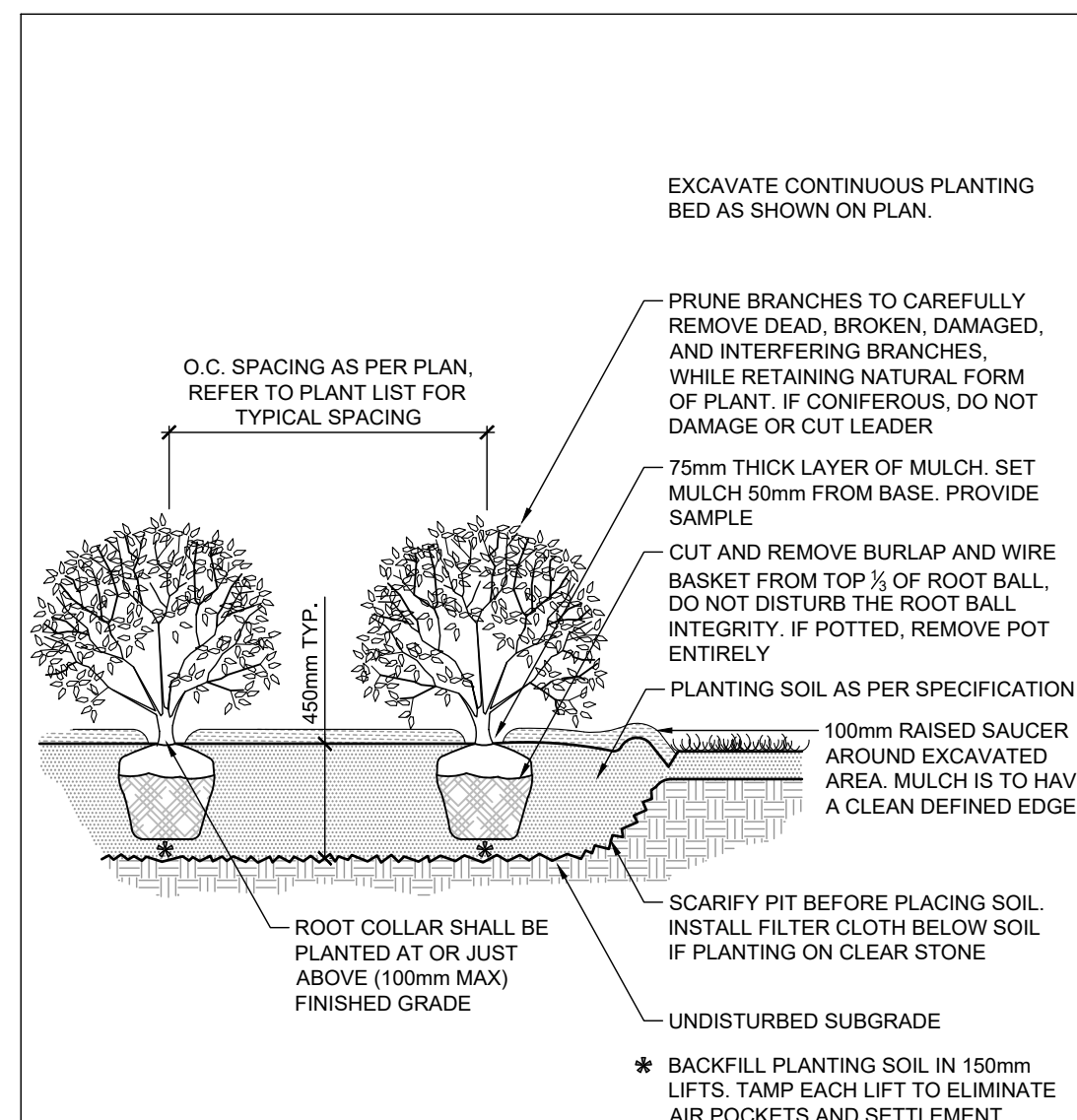
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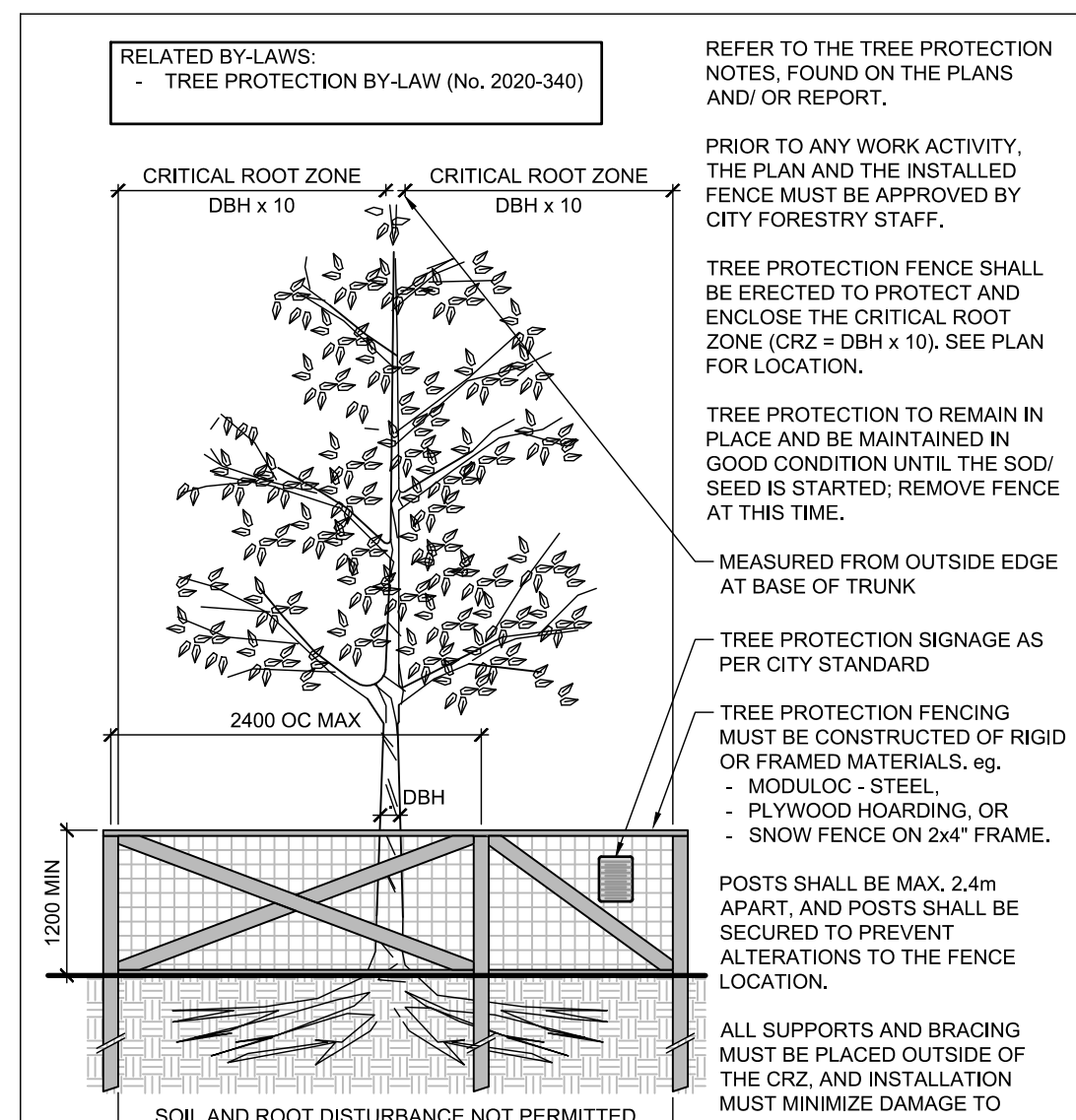
STANDARD DECIDUOUS TREE PLANTING D1



