



Box 100 | 7400 Prospect Street
 Pemberton BC V0N 2L0
 P: 604.894.6135 | F: 604.894.6136
 Email: admin@pemberton.ca
 Website: www.pemberton.ca

BOARD OF VARIANCE APPLICATION

Date of Application: June 30, 2021 VOP File Number: _____

APPLICANT INFORMATION:

Name: Coast Essential Construction Ltd Postal Address: _____
 Phone: Reid Madiuk: [REDACTED] Farhang Shahidi: [REDACTED]
 Fax: _____
 Cel: As above Email: [REDACTED]

REGISTERED OWNER INFORMATION:

Name: 1283735 BC LTD Postal Address: _____
 Phone: [REDACTED] 40543 Thunderbird Ridge
 Fax: _____ Squamish, BC, V8B 0G1
 Cel: As above Email: [REDACTED]

PROPERTY INFORMATION:

Civic Address: 7510 Pebble Creek Drive Legal Description: PID: 030-333-334, Lot 7, DL 211, EPS4695
Pemberton, BC Zoning Designation: RSA-2
 Section in Bylaw to be varied: 4.13 (a) viii. & 7.21 (a) i.

DESCRIPTION OF VARIANCE REQUESTED:

To vary Section 4.13 (a) viii. & Section 7.21 (a) i. to allow for wall heights greater than 1.2 m
to a maximum of 1.86 m, see Site Plan A-01.2, 2021-06-17

APPLICATION CHECKLIST:

Certificate of Title	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Site Plan	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Application Fee	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Property Within Agricultural Land Reserve	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	
Authorization Form	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Property Subject to Riparian Area Regulations	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
Rationale for Variance	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Property Adjacent to Residential Properties	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

I, Farhang Shahidi
Coast Essential Construction Ltd hereby allow for the purposes of this application, any member(s) of the Board of Variance to vie [REDACTED]

For Office Use Only

Roll No.: _____ Prospero No.: _____
 Related Files: _____ Fee Submitted: \$ _____ Receipt No.: _____



Letter of Agency

Civic Address: 7510 Pebble Creek Drive, Pemberton, BC

PID#: 030-333-334

Legal Description: LOT 7 PLAN EPS4695 DISTRICT LOT 211 LILOOET LAND DISTRICT
(the "Subject Lands")

Registered Owner: 1283735 BC LTD

I, Rachael Mirvish, being the Registered Owner (or duly authorized representative of the Registered Owner) of the Subject Lands, hereby authorize Coast Essential Construction Ltd to act as Agent and authorized signatory for the Registered Owner in respect of all matters relating to the development application of the Subject Lands as may be required by the Village of Pemberton.

A large black rectangular redaction box covering the signature of the registered owner.

Signature of Registered Owner

June 16 2021

Date

TITLE SEARCH PRINT

2021-06-17, 14:55:48

File Reference:

Requestor: Martha McLellan

Declared Value \$540000

****CURRENT INFORMATION ONLY - NO CANCELLED INFORMATION SHOWN****

Title Issued Under STRATA PROPERTY ACT (Section 249)

Land Title District KAMLOOPS
Land Title Office KAMLOOPS

Title Number CA8777474
From Title Number CA6601994

Application Received 2021-02-17

Application Entered 2021-02-19

Registered Owner in Fee Simple
Registered Owner/Mailing Address: 1283735 B.C. LTD., INC.NO. BC1283735
BOX 2563
GARIBALDI HIGHLANDS, BC
V0N 1T0

Taxation Authority North Shore - Squamish Valley Assessment Area
Pemberton, Village of
Pemberton Valley Dyking District

Description of Land
Parcel Identifier: 030-333-334
Legal Description:
STRATA LOT 7 DISTRICT LOT 211 LILLOOET DISTRICT STRATA PLAN EPS4695
TOGETHER WITH AN INTEREST IN THE COMMON PROPERTY IN PROPORTION TO THE UNIT
ENTITLEMENT OF THE STRATA LOT AS SHOWN ON FORM V

Legal Notations
HERETO IS ANNEXED EASEMENT CA2874965 OVER LOT 2, PLAN EPP21848
AS TO PART FORMERLY LOT 3 PLAN EPP21848

HERETO IS ANNEXED EASEMENT CA6555926 OVER THAT PART OF STRATA LOT 6 LD
STRATA PLAN EPS4695 SHOWN ON PL EPP78129

TITLE SEARCH PRINT

2021-06-17, 14:55:48

File Reference:

Requestor: Martha McLellan

Declared Value \$540000

Charges, Liens and Interests

Nature: EASEMENT
Registration Number: CA2874965
Registration Date and Time: 2012-11-19 15:13
Remarks: INTER ALIA
APPURTENANT TO LOT 3, PLAN EPP21848,
AS TO PART FORMERLY LOT 2 PLAN EPP21848

Nature: COVENANT
Registration Number: CA4950098
Registration Date and Time: 2016-01-26 17:04
Registered Owner: VILLAGE OF PEMBERTON
Remarks: INTER ALIA
MODIFIED BY CA7195407

Nature: STATUTORY RIGHT OF WAY
Registration Number: CA5871774
Registration Date and Time: 2017-03-15 10:06
Registered Owner: BRITISH COLUMBIA HYDRO AND POWER AUTHORITY
Remarks: INTER ALIA
AS TO PART FORMERLY LOT 2 PLAN EPP21848

Nature: STATUTORY RIGHT OF WAY
Registration Number: CA5871775
Registration Date and Time: 2017-03-15 10:06
Registered Owner: TELUS COMMUNICATIONS INC.
Remarks: INTER ALIA
AS TO PART FORMERLY LOT 2 PLAN EPP21848

Nature: COVENANT
Registration Number: CA6513043
Registration Date and Time: 2017-12-14 15:57
Registered Owner: VILLAGE OF PEMBERTON
Remarks: INTER ALIA

Nature: COVENANT
Registration Number: CA6513049
Registration Date and Time: 2017-12-14 15:57
Registered Owner: VILLAGE OF PEMBERTON
Remarks: INTER ALIA

Nature: COVENANT
Registration Number: CA6513055
Registration Date and Time: 2017-12-14 15:57
Registered Owner: VILLAGE OF PEMBERTON
Remarks: INTER ALIA

TITLE SEARCH PRINT

2021-06-17, 14:55:48

File Reference:

Requestor: Martha McLellan

Declared Value \$540000

Nature: RESTRICTIVE COVENANT
Registration Number: CA6513056
Registration Date and Time: 2017-12-14 15:57
Remarks: INTER ALIA
APPURTENANT TO PCL A (DD W34182F PL A21) DL 211
LILLOOET DISTRICT

