# LANDSCAPE CONTRACT DOCUMENTS

#### PROJECT: LANDSCAPE FOR TRIPLEX

LOCATION: 259 EAST 23RD STREET, NORTH VANCOUVER **CLIENT: COBBLESTONE HOMES LTD BUILDING ARCHITECT:** HEARTH ARCHITECTURAL LANDSCAPE ARCHITECT CONSULTANT: SW LANDSCAPE ARCHITECT ATTN: STEVE WONG 778 834-8959 stevewong234@gmail.com www.swlandscapearchitect.com

#### SUMMARY OF LANDSCAPE SCOPE OF WORK

**SUMMARY: THE LANDSCAPE PORTION OF THE PROJECT INCLUDES ALL LANDSCAPE** WORKS ASSOCIATED WITH A NEW BUILDING PROJECT. THIS INCLUDES BUT NOT LIMITED TO THE SUPPLY AND INSTALLATION OF GROWING MEDIUM, LANDSCAPE PLANTS, MULCH, IRRIGATION SYSTEM, PAVERS, CIP CONCRETE WALK/WALLS/STAIRS, CIP ADDRESS PILLAR WITH LIT SIGN, ASPHALT, FENCING, GATES, LOW VOLTAGE LIGHTING, ONE YEAR WARRANTY AND ONE YEAR LANDSCAPE MAINTENANCE. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ELECTRICAL AND WATER FEED IN ORDER TO ALLOW FOR THE INSTALLATION OF A COMPLETE, FUNCTIONING LANDSCAPE LIGHTING AND IRRIGATION SYSTEM. LANDSCAPE DESIGN/WORKS IS TO BE COORDINATED WITH ALL OTHER WORKS ON THIS SITE.

#### LANDSCAPE LIST OF DRAWINGS

- L0 COVER SHEET
- L1 LAYOUT
- L2 PLANTING PLAN
- L3 LIGHTING PLAN
- L4 TREE MANAGEMENT PLAN
- L5 DETAILS

#### GENERAL CONDITIONS OF THE CONTRACT

-REFER TO GENERAL CONDITIONS OF CONTRACT, BY PRIME CONSULTANT -REFER TO, AND COORDINATE THESE CONTRACT DOCUMENTS WITH THE CONTRACT DOCUMENTS OF THE OTHER CONSULTANTS AND THE MAIN CONTRACT

#### LANDSCAPE SPECIFICATIONS

#### 1. CANADIAN LANDSCAPE STANDARD (CLS), SECOND EDITION

COPYRIGHT, 2020, ISBN: 978-0-9950714-1-4

-PUBLISHED JOINTLY BY:

CANADIAN SOCIETY OF LANDSCAPE ARCHITECTS 12 FORILLON CRESCENT, OTTAWA ON K2M 2W5

1-613-668-4775 csla-aapc.ca

CANADIAN NURSERY LANDSCAPE ASSOCIATION

7856 FIFTH LINE SOUTH MILTON ON L9T 2X8

1-888-446-3499 cnla-acpp.ca

#### SUPPLEMENTARY SPECIFICATIONS- PROJECT SPECIFIC:

9. LANDSCAPE MAINTENANCE: ADD: PER SECTION 9.1.5, ESTABLISHMENT AND WARRANTY MAINTENANCE, THE MAINTENANCE PERIOD WILL BE FOR 1 CALENDAR YEAR FROM DATE OF ACCEPTANCE. PER SECTION 9.1.7, MAINTENANCE LEVEL FOR THIS PROJECT WILL BE AT LEVEL 3 "MODERATE"

#### CLS SPECIFICATIONS (PARTS THAT ARE NOT APPLICABLE TO THIS PROJECT ARE GRAYED OUT)

- SCOPE OF THE STANDARD
- CONTRACT ADMINISTRATION
- SITE PREPARATION AND PROTECTION
- GRADING AND DRAINAGE **GROWING MEDIUM**
- PLANTS AND PLANTING
- MULCHING
- SEEDING AND SODDING
- LANDSCAPE MAINTENANCE IRRIGATION SYSTEMS
- 11. INTEGRATED PEST AND VEGETATION MANAGEMENT
- 12. HARDSCAPE
- 13. LANDSCAPE OVER STRUCTURES
- 14. INTERIOR PLANTSCAPE N/A

## **APPENDIX A: LIST OF TABLES AND FIGURES**

APPENDIX B: BASIC CONTENTS OF A LANDSCAPE COMMISSIONING PLAN APPENDIX C: CANADIAN NURSERY STOCK STANDARD, NINTH EDITION APPENDIX D: NATIONAL VOLUNTARY CODE OF CONDUCT FOR THE ORNAMENTAL HORTICULTURE INDUSTRY

#### **GLOSSARY OF TERMS AND DEFINITIONS**

#### NOTES:

1. CONTRACTOR TO PROVIDE DIGITAL PHOTOS TO THE LANDSCAPE ARCHITECT FOR ALL WORK THAT WILL BE BURIED OR CONCEALED IN ORDER TO CONFIRM THAT THE WORK MEETS SPECIFICATIONS AND APPLICABLE STANDARDS

2. CONTRACTOR TO PROVIDE DIGITAL PHOTOS OF ALL PLANT MATERIAL AT THE NURSERY FOR LANDSCAPE ARCHITECT APPROVAL PRIOR TO SHIPPING. PHOTOS ARE TO BE REPRESENTATIVE OF THE PLANTS TO BE SHIPPED AND CLEARLY SHOW THE QUALITY AND SIZE OF THE PLANTS. A MEASURING STICK SHOULD BE USED WHERE NECESSARY TO SHOW THE HEIGHT OF A PLANT.

#### GENERAL PROJECT AND CONTRACTOR NOTES

- 1. Contractor shall review these plans thoroughly, make a detailed site visit, and shall immediately bring any inconsistency, site layout problem, or any other request for clarification to the Landscape Architect for resolution prior to the delivery of any bid. Failure to do so shall cause the Contractor to be ineligible for extras relating to such matters.
- 2. Contractor shall submit reproducible shop drawings to Landscape Architect for Owner's approval.
- Contractor shall co-ordinate with all trades to provide complete working systems.
- 4. Drawings of existing facilities are, in general, diagrammatic. Exact locations shall be determined by the Contractor from field measurements taken by Contractor's personnel. Actual arrangement of the work shall follow locations shown on the drawings within the constraints of existing equipment and construction. Dimensions shall govern these drawings and they are not to be scaled. Any scales on drawings are only for the Contractor's convenience. Drawing and notes to drawings are correlative and have equal authority and priority. Should there be discrepancies in themselves or between them, Contractor shall base bid pricing on the most expensive combination of quality and/or quantity of the work indicated. In the event of discrepancies, the appropriate method of performing the work and/or items to be incorporated into the scope of the work shall be determined by the appropriate design professional (eg Landscape Architect, Architect, Engineer)
- 5. Contractor is responsible for the safety, actions and conduct of his employees and his subcontractors' employees while in the project area, adjacent areas and in the building and its
- 6. All work described by these documents shall be performed in full accordance with all applicable codes and standards
- 7. 7 All materials, finishes, manufactured items, and equipment shall be installed in full accordance with the supplier's or manufacturer's written recommendations or these documents, whichever is more stringent 8. Requests to substitute any product, technique, or material shall be submitted in writing to
- Landscape Architect for approval. Samples, product information, and drawings shall be required prior to substitution approval. Proposed substitution shall be of equal quality and performance specification to that originally specified.
- 9. All workmanship, material, and equipment shall be guaranteed for one year from date of Owner acceptance. Any failure or deterioration within this period shall be corrected by the contractor at the contractor's expense.
- 10. Coordinate landscape drawings with architect/engineer and all other consultant drawings.

