

LANDSCAPE CONTRACT DOCUMENTS

PROJECT: LANDSCAPE FOR MULTIFAMILY DEVELOPMENT

LOCATION: 2645 MAHON AVENUE, NORTH VANCOUVER
CLIENT: KS MECHANICAL LTD.
ARCHITECT/ DESIGNER: 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 RESIDENTIAL DEVELOPMENT PROJECT. THIS INCLUDES BUT NOT LIMITED TO, SITE DEMOLITION, SITE PREPARATION, GRADING AND DRAINAGE, SURRY AND INSTALLATION OF GROWING MEDIUM, LANDSCAPE PLANTS, MULCH, IRRIGATION SYSTEM, LANDSCAPE PAVERS, CIP CONCRETE WALK/WALLS/STAIRS, FENCING, GATES, LANDSCAPE LIGHTING, ONE YEAR WARRANTY AND ONE YEAR LANDSCAPE MAINTENANCE. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ELECTRICAL AND WATER FEED TO ALLOW FOR THE INSTALLATION OF A COMPLETE, FUNCTIONING LANDSCAPE LIGHTING AND IRRIGATION SYSTEM. LANDSCAPE DESIGN/WORKS IS TO BE COORDINATED WITH THE ARCHITECT AND OTHER CONSULTANTS.

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 csia-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

1. SCOPE OF THE STANDARD
2. CONTRACT ADMINISTRATION
3. SITE PREPARATION AND PROTECTION
4. GRADING AND DRAINAGE
5. GROWING MEDIUM
6. PLANTS AND PLANTING
7. MULCHING
8. SEEDING AND SODDING
9. LANDSCAPE MAINTENANCE
10. 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

2. MMCD (LATEST EDITION) SPECIFICATIONS AND DRAWINGS, WITH MUNICIPAL SUPPLEMENTARY SPECIFICATIONS AND ALL APPLICABLE MUNICIPAL BY-LAWS.

3. FOR ALL CHILDREN'S PLAY SPACES AND EQUIPMENT, THE FOLLOWING STANDARDS ARE APPLICABLE: CAN/CSA-Z614-14 AND IPEMA (INTERNATIONAL PLAY EQUIPMENT MANUFACTURERS ASSOCIATION) STANDARD. SPECIFICATIONS FOR PLAY SURFACES TO INCLUDE ASTM F1292/1951/2075/2223/F355

NOTES:

1. IN CASE OF CONFLICTING SPECIFICATIONS THE MOST STRINGENT SPECIFICATION PREVAILS
2. 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
3. CONTRACTOR TO PROVIDE DIGITAL PHOTOS OF ALL TREES 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 MUST BE USED TO SHOW THE HEIGHT OF A PLANT AS WELL AS A TAPE MEASURE TO SHOW CALIPER SIZE.
4. PLANT SEARCH IS TO INCLUDE ALL NURSERIES WITHIN THE REGION OF METRO VANCOUVER.
4. CONTRACTOR TO PROVIDE DOCUMENTATION (EG INVOICES, SHIPPING RECEIPTS) THAT CONFIRM GENUS, SPECIES, CULTIVAR AND SIZE FOR ALL PLANT MATERIAL INCLUDING SOD THAT IS SHIPPED TO SITE.
5. ALL PLANT MATERIAL TO BE INSTALLED BY OCTOBER 15 AT THE LATEST, OTHERWISE PLANTING WILL BE REQUIRED TO BE POSTPONED UNTIL THE SPRING OF THE FOLLOWING YEAR.

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.
3. 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 vicinity.
6. All work described by these documents shall be performed in full accordance with all applicable codes and standards.
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 work similar in scope and size, and on at least 3 comparable projects. The contractor needs to be 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 of approved growing medium over scarified subgrade. All lawn areas to contain minimum 6" (150) mm of approved growing medium over scarified subgrade.
7. All guardrails are required wherever 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 appropriate engineer (eg structural, geotechnical). Contractor to provide engineer stamped shop drawings for Landscape Architect.
11. Landscape installation to be reviewed by registered Landscape Architect.

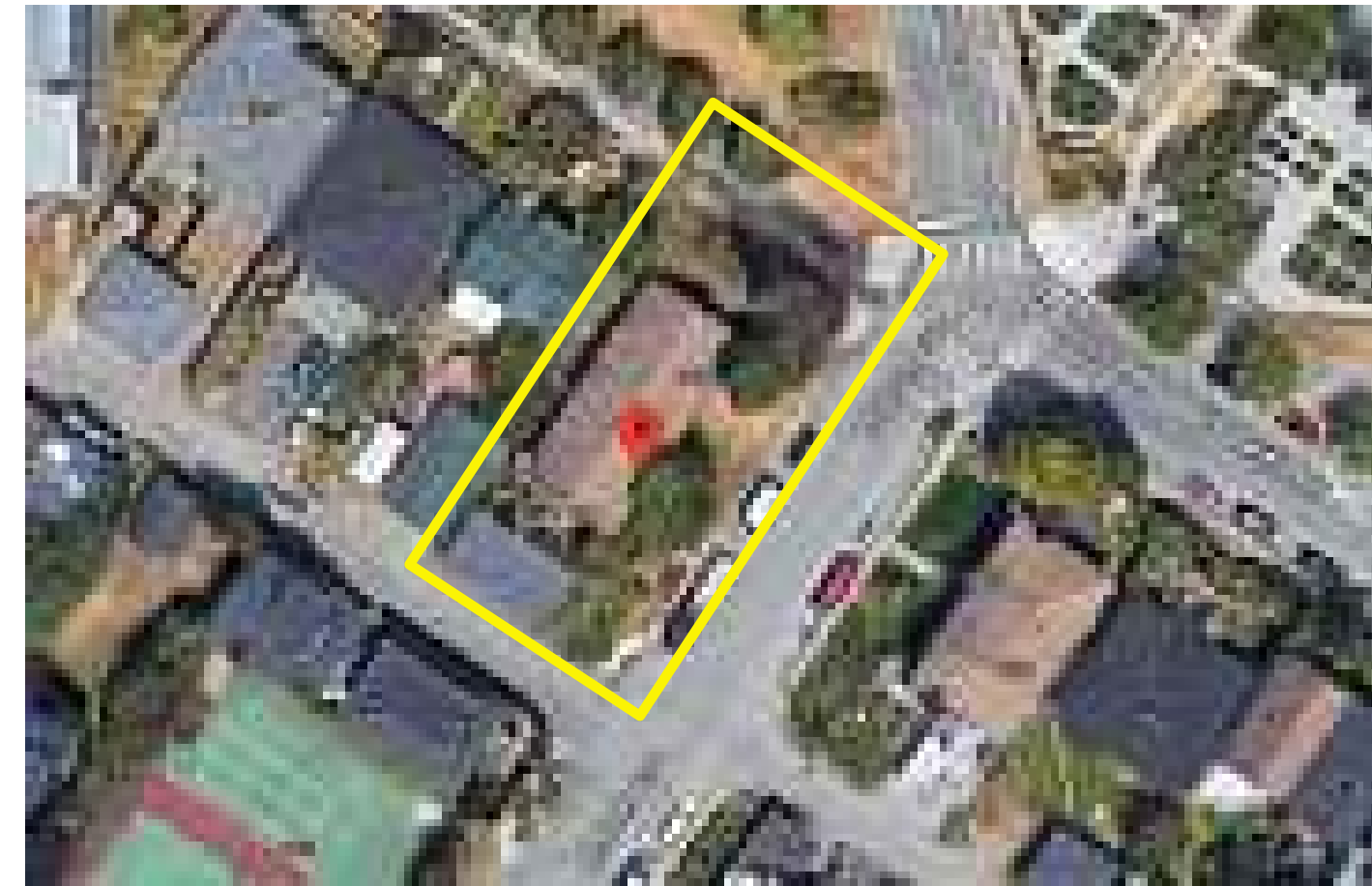
GENERAL TREE NOTES

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 adequately 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 or modify". Contact your project arborist for any TPZ barrier issues.
6. Refer to arborist report and drawing where applicable.