Nature: STATUTORY BUILDING SCHEME
Registration Number: CA6555908
Registration Date and Time: 2018-01-09 14:58
Remarks: INTER ALIA

Nature: EASEMENT
Registration Number: CA6555917
Registration Date and Time: 2018-01-09 14:58
Remarks: INTER ALIA
PART IN PLAN EPP78097 APPURTENANT TO THE COMMON
PROPERTY STRATA PLAN EPS4695

Nature: EASEMENT
Registration Number: CA6555927
Registration Date and Time: 2018-01-09 14:58
Remarks: PART IN PLAN EPP78129 APPURTENANT TO STRATA LOT 6
LD STRATA PL EPS4695

Nature: MORTGAGE
Registration Number: CA7093931
Registration Date and Time: 2018-09-27 16:37
Registered Owner: 379489 ONTARIO STREET HOLDINGS LTD.
INCORPORATION NO. C0436510
AS TO AN UNDIVIDED 400/650 INTEREST
Registered Owner: HARRY BING PARK JUNG
LINDA GAIL JUNG
AS TO AN UNDIVIDED 250/650 INTEREST AS JOINT TENANTS
Remarks: INTER ALIA

Nature: ASSIGNMENT OF RENTS
Registration Number: CA7093932
Registration Date and Time: 2018-09-27 16:37
Registered Owner: 379489 ONTARIO STREET HOLDINGS LTD.
INCORPORATION NO. C0436510
AS TO AN UNDIVIDED 400/650 INTEREST
Registered Owner: HARRY BING PARK JUNG
LINDA GAIL JUNG
AS TO AN UNDIVIDED 250/650 INTEREST AS JOINT TENANTS
Remarks: INTER ALIA

TITLE SEARCH PRINT

2021-06-17, 14:55:48

File Reference:

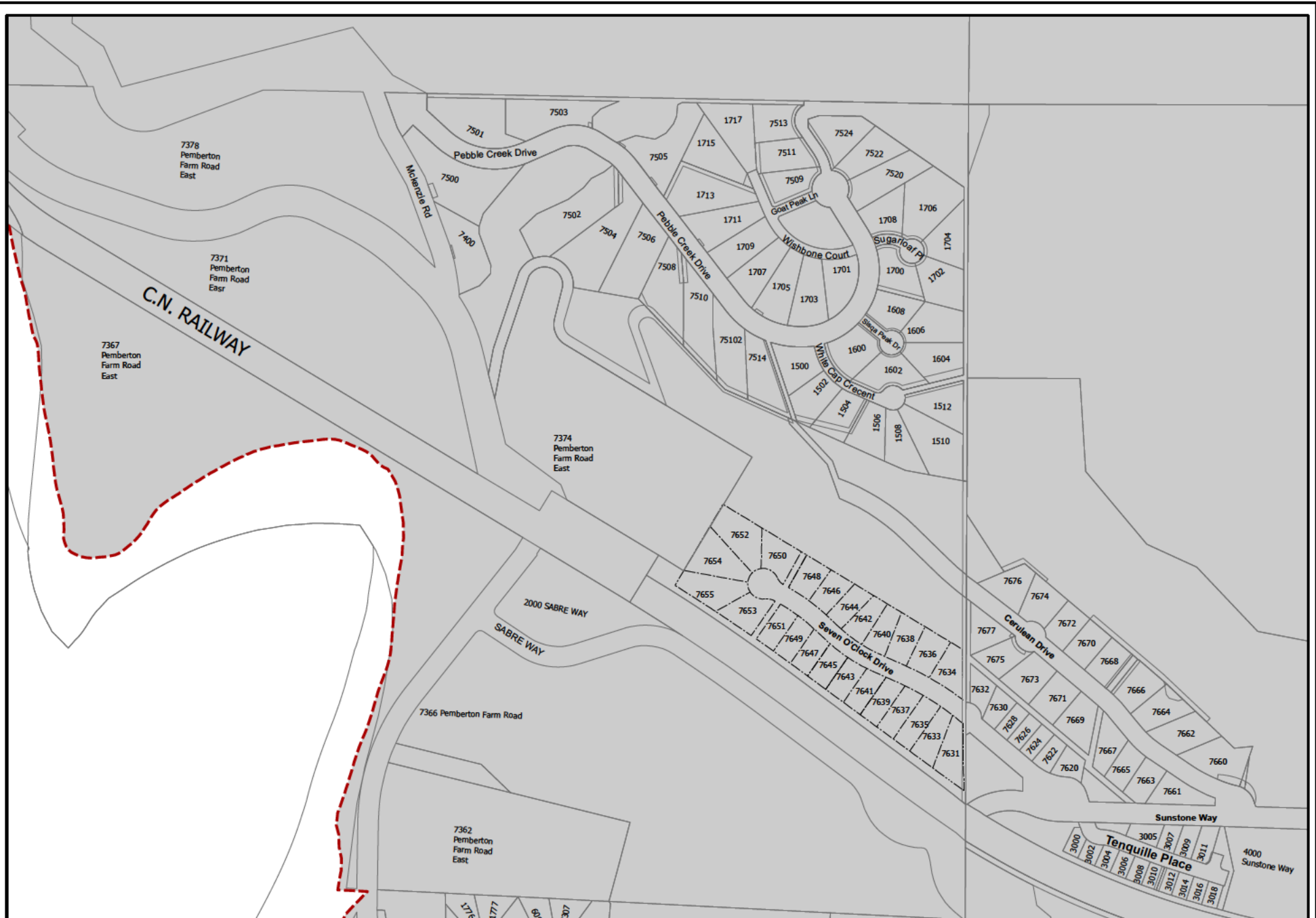
Requestor: Martha McLellan

Declared Value \$540000

Duplicate Indefeasible Title NONE OUTSTANDING

Transfers NONE

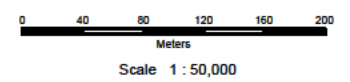
Pending Applications NONE



CIVIC ADDRESS MAPS
THE RIDGE AND SUNSTONE



Not for legal reference.
 Revised May 28, 2019



**Letter to the Board of Variance:
7510 Pebble Creek Drive, Lot 7, The Ridge**

June 30, 2021

Village of Pemberton
Box 100, 7400 Prospect Street
Pemberton, BC, V0N2L0

Dear Board of Variance,

This letter outlines our rationale and justification for the variance requests outlined below for the proposed residential construction at 7510 Pebble Creek Drive. This permit would cover the construction of a series of landscape retaining walls at the southern edge of the property taller than those currently permitted by Sections 4.13 and 7.21 of Village Zoning Bylaw No.832, 2018. With our intent being a design solution that we feel is preferable to a bylaw compliant alternative.