#### **GENERAL LANDSCAPE NOTES**

- 1. All landscape works are to meet the specifications and standards of the latest edition of the CANADIAN LANDSCAPE STANDARD, published by the Canadian Society of Landscape Architects and the Canadian Nursery landscape Association.
- 2. All landscape works to be carried out by a contractor with minimum 5 years' experience doing similar work, who is a member in good standing with the appropriate trade organization: eg, B.C. Landscape and Nursery Association (BCLNA), Irrigation industry Association of B.C. (IIABC). Execution of work to be under the direct supervision of qualified industry certified technicians
- 3. All grades to meet adjacent grades at property line. All stormwater is to be contained on site and away from adjacent properties. All hard surfaces to be sloped a minimum of 1.5%, and all lawn areas to be sloped a minimum of 2% to avoid standing water. Contractor is ultimately responsible for ensuring there is no standing water on site over an extended period.
- 4. No slopes to be steeper than 2.5 horizontal: 1 vertical.
- 5. All plant material and growing medium to meet Canadian Landscape Standard #1 specifications. Plant search area is to be any plant nursery within the Lower Mainland. Plant substitutions are only allowed if approved by Landscape Architect. Suggested plant substitutions shall be of similar species and of at least equal size to those originally specified.
- 6. All shrub beds to contain minimum 18" (450) mm depth and all lawn areas to contain a minimum of 6" (150) mm depth of approved growing medium over scarified subgrade unless stated otherwise on drawings.
- 7. All guardrails are required wherevever the fall height is over 2 ft. Guardrails to be a minimum 42" high from any climbable surface surface. Maximum openings between pickets to be under 4".
- 8. Stairs to have consistent rise/run for risers and treads. Stair treads to slope 2% to front edge of tread for drainage and constructed with materials or finishes to prevent slip falls. All stairs over 2 risers to have handrails between 32" to 38" high from the front of stair treads, and to extend 12" past the end of top/bottom treads.
- 9. Exterior ramps to adhere to BC Building code if greater than 5% slope. Ramps to be maximum of 8.3% and minimum 5' width. Handrails required on both sides. Construction to adhere to BC Building code.
- 10.All retaining walls and structures over 4 ft. in height or if there are issues with soil stability require signoff from the approriate engineer (eg structural, geotechnical). Contractor to provide engineer
- stamped shop drawings for Landscape Architect.
- 11.Landscape installation to be reviewed by registered Landscape Architect.

# **GENERAL TREE NOTES**

- 1. Any permitted tree removal(s) must be performed by a qualified professional.
- 2. No grade changes are to occur within the critical root zones of any retained trees. Any exposed roots from lines of excavation must be covered with burlap and then poly plastic in an effort to prevent dessication of exposed roots; this root curtain must be removed prior to backfilling. Trees must be adquately watered during the entire construction process.
- 3. The removal of existing organics within the critical root zones of retained trees must be performed manually, when installing new plant material within the critical root zones of retained trees, if large roots (1.5' diameter and larger) are encountered, then new plantings must be shifted to accommodate. No more than 3" of additional soil for new landscaping may be added within any critical root zone.
- 4. Any excavation work or work within the protection zone of retained trees requires the supervision of a certified arborist. This includes, but is not limited to; demolition, the installation of any permeable or impermeable surfaces (concrete, asphalt, pavers, etc.), installation of permanent or temporary services (gas, sewer, storm, sanitary, communication, electrical, irrigation, etc.), during the installation of patios, driveways, or any hardscape, during the installation of footings for fences, walls, decorative walls, retaining walls, decks, and deck footings.
- 5. Construction materials must not be stored within the tree protection zone (TPZ) of trees to be retained, and TPZ fencing to remain intact for the entire construction process. Signage must be clearly posted on each side of the barrier indicating 'Tree protection zone-Do not enter of modify' Contact your project arborist for any TPZ barrier issues.
- 6. Refer to arborist report and drawing, Prepared by Burley Boys Tree Services Ltd., dated June 23, 2021. Refer to and coordinate with other project drawings.

#### MATERIALS LIST-COORDINATE WITH SPECIFICATIONS

- 1. ADDRESS PILLAR: Architectural concrete finish, with square edges, complete with rebar and
- 2. ADDRESS SIGN: From Address Signage Company, North Vancouver.stainless steel with integrated 12v LED lightingand standoffs bolted to address pillar.
- 3. ASPHALT: 3" of compacted hot mix asphalt applied in 2 lifts over 4" of well compacted 3/4" minus base course per municipal and MMCD specifications.
- 4. CONCRETE: Per applicable industry standards. Concrete to be reinforced with rebar and/or
- WWM as shown on drawings. For concrete flatwork, provide medium broom finish with 2% cross slope, over min. 4" compacted granular base with expansion joints as required, and control joints @ 5'OC and where there is potential for cracking. Provide shop drawings showing expansion and control joints.
- 5. FENCE- POST BASE BRACKET: By Magma Supply, MSF104 for full dimension 4" post, black textured powdercoated.
- 6. FENCE-WOOD: 1 X6 T&G STK cedar boards, finished with 2 coats of Sikkens semi-transparent cedar stain. Exact style to be determined by Owner.
- 7. FILTER FABRIC: Nilex Nonwoven 4551 geotextile or equivalent; polypropylene, staple fiber, needle-punched nonwoven geotextile.
- 8. GRAVEL LAYER: 4" of 3/4" round drain rock over non-woven filter fabric.
- 9. GROWING MEDIUM: In accordance with CLS standards, latest edition. For Turf Areas: Level 1H (High Traffic Lawn Areas), containing by weight: 70-90% sand, maximum 25% fines (max 20% clay), 3-5% organic matter, with pH between 6-7; For Planting Areas: Level 1P (Planting Areas), containing by weight: 40-80% sand, maximum 25% fines (max 20% clay), 10-20% organic matter, with pH between 4.5-6.5. Supplied by Veratec Engineered Products (www.veratecgroup.com), DENBOW (www.denbow.com), SUMAS GRO MEDIA (www.sumasgromedia.com) or equivalent; 6"min for lawn areas on grade, 18" min for planted areas on grade, over scarified base, or as otherwise specified. A current representative soil analysis is to be done by Pacific Soil Analysis, Richmond to confirm soil sample meets specifications prior to shipping. If after shipping the quality of the soil is in question, further sampling and testing by Pacifc Soil Analysis will be required at contractor's expense. If it is determined that the soil does not meet CLS Specifications, the soil is to be removed at contractor's expense. Contact information for Pacific Soil Analysis is: #5-11720 Voyageur Way, Richmond, BC V6X 3G9: Phone (604) 273-8226.
- 10.HANDRAILS FOR STAIRS: 36 " high measured from front edge of tred, powder coated medium gloss charcoal aluminum, installed to BC Building code. Exact style to be determined by Owner.
- 11.IRRIGATION: Supply and installation required for a complete automatic, inground irrigation system to provide supplemental water efficiently and uniformly. All components to be new, and includes all pipes, sleeves, valves, in-ground irrigation boxes, sprinkler heads, solenoid wires, controller and rain sensor. Controller to have 2 extra zones for future expansion and if installed outside, to have controller and wiring secured in a lockable, weatherproof metal box. Irrigation components to be Rainbird, Toro or Hunter. Irrigation design and installation per Canadian Landscape Standards, latest edition. Design to be completed by a qualified designer/contractor with IIABC. Shop drawings for the irrigation design are to be provided by contractor and to be approved by the landscape architect prior to installation. Contractor is responsible for providing water service and connecting irrigation system to water service complete with backflow preventor, pressure reducing valve and isolation valves. Contractor to adjust irrigation controller, sprinkler heads and commission system in addition to providing as-built drawings and a one year warranty.
- 12.LIGHTING-BY KICHLER: Lighting fixtures and accessories to be Kichler 12 V, LED. STEP LIGHT: KIC-5782BKT27 .86W/ PATH LIGHT: KIC-15805BKT27 4W/ ACCENT LIGHT:KIC-16155BKT27 3.5W/ HARDSCAPE: KIC-16103GRY27 2.7W/ WALL WASH: KIC-16070BKT27R 4.3W/ BOLLARD: KIC-16070BKT27R 3.8W/ DECK LIGHT: KIC-15764CBR .86W/ 300 W Transformer-Kichler 15CS300SS or sized to allow for an additional 50 watt capacity; Photocell- Kichler 15565BK, Timer-24 hr.digital. Lighting to be installed as a complete working system with wires, connectors, mounting hardware, transformer, photocell and timer. Contractor is responsible for providing a power source and to have transformer, timer and source wiring secured in a lockable and weatherproof cabinet if mounted outside.
- 13.MULCH: To be composted fir bark, having dark brown, fine texture and ½" minus, applied evenly at a 2" depth over plant beds. Available from Augustine Soil and Mulch (604 465-5193) or equivalent.
- 14.PAVERS: By Abbotsford Concrete Products, Classic Standard Series, 4 7/16" by 8 7/8" by 2 3/8" inches, Natural colour, mixed with half standard and double standard sizes to suit owner. Edges to be provided with soldier course in Cahrcoal. Pavers installed over 1" bedding sand and minimum 6" compacted 34" minus base course over non-woven filter fabric. Perimeter edge restraint to be concrete or Edge-Pro or equivalent. Polymeric sand to be filled in joints.
- 15.PLANT MATERIAL: All plant material are to meet current Canadian Landscape Standard (CLS) #1 and installed according to current CLS standards by qualified contractor. Plant search is generally throughout the Lower Mainland except as indicated otherwise. Any plant substitutions must be approved by Landscape Architect.
- 16.RAILINGS: 42" high, powder coated medium gloss black charcoal. Maximum gap between pickets to be 3.75". Railings to be installed where there is a fall height of 2' or more, installed to BC Building code. Coordinate with architect/engineering drawings. Exact style to be determined by Owner.
- 17.SOD: All sod to be sand based sod (Perennial rye/Kentucky bluegrass) with no netting. Supplied by Bos Sod Farms, or equivalent. No clay or silt soil to be allowed.
- 18.STEPS-CONCRETE: Medium broom finish, sloped 2% to front of tread per BC Building code. Coordinate with architect/engineering drawings.
- 19.TREE ROOT BARRIER: By Deep Root or equivalent, polypropylene barrier, 2' deep by .08" thickness.