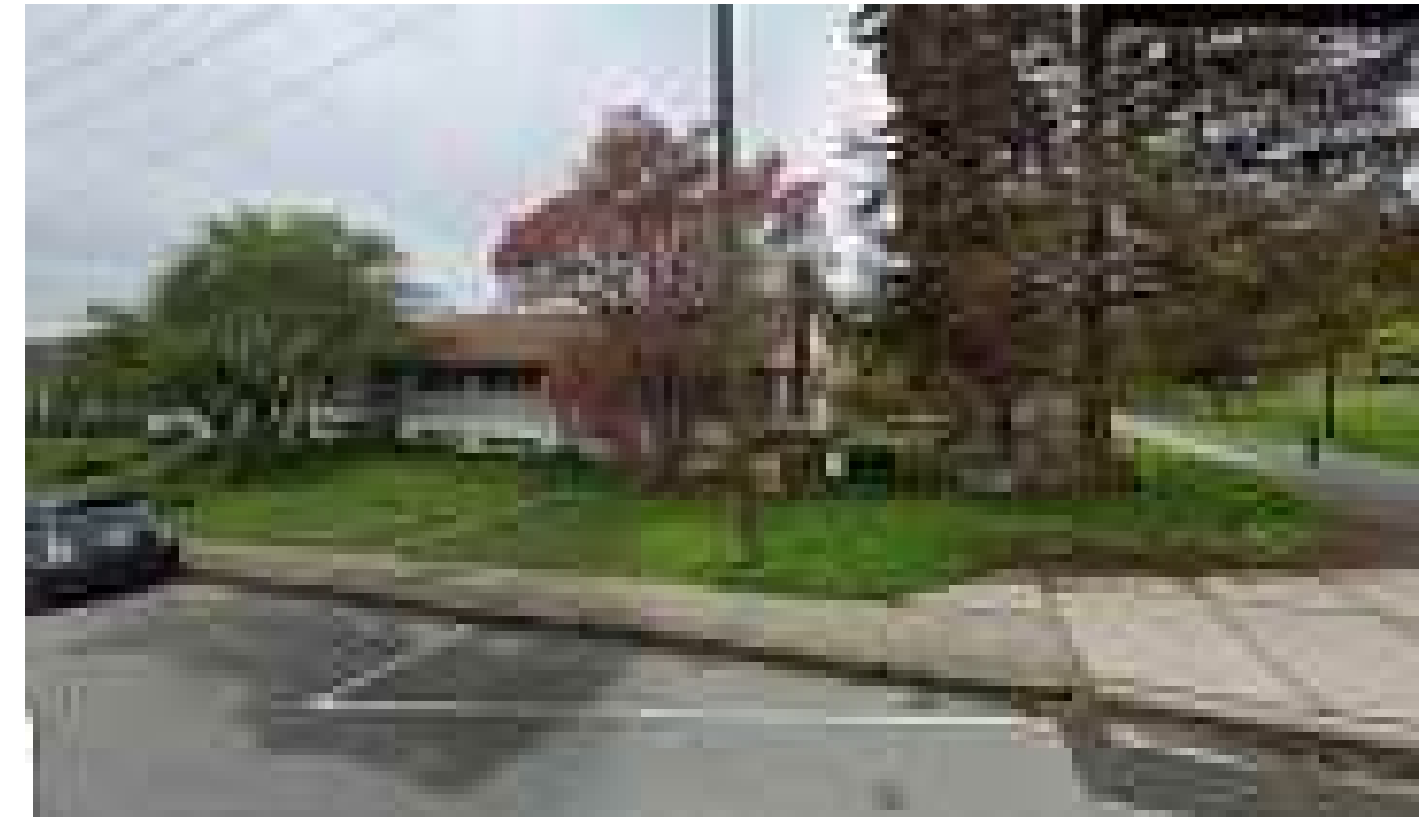
MATERIALS LIST-COORDINATE WITH SPECIFICATIONS

1. CONCRETE FLATWORK: 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 for consultant review prior to placing showing expansion and control joints.
2. FENCE- POST SADDLE BRACKET: By Simpson Strong-Tie, WUB44RHDG for full dimension 4" post, galvanized with 15M rebar.
3. FENCE-WOOD: Full dimension #2 and better cedar boards, finished with 2 coats of Sikkens semi-transparent cedar stain. Posts and kick board to be full dimension wood, incised and rated for ground contact approved per CCA/MCA PT.
4. GRANULAR BASE: To be minimum 4" depth of 3/4" minus road base compacted to 95% MPD and free of impurities per MMCD specifications.
5. GRAVEL LAYER: 3/4" diameter crush drain rock at depth of 4" min
6. 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: 50-70% sand, maximum 25% fines (max 20% clay), 10-20% organic matter, with pH between 4.5-6.5. Minimum 6" depth 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 Pacific Soil Analysis will be required at contractor's expense. It is the contractor's responsibility to ensure all growing medium used meets specifications. 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. For growing medium on roof or suspended slab, see section under Green Roof.
7. HANDRAILS FOR STAIRS: 36 " high measured from front edge of tread, powder coated medium gloss charcoal aluminum, installed to BC Building code. Exact style to be determined by Owner.
8. 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. Quick couplers to be on their separate zone. Controller to have 2 extra zones for future expansion and if installed outside, to have controller and wiring secured in a lockable, weatherproof 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 a water service line and connecting irrigation system to water service line complete with backflow preventor, pressure reducing valve, blowout and isolation valves. Contractor to adjust irrigation controller, sprinkler heads, drip lines and commission system in addition to providing as-built drawings and a one year warranty.
9. LIGHTING-BY KICHLER: Lighting fixtures and accessories to be Kichler 12 V, LED, as required from the following: 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/ Transformer sized to allow for an additional 50 watt capacity; Photocell controller to be Kichler 15565BK or equivalent, with a 24 hour digital timer. 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 and timer secured in a lockable and weatherproof cabinet if accessible to the public. All wires to be hidden and buried min 8" in soil. Refer to architectural drawings for specifications for exterior building lights.
10. LIGHTING-GENERAL: Contractor is responsible for providing a complete operating system with power source, wiring, photocell sensor and timer. If timer is outside, it will need to be secured in a lockable and weatherproof cabinet. All work to conform to applicable codes.
11. MULCH: To be composted fir bark, having dark brown, fine texture and 1/2" minus, applied evenly at a 2" depth over plant beds. Available from Augustine Soil and Mulch (604 465-5193) or equivalent.
12. 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 throughout the Metro Vancouver area except if indicated otherwise. Any plant substitutions must be approved by Landscape Architect. See Notes on left column of Cover Page.
13. RAILINGS: Height per drawings. Finish to be powder coated medium gloss black charcoal. Railings to be installed where there is a fall height of 2' or more, minimum 42: high and installed per BC Building code. Maximum gap between pickets to be 4". Posts to be min 2" d. and maximum 6' oc. Coordinate with architect/engineering drawings. Exact style to be determined by Owner. Contractor to supply shop drawings for approval by landscape architect.
14. RETAINING WALL-CONCRETE: Per applicable industry standards. Concrete to be reinforced with rebar as shown on drawings. Drawings are to be confirmed with structural engineer. For retaining walls over 4' high, or where there may be issues with global stability, stamped engineered drawings are required. Provide shop drawings for consultant review prior to placing showing expansion and control joints.
15. SOD: All sod to be sand based sod (Perennial rye/Kentucky bluegrass) with no netting. No clay or silt soil to be allowed with sod.
16. STEPS-CONCRETE: Medium broom finish, sloped 2% to front of tread per BC Building code. Coordinate with architect/engineering drawings.
17. WOOD: Per industry standards. All exterior wood to be rot resistant, either western red cedar, yellow cedar, robinia, ipe or pressure treated (PT). Minimum standard to be #2 and better. Wood to be finished with minimum 2 coats of an approved exterior grade finish. All wood in contact with ground to be incised, ground contact approved per CCA/MCA PT. All cuts to be sealed prior to installation.