Section 4.13 (a) viii. allows a retaining wall to a maximum height of 1.2 meters (m) to be sited on any portion of a lot, and Section 7.21 (a) i. allows a retaining wall up to 1.2 m in height when measured from the average natural grade at it's base, and not within 0.6 m horizontally of any another retaining wall.

The following variances are being requested on the walls denoted on the plan and section drawings, and the table below:

- To vary Section 4.13 (a) viii. to allow for wall heights greater than the 1.2 m (3.94 ft) allowed, to a maximum of 2.03 m (6.67 ft), a maximum relaxation of 0.82 m (2.67 ft), to be sited on the lot in general compliance with location on the Site Plan A-01.2 and Site Section A-01.6 2021-06-17 or in a location approved by Building Permit; and
- To vary Section 7.21 (a) i. to relax the maximum height of a retaining wall, from 1.2 m (3.94 ft) to maximum of 2.03 m (6.67 ft), a maximum relaxation of 0.82 m (2.67 ft).

	Maximum Height from Average Natural Grade	Relaxation Requested	Maximum Exposed Face of Wall Showing on Completion
Wall 1 (Yellow)	1.52 m (5.00 ft)	0.30 m (1.00 ft)	1.52 m (5.00 ft)
Wall 2 (Blue)	1.73 m (5.67 ft)	0.51 m (1.67 ft)	1.98 m (6.50 ft)
Wall 3 (Purple)	1.50 m (4.92 ft)	0.28 m (0.92 ft)	1.98 m (6.50 ft)
Wall 4 (Green)	2.03 m (6.8 ft)	0.82 m (2.67 ft)	1.73 m (5.67 ft)

The proposed walls have been designed in conjunction with input from our geotechnical engineers for the project, their independent review and recommendations for our design are submitted alongside this request, and designed in a manner that we feel matches the existing contours of the lot more so than would have been possible when constructing a bylaw compliant arrangement.

We feel the plan presented provides an aesthetically suitable solution which matches the natural contours of the landscape and is in line with the Village of Pemberton's Hillside Development Design Guidelines (April 2020). Whilst the current bylaws, which allow for a single retaining wall to a maximum of 1.2 m in height, not located within 0.6 m horizontally of any other retaining wall, or 1V:0.5H, presents design constraints which make the creation of retaining walls matching natural contours difficult to achieve without arriving at a staircase-like solution.

Additionally, our submitted plan creates a greater amount of usable property in the form of a flatter, less tiered, landscape design which improves accessibility around the proposed dwelling. It also allows for efficient and effective distribution of existing fill material within the lot, reducing the need for removal of spoil during excavation and importing of replacement fill for backfilling later on, both of which minimising the project's need for heavy vehicle traffic.

In conjunction with this letter and our application we have also submitted the following information in relation to this variance request:

- A completed application form
- A site plan
- Retaining wall design drawings
- Retaining wall and landscape plan visual renderings
- Geotechnical review and design guidance
- A landscape plan
- A landscape cost estimate
- Certificate of title (2021-06-07)
- Owners Authorization Form
- Site photos (included below)

As a reference for council, we are also submitting a similar development variance permit request for the adjacent property, 7508 Pebble Creek Drive, which shares an owner with this lot. The two properties will employ a similar aesthetic in their landscape retaining design, with the extent of retaining varying to account for the individual lot characteristics.



Figure 1 – Current conditions at southern property line looking east.



Figure 2 – Current conditions at southern property line looking north.



Figure 3 – Current conditions at southern property line looking west.



Figure 4 – Current conditions facing south from lot center, existing neighbouring retaining visible.



Figure 5 – Current view southwest from within the subject lot, showing extent of neighbouring retaining. This example of existing retaining does not meet current bylaws.



Figure 6 – Center lot facing west showing relative scale of the neighbouring property's retaining. Example of existing wall more than 1.2m in height.



Figure 7 – Local retaining wall example 1 of 6. Example of well executed terraced walls. Location: The Ridge.



Figure 8 – Local retaining wall example 2 of 6. Walls over height but including terrace for planting. Location: main access to The Ridge.



Figure 9 – Local retaining wall example 3 of 6. Example of how each row of gabions step back to easily achieve a 1H:1V slope. Location: main access to The Ridge.



Figure 10 – Local retaining wall example 4 of 6. Example of 1H:1V slope. Although considered acceptable, this solution is not aesthetically pleasing, and prone to erosion. Terraced retaining provides better vegetation cover, less erosion, and a more pleasing appearance. Viewed from Sunstone Development.



*Figure 11 – Local retaining wall example 5 of 6.
Example of an unretained slope. Viewed from Sunstone Development.*

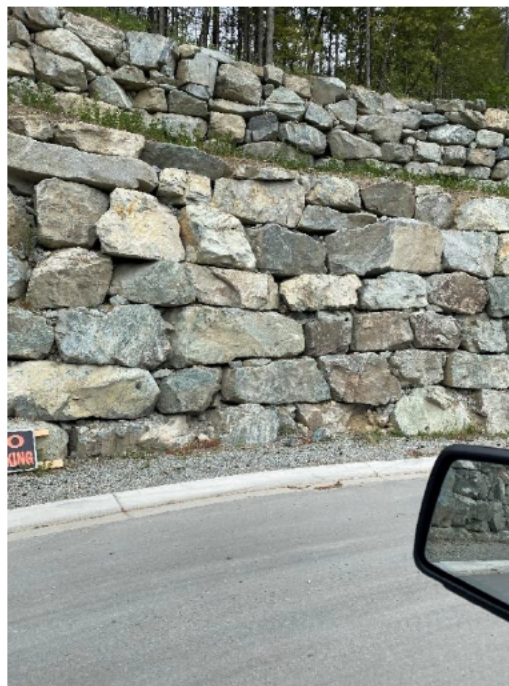


Figure 12 – Local retaining wall example 6 of 6. Developer built wall in Sunstone for road access. As all hillside developments will require road access, so do homes. Lots sloping in two directions require retaining across the slopes from a high wall to a low wall in order to use the lot efficiently.

**7510 Pebble Creek Drive
Lot 7, The Ridge**

Landscape Plan and Cost Estimate

June 15, 2021

Village of Pemberton
Box 100, 7400 Prospect Street
Pemberton, BC, V0N2L0

Dear Development Services Team,

The following plant list is the planned landscape planting scheme outlined on the design drawings, and estimated to cost approximately \$6,500 plus taxes at current prices.