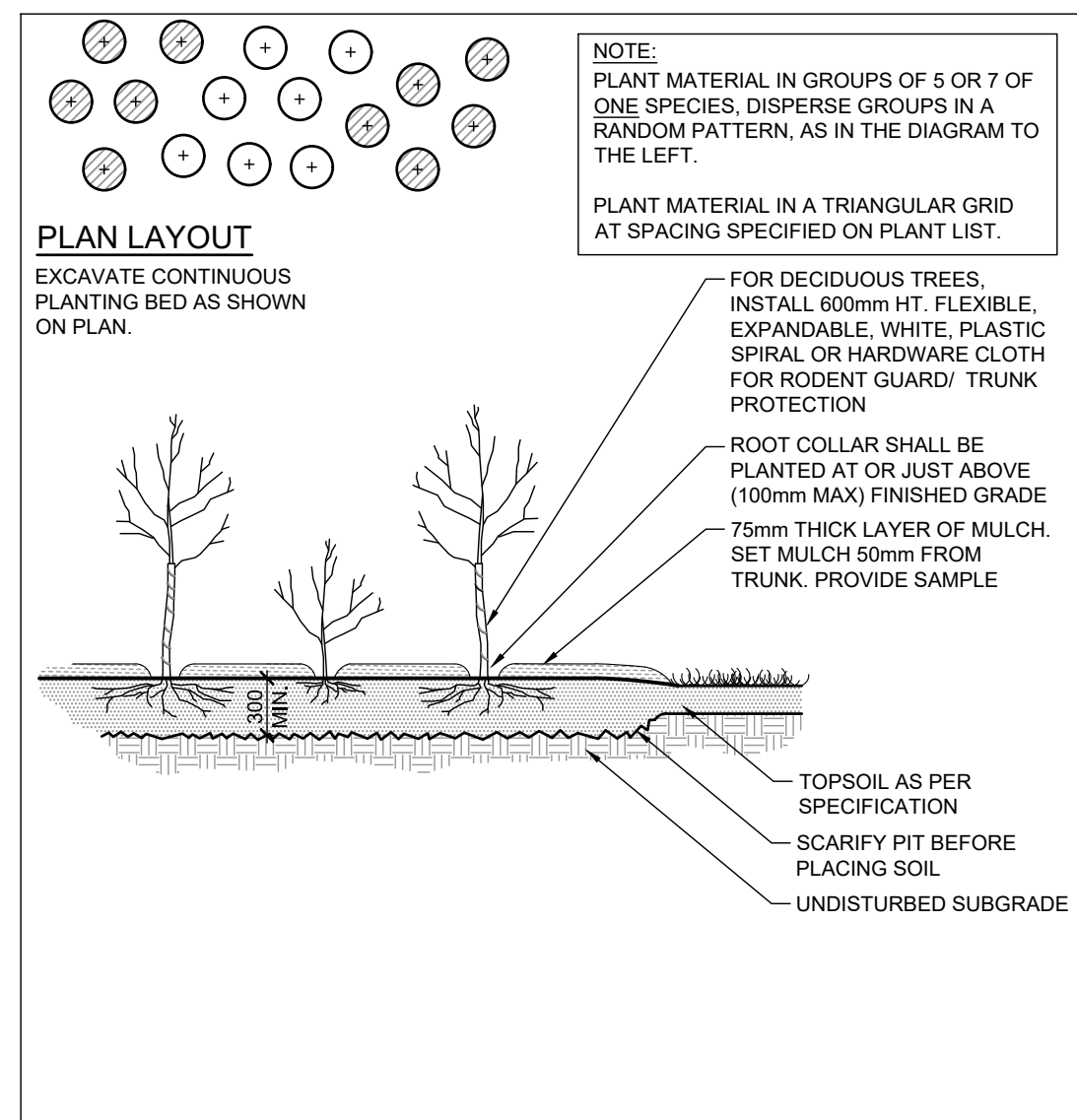
STANDARD CONIFEROUS TREE PLANTING D2



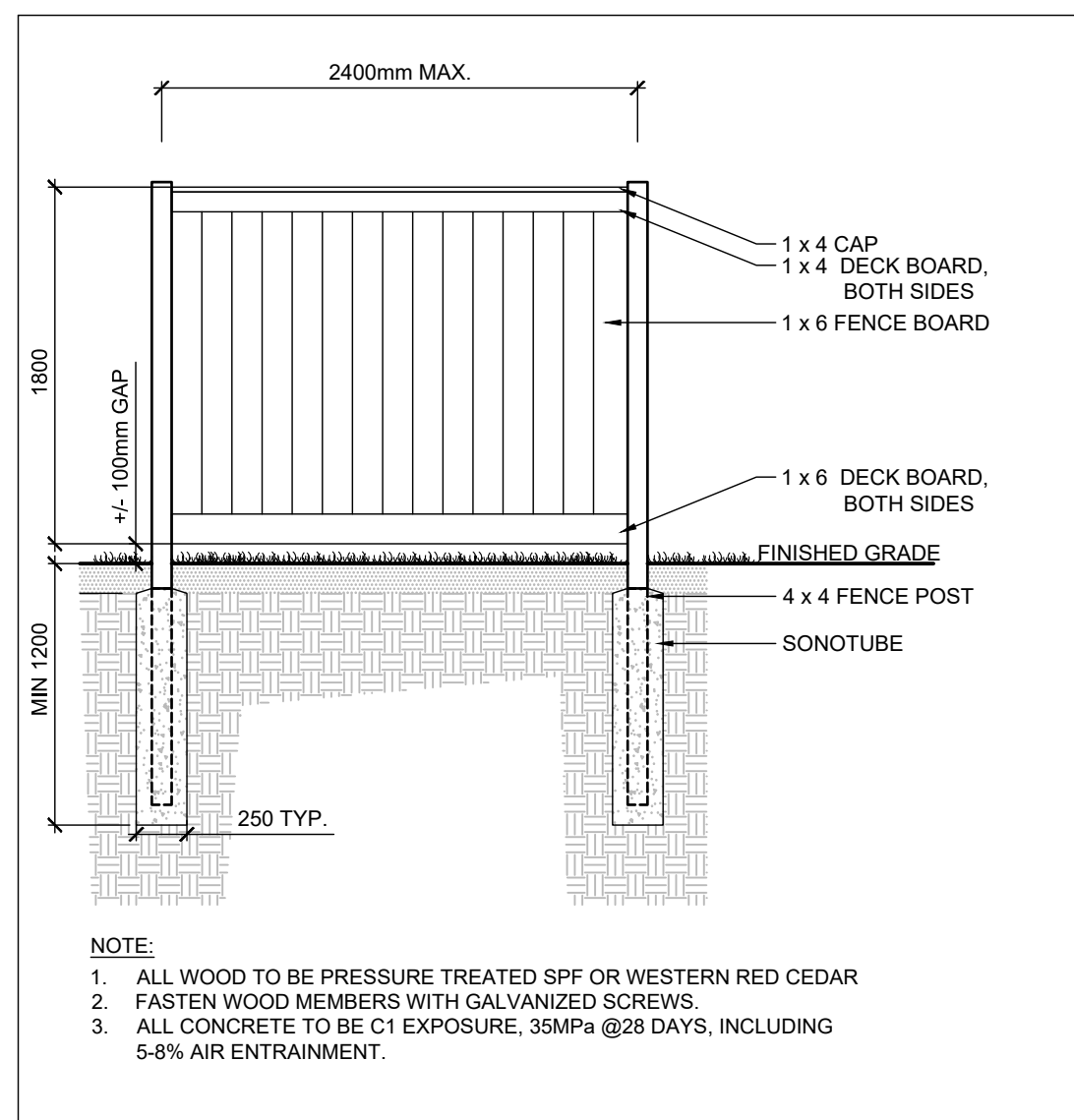
SHRUB AND PERENNIAL PLANTING D3



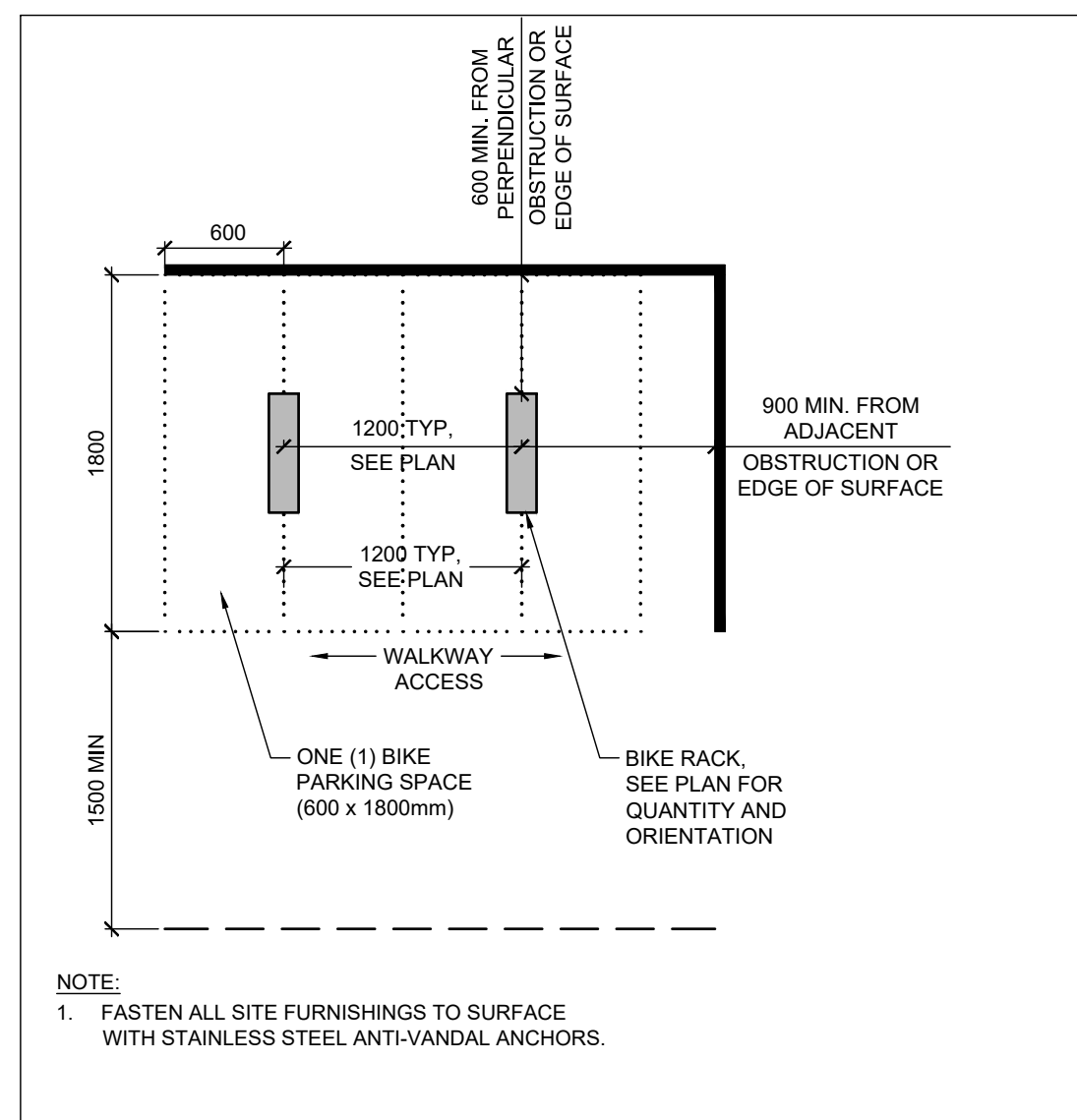