NOTE: ALL MATERIALS SHOWN ON DRAWINGS ARE NOT NECESSARILY 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



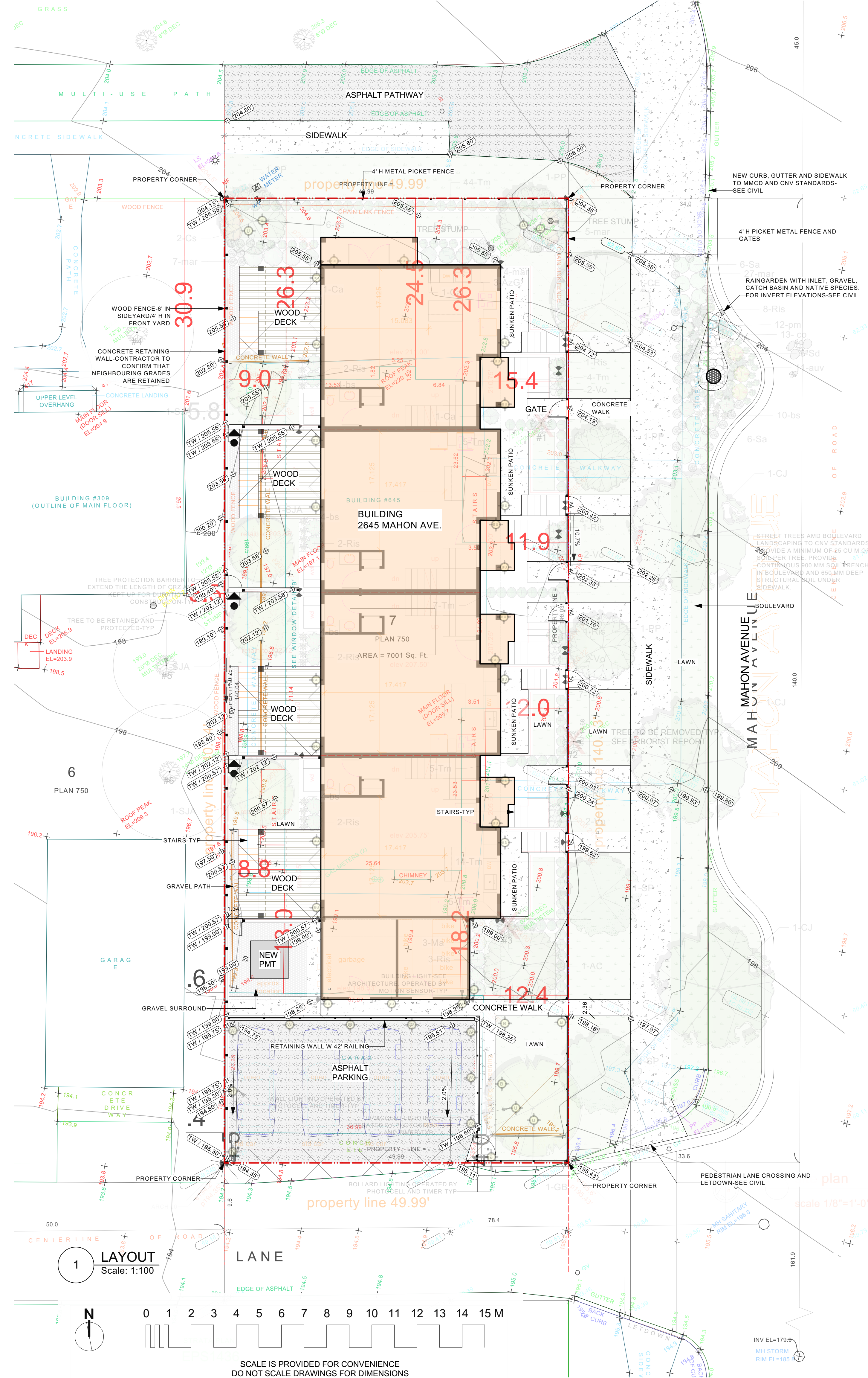
STREET VIEW OF PROJECT SITE

No.	Date	Issue/Revision Notes
A	10/7/2023	FOR COORDINATION

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Design Firm	SW LANDSCAPE ARCHITECT	
	919 MELBOURNE AVENUE, NORTH VANCOUVER stevewong234@gmail.com 778 834-8959 www.swlandscapearchitect.com	
Client	KS MECHANICAL LTD	
Project Title	MULTIFAMILY DWELLING 2645 MAHON AVENUE, NV	
Sheet Title	COVER SHEET	
Project Manager	STEVE WONG	Project ID 2023-8
Drawn By	SW	Scale AS NOTED
		Sheet No.
Date	SEPTEMBER 2023	L-0
CAD File Name	2645 MAHON NV_vwx	_____ of _____
		5



GENERAL PROJECT AND CONTRACTOR NOTES

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- Coordinate landscape drawings with architect/engineer and all other consultant drawings.

LEGEND

- EXISTING ELEVATION
- PROPOSED ELEVATION
- PROPOSED TOP OF WALL ELEVATION
- PROPOSED BOTTOM OF WALL ELEVATION
- PROPERTY LINE
- AREA DRAIN
- TRENCH DRAIN
- ASPHALT
- CONCRETE
- FIBAR
- SAND
- STONEMWORK
- SLABS/TILES
- WOOD DECK
- GRAVEL
- GRASS

No.	Date	Issue/Revision Notes
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 stevewong234@gmail.com 778 834-8959
 www.swlandscapearchitect.com

Client: **KS MECHANICAL LTD**

Project Title: **MULTIFAMILY DWELLING
 2645 MAHON AVENUE, NV**

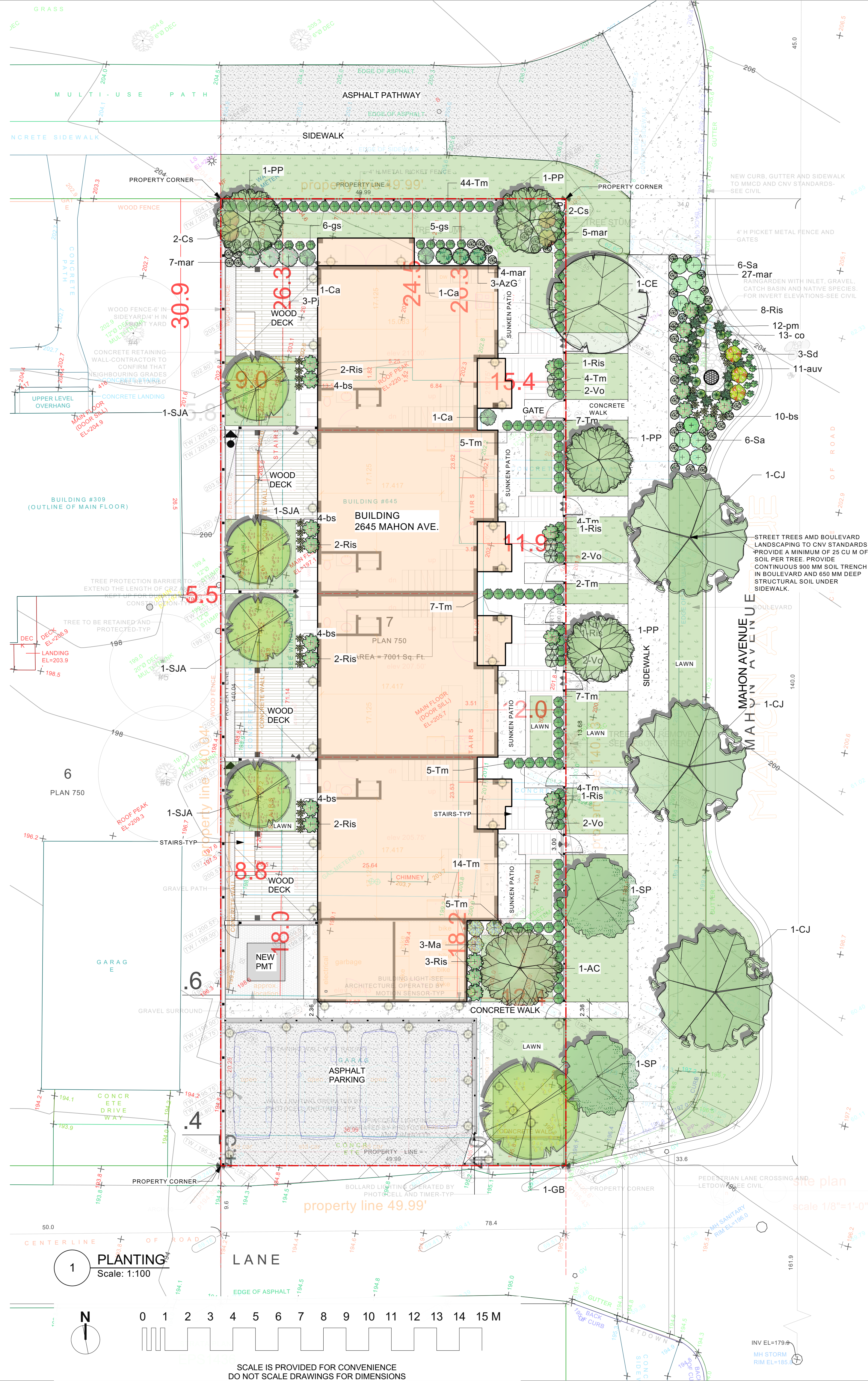
Sheet Title: **LAYOUT**

Project Manager: STEVE WONG	Project ID: 2023-8
Drawn By: SW	Scale: AS NOTED
Date: SEPTEMBER 2023	Sheet No.: L-1
CAD File Name: 2645 MAHON NV.vrx	of 5