Trees:

- | | | |
|-------------------------|--------------|------------|
| • Pinus Nigra | 1.5 m to 2 m | Quantity 9 |
| • Pacific Dogwood | 5 cm cal. | Quantity 3 |
| • Quaking Aspen | 5 cm cal. | Quantity 1 |
| • Multi stem Vine Maple | 2 m | Quantity 1 |

Shrubs:

- | | | |
|----------------------------------|--------|-------------|
| • Mugo Pines | #2 pot | Quantity 9 |
| • Yellow Twig Dogwood | #2 pot | Quantity 14 |
| • Nootka Rose | #2 pot | Quantity 9 |
| • Mock Orange | #5 pot | Quantity 1 |
| • Oregon Grape (Mahonia Nervosa) | #2 pot | Quantity 12 |

Groundcover

- | | | |
|-----------------|--------|--------------|
| • Kinnickinnick | 4" pot | Quantity 144 |
|-----------------|--------|--------------|

Softscape:

- To include all required top soils and mulch

Estimated Cost:

- \$6,500 plus taxes at current prices.

PREPARED FOR:
COAST ESSENTIAL CONSTRUCTION

7510 PEBBLE CREEK DRIVE (LOT 7)

RETAINING WALL DESIGN

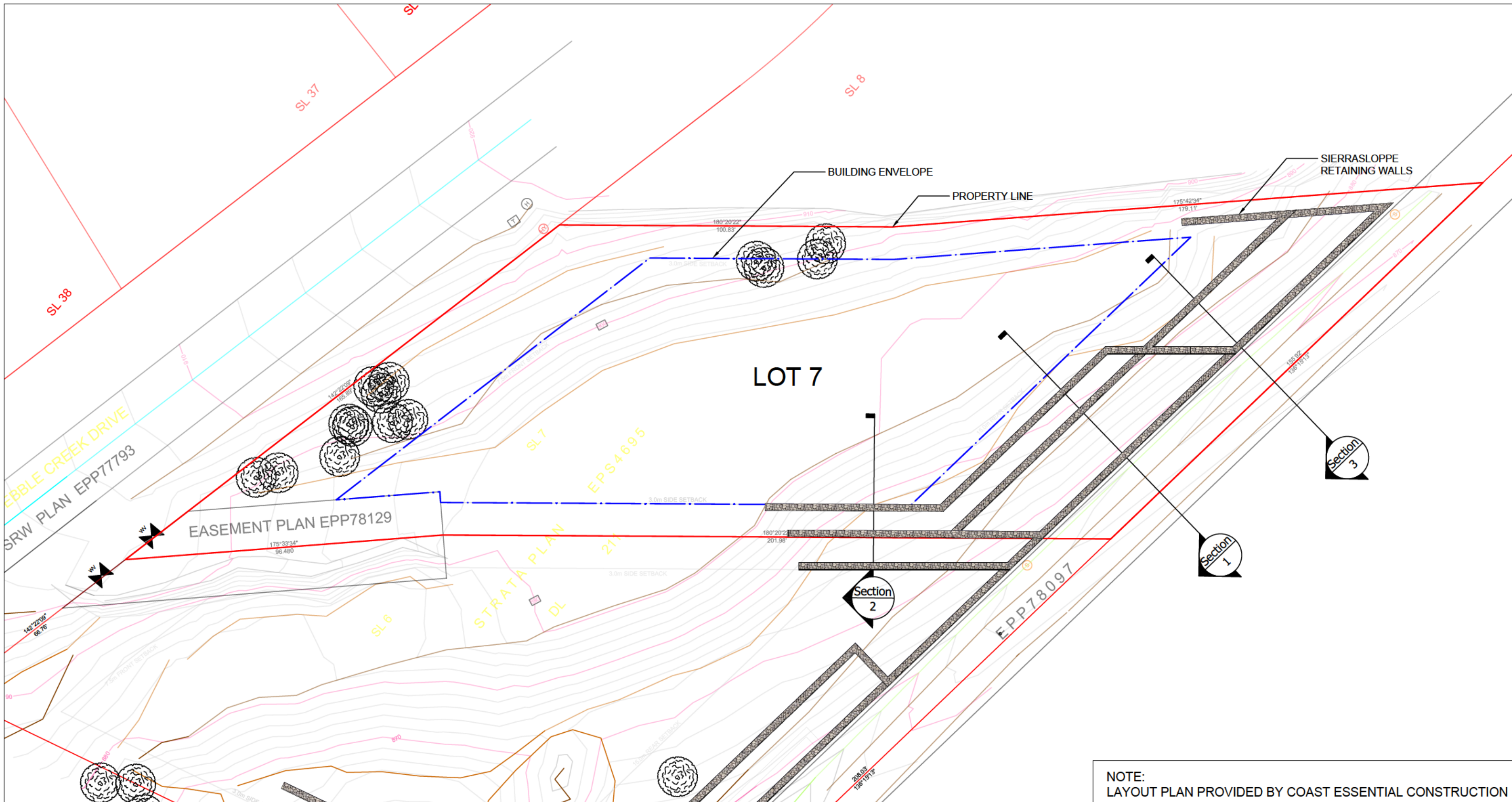
PEMBERTON, BC

ISSUED FOR DISCUSSION

JOB NO: 1547
DRAWING NO: 1547-7-00
DATE: MAY 25, 2021



SFA GEOTECHNICAL INC
#1 - 38920 Queens Way
Squamish, BC V8B 0K8
604 898 1093



NOTE:
LAYOUT PLAN PROVIDED BY COAST ESSENTIAL CONSTRUCTION



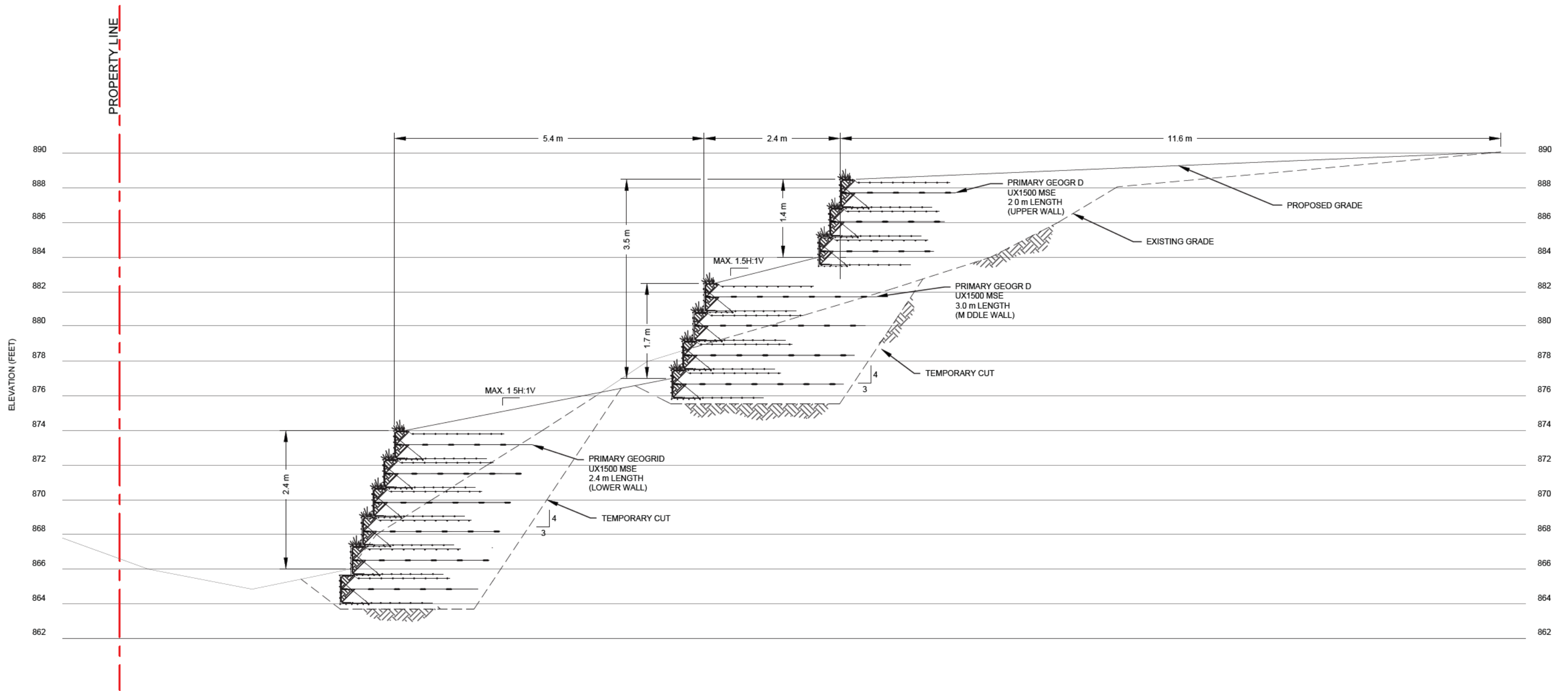
SFA GEOTECHNICAL INC
#1 - 38920 Queens Way
Squamish, BC V8B 0K8
604 898 1093

**THE RIDGE, LOT 7
PEMBERTON, BC
RETAINING WALL
PLAN VIEW**

DRAWN BY: WG
REVIEWED BY: SF
DATE: MAY 14, 2021
SCALE: NTS

REVISION NO.:	DESCRIPTION	DATE
A	ISSUED FOR DISCUSSION	MAY 25, 2021

JOB NO: 1547
DRAWING NO: 1547-7-01



SECTION 1



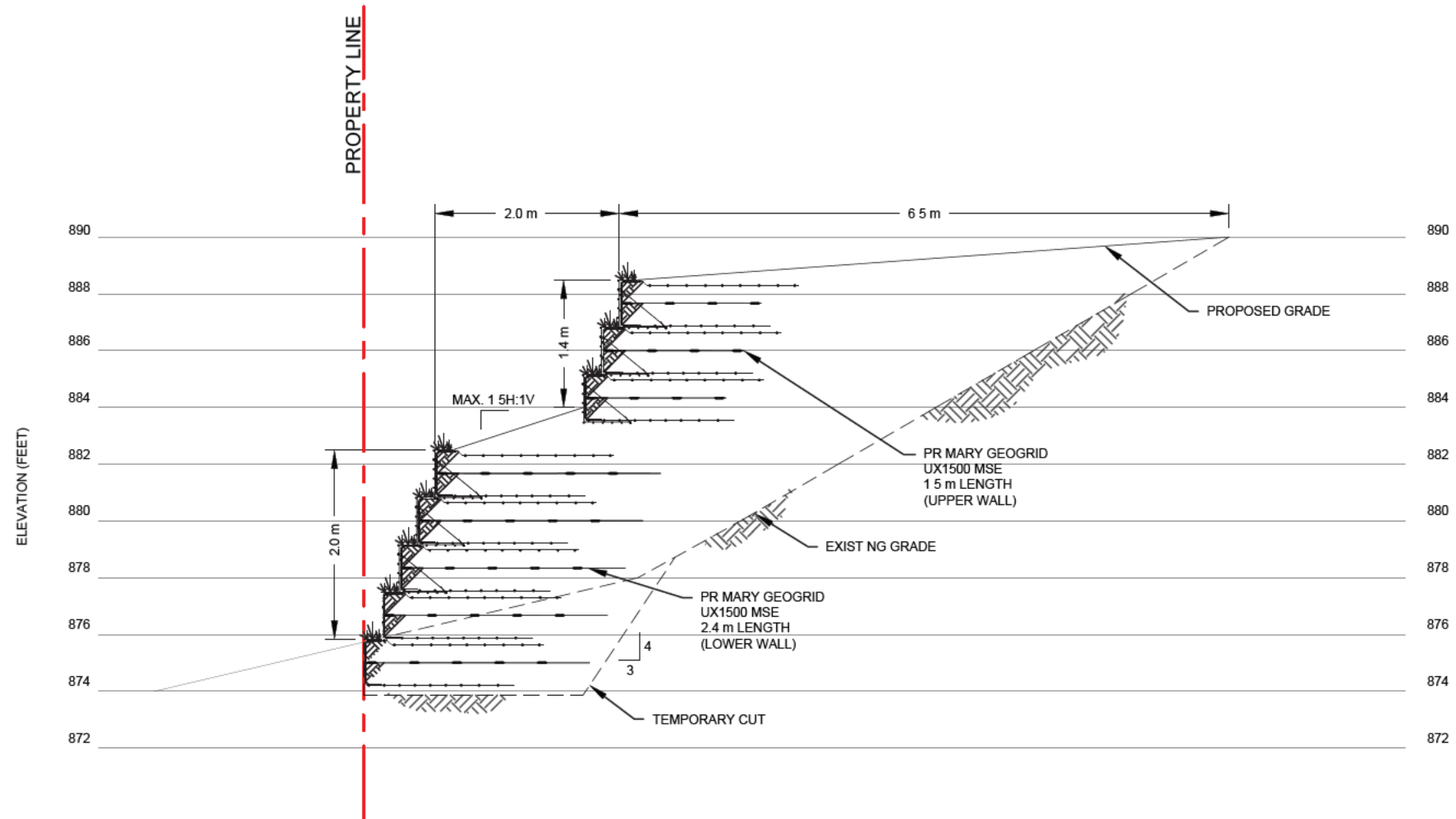
SFA GEOTECHNICAL INC
 #1 - 38920 Queens Way
 Squamish, BC V8B 0K8
 604 898 1093

