



CITY OF COLWOOD

3300 Wishart Road | Colwood | BC V9C 1R1 | 250 294-8153
planning@colwood.ca | www.colwood.ca

File: DP000007 - Car Dealership Site Works at 2930 Brickshire Dr

DEVELOPMENT PERMIT DP000007

THIS PERMIT, issued **July 24, 2024**, is,

ISSUED BY: **CITY OF COLWOOD**, a municipality incorporated under the *Local Government Act*,
3300 Wishart Road, Victoria, BC, V9C 1R1

(the "City")

PURSUANT TO: Section 490 of the *Local Government Act*, RSBC 2015, Chapter 1

ISSUED TO: KOT VICTORIA LAND HOLDINGS LTD
C/O DOAK SHIRREFF LAWYERS LLP
200-537 LEON AVE
KELOWNA BC V1Y 2A9

(the "Permittee")

-
1. This Form and Character, and Environmental Development Permit applies to those lands within the City of Colwood described below, and any and all buildings, structures, and other development thereon:

LOT 2, SECTION 73, ESQUIMALT LAND DISTRICT, PLAN EPP119904
2930 BRICKSHIRE DR

(the "Lands")

2. This Development Permit regulates the development and alterations of the Land, and supplements the "*Colwood Land Use Bylaw, 1989*" (Bylaw No. 151), to ensure the Form and Character and Environmental considerations for the site works associated with the car dealership development on the Langford portion of the lot are consistent with the design and environmental guidelines for areas designated as "Mixed Use Employment Centre" and "Riparian" in the City of Colwood Official Community Plan (Bylaw No. 1700).
3. This Development Permit is **NOT** a Building Permit or a subdivision approval.

4. This Development Permit is issued subject to compliance with all of the bylaws of the City of Colwood that apply to the development of the Lands, except as specifically supplemented by this Permit.
5. The Director of Development Services or their delegate may approve minor variations to the schedules attached to and forming part of this Development Permit, provided that such minor variations are consistent with the overall intent of the original plans and do not alter the form and character of the development authorized by those plans.
6. If the Permittee does not substantially start the construction permitted by this Permit within 24 months of the date of this Permit, the Permit shall lapse and be of no further force and effect.
7. The development is to be constructed in accordance with the following plans and specifications, which are attached to and form as part of this permit:
 - Schedule 1 Architectural Drawings and Signage Plan prepared by Alan Lowe Architect Inc. dated June 27, 2024.
 - Schedule 2 Landscape Plan prepared by Lombard North Group dated April 9, 2024.
 - Schedule 3 Landscape Cost Estimate by Lombard North Group dated April 10, 2024.
 - Schedule 4 Restoration Plan and Cost Estimate by Aquaparian dated June 13, 2024.
 - Schedule 5 RAPR Assessment Report prepared by Cascadia Biological Services dated January 20, 2024.
 - Schedule 6 Civil Plans prepared by Aplin & Martin Consultants Ltd. Dated May 3, 2024.
8. This Development Permit authorizes the site works associated with the car dealership located on the Langford portion of the lot. The Lands shall not be altered, nor any buildings or structures constructed, except in accordance with the following conditions:

GENERAL

- 8.1. The following permits issued on the Lands by the City of Colwood apply, remain valid and are in no way diminished by this Development Permit:
 - 8.1.1. All conditions of DP-20-025 675 Meaford
 - 8.1.2. All conditions of DVP00009 2930 Brickshire Drive
- 8.2. This Permit shall not be construed as relieving the Permittee from compliance with any of the requirements contained within the Section 219 covenants registered as "CA8570294" and "CA9693817" and as amended.
- 8.3. British Columbia's archaeological sites are protected under the Heritage Conservation Act and shall not be altered or damaged without the required permits from the Provincial Archaeology Branch.
 - 8.3.1. There are areas of archaeological potential located within the subject property, which may contain archaeological sites protected by the Heritage Conservation Act. Please contact the Archaeology Branch of the Provincial Government (250-953-3334) to learn more about responsibilities and obligations during construction.

FORM AND CHARACTER CONDITIONS

Building Features

- 8.4. The form and character of the site works to be constructed on the Lands shall conform to the Architectural Drawings prepared by Alan Lowe Architect Inc. (Schedule 1).
- 8.5. Any future additions of telecommunications antennas or equipment to the exterior of the structures included in this Permit shall be architecturally integrated into the structures they are mounted on or screened from views so as not to be visually obtrusive, to the satisfaction of the Director of Development Services or their delegate.
- 8.6. No future construction/installation of unenclosed or enclosed outdoor storage areas or recycling/refuse collection shall be undertaken without the issuance of a further Development Permit or amendment to this Permit.

Signage

- 8.7. Any proposed signage shall be in accordance with the details provided in the Signage Plan prepared by Alan Lowe Architect Inc. (Schedule 1).
- 8.8. This Development Permit does not include any signage approvals. A separate sign permit will be required for any marketing signage.

Landscaping

- 8.9. The design and construction of the proposed landscaping shall be in substantial compliance with the Landscape Plan prepared by Lombard North Group (Schedule 2).
- 8.10. Prior to the issuance of the Development Permit, the Permittee shall provide the City with a written letter of engagement from a registered landscape architect agreeing to:
 - 8.10.1. Supervise and install the landscape work in accordance with the approved Landscape Plan prepared by Lombard North Group (Schedule 2); and
 - 8.10.2. Perform a final inspection and submit an inspection report to the City confirming substantial compliance with the approved landscape plan.
- 8.11. Prior to the issuance of the Development Permit, the Permittee shall obtain a one-year warranty of the landscape works from the landscape contractor. This warranty shall be transferrable to subsequent owners of the property within the warranty period. The warranty must include provision for a further one-year warranty on materials.
- 8.12. Prior to the issuance of a Development Permit, the Permittee must provide to the City in the form of an irrevocable letter of credit or certified cheque, security in the amount of **\$30,877** based on 110% of the Landscape Cost Estimate Lombard North Group (Schedule 3), which amount, or a portion therefore, as the case may be, shall be returned, no sooner than 1 year from the date of planting, upon receipt of a signed statement of substantial completion from a registered landscape architect, to the satisfaction of the Director of Development Services.

ENVIRONMENTAL CONDITIONS

General

- 8.13. Where required, Federal and Provincial environmental approvals shall be obtained prior to any works occurring on the Lands.
- 8.14. Clearing of the lot prior to issuance of a Building Permit shall be limited to the minimum area required for construction.
- 8.15. A security deposit of **\$3515.63**, based on 125% of the Restoration Cost Estimate prepared by Aquaparian (Schedule 4) must be submitted by the Permittee to the City of Colwood prior to issuance of the Development Permit. The environmental security deposit will be held until a satisfactory final inspection report prepared by the project's QEP is submitted to the City, no sooner than two years from the date restoration work is completed, confirming that the restoration works remain in substantial compliance with the approved Restoration Plan prepared by Aquaparian (Schedule 4).
- 8.16. The property owner is responsible for ensuring all recommendations in the RAPR report (Schedule 5) are followed, including monitoring and reporting to the City of Colwood. No clearing or site preparation shall occur until all qualified professionals (registered biologist, qualified environmental professional, arborist, etc.), as applicable, have been retained to oversee impacts on the site and ensure compliance with the recommendations contained in Schedule 5. Prior to the issuance of the Development Permit, the Permittee shall provide the City with written letters of engagement from all qualified professionals, as applicable, agreeing to:
- 8.16.1. Oversee impacts on the site and ensure compliance with the recommendations contained in Schedules 4, and 5; and
- 8.16.2. Perform a final inspection and submit an inspection report to the City confirming substantial compliance with Schedules 4, and 5.
- 8.17. Environmental restoration and enhancement work shall be completed in substantial compliance with the approved schedules (Schedule 4, and Schedule 5), to the satisfaction of the Director of Development Services.

Habitat Protection and Stormwater Management

- 8.18. Stormwater management shall be in accordance with an approved Stormwater Management Plan prepared by Aplin Martin (Schedule 6). In the event of an emergency, such as a spill, flood, or stormwater breach, a QEP shall be retained by the permittee to identify remediation/restoration requirements and **shall report to the Director of Development Services (or their delegate at planning@colwood.ca)**

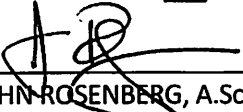
Erosion and Sediment Control

- 8.19. Erosion and sediment control shall be in accordance with the approved Erosion and Sediment Control Plan prepared by Aplin Martin (Schedule 6) including meeting all recommendations.

Nesting and Migratory Birds

8.20. It is the property owner's responsibility to ensure that physical works are compliant with the federal Migratory Birds Convention Act, 1994 and the provincial Wildlife Act with respect to bird nests. Both of these acts prohibit the disturbance or destruction of active nests and eggs.

ISSUED ON THIS 24 DAY OF JULY, 2024.

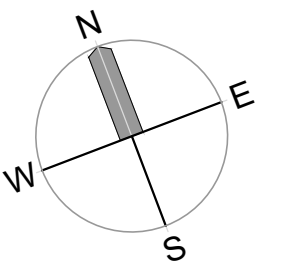


JOHN ROSENBERG, A.Sc.T.
DIRECTOR OF ENGINEERING AND DEVELOPMENT SERVICES

client:



project north:



issue / revisions:

No.	Issued / Revisions	Date
11	REVISIONS TO DP - COLWOOD	27 JUNE '24
10	ISSUED FOR CIVIL SCOPE TENDER	14 JUNE '24
9	REVISIONS TO DP - COLWOOD	09 APR '24
8	REVISIONS TO DP - LANGFORD	15 FEB '24
7	ISSUED FOR BP	09 FEB '24
6	ISSUED FOR BUDGET	31 JAN '24
5	ISSUED FOR BP-DRAFT	15 JAN '24
4	ISSUED FOR BIOLOGICAL	15 JAN '24
3	BP COORDINATION (75%)	25 OCT '23
2	BP COORDINATION	10 OCT '23
1	DEVELOPMENT PERMIT	15 JUNE '23

alan lowe architect inc.

118 - 21 Erie St. t 250.360.2888
Victoria, British Columbia

seal:



project title:
VICTORIA HYUNDAI & GENESIS DEALERSHIPS

2930 BRICKSHIRE DRIVE
LANGFORD, BC

drawing title:
SITE PLAN AND PROJECT DATA

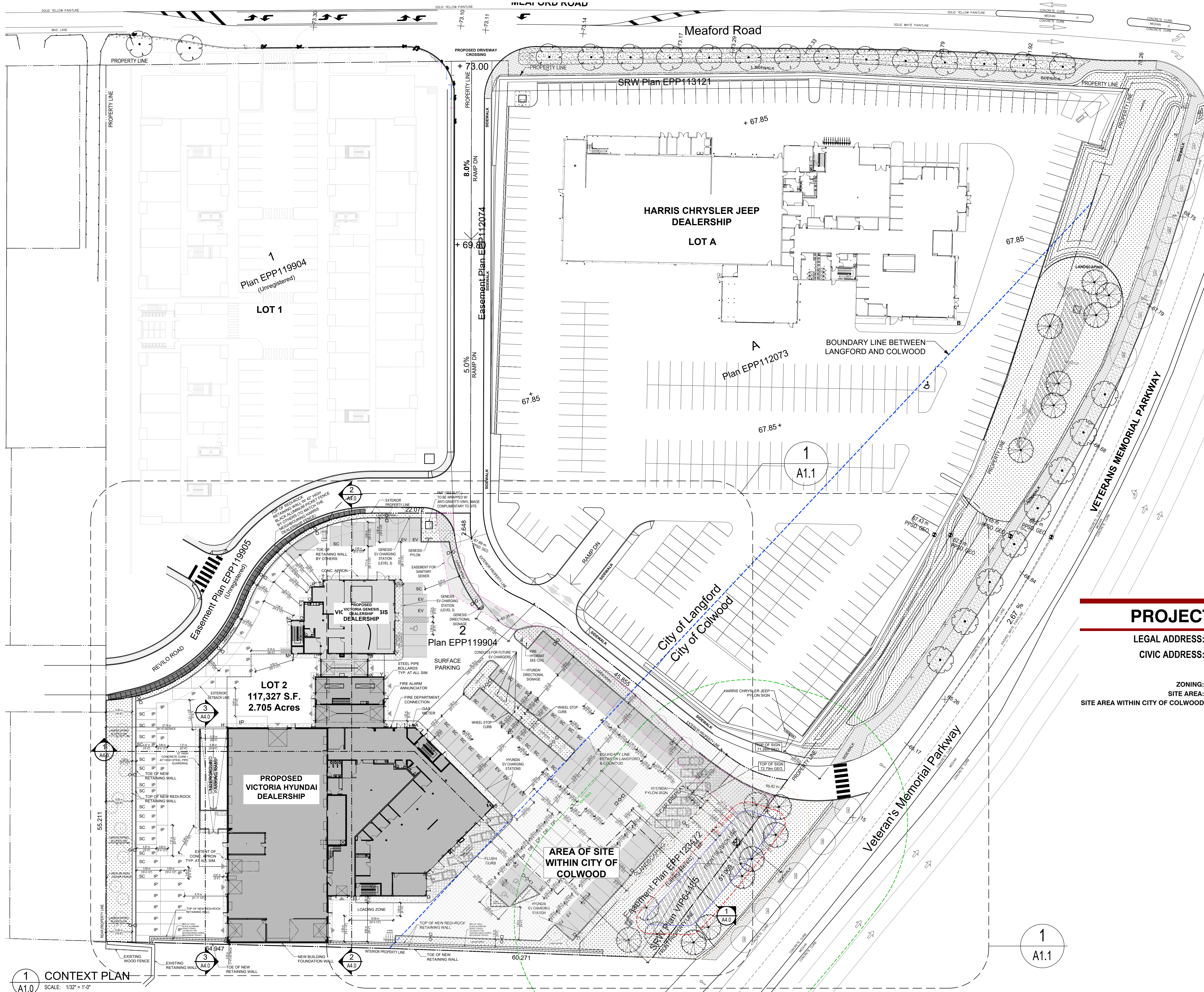
project no.: 21.673

date: 27 JUNE '24 scale: AS NOTED

checked by: LOWE drawn by: DD

sheet no.:

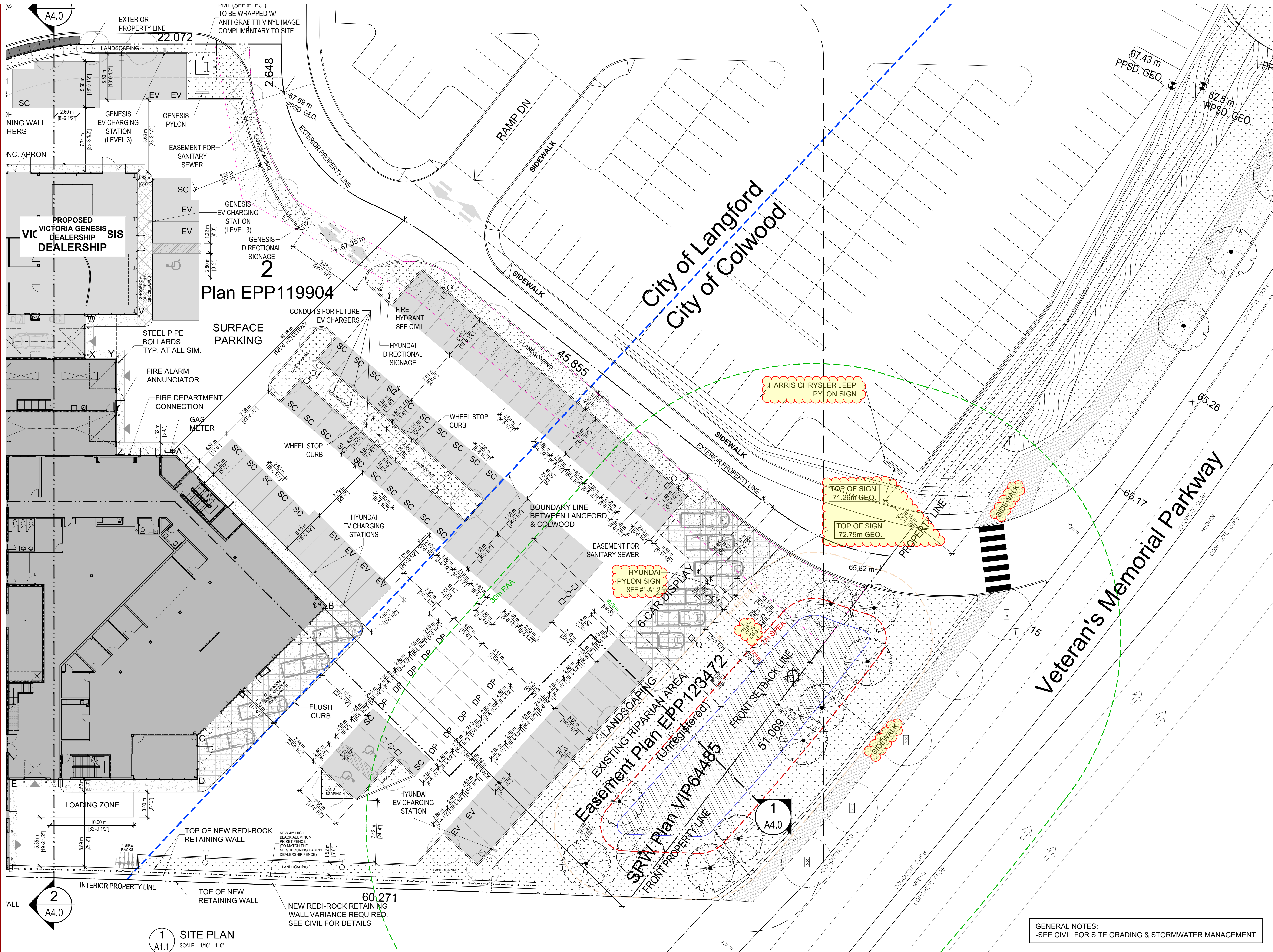
A1.0



PROJECT DATA

LEGAL ADDRESS: Lot 2, Section 73, Esquimalt District, Plan EPP119904
CIVIC ADDRESS: 2930 BRICKSHIRE DRIVE LANGFORD, B.C.
ZONING DATA
ZONING: A1 - RURAL 1
SITE AREA: 10,900 m² (117,326.6 ft²)
SITE AREA WITHIN CITY OF COLWOOD: 2,842.7 m² (30,598.9 ft²)

1 CONTEXT PLAN
A1.0 SCALE: 1/32" = 1'-0"



A4.0

2 A4.0

1 SITE PLAN
A1.1 SCALE: 1/16" = 1'-0"

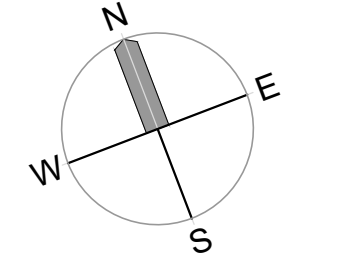
GENERAL NOTES:
-SEE CIVIL FOR SITE GRADING & STORMWATER MANAGEMENT

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client:



project north:



issue / revisions:

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2930 BRICKSHIRE DRIVE
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drawing title:
SITE PLAN

project no.: 21.673

date: 27 JUNE '24 scale: AS NOTED

checked by: LOWE drawn by: DD

sheet no.:

A1.1

client:



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PROPOSED PYLON SIGN DETAILS

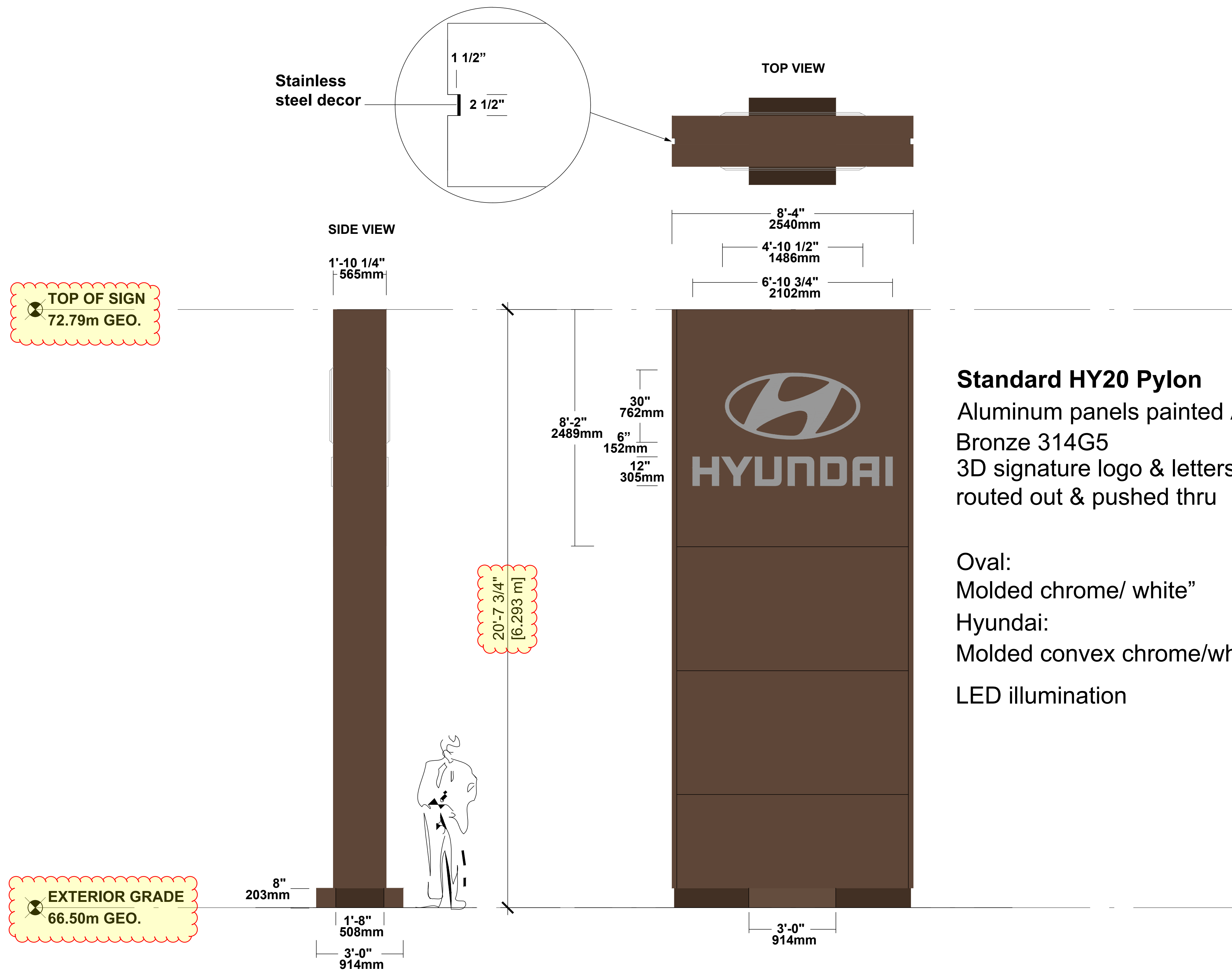
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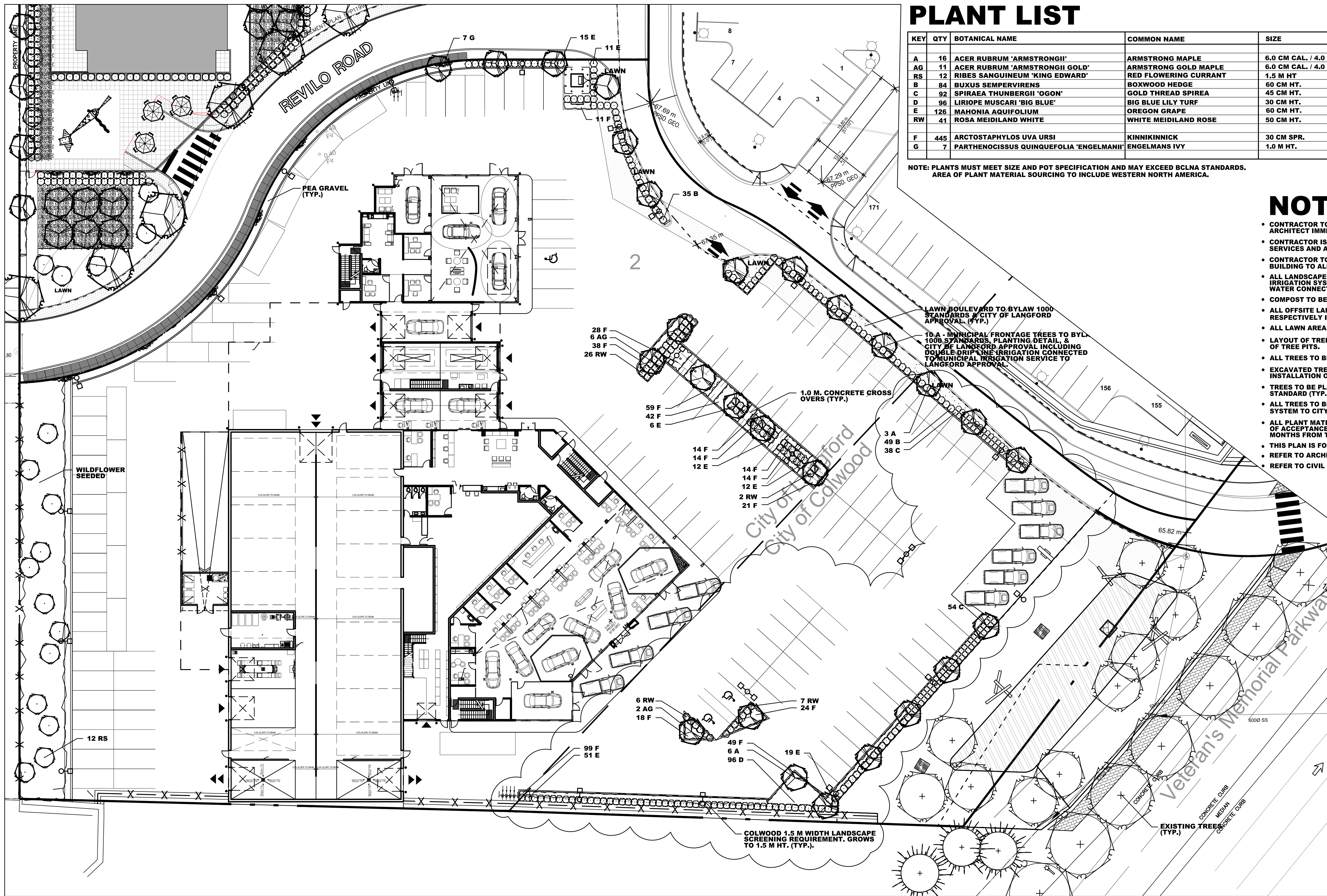
checked by: LOWE drawn by: DD

sheet no.:

A1.2



1 PROPOSED PYLON SIGN DETAILS
SCALE: 1/2" = 1'-0"



PLANT LIST

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOTS	COMMENTS
A	16	ACER RUBRUM 'ARMSTRONGII'	ARMSTRONG MAPLE	6.0 CM CAL. / 4.0 - 5.0 M HT.	B & B	FULL, 1.8 M HT. STANDARD
AG	11	ACER RUBRUM 'ARMSTRONGII GOLD'	ARMSTRONG GOLD MAPLE	6.0 CM CAL. / 4.0 - 5.0 M HT.	B & B	FULL, 1.8 M HT. STANDARD
RS	12	RIBES SANGUINEUM 'KING EDWARD'	RED FLOWERING CURRANT	1.5 M HT	B & B	MULTI-STEM, FULL
B	84	BUXUS SEMPERVIRENS	BOXWOOD HEDGE	60 CM HT.	27 CM POT	FULL
C	92	SPIRAEA THUNBERGII 'OGON'	GOLD THREAD SPIREA	45 CM HT.	21 CM POT	FULL
D	96	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILY TURF	30 CM HT.	21 CM POT	FULL, PLANT 40 CM O.C.
E	126	MAHONIA AQUIFOLIUM	OREGON GRAPE	60 CM HT.	27 CM POT	FULL
RW	41	ROSA MEIDLAND WHITE	WHITE MEIDLAND ROSE	50 CM HT.	21 CM POT	FULL
F	445	ARCTOSTAPHYLOS UVA URSI	KINNIKINICK	30 CM SPR.	15 CM POT	MIN. 3 LEADERS, PLANT 45 CM O.C.
G	7	PARTHENOCISSUS QUINQUEFOLIA 'ENGELMANII'	ENGELMANS IVY	1.0 M HT.	21 CM POT	FULL, STAKED, MIN. 3 LEADERS

NOTE: PLANTS MUST MEET SIZE AND POT SPECIFICATION AND MAY EXCEED BCLNA STANDARDS. AREA OF PLANT MATERIAL SOURCING TO INCLUDE WESTERN NORTH AMERICA.

NOTES

- CONTRACTOR TO REPORT ALL ERRORS, OMISSIONS AND DISCREPANCIES TO LANDSCAPE ARCHITECT IMMEDIATELY AND PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND SERVICES AND ANY DAMAGE TO SAME CAUSED BY HIS WORK.
- CONTRACTOR TO ENSURE SMOOTH CONTINUOUS POSITIVE DRAINAGE AWAY FROM BUILDING TO ALL DRAINAGE PICKUP POINTS.
- ALL LANDSCAPED AREAS TO BE IRRIGATED WITH A FULLY AUTOMATIC UNDERGROUND IRRIGATION SYSTEM, COORDINATE IRRIGATION SLEEVES, TIMER CLOCK LOCATION AND WATER CONNECTIONS WITH GENERAL CONTRACTOR.
- COMPOST TO BE PLACED TO 75 MM DEPTH AFTER SETTLEMENT IN ALL PLANTING BEDS
- ALL OFFSITE LANDSCAPE WORK TO CITY OF LANGFORD & COLWOOD STANDARDS & APPROVAL RESPECTIVELY INCLUDING, BUT NOT LIMITED TO BYLAW 1000 REQUIREMENTS.
- ALL LAWN AREAS TO BE SODDED.
- LAYOUT OF TREES TO BE APPROVED BY CITY OF LANGFORD/ COLWOOD PRIOR TO EXCAVATION OF TREE PITS.
- ALL TREES TO BE APPROVED BY CITY OF LANGFORD/ COLWOOD PRIOR TO PLANTING.
- EXCAVATED TREE PITS TO BE APPROVED BY CITY OF LANGFORD/ COLWOOD PRIOR TO INSTALLATION OF TOP SOIL.
- TREES TO BE PLANTED AS PER CITY OF LANGFORD BYLAW 1000, DETAIL L1/ COLWOOD STANDARD (TYP.).
- ALL TREES TO BE DRIP IRRIGATED AND CONNECTED TO THE CITY SYSTEM TO CITY OF LANGFORD/ COLWOOD STANDARDS & APPROVAL.
- ALL PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF (1) YEAR AFTER DATE OF ACCEPTANCE. ALL REPLACEMENT PLANTS TO BE GUARANTEED FOR AN ADDITIONAL 12 MONTHS FROM TIME OF PLANTING.
- THIS PLAN IS FOR SOFT LANDSCAPE ONLY.
- REFER TO ARCHITECTURAL/CIVIL FOR HARD LANDSCAPING, SITE GRADING.
- REFER TO CIVIL FOR MUNICIPAL IRRIGATION SERVICES.

SUBMITTED FOR BUILDING PERMIT NOVEMBER 24, 2023

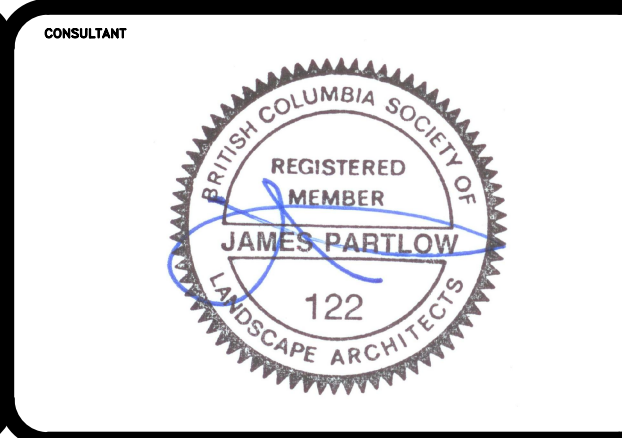
NO.	DATE	BY	REVISION
1.	FEB.09.24	S.P.	LANGFORD COMMENTS
2.	APR.09.24	J.P.	COLWOOD COMMENTS

NAME	S.P.
CHECKED	J.P.
DATE	JUNE 15, 2023
DRAWING	KOT H - L1R4R3.2



VICTORIA HYUNDAI

VICTORIA, B.C.



KOT Hyundai (Colwood)

Cost Estimate - April 10, 2024

KOTH H - L1R4R3.1.dwg

Landscape	Quantity	Unit	Unit Price	Total
Soft Landscape Items				
Columnar Deciduous Trees (6.0 cm. Cal.)	11	ea	\$ 700.00	\$ 7,700.00
Shrubs (27 cm. pot)	72	ea	\$ 45.00	\$ 3,240.00
Shrubs (21 cm. pot)	92	ea	\$ 25.00	\$ 2,300.00
Groundcover (15 cm. pot)	286	ea	\$ 15.00	\$ 4,290.00
Lawn - Sodded	20	sq.m.	\$ 40.00	\$ 800.00
Topsoil - Planting Beds (45 cm depth)	72	cu.m.	\$ 45.00	\$ 3,240.00
Irrigation		allow	\$ 6,500.00	\$ 6,500.00
Sub Total				\$ 28,070.00
TOTAL				\$ 28,070.00

Note: The Above Includes all labor and material costs.