1 LAYOUT
 Scale: 1:100



SCALE IS PROVIDED FOR CONVENIENCE
 DO NOT SCALE DRAWINGS FOR DIMENSIONS



PLANT LIST 645 MAHON CNV

Botanical Name	Common Name	No.	Size	Spacing	Sym
TREES					
<i>Acer circinatum</i>	Vine maple	1	2.4 m	as shown	AC
<i>Cercidiphyllum japonicum</i>	Katsura tree	3	7 cm	as shown	CJ
<i>Cornus 'Eddie's White Wonder'</i>	Flowering dogwood	1	7 cm	as shown	CE
<i>Ginkgo biloba 'Autumn Gold'</i>	Ginkgo	1	7 cm	as shown	GB
<i>Parrotia persica 'Spire'</i>	Parrotia	4	7 cm	as shown	PP
<i>Stewartia pseudocamellia</i>	Stewartia	2	7 cm	as shown	SP
<i>Styrax japonicus 'Snowcone'</i>	Japanese snowbell	4	7 cm	as shown	SI
SHRUBS					
<i>Azalea 'Girard Fuchsia'</i>	Azalea	3	#2 pot	as shown	AzG
<i>Cornus alba 'Elegantissima'</i>	Variegated dogwood	3	#2 pot	as shown	Ca
<i>Cornus stolonifera</i>	Redtwig dogwood	4	#2 pot	as shown	Cs
<i>Mahonia aquifolium</i>	Oregon grape	3	#2 pot	as shown	Ma
<i>Pieris japonica 'Mountain Fire'</i>	Lily-of-the-valley shrub	4	#2 pot	as shown	Pj
<i>Ribes sanguinum</i>	Red flowering currant	23	#2 pot	as shown	Ris
<i>Spiraea douglasii</i>	Hardhack	3	#2 pot	as shown	Sp
<i>Symphoricarpos alba</i>	Snowberry	12	#2 pot	as shown	Sp
<i>Taxus media 'Rising Star'</i>	Yew	112	1.2 m	as shown	Tm
VINES, GROUND COVERS AND HERBACEOUS PERENNIALS					
<i>Arctostaphylos uva-ursi</i>	Kinnikinnick	11	#1 pot	as shown	auv
<i>Blechnum spicant</i>	Deer fern	26	#1 pot	as shown	bs
<i>Carex obnupta</i>	Slough sedge	13	#1 pot	as shown	co
<i>Gaultheria shallon</i>	Salal	11	#1 pot	as shown	gs
<i>Mahonia repens</i>	Creeping oregon grape	43	#1 pot	as shown	mar
<i>Polystichum munium</i>	Western sword fern	12	#1 pot	as shown	pm

Contractor to be certified by BCLNA
 All plants and installation to meet or exceed latest Canadian Landscape standard (CLS) #1 standards
 Contractor to verify numbers and placement of plants prior to installation

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LEGEND

	EXISTING ELEVATION
	PROPOSED ELEVATION
	PROPOSED TOP OF WALL ELEVATION
	PROPOSED BOTTOM OF WALL ELEVATION
	PROPERTY LINE
	AREA DRAIN
	TRENCH DRAIN

	ASPHALT
	CONCRETE
	FIBAR
	SAND
	STONWORK
	SLABS/TILES
	WOOD DECK
	GRAVEL
	GRASS

No.	Date	Issue/Revision Notes
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Client: KS MECHANICAL LTD

Project Title: MULTIFAMILY DWELLING
 2645 MAHON AVENUE, NV

Sheet Title: PLANTING PLAN

Project Manager: STEVE WONG | Project ID: 2023-8

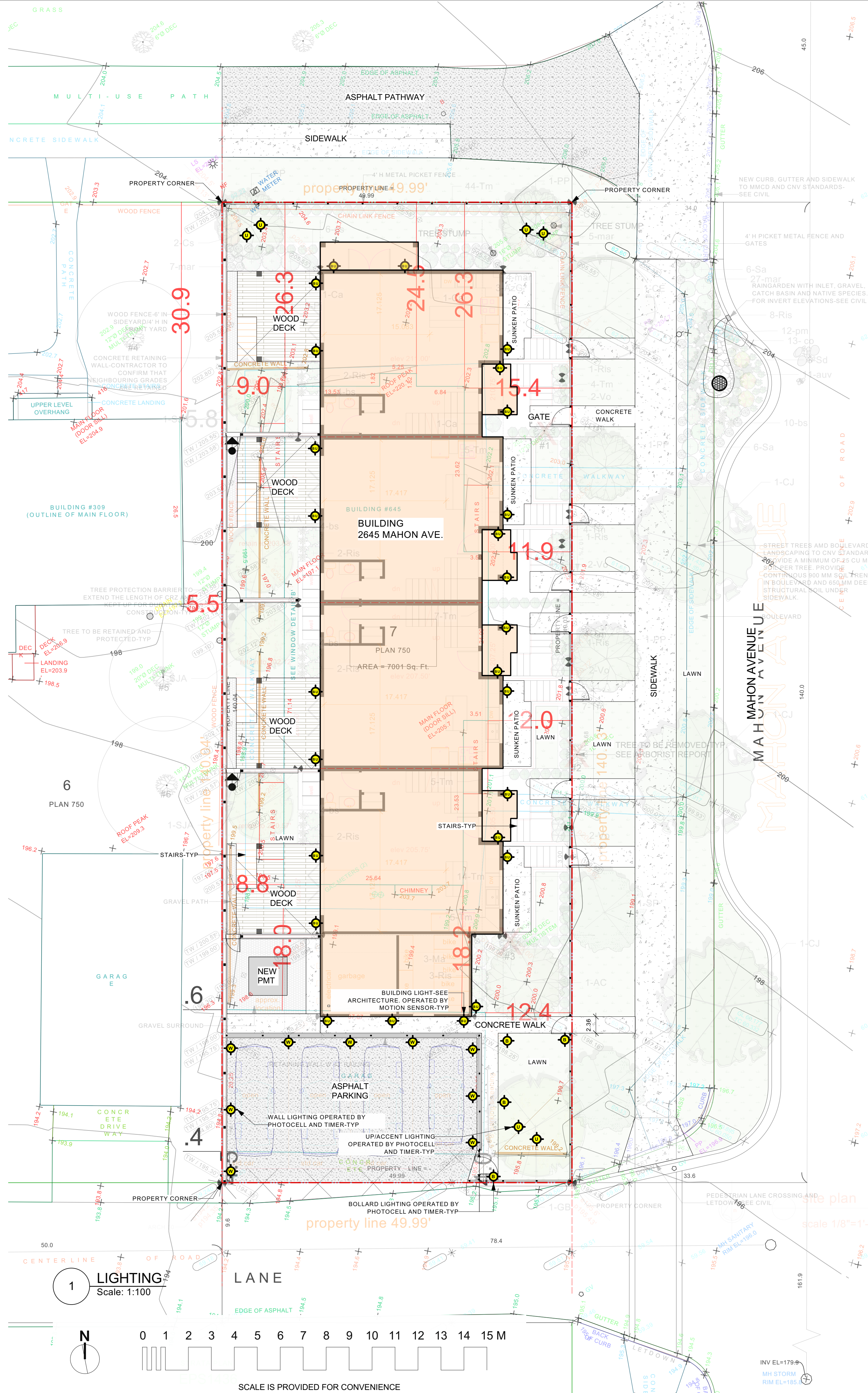
Drawn By: SW | Scale: AS NOTED

Date: SEPTEMBER 2023 | Sheet No.: L-2 of 5
 CAD File Name: 2645 MAHON NV.vwx

1 PLANTING Scale: 1:100



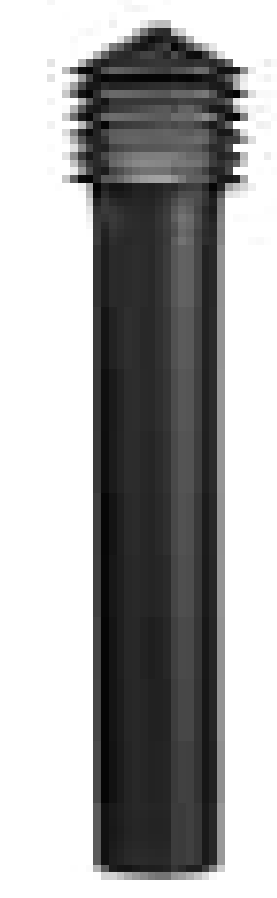
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2 KICHLER ACCENT LIGHT
Scale: N/A