NOTE: ALL MATERIALS SHOWN ON DRAWINGS ARE NOT NECECARILY INCLUDED IN THIS MATERIALS LIST. CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL MATERIALS REQUIRED TO COMPLETE LANDSCAPE WORKS PER CONTRACT DOCUMENTS.



AERIAL VIEW OF PROJECT SITE- UP IS NORTH



STREET VIEW OF PROJECT SITE

No.	Date	Issue/Revision Notes
Α	3/15/2022	REVIEW
В	3/17/2022	SUBMIT
С	4/3/2022	SUBMIT

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COBBLESTONE HOMES

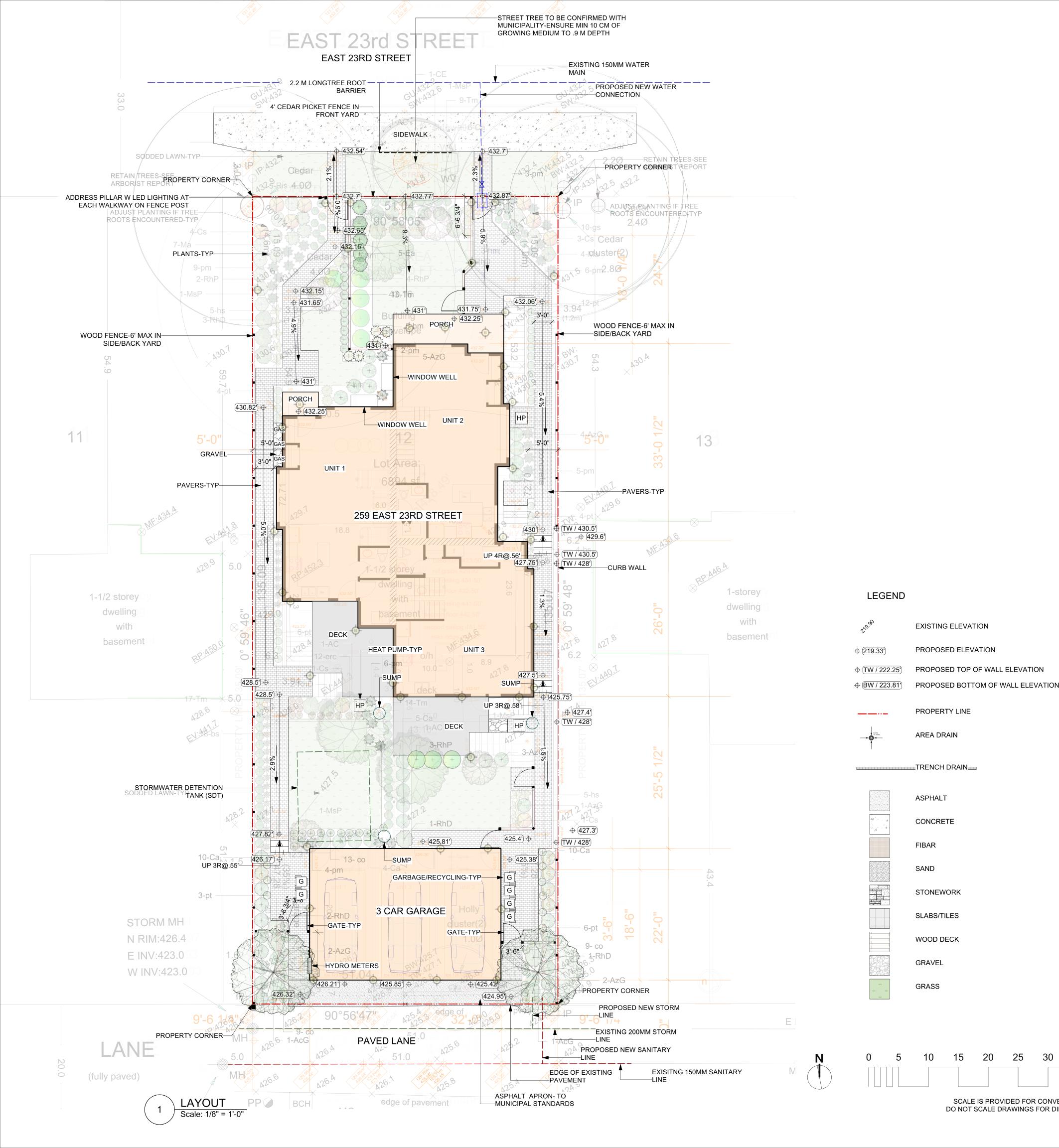
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E 23 v1.vwx

TRIPLEX DEVELOPMENT 259 E. 23RD ST. NORTH VANCOUVER

**COVER SHEET** 

l	
Project Manager	Project ID
STEVE WONG	2022-5
Drawn By	Scale
SW	AS NOTED
	Sheet No.
	L-0
Date	<b>│</b>
MARCH 2022	of
CAD File Name	