June 13, 2024

Island West Coast Development
2214 McCullough Rd
Nanaimo BC V9S 4M8

Attn: Rhonda Greggain & Robert Armeneau

Via Email: Rhonda.greggain@iwcd.ca; robert.armeneau@iwcd.ca

**RE: RIPARIAN DISTURBANCE RESTORATION PLAN
KOT VICTORIA HYUNDAI – 2390 BRICKSHIRE DRIVE LANGFORD**

1.0 INTRODUCTION

Aquaparian Environmental Consulting Ltd (Aquaparian) was retained by Island West Coast Developments (IWCD) to provide a riparian restoration plan and cost estimate for two small areas that will be impacted to install a sanitary / sewer connection and a stormwater outfall and headwall. The two small areas are located within a previously restored riparian area next to a constructed stormwater detention pond. The City of Colwood requires a restoration plan with a cost estimate to restore these two areas as per the original riparian restoration plan prepared for the Victoria Hyundai project located at 2390 Brickshire Drive in Langford BC. Figure 1 is a site location map.

Aquaparian has based the following restoration plan on the original landscape plan produced for the project by Eliza Oprescu of Studio TLA and the estimated disturbance areas provided by IWCD which are 50m² for the sanitary sewer connection and 20m² for the stormwater outfall to the pond. Both areas of disturbance are located within the Pond Edge Restoration Area identified on the landscape plan within the upper ¾ of the bank slope. Figure 2 attached shows the disturbance area overlaid on a section of the Studio TLA landscape plan and a section of the servicing engineering drawing.

The species list for this area recommended by Studio TLA included species that range from wet to dry moisture regimes including semi-aquatic to upland plants. As the restoration areas are limited to the upper slope area and will be overlying infrastructure, no trees are recommended to be replanted and the dry species on the list are preferred. The total estimated disturbance area is 70m².

Species recommended for this zone by Studio TLA are identified in the table below with the recommended number to be replanted over the proposed disturbance area as well as alternative species more suitable to the upper slope. If the actual disturbance area is different from the estimated areas, adjust the number of plants based on the recommended density.

Table 1: Species List from Landscape Plan for the Pond Edge Zone

Name	Species	Habitat Preference	Replacement Recommendation
Red alder	<i>Alnus rubra</i>	Dry / sun	0
Slough sedge	<i>Carex obnupta</i>	Wet / shade	0
Salal	<i>Gaultheria shallon</i>	Dry / shade	20 x 1 Gal pot
Meadow barley	<i>Hordeum brachyantherum</i>	Moist to mesic / sun	0
Oregon grape	<i>Mahonia aquifolium</i>	Dry / sun	4 x 1 Gal pot
Dune willow	<i>Salix hookeriana</i>	Moist to Wet / sun / partial shade	0
Pacific willow	<i>Salix lucida</i>	Moist to Wet / sun / partial shade	0
Sitka willow	<i>Salix sitchensis</i>	Wet / sun / partial shade	0
Western spirea	<i>Spirea douglasii</i>	Moist to Wet / sun / shade	0
Broad leaved cattail	<i>Typha latifolia</i>	Wet / sun	0
Alternative Species			
Nootka rose	<i>Rosa nutkana</i>	Dry / sun	25 x 1 Gal pot
Snowberry	<i>Symphoricarpos albus</i>	Dry / sun	25 x 1 Gal pot

Recommendations:

- Plant salal in patches of 3 to 5 and density 4 / m² preferably with some shade from adjacent trees or tall shrubs.
- Plant shrubs (Tall Oregon grape, Nootka rose and Snowberry) 1m apart on centre.
- Adjust number of plants based on density for the actual disturbance area following construction.
- Install the plants during cool wet weather (fall or spring).
- Add a handful of bonemeal during installation to reduce transplant shock.
- Irrigate as necessary through the first two summer seasons or until plants are established.
- Remove invasive species if they have germinated since the original restoration (Himalayan blackberry, scotch broom, Spurge laurel etc) as per the original planting plan recommendations.

2.0 BOND ESTIMATE

Species	Quantity	Unit Price	Total
Nootka rose	25 x 1 Gal	\$11	\$275
Snowberry	25 x 1 Gal	\$11	\$275
Tall Oregon grape	4 x 1 Gal	\$11	\$275
Salal	20 x 1 Gal	\$11	\$275
Roadside or coastal reclamation seed mix	17kg bag	\$150	\$150
Plants Total			\$1250
GST			\$62.50
Labour estimate	2 people	1 day	\$1500
Total			\$2812.50

(Plant costs as per Streamside Native Plants; actual cost will vary by supplier and landscape installation company)

(The City of Colwood may require a security deposit of 110% of the above estimate if the original Bond has already been returned).

3.0 CLOSURE

This report has been based on background information provided by IWCD for the subject property, past project experience working on similar development projects and in accordance with generally accepted biological practices. No other warranty is made, either expressed or implied. Aquaparian trusts that the information provided in this report meets your requirements.

Any questions regarding information provided in this document, please contact the undersigned at (250) 591-2258.

REGARDS,

AQUAPARIAN ENVIRONMENTAL CONSULTING LTD



Sarah Bonar B.Sc; R.P.Bio
Senior Biologist / Principal

<https://netorg5387218.sharepoint.com/sites/Shared/Shared Documents/Documents/Projects/Projects/N1182 Kot Victoria Hyundai/Riparian Disturbance Restoration Plan.docx>



203-321 Wallace St, Nanaimo, BC V9R 5B6

SARAH BONAR 250-714-8446 CHRIS ZAMORA 250-714-8864

4.0 REFERENCES

City of Colwood. Development Permit Package DP-20-025. December 10, 2020.

Streamside Native Plants. Accessed June 13, 2024. [Streamside Native Plants](#)

FIGURE 1
SITE LOCATION MAP

2930 Brickshire Drive Site Location Map

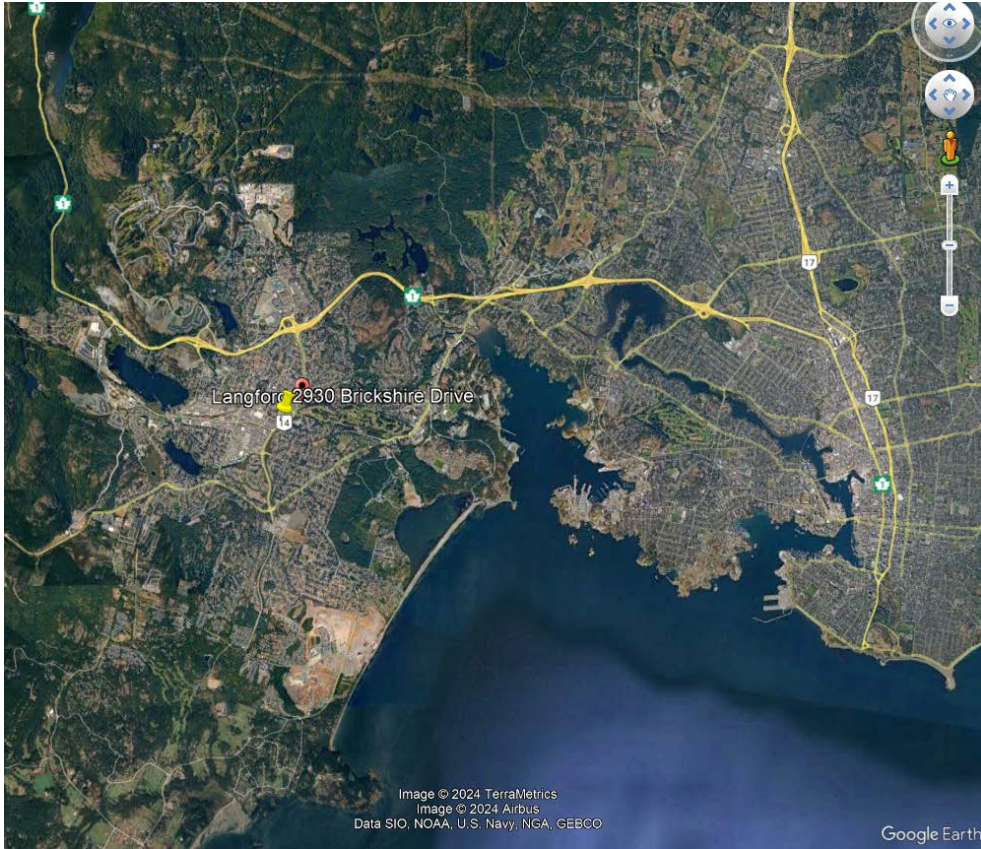
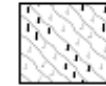
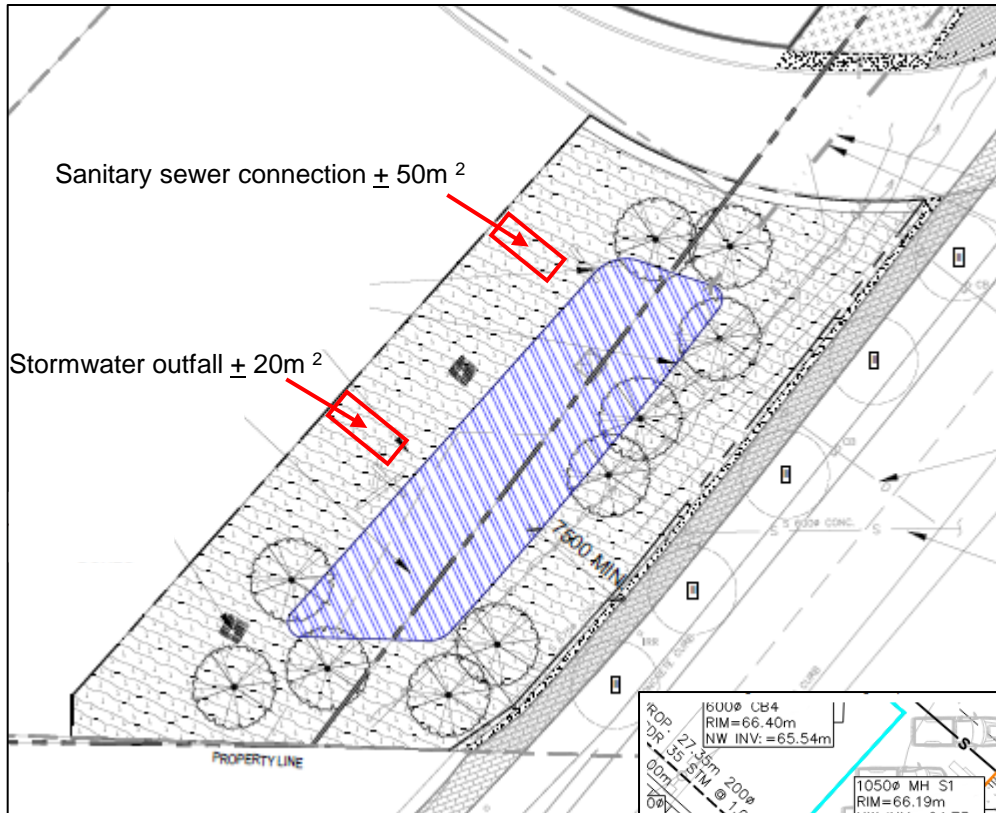


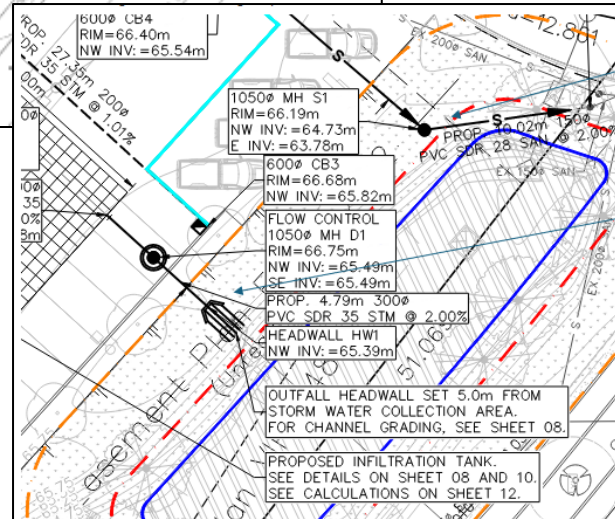
FIGURE 2
RESTORATION AREAS

Excerpts from Studio LTA Landscape Plan showing proposed disturbance area and species within that zone to be replaced.



POND EDGE RESTORATION PLANTING

- Alnus rubra* / Red Alder
- Carex obnupta* / Slough Sedge
- Gaultheria shallon* / Salal
- Hordeum brachyantherum* / Meadow Barley
- Mahonia aquifolium* / Oregon Grape
- Salix hookeriana* / Dune Willow
- Salix lucida* / Pacific Willow
- Salix sitchensis* / Sitka Willow
- Spiraea douglasii* / Western Spirea
- Typha latifolia* / Broad Leaved Cattail



Only the 'disturbed' excavated area where the Sanitary / Sewer will be installed needs to be restored

Only the 'disturbed' excavated area where the 'Outfall Headwall' will be installed needs to be restored

FORM 1

Riparian Areas Protection Regulations - Qualified Environmental Professional - Assessment Report

Riparian Areas Protection Regulation: Assessment Report

Please refer to submission instructions and assessment report guidelines when completing this report.

Date 2024-01-20

I. Primary QEP Information

First Name	Thomas	Middle Name	
Last Name	Roy		
Designation	R.P. Bio	Company Cascadia Biological Services	
Registration #	1089	Email cascadiabiological@shaw.ca	
Address	772 Goldstream Ave PO Box 27034		
City	Victoria	Postal/Zip	V9B 5S4
Prov/state	BC	Country	Canada
		Phone #	250 888-4864

II. Secondary QEP Information (use Form 2 for other QEPs)

First Name		Middle Name	
Last Name			
Designation		Company	
Registration #		Email	
Address			
City		Postal/Zip	
Prov/state		Country	
		Phone #	

III. Developer Information

First Name	John	Middle Name	
Last Name	Kot		
Company	Kot Victoria Land Holdings Ltd		
Phone #	250 826-8685	Email johnkot@kotautogroup.com	
Address	3777 Highway 97 North		
City	Kelowna	Postal/Zip	V1X 5C3
Prov/state	BC	Country	Canada

IV. Development Information

Development Type	Construction: Commercial		
Area of Development (ha)	1.0	Riparian Length (m)	30
Lot Area (ha)	1.09	Nature of Development	New
Proposed Start Date	2024-03-15	Proposed End Date	2026-12-31

V. Location of Proposed Development

Street Address (or nearest town)	2930 Brickshire Drive		
Local Government	City of Colwood	City	Colwood
Stream Name	Unnamed Tributary to Colwood Creek		
Legal Description (PID)	031-839-088	Region	CRD
Stream/River Type	Stream	DFO Area	South Coast
Watershed Code	Unnamed trib to WSC 920-040500		
Latitude	48	26	35
Longitude	123	30	00

Completion of Database Information includes the Form 2 for the Additional QEPs, if needed. Insert that form immediately after this page.

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1. Description of Fisheries Resources Values

2. Results of Riparian Assessment (SPEA width)

3. Site Plan

4. Measures to Protect and Maintain the SPEA
(detailed methodology only).

- 1. Danger Trees.....
- 2. Windthrow.....
- 3. Slope Stability.....
- 4. Protection of Trees.....
- 5. Encroachment
- 6. Sediment and Erosion Control.....
- 7. Floodplain.....
- 8. Stormwater Management.....

5. Environmental Monitoring

6. Photos

7. Assessment Report Professional Opinion

Section 1. Description of Fisheries Resources Values and a Description of the Development proposal

(Provide as a minimum: Species present, type of fish habitat present, description of current riparian vegetation condition, connectivity to downstream habitats, nature of development, specific activities proposed, timelines)

The purpose of this report is to identify watercourses and associated Riparian Areas Protection Regulations (RAPR) setbacks for a proposed commercial construction project. The proposed commercial development is located along the City of Colwood and Langford border. The parent property at this location is located within both City's boundaries. (split civic location as well as split zoning and development permit areas). At the time of our assessment in September/October of 2023, there was one ditch that met the definition of a waterbody identified under the RAPR legislation. It was constructed by myself over upland habitat as part of a development permit application requirement with the City of Colwood. It connects via two culverts and a vegetated swale to Colwood Creek approximately 100m downstream and across the Veterans Memorial Parkway (VMP). There are no fish upstream of Colwood Creek into the culvert system across VMP as it is impassable given the grade and length of culvert. The constructed ditches/swales were a requirement by the City of Colwood to ensure stormwater management for this new development. Previous requirements of the DP required replanting of the ditch banks up to the 7.5m riparian SMZ. This has been completed and vegetation is now at the pole sapling stage of development. There are no natural state areas within the boundaries of this lot including adjacent lots.

Section 2. Results of Riparian Assessment (SPEA width)

2. Results of Detailed Riparian Assessment

Refer to Chapter 3 of Assessment Methodology

Date: 2024-01-20

Description of Water bodies involved (number, type)

1 stream

Stream	1
Wetland	
Lake	
Ditch	
Number of reaches	1
Reach #	1

Channel width and slope and Channel Type (use only if water body is a stream or a ditch, and only provide widths if a ditch)

Channel Width(m)		Gradient (%)	
starting point	3	Low	0.5
upstream	3		
	3		
	3		
downstream	3	High	
	3		
	3		
	3		
Total: minus high /low	27		0.5
mean	3		
Channel Type	R/P	C/P	S/P

I, Thomas Roy, hereby certify that:

a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulations made under the Riparian Areas Protection Act

b) I am qualified to carry out this part of the assessment of the development proposal made by the developer Kot Victoria Land Holdings Ltd;

c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and

d) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

Site Potential Vegetation Type (SPVT)

	Yes	No	
SPVT Polygons		X	Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes
Polygon No:	1		I, <u>Thomas Roy</u> , hereby certify that: a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulations made under the Riparian Areas Protection Act I am qualified to carry out this part of the assessment of the development proposal made by the developer Kot Victoria Land Holdings Ltd; b) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and c) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.
SPVT Type	LC	SH	
			X
Polygon No:			Method employed if other than TR
			Method employed if other than TR

FORM 1

Riparian Areas Protection Regulations - Qualified Environmental Professional - Assessment Report

SPVT Type	LC	SH	TR	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Polygon No:	<input type="text"/>	Method employed if other than TR		
SPVT Type	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	1	If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons
-------------	---	---

LWD, Bank and Channel Stability ZOS (m)	2					
Litter fall and insect drop ZOS (m)	2					
Shade ZOS (m) max	2	South bank	Yes	<input type="text"/>	No	<input checked="" type="checkbox"/>

Ditch	Justification description for classifying as a ditch (manmade, no significant headwaters or springs, seasonal flow)	The ditch was constructed by myself for a previous development over upland habitat. It has never seen water in the past 3 years since it was constructed. It connects to fish habitat approx. 100m downstream via culverts and bio swales ditches. It is non fish bearing given the long culvert under the Veterans Memorial Parkway (see map). There are no significant headwaters to this unnamed tributary
-------	---	---

Ditch Fish Bearing	Yes	<input type="text"/>	No	<input type="text"/>	If non-fish bearing insert no fish bearing status report
--------------------	-----	----------------------	----	----------------------	--

SPEA Maximum (For ditch use table3-7)

Segment No:		If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons
-------------	--	---

LWD, Bank and Channel Stability ZOS (m)						
Litter fall and insect drop ZOS (m)						
Shade ZOS (m) max		South bank	Yes	<input type="text"/>	No	<input type="text"/>

SPEA maximum (For ditch use table3-7)

Segment No:		If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons
-------------	--	---

LWD, Bank and Channel Stability ZOS (m)						
Litter fall and insect drop ZOS (m)						
Shade ZOS (m) max		South bank	Yes	<input type="text"/>	No	<input type="text"/>

FORM 1

Riparian Areas Protection Regulations - Qualified Environmental Professional - Assessment Report

SPEA Maximum		(For ditch use table3-7)
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I, Thomas Roy, hereby certify that:

- a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulations made under the Riparian Areas Protection Act;
- b) I am qualified to carry out this part of the assessment of the development proposal made by the developer ; Kot Victoria Land Holdings Ltd
- c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
- d) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

Comments

Segment 1 represents the left bank facing downstream. There is an additional buffer of 7.5m on the ditch as part of the original DP application with the City of Colwood. This adds an additional 5.5m to the ditch over and above the 2m SPEA

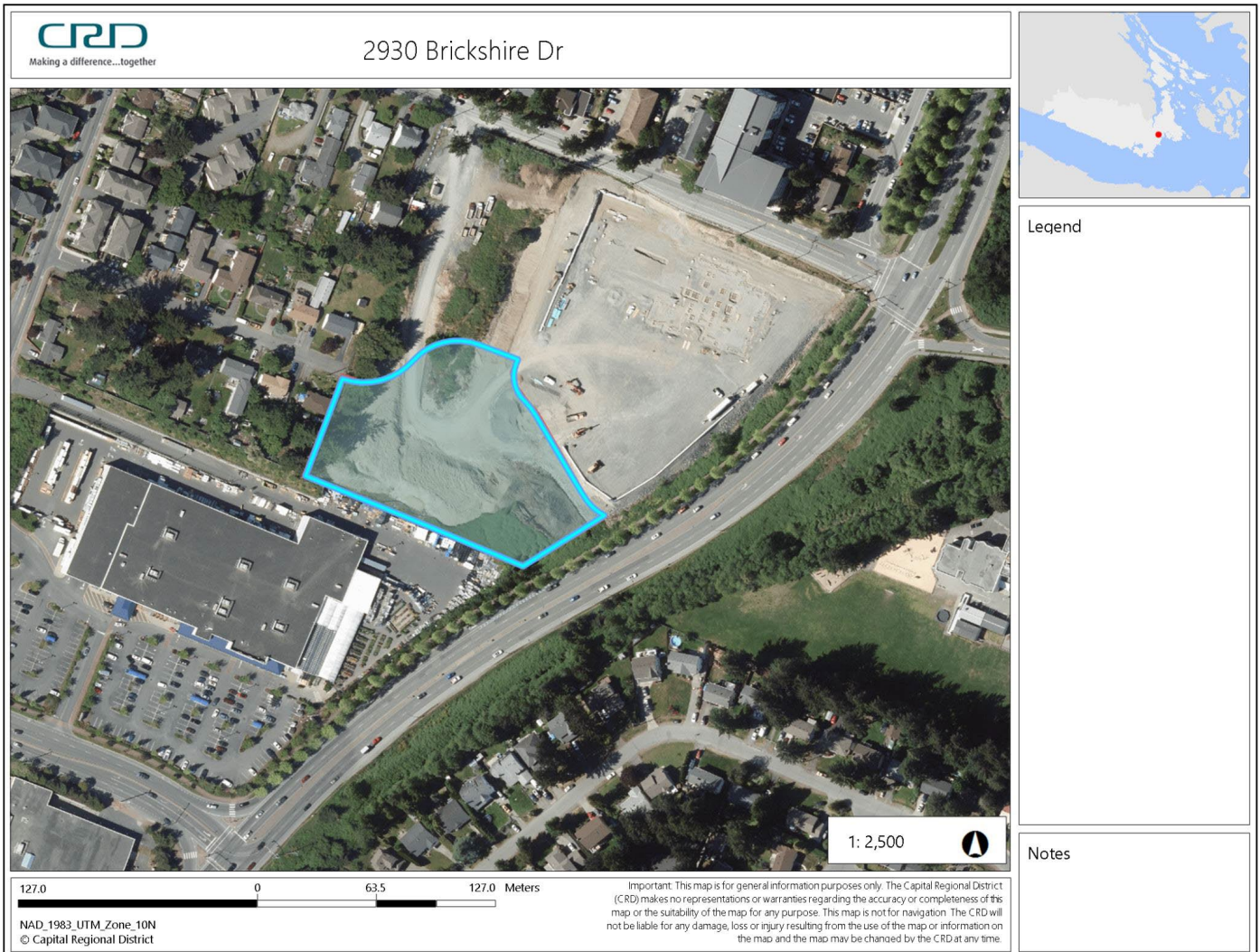
FORM 1

Riparian Areas Protection Regulations - Qualified Environmental Professional - Assessment Report

Section 3. Site Plan

Insert jpg file below

Site Plan



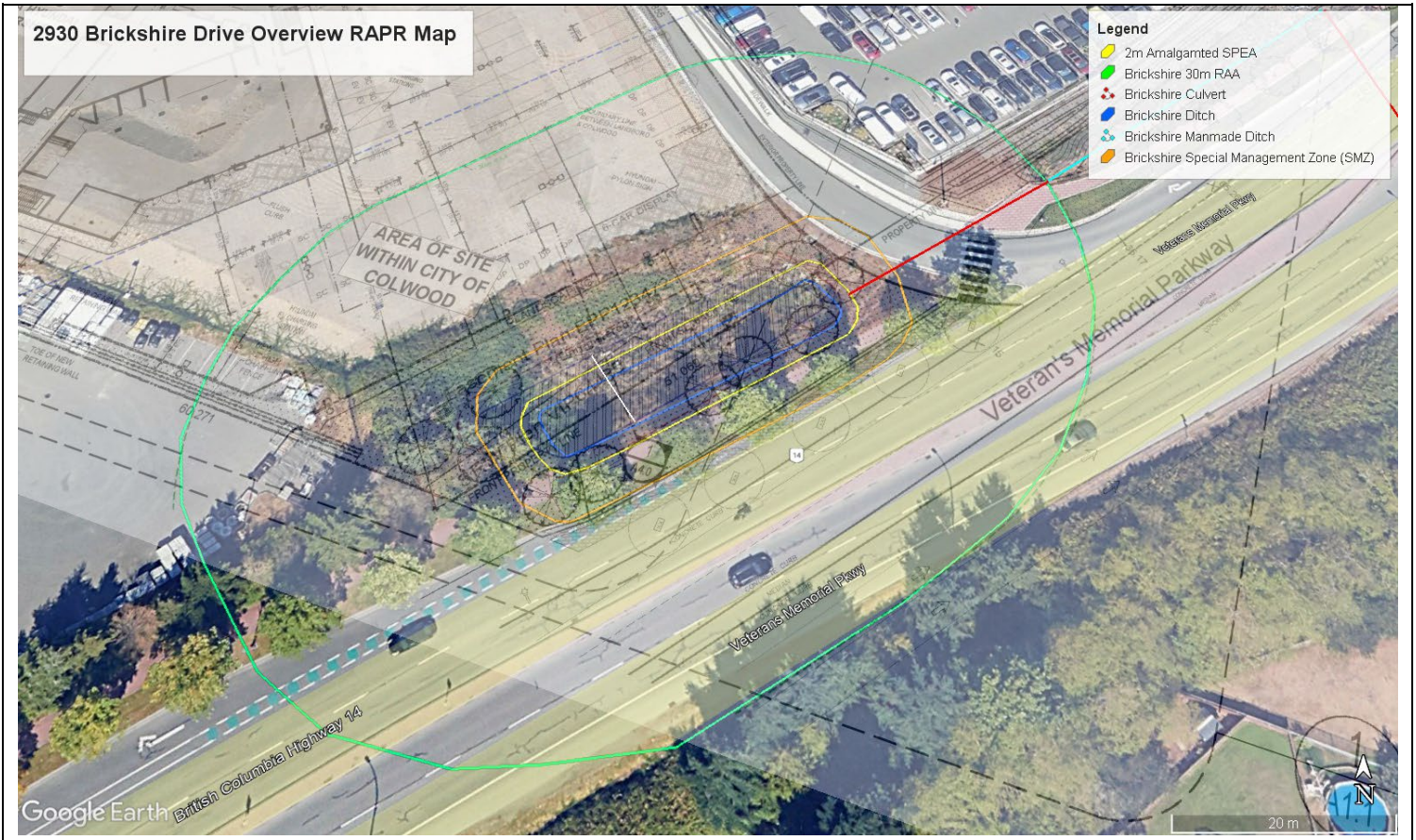
Note: Blue polygon represents the subject property

FORM 1

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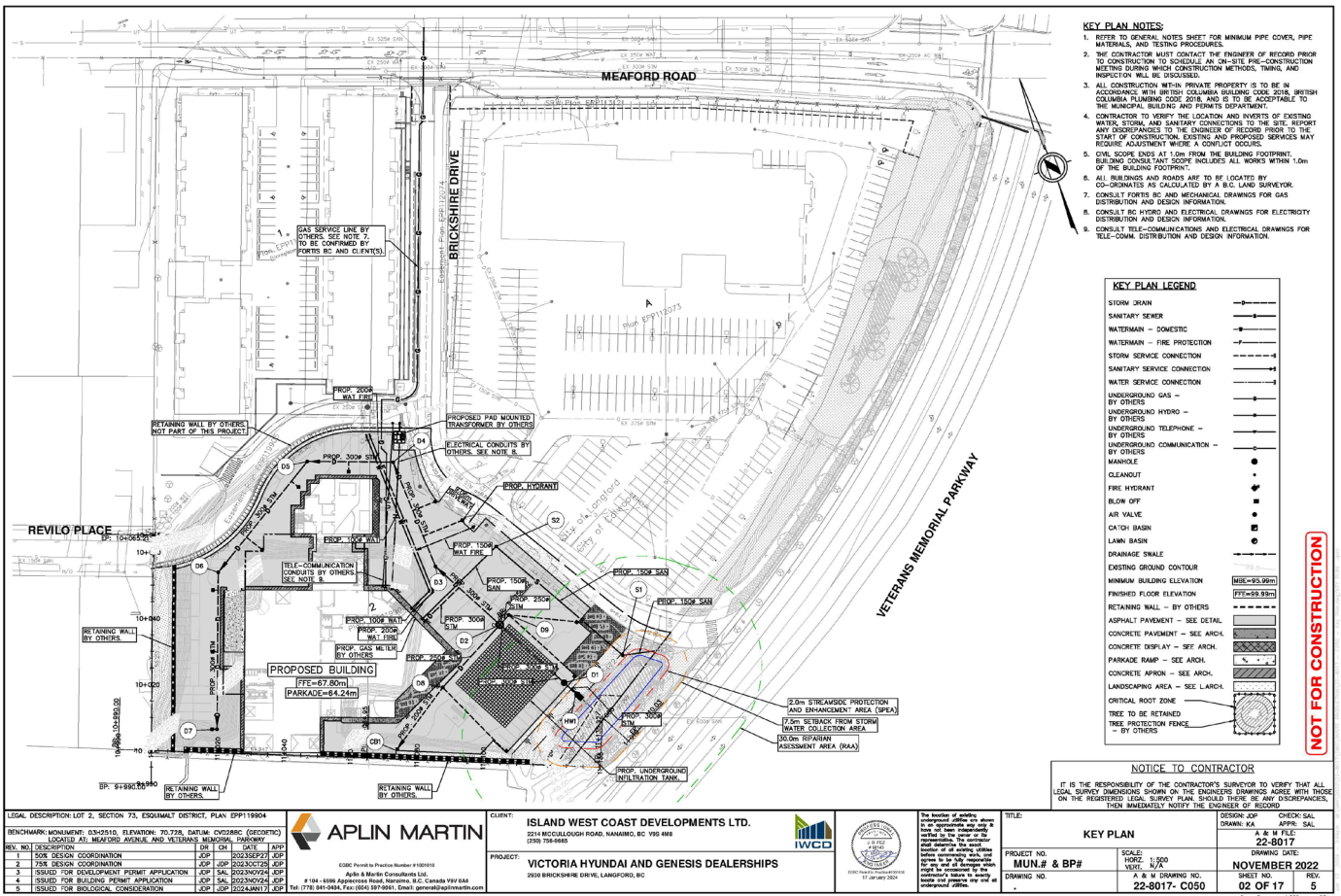


Note: View of constructed ditch. Blue polyline represents the ditch established HWM through culvert invert. Yellow polyline represents the 2m ditch SPEA. Orange polyline represents the 7.5m riparian habitat setback from DP. Green polyline represents the 30m RAA



FORM 1

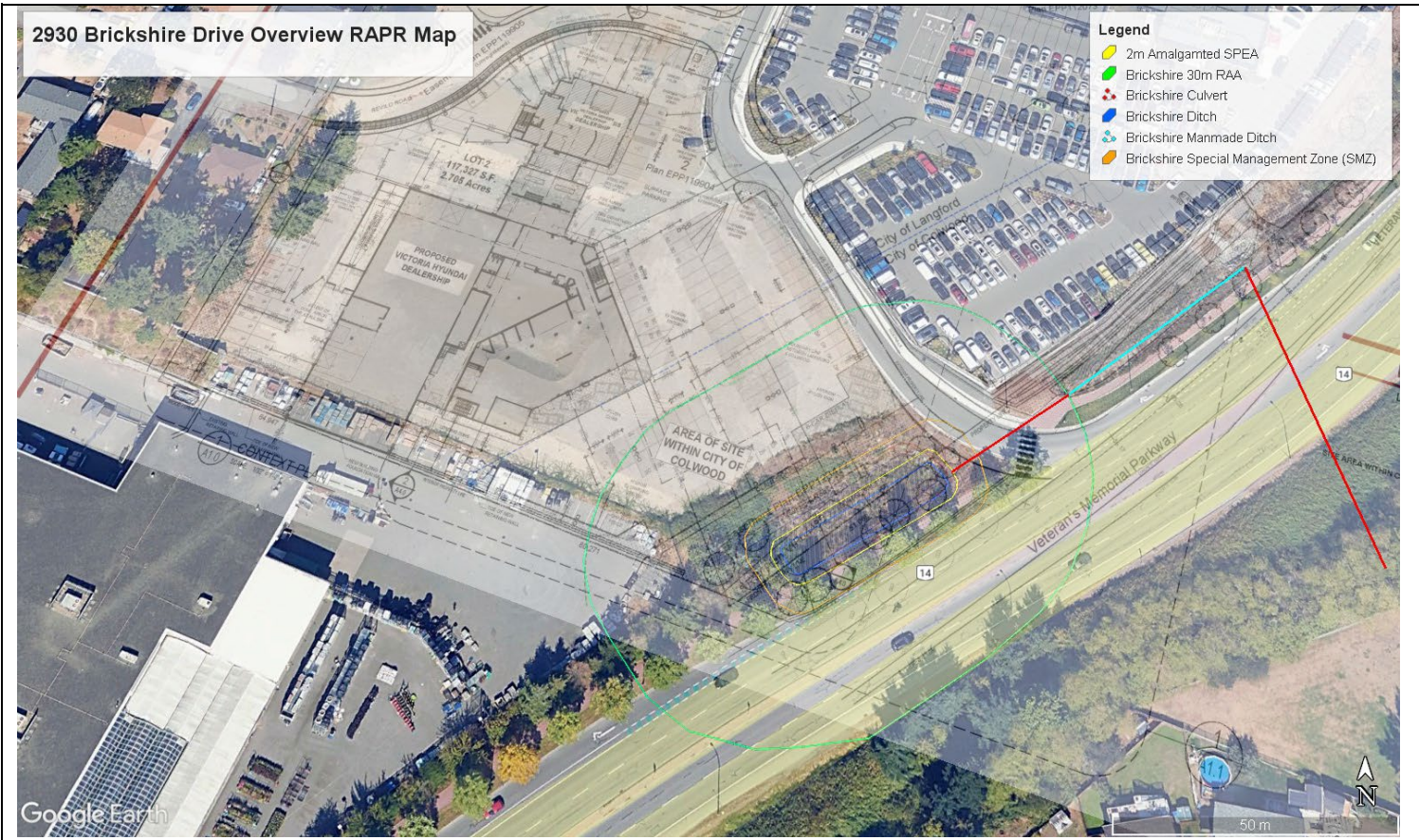
Riparian Areas Protection Regulations - Qualified Environmental Professional - Assessment Report