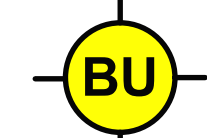
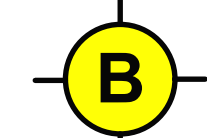
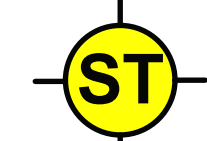
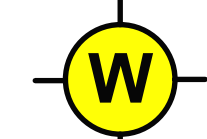
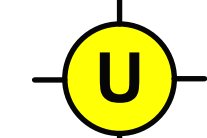
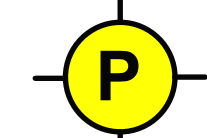
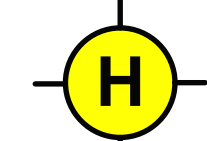

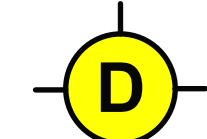


3 KICHLER STEP/WALL LIGHT
Scale: N/A



4 KICHLER BOLLARD LIGHT
Scale: N/A

LIGHTING LEGEND

-  BUILDING LIGHT
-  BOLLARD LIGHT
-  STEP LIGHT
-  WALL LIGHT
-  UP/ACCENT LIGHT
-  PATH LIGHT
-  HARDSCAPE LIGHT
-  DECK LIGHT
-  DOWN/ACCENT LIGHT

No.	Date	Issue/Revision Notes
A	10/7/2023	FOR COORDINATION

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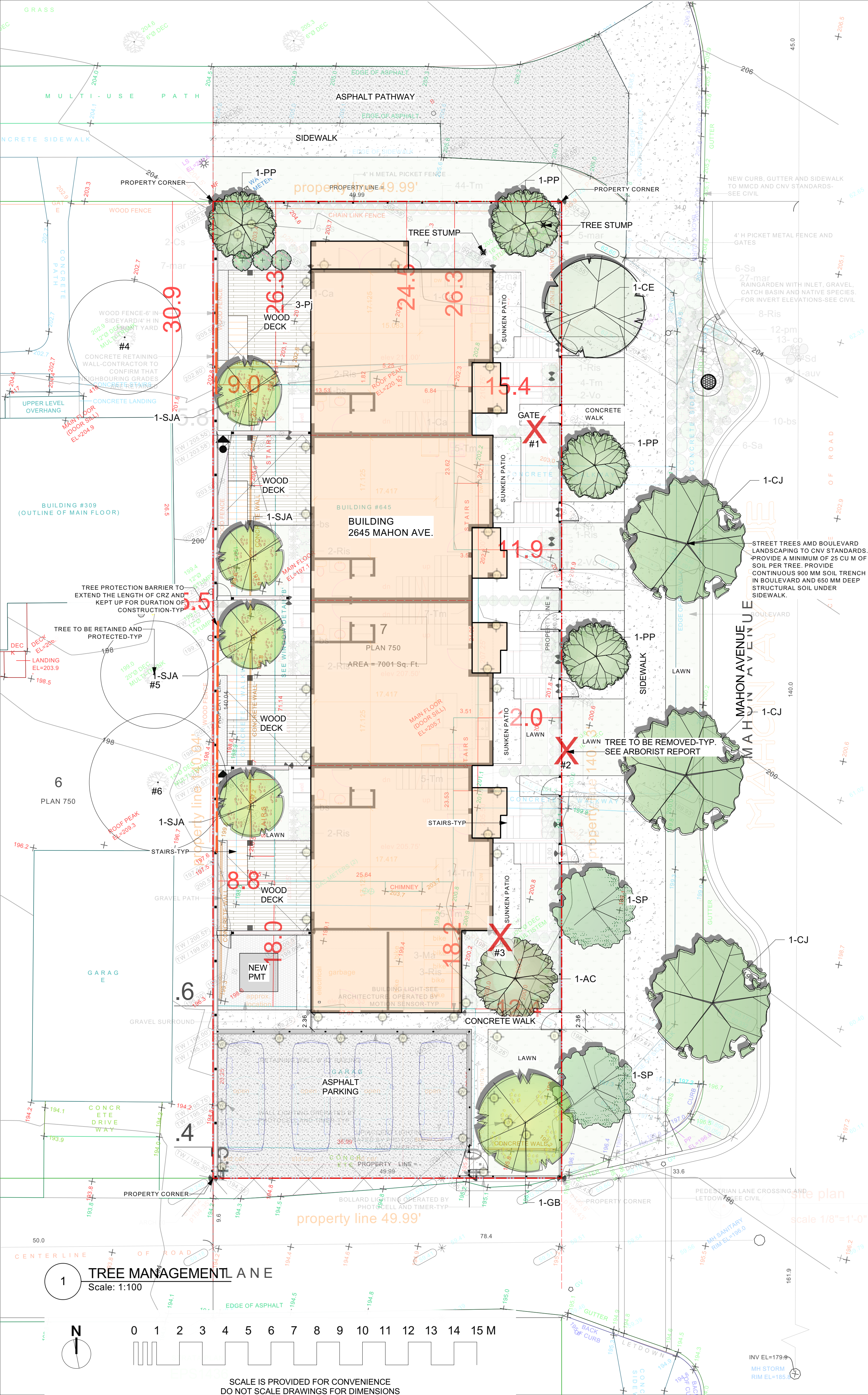
Project Title: MULTIFAMILY DWELLING
2645 MAHON AVENUE, NV

Sheet Title: LIGHTING PLAN

Project Manager: STEVE WONG | Project ID: 2023-8
Drawn By: SW | Scale: AS NOTED

Date: SEPTEMBER 2023 | Sheet No.: L-3
CAD File Name: 2645 MAHON NV.vwx | 5

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1 TREE MANAGEMENT A NE
Scale: 1:100

6.0 TREE INVENTORY

Table 1 - Tree Inventory
Klimo & Associates Ltd.
March 31, 2023
645 Mahon Ave, City of North Vancouver

ID#	Survived Y/N	On-site (ON) Off-site (OFF) City (C)	Common name	Botanical name	DBH (cm)	LCR (m)	Canopy (DIA. M)	Condition	Comments	Retention Suitability	Retain / Remove	TPZ (m)
T1	Yes	On-site	Dogwood	Cornus	25/22 /18	40	10	The overall growth of the subject tree was examined to have developed a multi-stemmed structured base. The overall growth of the crown was observed to have a sweep towards the east. The main stems were observed to have been pruned in the past. Subject tree is in fair condition.	Subject tree falls towards the edge of the proposed building footprint and will be within the zone of the heaviest construction & excavation related activities.	Marginal	Remove	3.9
T2	Yes	Shared (City)	Hawthorn	Crataegus	25/28 /32	40	10	The overall growth of the subject tree was examined to have developed a multi-stemmed structured base. The main stems were observed to have been pruned in the past. Sections of observable cavity was observed within its structure. Subject tree is in fair condition.	Subject tree falls towards the edge of the proposed building footprint, boulevard & perimeter civil works, and will be within the zone of the heaviest construction & grading related activities. The city's authorization will be required for its removal.	Marginal	Remove	5.1
T3	Yes	On-site	Common plum	Prunus domestica	20/23 /20	30	7	The overall growth of the subject tree was examined to have developed a multi-stemmed structured base. The union was observed to be poorly structured with a deep union. The main stems were observed to have been pruned in the past. Sections of deadwood was observed within its structure. Subject tree is in fair condition.	Subject tree falls towards the edge of the proposed building footprint and will be within the zone of the heaviest construction & excavation related activities.	Marginal	Remove	3.8
T4	Yes	Off-site	Common apple	Malus domestica	20	30	5	Mature fruiting tree. Subject tree was examined to have developed a multi-stemmed structured overall growth form. The growth of the crown was observed to have a limited overall development. Observable deadwood and decay had been observed within its canopy. Subject tree is in fair condition.	Place Tree Protection barriers to protect its trunk, roots, and structure. Arborist supervision will be required during the site clearing process, excavation process, placement of the perimeter pathway, and removal/replacement of the perimeter fence.	Marginal	Retain	1.2
T5	Yes	Off-site	Hawthorn	Crataegus	40/15 /5	30	5	Subject tree was examined to have developed a multi-stemmed structured overall growth form. The growth of the crown was observed to have a limited overall development. Observable deadwood and decay had been observed within its canopy. Subject tree is in fair condition.	Place Tree Protection barriers to protect its trunk, roots, and structure. Arborist supervision will be required during the site clearing process, excavation process, placement of the perimeter pathway, and removal/replacement of the perimeter fence.	Marginal	Retain	3.3
T6	Yes	Off-site	Magnolia	Magnolia	15/10 /5	30	6	Subject tree was examined to have developed a multi-stemmed structured overall growth form. The growth of the crown was observed to be healthy and no major defects and or signs of stress were to be examined. Canopy was observed to have been maintained in the past. Subject tree is in fair to good condition.	Place Tree Protection barriers to protect its trunk, roots, and structure. Arborist supervision will be required during the site clearing process, excavation process, placement of the perimeter pathway, and removal/replacement of the perimeter fence.	Suitable	Retain	1.8