TREE PROTECTION FENCE D4



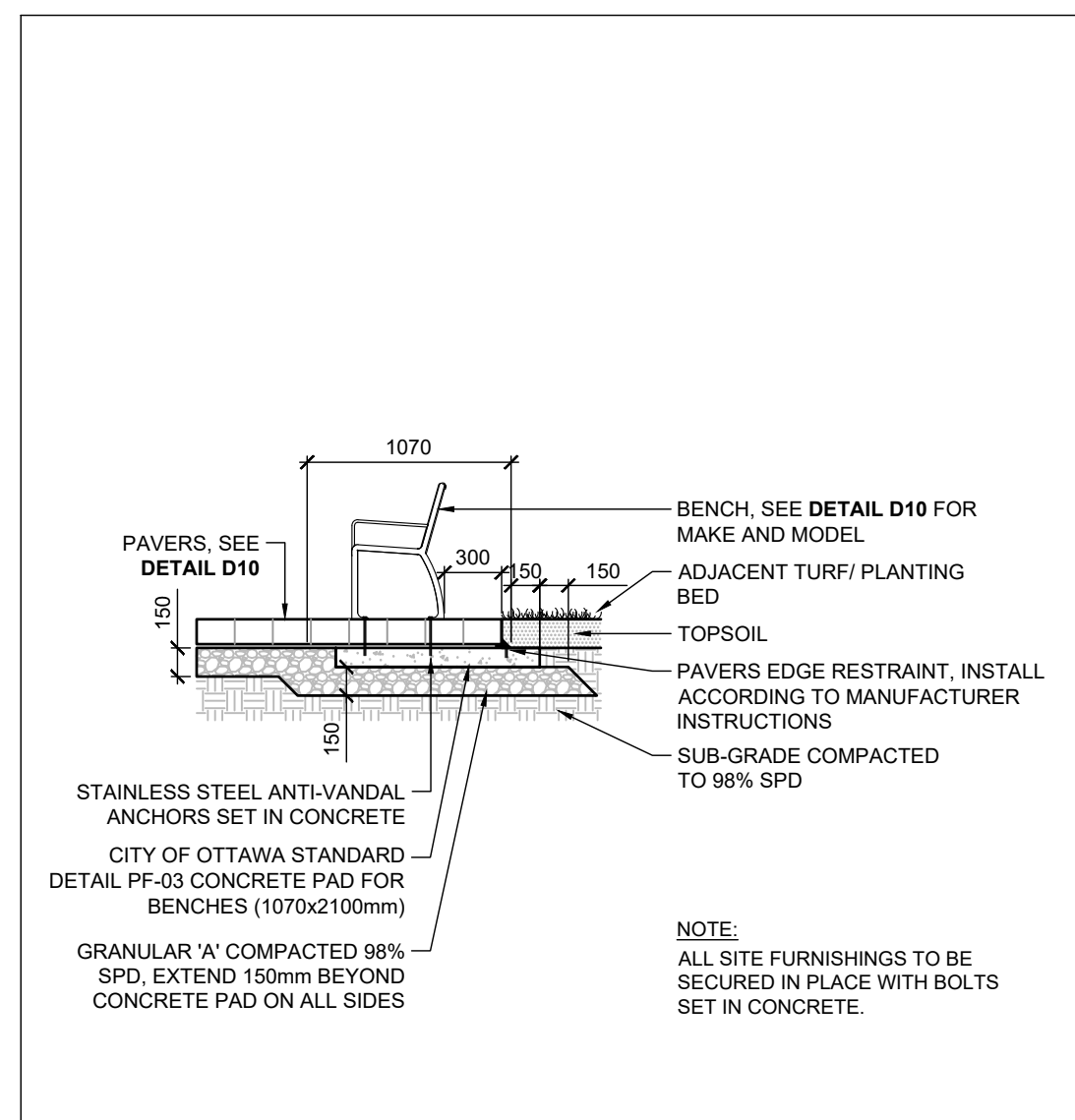
REFORESTATION D5



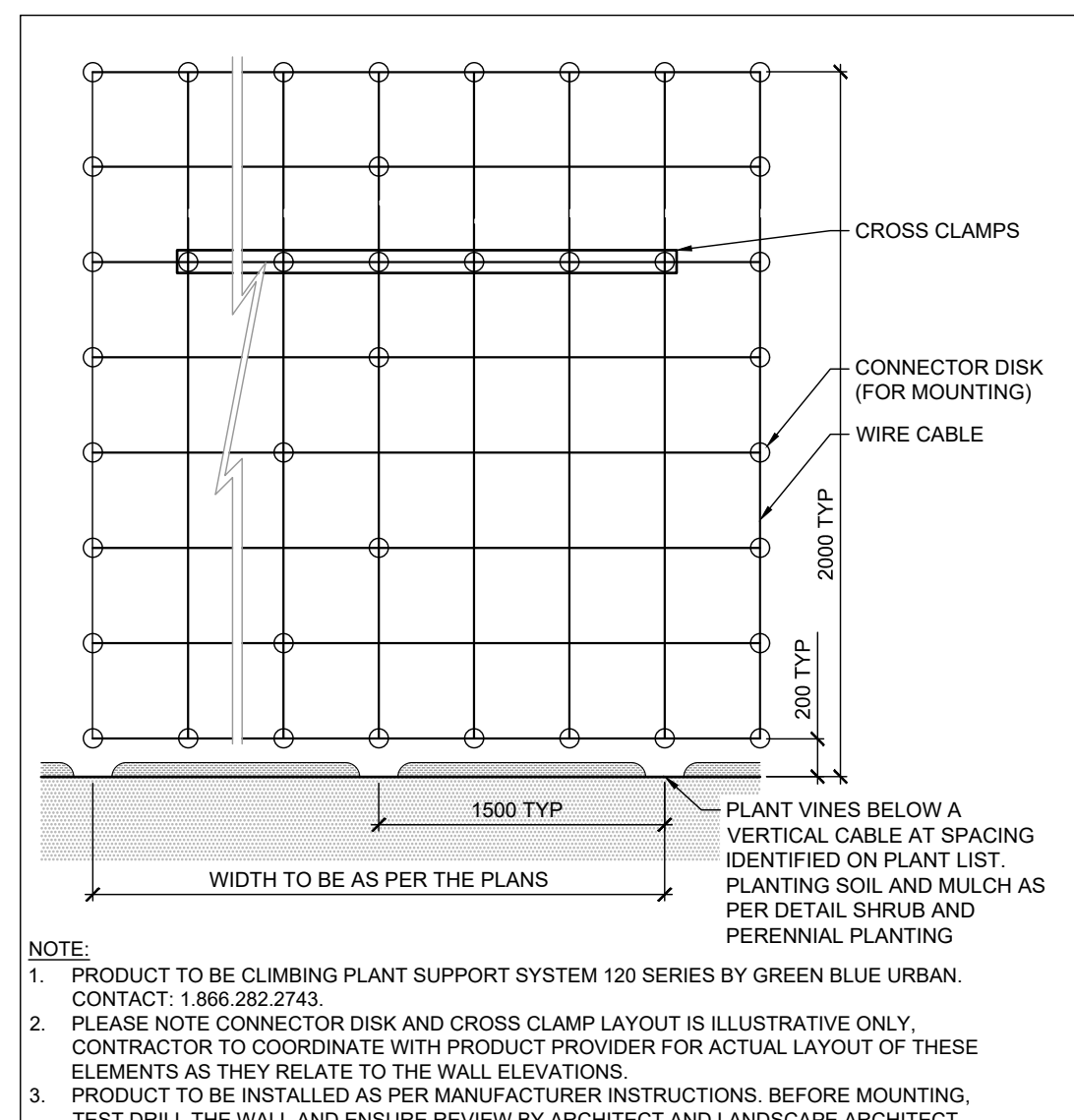
WOOD SCREEN DETAIL D6



BIKE LAYOUT D7



BENCH D8



TRELLIS D9

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No.	REVISION	DATE	BY
3.	ISSUED FOR SPA	JUL 19/24	RJ
2.	ISSUED FOR COORDINATION	MAY 30/24	RJ
1.	ISSUED FOR COORDINATION	FEB 16/24	RJ