#### **GENERAL PROJECT AND CONTRACTOR NOTES**

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**COBBLESTONE HOMES** 

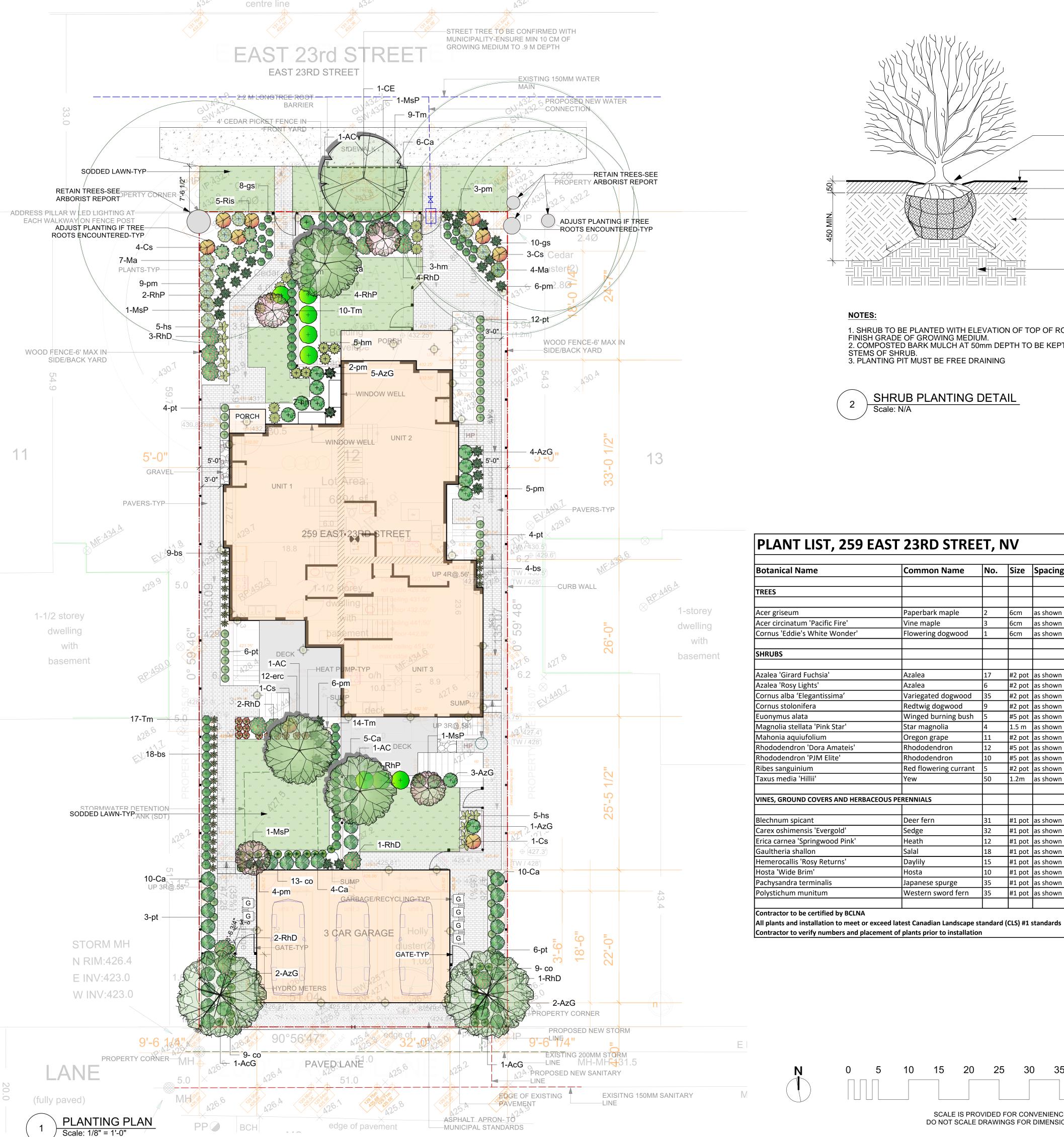
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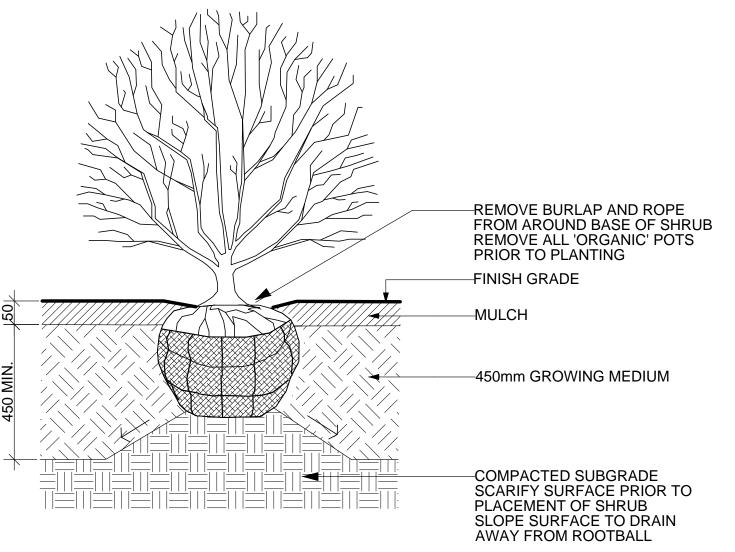
DO NOT SCALE DRAWINGS FOR DIMENSIONS

TRIPLEX DEVELOPMENT 259 E. 23RD ST. NORTH VANCOUVER

LAYOUT

Project ID 2022-5
Scale AS NOTED
Sheet No.
- L-1



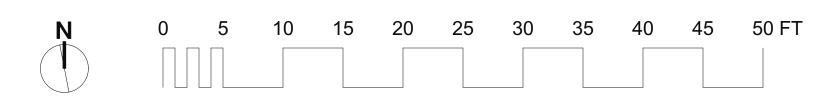


#### NOTES:

1. SHRUB TO BE PLANTED WITH ELEVATION OF TOP OF ROOTBALL OR POT LEVEL WITH FINISH GRADE OF GROWING MEDIUM. 2. COMPOSTED BARK MULCH AT 50mm DEPTH TO BE KEPT AT LEAST 50mm AWAY FROM STEMS OF SHRUB. 3. PLANTING PIT MUST BE FREE DRAINING