2 TREE TABLE FROM ARBORIST REPORT
Scale: NTS

ONSITE TREE SUMMARY

TREES REMOVED 3
TREES PLANTED 16
OFFSITE (8)
ONSITE (8)

REFER TO ARBORIST REPORT BY KLIMO AND ASSOCIATES, MARCH 31, 2023

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Project Title: MULTIFAMILY DWELLING
2645 MAHON AVENUE, NV

Sheet Title: TREE MANAGEMENT

Project Manager: STEVE WONG | Project ID: 2023-8

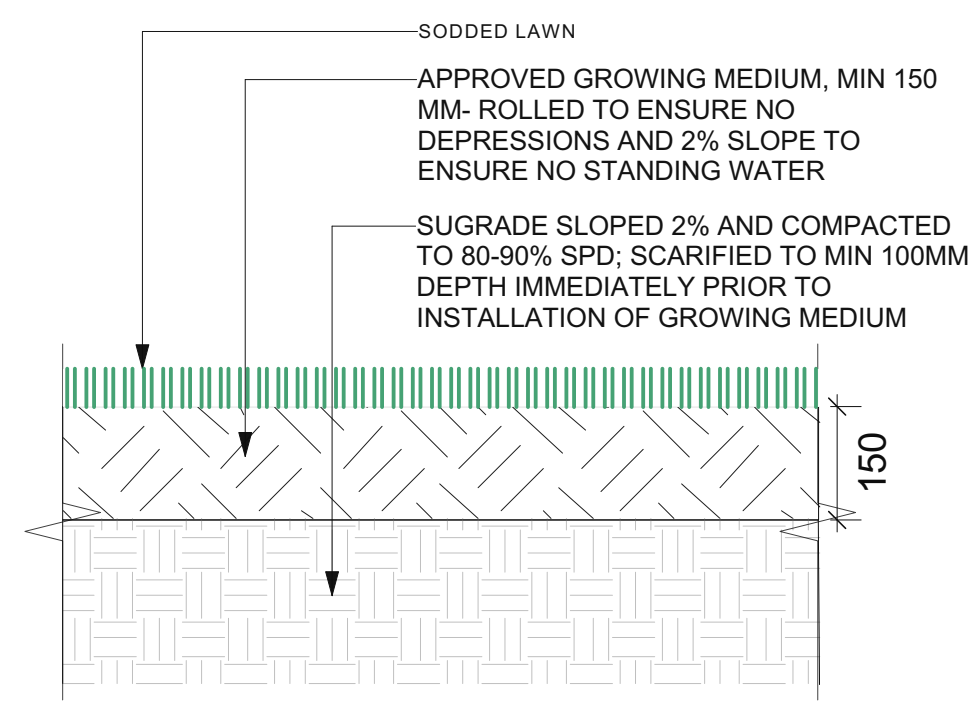
Drawn By: SW | Scale: AS NOTED

Date: SEPTEMBER 2023 | Sheet No.: L-4 of 5
CAD File Name: 2645 MAHON NV.vwx