DESIGN	SCALE
KW	1:300
RJ	
MT	
KW	
RJ	

FOR REVIEW ONLY	

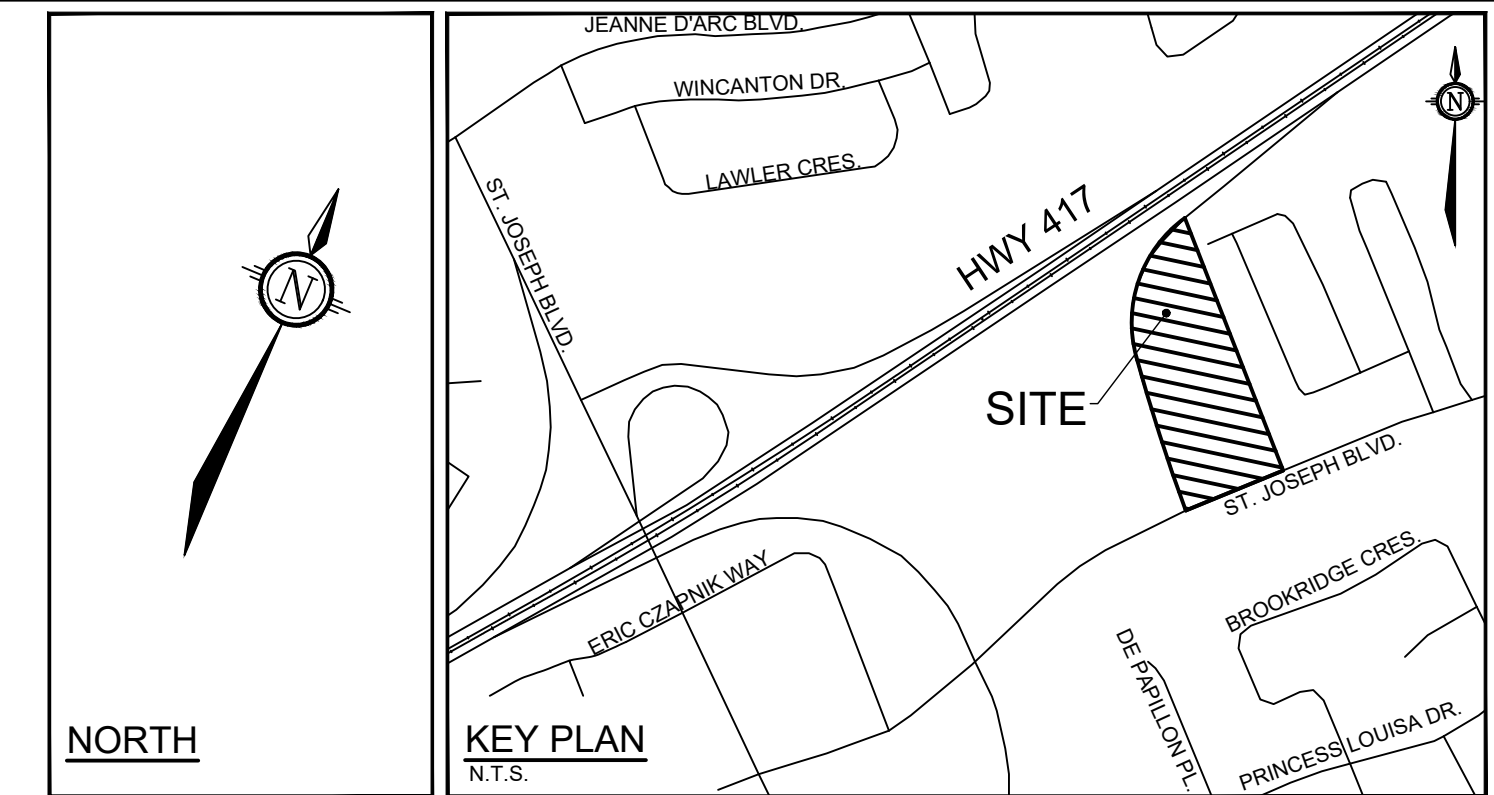
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LOCATION CITY OF OTTAWA CHARTO LANDS -3459 & 3479 ST. JOSEPH BOULEVARD	PROJECT No. 113020-00
DRAWING NAME DETAILS	REV # 3
	DRAWING No. 113020-LD

**NOVATECH DETAILS**

Found on Sheet TCR1.

D1. Tree Protection Fence



**LEGEND**

- 3-D1 DETAIL SHEET # NOVATECH OR CITY  
EG. L1, L2, ETC. DETAIL NUMBER SEE LIST  
FOR CODE
- PROPERTY LIMIT
- EXISTING TREE TO REMAIN,  
SYMBOL SIZE REFLECTS CRZ
- EXISTING TREE TO REMOVE,  
SYMBOL SIZE REFLECTS CRZ
- EXISTING TREE GROUP TO  
REMOVE, SIZE REFLECTS CRZ
- TREE PROTECTION FENCE
- LIMIT OF UNDERGROUND  
STRUCTURE

**GENERAL**

1. Read and interpret this drawing/drawing set in conjunction with all the contract details and specifications, including related civil, utility, structural, architectural, mechanical, electrical, environmental, geotechnical, and survey information.
2. The Contractor is to determine the exact location, size, material, and elevation of all existing utilities prior to commencing construction. Protect and assume responsibility for all existing utilities regardless of being shown on the drawings.
3. It is essential to use the plans and details in conjunction with the specifications and notes.
4. Do not scale drawings. Work to dimensions only.
5. Protect all existing and retained vegetation for the duration of construction according to the contract details and specifications.
6. Reinstatement all areas and items damaged or disturbed, beyond the Limit of Work, because of construction activities, including but not limited to construction staging areas, haul roads, stockpile areas, etc. to the satisfaction of the Consultant. Unless otherwise noted, Contractor is to reinstate all areas to pre-construction condition or better to the satisfaction of the Contract Administrator.