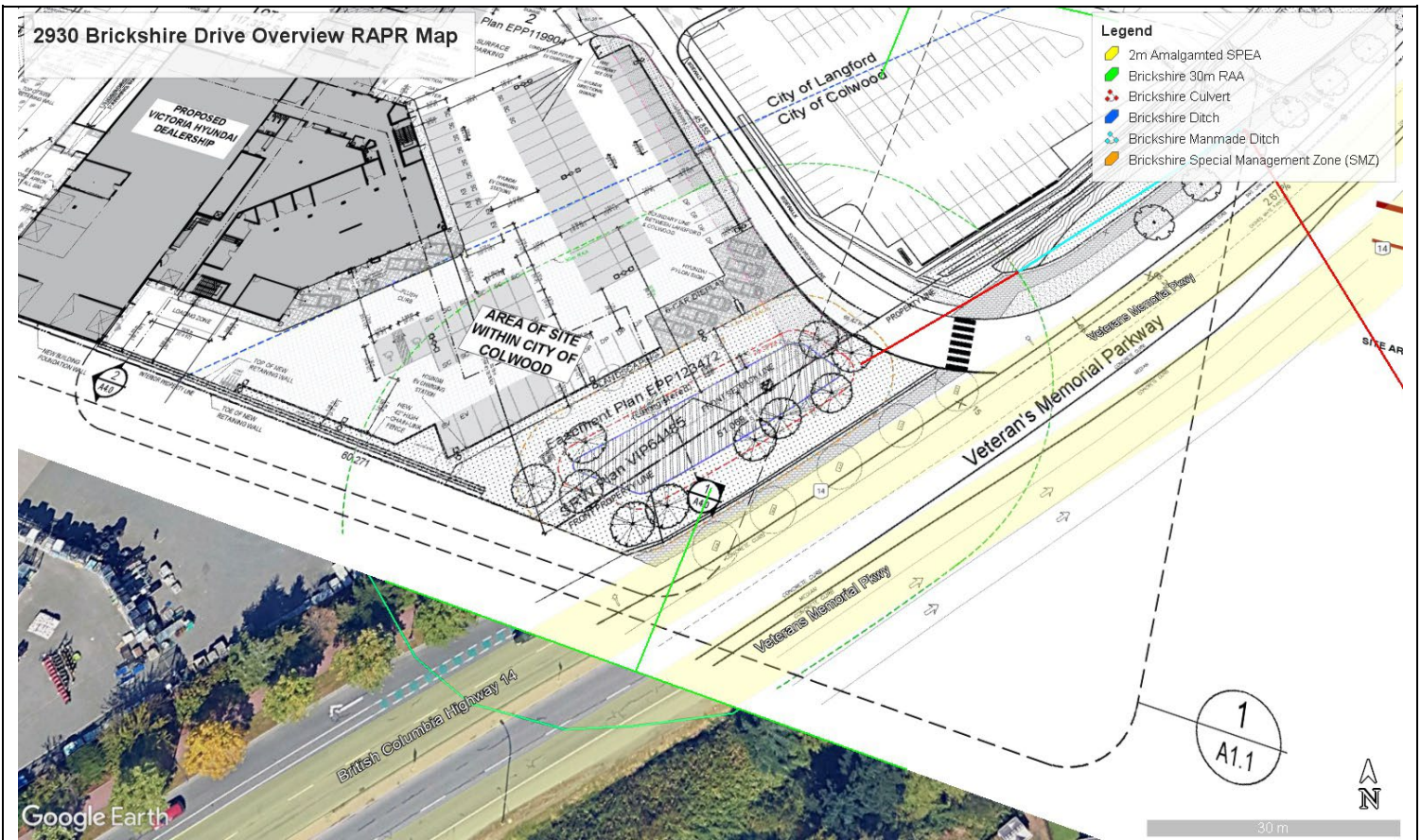
Note: View of constructed ditch. Blue polyline represents the ditch established HWM through culvert invert. Red polyline represents the 2m ditch SPEA. Orange polyline represents the 7.5m riparian habitat setback from DP. Green polyline represents the 30m RAA

FORM 1

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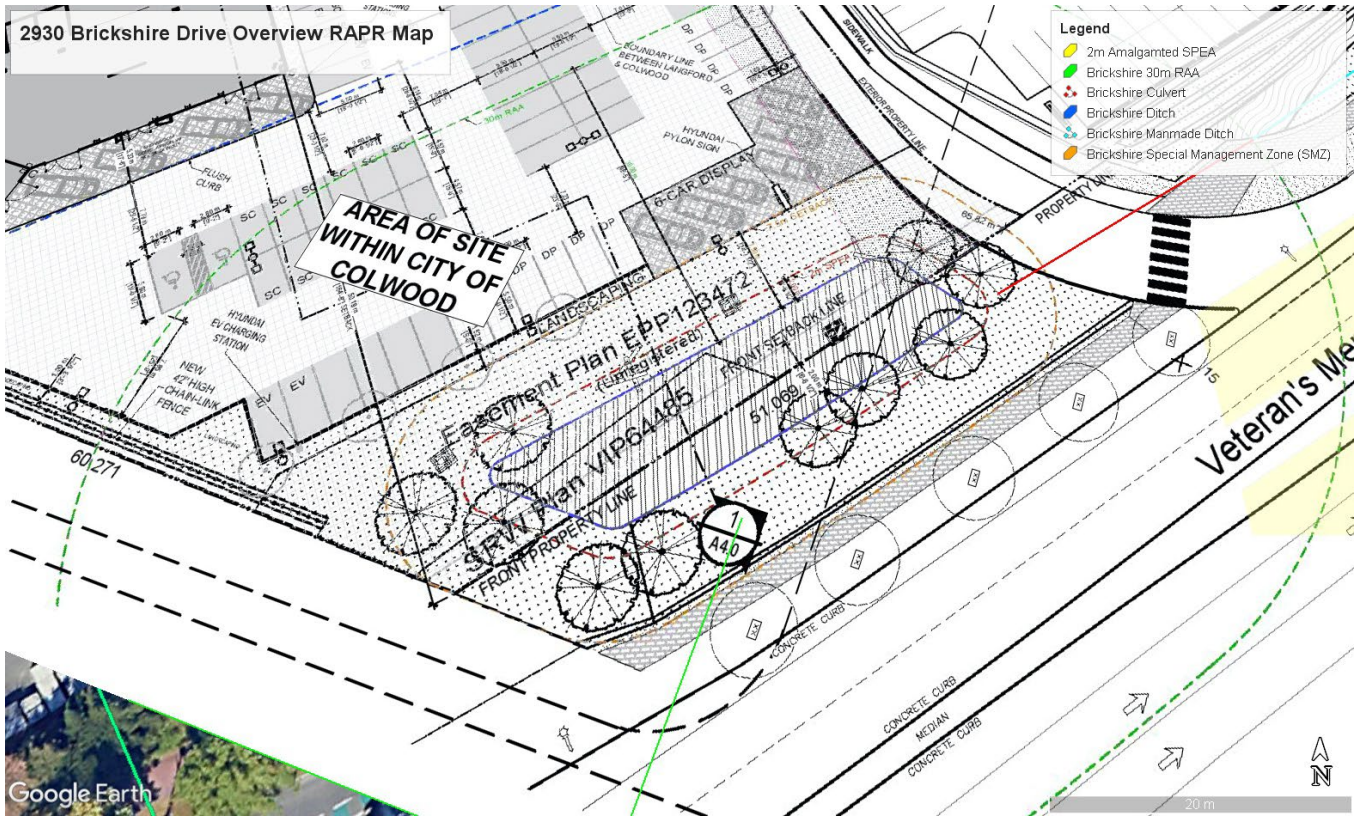
Note: View of constructed ditch. Blue polyline represents the ditch established HWM through culvert invert. Yellow polyline represents the 2m ditch SPEA. Orange polyline represents the 7.5m riparian habitat setback from DP. Green polyline represents the 30m RAA



Note: View of constructed ditch. Blue polyline represents the ditch established HWM through culvert invert. Red polyline represents the 2m ditch SPEA. Orange polyline represents the 7.5m riparian habitat setback from DP. Green polyline represents the 30m RAA

FORM 1

Riparian Areas Protection Regulations - Qualified Environmental Professional - Assessment Report



Section 4. Measures to Protect and Maintain the SPEA

This section is required for detailed assessments. Attach text or document files, as need, for each element discussed in chapter 1.1.3 of Assessment Methodology. It is suggested that documents be converted to PDF before inserting into the assessment report. Use your “return” button on your keyboard after each line. You must address and sign off each measure. If a specific measure is not being recommended a justification must be provided.

1. Danger Trees	Danger trees are not a concern on this site as there are no larger trees remaining within the 30m RAA. This is a constructed ditch over barren upland habitat
<p>I, <u>Thomas Roy</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulations made under the Riparian Areas Protection Act;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer. Kot Victoria Land Holdings Ltd</p> <p>e) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister’s technical manual to the Riparian Areas Protection Regulation.</p>	
2. Windthrow	Windthrow is not a concern on this site as there are no large trees remaining within the 30m RAA. This was a constructed ditch after the site was regraded
<p>I, <u>Thomas Roy</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulations made under the Riparian Areas Protection Act;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer Kot Victoria Land Holdings Ltd</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister’s technical manual to the Riparian Areas Protection Regulation.</p>	
3. Slope Stability	Slope stability is not a concern on this site due to the absence of steep slopes and that there are no trees within the 30m RAA. The ground at this location is predominantly of low grade 0-5%
<p>I, <u>Thomas Roy</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulations made under the Riparian Areas Protection Act ;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer Kot Victoria Land Holdings Ltd</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister’s technical manual to the Riparian Areas Protection Regulation.</p>	
4. Protection of Trees	Storm fencing will be placed by the designated QEP along the 7m Special Management Zone (SMZ). This is to include storm fencing during the construction period and permanent split cedar rail as a permanent fencing requirement
<p>I, <u>Thomas Roy</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulations made under the Riparian Areas Protection Act</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer Kot Victoria Land Holdings Ltd</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister’s technical manual to the Riparian Areas Protection Regulation.</p>	
5. Encroachment	As above
<p>I, <u>Thomas Roy</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulations made under the Riparian Areas Protection Act</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer Kot Victoria</p>	

FORM 1

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Land Holdings Ltd	
c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.	
6. Sediment and Erosion Control	Sediment and erosion control measures will be implemented to reduce sediment laddened water from entering the ditch during the proposed works. These will include sediment fencing and hay bales placed along disturbed areas (if any) and the SMZ. The designated QEP will install the sediment controls. A detailed sediment and erosion control plan including sediment fencing locations is presented in Attachment I.
I, <u>Thomas Roy</u> , hereby certify that:	
c. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulations made under the Riparian Areas Protection Act	
d. I am qualified to carry out this part of the assessment of the development proposal made by the developer Kot Victoria Land Holdings Ltd	
a. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.	
7. Stormwater Management	Stormwater management onsite will be through vegetated swales (where appropriate) as well as settling ponds. Rock pits and/or equivalent will be installed on all new buildings. An alternative will be sending the stormwater to the City stormwater system.
I, <u>Thomas Roy</u> , hereby certify that:	
e. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ;	
f. I am qualified to carry out this part of the assessment of the development proposal made by the developer Kot Victoria Land Holdings Ltd	
g. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.	
8. Floodplain Concerns (highly mobile channel)	No concerns at this site as the ditch has been constructed to handle stormwater flows.
I, <u>Thomas Roy</u> , hereby certify that:	
a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulations made under the Riparian Areas Protection Act	
b. I am qualified to carry out this part of the assessment of the development proposal made by the developer Kot Victoria Land Holdings Ltd	
c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.	

Section 5. Environmental Monitoring

Attach text or document files explaining the monitoring regimen Use your "return" button on your keyboard after each line. It is suggested that all document be converted to PDF *before* inserting into the PDF version of the assessment report. Include actions required, monitoring schedule, communications plan, and requirement for a post development report.

Specific Recommendations for Works within 30m of a Waterbody and Outside of Designated SPEA

2930 Brickshire Drive – City of Colwood BC

Works Within 30m RAPR Riparian Assessment Area

- Prior to the proposed works, a sediment and erosion control plan will be developed to prevent the discharge of sediment laden water into the SPEA or any watercourse
- No works shall be undertaken within areas designated as SPEA associated with this phase of the development except for the stormwater outfall proposed. Permits for this work will be through the Section 11 Notification under the Water Sustainability Act
- All works Scheduled Within 30m of a Watercourse will adhere to all recommendations as outlined in the Ministry of Environment's *Develop with Care, Environmental Guidelines for Urban and Rural Development in British Columbia, 2012*. As well:
 - Ensure construction will proceed smoothly without harmful alteration of habitat;
 - Provide long-term monitoring for disturbed sites until green-up is established and the soils at the site are stable.
- Heavy equipment (excavators etc.) working within the RAA will be monitored for leaks (oil, hydraulic fluid etc.).
- Sediment control measures will be installed (where necessary) along disturbed areas to minimize sediment inflow to the SPEA and ditch.
- Areas designated as the SPEA will be flagged with high visibility flagging tape and temporary fencing.
- Disturbed areas within 30m of a waterbody will be revegetated with native plants of a size that will quickly re-establish riparian cover when construction activities are deemed complete.

- Detailed direction to contractors will be given to ensure that no erosion or sediment movement will occur and that no silt will be released to the SPEA or watercourse during the construction and post construction phase.
- The site will be monitored by the designated QEP (once every two weeks or as required due to high rainfall events - >30mm/24 hour period) during the construction period. Any contraventions of the RAPR will be communicated to the builder as well as local municipal staff and RAPR staff.
- A post construction report generated by the designated QEP will be submitted to RAPR and local municipal staff within four months of the end of construction activities.

Section 6. Photos

Plate
#1

Typical view of the stormwater channelized ditch



Plate
#2

View upstream of typical channel morphology and vegetation



Section 7. Professional Opinion**Qualified Environmental Professional opinion on the development proposal's riparian assessment.**Date 1. I/We Thomas Roy

Please list name(s) of qualified environmental professional(s) and their professional designation that are involved in assessment.)

hereby certify that:

- a) I am/We are qualified environmental professional(s), as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
 - b) I am/We are qualified to carry out the assessment of the proposal made by the developer Kot Victoria Land Holdings Ltd; which proposal is described in section 3 of this Assessment Report (the "development proposal"),
 - c) I have/We have carried out an assessment of the development proposal and my/our assessment is set out in this Assessment Report; and
 - d) In carrying out my/our assessment of the development proposal, I have/We have followed the specifications of the Riparian Areas Protection Regulation and assessment methodology set out in the minister's manual; AND
2. As qualified environmental professional(s), I/we hereby provide my/our professional opinion that:
- a) N/A the site of the proposed development is subject to undue hardship, (if applicable, indicate N/A otherwise) and
 - b) the proposed development will meet the **riparian protection standard** if the development proceeds as proposed in the report and complies with the measures, if any, recommended in the report.

[NOTE: "Qualified Environmental Professional" means an individual as described in section 21 of the Riparian Areas Protection Regulation.]

Submission Instructions

Riparian Areas Protection Regulation – Qualified Environmental Professional – Assessment Report RAR-QEP-AR

Forms you will need to complete are

- Form 1 which has the database information, the description of the fisheries resources, development site plan, measures to protect and maintain the SPEA, and environmental monitoring.
- Form 2, if more QEPs are part of the project team.
- Either Form 3 the detailed assessment form(s) or Form 4 simple assessment form(s) which is for the results of the riparian assessment (SPEA width). Use enough copies of the form to complete the assessment of the site.
- Form 5 is the photo form(s). Duplicate for additional photos.

NB: See the Guidelines and the Assessment Methods for detailed instructions on the information required for completing the Assessment Report.

A complete Riparian Assessment Report based on the template forms must be converted to a *single* Portable Document Format PDF file prior to uploading onto the Notification System.

The Assessment Report must be complete, by submitting the information specified, and posted to provide notification to the local government, Ministry of Water, Land and Air Protection and the Department of Fisheries and Oceans Canada.

Tips for working with MS Word Template Forms

Using the forms

- Before beginning, print a hard copy of the form and the guidance files for reference
- Open the template
- Enter data into the shaded fields on the form
- Use TAB to move from one field to another; SHIFT-TAB to go in reverse
- Text and digital photos may be inserted from other applications
- The amount of text that can be entered in each box is limited and cannot be changed by the user; boxes with date information, for example, require input like: yyyy-mm-dd.

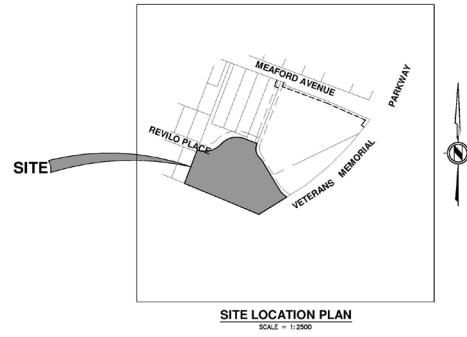
Saving the completed form

- Assign name to the completed form
- Save a word document (*.doc file)
- Do not overwrite the Template (*.dot file) with your completed form
- If you do overwrite the template, you can download a new copy from this web site

Attachment I – Detailed Sediment Control Plan



ESBC Permit to Practice Number # 02-018
 Aplin & Martin Consultants Ltd.
 #104 - 6596 Applecross Road, Nanaimo, BC, Canada V9V 0A4
 Tel: (779) 841-0484, Fax: (804) 597-9061, Email: general@aplinmartin.com



DEVELOPER:
 ISLAND WEST COAST DEVELOPMENTS LTD.
 2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
 (250) 756-9565

PROJECT:
 VICTORIA HYUNDAI AND GENESIS DEALERSHIPS
 2930 BRICKSHIRE DRIVE, LANGFORD, BC

DRAWING INDEX

DRAWING No.	REV No.	DRAWING TITLE
22-8017-C000	06	COVER
22-8017-C010	06	GENERAL NOTES
22-8017-C020	06	KEY PLAN
22-8017-C030	06	EXISTING CONTOUR PLAN
22-8017-C040	06	GRADING PLAN
22-8017-C050	06	GRADING SECTIONS - WEST PL
22-8017-C061	06	GRADING SECTIONS - SOUTH PL
22-8017-C060	06	SERVICING PLAN
22-8017-C080	06	SERVICING PROFILE - STORM
22-8017-C090	06	UTILITY COORDINATION PLAN
22-8017-C090	06	DETAILS
22-8017-C700	06	FIRE PROTECTION PLAN
22-8017-C080	06	STORMWATER MANAGEMENT PLAN
22-8017-C010	06	SEWAGE CATCHMENT PLAN
22-8017-ESC6	06	EROSION AND SEDIMENT CONTROL - NOTES AND DETAILS
22-8017-ESC1	06	EROSION AND SEDIMENT CONTROL - PLAN STAGE 1
22-8017-ESC2	06	EROSION AND SEDIMENT CONTROL - PLAN STAGE 2
22-8017-ESC3	06	EROSION AND SEDIMENT CONTROL - PLAN STAGE 3

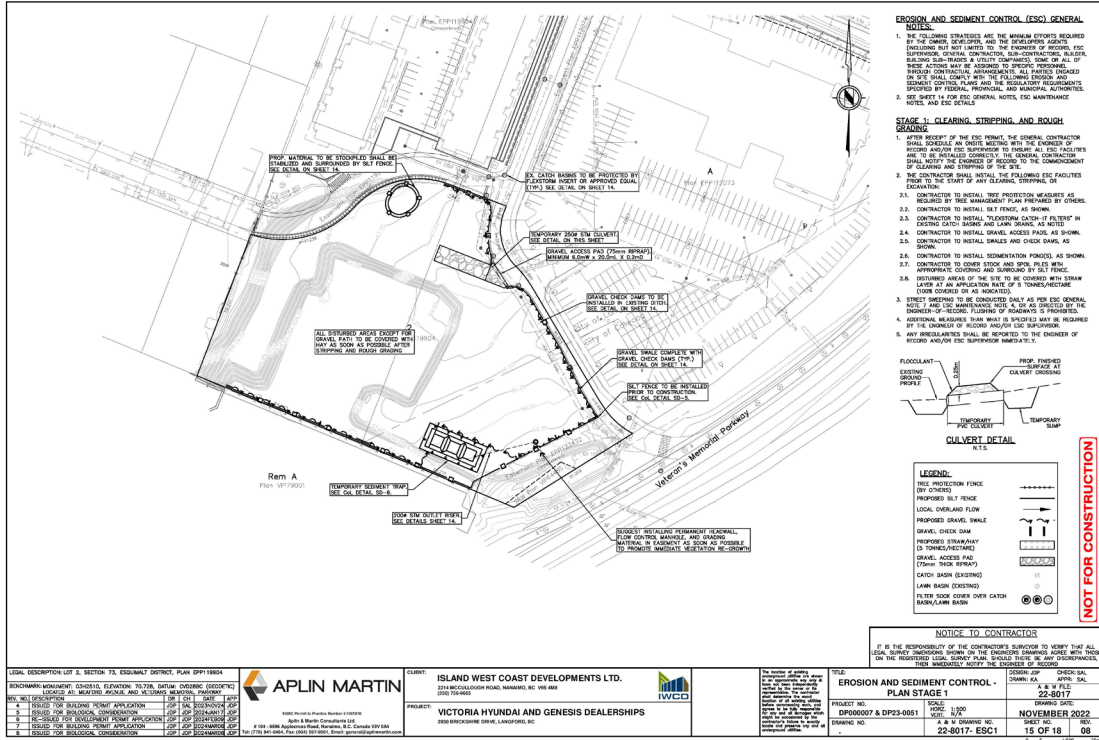
MUNICIPAL PROJECT No. DP000007 & DP23-0051

APLIN & MARTIN PROJECT No. 22-8017

NOT FOR CONSTRUCTION

FORM 1

Riparian Areas Protection Regulations - Qualified Environmental Professional - Assessment Report

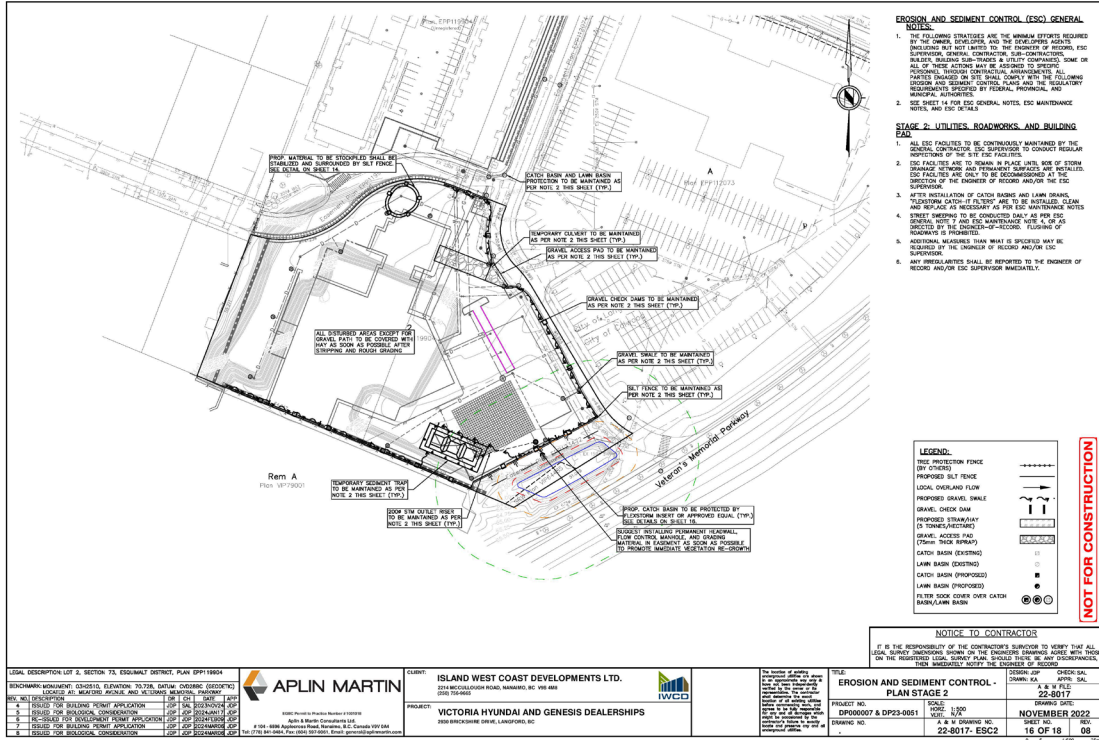


- EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES:**
1. THE FOLLOWING STRATEGIES AND THE MINIMUM EFFORTS REQUIRED BY THE OWNER, CONTRACTOR AND THE DESIGNER MUST BE FOLLOWED BY THE CONTRACTOR TO PREVENT EROSION AND SEDIMENTATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF ANY CHANGES TO THE EROSION AND SEDIMENTATION CONTROL PLAN AND THE REGULATORY REQUIREMENTS PROVIDED BY FEDERAL, PROVINCIAL, AND MUNICIPAL AUTHORITIES.
 2. SEE SHEET 4 FOR ESC GENERAL NOTES, EIC MAINTENANCE NOTES AND EIC DETAILS.
- STAGE 1: CLEARING, STRIPPING AND ROUGH GRADING:**
1. AFTER RECEIPT OF THE ESC PERMIT, THE GENERAL CONTRACTOR SHALL CONSULT WITH THE ENGINEER OF RECORD AND THE SUPERVISOR TO REVIEW ALL ESC FACILITIES AND TO BE INSTALLED CORRECTLY. THE GENERAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF THE COMPLETION OF CLEARING AND STRIPPING.
 2. THE CONTRACTOR SHALL INSTALL THE FOLLOWING ESC FACILITIES PRIOR TO THE START OF ANY CLEARING, STRIPPING OR EXCAVATION:
 - 2.1. CONTRACTOR TO INSTALL TREE PROTECTION HEADRESTS AS REQUIRED BY TREE MANAGEMENT PLAN PROVIDED BY OWNER.
 - 2.2. CONTRACTOR TO INSTALL SILT FENCE, AS SHOWN.
 - 2.3. CONTRACTOR TO INSTALL FLOODPLAIN CATCH-UP FILTERS IN EXISTING CATCH BASINS AND LAWN GRASSES, AS NOTED.
 - 2.4. CONTRACTOR TO INSTALL GRAVEL ACCESS PADS, AS SHOWN.
 - 2.5. CONTRACTOR TO INSTALL SWALES AND CHECK DAMS, AS SHOWN.
 - 2.6. CONTRACTOR TO INSTALL SEDIMENTATION PONDS, AS SHOWN.
 - 2.7. CONTRACTOR TO COVER STOCK AND SOIL PILES WITH APPROPRIATE COVERING TO PREVENT EROSION.
 - 2.8. DISTURBED AREAS OF THE SITE TO BE COVERED WITH STRAW LEAFS AT AN APPLICATION RATE OF 5 TONNES/HECTARE.
 3. ESCD SHEETING TO BE CONDUCTED ONLY AS PER ESC GENERAL NOTE 4 AND ESC MAINTENANCE NOTE 4, AS APPLICABLE BY THE ENGINEER OF RECORD. TURNING OF FLOODPLAIN IS PROHIBITED.
 4. EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED AS REQUIRED BY THE ENGINEER OF RECORD AND/OR ESC SUPERVISOR.
 5. ANY MEASUREMENTS SHALL BE PROVIDED TO THE ENGINEER OF RECORD AND/OR ESC SUPERVISOR IMMEDIATELY.