**THE RIDGE, LOT 7
 PEMBERTON, BC
 RETAINING WALL
 SECTION VIEW**

DRAWN BY: WG
 REVIEWED BY: SF
 DATE: MAY 14, 2021
 SCALE: NTS

REVISION NO.:	DESCRIPTION	DATE
A	ISSUED FOR DISCUSSION	MAY 25, 2021

JOB NO: **1547**
 DRAWING NO: **1547-7-02**



SECTION 2



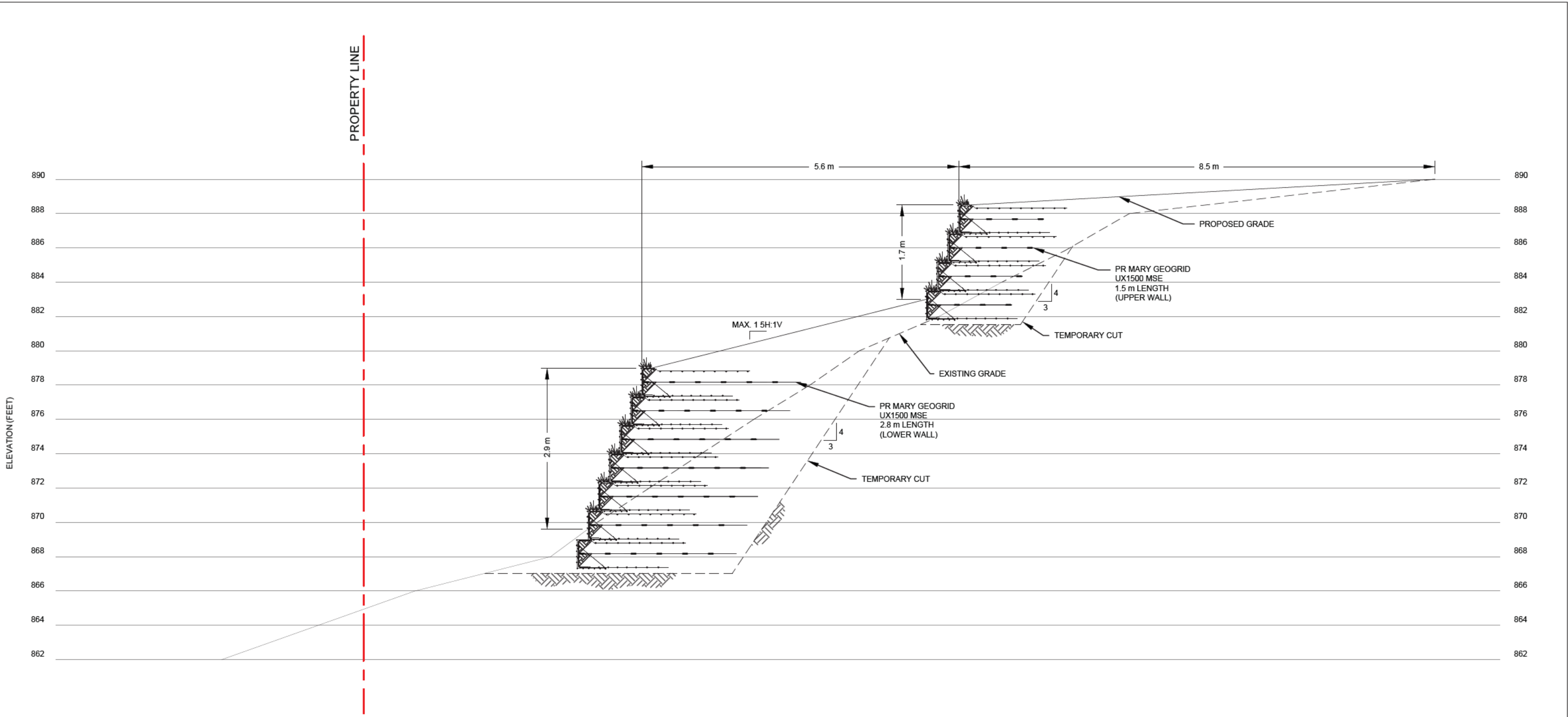
SFA GEOTECHNICAL INC
 #1 - 38920 Queens Way
 Squamish, BC V8B 0K8
 604 898 1093