**TREE PROTECTION**

Implement the following protection measures for retained trees, both on site and on adjacent sites, prior to any work activity, including tree removal. Maintain tree protection fence in place and in good condition for the duration of site works:

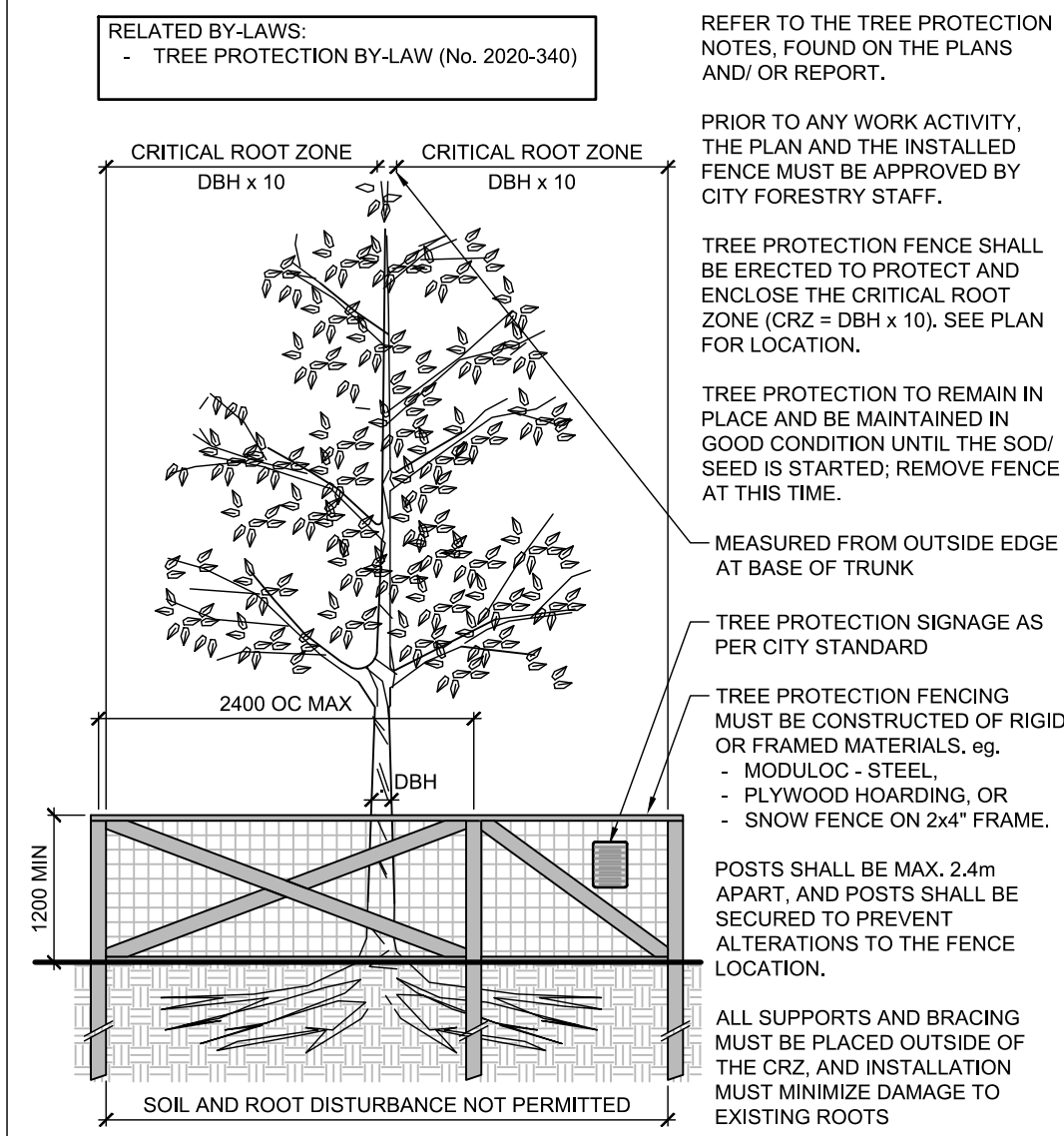
1. The Landscape Architect or Certified Arborist is to determine the location of the tree protection fencing and detail it on any associated plans for the site (e.g. tree conservation report, tree disclosure report, etc.).
2. Under the guidance of a Landscape Architect or Certified Arborist, erect a fence at the critical root zone (CRZ) of trees. Diameter at breast height (DBH) is the trunk diameter measured at 1.3m height on the tree trunk. The CRZ is calculated as DBH x 10. Refer to the Tree Protection Fence detail.
3. Refer to the Tree Protection Plan for fence location. City Forestry Staff are to approve both the plan and the installed fence prior to work commencement.
4. Do not place any material or equipment within 2m of the CRZ of any tree, including outhouses.
5. Do not attach any signs, notices, or posters to any tree.
6. Do not disturb, raise, or lower the existing grade within the CRZ without approval.
7. Only tunnel or bore when digging within the CRZ of a tree. Hand work only where required within the CRZ; absolutely no machinery permitted.
8. Do not damage the root system, trunk, or branches, or any tree.
9. Do not extend hard surface or significantly change landscaping.
10. Ensure that exhaust fumes from all equipment are directed away from any tree canopy.
11. When trees marked for removal overlap with the CRZ of trees marked for preservation: cut roots at the edge of the CRZ and grind down stumps after tree removals, do not pull out stumps. Ensure there is not root pulling or disturbance of the ground within the CRZ.
12. Prior to work taking place, notify and consult the Landscape Architect and City Forestry Staff if roots must be cut. Roots 20mm or larger should be cut at right angles with clean, sharp horticultural tools without tearing, crushing, or pulling. Refer to City of Ottawa Specification S.P. F-8011 Tree Protection, Excavation of Root Zone.
13. If damaged or objectionable branches are observed, consult the Landscape Architect, before any work is conducted. Do not prune leaders. Do not prune more than 1/4 of crown.
14. Set up a water and fertilizing program, if trees are being affected by site works, to the satisfaction of the Landscape Architect.
15. The Landscape Architect is to prescribe mitigation measures if the protected fenced area must be reduced to facilitate construction. Measures may include the placement of plywood, wood chips, or steel plating over the roots for protection. City Forestry Staff are to approve said measures prior to fence movement.
16. City of Ottawa By-law, Protects municipal trees and municipal natural areas in the City of Ottawa and trees on private property in the urban area of the City of Ottawa (2020-340).

**EXISTING TREE INVENTORY**

No.	Botanical Name	Common Name	DBH (cm)	CRZ (m)	Condition	Client	Remarks	Recomm.
1	<i>Acer freemanii</i>	Freeman Maple	17.0	1.70	Good	Client		Remove
2	<i>Pinus nigra</i>	Austrian Pine	20.0	2.00	Good	City		PROTECT
3	<i>Populus tremuloides</i>	Trembling Aspen	12.0	1.20	Good	City		Remove
4	<i>Pinus nigra</i>	Austrian Pine	14.0	1.40	Dead	City	Dead branches, stress, dieback	Remove
5	<i>Ulmus americana</i>	White Elm	11.0	1.10	Good	Client		Remove
6	<i>Ulmus americana</i>	White Elm	13.0	1.30	Fair	Client		Remove
7	<i>Quercus macrocarpa</i>	Bur Oak	45.0	4.50	Good	Client	VC, DB, good specimen, witches broom	Remove
8	<i>Tilia americana</i>	Bass Wood	15.0	1.50	Good	Client		Remove
9	<i>Acer saccharum</i>	Sugar Maple	16.0	1.60	Good	Client		Remove
10	<i>Quercus macrocarpa</i>	Bur Oak	13.0	1.30	Good	Client		Remove
11	<i>Quercus macrocarpa</i>	Bur Oak	14.0	1.40	Good	Client		Remove
12	<i>Quercus macrocarpa</i>	Bur Oak	12.0	1.20	Good	Client		Remove
13	<i>Quercus macrocarpa</i>	Bur Oak	52.0	5.20	Good	Client	VC, DB, good specimen, witches broom	Remove