<p>LEGAL DESCRIPTION: LOT 3, SECTION 7A, EDGEMONT DISTRICT, PLAN EPP118904</p> <p>EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES:</p> <p>1. THE FOLLOWING STRATEGIES AND THE MINIMUM EFFORTS REQUIRED BY THE OWNER, CONTRACTOR AND THE DESIGNER MUST BE FOLLOWED BY THE CONTRACTOR TO PREVENT EROSION AND SEDIMENTATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF ANY CHANGES TO THE EROSION AND SEDIMENTATION CONTROL PLAN AND THE REGULATORY REQUIREMENTS PROVIDED BY FEDERAL, PROVINCIAL, AND MUNICIPAL AUTHORITIES.</p> <p>2. SEE SHEET 4 FOR ESC GENERAL NOTES, EIC MAINTENANCE NOTES AND EIC DETAILS.</p>	<p>CLIENT: ISLAND WEST COAST DEVELOPMENTS LTD. 2201 BROCKMEAD ROAD, NANAIMO, BC V9B 4M8 (250) 754-0000</p> <p>PROJECT: VICTORIA HYUNDAI AND GENESIS DEALERSHIPS 2800 BROCKMEAD DRIVE, LANSDOWNE, BC</p>	<p>DATE: 22-NOV-2022</p> <p>PROJECT NO.: DRP00007 & DRP23-0051</p> <p>DRAWING NO.: A & W DRAWING NO. 22-00171 - ESC1</p>	<p>DESIGNER: APLIN MARTIN</p> <p>DATE: 22-NOV-2022</p> <p>SCALE: 1:200</p> <p>DATE: 22-NOV-2022</p> <p>DATE: 22-NOV-2022</p>
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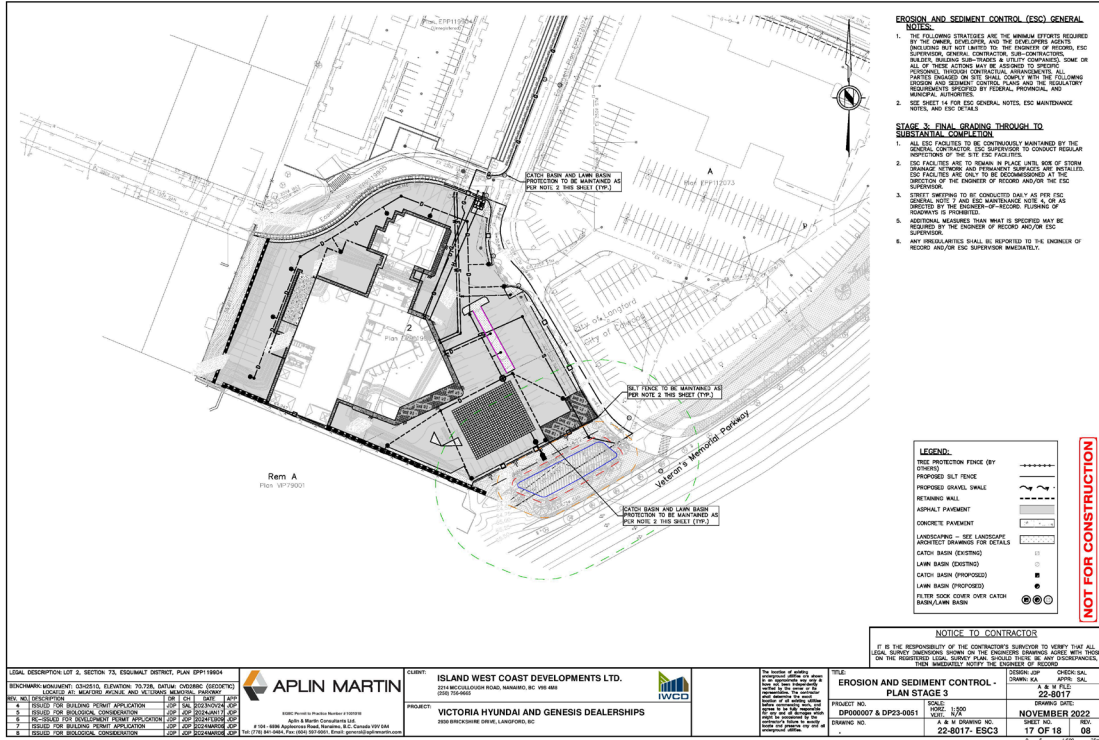
FORM 1

Riparian Areas Protection Regulations - Qualified Environmental Professional - Assessment Report



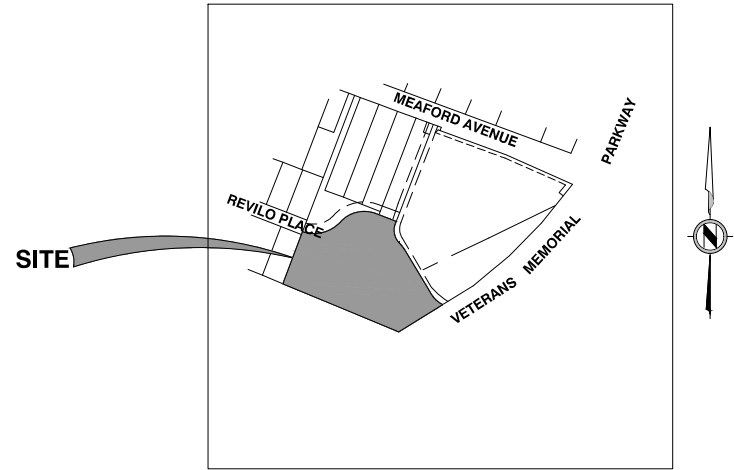
FORM 1

Riparian Areas Protection Regulations - Qualified Environmental Professional - Assessment Report





EGBC Permit to Practice Number #1001018
Aplin & Martin Consultants Ltd.
 #104 - 6596 Applecross Road, Nanaimo, BC, Canada V9V 0A4
 Tel: (778) 841-0484, Fax: (604) 597-9061, Email: general@aplinmartin.com



SITE LOCATION PLAN
 SCALE = 1:2500

DRAWING INDEX

DRAWING No.	REV No.	DRAWING TITLE
22-8017-C000	09	COVER
22-8017-C010	09	GENERAL NOTES
22-8017-C050	09	KEY PLAN
22-8017-C070	09	EXISTING CONTOUR PLAN
22-8017-C100	09	GRADING PLAN
22-8017-C150	09	GRADING SECTIONS - WEST PL
22-8017-C151	09	GRADING SECTIONS - SOUTH PL
22-8017-C200	09	SERVICING PLAN
22-8017-C250	09	SERVICING PROFILE - STORM
22-8017-C280	09	UTILITY COORDINATION PLAN
22-8017-C300	09	DETAILS
22-8017-C700	09	FIRE PROTECTION PLAN
22-8017-C800	09	STORMWATER MANAGEMENT PLAN
22-8017-C810	09	SANITARY CATCHMENT PLAN
22-8017-ESCN	09	EROSION AND SEDIMENT CONTROL - NOTES AND DETAILS
22-8017-ESC1	09	EROSION AND SEDIMENT CONTROL - PLAN STAGE 1
22-8017-ESC2	09	EROSION AND SEDIMENT CONTROL - PLAN STAGE 2
22-8017-ESC3	09	EROSION AND SEDIMENT CONTROL - PLAN STAGE 3

DEVELOPER:
ISLAND WEST COAST DEVELOPMENTS LTD.
 2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
 (250) 756-9665

PROJECT:
VICTORIA HYUNDAI AND GENESIS DEALERSHIPS
 2930 BRICKSHIRE DRIVE, LANGFORD, BC

RECEIVED City of Colwood
 Engineering Dept.
 By deden May-31-2024

MUNICIPAL PROJECT No. DP000007 & DP23-0051

APLIN & MARTIN PROJECT No. 22-8017

NOT FOR CONSTRUCTION

GENERAL NOTES:

- 1. ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY TO BE IN ACCORDANCE WITH THE LATEST CITY OF LANGFORD (CoL) SUBDIVISION AND DEVELOPMENT SERVICING BYLAW 1000, THE LATEST CITY OF COLWOOD (CoC) SUBDIVISION AND DEVELOPMENT OF LAND BYLAW, 1995, THE LATEST CAPITAL REGIONAL DISTRICT (CRD) ENGINEERING STANDARDS AND STANDARD DRAWINGS, THE LATEST MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD), AND THE LATEST MMCD DESIGN GUIDELINES.
2. ALL CONSTRUCTION WITHIN PRIVATE PROPERTY IS TO BE IN ACCORDANCE WITH BRITISH COLUMBIA BUILDING CODE 2018, BRITISH COLUMBIA PLUMBING CODE 2018, AND IS TO BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION (AHJ) BUILDING AND PERMITS DEPARTMENT.
3. ALL ELEVATIONS ARE METRIC AND TO GEODETIC DATUM. COORDINATES ARE GROUND LEVEL (UTM NAD 83 WITH COMBINED SCALE FACTOR OF 1/0.99985).
4. ALL LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND ALL STRUCTURES ARE NOT NECESSARILY SHOWN.
5. TREE PROTECTION TO BE INSTALLED AS PER CoL STD DWG L5, THE TREE PROTECTION PLAN, AND/OR AS DIRECTED BY THE PROJECT ARBORIST.
6. CONTRACTOR TO VERIFY THE LOCATION AND INVERTS OF EXISTING WATER, STORM, AND SANITARY CONNECTIONS TO THE SITE. REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO THE START OF CONSTRUCTION. EXISTING AND PROPOSED SERVICES MAY REQUIRE ADJUSTMENT WHERE A CONFLICT OCCURS.
7. ANY ALTERNATIVES TO SPECIFIED MATERIALS OR APPURTENANCES TO BE APPROVED BY THE AHJ ENGINEER PRIOR TO CONSTRUCTION.
8. CIVIL SCOPE ENDS AT 1.0m FROM THE PROPOSED BUILDING FOOTPRINT. BUILDING CONSULTANT SCOPE INCLUDES ALL WORKS 1.0m WITHIN THE BUILDING FOOTPRINT.
9. TRENCHING TO BE AS PER CoL STD DWG SS G4 OR AHJ APPROVED DRAWING. TRAVELED AREA BACKFILL TO BE IMPORTED GRANULAR MATERIAL COMPACTED TO MINIMUM 95% MODIFIED PROCTOR, UNLESS OTHERWISE APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD.
10. ALL ASBESTOS CEMENT ENCOUNTERED WITHIN THE TRENCH LINE SHALL BE REMOVED AND DISPOSED OF, OR ABANDONED, IN ACCORDANCE WITH WORKSAFE BC AND AHJ REQUIREMENTS.
11. ALL PIPING AND RELATED APPURTENANCES TO BE INSPECTED AND APPROVED BY THE ENGINEER OF RECORD, OR THEIR REPRESENTATIVE, PRIOR TO BACKFILLING.
12. ASPHALT PAVEMENT RESTORATION TO BE AS PER CoL STD DWG SS G5 OR AHJ APPROVED DRAWING.
13. ALL SURFACE RESTORATION (ROADS, CURBS, SIDEWALKS, ETC) SHALL BE TO ORIGINAL CONDITION OR BETTER.

WATERMAIN NOTES:

- 1. ALL WATER PIPES TO HAVE A MINIMUM 1.2m OF COVER, UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER OF RECORD.
2. ALL WATER MAINS TO BE PVC DR18, UNLESS OTHERWISE NOTED. SIZE NOTED ON PLAN OR PROFILE.
3. ALL EXISTING WATER MAINS TO BE REMOVED OR ABANDONED ONLY ONCE EXISTING WATER MAIN IS DECOMMISSIONED OR AS APPROVED BY THE ENGINEER OF RECORD.
4. ALL WATER MAIN JOINTS TO BE RESTRAINED AS PER CRD STANDARDS SECTION 4.7.4 FOR THRUST BLOCKS AND JOINT RESTRAINTS.
5. ALL WATER MAIN JOINTS WITHIN 3.0m HORIZONTAL OR 0.45m VERTICAL OF SANITARY SEWER OR STORM DRAINS TO BE PROTECTED BY SHRINK WRAP OR PETROLEUM TAPE AS PER CRD STANDARDS SECTION 4.2.6 FOR WATERMAIN LOCATION, DEPTH AND GRADE.
6. TESTING OF THE WATER SYSTEM TO BE IN ACCORDANCE WITH CRD STANDARDS SECTION 2.9 TESTING AND DISINFECTION.

SANITARY SEWER NOTES:

- 1. ALL SANITARY PIPES TO HAVE A MINIMUM 15cm OF COVER IN ROAD RIGHT-OF-WAYS AND 1.0m IN UNTRAVELED AREAS, UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER OF RECORD.
2. ALL SANITARY MAINS TO BE PVC SDR28, UNLESS OTHERWISE NOTED. SIZE NOTED ON PLAN OR PROFILE.
3. ALL SANITARY SERVICE CONNECTIONS TO BE 150P PVC SDR28 UNLESS OTHERWISE NOTED.
4. ALL SANITARY FORCE MAINS TO BE HDPE DR12 UNLESS OTHERWISE NOTED.
5. ALL SANITARY SERVICE BOXES TO BE IN ACCORDANCE WITH CoL STD DWG SS S9.
6. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SERVICE TO EXISTING USERS DURING CONSTRUCTION THROUGH BYPASS PUMPING. THE CONTRACTOR IS TO PROVIDE A BYPASS PUMPING PLAN PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL ENSURE THAT THE PUMPING EQUIPMENT IS KEPT IN GOOD WORKING CONDITION DURING THE PROJECT.
7. ALL TESTING TO BE IN ACCORDANCE WITH CoL BYLAW SECTION 6.7 TESTING AND MMCD STANDARDS.
8. THE CONTRACTOR IS TO FLUSH ALL MAINS AND PROVIDE CCTV INSPECTION TO THE ENGINEER OF RECORD PRIOR TO ASPHALT RESTORATION.

STORM DRAINAGE NOTES:

- 1. ALL STORM PIPES TO HAVE A MINIMUM 1.5m OF COVER IN ROAD RIGHT-OF-WAYS AND 1.0m IN UNTRAVELED AREAS, UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER OF RECORD.
2. ALL STORM MAINS TO BE PVC SDR28, UNLESS OTHERWISE NOTED. SIZE NOTED ON PLAN OR PROFILE.
3. ALL STORM DRAINAGE SERVICE CONNECTIONS TO BE 150P PVC SDR28, UNLESS OTHERWISE NOTED.
4. ALL CATCH/LAWN BASIN LEADS TO BE 200P PVC SDR35, UNLESS OTHERWISE NOTED.
5. ALL PERFORATED DRAIN PIPES TO BE PVC SDR35, UNLESS OTHERWISE NOTED.
6. ALL STORM DRAINAGE SERVICE BOXES TO BE IN ACCORDANCE WITH CoL STD DWG SS S9.
7. ALL CATCH BASINS WITHIN CITY RIGHT-OF-WAY TO BE CITY OF LANGFORD AS PER CoL STD DWG SS S11, UNLESS OTHERWISE NOTED.
8. ALL LAWN BASINS WITHIN CITY RIGHT-OF-WAY TO BE AS PER MMCD STD DWG S12, UNLESS OTHERWISE NOTED.
9. PROPOSED STORM DRAINAGE SERVICES ARE TO BE INSTALLED BELOW EXISTING BASEMENT ELEVATION OR AT THE SAME INVERT AS THE SANITARY SERVICES WHERE POSSIBLE, UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER OF RECORD.
10. NOT ALL STORM CONNECTIONS ARE SHOWN. SOME PROPERTIES MAY HAVE MORE THAN ONE CONNECTION TO THE EXISTING DITCH OR ADJACENT CULVERT.
11. ALL EXISTING STORM DRAINS AND CULVERTS TO BE ABANDONED SHALL BE INSPECTED FOR EXISTING STORM CONNECTIONS. ALL EXISTING CONNECTIONS ARE TO BE RELOCATED TO THE NEW STORM GENERATOR. DO NOT PLUG OR ABANDON AN EXISTING STORM DRAINAGE CONNECTION WITHOUT WRITTEN APPROVAL FROM THE AHJ CONSTRUCTION REPRESENTATIVE.
12. ALL TESTING TO BE IN ACCORDANCE WITH CoL BYLAW SECTION 5.9 TESTING AND MMCD STANDARDS.
13. THE CONTRACTOR IS TO FLUSH ALL MAINS AND PROVIDE CCTV INSPECTION TO THE ENGINEER OF RECORD PRIOR TO ASPHALT RESTORATION.

EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES:

- 1. THE FOLLOWING STRATEGIES ARE THE MINIMUM EFFORTS REQUIRED BY THE OWNER, DEVELOPER, AND THE DEVELOPERS' AGENTS (INCLUDING BUT NOT LIMITED TO: THE ENGINEER OF RECORD, ESC SUPERVISOR, GENERAL CONTRACTOR, SUB-CONTRACTORS, BUILDER, BUILDING SUB-TRADES & UTILITY COMPANIES). SOME OR ALL OF THESE ACTIONS MAY BE ASSIGNED TO SPECIFIC PERSONNEL THROUGH CONTRACTUAL ARRANGEMENTS. ALL PARTIES ENGAGED ON SITE SHALL COMPLY WITH THE FOLLOWING EROSION AND SEDIMENT CONTROL PLANS AND THE REGULATORY REQUIREMENTS SPECIFIED BY FEDERAL, PROVINCIAL, AND MUNICIPAL AUTHORITIES.
2. EROSION AND SEDIMENT CONTROL FOR THIS PROJECT WILL BE AS OUTLINED IN THE FISHERIES AND OCEANS CANADA AND MINISTRY OF WATER, LAND, AND AIR PROTECTION HANDBOOK ENTITLED "LAND DEVELOPMENT GUIDELINES FOR THE PROTECTION OF AQUATIC HABITAT, SEPTEMBER 1993" AND "ENVIRONMENTAL BEST MANAGEMENT PRACTICES FOR URBAN AND RURAL LAND DEVELOPMENT IN BRITISH COLUMBIA, JUNE 2004" AND "EROSION & SEDIMENT CONTROL GUIDELINE" BY THE CITY OF LANGFORD AND COLWOOD. IT IS INCUMBENT UPON THE GENERAL CONTRACTOR TO ACQUIRE THESE GUIDELINES AND FAMILIARIZE THEMSELVES WITH THE REQUIREMENTS THEREIN.
3. GENERAL CONTRACTOR TO HAVE A COPY OF THE ESC PLAN ON-SITE AT ALL TIMES, AND ENSURE CITY OF LANGFORD AND COLWOOD STANDARD EROSION & SEDIMENT CONTROL SIGNAGE IS PLACED ON-SITE PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED IN PLACE UNTIL LANDSCAPING IS COMPLETED.
4. THE ENGINEER OF RECORD WILL DESIGNATE AN ON-SITE ESC SUPERVISOR WHO IS RESPONSIBLE TO MONITOR, INSPECT, AND REPORT TO THE DEVELOPER AND GENERAL CONTRACTOR ON ESC FACILITIES & SITE DISCHARGE PERFORMANCE IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES (BMP'S).
5. THE CONSULTANT ASSUMES NO RESPONSIBILITY FOR DAMAGES RESULTING FROM IMPROPER EROSION AND SEDIMENT CONTROL MEASURES UNDERTAKEN BY THE GENERAL CONTRACTOR.
6. ANY DIRECTION GIVEN BY THE ENGINEER OF RECORD OR ESC SUPERVISOR TO THE GENERAL CONTRACTOR FOR EROSION AND SEDIMENT CONTROL, NOT FOLLOWED BY THE GENERAL CONTRACTOR IS TO BE REPORTED TO THE SITE SUPERINTENDENT AND MUNICIPALITY IMMEDIATELY.
7. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT NO SOIL, SAND, SILT, OR ANY OTHER SUBSTANCES ARE SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY, OR AREAS THAT LEAD TO CATCH BASINS CONNECTED TO PUBLIC SYSTEMS. THE GENERAL CONTRACTOR IS TO CLEAN ANY SUCH MATERIAL IMMEDIATELY, I.E. ROADS ARE TO BE SWEEPED WITH A VACUUM STREET SWEEPER AFTER WORK STOPPAGE EACH DAY.
8. PRIOR TO CONSTRUCTION, INSTALL A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT TO LIMIT TRACKING OF THE SOILS ONTO OFFSITE ROADWAYS. THE WIDTH ON PAD SHOULD BE THE FULL WIDTH OF THE POINT OF INGRESS/EGRESS AND SHOULD NOT BE LESS THAN 6m WIDE WITH A LENGTH OF THE PAD TO BE NOT LESS THAN 20m. THE PAD SHALL HAVE A MINIMUM THICKNESS OF 200mm (8") OF COARSE GRANULAR MATERIAL. COARSE GRANULAR MATERIAL SHALL AS 75mm SHOT ROCK OR FRACTURED DRAIN ROCK UNDERLAIN WITH GEO-TEXTILE FABRIC IS RECOMMENDED.
9. THE ENTRANCE SHOULD BE MAINTAINED FOR THE DURATION OF CONSTRUCTION, IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, OR AREAS THAT LEAD TO CATCH BASINS CONNECTED TO PUBLIC SYSTEMS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL MATERIAL AS CONDITIONS DEMAND. THE PAD MAY BE REMOVED ONCE PERMANENT PAVEMENTS ARE IN PLACE AT THE SITE. A WHEEL WASH MAY BE REQUIRED IF THE TEMPORARY GRAVEL PAD IS NOT WORKING.
10. PRIOR TO CONSTRUCTION, CLEARLY FLAG OR FENCE AREAS OF NO DISTURBANCE AS WELL AS ANY DESIGNATED TREES AND SHRUBS THAT ARE TO BE PRESERVED. MARKINGS SHOULD REMAIN IN PLACE THROUGHOUT CONSTRUCTION.
11. STRIP AND GRUB ONLY THOSE AREAS NECESSARY FOR THE CURRENT CONSTRUCTION. STAGE CONSTRUCTION OPERATIONS TO LIMIT DISTURBANCE AND DO NOT STRIP ANY AREA UNTIL REQUIRED.
12. GRADE WORK AREAS AROUND ADJACENT PROPERTIES AND TOWARDS THE SEDIMENT POND ON THE SITE FOR DISPERSAL AND INFILTRATION.
13. IF GRADED AREAS WITHIN THE PROJECT WILL NOT BE COMPLETED OUTSIDE OF THE WET SEASON (OCTOBER TO APRIL), REVEGETATION OPERATIONS SHOULD BE CARRIED OUT WITHIN ONE WEEK OF GRADING COMPLETION OR NO LATER THAT SEPT 15TH.
14. SILT FENCINGS IS TO BE INSTALLED AROUND ALL STOCK/SPOIL PILES, OR PILES ARE TO BE OTHERWISE COVERED TO LIMIT EROSION AND SEDIMENT GENERATION.
15. INSTALL SETTLEMENT PONDS EQUIPPED WITH EMERGENCY OVERFLOW, FOR RETENTION/INFILTRATION TREATMENT OF RUNOFF COLLECTED BY INTERCEPTOR SWALES (DITCHES) AND/OR SILT BARRIERS. THE SETTLEMENT PONDS ARE TO HAVE A MINIMUM VOLUME TO CONTAIN FLOWS FROM A 10-YEAR RETURN PERIOD, 24-HOUR RAINFALL EVENT. THE PONDS SHOULD BE USED AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
16. ROUTINE INSPECTION AND MAINTENANCE OF THE SYSTEM COMPONENTS WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHOULD DESIGNATE AN ON-SITE ESC FACILITATOR TO BE RESPONSIBLE FOR DAY-TO-DAY MANAGEMENT OF THE ESC FACILITIES. THE GENERAL CONTRACTOR IS TO SUPPLY A PHONE NUMBER WHERE THE ESC FACILITATOR CAN BE REACHED 24 HOURS/DAY. AT A MINIMUM, INSPECT ALL BMP'S WEEKLY TO ENSURE PROPER FUNCTION WITH INSPECTION REPORTS PROVIDED TO THE ENGINEER OF RECORD FOR REVIEW.
17. 48 HOURS PRIOR TO ANY PREDICTED SIGNIFICANT STORM EVENT, THE ESC FACILITATOR AND ESC SUPERVISOR SHOULD INSPECT THE ESC FACILITIES AND ENSURE THAT THE WORK ARE ADEQUATE TO PROTECT THE SITE DURING THE STORM EVENT. THE ESC FACILITATOR SHALL PROVIDE A WRITTEN REPORT TO THE ENGINEER OF RECORD AND/OR THE MUNICIPALITY. IF THE ESC SUPERVISOR DETERMINES THAT THE ESC WORKS ARE NOT ADEQUATE TO PROTECT THE SITE DURING THE ANTICIPATED STORM EVENT, THEN THEY ARE TO IMMEDIATELY INFORM THE ENGINEER OF RECORD AND GENERAL CONTRACTOR SO THAT THE WORKS CAN BE MODIFIED TO ADEQUATELY PROTECT THE SITE DURING THE STORM EVENT AND PROVIDE A WRITTEN REPORT TO THE ENGINEER OF RECORD AND/OR MUNICIPALITY.
18. DURING AND/OR FOLLOWING EACH SIGNIFICANT STORM EVENT, THE ESC FACILITATOR AND ESC SUPERVISOR SHOULD OBSERVE THE SETTLEMENT PONDS AND STORM DRAIN TO CONFIRM THAT TURBID WATERS FROM SOURCES ASSOCIATED WITH CONSTRUCTION ARE NOT ENTERING THE STORM DRAINAGE SYSTEM. THE ESC FACILITATOR SHOULD TAKE IMMEDIATE CORRECTIVE ACTION IF INSPECTION INDICATES A PROBLEM. RECORD INSPECTION DATES, ANY SIGNIFICANT OBSERVATIONS, AND ACTIONS TAKEN, THEN INFORM THE ENGINEER OF RECORD AND THE MUNICIPALITY.

MAINTENANCE ALL STAGES (AS APPLICABLE):

- 1. THE GENERAL CONTRACTOR'S ESC FACILITATOR IS RESPONSIBLE FOR DAY-TO-DAY MAINTENANCE OF THE ESC WORKS. ROUTINE INSPECTION AND MAINTENANCE OF THE SITE WORKS WILL BE THE RESPONSIBILITY OF THE ESC FACILITATOR. AT A MINIMUM INSPECT ALL BMP'S WEEKLY TO ENSURE PROPER FUNCTION WITH INSPECTION REPORTS PROVIDED TO THE ENGINEER OF RECORD AND THE MUNICIPALITY FOR REVIEW.
2. INSPECTIONS AND REPORTS ARE TO BE CONDUCTED AS PER ESC GENERAL NOTES 16, 17, AND 18.
3. UPON DIRECTION BY THE ENGINEER OF RECORD OR ESC SUPERVISOR, THE GENERAL CONTRACTORS ESC FACILITATOR IS REQUIRED TO UNDERTAKE MAINTENANCE ACTIVITIES AS NECESSARY TO MODIFY OR MAINTAIN ESC FACILITIES. ADDITIONAL MEASURES THAN WHAT IS SPECIFIED MAY BE REQUIRED.
4. THE GENERAL CONTRACTOR IS TO ENSURE ROAD SURFACES ARE REGULARLY CLEANED OF ACCUMULATED SEDIMENTS BY STREET SWEEPER AT THE END OF EACH DAY AS REQUIRED BY ESC GENERAL NOTE 7. FLUSHING OF ROADWAYS IS PROHIBITED.
5. SEDIMENT FENCES/BARRIERS TO BE INSPECTED AND REPAIRED PRIOR TO EXPECTED RAIN EVENTS AND FOLLOWING ALL SIGNIFICANT STORM EVENTS OR PERIODS OF EXTENDED RAIN; ACCUMULATED SEDIMENTS GREATER THAN 50% OF THE FENCE CAPACITY OR DEFICIENCIES SHOULD BE DEALT WITH ACCORDINGLY.
6. ALL CATCH BASIN FILTER SOCKS ARE TO BE INSPECTED WEEKLY OR FOLLOWING STORM EVENTS, INLINE FILTERS ARE TO BE REMOVED AND CLEANED AT 40% CAPACITY.
7. GRAVEL ACCESS PADS TO BE INSPECTED DAILY TO ENSURE FUNCTIONALITY, ADDITIONAL ROCK TO BE ADDED AS REQUIRED.
8. ANY STOCKPILED MATERIAL TO BE COVERED AND ENCLOSED BY SEDIMENT FENCE AS SPECIFIED.
9. DUST NUISANCE WILL BE REDUCED BY USE OF WATER SPRAYED ON THE EXPOSED SOURCE OF THE DUST. FREQUENCY OF THE SUPPRESSION WILL BE AS REQUIRED OR AS DIRECTED BY THE ENGINEER OF RECORD.
10. ALL SEDIMENT FROM ESC CONTROL FACILITIES TO BE DISPOSED OF IN A MANNER AS TO NOT COMPOUND OR COMPROMISE THE SEDIMENT LOADING OF OTHER CONTROL MEASURES.
11. ANY IRREGULARITIES SHALL BE REPORTED TO THE ENGINEER OF RECORD AND/OR ESC SUPERVISOR IMMEDIATELY.

POWER, COMMUNICATIONS AND GAS:

- 1. THE CONTRACTOR SHALL CONTACT BC ONE CALL A MINIMUM OF THREE WORKING DAYS PRIOR TO START OF CONSTRUCTION. NOTE THAT BC ONE CALL WILL NOT HAVE INFORMATION ON CITY UTILITIES (WITH THE EXCEPTION OF CITY OF LANGFORD AND COLWOOD FIBER OPTICS) OR SHAW. CALL 1-800-DIG-SHAW FOR SHAW INFORMATION.
2. THE CONTRACTOR SHALL CONSTRUCT UNDERGROUND BC HYDRO, TELUS, SHAW CABLE AND FORTIS BC IN ACCORDANCE WITH THE APPLICABLE UTILITY COMPANY'S CURRENT SPECIFICATIONS.
3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS REQUIRED PRIOR TO THE START OF CONSTRUCTION TO ARRANGE INSPECTION AND APPROVALS.
4. THE CONTRACTOR SHALL CONTACT BC HYDRO AND TELUS TO INSTALL RISERS ON EXISTING JUNCTION BOXES TO BRING LID ELEVATIONS FLUSH TO GRADE.
5. CONNECTION TO, OR ALTERATION OF, EXISTING MUNICIPALITY OWNED UTILITIES REQUIRES AUTHORIZATION BY THE MUNICIPALITY'S REPRESENTATIVE.
6. ALL LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHALL BE CONFIRMED BY THE USE OF A PIPE LOCATOR AND MANUAL DIGGING. ALL OR ANY STRUCTURES NOT NECESSARILY SHOWN.
7. ALL SURFACE RESTORATION (ROADS, CURBS, SIDEWALKS, ETC) SHALL BE TO ORIGINAL CONDITION OR BETTER.
8. THE CONTRACTOR SHALL NOTIFY ALL RESIDENCES AND/OR BUSINESSES AFFECTED BY THE CONSTRUCTION FIVE DAYS PRIOR TO STARTING THE CONSTRUCTION. THE CONTRACTOR SHALL ALSO EACH DAY INDIVIDUALLY NOTIFY EACH RESIDENCE OR BUSINESS WHICH WILL BE AFFECTED BY THE NEXT DAY'S WORK.
9. THE DRAWINGS MAY NOT SHOW ALL INDIVIDUAL UNDERGROUND HOME SERVICE CONNECTIONS. THE CONTRACTOR SHALL EXPOSE, ALL EXISTING UNDERGROUND FACILITIES BY HAND DIGGING BEFORE USING MECHANICAL EXCAVATING EQUIPMENT.

NOT FOR CONSTRUCTION

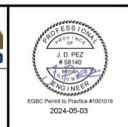
NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD.

Table with 5 columns: REV. NO., DESCRIPTION, DR, CH, DATE, APP. Includes revision history for biological consideration, development permit application, building permit application, and city review.

APLIN MARTIN logo and contact information: EGBC Permit to Practice Number #100118, Aplin & Martin Consultants Ltd., #104-6596 Appleton Road, Nanaimo, BC, Canada V9V 0A4, Tel: (778) 841-0484, Fax: (604) 597-9061, Email: general@aplinmartin.com

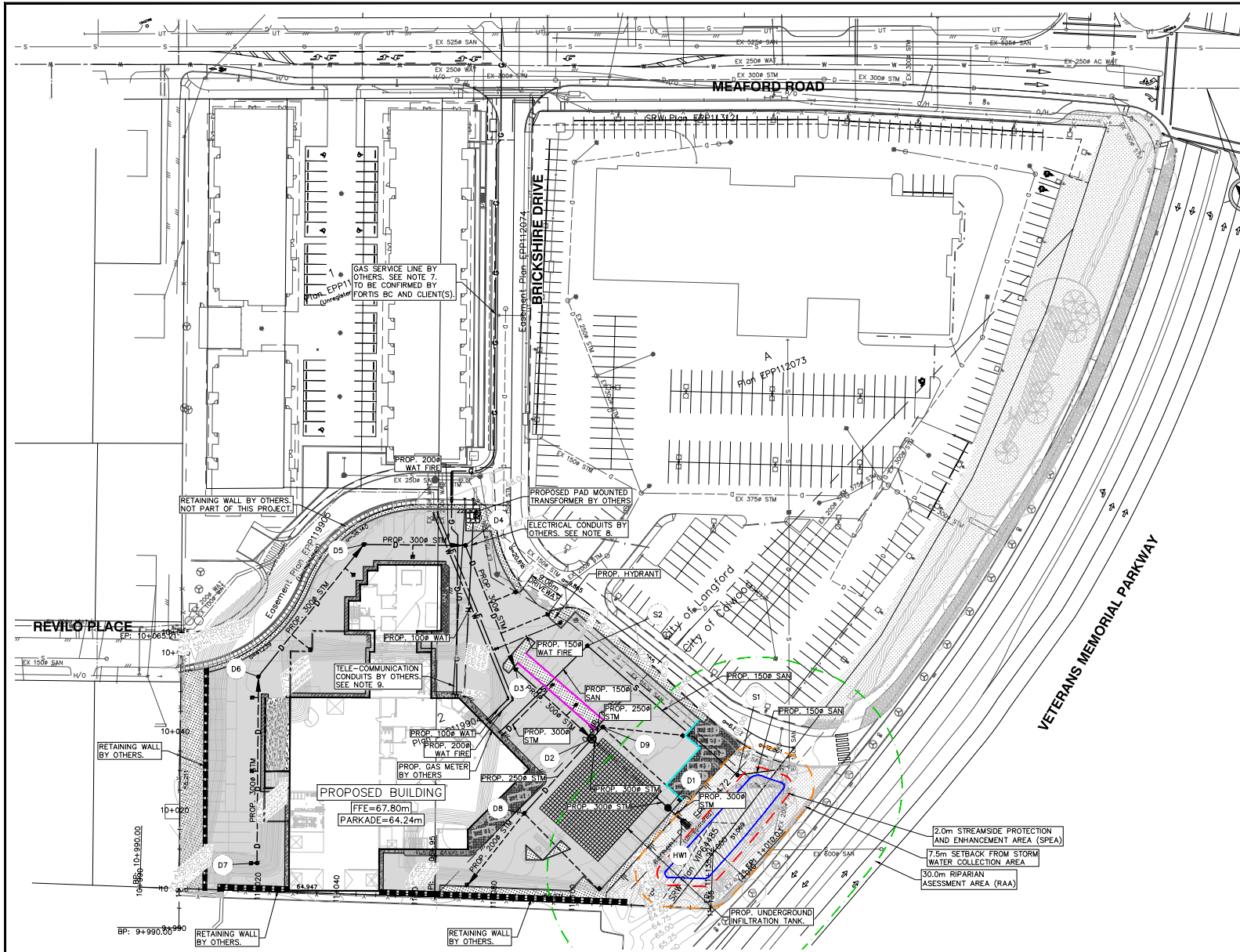
CLIENT: ISLAND WEST COAST DEVELOPMENTS LTD., 2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8 (250) 756-9665. PROJECT: VICTORIA HYUNDAI AND GENESIS DEALERSHIPS, 2930 BRICKSHIRE DRIVE, LANGFORD, BC.



The location of existing underground utilities are shown to an approximate accuracy only & have not been independently verified by the owner or its representative. The contractor shall determine the exact location of existing utilities before commencing work, and agree to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and/or mark the end of underground utilities.

Table with 2 columns: TITLE, PROJECT NO., DRAWING NO., SCALE, DATE. Includes project details: DP000007 & DP23-0051, 22-8017, A & M DRAWING NO. 22-8017- C010, DATE NOVEMBER 2022, DRAWING DATE 01 OF 18 09.

Table with 2 columns: DESIGN: JDP, CHECK: SAL, DRAWN: KA, APPR: SAL, SHEET NO., REV. Includes drawing identification: 22-8017, SHEET NO. 01 OF 18, REV. 09.



- KEY PLAN NOTES:**
- REFER TO GENERAL NOTES SHEET FOR MINIMUM PIPE COVER, PIPE MATERIALS, AND TESTING PROCEDURES.
 - THE CONTRACTOR MUST CONTACT THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING DURING WHICH CONSTRUCTION METHODS, TIMING, AND INSPECTION WILL BE DISCUSSED.
 - ALL CONSTRUCTION WITHIN PRIVATE PROPERTY IS TO BE IN ACCORDANCE WITH BRITISH COLUMBIA BUILDING CODE 2018, BRITISH COLUMBIA PLUMBING CODE 2018, AND IS TO BE ACCEPTABLE TO THE MUNICIPAL BUILDING AND PERMITS DEPARTMENT.
 - CONTRACTOR TO VERIFY THE LOCATION AND INVERTS OF EXISTING WATER, STORM, AND SANITARY CONNECTIONS TO THE SITE. REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO THE START OF CONSTRUCTION. EXISTING AND PROPOSED SERVICES MAY REQUIRE ADJUSTMENT WHERE A CONFLICT OCCURS.
 - CIVIL SCOPE ENDS AT 1.0m FROM THE BUILDING FOOTPRINT. BUILDING CONSULTANT SCOPE INCLUDES ALL WORKS WITHIN 1.0m OF THE BUILDING FOOTPRINT.
 - ALL BUILDINGS AND ROADS ARE TO BE LOCATED BY CO-ORDINATES AS CALCULATED BY A B.C. LAND SURVEYOR.
 - CONSULT FORTIS BC AND MECHANICAL DRAWINGS FOR GAS DISTRIBUTION AND DESIGN INFORMATION.
 - CONSULT BC HYDRO AND ELECTRICAL DRAWINGS FOR ELECTRICITY DISTRIBUTION AND DESIGN INFORMATION.
 - CONSULT TELE-COMMUNICATIONS AND ELECTRICAL DRAWINGS FOR TELE-COMM. DISTRIBUTION AND DESIGN INFORMATION.