**THE RIDGE, LOT 7
 PEMBERTON, BC
 RETAINING WALL
 SECTION VIEW**

DRAWN BY: WG
 REVIEWED BY: SF
 DATE: MAY 14, 2021
 SCALE: NTS

REVISION NO.:	DESCRIPTION	DATE
A	ISSUED FOR DISCUSSION	MAY 25, 2021

JOB NO: **1547**
 DRAWING NO: **1547-7-02**



SECTION 3



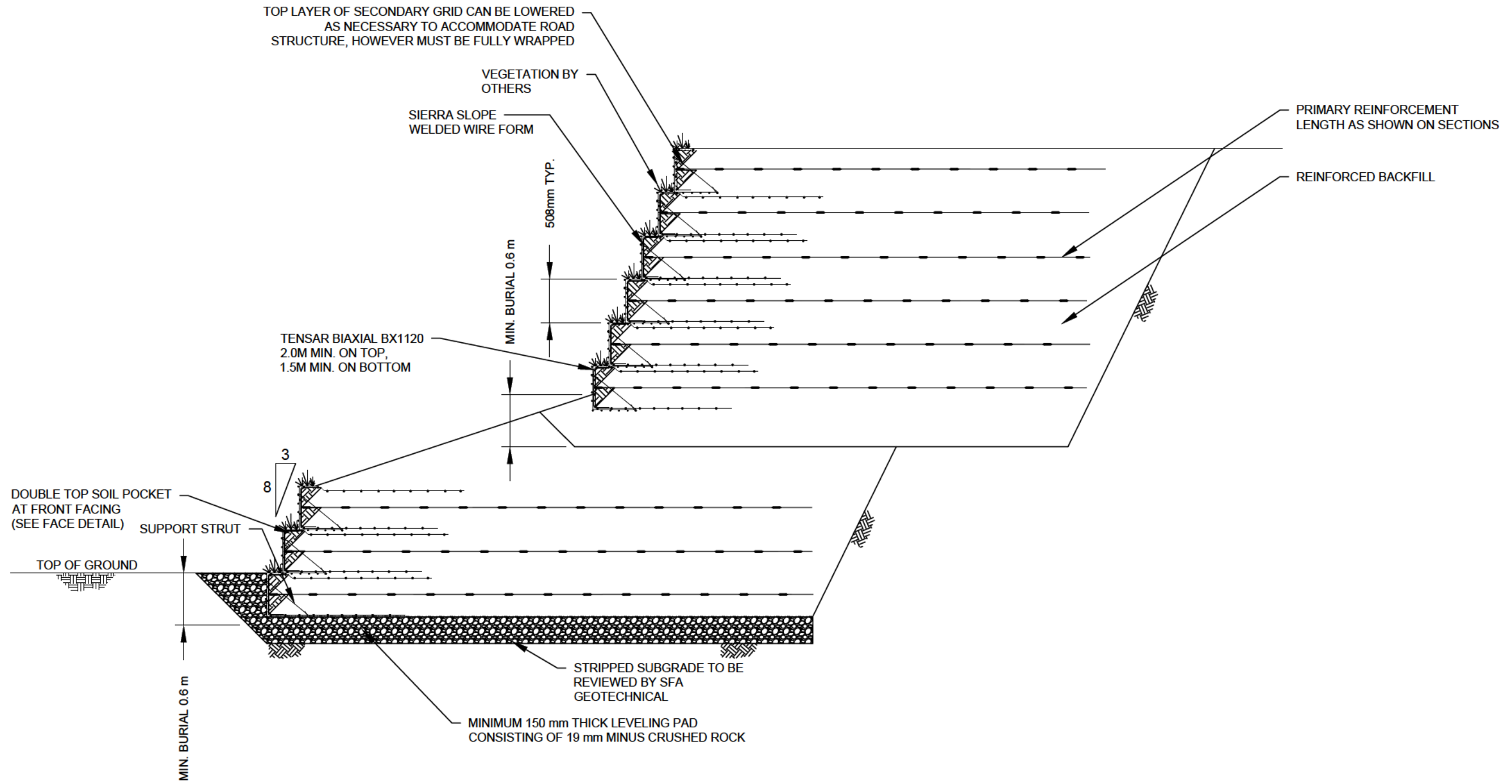
SFA GEOTECHNICAL INC
 #1 - 38920 Queens Way
 Squamish, BC V8B 0K8
 604 898 1093

**THE RIDGE, LOT 7
 PEMBERTON, BC
 RETAINING WALL
 SECTION VIEW**

DRAWN BY: WG
 REVIEWED BY: SF
 DATE: MAY 14, 2021
 SCALE: NTS

REVISION NO.:	DESCRIPTION	DATE
A	ISSUED FOR DISCUSSION	MAY 25, 2021

JOB NO: **1547**
 DRAWING NO: **1547-7-04**



TYPICAL SECTION



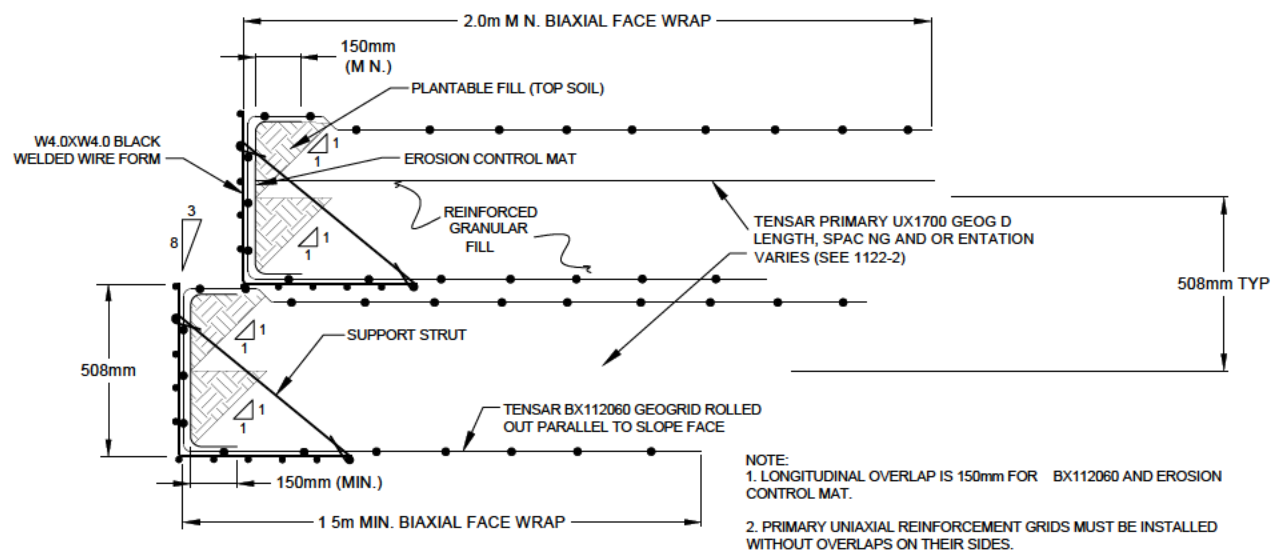
SFA GEOTECHNICAL INC
 #1 - 38920 Queens Way
 Squamish, BC V8B 0K8
 604 898 1093

**THE RIDGE, LOT 7
 PEMBERTON, BC
 RETAINING WALL
 TYPICAL SECTION**

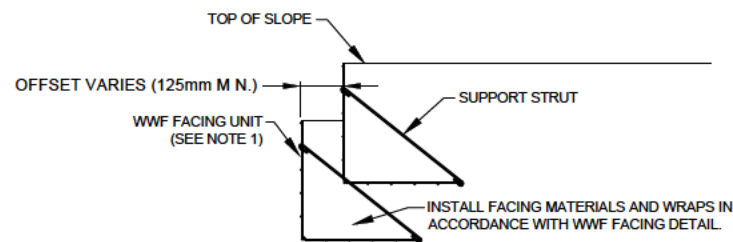
DRAWN BY: WG
 REVIEWED BY: SF
 DATE: MAY 14, 2021
 SCALE: NTS