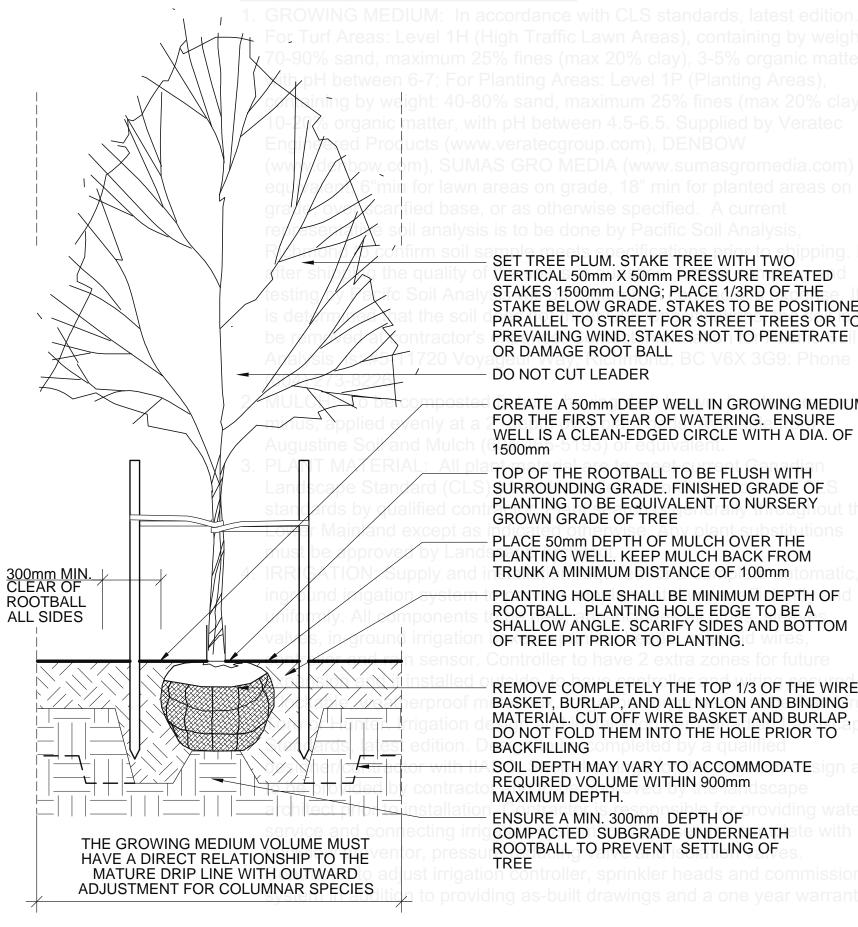


Botanical Name	Common Name	No.	Size	Spacing	Sym	
TREES						
Acer griseum	Paperbark maple	2	6cm	as shown	AcG	
Acer circinatum 'Pacific Fire'	Vine maple	3	6cm	as shown	AC	
Cornus 'Eddie's White Wonder'	Flowering dogwood	1	6cm	as shown	CE	
SHRUBS						
Azalea 'Girard Fuchsia'	Azalea	17	#2 pot	as shown	AzG	
Azalea 'Rosy Lights'	Azalea	6	#2 pot	as shown	AzR	
Cornus alba 'Elegantissima'	Variegated dogwood	35	#2 pot	as shown	Ca	
Cornus stolonifera	Redtwig dogwood	9	#2 pot	as shown	Cs	
Euonymus alata	Winged burning bush	5	#5 pot	as shown	Ea	
Magnolia stellata 'Pink Star'	Star magnolia	4	1.5 m	as shown	MsP	
Mahonia aquiufolium	Oregon grape	11	#2 pot	as shown	Ma	
Rhododendron 'Dora Amateis'	Rhododendron	12	#5 pot	as shown	RhD	
Rhododendron 'PJM Elite'	Rhododendron	10	#5 pot	as shown	RhP	
Ribes sanguinium	Red flowering currant	5	#2 pot	as shown	Ris	
Taxus media 'Hillii'	Yew	50	1.2m	as shown	Tm	
VINES, GROUND COVERS AND HERBACE	OUS PERENNIALS					
Blechnum spicant	Deer fern	31	#1 pot	as shown	bs	
Carex oshimensis 'Evergold'	Sedge	32	#1 pot	as shown	со	
Erica carnea 'Springwood Pink'	Heath	12		as shown	erc	
Gaultheria shallon	Salal	18	#1 pot	as shown	gs	
Hemerocallis 'Rosy Returns'	Daylily	15	#1 pot	as shown	hm	
Hosta 'Wide Brim'	Hosta	10	#1 pot	as shown	hs	
Pachysandra terminalis	Japanese spurge	35	#1 pot	as shown	pt	
Polystichum munitum	Western sword fern	35	#1 pot	as shown	pm	



SCALE IS PROVIDED FOR CONVENIENCE DO NOT SCALE DRAWINGS FOR DIMENSIONS





SET TREE PLUM. STAKE TREE WITH TWO VERTICAL 50mm X 50mm PRESSURE TREATED STAKES 1500mm LONG; PLACE 1/3RD OF THE STAKE BELOW GRADE. STAKES TO BE POSITIONED PARALLEL TO STREET FOR STREET TREES OR TO PREVAILING WIND. STAKES NOT TO PENETRATE OR DAMAGE ROOT BALL DO NOT CUT LEADER

CREATE A 50mm DEEP WELL IN GROWING MEDIUM 2" FOR THE FIRST YEAR OF WATERING. ENSURE

TOP OF THE ROOTBALL TO BE FLUSH WITH SURROUNDING GRADE. FINISHED GRADE OF PLANTING TO BE EQUIVALENT TO NURSERY **GROWN GRADE OF TREE** 

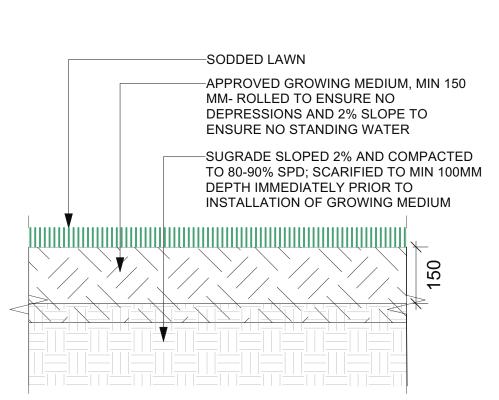
PLACE 50mm DEPTH OF MULCH OVER THE PLANTING WELL. KEEP MULCH BACK FROM TRUNK A MINIMUM DISTANCE OF 100mm PLANTING HOLE SHALL BE MINIMUM DEPTH OF ROOTBALL. PLANTING HOLE EDGE TO BE A

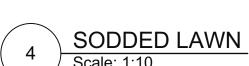
REMOVE COMPLETELY THE TOP 1/3 OF THE WIRE BASKET, BURLAP, AND ALL NYLON AND BINDING MATERIAL. CUT OFF WIRE BASKET AND BURLAP, DO NOT FOLD THEM INTO THE HOLE PRIOR TO

SOIL DEPTH MAY VARY TO ACCOMMODATE REQUIRED VOLUME WITHIN 900mm MAXIMUM DEPTH.

ENSURE A MIN. 300mm DEPTH OF COMPACTED SUBGRADE UNDERNEATH ROOTBALL TO PREVENT SETTLING OF

TREE PLANTING DETAIL





No.	Date	Issue/Revision Notes			
Α	3/15/2022	REVIEW			
В	3/17/2022	SUBMIT			
С	4/3/2022	SUBMIT			

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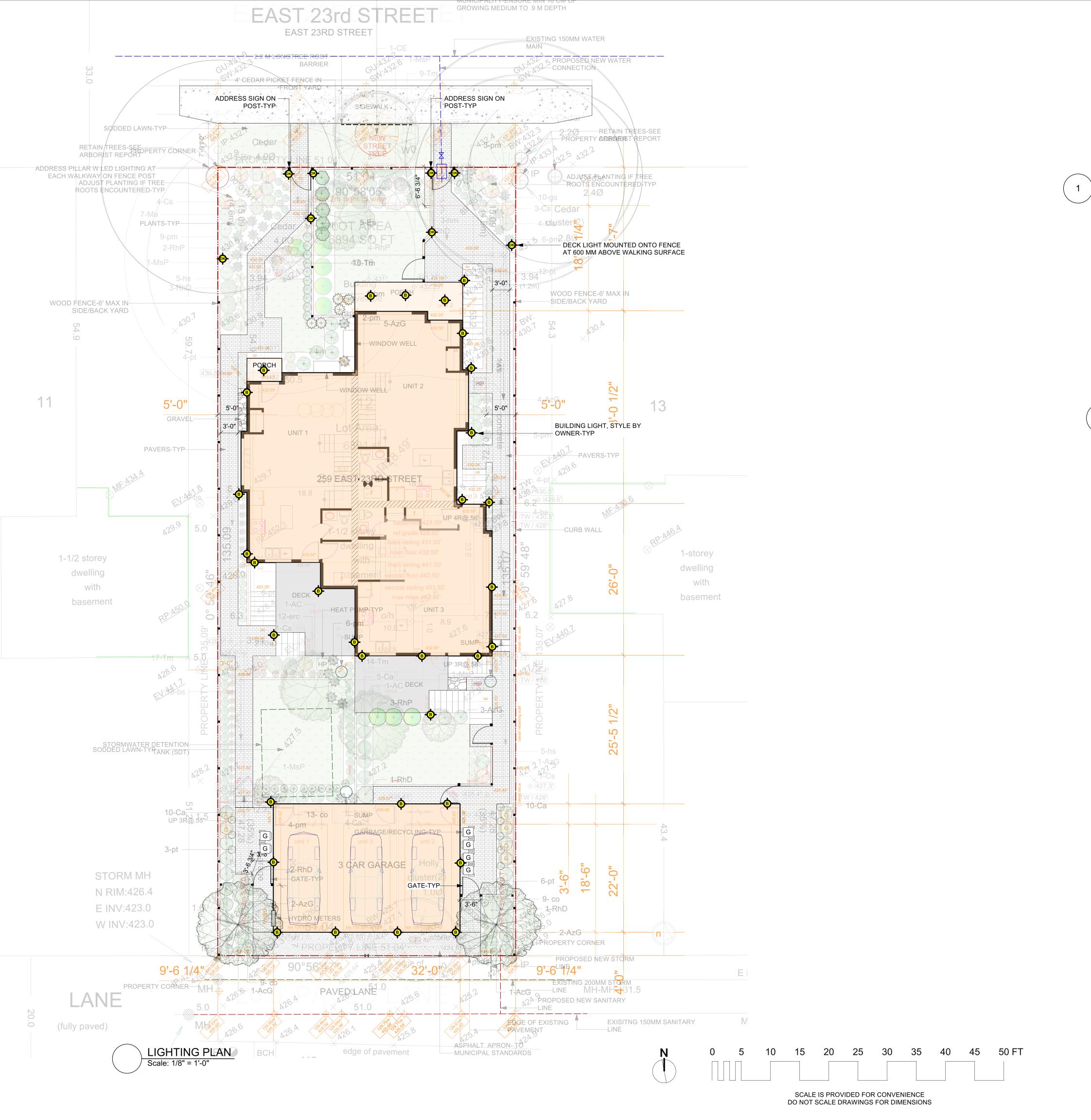
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**COBBLESTONE HOMES** 