KEY PLAN LEGEND

STORM DRAIN	---
SANITARY SEWER	-S-
WATERMAIN - DOMESTIC	-W-
WATERMAIN - FIRE PROTECTION	-F-
STORM SERVICE CONNECTION	---
SANITARY SERVICE CONNECTION	---
WATER SERVICE CONNECTION	---
UNDERGROUND GAS - BY OTHERS	---
UNDERGROUND HYDRO - BY OTHERS	---
UNDERGROUND TELEPHONE - BY OTHERS	---
UNDERGROUND COMMUNICATION - BY OTHERS	---
MANHOLE	●
CLEANOUT	●
FIRE HYDRANT	◆
BLOW OFF	●
AIR VALVE	●
CATCH BASIN	■
LAWN BASIN	●
DRAINAGE SWALE	---
EXISTING GROUND CONTOUR	---
MINIMUM BUILDING ELEVATION	MBC=99.99m
FINISHED FLOOR ELEVATION	FFE=99.99m
FINISHED CURB - SEE DETAIL	---
NOTCHED CURB - SEE DETAIL	---
ROLLER CURB - SEE DETAIL	---
RETAINING WALL - BY OTHERS	---
ASPHALT PAVEMENT - SEE DETAIL	---
CONCRETE PAVEMENT - SEE ARCH.	---
CONCRETE DISPLAY - SEE ARCH.	---
PARKADE RAMP - SEE ARCH.	---
CONCRETE APRON - SEE ARCH.	---
LANDSCAPING AREA - SEE LARCH.	---

NOT FOR CONSTRUCTION

NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEER'S DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD.

LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904

BENCHMARK MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEOIDETIC)
 LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17	JDP
6	RE-ISSUED FOR DEVELOPMENT PERMIT APPLICATION	JDP	JDP	2024FEB09	JDP
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024MAR06	JDP
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024MAR06	JDP
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024MAY03	JDP

APLIN MARTIN

EGBC Permit to Practice Number #1001018

ApLin & Martin Consultants Ltd.
 #104 - 6596 Applecross Road, Nanaimo, B.C. Canada V9V 0A4
 Tel: (778) 841-0484, Fax: (604) 597-9061, Email: general@aplinmartin.com

CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
 2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
 (250) 756-9665

PROJECT: **VICTORIA HYUNDAI AND GENESIS DEALERSHIPS**
 2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCO

The location of existing underground utilities are shown in an approximate way only & verified by the owner or its representatives. The contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

IBS

TITLE: **KEY PLAN**

PROJECT NO. **DP000007 & DP23-0051**

DRAWING NO. **A & M DRAWING NO. 22-8017- C050**

SCALE: **HORIZ. 1:500**
VERT. N/A

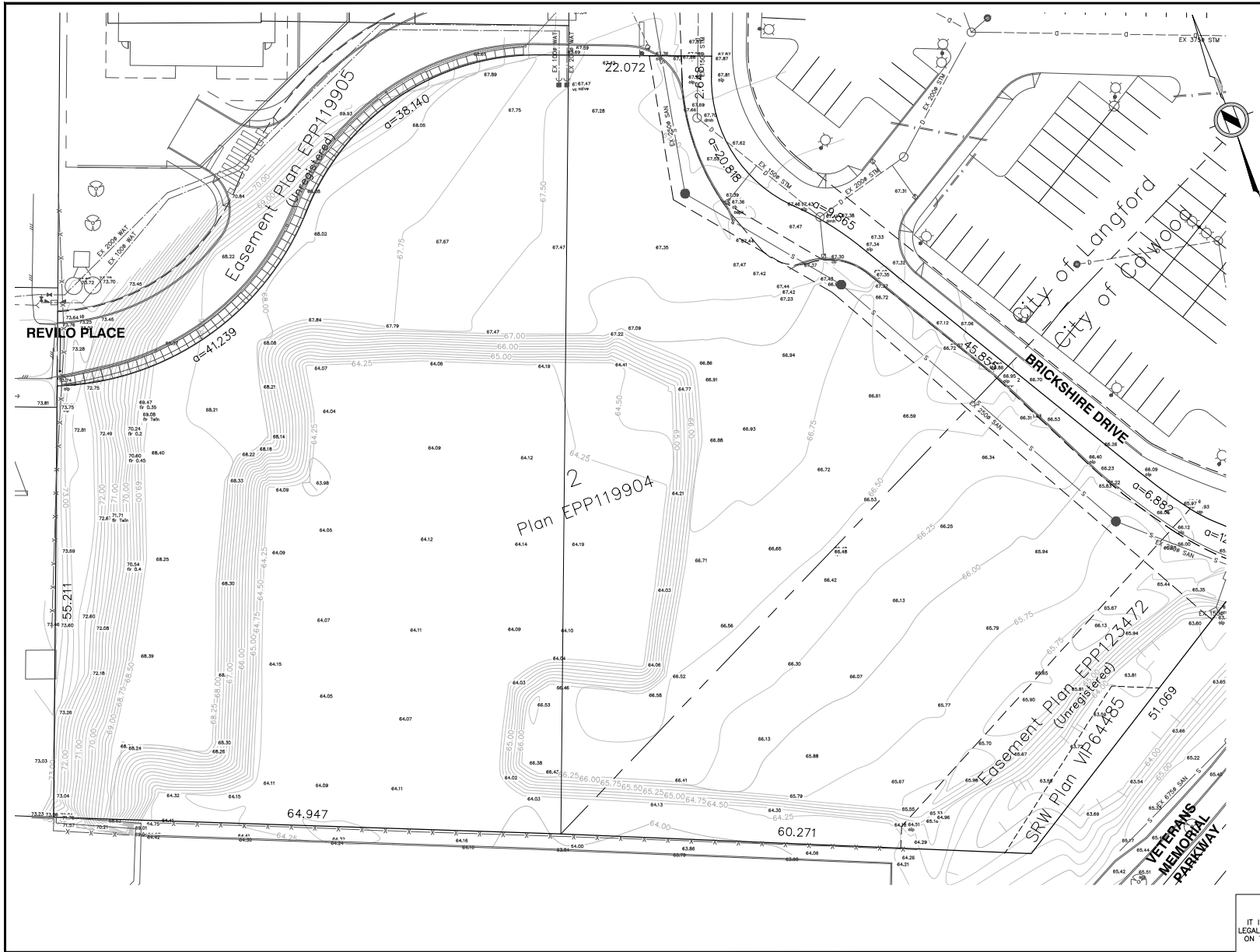
DESIGN: JDP CHECK: SAL
 DRAWN: KA APPR: SAL

22-8017

DRAWING DATE: **NOVEMBER 2022**

SHEET NO. **02** OF **18** REV. **09**

0 5 1:500 25m



EXISTING CONTOUR NOTES:

- ALL DIMENSIONS AND ELEVATIONS ARE IN METERS AND TO GEODETIC DATUM, UNLESS OTHERWISE NOTED.
- ALL LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND ALL STRUCTURES ARE NOT NECESSARILY SHOWN.

EXISTING CONTOUR LEGEND

EXISTING GROUND CONTOUR	99.5
STORM DRAIN	---
SANITARY SEWER	---
WATERMAIN - DOMESTIC	---
WATERMAIN - FIRE PROTECTION	---
STORM SERVICE CONNECTION	---
SANITARY SERVICE CONNECTION	---
WATER SERVICE CONNECTION	---
UNDERGROUND GAS	---
UNDERGROUND HYDRO	---
UNDERGROUND TELEPHONE	---
UNDERGROUND COMMUNICATION	---
OVERHEAD HYDRO/TEL/CABLE	---
MANHOLE	○
CLEANOUT	○
FIRE HYDRANT	○
BLOW OFF	□
AIR VALVE	○
CATCH BASIN	□
LAWN BASIN	○

NOTICE TO CONTRACTOR

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NOT FOR CONSTRUCTION

LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904

BENCHMARK MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEODETIC)
 LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17	JDP
6	RE-ISSUED FOR DEVELOPMENT PERMIT APPLICATION	JDP	JDP	2024FEB09	JDP
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024MAR06	JDP
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024MAR06	JDP
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024MAY03	JDP

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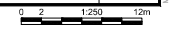
PROJECT: **VICTORIA HYUNDAI AND GENESIS DEALERSHIPS**
 2930 BRICKSHIRE DRIVE, LANGFORD, BC

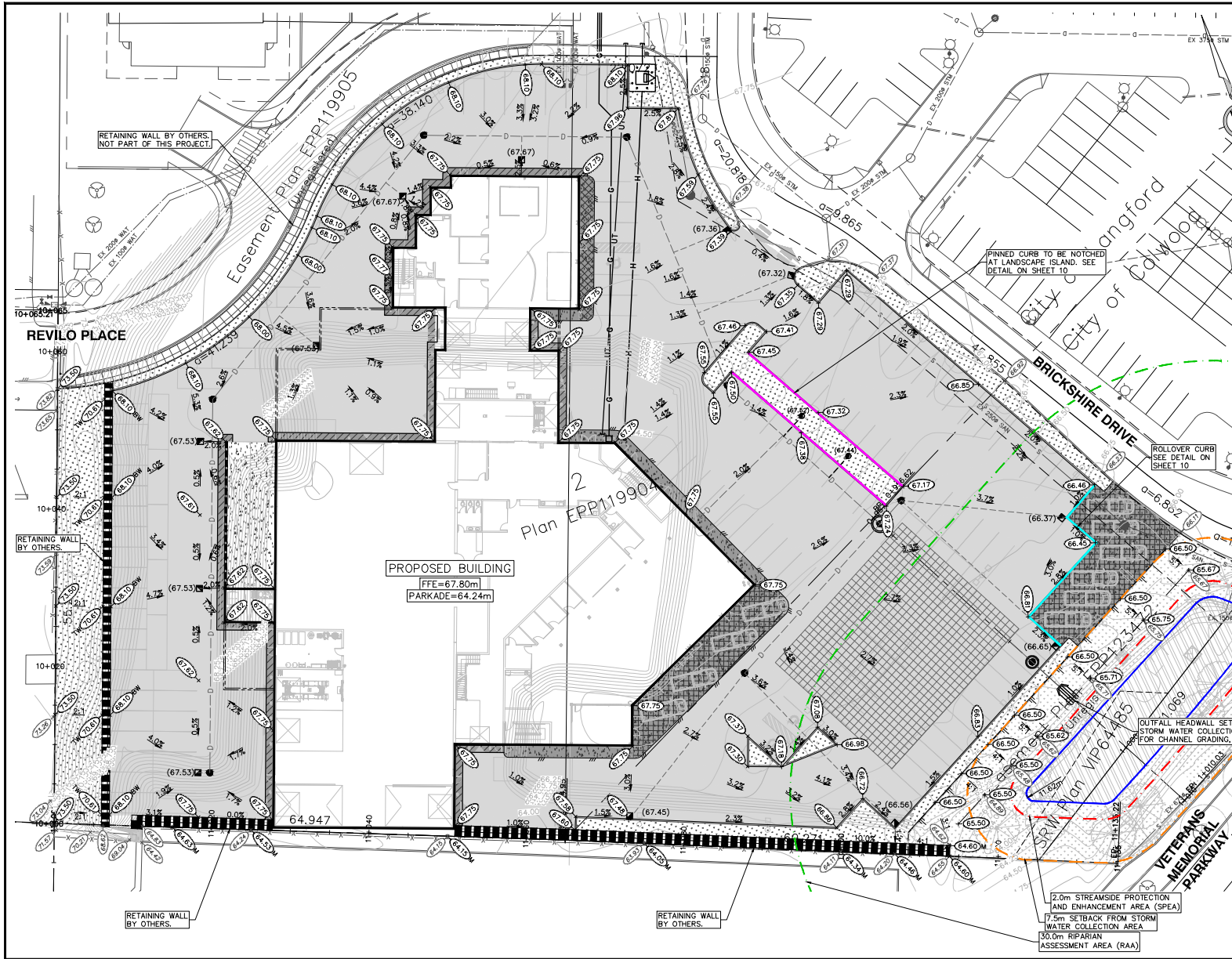
IBWC



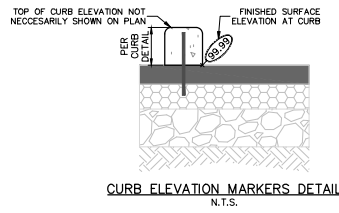
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TITLE: EXISTING CONTOUR PLAN	DESIGN: JDP DRAWN: KA	CHECK: SAL APPR: SAL
PROJECT NO. DP000007 & DP23-0051	SCALE: HORIZ: 1:250	A & M FILE: 22-8017
DRAWING NO. 22-8017- C070	VERT: N/A	DRAWING DATE: NOVEMBER 2022
	A & M DRAWING NO. 22-8017- C070	SHEET NO. 03 OF 18
		REV. 09





- SITE GRADING NOTES:**
- REFER TO GENERAL NOTES SHEET FOR MINIMUM PIPE COVER, PIPE MATERIALS, AND TESTING PROCEDURES.
 - THE CONTRACTOR MUST CONTACT THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING DURING WHICH CONSTRUCTION METHODS, TIMING, AND INSPECTION WILL BE DISCUSSED.
 - ALL CONSTRUCTION WITHIN PRIVATE PROPERTY IS TO BE IN ACCORDANCE WITH BRITISH COLUMBIA BUILDING CODE 2018, BRITISH COLUMBIA PLUMBING CODE 2018, AND IS TO BE ACCEPTABLE TO THE MUNICIPAL BUILDING AND PERMITS DEPARTMENT.
 - ALL BUILDINGS AND ROADS ARE TO BE LOCATED BY CO-ORDINATES AS CALCULATED BY A B.C. LAND SURVEYOR.
 - ALL DIMENSIONS AND ELEVATIONS ARE IN METERS AND TO GEODETIC DATUM, UNLESS OTHERWISE NOTED.
 - ALL EXCAVATION, FILL PLACEMENT AND COMPACTION TO BE IN ACCORDANCE WITH GEOTECHNICAL CONSULTANTS REPORT.
 - ALL ON-SITE ASPHALT PAVEMENT TO BE CONSTRUCTED AS PER PAVEMENT STRUCTURE DETAIL ON THE DETAIL SHEET.
 - CHANGES TO GRADE SHALL BE FORMED BY SMOOTH CURVES.
 - ALL BUILDINGS EXIT TO GRADE FROM THE LOWER FLOOR, UNLESS OTHERWISE NOTED.
 - CONTRACTOR TO EMPLOY GEOTECHNICAL CONSULTANT FOR PERFORMANCE OF IN PLACE TESTING DURING THE PREPARATION OF THE SUBGRADE AND CONSTRUCTION OF THE PAVEMENT STRUCTURE.
 - CONTRACTOR TO REVIEW DETAILS SHEET TO CONFIRM SITE SPECIFIC DESIGN REQUIREMENTS. REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO THE START OF CONSTRUCTION.



SITE GRADING LEGEND

EXISTING GROUND ELEVATION	+99.99
FINISHED GROUND ELEVATION	+99.99
FINISHED GROUND ELEVATION AT TOP OF WALL	+99.99/TW
FINISHED GROUND ELEVATION AT BOTTOM OF WALL	+99.99/BW
FINISHED GROUND ELEVATION TO MEET EXISTING ELEVATION	+99.99/M
GRADE	9.9%
EXISTING GROUND CONTOUR	99.5
MINIMUM BUILDING ELEVATION	MBE 95.99
FINISHED FLOOR ELEVATION	FFE 99.99
PINNED CURB - SEE DETAIL	—
NOTCHED CURB - SEE DETAIL	—
ROLLER CURB - SEE DETAIL	—
EDGE OF ASPHALT PAVEMENT	—
RETAINING WALL - BY OTHERS	—
CATCH BASIN	—
LAWN BASIN	—
DRAINAGE SWALE	—
RIM ELEVATION	(99.99)
ASPHALT PAVEMENT - SEE DETAIL	—
CONCRETE PAVEMENT - SEE ARCH.	—
CONCRETE DISPLAY - SEE ARCH.	—
PARKADE RAMP - SEE ARCH.	—
CONCRETE APRON - SEE ARCH.	—
LANDSCAPING AREA - SEE L.A.RCH.	—

NOTICE TO CONTRACTOR

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LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904

BENCHMARK: MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEODETIC)
 LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17	JDP
6	RE-ISSUED FOR DEVELOPMENT PERMIT APPLICATION	JDP	JDP	2024FEB09	JDP
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024MAR06	JDP
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024MAR06	JDP
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024MAY03	JDP

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CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
 2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
 (250) 796-9665

PROJECT: **VICTORIA HYUNDAI AND GENESIS DEALERSHIPS**
 2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCO

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BCS

TITLE: **GRADING PLAN**

PROJECT NO. **DP000007 & DP23-0051**

DRAWING NO. **22-8017 - C100**

SCALE: **HORIZ: 1:250**
VERT: N/A

A & M DRAWING NO. **22-8017 - C100**

DESIGN: JDP
 DRAWN: KA
 CHECK: SAL
 APPR: SAL

A & M FILE: **22-8017**

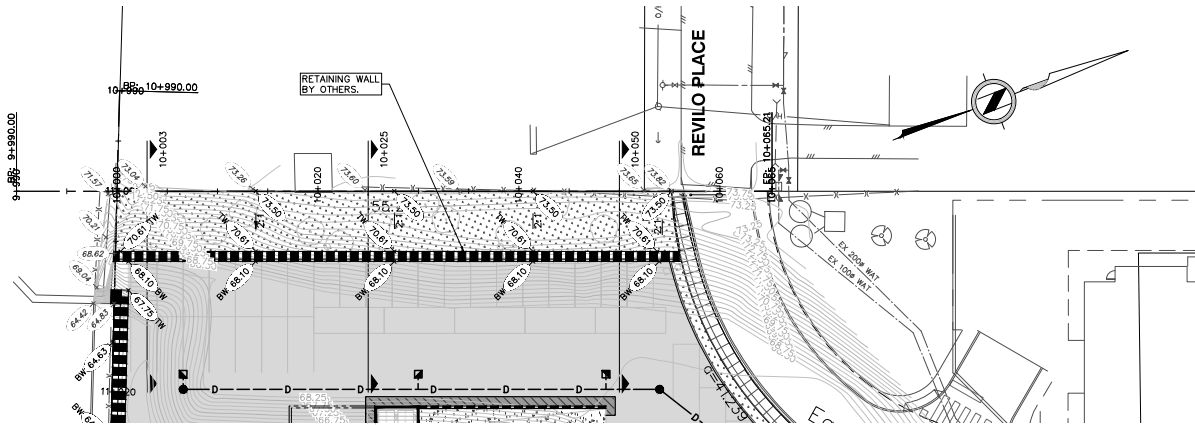
DRAWING DATE: **NOVEMBER 2022**

SHEET NO. **04** OF **18**

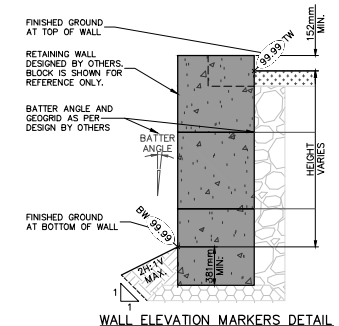
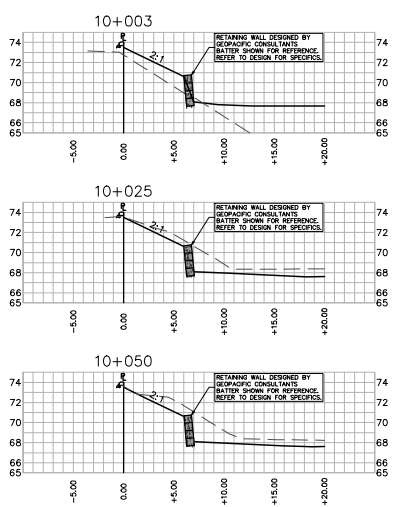
REV. **09**

0 2 1:250 12m

NOT FOR CONSTRUCTION



- SITE GRADING NOTES:**
1. REFER TO GENERAL NOTES SHEET FOR MINIMUM PIPE COVER, PIPE MATERIALS, AND TESTING PROCEDURES.
 2. THE CONTRACTOR MUST CONTACT THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING DURING WHICH CONSTRUCTION METHODS, TIMING, AND INSPECTION WILL BE DISCUSSED.
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 7. ALL ON-SITE ASPHALT PAVEMENT TO BE CONSTRUCTED AS PER PAVEMENT STRUCTURE DETAIL ON THE DETAIL SHEET.
 8. CHANGES TO GRADE SHALL BE FORMED BY SMOOTH CURVES.
 9. ALL BUILDINGS EXIST TO GRADE FROM THE LOWER FLOOR, UNLESS OTHERWISE NOTED.
 10. CONTRACTOR TO EMPLOY GEOTECHNICAL CONSULTANT FOR PERFORMANCE OF IN PLACE TESTING DURING THE PREPARATION OF THE SUBGRADE AND CONSTRUCTION OF THE PAVEMENT STRUCTURE.
 11. CONTRACTOR TO REVIEW DETAILS SHEET TO CONFIRM SITE SPECIFIC DESIGN REQUIREMENTS. REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO THE START OF CONSTRUCTION.



SITE GRADING LEGEND

EXISTING GROUND ELEVATION	+ 99.99
FINISHED GROUND ELEVATION	+ 99.99
FINISHED GROUND ELEVATION AT TOP OF WALL	+ 99.99 TW
FINISHED GROUND ELEVATION AT BOTTOM OF WALL	+ 99.99 BW
FINISHED GROUND ELEVATION TO MEET EXISTING ELEVATION	+ 99.99 M
GRADE	9.9%
EXISTING GROUND CONTOUR	99.5
MINIMUM BUILDING ELEVATION	MBE=95.99m
FINISHED FLOOR ELEVATION	FFE=99.99m
CURB & GUTTER - SEE DETAIL	
EDGE OF ASPHALT PAVEMENT	
RETAINING WALL - BY OTHERS	
BUILDING FOUNDATION STEP	0.3m STEP
CATCH BASIN	☐
LAWN BASIN	●
DRAINAGE SWALE	---
RIM ELEVATION	(99.99)
ASPHALT PAVEMENT - SEE DETAIL	
CONCRETE PAVEMENT - SEE ARCH.	
LANDSCAPING AREA - SEE L.ARCH.	
GRAVEL AREA - SEE L.ARCH.	
PERMEABLE PAVERS - SEE L.ARCH.	
ROOF AREA - SEE ARCH.	

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LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904

BENCHMARK: MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEODETIC)
 LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17	JDP
6	RE-ISSUED FOR DEVELOPMENT PERMIT APPLICATION	JDP	JDP	2024FEB09	JDP
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024MAR06	JDP
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024MAR04	JDP
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024MAY03	JDP

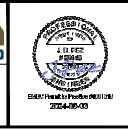
APLIN MARTIN

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CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
 2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
 (250) 796-9665

PROJECT: **VICTORIA HYUNDAI AND GENESIS DEALERSHIPS**
 2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCO



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TITLE: **GRADING SECTIONS - WEST PL**

PROJECT NO. **DP000007 & DP23-0051**

DRAWING NO. **A & M DRAWING NO. 22-8017- C150**

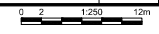
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DESIGN: JDP, CHECK: SAL, DRAWN: KA, APPR: SAL

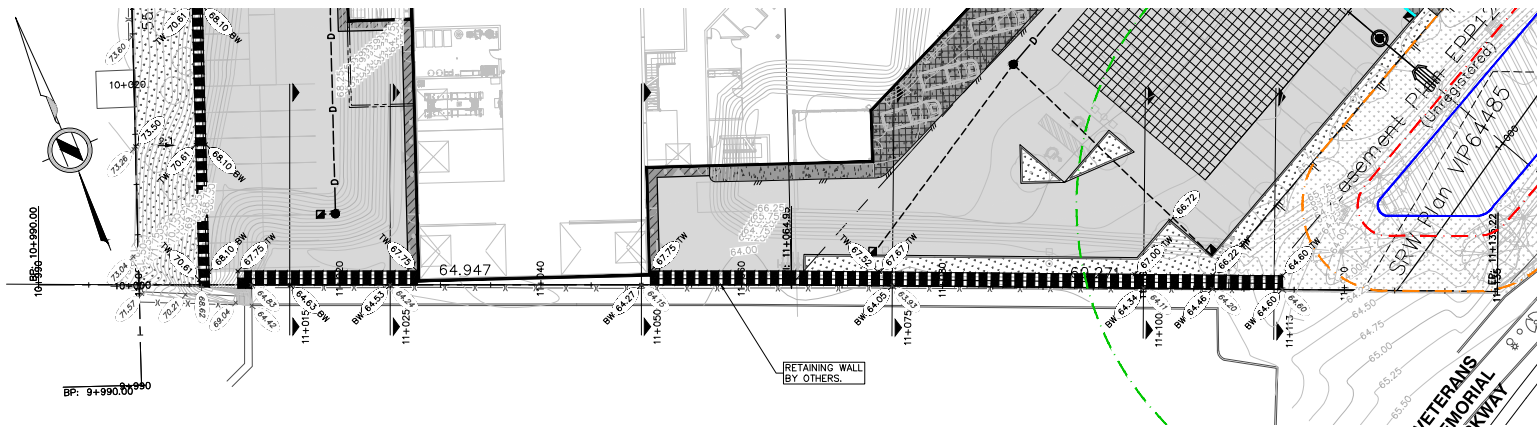
A & M FILE: **22-8017**

DRAWING DATE: **NOVEMBER 2022**

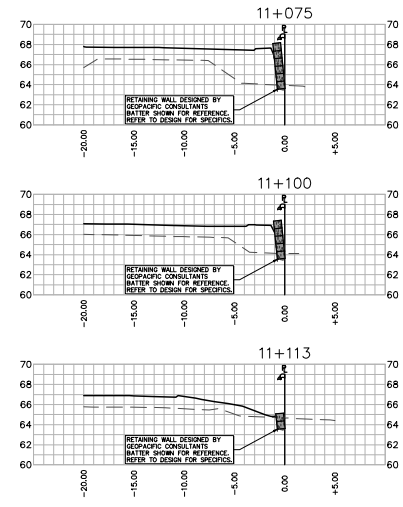
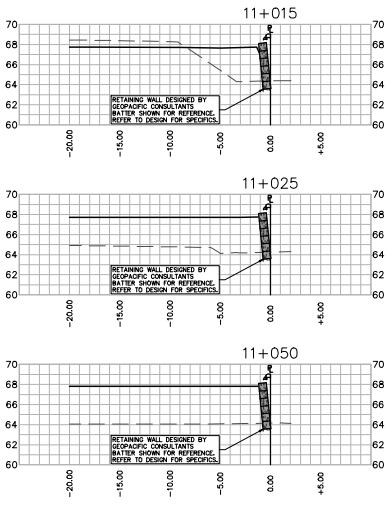
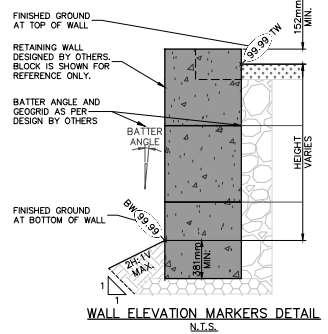
SHEET NO. **05 OF 18**, REV. **09**



NOT FOR CONSTRUCTION



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SITE GRADING LEGEND

EXISTING GROUND ELEVATION	+ 99.99
FINISHED GROUND ELEVATION	+ 99.99
FINISHED GROUND ELEVATION AT TOP OF WALL	+ 99.99 TW
FINISHED GROUND ELEVATION AT BOTTOM OF WALL	+ 99.99 BW
FINISHED GROUND ELEVATION TO MEET EXISTING ELEVATION	+ 99.99 M
GRADE	9.9%
EXISTING GROUND CONTOUR	99.5
MINIMUM BUILDING ELEVATION	MBE=95.99m
FINISHED FLOOR ELEVATION	FFE=99.99m
CURB & GUTTER - SEE DETAIL	
EDGE OF ASPHALT PAVEMENT	
RETAINING WALL - BY OTHERS	---
BUILDING FOUNDATION STEP	0.3m STEP
CATCH BASIN	■
LAWN BASIN	●
DRAINAGE SWALE	---
RIM ELEVATION	(99.99)
ASPHALT PAVEMENT - SEE DETAIL	
CONCRETE PAVEMENT - SEE ARCH.	
LANDSCAPING AREA - SEE LARCH.	
GRAVEL AREA - SEE LARCH.	
PERMEABLE PAVERS - SEE LARCH.	
ROOF AREA - SEE ARCH.	

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NOT FOR CONSTRUCTION

LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904

BENCHMARK: MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEODETIC)
LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17	JDP
6	RE-ISSUED FOR BIOLOGICAL PERMIT APPLICATION	JDP	JDP	2024FEB09	JDP
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024MAR06	JDP
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024MAR06	JDP
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024MAY03	JDP

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CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
(250) 796-9665

PROJECT: **VICTORIA HYUNDAI AND GENESIS DEALERSHIPS**
2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCO

Professional Engineer Seal: I.B. 5152, A. 5104, 2024-07-04, 3004-07-04

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TITLE: **GRADING SECTIONS - SOUTH PL**

PROJECT NO. **DP000007 & DP23-0051**

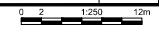
DRAWING NO. **22-8017 - C151**

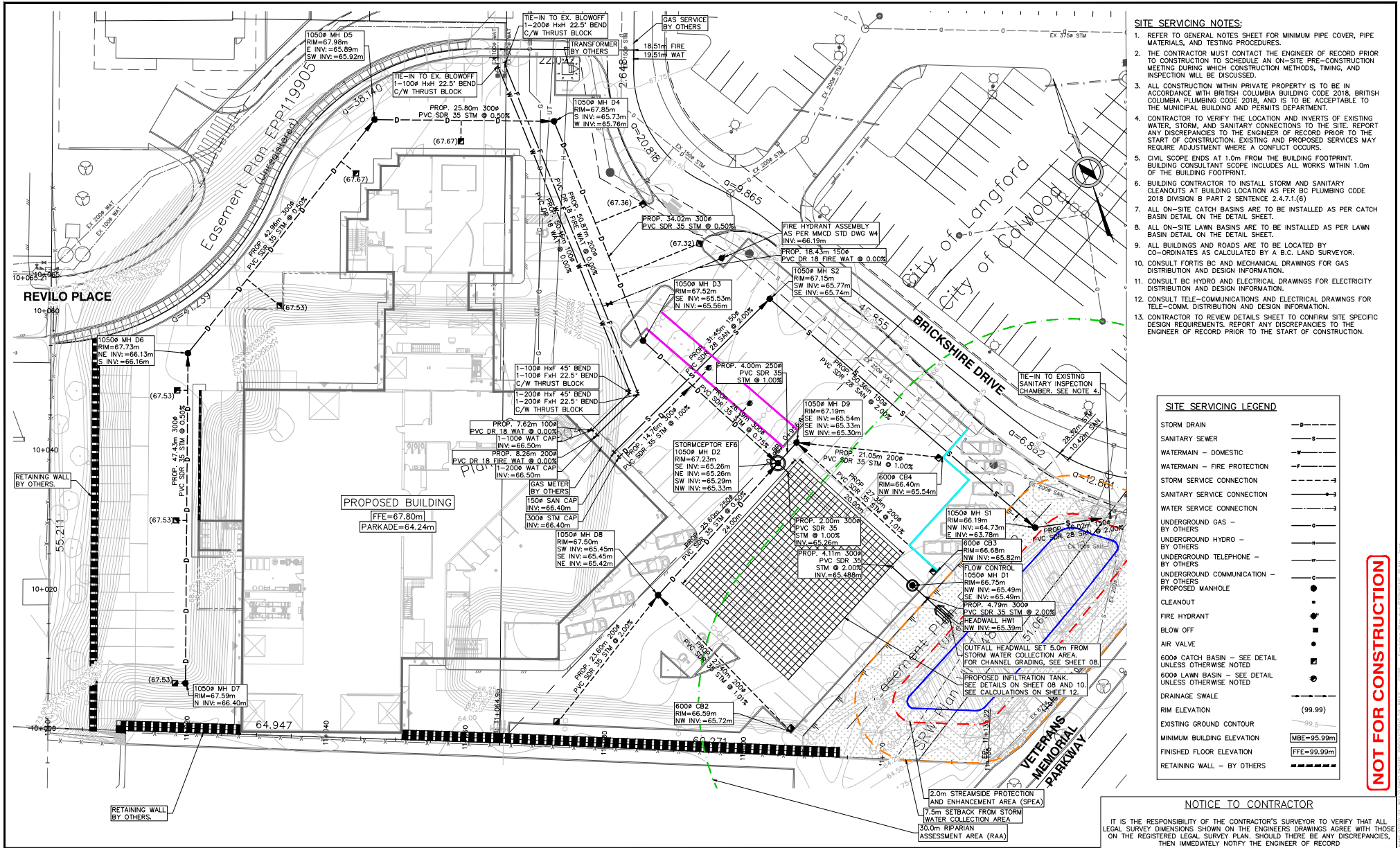
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DESIGN: JDP, CHECK: SAL, DRAWN: KA, APPR: SAL

DRAWING DATE: **NOVEMBER 2022**

SHEET NO. **06 OF 18**, REV. **09**





- SITE SERVICING NOTES:**
- REFER TO GENERAL NOTES SHEET FOR MINIMUM PIPE COVER, PIPE MATERIALS, AND TESTING PROCEDURES.
 - THE CONTRACTOR MUST CONTACT THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING DURING WHICH CONSTRUCTION METHODS, TIMING, AND INSPECTION WILL BE DISCUSSED.
 - ALL CONSTRUCTION WITHIN PRIVATE PROPERTY IS TO BE IN ACCORDANCE WITH BRITISH COLUMBIA BUILDING CODE 2018, BRITISH COLUMBIA PLUMBING CODE 2018, AND IS TO BE ACCEPTABLE TO THE MUNICIPAL BUILDING AND PERMITS DEPARTMENT.
 - CONTRACTOR TO VERIFY THE LOCATION AND INVERTS OF EXISTING WATER, STORM, AND SANITARY CONNECTIONS TO THE SITE. REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO THE START OF CONSTRUCTION. EXISTING AND PROPOSED SERVICES MAY REQUIRE ADJUSTMENT WHERE A CONFLICT OCCURS.
 - CIVIL SCOPE ENDS AT 1.0m FROM THE BUILDING FOOTPRINT. BUILDING CONSULTANT SCOPE INCLUDES ALL WORKS WITHIN 1.0m OF THE BUILDING FOOTPRINT.
 - BUILDING CONTRACTOR TO INSTALL STORM AND SANITARY CLEANOUTS AT BUILDING LOCATION AS PER BC PLUMBING CODE 2018 DIVISION B PART 2 SENTENCE 2.4.7.1.(6)
 - ALL ON-SITE CATCH BASINS ARE TO BE INSTALLED AS PER CATCH BASIN DETAIL ON THE DETAIL SHEET.
 - ALL ON-SITE LAWN BASINS ARE TO BE INSTALLED AS PER LAWN BASIN DETAIL ON THE DETAIL SHEET.
 - ALL BUILDINGS AND ROADS ARE TO BE LOCATED BY CO-ORDINATES AS CALCULATED BY A B.C. LAND SURVEYOR.
 - CONSULT FORTIS BC AND MECHANICAL DRAWINGS FOR GAS DISTRIBUTION AND DESIGN INFORMATION.
 - CONSULT BC HYDRO AND ELECTRICAL DRAWINGS FOR ELECTRICITY DISTRIBUTION AND DESIGN INFORMATION.
 - CONSULT TELE-COMMUNICATIONS AND ELECTRICAL DRAWINGS FOR TELE-COMM. DISTRIBUTION AND DESIGN INFORMATION.
 - CONTRACTOR TO REVIEW DETAILS SHEET TO CONFIRM SITE SPECIFIC DESIGN REQUIREMENTS. REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO THE START OF CONSTRUCTION.