Key	Botanical Name	Common Name	% Compos.	DBH Min-Max	DBH Avg	Owner	Remarks	Recomm.
<b>Area A</b>								
A	<i>Acer negundo</i>	Manitoba Maple Hedge	85%	5-15cm	0.5-1.5m	Client	Covered in grape vine	Remove
A	<i>Fraxinus sp.</i>	White Ash	10%	5-10cm	0.5-1.0m	Client	Emerald Ash Borer, poor	Remove
A	<i>Rhus typhina</i>	Staghorn sumac	5%	2-5cm	0.2-0.5m	Client		Remove
<b>Area B</b>								
B	<i>Ulmus americana</i>	White Elm	20%	5-20cm	0.5-2.0m	Client	Dead, witches broom	Remove
B	<i>Populus sp.</i>	White Elm	80%	5-25cm	0.5-2.5m	Client	Young growth	Remove
<b>Area C</b>								
C	<i>Ulmus americana</i>	White Elm	15%	5-16cm	0.5-1.6m	Client	Dead, witches broom	Remove
C	<i>Populus sp.</i>	Aspen	30%	5-20cm	0.5-2.0m	Client	Young growth	Remove
C	<i>Fraxinus sp.</i>	Ash	15%	5-18cm	0.5-1.8m	Client	Dead, emerald ash borer, witches broom	Remove
C	<i>Tilia americana</i>	Bass Wood	20%	5-30cm	0.5-3.0m	Client	Mostly good condition	Remove
C	<i>Acer saccharum</i>	Sugar Maple	10%	5-20cm	0.5-2.0m	Client	Mostly good condition	Remove
C	<i>Quercus macrocarpa</i>	Bur Oak	10%	5-50cm	0.5-5.0m	Client	Mostly good condition	Remove

SEE DRAWING 113020-L2 FOR CONTINUATION OF SITE



TREE PROTECTION FENCE

D1

RELATED BY-LAWS:  
- TREE PROTECTION BY-LAW (No. 2020-340)

REFER TO THE TREE PROTECTION NOTES, FOUND ON THE PLANS AND/OR REPORT.

PRIOR TO ANY WORK ACTIVITY, THE PLAN AND THE INSTALLED FENCE MUST BE APPROVED BY CITY FORESTRY STAFF.

TREE PROTECTION FENCE SHALL BE ERECTED TO PROTECT AND ENCLOSE THE CRITICAL ROOT ZONE (CRZ = DBH x 10). SEE PLAN FOR LOCATION.

TREE PROTECTION TO REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION UNTIL THE SOD/SEED IS STARTED. REMOVE FENCE AT THIS TIME.

MEASURED FROM OUTSIDE EDGE AT BASE OF TRUNK

TREE PROTECTION SIGNAGE AS PER CITY STANDARD

TREE PROTECTION FENCING MUST BE CONSTRUCTED OF RIGID OR FRAMED MATERIALS, eg.  
- MODULOC - STEEL  
- PLYWOOD HOARDING, OR  
- SNOW FENCE ON 2x4 FRAME.

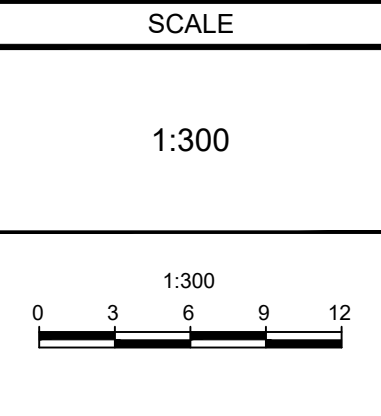
POSTS SHALL BE MAX. 2.4m APART, AND POSTS SHALL BE SECURED TO PREVENT ALTERATIONS TO THE FENCE LOCATION.

ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE CRZ, AND INSTALLATION MUST MINIMIZE DAMAGE TO EXISTING ROOTS

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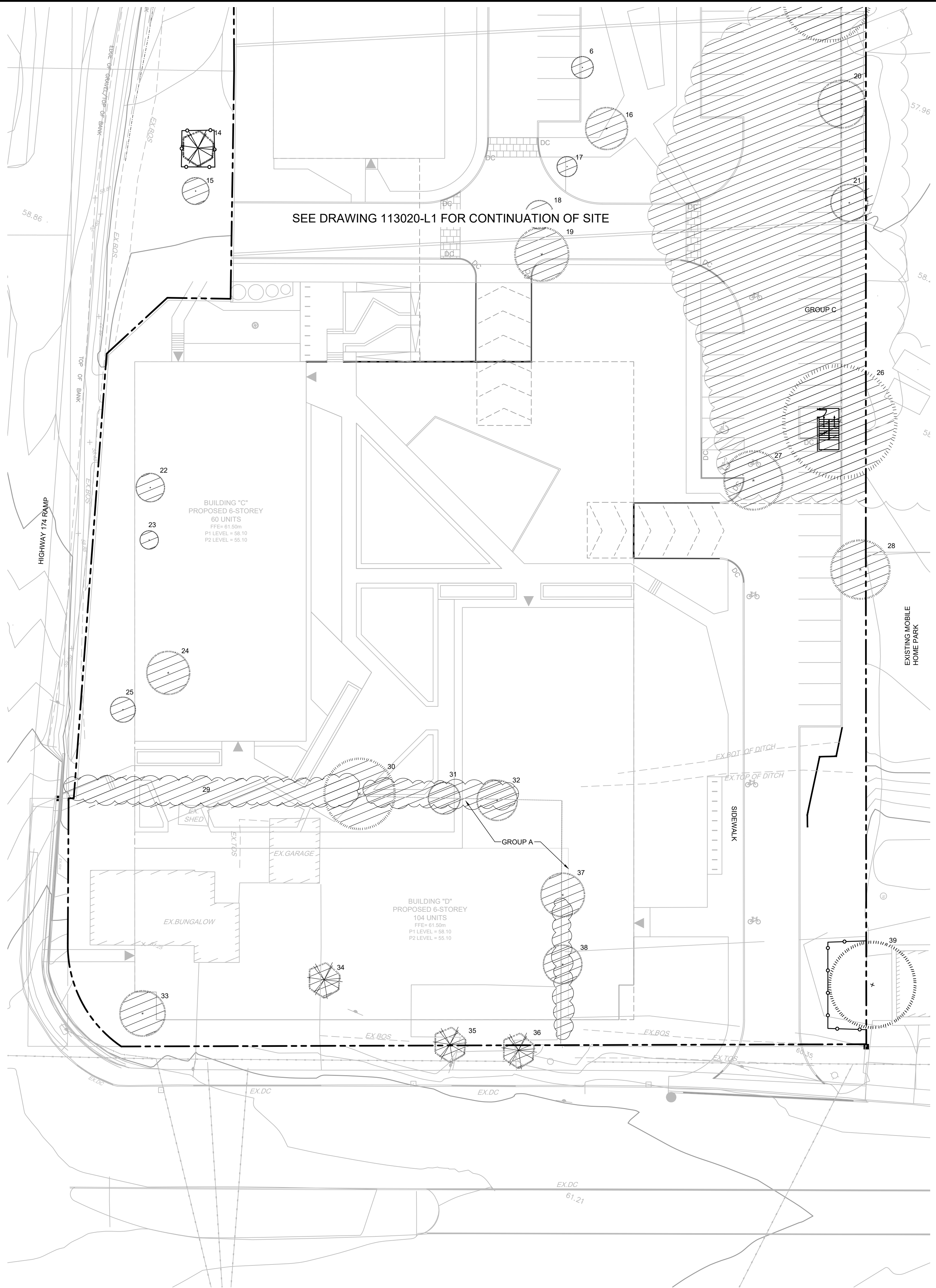
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CHECKED	RGJ
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LOCATION  
CITY OF OTTAWA  
CHARTO LANDS -3459 & 3479 ST. JOSEPH BOULEVARD