TRIPLEX DEVELOPMENT 259 E. 23RD ST. NORTH VANCOUVER

PLANTING PLAN

Project Manager STEVE WONG	Project ID 2022-5			
Drawn By SW	AS NOTED			
	Sheet No.			
Date MARCH 2022	- L-2			
CAD File Name E 23 v1.vwx	of 5			









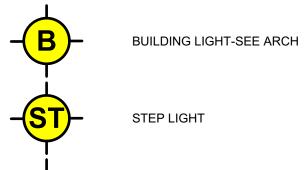


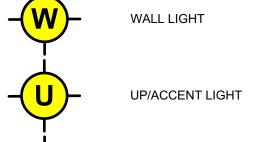
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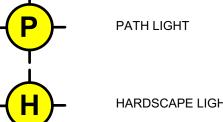
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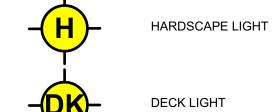


#### LIGHTING LEGEND









- <b>UK</b> -	DECK LIGHT
<b>D</b> -	DOWN/ACCENT LIGHT

esign Firm	SW LANDSCAPE ARCHITECT	
	919 MELBOURNE AVENUE NORTH VANCOUVER www.swlandscapearchitect.com	
	www.swianuscapearcintect.com	

COBBLESTONE HOMES

Desired Title

TRIPLEX DEVELOPMENT 259 E. 23RD ST. NORTH VANCOUVER

LIGHTING PLAN

Project Manager STEVE WONG	Project ID 2022-5
Drawn By SW	Scale AS NOTED
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## **Appendix**

Below details the tree assessed. "DBH" is the main trunk diameter of the tree measured approximately 1.4m from grade. The determined condition of each tree is relative to its health, canopy structure, colour and vigor and any defects noted in the stem, canopy or root plate. Retention values are based on the tree species profile, growing conditions & viability as long-term. "CRZ" is the determined Critical Root Zone of each tree. Preferred & Minimum CRZs are outlined below. The Preferred CRZ measurement is based on 12xDBH, as recommended by <a href="PNW-ISA">PNW-ISA</a>; Tree protection barriers should be located no closer to the trunk than this distance. It should be noted trees with excavations required inside the Preferred CRZ can often be retained.

Tree /Tag #	Species	DBH (cm)	Condition Good Fair Poor Dead/Dying	Retention Value High Moderate Low Unsuitable	CRZ (Min) (m)	CRZ (Pref'd) (m)	Comments & Recommendations
1	Cedar	122	Good	High	7.32	14.64	<ul> <li>Shared with City &amp; west neighbour</li> <li>Existing sidewalk inside CRZ recommended to be retained</li> <li>If a new sidewalk required, should be installed in same location as existing</li> <li>Recommend:         <ul> <li>Retain, install tree protection barrier</li> <li>Arborist supervision required for sidewalk/entry path installation/grading</li> </ul> </li> </ul>
2	Cedar	121	Good-Fair	High	7.26	14.52	<ul> <li>Leaning/weighted to SW</li> <li>Conflict with excavations</li> <li>Recommend:</li> <li>Remove to facilitate proposed development</li> <li>Stump must be ground, not removed with excavator to protect CRZ of T1.</li> </ul>
3	Cedar x 3	117, 67, 72	Fair	Moderate	7.02	14.04	<ul> <li>Group of 3 trees</li> <li>Shared with City &amp; east neighbour</li> <li>Western most stem prev. Topped</li> <li>Existing sidewalk inside CRZ recommended to be retained</li> <li>If a new sidewalk is required, it should be installed in same location as existing</li> <li>Recommend:         <ul> <li>Retain, install tree protection barrier</li> <li>Arborist supervision required for sidewalk/entry path installation/grading</li> </ul> </li> </ul>

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4	Pear	27	Fair-Poor	Low	1.62	3.24	Conflict with excavations     Recommend:     Remove to facilitate proposed development
6	Holly	34	Poor	Unsuitable	2.04	4.08	Multi-stemmed; combined DBH     (18, 14, 12)     Invasive species     Conflict with excavations     Recommend:     Remove to facilitate proposed development
6	Holly	44	Poor	Unsuitable	2.64	5.28	Multi-stemmed; combined DBH     (21, 17, 12)     Invasive species     Conflict with excavations     Recommend:     Remove to facilitate proposed development
7	Emerald cedar	8	Good	Moderate	0.48	0.96	East neighbour's property     Hedgerow Recommend:     Retain, install tree protection barrier at property line

# Tree Removal/Retention Summary:

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Number of permit protected trees to be removed:	0
Number of non-permit protected trees to be removed:	4
Number of retained trees on site:	3

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# Site Map:



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Refer to arborist report and drawings, Prepared by Burley Boys Tree Services Ltd., dated June 23, 2021. Refer to and coordinate with other

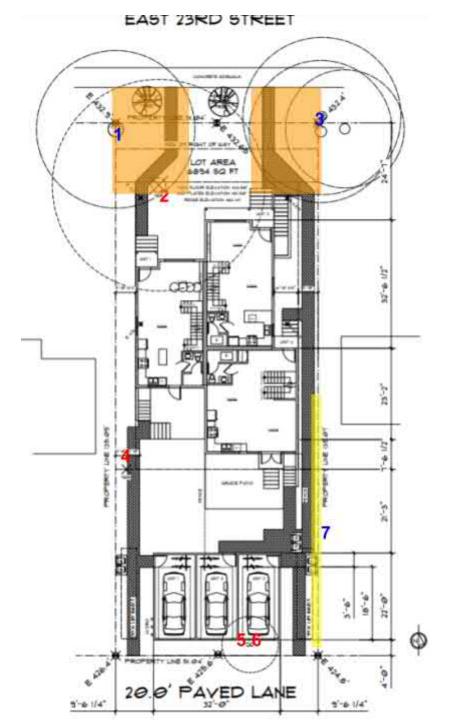
project drawings.