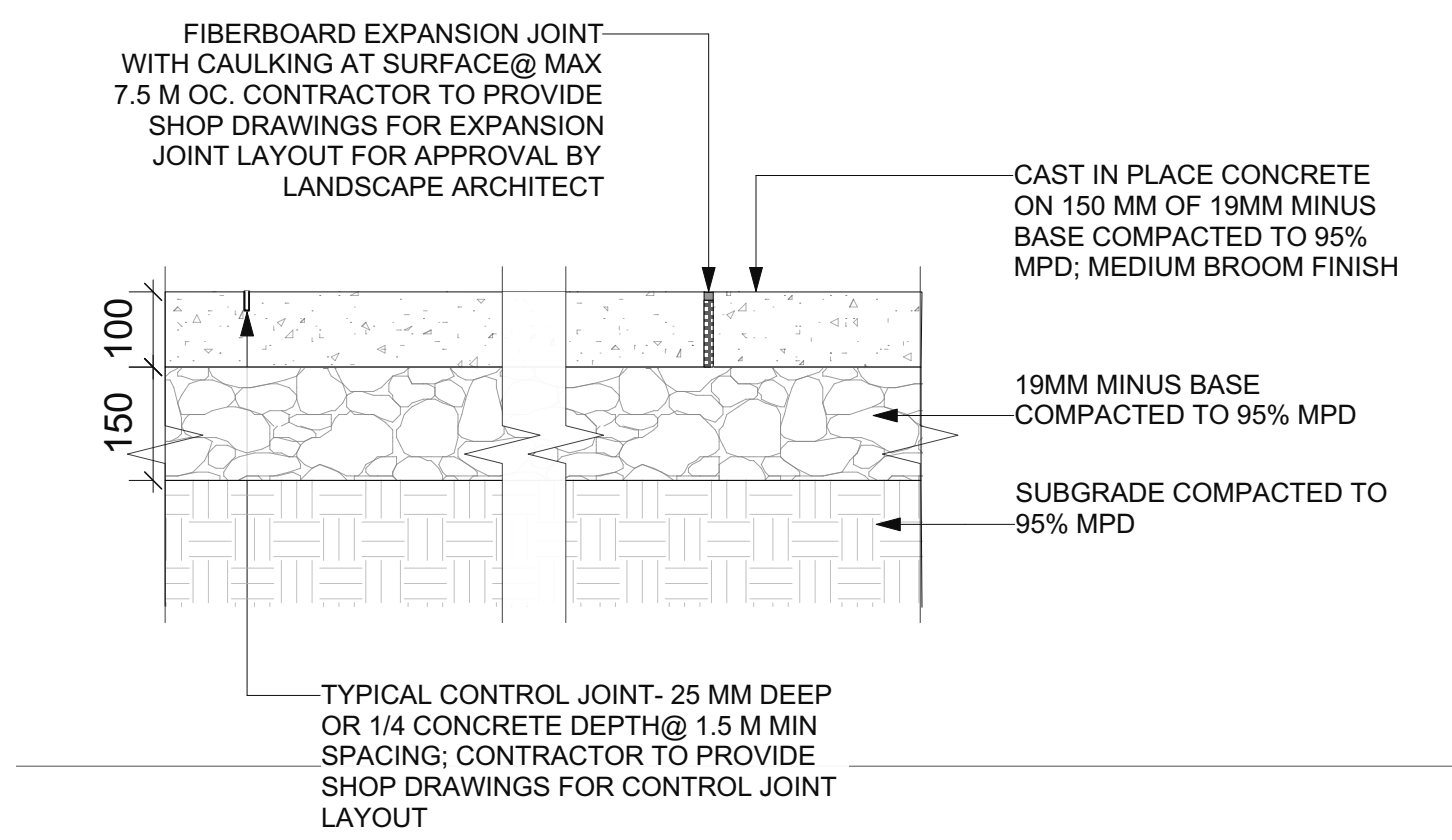


3 TREE MAP FROM ARBORIST REPORT
Scale: NTS

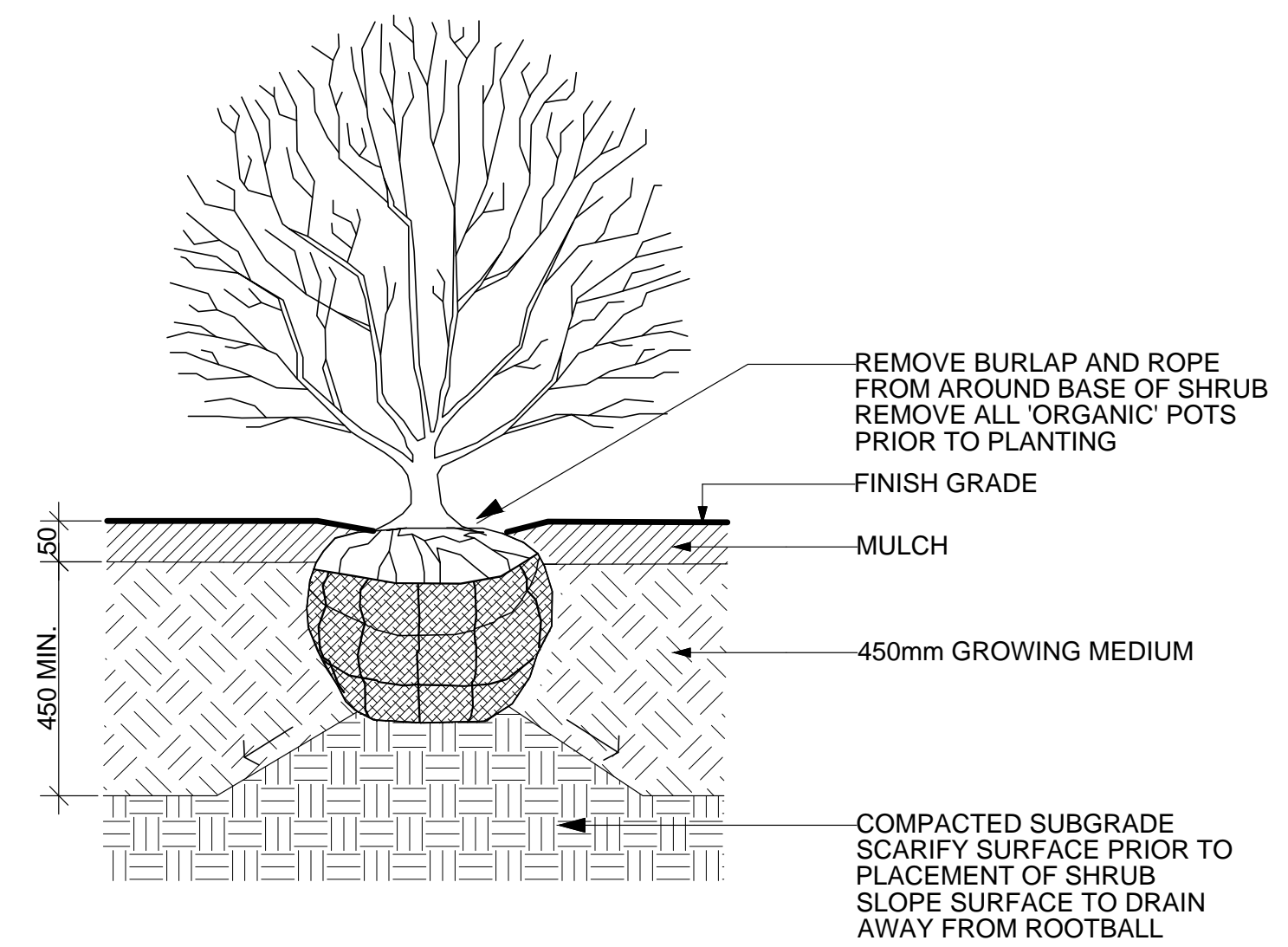
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1 SODDED LAWN DETAIL
Scale: 1:10

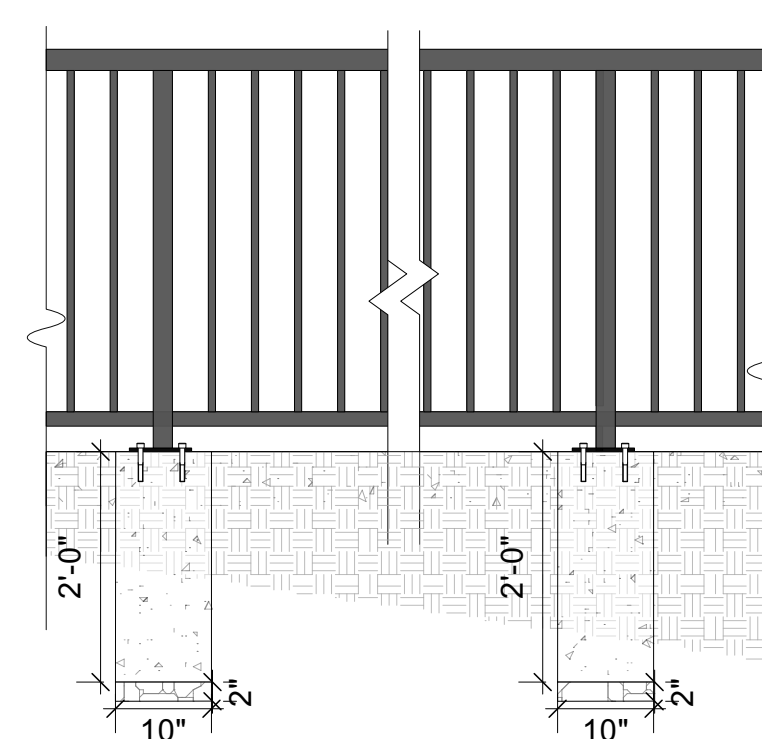


2 CIP FLATWORK
Scale: 1:10

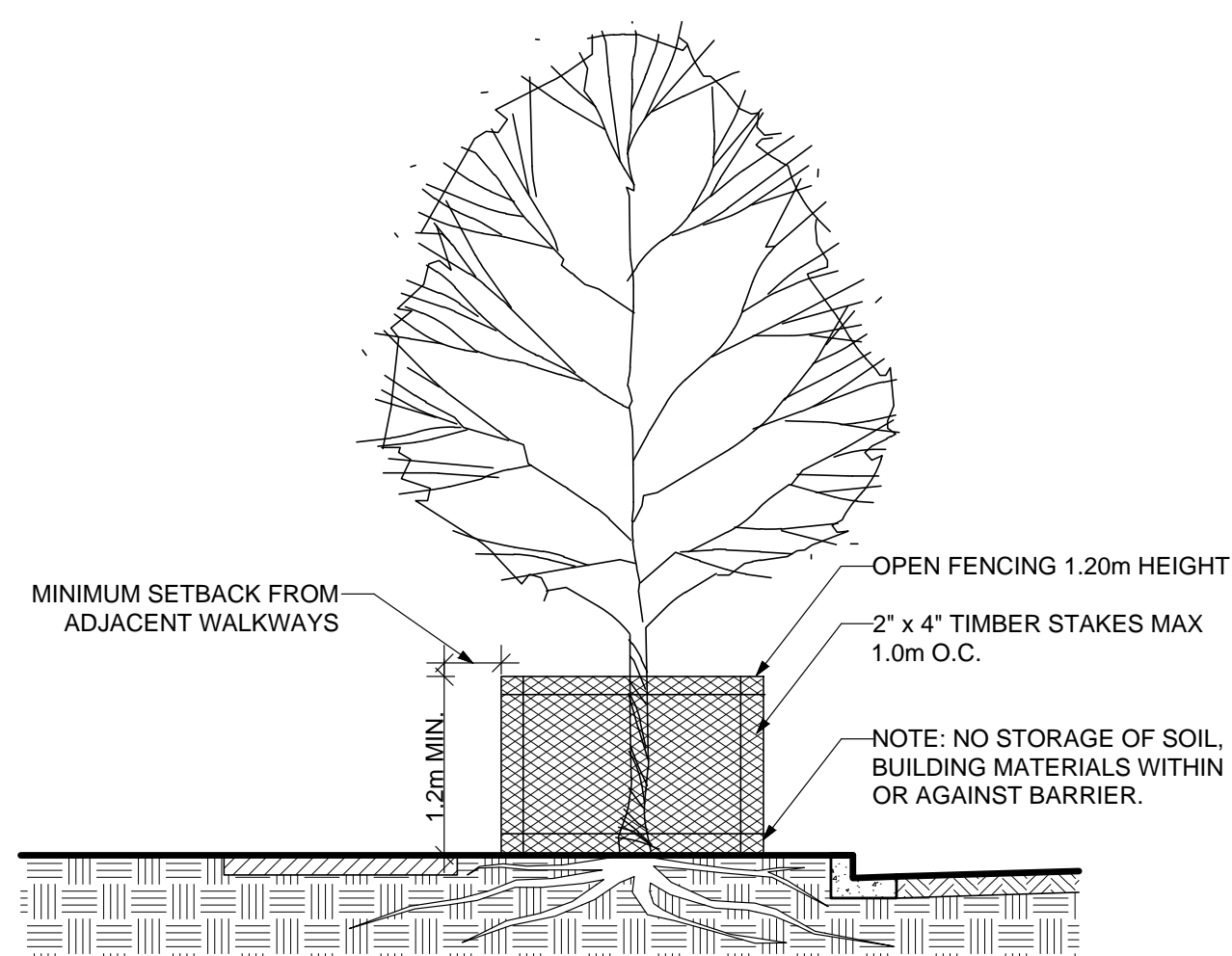


NOTES:
 1. SHRUB TO BE PLANTED WITH ELEVATION OF TOP OF ROOTBALL OR POT LEVEL WITH FINISH GRADE OF GROWING MEDIUM.
 2. COMPOSTED BARK MULCH AT 50mm DEPTH TO BE KEPT AT LEAST 50mm AWAY FROM STEMS OF SHRUB.
 3. PLANTING PIT MUST BE FREE DRAINING