SITE SERVICING LEGEND

STORM DRAIN	---
SANITARY SEWER	---
WATERMAIN - DOMESTIC	---
WATERMAIN - FIRE PROTECTION	---
STORM SERVICE CONNECTION	---
SANITARY SERVICE CONNECTION	---
WATER SERVICE CONNECTION	---
UNDERGROUND GAS - BY OTHERS	---
UNDERGROUND HYDRO - BY OTHERS	---
UNDERGROUND TELEPHONE - BY OTHERS	---
UNDERGROUND COMMUNICATION - BY OTHERS	---
PROPOSED MANHOLE	●
CLEANOUT	○
FIRE HYDRANT	■
BLOW OFF	■
AIR VALVE	■
600# CATCH BASIN - SEE DETAIL UNLESS OTHERWISE NOTED	■
600# LAWN BASIN - SEE DETAIL UNLESS OTHERWISE NOTED	■
DRAINAGE SWALE	---
RIM ELEVATION (99.99)	---
EXISTING GROUND CONTOUR	---
MINIMUM BUILDING ELEVATION (MBE=95.99m)	---
FINISHED FLOOR ELEVATION (FFE=99.99m)	---
RETAINING WALL - BY OTHERS	---

NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD.

NOT FOR CONSTRUCTION

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17	JDP
6	RE-ISSUED FOR DEVELOPMENT PERMIT APPLICATION	JDP	JDP	2024FEB09	JDP
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024MAR06	JDP
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024MAR06	JDP
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024MAY03	JDP

APLIN MARTIN

EGBC Permit to Practice Number #1001018

ApLin & Martin Consultants Ltd.
#104-6596 Applecross Road, Nanaimo, B.C. Canada V9V 0A4
Tel: (778) 841-0484, Fax: (604) 597-9061, Email: general@aplinmartin.com

CLIENT: ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
(250) 756-9665

PROJECT: VICTORIA HYUNDAI AND GENESIS DEALERSHIPS
2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCO

The location of existing underground utilities are shown for an approximate area only & verified by the owner or its representative. It is the responsibility of the contractor to determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any one of underground utilities.

100% Liability to Owner 7/24/04

TITLE: SERVICING PLAN

PROJECT NO.: DP000007 & DP23-0051

DRAWING NO.: 22-8017 - C200

SCALE: HORIZ: 1:250
VERT: N/A

A & M DRAWING NO.: 22-8017 - C200

DESIGN: JDP
DRAWN: KAM

CHECK: SAL
APPR: SAL

A & M FILE: 22-8017

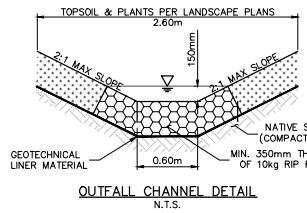
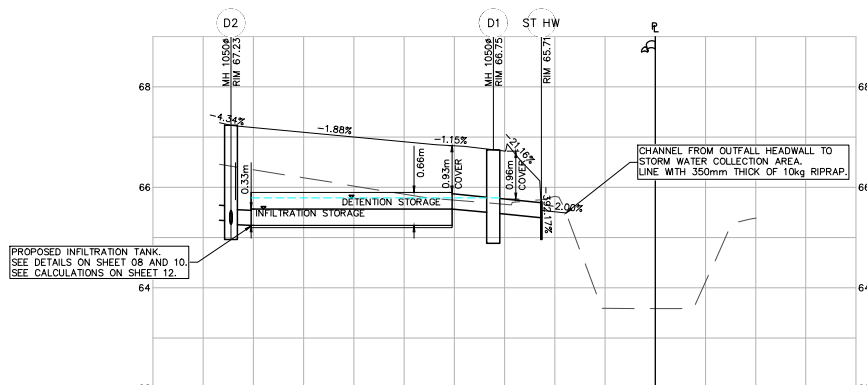
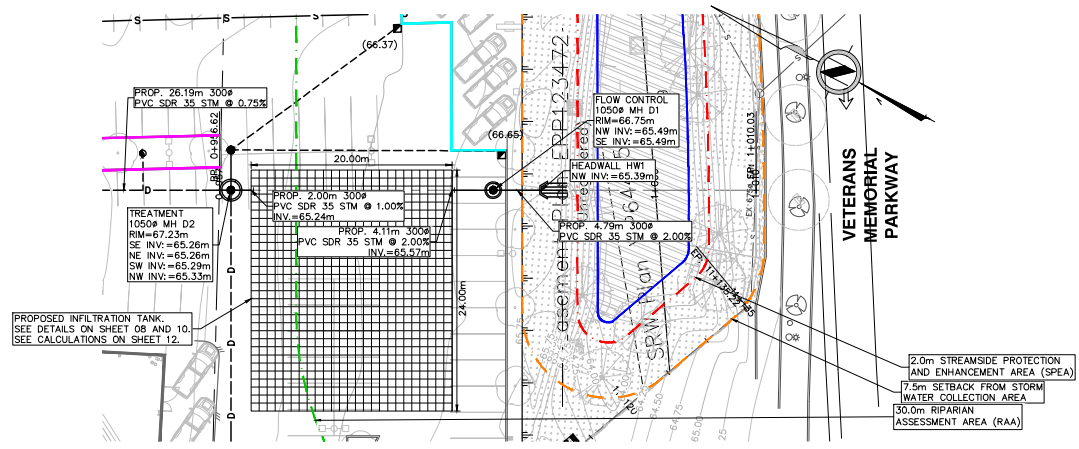
DRAWING DATE: NOVEMBER 2022

SHEET NO.: 07 OF 18

REV.: 129

SITE SERVICING NOTES:

- REFER TO GENERAL NOTES SHEET FOR MINIMUM PIPE COVER, PIPE MATERIALS, AND TESTING PROCEDURES.
- THE CONTRACTOR MUST CONTACT THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING DURING WHICH CONSTRUCTION METHODS, TIMING, AND INSPECTION WILL BE DISCUSSED.
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- CONSULT BC HYDRO AND ELECTRICAL DRAWINGS FOR ELECTRICITY DISTRIBUTION AND DESIGN INFORMATION.
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- CONTRACTOR TO REVIEW DETAILS SHEET TO CONFIRM SITE SPECIFIC DESIGN REQUIREMENTS. REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO THE START OF CONSTRUCTION.



STORM LENGTH, SIZE, TYPE AND GRADE	26.19m-300" PVC SDR 35 STM @ 0.75%	2.00m-300" PVC SDR 35 STM @ 1.00%	4.11m-300" PVC SDR 35 STM @ 2.00%	4.79m-300" PVC SDR 35 STM @ 2.00%
INVERT ELEVATION	NE: 65.26m SE: 65.29m SW: 65.29m NW: 65.35m	NE: 65.26m SE: 65.26m SW: 65.29m NW: 65.35m	SE: 65.57m	NN: 65.49m SE: 65.49m NN: 65.39m
CHAINAGE	0+950.00 0+957.77 0+960.00 0+954.77	0+979.77	0+983.88	0+986.67

SITE SERVICING LEGEND

- STORM DRAIN
- SANITARY SEWER
- WATERMAIN - DOMESTIC
- WATERMAIN - FIRE PROTECTION
- STORM SERVICE CONNECTION
- SANITARY SERVICE CONNECTION
- WATER SERVICE CONNECTION
- UNDERGROUND GAS - BY OTHERS
- UNDERGROUND HYDRO - BY OTHERS
- UNDERGROUND TELEPHONE - BY OTHERS
- UNDERGROUND COMMUNICATION - BY OTHERS
- PROPOSED MANHOLE
- CLEANOUT
- FIRE HYDRANT
- BLOW OFF
- AIR VALVE
- 600# CATCH BASIN - SEE DETAIL UNLESS OTHERWISE NOTED
- 600# LAWN BASIN - SEE DETAIL UNLESS OTHERWISE NOTED
- DRAINAGE SWALE
- RIM ELEVATION (99.99)
- EXISTING GROUND CONTOUR
- MINIMUM BUILDING ELEVATION (MBE=95.99m)
- FINISHED FLOOR ELEVATION (FFE=99.99m)
- RETAINING WALL - BY OTHERS

NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD.

LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904

BENCHMARK MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEOIDETIC)
 LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17	JDP
6	RE-ISSUED FOR DEVELOPMENT PERMIT APPLICATION	JDP	JDP	2024FEB09	JDP
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024MAR06	JDP
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024MAR06	JDP
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024MAY03	JDP

APLIN MARTIN

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ApIn & Martin Consultants Ltd.
 #104 + 6596 Anglerville Road, Nanaimo, B.C. Canada V9V 0A4
 Tel: (778) 841-0484, Fax: (604) 597-9061, Email: general@aplinmartin.com

CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
 2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
 (250) 796-9665

PROJECT: **VICTORIA HYUNDAI AND GENESIS DEALERSHIPS**
 2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCO

The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representatives. The contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

BCS

TITLE: **SERVICING PROFILE - STORM**

PROJECT NO. **DP000007 & DP23-0051**

DRAWING NO. **A & M DRAWING NO. 22-8017- C250**

SCALE: **HORIZ: 1:250 VERT: N/A**

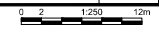
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 DRAWN: KA APPR: SAL

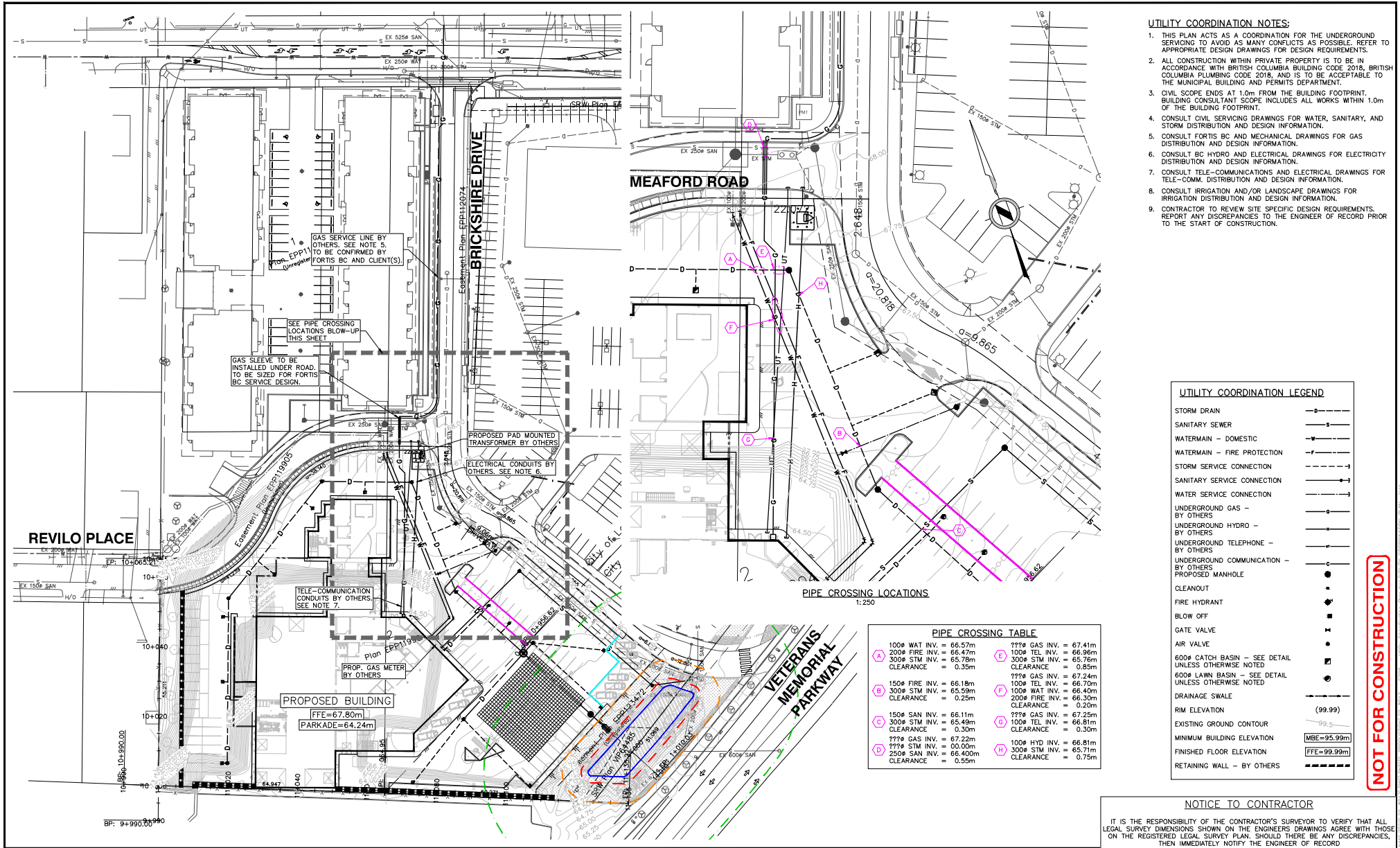
A & M FILE: 22-8017

DRAWING DATE: **NOVEMBER 2022**

SHEET NO. **08 OF 18** REV. **09**

NOT FOR CONSTRUCTION





- UTILITY COORDINATION NOTES:**
1. THIS PLAN ACTS AS A COORDINATION FOR THE UNDERGROUND SERVING TO AVOID AS MANY CONFLICTS AS POSSIBLE. REFER TO APPROPRIATE DESIGN DRAWINGS FOR DESIGN REQUIREMENTS.
 2. ALL CONSTRUCTION WITHIN PRIVATE PROPERTY IS TO BE IN ACCORDANCE WITH BRITISH COLUMBIA BUILDING CODE 2018, BRITISH COLUMBIA PLUMBING CODE 2018, AND IS TO BE ACCEPTABLE TO THE MUNICIPAL BUILDING AND PERMITS DEPARTMENT.
 3. CIVIL SCOPE ENDS AT 1.0m FROM THE BUILDING FOOTPRINT. BUILDING CONSULTANT SCOPE INCLUDES ALL WORKS WITHIN 1.0m OF THE BUILDING FOOTPRINT.
 4. CONSULT CIVIL SERVING DRAWINGS FOR WATER, SANITARY, AND STORM DISTRIBUTION AND DESIGN INFORMATION.
 5. CONSULT FORTIS BC AND MECHANICAL DRAWINGS FOR GAS DISTRIBUTION AND DESIGN INFORMATION.
 6. CONSULT BC HYDRO AND ELECTRICAL DRAWINGS FOR ELECTRICITY DISTRIBUTION AND DESIGN INFORMATION.
 7. CONSULT TELE-COMMUNICATIONS AND ELECTRICAL DRAWINGS FOR TELE-COMM. DISTRIBUTION AND DESIGN INFORMATION.
 8. CONSULT IRRIGATION AND/OR LANDSCAPE DRAWINGS FOR IRRIGATION DISTRIBUTION AND DESIGN INFORMATION.
 9. CONTRACTOR TO REVIEW SITE SPECIFIC DESIGN REQUIREMENTS. REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO THE START OF CONSTRUCTION.

UTILITY COORDINATION LEGEND

STORM DRAIN	---
SANITARY SEWER	---
WATERMAIN - DOMESTIC	---
WATERMAIN - FIRE PROTECTION	---
STORM SERVICE CONNECTION	---
SANITARY SERVICE CONNECTION	---
WATER SERVICE CONNECTION	---
UNDERGROUND GAS - BY OTHERS	---
UNDERGROUND HYDRO - BY OTHERS	---
UNDERGROUND TELEPHONE - BY OTHERS	---
UNDERGROUND COMMUNICATION - BY OTHERS	---
PROPOSED MANHOLE	○
CLEANOUT	●
FIRE HYDRANT	◆
BLOW OFF	◆
GATE VALVE	◆
AIR VALVE	◆
600# CATCH BASIN - SEE DETAIL UNLESS OTHERWISE NOTED	■
600# LAWN BASIN - SEE DETAIL UNLESS OTHERWISE NOTED	■
DRAINAGE SWALE	---
RIM ELEVATION (99.99)	---
EXISTING GROUND CONTOUR	---
MINIMUM BUILDING ELEVATION (MBE=95.99m)	---
FINISHED FLOOR ELEVATION (FFE=99.99m)	---
RETAINING WALL - BY OTHERS	---

PIPE CROSSING TABLE

100# WAT INV. = 66.57m	??# GAS INV. = 67.41m
200# FIRE INV. = 66.47m	100# TEL INV. = 66.96m
300# STM INV. = 65.78m	300# STM INV. = 65.76m
CLEARANCE = 0.35m	CLEARANCE = 0.85m
150# FIRE INV. = 66.18m	??# GAS INV. = 67.24m
300# STM INV. = 65.59m	100# TEL INV. = 66.70m
CLEARANCE = 0.25m	100# WAT INV. = 66.40m
150# SAN INV. = 66.11m	200# FIRE INV. = 66.30m
100# TEL INV. = 66.81m	CLEARANCE = 0.20m
CLEARANCE = 0.30m	??# GAS INV. = 67.25m
??# GAS INV. = 67.22m	100# TEL INV. = 66.81m
??# STM INV. = 66.00m	CLEARANCE = 0.30m
250# SAN INV. = 66.40m	100# HYD INV. = 66.81m
CLEARANCE = 0.55m	300# STM INV. = 65.71m
	CLEARANCE = 0.75m

NOT FOR CONSTRUCTION

NOTICE TO CONTRACTOR

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BENCHMARK MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEOIDETIC)
 LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17	JDP
6	RE-ISSUED FOR DEVELOPMENT PERMIT APPLICATION	JDP	JDP	2024FEB09	JDP
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024MAR06	JDP
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024MAR06	JDP
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024MAY03	JDP

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 2930 BRICKSHIRE DRIVE, LANGFORD, BC

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PROFESSIONAL SEAL: I.B. 9162, 10/01/2018, 2024-07-08, 2024-07-08

TITLE: UTILITY COORDINATION PLAN

PROJECT NO.: DP000007 & DP23-0051

DRAWING NO.: 22-8017- C290

SCALE: HORIZ: 1:500, VERT: N/A

A & M DRAWING NO.: 22-8017- C290

DESIGN: JDP, **CHECK:** SAL
DRAWN: KA, **APPR:** SAL

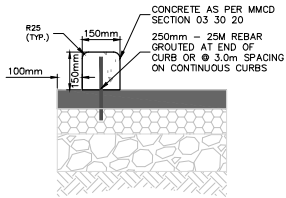
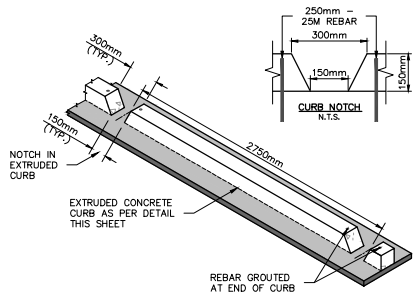
A & M FILE: 22-8017

DRAWING DATE: NOVEMBER 2022

SHEET NO.: 09 OF 18, **REV.:** 09



APLIN MARTIN CONSULTANTS LTD. 2024-07-08 10:00 AM

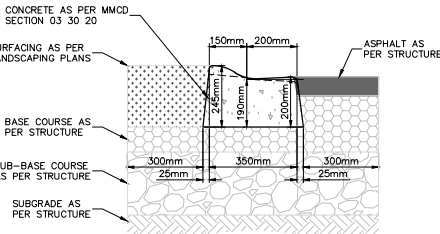


EXTRUDED PINNED CURB DETAIL
N.T.S.

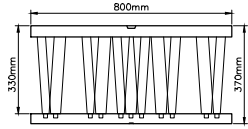
NOTES:

- 250mm - 25M REBAR GROUTED AT END OF EVERY CURB
- PROVIDE CURB NOTCH AT EVERY PARKING STALL PAINT LINE - 2.75m C/C OR AS PER ARCHITECTURAL DRAWINGS - c/w 150mm WDE BOTTOM AND 300mm WDE TOP

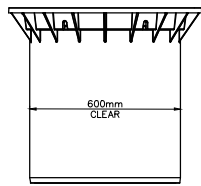
PINNED CURB NOTCH DETAIL
N.T.S.



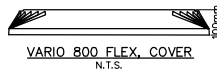
ONSITE ROLLOVER CURB & GUTTER DETAIL
N.T.S.



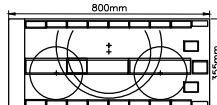
ECOBLOC INSPECT SMART MODULE
N.T.S.



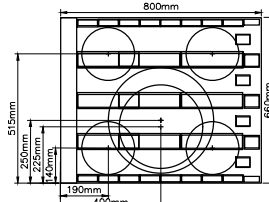
VARIO 800 TELESCOPIC DOME SHAFT
N.T.S.



VARIO 800 FLEX COVER
N.T.S.

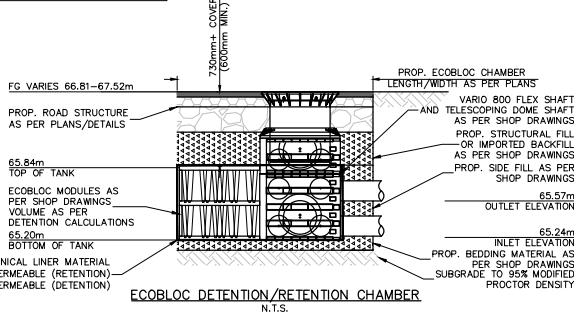


VARIO 800 FLEX, TYPE 1
N.T.S.



VARIO 800 FLEX, TYPE 2
N.T.S.

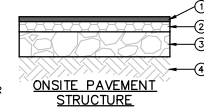
CONTRACTOR TO SUPPLY SHOP DRAWINGS FROM AN APPROVED SUPPLIER. SHOP DRAWINGS TO INCLUDE ALL COMPONENTS AS REQUIRED.



ECOBLOC DETENTION/RETENTION CHAMBER
N.T.S.

PAVEMENT STRUCTURE - CAR AND LIGHT TRUCK VEHICLES

- 50mm - ASPHALT
- 100mm - 20mm MINUS CRUSHED GRAVEL BASE COURSE
- 200mm - 75mm MINUS GRAVEL SUB-BASE COURSE, WELL GRADED
- SUBGRADE TO 95% MODIFIED PROCTOR DENSITY



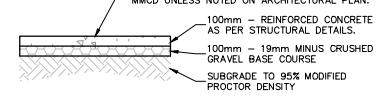
ONSITE PAVEMENT STRUCTURE
N.T.S.

PAVEMENT STRUCTURE - HEAVY TRUCK TRAFFIC

- 75mm - ASPHALT
- 100mm - 20mm MINUS CRUSHED GRAVEL BASE COURSE
- 200mm - 75mm MINUS GRAVEL SUB-BASE COURSE, WELL GRADED
- SUBGRADE TO 95% MODIFIED PROCTOR DENSITY

REFER TO GEOTECHNICAL REPORT BY: GEOPACIFIC CONSULTANTS LTD. FILE #: 22470 DATED: 2023-FEB-23

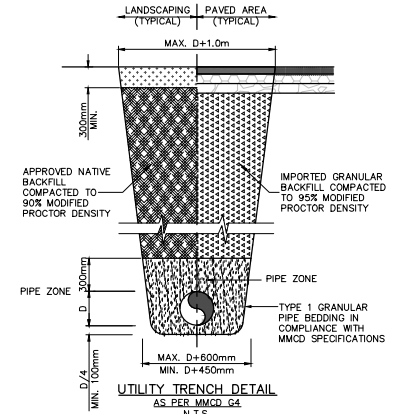
PAVEMENT STRUCTURE - ONSITE CONCRETE PAVEMENT STRUCTURE



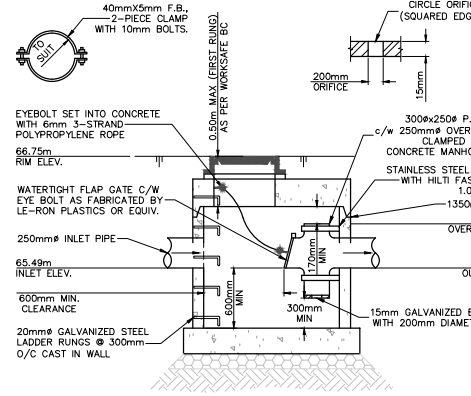
ONSITE CONCRETE PAVEMENT STRUCTURE
N.T.S.

ORIFICE SIZING CALCULATION	
$A = Q / (c \sqrt{SRT(2gh)})$	
$D = \sqrt{SRT(4A/P) * 1000}$	
Manhole D1	
Overflow Elev. =	65.79 m
Outlet Elev. =	65.49 m
Head, h =	0.3 m
c =	0.62
$Q = 0.04799 \text{ m}^3/\text{s}$	
Required Area, A =	0.0319 m ²
Orifice Diameter, D =	201.55 mm
Use	202.00 mm

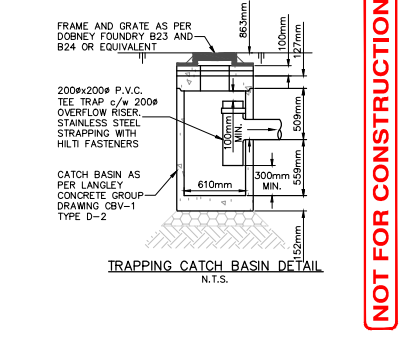
OVERFLOW SIZING CALCULATION	
$Q = CLH^{3/2}$	$L = Dn$
Manhole D1	
Surface Route Elev. =	66.75 m
Top of Riser Elev. =	65.79 m
Head, h =	0.960 m
Riser Diameter, D =	0.250 m
Circumference, L =	0.785 m
C =	1.84
$Q_{max} = 1.339 \text{ m}^3/\text{s}$	
$Q_{min} = 0.136 \text{ m}^3/\text{s}$	
$Q_{avg} = 0.048 \text{ m}^3/\text{s}$	
$Q_{avg} > Q_{min}$?	YES



UTILITY TRENCH DETAIL
AS PER MMCD_G4
N.T.S.



FLOW CONTROL MANHOLE D1 DETAILS
N.T.S.



TRAPPING CATCH BASIN DETAIL
N.T.S.

NOTICE TO CONTRACTOR
IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD.

LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904				
BENCHMARK: MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEODETIC) LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY				
REV. NO.	DESCRIPTION	DR	CH	DATE
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17
6	RE-ISSUED FOR DEVELOPMENT PERMIT APPLICATION	JDP	JDP	2024FEB09
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024MAR04
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024MAR04
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024MAY03

APLIN MARTIN
EGBC Permit to Practice Number #1001018
ApIn & Martin Consultants Ltd.
#104 - 6596 Applecross Road, Nanaimo, B.C. Canada V9V 0A4
Tel: (778) 841-0484, Fax: (604) 597-9061, Email: general@aplinmartin.com

CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
(250) 796-9665

PROJECT: **VICTORIA HYUNDAI AND GENESIS DEALERSHIPS**
2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCO

IBS

LOCATION: The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any one of underground utilities.

TITLE: **DETAILS**

PROJECT NO.: **DP00007 & DP23-0051**

DRAWING NO.: **22-8017 - C300**

SCALE: HORIZ. AS SHOWN
VERT. AS SHOWN

A & M DRAWING NO.: **22-8017- C300**

DESIGN: JDP
DRAWN: KA
CHECK: SAL
APPR: SAL

A & M FILE: **22-8017**

DRAWING DATE: **NOVEMBER 2022**

SHEET NO.: **10 OF 18**

REV.: **09**

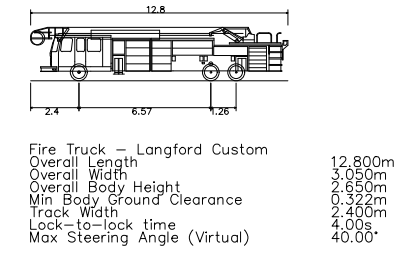
NOT FOR CONSTRUCTION

FIRE FLOW CALCULATION SHEET			
Service Garage			
1 Type of Construction:	Ordinary (Tilt-up Concrete & Steel Frame)		
Total Floor Area (A):	12886 sq.ft. = 1197 sq.m.		
Coefficient (C) - based on type of construction:	1.0		
Fire Flow From Formula (F+220 CA ^{0.5}):	(rounded) 8000 l/min (a)		
2 Type of Occupancy:	Automotive Dealership - Service Garage		
Hazard Allowance:	15% x (a) = 1200 l/min		
Sub-Total:	9200 l/min (b)		
3 Automatic Sprinklers:	Fully Supervised		
Sprinkler Allowance:	-50% x (b) = -4600 l/min		
(System is fully alarmed)			
4 Exposures:			
North:	>30 0% ** Both sprinklered		
East:	0 0% ** Both sprinklered		
South:	9.5 0% ** Both sprinklered		
West:	21.5 10% ** Both sprinklered		
Exposure Allowance (Not to exceed 75%):	10% x (b) = 920 l/min (c)		
TOTAL FIRE FLOW REQUIRED (rounded):	6000 l/min		
TOTAL FIRE FLOW PROVIDED:	100.0 l/s		
REQUIRED FIRE FLOW DURATION:	2.00 hrs		

Notes:
 * If the exposed building is sprinklered, the exposure charge can be reduced by 1/2.
 ** If both buildings are sprinklered, the exposure charge can be reduced to 0%.

FIRE FLOW CALCULATION SHEET			
Dealership			
1 Type of Construction:	Ordinary (Tilt-up Concrete & Steel Frame)		
Total Floor Area (A):	27244 sq.ft. = 2531 sq.m.		
Coefficient (C) - based on type of construction:	1.0		
Fire Flow From Formula (F+220 CA ^{0.5}):	(rounded) 10000 l/min (a)		
2 Type of Occupancy:	Automotive Dealership - Car Storage and Office		
Hazard Allowance:	0% x (a) = 0 l/min		
Sub-Total:	10000 l/min (b)		
3 Automatic Sprinklers:	Fully Supervised		
Sprinkler Allowance:	-50% x (b) = -5000 l/min		
(System is fully alarmed)			
4 Exposures:			
North:	27 0% ** Both sprinklered		
East:	>30 0% ** Both sprinklered		
South:	21 0% ** Both sprinklered		
West:	0 0% ** Both sprinklered		
Exposure Allowance (Not to exceed 75%):	0% x (b) = 0 l/min (c)		
TOTAL FIRE FLOW REQUIRED (rounded):	6000 l/min		
TOTAL FIRE FLOW PROVIDED:	100.0 l/s		
REQUIRED FIRE FLOW DURATION:	2.00 hrs		

Notes:
 * If the exposed building is sprinklered, the exposure charge can be reduced by 1/2.
 ** If both buildings are sprinklered, the exposure charge can be reduced to 0%.