# TREE COUNT SUMMARY

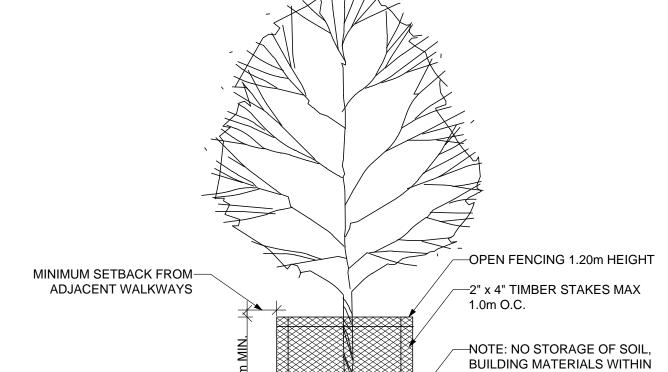
TREES REMOVED PLANTED TREES

## Site Plan:

The below site plan plots tree locations and outlines removal / retention recommendations (Retain, Remove, Relocate). Approximate Tree Protection Fencing locations are outlined in yellow. Retained Trees requiring Arborist Supervision are outlined in orange. An original large scaled copy of the site plan indicating trees marked for removal, and the locations of Tree Protection Zone fencing has not been included with this report; this is to be provided by the applicant, if required.



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SCHEDULE A - TREE PROTECTION BARRIER			
TREE PROTECTION DISTANCE TABLE			
TRUNK [	DIAMETER	MINIMUM DISTANCE	
CM	FT	FROM TRUNK (METERS)	
20	0.6	1.2	
25	0.8	1.5	
35	1.0	2.1	
40	1.2	2.4	
45	1.3	2.7	
50	1.5	3.0	
55	1.7	3.3	
60	2.0	3.6	
75	2.5	4.5	
90	3.0	5.0	
100	3.3	6.0	

NOTE:
TREE PROTECTION BARRIERS MUST BE
AT LEAST 1.20m IN HEIGHT AND
CONSTRUCTED OF EITHER SNOW
FENCING SECURELY FASTENED TO 2x4
TIMBER STAKES, OR METAL STAKES
SPACED NO FURTHER THAN 1.00m
APART.

OR AGAINST BARRIER.



# retained trees. Any exposed roots from lines of excavation must be covered with burlap and then poly plastic in an effort to prevent dessication of exposed roots; this root curtain must be removed prior to backfilling. Trees must be adquately watered during the entire construction process. The removal of existing organics within the critical root zones of retained

1. Any permitted tree removal(s) must be performed by a qualified

2. No grade changes are to occur within the critical root zones of any

**GENERAL TREE NOTES** 

- Trees must be adquately watered during the entire construction process.

  3. The removal of existing organics within the critical root zones of retained trees must be performed manually. when installing new plant material within the critical root zones of retained trees, if large roots (1.5' diameter and larger) are encountered, then new plantings must be shifted to accommodate. No more than 3" of additional soil for new landscaping may
- be added within any critical root zone.

  4. Any excavation work or work within the protection zone of retained trees requires the supervision of a certified arborist. This includes, but is not limited to; demolition, the installation of any permeable or impermeable surfaces (concrete, asphalt, pavers, etc.), installation of permanent or temporary services (gas, sewer, storm, sanitary, communication, electrical, irrigation, etc.), during the installation of patios, driveways, or any hardscape, during the installation of footings for fences, walls, decorative
- walls, retaining walls, decks, and deck footings.
  5. Construction materials must not be stored within the tree protection zone (TPZ) of trees to be retained, and TPZ fencing to remain intact for the entire construction process. Signage must be clearly posted on each side of the barrier indicating 'Tree protection zone-Do not enter of modify'. Contact your project arborist for any TPZ barrier issues.
- 6. Refer to arborist report and drawings, Prepared by Burley Boys Tree Services Ltd., dated June 23, 2021. Refer to and coordinate with other project drawings.

No.	Date	Issue/Revision Notes
Α	3/15/2022	REVIEW
В	3/17/2022	SUBMIT
С	4/3/2022	SUBMIT

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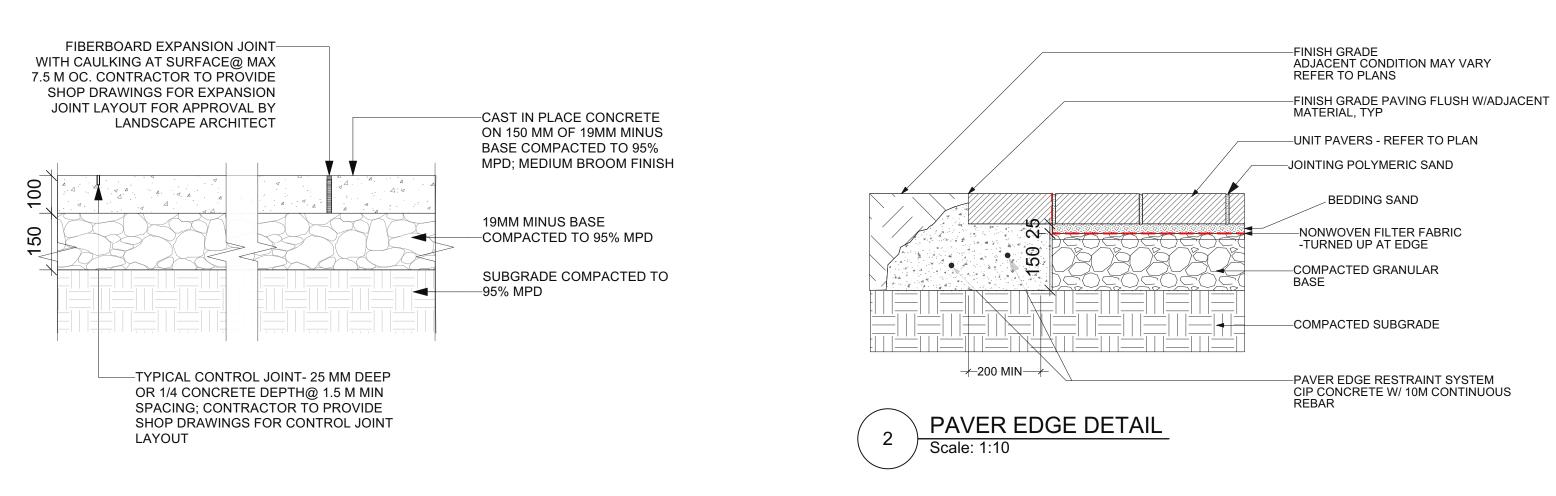
Desired Tills