3 SHRUB PLANTING DETAIL
Scale: N/A



4 METAL FENCE ON GRADE
Scale: 1:20

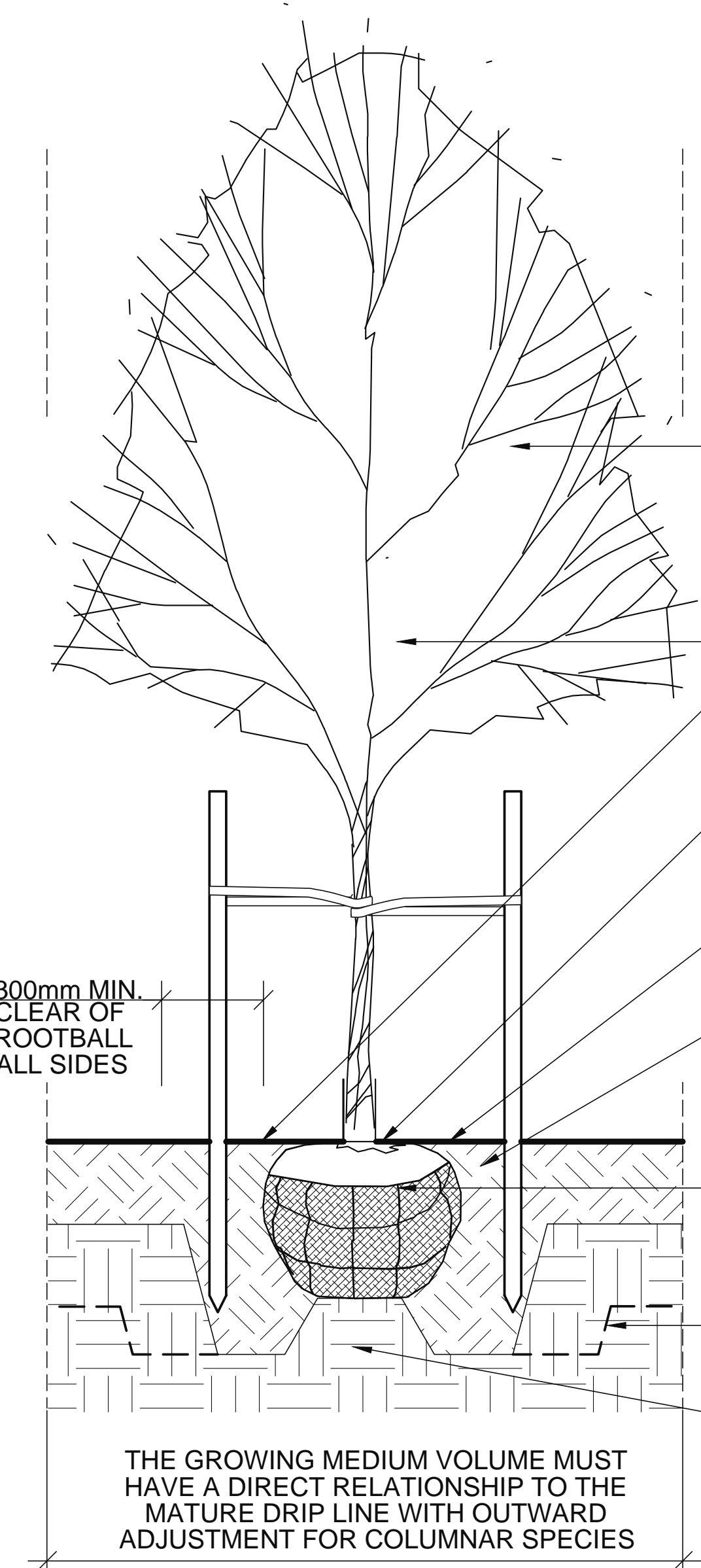


SCHEDULE A - TREE PROTECTION BARRIER

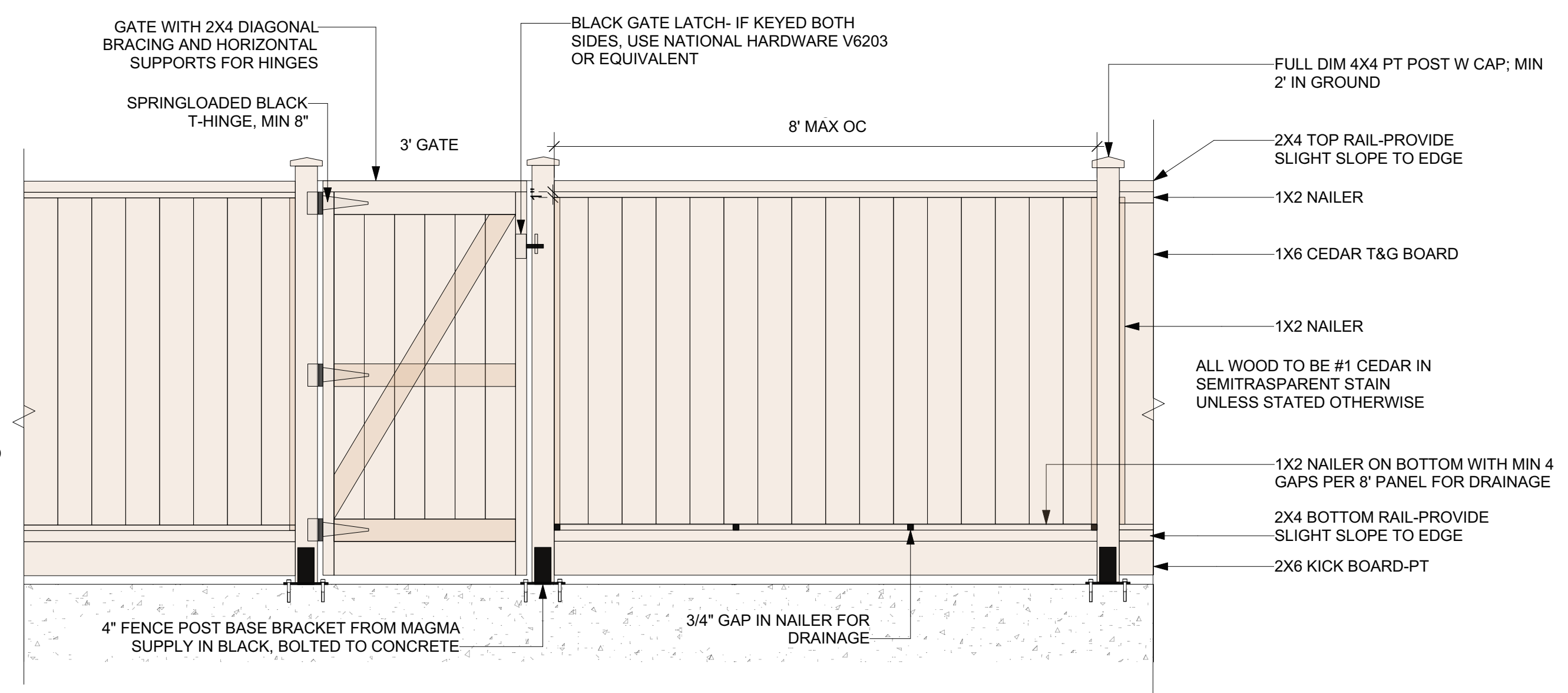
TREE PROTECTION DISTANCE TABLE		
TRUNK DIAMETER		MINIMUM DISTANCE FROM TRUNK (METERS)
CM	FT	
20	0.6	1.2
25	0.8	1.5
35	1.0	2.1
40	1.2	2.4
45	1.3	2.7
50	1.5	3.0
55	1.7	3.3
60	2.0	3.6
75	2.5	4.5
90	3.0	5.0
100	3.3	6.0

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.

5 TREE PROTECTION BARRIER
Scale: NTS



7 TREE PLANTING DETAIL
Scale: N/A



6 WOOD FENCE ON WALL
Scale: 1:20

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Project Title: MULTIFAMILY DWELLING
 2645 MAHON AVENUE, NV

Sheet Title: DETAILS

Project Manager: STEVE WONG
 Drawn By: SW

Project ID: 2023-8
 Scale: AS NOTED

Date: SEPTEMBER 2023
 CAD File Name: 2645 MAHON NV.vwx

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