Fire Truck - Langford Custom
 Overall Length 12.800m
 Overall Width 3.050m
 Overall Body Height 2.630m
 Min Body Ground Clearance 0.322m
 Track Width 2.400m
 Lock-to-lock time 4.00s
 Max Steering Angle (Virtual) 40.0°

WATER DEMAND CALCULATIONS:

WATER DESIGN FLOW = FIRE FLOW + MAX DAY DEMAND

FIRE FLOW DEMAND	= 100 L/s
MAX DAY DEMAND	= 0.59 L/s
DESIGN FLOW DEMAND	= 100.59 L/s

APPROXIMATE RESIDUAL PRESSURE AT FIRE HYDRANT
 HYDRANT CURVE 100L/s = 32m PRESSURE HEAD
 32m x 9.8kPa/m = 313.6 KPa
 32m x 1.42PSI/m = 45.4 PSI

GROUND LEVEL AT HYDRANT = 73.80m +/-
 GROUND LEVEL AT BUILDING = 67.80m +/-
 ADDITIONAL ELEVATION HEAD = 6.00m +/-

APPROXIMATE RESIDUAL PRESSURE AT BUILDING
 32m x 6m = 38m
 38m x 9.8kPa/m = 372.5 KPa
 38m x 1.42PSI/m = 54.0 PSI

NOTICE TO CONTRACTOR

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LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904				
BENCHMARK MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28C (GEOIDETIC)				
LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY				
REV. NO.	DESCRIPTION	DR	CH	DATE
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024.JAN.17
6	RE-ISSUED FOR DEVELOPMENT PERMIT APPLICATION	JDP	JDP	2024.FEB.09
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024.MAR.06
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024.MAR.06
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024.MAY.03

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CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
 2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
 (250) 756-9665

PROJECT: **VICTORIA HYUNDAI AND GENESIS DEALERSHIPS**
 2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCO

The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representatives. The contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any one of underground utilities.

10000 (Professional Seal)

TITLE: **FIRE PROTECTION PLAN**

PROJECT NO. **DP000007 & DP23-0051**

DRAWING NO. **A & M DRAWING NO. 22-8017- C700**

SCALE: **HORIZ: 1:500 VERT: N/A**

DESIGN: JDP CHECK: SAL
 DRAWN: KA APPR: SAL

A & M FILE: **22-8017**

DRAWING DATE: **NOVEMBER 2022**


SHEET NO. **11 OF 18** REV. **09**

NOT FOR CONSTRUCTION

APLIN MARTIN CONSULTANTS LTD. PROJECT: VICTORIA HYUNDAI AND GENESIS DEALERSHIPS DRAWING: 22-8017- C700 SHEET: 11 OF 18

STORM FLOW ANALYSIS - CALCULATION SHEET

Municipal Project: DP23-0051
Project Title: Victoria Hyundai & Genesis
Project Location: 2930 Brinkshire Drive, Langford BC



Engineer of Record: Aplin & Martin Consultants Ltd. (Jacob Pez, P.Eng.)
EGBC Permit to Practice: 1001018

RETURN PERIOD: 25 Years

DATE: 23-Apr-24
A&M File: 22-8017
Design by: JDP
Checked by: JDP
SHEET: 1 of 1


Manning's Formula: $V = (1/n) \times R^{2/3} \times S^{1/2}$
 $Q = V \times A$
Rational Formula: $Q = C \times I \times A \times 2.78$
 $I = (a \times T_c^{-b}) \times 1.10$

SEAL/ENGINEER'S STAMP

FROM MH	TO MH	Area #	Area A (Ha)	Runoff Coeff. C	Ax/C (Ha)	Accum. (Ax/C)	Time of Conc. Tc (min)	Rainfall Intensity I (mm/hr)	Design Flow Qz (L/s)	Diameter of Pipe D (mm)	Length of Pipe L (m)	Design Slope S (%)	Installed Slope (%)	Flow Capacity Qmax (L/s)	Velocity V (m/s)	Time of Flow (min)
ONSITE																
D7	D6	A	0.16	0.85	0.14	0.14	10.00	43.03	16.59	300	46.80	0.25		48.4	0.68	114
D6	D5	B	0.07	0.85	0.06	0.20	11.4	40.88	22.19	300	43.77	0.25		48.4	0.68	107
D5	D4	C	0.04	0.85	0.03	0.23	12.21	39.13	24.87	300	25.80	0.25		48.4	0.68	103
D4	D3	D	0.06	0.85	0.07	0.30	12.84	38.21	31.42	300	50.87	0.25		48.4	0.68	124
DLR0	D3U02	E	0.29	0.00	0.24	0.24	10.00	43.03	23.83	250	14.76	0.50		42.0	0.96	83.9
D3	D2	D	0.00	0.85	0.00	0.54	14.08	36.57	54.90	300	49.83	0.75		83.7	1.18	0.70
D9	D2	F	0.19	0.85	0.16	0.16	10.00	43.03	19.60	250	25.60	1.00		59.5	1.21	0.35
D8	D2	G	0.13	0.85	0.11	0.11	10.00	43.03	15.22	250	4.00	1.00		59.5	1.21	0.06
D2	TANK		0.00	0.85	0.00	0.81	14.78	33.74	80.92	300	2.00	1.00		196.7	1.97	0.02
TANK	D1		0.00	0.85	0.00	0.81	14.80	35.72	80.87	300	4.1	2.00		136.8	1.93	0.04
D1	HWT		0.00	0.85	0.00	0.81	14.84	35.67	80.77	300	7.14	2.00		136.8	1.93	0.06

STORM FLOW ANALYSIS - CALCULATION SHEET

Municipal Project: DP23-0051
Project Title: Victoria Hyundai & Genesis
Project Location: 2930 Brinkshire Drive, Langford BC



Engineer of Record: Aplin & Martin Consultants Ltd. (Jacob Pez, P.Eng.)
EGBC Permit to Practice: 1001018

RETURN PERIOD: 100 Years

DATE: #####
A&M File: 22-8017
Design by: JDP
Checked by: JDP
SHEET: 1 of 1

Manning's Formula: $V = (1/n) \times R^{2/3} \times S^{1/2}$
 $Q = V \times A$
Rational Formula: $Q = C \times I \times A \times 2.78$
 $I = (a \times T_c^{-b}) \times 1.10$

SEAL/ENGINEER'S STAMP

FROM MH	TO MH	Area #	Area A (Ha)	Runoff Coeff. C	Ax/C (Ha)	Accum. (Ax/C)	Time of Conc. Tc (min)	Rainfall Intensity I (mm/hr)	Design Flow Qz (L/s)	Diameter of Pipe D (mm)	Length of Pipe L (m)	Design Slope S (%)	Installed Slope (%)	Flow Capacity Qmax (L/s)	Velocity V (m/s)	Time of Flow (min)
ONSITE																
D7	D6	A	0.16	0.85	0.14	0.14	10.00	52.61	20.29	300	46.80	0.25		48.4	0.68	114
D6	D5	B	0.07	0.85	0.06	0.20	11.4	49.94	27.11	300	43.77	0.25		48.4	0.68	107
D5	D4	C	0.04	0.85	0.03	0.23	12.21	47.79	30.37	300	25.80	0.25		48.4	0.68	103
D4	D3	D	0.06	0.85	0.07	0.30	12.84	46.65	38.36	300	50.87	0.25		48.4	0.68	124
DLR0	D3U02	E	0.29	0.00	0.24	0.24	10.00	56.61	35.73	250	14.76	0.50		42.0	0.96	83.9
D3	D2	D	0.00	0.85	0.00	0.54	14.08	44.62	67.01	300	49.83	0.75		83.7	1.18	0.70
D9	D2	F	0.19	0.85	0.16	0.16	10.00	52.61	23.96	250	25.60	1.00		59.5	1.21	0.35
D8	D2	G	0.13	0.85	0.11	0.11	10.00	52.61	16.16	250	4.00	1.00		59.5	1.21	0.06
D2	TANK		0.00	0.85	0.00	0.81	14.78	43.59	98.71	300	2.00	1.00		196.7	1.97	0.02
TANK	D1		0.00	0.85	0.00	0.81	14.80	43.57	98.65	300	4.1	2.00		136.8	1.93	0.04
D1	HWT		0.00	0.85	0.00	0.81	14.84	43.51	98.52	300	7.14	2.00		136.8	1.93	0.06

RUNOFF COEFFICIENT CALCULATION

Existing Conditions			Runoff Coeff.	Weighted Average Coeff.
Area m²	%			
Site Area	10947	100%	0.30	0.30
Softscape	10946.9	100%	0.30	
Building	0.00	0%	0.90	
Hardscape	0.00	0%	0.90	

Proposed Conditions			Runoff Coeff.	Weighted Average Coeff.
Area m²	%			
Site Area	10946.91	100%	0.50	0.85
Softscape	14684.5	13%	0.50	
Roof	2802.57	26%	0.90	
Pavers	0.00	0%	0.85	
Hardscape	6675.93	61%	0.90	

STORAGE CALCULATIONS

INFILTRATION TANK STORAGE

Length (m)	Width (m)	Depth (m)	Void Ratio	Volume (m³)
24.00	20.00	0.33	95%	150.480

DETENTION TANK STORAGE

Length (m)	Width (m)	Depth (m)	Void Ratio	Volume (m³)
24.00	20.00	0.30	95%	136.800

SUMMARY

Total Volume Detained (m³)	116.80
Target Volume To Be Detained (m³)	76.69

STORMWATER DETENTION CALCULATION

100 YEAR RELEASE RATE FLOWS

Time	Runoff Coeff.	Area	Intensity	Flow G
min	%	Ha	mm/hr	m³/s
0hrs	10	0.30	109	52.6
0.05hr	10	0.85	109	52.6

Storage Volume Required (Modified Rational Method)

$Storage = T_c (Q_p - Q_{re}) + 0.5 \times T_c \times Q_{re} (V/Q_p - V/Q_{re})$
 T_c = Time to concentration [seconds]
 Q_p = Peak flow for storm at $T = T_c$ [m³/s]
 T_p = Time of storm duration [seconds]
 Q_{re} = Peak flow for storm at $T = T_p$ [m³/s]
 Q_{re} = Maximum allowable release rate [m³/s]

Maximum Storage Required = 76.69 m³

STORMWATER INFILTRATION CALCULATION

2 YEAR RELEASE RATE FLOWS

Time	Runoff Coeff.	Area	Intensity	Flow G
min	%	Ha	mm	m³/s
0hrs	10	0.30	109	23.7
0.05hr	10	0.85	109	23.7

Infiltration Information to Site Storage

Percolation Tests = 1.99E-05 (m/s)
Percolation Factor = 1.000
Base Area of Infiltration Storage = 49900 (m²)
 Q_{in} = Infiltration Rate = 6.67E-03 (m³/s)
Maximum Storage Required = 10012 (m³)
Voids / Porosity = 0.95
Volume of Infiltration Storage = 126.44 (m³)
Depth of Infiltration Storage = 0.26 [m]

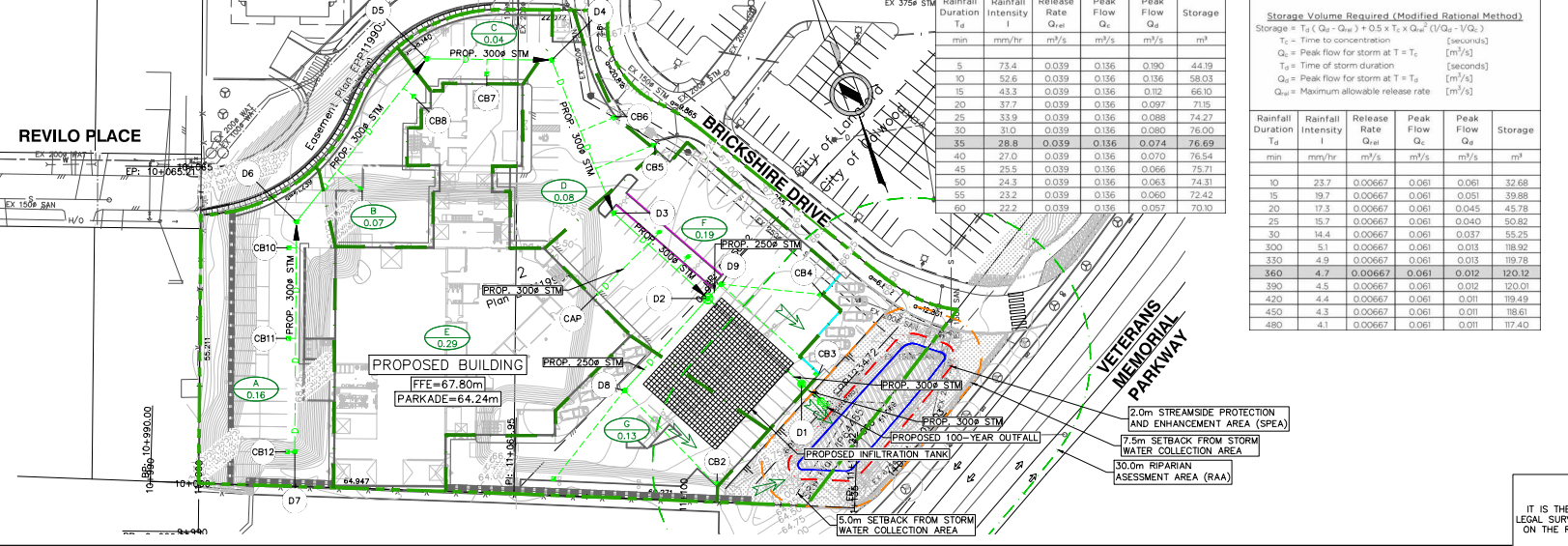
Storage Volume Required (Modified Rational Method)

$Storage = T_c (Q_p - Q_{in}) + 0.5 \times T_c \times Q_{in} (V/Q_p - V/Q_{in})$
 T_c = Time to concentration [seconds]
 Q_p = Peak flow for storm at $T = T_c$ [m³/s]
 T_p = Time of storm duration [seconds]
 Q_{in} = Peak flow for storm at $T = T_p$ [m³/s]
 Q_{in} = Maximum allowable release rate [m³/s]

Rainfall Duration T_c	Rainfall Intensity I	Release Rate Q_{re}	Peak Flow Q_p	Peak Flow Q_{in}	Storage
5	73.4	0.039	0.136	0.190	44.79
10	52.6	0.039	0.136	0.136	38.03
15	43.3	0.039	0.136	0.112	33.11
20	37.7	0.039	0.136	0.097	29.78
25	33.9	0.039	0.136	0.088	27.42
30	31.0	0.039	0.136	0.080	26.00
35	28.8	0.039	0.136	0.074	25.00
40	27.0	0.039	0.136	0.070	24.34
45	25.5	0.039	0.136	0.066	23.81
50	24.3	0.039	0.136	0.063	23.41
55	23.2	0.039	0.136	0.060	23.12
60	22.2	0.039	0.136	0.057	22.90

STORMWATER MANAGEMENT NOTES:

- REFER TO GENERAL NOTES SHEET FOR MINIMUM PIPE COVER, PIPE MATERIALS, AND TESTING PROCEDURES.
- THE CONTRACTOR MUST CONTACT THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING DURING WHICH CONSTRUCTION METHODS, TIMING, AND INSPECTION WILL BE DISCUSSED.
- ALL CONSTRUCTION WITHIN PRIVATE PROPERTY IS TO BE IN ACCORDANCE WITH BRITISH COLUMBIA BUILDING CODE 2018, BRITISH COLUMBIA PLUMBING CODE 2018, AND IS TO BE ACCEPTABLE TO THE MUNICIPAL BUILDING AND PERMITS DEPARTMENT.
- CONTRACTOR TO VERIFY THE LOCATION AND INVERTS OF EXISTING WATER, STORM AND SANITARY CONNECTIONS TO THE SITE. REPORT TO THE ENGINEER OF RECORD ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION.
- ALL BUILDINGS AND ROADS ARE TO BE LOCATED BY CO-ORDINATES AS RECALCULATED BY A B.C. LAND SURVEYOR.
- CONTRACTOR TO REVIEW DETAILS SHEET TO CONFIRM SITE SPECIFIC DESIGN REQUIREMENTS. REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO THE START OF CONSTRUCTION.



STORMWATER MANAGEMENT LEGEND

- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- EXISTING DITCHES
- PROPOSED DITCHES
- PROPOSED DRAINAGE SWALES
- MANHOLE, CLEANOUT, HEADWALL NUMBER
- CATCHMENT AREA
- CATCHMENT AREA BOUNDARY LINE
- SUB-CATCHMENT BOUNDARY LINE
- 100 YEAR PIPE FLOW - IN PIPE
- 100 YEAR PIPE FLOW - SURCHARGE
- 100 YEAR PIPE FLOW - OVERLAND
- 200 YEAR OVERLAND FLOW ROUTE
- LOCAL OVERLAND FLOW DIRECTION
- MANHOLE
- CATCH BASIN
- LAWN BASIN
- RIM ELEVATION
- EXISTING GROUND CONTOUR

NOT FOR CONSTRUCTION

LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904

BENCHMARK: MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEOIDETIC)
LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17	JDP
6	RE-ISSUED FOR DEVELOPMENT PERMIT APPLICATION	JDP	JDP	2024FEB09	JDP
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024MAR06	JDP
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024MAR06	JDP
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024MAY03	JDP

APLIN MARTIN

EGBC Permit to Practice Number #0110118

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Tel: (778) 841-0484, Fax: (604) 597-9081, Email: general@aplinmartin.com

CLIENT: ISLAND WEST COAST DEVELOPMENTS LTD.
2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
(250) 756-9665

PROJECT: VICTORIA HYUNDAI AND GENESIS DEALERSHIPS
2930 BRINKSHIRE DRIVE, LANGFORD, BC

IWCO

APLIN MARTIN SEAL/ENGINEER'S STAMP

The location of existing underground utilities are shown as an approximate map only & verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be caused by the contractor's failure to exactly locate and preserve any one of underground utilities.

TITLE: STORMWATER MANAGEMENT PLAN

PROJECT NO.: DP00007 & DP23-0051
DRAWING NO.: 22-8017-C800

SCALE: HORIZ: 1:500
VERT: N/A

A & M DRAWING NO.: 22-8017-C800

DESIGN: JDP
DRAWN: KAM

CHECK: SAL
APPR: SAL

A & M FILE: 22-8017
DRAWING DATE: NOVEMBER 2022
SHEET NO.: 12 OF 18
REV.: 09

SANITARY FLOW ANALYSIS - CALCULATION SHEET

Municipal Project: DP23-0501
 Project Title: Victoria Hyundai & Genesis
 Project Location: 2930 Brickshire Drive, Langford BC



AVERAGE DAILY FLOW
 Industrial 20,000 L/hectare/day
 Inflow & Infiltration 20,000 L/hectare/day

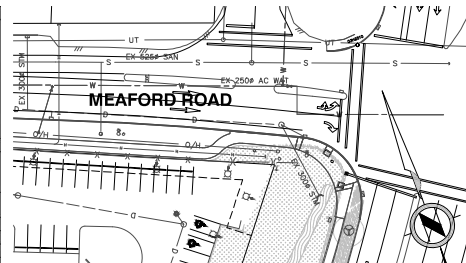
MAXIMUM DEPTH OF FLOW
 50% for Prop. Local Sewers
 70% for Prop. Trunk Sewers



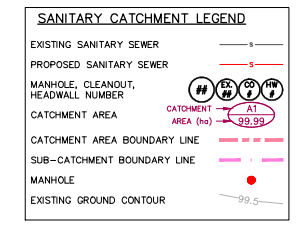
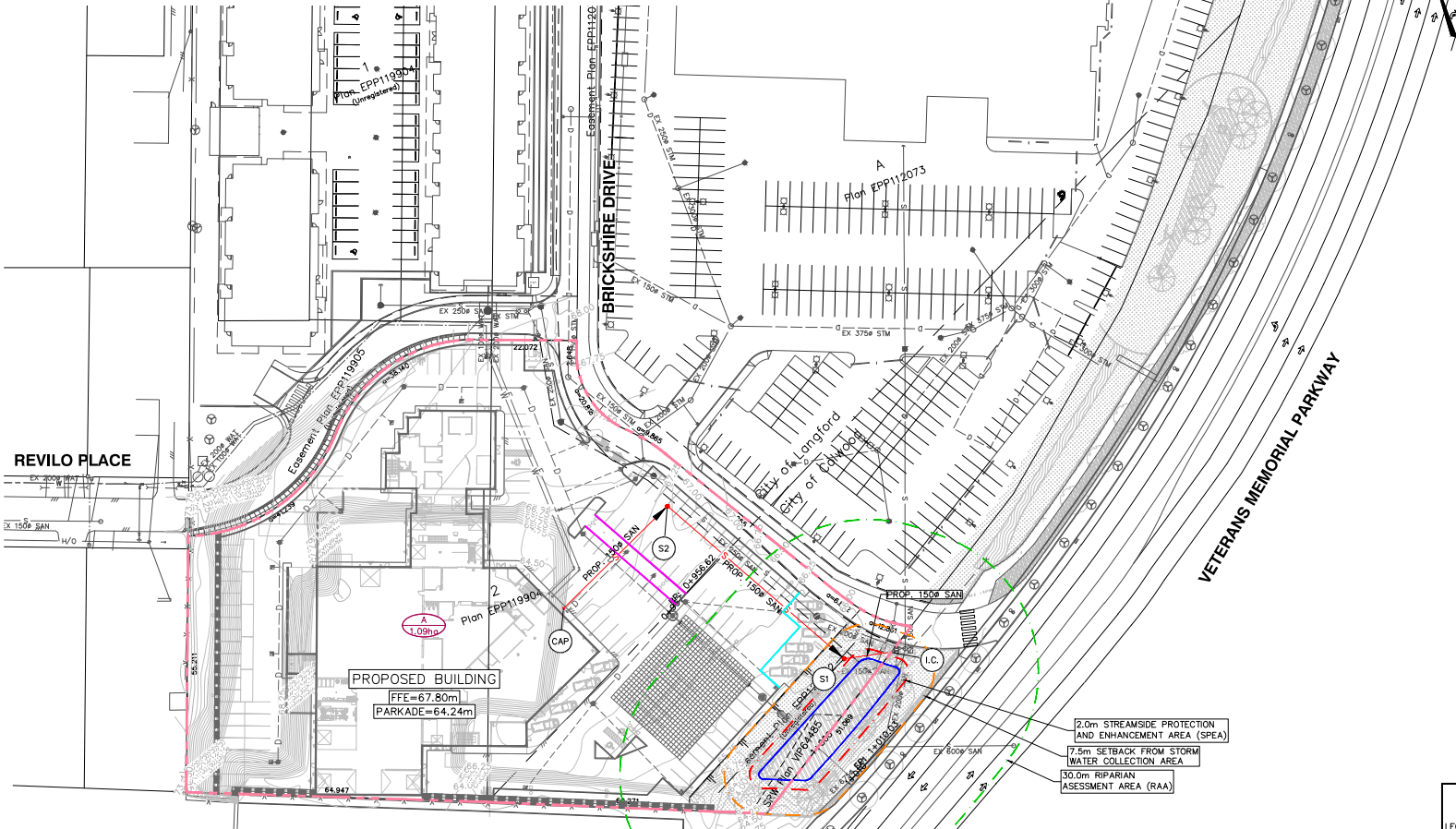
DATE: 03-May-24
 A&M File: 22-8017
 Design by: JDP
 Check by: SAL
 SHEET: 1 of 1

Mannings Formula
 $V = (1/n) \times R^{2/3} \times S^{1/2}$
 $Q = V \times A$
 $n_{channel} = 0.013$
 Peaking Factor
 $P_f = 1 + 14 / (4 + P^{10})$

Locations		Sub-Catchments				Flow Calculations				Pipe Parameters											
Street	Manhole	Sub-Catchment No.	Area	Cum. Area	Land Usage	Pop. Density	Density	Pop. Rate	Pop.	Cum. Pop.	Avg Flow ADWF	Peak Factor P _f	Peak Flow PDWF	Inflow & Infil.	Design Flow Q	Slope S	Diam. D	Length L	Veloc. V _{max}	Pipe Capac. Q _{cap}	
	F _{man}	T _u	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(110)	(L ³ /s)	(L ³ /s)	(L ³ /s)	(L ³ /s)	(L ³ /s)	(%)	(mm)	(m)	(m/s)	(L ³ /s)	
Proposed Building Service																					
Road A	CAP	S2	A	1.09	1.09	80	80	0.25	88	88	0.25	4.26	1.08	0.25	1.33	2.00	150	100.00	1.22	21.54	
Road B	S2	SI		0.00	1.09	80	80	0.25	88	88	0.25	4.26	1.08	0.25	1.33	2.00	150	100.00	1.22	21.54	
Road C	SI	IC		0.00	1.09	80	80	0.25	88	88	0.25	4.26	1.08	0.25	1.33	2.00	150	100.00	1.22	21.54	



- SANITARY CATCHMENT NOTES:**
- REFER TO GENERAL NOTES SHEET FOR MINIMUM PIPE COVER, PIPE MATERIALS, AND TESTING PROCEDURES.
 - THE CONTRACTOR MUST CONTACT THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING DURING WHICH CONSTRUCTION METHODS, TIMING, AND INSPECTION WILL BE DISCUSSED.
 - ALL CONSTRUCTION WITHIN PRIVATE PROPERTY IS TO BE IN ACCORDANCE WITH BRITISH COLUMBIA BUILDING CODE 2018, BRITISH COLUMBIA PLUMBING CODE 2018, AND IS TO BE ACCEPTABLE TO THE MUNICIPAL BUILDING AND PERMITS DEPARTMENT.
 - CONTRACTOR TO VERIFY THE LOCATION AND INVERTS OF EXISTING WATER, STORM AND SANITARY CONNECTIONS TO THE SITE. REPORT TO THE ENGINEER OF RECORD ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION.
 - ALL BUILDINGS AND ROADS ARE TO BE LOCATED BY CO-ORDINATES AS CALCULATED BY A B.C. LAND SURVEYOR.
 - CONTRACTOR TO REVIEW DETAILS SHEET TO CONFIRM SITE SPECIFIC DESIGN REQUIREMENTS. REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO THE START OF CONSTRUCTION.



NOTICE TO CONTRACTOR
 IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD.

NOT FOR CONSTRUCTION

LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904

BENCHMARK MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEOIDETIC)
 LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17	JDP
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CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
 2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
 (250) 756-9665

PROJECT: **VICTORIA HYUNDAI AND GENESIS DEALERSHIPS**
 2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCO

The location of existing underground utilities are shown to an approximate accuracy and have not been independently verified by the owner or its representatives. The contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

TITLE: **SANITARY CATCHMENT PLAN**

PROJECT NO. **DP000007 & DP23-0051**

DRAWING NO. **A & M DRAWING NO. 22-8017- C810**

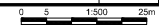
SCALE: HORIZ: 1:500
 VERT: N/A

DESIGN: JDP CHECK: SAL
 DRAWN: KA APPR: SAL

A & M FILE: **22-8017**

DRAWING DATE: **NOVEMBER 2022**

SHEET NO. **13** OF **18** REV. **09**



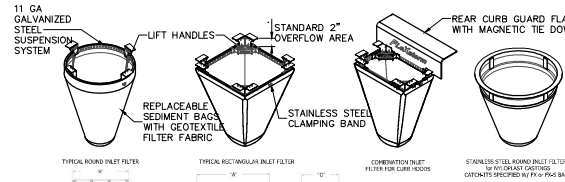
EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES:

- THE FOLLOWING STRATEGIES ARE THE MINIMUM EFFORTS REQUIRED BY THE OWNER, DEVELOPER, AND THE DEVELOPERS AGENTS (INCLUDING BUT NOT LIMITED TO: THE ENGINEER OF RECORD, ESC SUPERVISOR, GENERAL CONTRACTOR, SUB-CONTRACTORS, BUILDER, BUILDING SUB-TRADES & UTILITY COMPANIES). SOME OR ALL OF THESE ACTIONS MAY BE ASSIGNED TO SPECIFIC PERSONNEL THROUGH CONTRACTUAL ARRANGEMENTS. ALL PARTIES ENGAGED ON SITE SHALL COMPLY WITH THE FOLLOWING EROSION AND SEDIMENT CONTROL PLANS AND THE REGULATORY REQUIREMENTS SPECIFIED BY FEDERAL, PROVINCIAL, AND MUNICIPAL AUTHORITIES.
- EROSION AND SEDIMENT CONTROL FOR THIS PROJECT WILL BE AS OUTLINED IN THE FISHERIES AND OCEANS CANADA AND MINISTRY OF WATER, LAND, AND AIR PROTECTION HANDBOOK ENTITLED "LAND DEVELOPMENT GUIDELINES FOR THE PROTECTION OF AQUATIC HABITAT," SEPTEMBER 1993" AND "ENVIRONMENTAL BEST MANAGEMENT PRACTICES FOR URBAN AND RURAL LAND DEVELOPMENT IN BRITISH COLUMBIA, JUNE 2004" AND "SUBDIVISION AND DEVELOPMENT SERVICING BYLAW NO. 1000 - 2022" BY THE CITY OF LANGFORD. IT IS INCUMBENT UPON THE GENERAL CONTRACTOR TO ACQUIRE THESE GUIDELINES AND FAMILIARIZE THEMSELVES WITH THE REQUIREMENTS THEREIN.
- GENERAL CONTRACTOR TO HAVE A COPY OF THE ESC PLAN ON-SITE AT ALL TIMES, AND ENSURE CITY OF LANGFORD STANDARD EROSION & SEDIMENT CONTROL SIGNAGE IS PLACED ON-SITE PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED IN PLACE UNTIL LANDSCAPING IS COMPLETED.
- THE ENGINEER OF RECORD WILL DESIGNATE AN ON-SITE ESC SUPERVISOR WHO IS RESPONSIBLE TO MONITOR, INSPECT, AND REPORT TO THE DEVELOPER AND GENERAL CONTRACTOR ON ESC FACILITIES & SITE DISCHARGE PERFORMANCE IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES (BMP'S).
- THE CONSULTANT ASSUMES NO RESPONSIBILITY FOR DAMAGES RESULTING FROM IMPROPER EROSION AND SEDIMENT CONTROL MEASURES UNDERTAKEN BY THE GENERAL CONTRACTOR.
- ANY DIRECTION GIVEN BY THE ENGINEER OF RECORD OR ESC SUPERVISOR TO THE GENERAL CONTRACTOR FOR EROSION AND SEDIMENT CONTROL NOT FOLLOWED BY THE GENERAL CONTRACTOR IS TO BE REPORTED TO THE SITE SUPERINTENDENT AND MUNICIPALITY IMMEDIATELY.
- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT NO SOIL, SAND, SILT, OR ANY OTHER SUBSTANCES ARE SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY, OR AREAS THAT LEAD TO CATCH BASINS CONNECTED TO PUBLIC SYSTEMS. THE GENERAL CONTRACTOR IS TO CLEAN ANY SUCH MATERIAL IMMEDIATELY. I.E. ROADS ARE TO BE SWEEP WITH A VACUUM STREET SWEEPER AFTER WORK STOPPAGE EACH DAY.
- PRIOR TO CONSTRUCTION, INSTALL A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT TO LIMIT TRACKING OF SITE SOILS ONTO OFFSITE ROADWAYS. THE WIDTH OF THE PAD SHOULD BE THE FULL WIDTH OF THE POINT OF INGRESS/EGRESS AND SHOULD NOT BE LESS THAN 6m WIDE WITH A LENGTH OF THE PAD TO BE NOT LESS THAN 150m. THE PAD SHALL HAVE A MINIMUM THICKNESS OF 200mm (8") OF COARSE GRANULAR MATERIAL, COARSE GRANULAR MATERIAL SUCH AS 75mm SHOT ROCK OR FRACTURED DRAIN ROCK UNDERLAIN WITH GEO-TEXTILE FABRIC IS RECOMMENDED.
- THE ENTRANCE SHOULD BE MAINTAINED FOR THE DURATION OF CONSTRUCTION, IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, OR AREAS THAT LEAD TO CATCH BASINS CONNECTED TO PUBLIC SYSTEMS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL MATERIAL. HOWEVER, THE PAD SHOULD BE MAINTAINED ONCE PERMANENT PAVEMENTS ARE IN PLACE AT THE SITE. A WHEEL WASH MAY BE REQUIRED IF THE TEMPORARY GRAVEL PAD IS NOT WORKING.
- PRIOR TO CONSTRUCTION, CLEARLY FLAG OR FENCE AREAS OF NO DISTURBANCE AS WELL AS ANY DESIGNATED STRESS AND SHRUBS THAT ARE TO BE PRESERVED. MARKINGS SHOULD REMAIN IN PLACE THROUGHOUT CONSTRUCTION.
- STRIP AND GRUB ONLY THOSE AREAS NECESSARY FOR THE CURRENT CONSTRUCTION. STAGE CONSTRUCTION OPERATIONS TO LIMIT DISTURBANCE AND DO NOT STRIP ANY AREA UNTIL REQUIRED.
- GRADE WORK AREAS AWAY FROM ADJACENT PROPERTIES AND TOWARDS THE SEDIMENT POND ON THE SITE FOR DISPERSAL AND INFILTRATION.
- IF GRADED AREAS WITHIN THE PROJECT WILL NOT BE COMPLETED OUTSIDE OF THE WET SEASON (OCTOBER TO APRIL), RE-VEGETATION OPERATIONS SHOULD BE CARRIED OUT WITHIN ONE WEEK OF GRADING COMPLETION OR NO LATER THAT SEPT 15TH.
- SILT FENCING IS TO BE INSTALLED AROUND ALL STOCK/SPOIL PILES, OR PILES ARE TO BE OTHERWISE COVERED TO LIMIT EROSION AND SEDIMENT GENERATION.
- INSTALL SETTLEMENT PONDS EQUIPPED WITH EMERGENCY OVERFLOW, FOR RETENTION/FILTRATION TREATMENT OF RUNOFF COLLECTED BY INTERCEPTOR SWALES (DITCHES) AND/OR SILT BARRIERS. THE SETTLEMENT PONDS ARE TO HAVE A MINIMUM VOLUME TO CONTAIN FLOWS FROM A 10-YEAR RETURN PERIOD, 24-HOUR RAINFALL EVENT. THE PONDS SHOULD BE USED AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
- ROUTINE INSPECTION AND MAINTENANCE OF THE SYSTEM COMPONENTS WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHOULD DESIGNATE AN ON-SITE ESC FACILITATOR TO BE RESPONSIBLE FOR DAY-TO-DAY MANAGEMENT OF THE ESC FACILITIES. THE GENERAL CONTRACTOR IS TO SUPPLY A PHONE NUMBER WHERE THE ESC FACILITATOR CAN BE REACHED 24 HOURS/DAY. AT A MINIMUM, INSPECT ALL BMP'S WEEKLY TO ENSURE PROPER FUNCTION WITH INSPECTION REPORTS PROVIDED TO THE ENGINEER OF RECORD FOR REVIEW.
- 48 HOURS PRIOR TO ANY PREDICTED SIGNIFICANT STORM EVENT, THE ESC FACILITATOR AND ESC SUPERVISOR SHOULD INSPECT THE ESC FACILITIES AND ENSURE THAT THE WORK IS ADEQUATE TO PROTECT THE SITE DURING THE STORM EVENT. THE ESC FACILITATOR SHALL PROVIDE A WRITTEN REPORT TO THE ENGINEER OF RECORD AND/OR THE MUNICIPALITY. IF THE ESC SUPERVISOR DETERMINES THAT THE ESC WORKS ARE NOT ADEQUATE TO PROTECT THE SITE DURING THE ANTICIPATED STORM EVENT, THEN THEY ARE TO IMMEDIATELY INFORM THE ENGINEER OF RECORD AND GENERAL CONTRACTOR SO THAT THE WORKS CAN BE MODIFIED TO ADEQUATELY PROTECT THE SITE DURING THE STORM EVENT AND PROVIDE A WRITTEN REPORT TO THE ENGINEER OF RECORD AND/OR MUNICIPALITY.
- DURING AND/OR FOLLOWING EACH SIGNIFICANT STORM EVENT, THE ESC FACILITATOR AND ESC SUPERVISOR SHOULD OBSERVE THE SETTLEMENT PONDS AND STORM DRAIN TO CONFIRM THAT TURBID WATER FROM SOURCES ASSOCIATED WITH CONSTRUCTION ARE NOT ENTERING THE STORM DRAINAGE SYSTEM. THE ESC FACILITATOR SHOULD TAKE IMMEDIATE CORRECTIVE ACTION IF INSPECTION INDICATES A PROBLEM. RECORD INSPECTION DATES, ANY SIGNIFICANT OBSERVATIONS, AND ACTIONS TAKEN, THEN INFORM THE ENGINEER OF RECORD AND THE MUNICIPALITY.