DRAWING NAME  
**TREE CONSERVATION PLAN**

PROJECT No. 113020-00  
REV #1  
DRAWING No. 113020-TCR1



**NOVATECH DETAILS**  
Found on Sheet TCR1.  
D1. Tree Protection Fence



**EXISTING TREE INVENTORY**

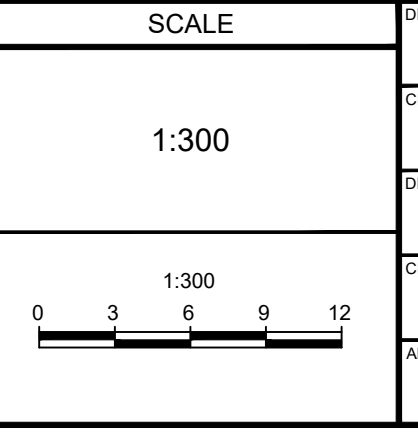
No.	Botanical Name	Common Name	DBH (cm)	CRZ (m)	Condition	Client	Remarks	Recomm.
14	<i>Pinus strobus</i>	White Pine	18.0	1.80	Good	City		PROTECT
15	<i>Fraxinus sp</i>	Ash	16.0	1.60	Dead	City	Suckering growth, main trunk is dead	Remove
16	<i>Ulmus americana</i>	White Elm	25.0	2.50	Fair	Client		Remove
17	<i>Ulmus americana</i>	White Elm	12.0	1.20	Fair	Client		Remove
18	<i>Ulmus americana</i>	White Elm	17.0	1.70	Fair	Client		Remove
19	<i>Ulmus americana</i>	White Elm	32.0	3.20	Fair	Client	multistem	Remove
20	<i>Quercus macrocarpa</i>	Bur Oak	31.0	3.10	Good	Client		Remove
21	<i>Quercus macrocarpa</i>	Bur Oak	22.0	2.20	Good	Client		Remove
22	<i>Fraxinus sp</i>	Ash	17.0	1.70	Dead	Client	Suckering growth, main trunk is dead	Remove
23	<i>Fraxinus sp</i>	Ash	11.0	1.10	Fair	Client		Remove
24	<i>Fraxinus sp</i>	Ash clump	26.0	2.60	Dead	Client	Suckering growth, main trunk is dead	Remove
25	<i>Ulmus americana</i>	White Elm	15.0	1.50	Good	Client		Remove
26	<i>Ulmus americana</i>	White Elm	67.0	6.70	Poor	Client	Multi-stem, half dead, witches broom	Remove
27	<i>Ulmus americana</i>	White Elm	35.0	3.50	Dead	Client	Dead	Remove
28	<i>Acer negundo</i>	Manitoba Maple	27.0	2.70	Poor	Shared	Sweep	Remove
29	<i>Thuja occidentalis hedge</i>	Cedar Hedge	20.0	2.00	Fair	Client		Remove
30	<i>Acer negundo</i>	Manitoba Maple	42.0	4.20	Fair	Client	Rot, multistem, lean 45, low vigour, VC, IB	Remove
31	<i>Acer negundo</i>	Manitoba Maple	19.0	1.90	Good	Client		Remove
32	<i>Acer negundo</i>	Manitoba Maple	24.0	2.40	Good	Client		Remove
33	<i>Malus sp</i>		27.0	2.70	Poor	Client	Rot, lean, suckers	Remove
34	<i>Thuja occidentalis</i>		17.0	1.70	Good	Client		Remove
35	<i>Thuja sp</i>	Cedar Bush			Fair	Shared	Manitoba maple growing through it	Remove
36	<i>Thuja sp</i>	Cedar Bush	8.0	0.80	Fair	Shared		Remove
37	<i>Acer negundo</i>	Manitoba Maple	26.0	2.60	Good	Client		Remove
38	<i>Acer negundo</i>	Manitoba Maple	23.0	2.30	Good	Client		Remove
39	<i>Acer negundo</i>	Manitoba Maple	51.0	5.10	Good	Neighbour	Vigorous, happy, healthy	PROTECT

Key	Botanical Name	Common Name	% Compos.	DBH Min-Max	DBH Avg	Owner	Remarks	Recomm.
<b>Area A</b>								
A	<i>Acer negundo</i>	Manitoba Maple Hedge	85%	5-15cm	0.5-1.5m	Client	Covered in grape vine	Remove
A	<i>Fraxinus sp</i>	White Ash	10%	5-10cm	0.5-1.0m	Client	Emerald Ash Borer, poor	Remove
A	<i>Rhus typhina</i>	Staghorn sumac	5%	2-5cm	0.2-0.5m	Client		Remove
<b>Area B</b>								
B	<i>Ulmus americana</i>	White Elm	20%	5-20cm	0.5-2.0m	Client	Dead, witches broom	Remove
B	<i>Populus sp</i>	White Elm	80%	5-25cm	0.5-2.5m	Client	Young growth	Remove
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C	<i>Acer saccharum</i>	Sugar Maple	10%	5-20cm	0.5-2.0m	Client	Mostly good condition	Remove
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DESIGN	KEY
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DRAWN	KEW
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DRAWING NAME  
**TREE CONSERVATION PLAN**

PROJECT No.  
113020-00

REV #1

DRAWING No.  
113020-TCR2

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