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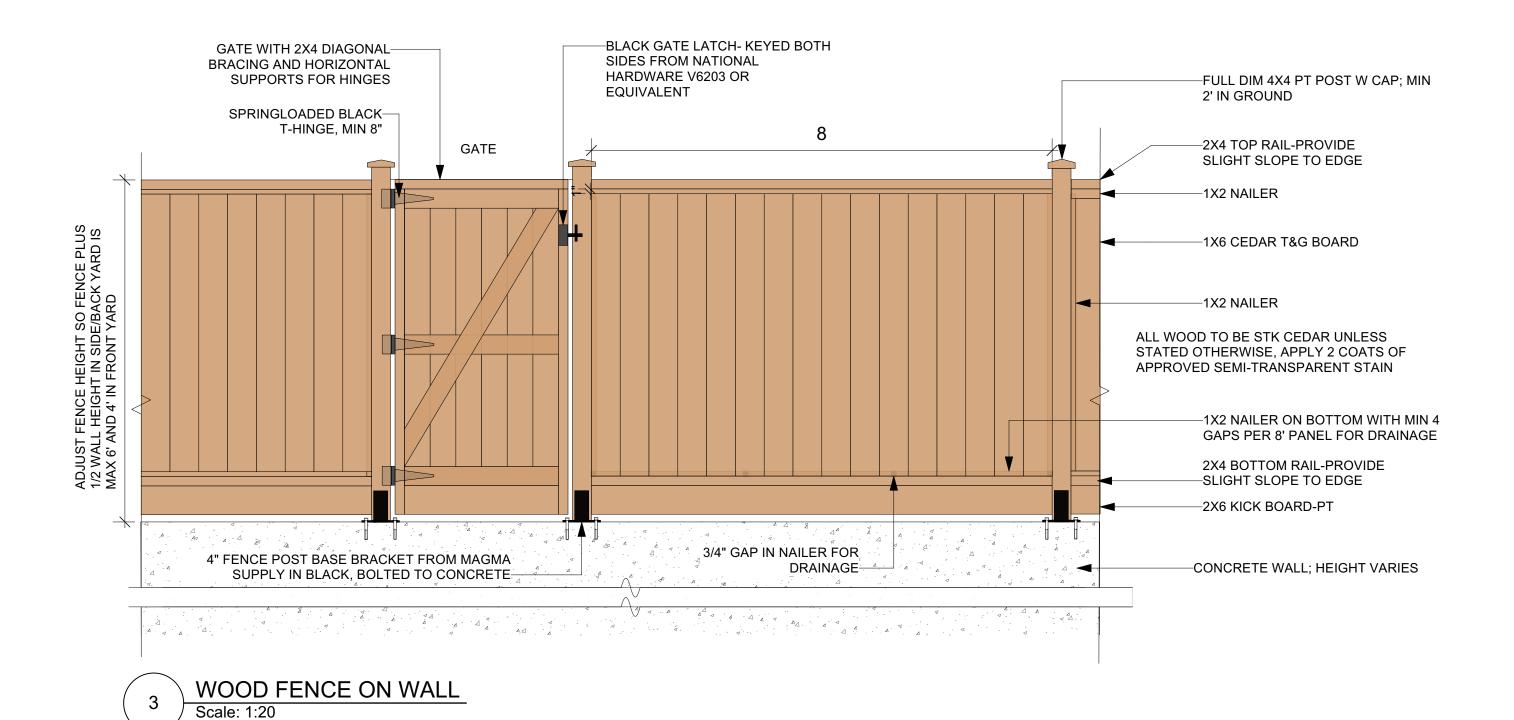
TRIPLEX DEVELOPMENT 259 E. 23RD ST. NORTH VANCOUVER

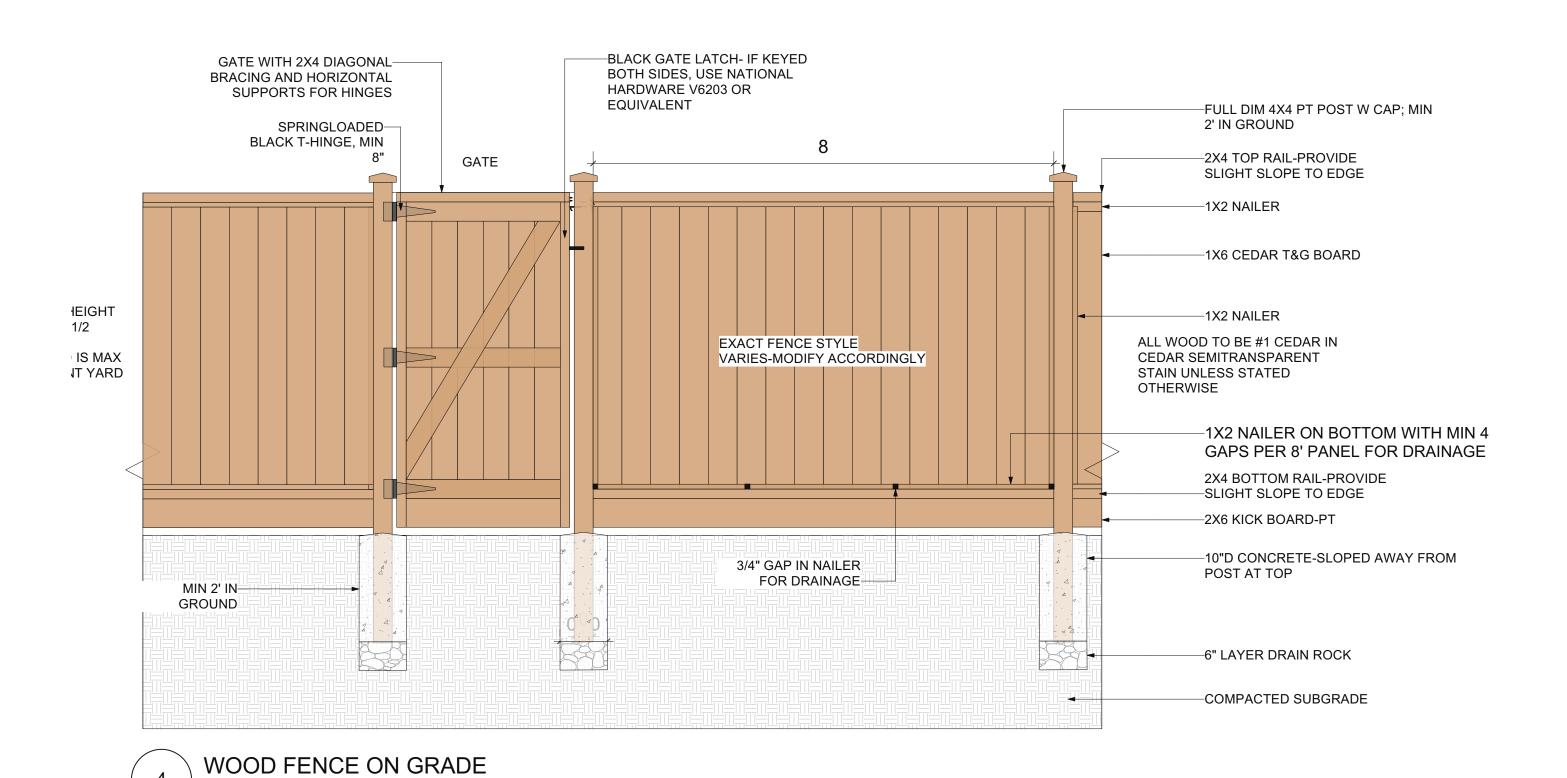
TREE MANAGEMENT

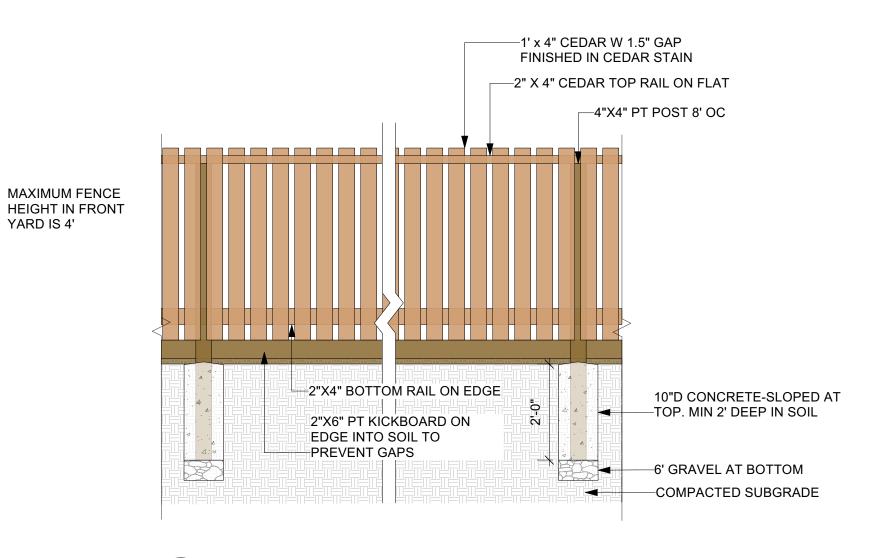
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YARD IS 4'

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**DETAILS** 

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