MAINTENANCE ALL STAGES (AS APPLICABLE):

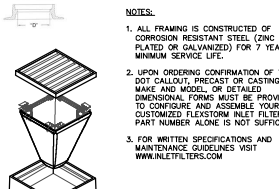
- THE GENERAL CONTRACTOR'S ESC FACILITATOR IS RESPONSIBLE FOR DAY-TO-DAY MAINTENANCE OF THE ESC WORKS. ROUTINE INSPECTION AND MAINTENANCE OF THE SITE WORKS WILL BE THE RESPONSIBILITY OF THE ESC FACILITATOR. AT A MINIMUM INSPECT ALL BMP'S WEEKLY TO ENSURE PROPER FUNCTION WITH INSPECTION REPORTS PROVIDED TO THE ENGINEER OF RECORD AND THE MUNICIPALITY FOR REVIEW.
- INSPECTIONS AND REPORTS ARE TO BE CONDUCTED AS PER ESC GENERAL NOTES 16, 17, AND 18.
- UPON DIRECTION BY THE ENGINEER OF RECORD OR ESC SUPERVISOR, THE GENERAL CONTRACTOR'S ESC FACILITATOR IS REQUIRED TO UNDERTAKE MAINTENANCE ACTIVITIES AS NECESSARY TO MODIFY OR MAINTAIN ESC FACILITIES. ADDITIONAL MEASURES THAN WHAT IS SPECIFIED MAY BE REQUIRED.
- THE GENERAL CONTRACTOR IS TO ENSURE ROAD SURFACES ARE REGULARLY CLEANED OF ACCUMULATED SEDIMENTS BY STREET SWEEPER AT THE END OF EACH DAY AS REQUIRED BY GENERAL NOTE 7. FLUSHING OF ROADWAYS IS PROHIBITED.
- SEDIMENT FENCES/BARRIERS TO BE INSPECTED AND REPAIRED PRIOR TO EXPECTED RAIN EVENTS AND FOLLOWING ALL SIGNIFICANT STORM EVENTS OR PERIODS OF EXTENDED RAIN; ACCUMULATED SEDIMENTS GREATER THAN 30% OF THE FENCE CAPACITY OR DEFICIENCIES SHOULD BE DEALT WITH ACCORDINGLY.
- ALL CATCH BASIN FILTER SOCKS ARE TO BE INSPECTED WEEKLY OR FOLLOWING STORM EVENTS, RINSE FILTERS ARE TO BE REMOVED AND CLEANED AT 40% CAPACITY.
- GRAVEL ACCESS PADS TO BE INSPECTED DAILY TO ENSURE FUNCTIONALITY, ADDITIONAL ROCK TO BE ADDED AS REQUIRED.
- ANY STOCKPILED MATERIAL TO BE COVERED AND ENCLOSED BY SEDIMENT FENCE AS SPECIFIED.
- DUST NUISANCE WILL BE REDUCED BY USE OF WATER SPRAYED ON THE EXPOSED SOURCE OF THE DUST. FREQUENCY OF THE SUPPRESSION WILL BE AS REQUIRED OR AS DIRECTED BY THE ENGINEER OF RECORD.
- ALL SEDIMENT FROM ESC CONTROL FACILITIES TO BE DISPOSED OF IN A MANNER AS TO NOT COMPOUND OR COMPROMISE THE SEDIMENT LOADING OF OTHER CONTROL MEASURES.
- ANY IRREGULARITIES SHALL BE REPORTED TO THE ENGINEER OF RECORD AND/OR ESC SUPERVISOR IMMEDIATELY.

FLEXFORM CATCH-IT FILTERS FOR TEMPORARY INLET PROTECTION
SECTION SELECTION AND SPECIFICATION DRAWING



SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE

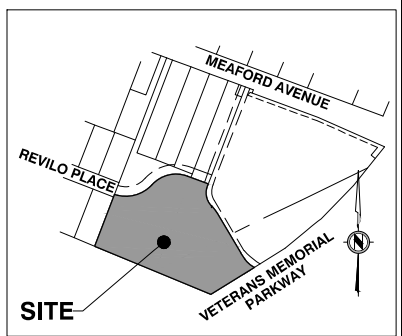
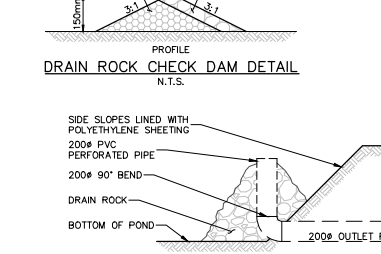
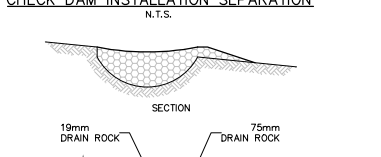
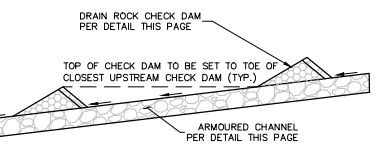
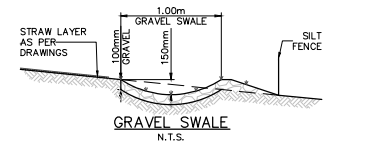
Nominal Bag Size	Spill Storage Capacity (Litres)	Filtered From Rate at 50% Slope (L/Min)
Small	1.0	1.2
Medium	2.0	2.4
Large	3.0	3.6
Extra Large	4.0	4.8



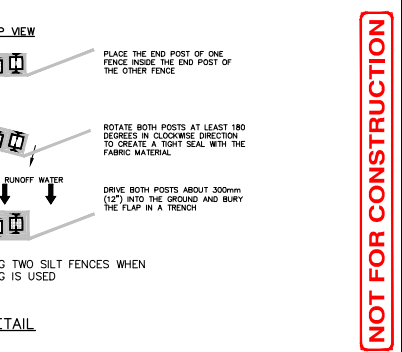
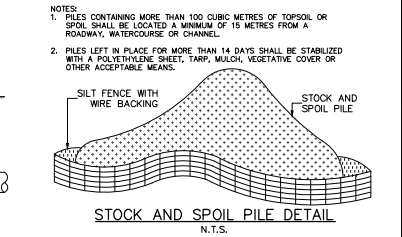
- INSTALLATION:**
- REMOVE GRATE
 - DROP FLEXFORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
 - REPLACE GRATE

SEDIMENT CONTROL AT CATCH BASINS
 N.T.S.

ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC. A DIVISION OF AOS, INC.
 WWW.INLETFILTERS.COM
 PH: (604) 287-2828
 FX: (604) 255-3472
 EN: INFO@INLETFILTERS.COM



SITE LOCATION PLAN
 SCALE = 1:2500



NOTICE TO CONTRACTOR

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LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904

BENCHMARK MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEOIDETIC)
 LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY

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8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2022MAY03	JDP
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2022MAY03	JDP

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PROJECT: VICTORIA HYUNDAI AND GENESIS DEALERSHIPS
 2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCO

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN EXCAVATED TRENCH 150mm x 150mm OR AS REQUIRED BY THE LOCAL REGULATORY AUTHORITY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

TITLE: EROSION AND SEDIMENT CONTROL - NOTES AND DETAILS

PROJECT NO.: DP000007 & DP23-0051

DRAWING NO.: 22-8017 - ESCN

SCALE: HORIZ. AS SHOWN
 VERT. AS SHOWN
 A & M DRAWING NO. 22-8017- ESCN

DESIGN: JDP
DRAWN: KA

CHECK: SJP
APPR: SJP

A & M FILE: 22-8017

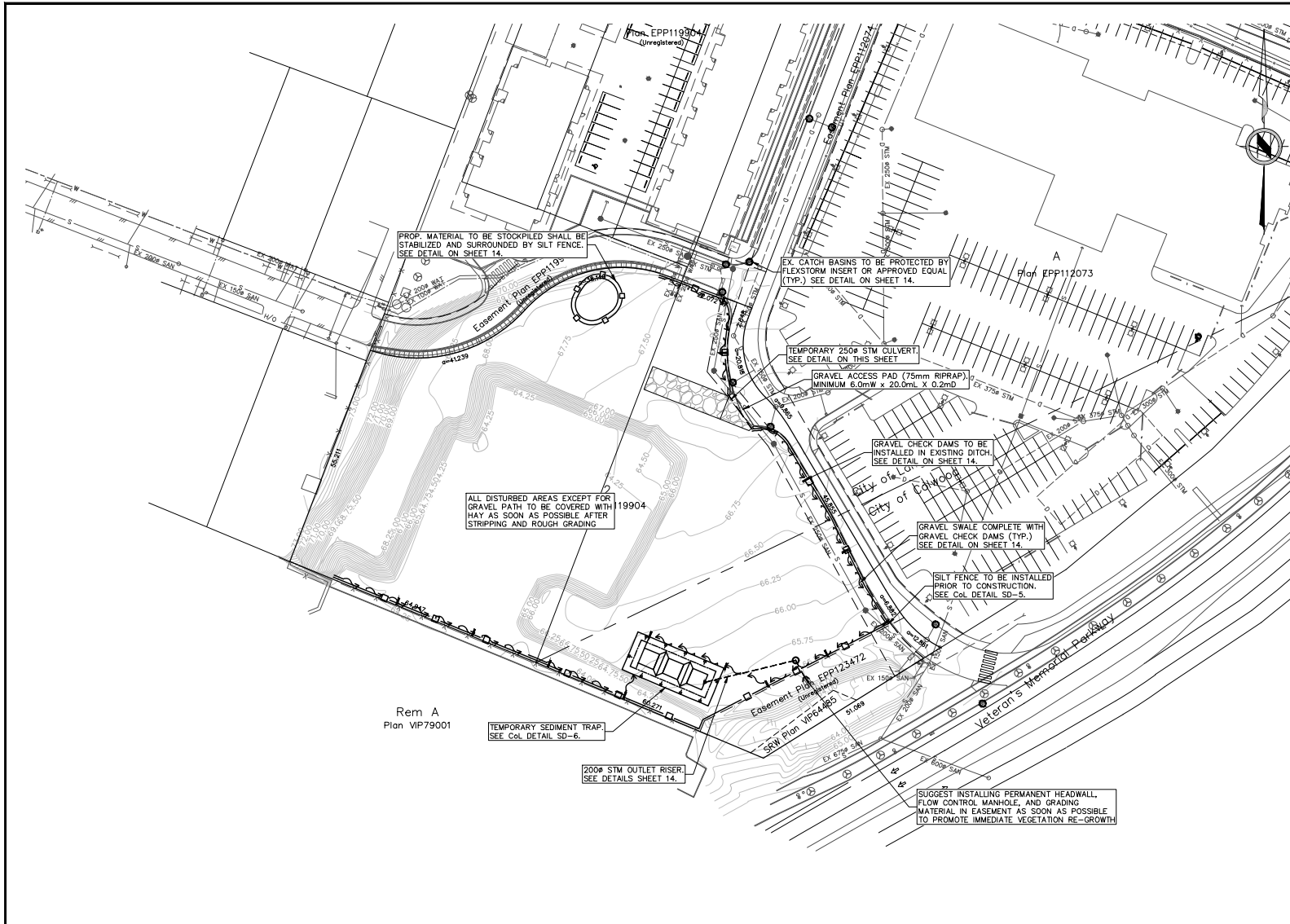
DRAWING DATE: NOVEMBER 2022

SHEET NO.: 14 OF 18

REV.: 09

0 10 H:1:1000
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NOT FOR CONSTRUCTION

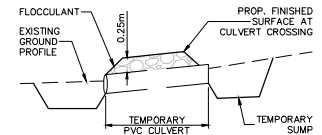


EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES:

- THE FOLLOWING STRATEGIES ARE THE MINIMUM EFFORTS REQUIRED BY THE OWNER, DEVELOPER, AND THE DEVELOPERS AGENTS (INCLUDING BUT NOT LIMITED TO: THE ENGINEER OF RECORD, ESC SUPERVISOR, GENERAL CONTRACTOR, SUB-CONTRACTORS, BUILDER, BUILDING SUB-TRADES & UTILITY COMPANIES), SOME OR ALL OF THESE ACTIONS MAY BE ASSIGNED TO SPECIFIC PERSONNEL THROUGH CONTRACTUAL ARRANGEMENTS. ALL PARTIES ENGAGED ON SITE SHALL COMPLY WITH THE FOLLOWING EROSION AND SEDIMENT CONTROL PLANS AND THE REGULATORY REQUIREMENTS SPECIFIED BY FEDERAL, PROVINCIAL, AND MUNICIPAL AUTHORITIES.
- SEE SHEET 14 FOR ESC GENERAL NOTES, ESC MAINTENANCE NOTES, AND ESC DETAILS

STAGE 1: CLEARING, STRIPPING, AND ROUGH GRADING

- AFTER RECEIPT OF THE ESC PERMIT, THE GENERAL CONTRACTOR SHALL SCHEDULE AN ONSITE MEETING WITH THE ENGINEER OF RECORD AND/OR ESC SUPERVISOR TO ENSURE ALL ESC FACILITIES ARE TO BE INSTALLED CORRECTLY. THE GENERAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF THE COMMENCEMENT OF CLEARING AND STRIPPING OF THE SITE.
- THE CONTRACTOR SHALL INSTALL THE FOLLOWING ESC FACILITIES PRIOR TO THE START OF ANY CLEARING, STRIPPING, OR EXCAVATION:
 - CONTRACTOR TO INSTALL TREE PROTECTION MEASURES AS REQUIRED BY TREE MANAGEMENT PLAN PREPARED BY OTHERS.
 - CONTRACTOR TO INSTALL SILT FENCE, AS SHOWN.
 - CONTRACTOR TO INSTALL "FLEXSTORM CATCH-IT FILTERS" IN EXISTING CATCH BASINS AND LAWN DRAINS, AS NOTED.
 - CONTRACTOR TO INSTALL GRAVEL ACCESS PADS, AS SHOWN.
 - CONTRACTOR TO INSTALL SWALES AND CHECK DAMS, AS SHOWN.
 - CONTRACTOR TO INSTALL SEDIMENTATION POND(S), AS SHOWN.
 - CONTRACTOR TO COVER STOCK AND SPOIL PILES WITH APPROPRIATE COVERING AND SURROUND BY SILT FENCE.
 - DISTURBED AREAS OF THE SITE TO BE COVERED WITH STRAW LAYER AT AN APPLICATION RATE OF 5 TONNES/HECTARE (100% COVERED OR AS INDICATED).
- STREET SWEEPING TO BE CONDUCTED DAILY AS PER ESC GENERAL NOTE 7 AND ESC MAINTENANCE NOTE 4, OR AS DIRECTED BY THE ENGINEER-OF-RECORD. FLUSHING OF ROADWAYS IS PROHIBITED.
- ADDITIONAL MEASURES THAN WHAT IS SPECIFIED MAY BE REQUIRED BY THE ENGINEER OF RECORD AND/OR ESC SUPERVISOR. ANY IRREGULARITIES SHALL BE REPORTED TO THE ENGINEER OF RECORD AND/OR ESC SUPERVISOR IMMEDIATELY.



CULVERT DETAIL
N.T.S.

LEGEND:

TREE PROTECTION FENCE (BY OTHERS)	
PROPOSED SILT FENCE	
LOCAL OVERLAND FLOW	
PROPOSED GRAVEL SWALE	
GRAVEL CHECK DAM	
PROPOSED STRAW/HAY (5 TONNES/HECTARE)	
GRAVEL ACCESS PAD (75mm THICK RIPRAP)	
CATCH BASIN (EXISTING)	
LAWN BASIN (EXISTING)	
FILTER SOCK COVER OVER CATCH BASIN/LAWN BASIN	

NOT FOR CONSTRUCTION

NOTICE TO CONTRACTOR

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2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCOD



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TITLE: **EROSION AND SEDIMENT CONTROL - PLAN STAGE 1**

DESIGN: JDP CHECK: SAL
DRAWN: KA APPR: SAL

A & M FILE: **22-8017**

DRAWING DATE: **NOVEMBER 2022**

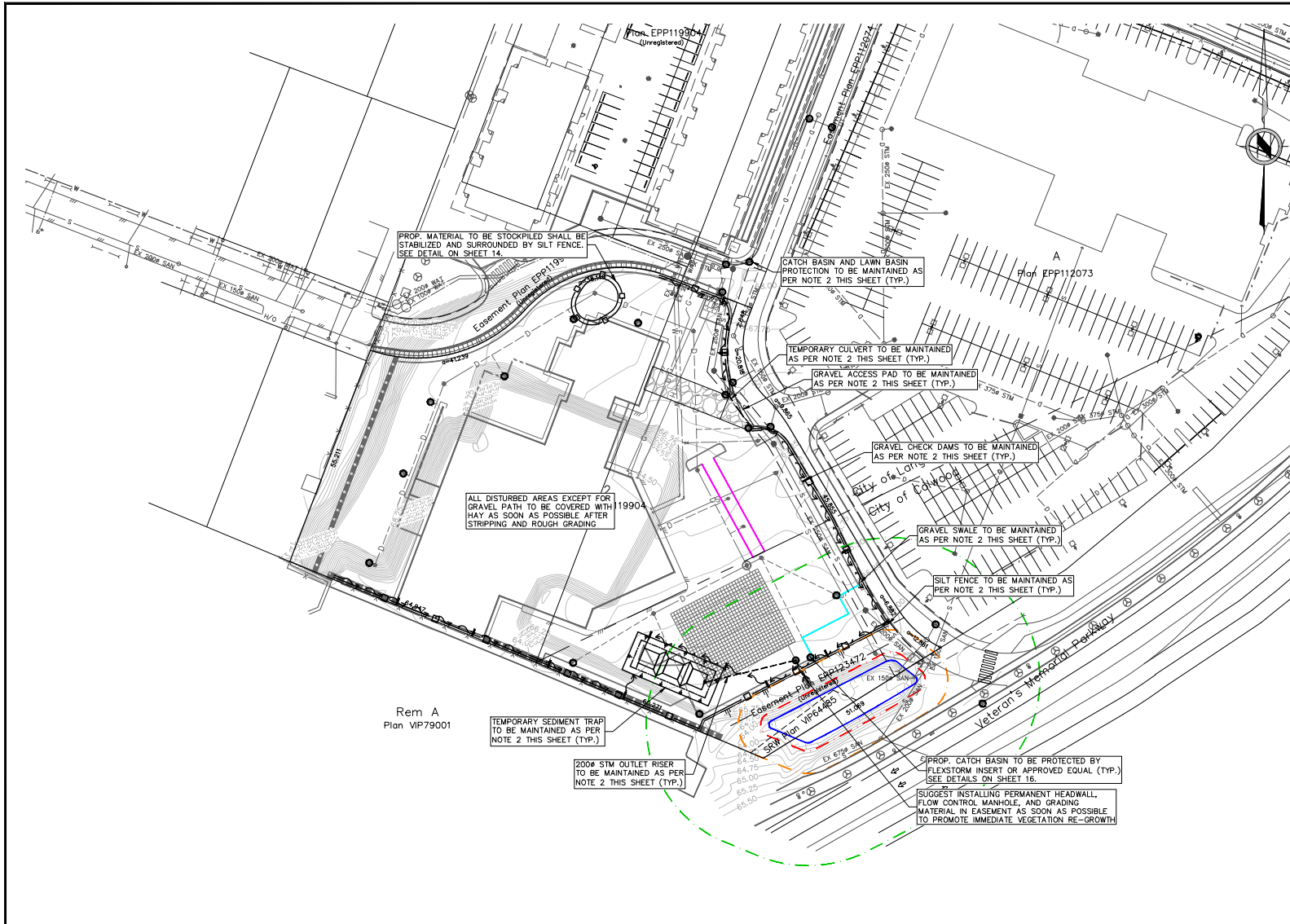
PROJECT NO.: **DP000007 & DP23-0051**

DRAWING NO.: **22-8017- ESC1**

SCALE: HORIZ: 1:500
VERT: N/A

SHEET NO.: **15 OF 18**

REV.: **09**

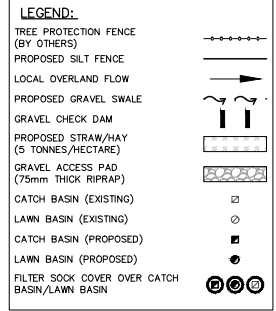


EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES:

- THE FOLLOWING STRATEGIES ARE THE MINIMUM EFFORTS REQUIRED BY THE OWNER, DEVELOPER, AND THE DEVELOPERS AGENTS (INCLUDING BUT NOT LIMITED TO: THE ENGINEER OF RECORD, ESC SUPERVISOR, GENERAL CONTRACTOR, SUB-CONTRACTORS, BUILDER, BUILDING SUB-TRADES & UTILITY COMPANIES), SOME OR ALL OF THESE ACTIONS MAY BE ASSIGNED TO SPECIFIC PERSONNEL THROUGH CONTRACTUAL ARRANGEMENTS. ALL PARTIES ENGAGED ON SITE SHALL COMPLY WITH THE FOLLOWING EROSION AND SEDIMENT CONTROL PLANS AND THE REGULATORY REQUIREMENTS SPECIFIED BY FEDERAL, PROVINCIAL, AND MUNICIPAL AUTHORITIES.
- SEE SHEET 14 FOR ESC GENERAL NOTES, ESC MAINTENANCE NOTES, AND ESC DETAILS

STAGE 2: UTILITIES, ROADWORKS, AND BUILDING PAD

- ALL ESC FACILITIES TO BE CONTINUOUSLY MAINTAINED BY THE GENERAL CONTRACTOR. ESC SUPERVISOR TO CONDUCT REGULAR INSPECTIONS OF THE SITE ESC FACILITIES.
- ESC FACILITIES ARE TO REMAIN IN PLACE UNTIL 90% OF STORM DRAINAGE NETWORK AND PERMANENT SURFACES ARE INSTALLED. ESC FACILITIES ARE ONLY TO BE DECOMMISSIONED AT THE DIRECTION OF THE ENGINEER OF RECORD AND/OR THE ESC SUPERVISOR.
- AFTER INSTALLATION OF CATCH BASINS AND LAWN DRAINS, FLEXSTORM CATCH-IT FILTERS ARE TO BE INSTALLED. CLEAN AND REPLACE AS NECESSARY AS PER ESC MAINTENANCE NOTES
- STREET SWEEPING TO BE CONDUCTED DAILY AS PER ESC GENERAL NOTE 7 AND ESC MAINTENANCE NOTE 4, OR AS DIRECTED BY THE ENGINEER-OF-RECORD. FLUSHING OF ROADWAYS IS PROHIBITED.
- ADDITIONAL MEASURES THAN WHAT IS SPECIFIED MAY BE REQUIRED BY THE ENGINEER OF RECORD AND/OR ESC SUPERVISOR.
- ANY IRREGULARITIES SHALL BE REPORTED TO THE ENGINEER OF RECORD AND/OR ESC SUPERVISOR IMMEDIATELY.



NOT FOR CONSTRUCTION

NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD.

LEGAL DESCRIPTION: LOT 2, SECTION 73, ESQUIMALT DISTRICT, PLAN EPP119904

BENCHMARK MONUMENT: 03H2510, ELEVATION: 70.728, DATUM: CVD28BC (GEODETIC)
LOCATED AT: MEAFORD AVENUE AND VETERANS MEMORIAL PARKWAY

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
5	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024JAN17	JDP
6	RE-ISSUED FOR DEVELOPMENT PERMIT APPLICATION	JDP	JDP	2024FEB09	JDP
7	ISSUED FOR BUILDING PERMIT APPLICATION	JDP	JDP	2024MAR06	JDP
8	ISSUED FOR BIOLOGICAL CONSIDERATION	JDP	JDP	2024MAR06	JDP
9	RE-ISSUED FOR CITY REVIEW	JDP	JDP	2024MAY03	JDP

APLIN MARTIN

EGBC Permit to Practice Number #1001018

ApLin & Martin Consultants Ltd.
#104 - 6596 Applecross Road, Nanaimo, B.C., Canada V9V 0A4
Tel: (778) 841-0484, Fax: (604) 597-9061, Email: general@aplinmartin.com

CLIENT: **ISLAND WEST COAST DEVELOPMENTS LTD.**
2214 MCCULLOUGH ROAD, NANAIMO, BC V9S 4M8
(250) 756-9665

PROJECT: **VICTORIA HYUNDAI AND GENESIS DEALERSHIPS**
2930 BRICKSHIRE DRIVE, LANGFORD, BC

IWCO

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IBS 1512
45046
IBS 1512 to Plan No 750400
2024-07-02

TITLE: **EROSION AND SEDIMENT CONTROL - PLAN STAGE 2**

PROJECT NO. **DP000007 & DP23-0051**

DRAWING NO. **A & M DRAWING NO. 22-8017- ESC2**

SCALE: **HORIZ: 1:500 VERT: N/A**

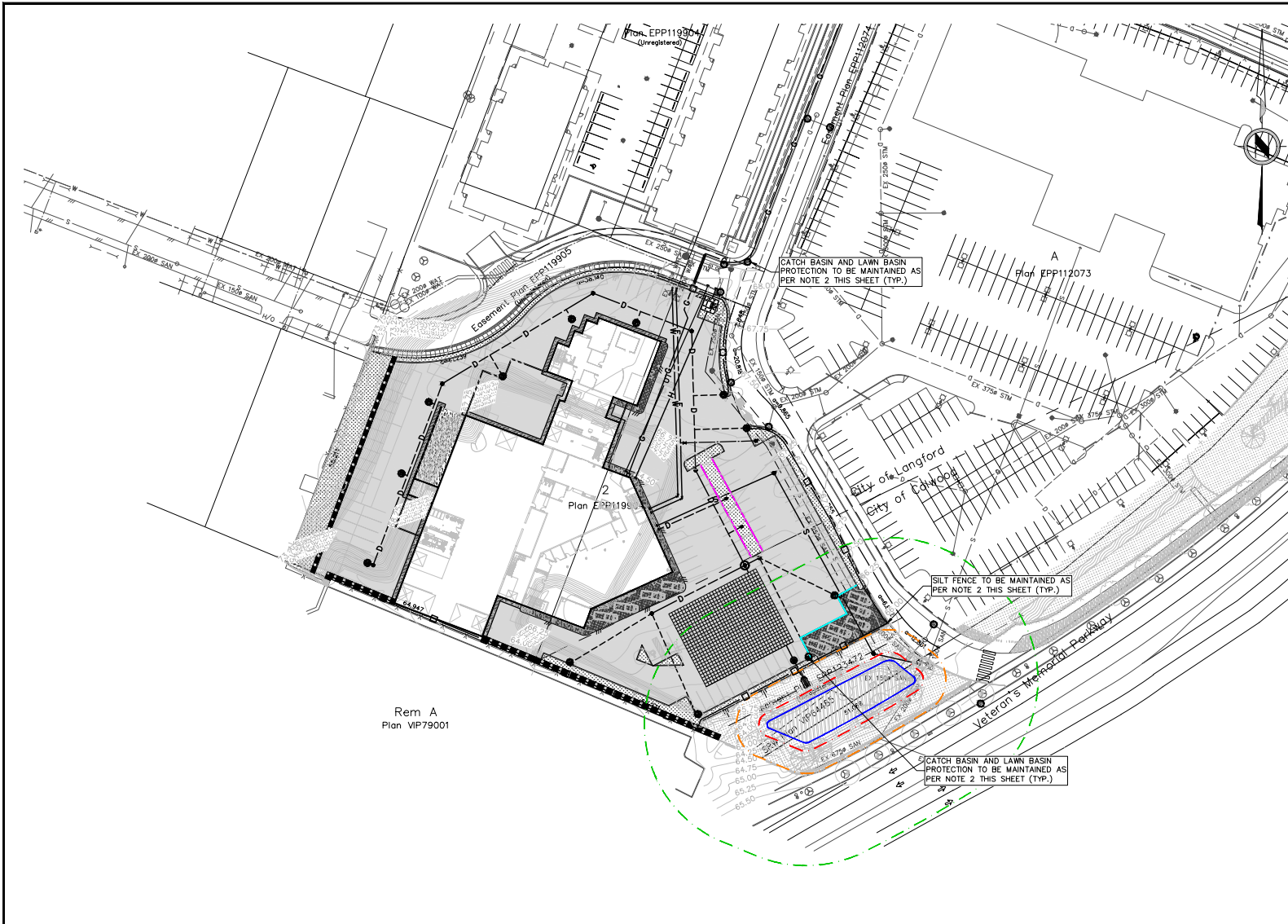
DESIGN: JDP CHECK: SAL
DRAWN: KA APPR: SAL

A & M FILE: **22-8017**

DRAWING DATE: **NOVEMBER 2022**

SHEET NO. **16** OF **18** REV. **09**

0 5 1:500 25m



Rem A
Plan VIP79001

EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES:

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2. SEE SHEET 14 FOR ESC GENERAL NOTES, ESC MAINTENANCE NOTES, AND ESC DETAILS

STAGE 3: FINAL GRADING THROUGH TO SUBSTANTIAL COMPLETION

1. ALL ESC FACILITIES TO BE CONTINUOUSLY MAINTAINED BY THE GENERAL CONTRACTOR, ESC SUPERVISOR TO CONDUCT REGULAR INSPECTIONS OF THE SITE ESC FACILITIES.
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3. STREET SWEEPING TO BE CONDUCTED DAILY AS PER ESC GENERAL NOTE 7 AND ESC MAINTENANCE NOTE 4, OR AS DIRECTED BY THE ENGINEER-OF-RECORD. FLUSHING OF ROADWAYS IS PROHIBITED.
5. ADDITIONAL MEASURES THAN WHAT IS SPECIFIED MAY BE REQUIRED BY THE ENGINEER OF RECORD AND/OR ESC SUPERVISOR.
6. ANY IRREGULARITIES SHALL BE REPORTED TO THE ENGINEER OF RECORD AND/OR ESC SUPERVISOR IMMEDIATELY.

LEGEND:	
TREE PROTECTION FENCE (BY OTHERS)	—+—+—+—
PROPOSED SILT FENCE	—+—+—+—
PROPOSED GRAVEL SWALE	—+—+—+—
RETAINING WALL	—+—+—+—
ASPHALT PAVEMENT	▨
CONCRETE PAVEMENT	▩
LANDSCAPING — SEE LANDSCAPE ARCHITECT DRAWINGS FOR DETAILS	▩
CATCH BASIN (EXISTING)	□
LAWN BASIN (EXISTING)	○
CATCH BASIN (PROPOSED)	■
LAWN BASIN (PROPOSED)	●
FILTER SOCK COVER OVER CATCH BASIN/LAWN BASIN	⊗

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TITLE: **EROSION AND SEDIMENT CONTROL - PLAN STAGE 3**

PROJECT NO. **DP000007 & DP23-0051**

DRAWING NO. **A & M DRAWING NO. 22-8017- ESC3**

SCALE: HORIZ: 1:500 VERT: N/A

DESIGN: JDP CHECK: SAL
DRAWN: KA APPR: SAL

A & M FILE: **22-8017**

DRAWING DATE: **NOVEMBER 2022**

SHEET NO. **17** OF **18** REV. **09**