REVISION NO.:	DESCRIPTION	DATE
A	ISSUED FOR DISCUSSION	MAY 25, 2021

JOB NO: **1547**
 DRAWING NO: **1547-7-05**

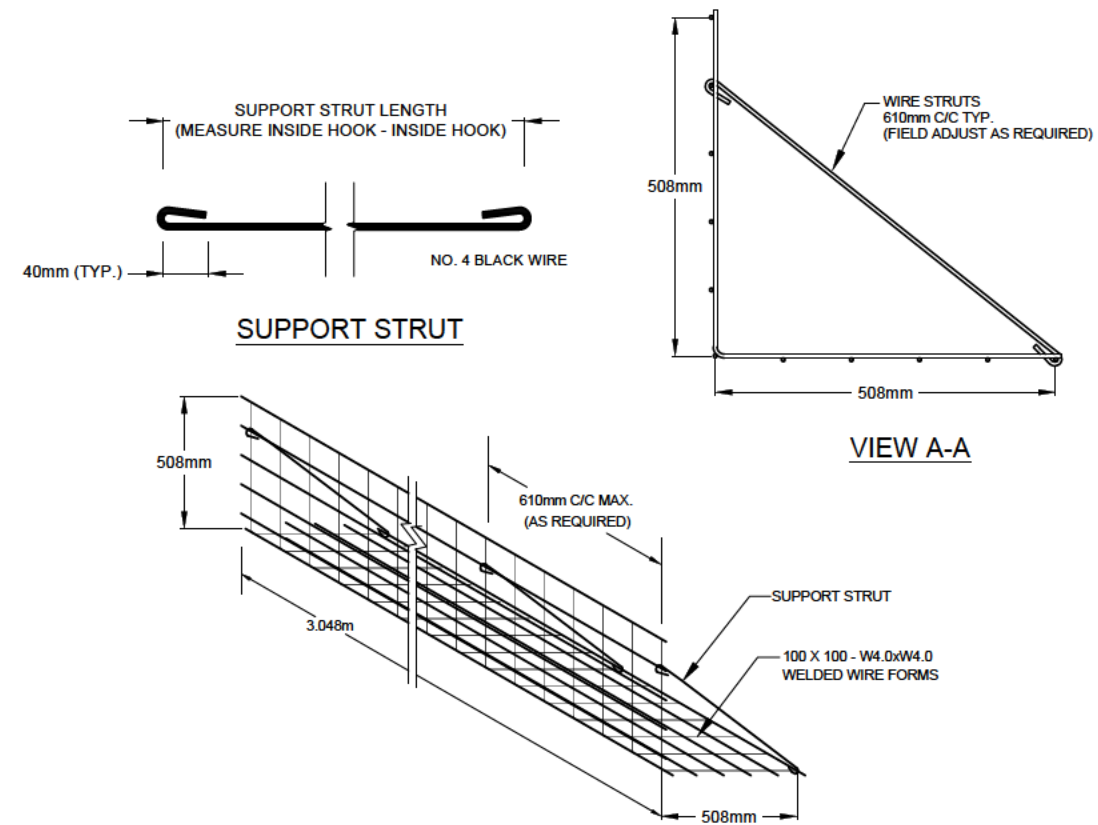


SIERRA SLOPE WELDED WIRE STEPPED FACE DETAIL

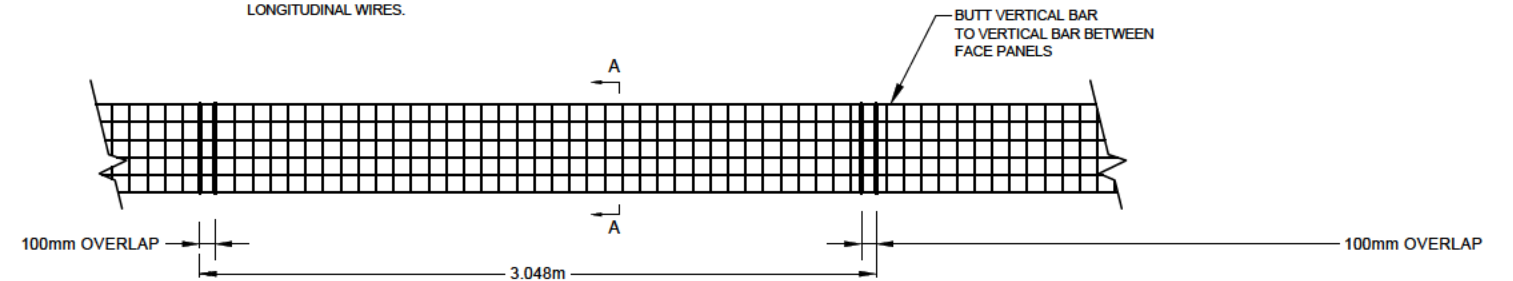


**SIERRA SLOPE NESTING DETAIL FOR TOP OF SLOPE
(WHERE REQUIRED)**

- NOTES:**
- SEE WELDED WIRE FORM (WWF) FACING DETAIL FOR FACING MATERIALS AND DIMENSIONS.
 - SET TOPMOST WWF FACING UNIT INSIDE WWF FACING UNIT BELOW TO FOLLOW GRADE.
 - HORIZONTAL WIRES OF TOPMOST WWF FACING UNIT MAY BE CUT TO ALLOW INSTALLATION OVER STRUTS OF WWF FACING UNIT BELOW



- Notes:**
- FACING TO CONSIST OF PREFABRICATED W 4X4-W4.0XW4.0 FORMS.
 - ALL FORMS AND STRUTS WILL BE FABRICATED WITH BLACK WIRE.
 - OVERALL LENGTH OF WIRE FORMS IS 3.048m.
 - STRUT LENGTH AND CROSS-SECTIONAL FORM DIMENSIONS TO BE PROVIDED IN FABRICATOR'S SHOP DRAWINGS.
 - STRUT TO HOOK ACROSS INTERSECTION OF TRANSVERSE AND LONGITUDINAL WIRES.



WELDED WIRE FORM DETAIL



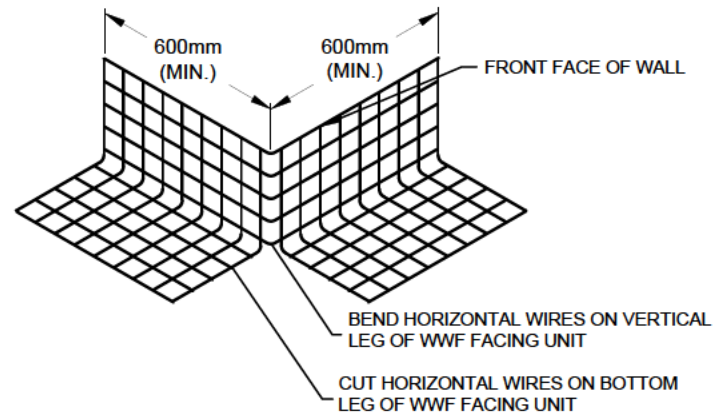
SFA GEOTECHNICAL INC
 #1 - 38920 Queens Way
 Squamish, BC V8B 0K8
 604 898 1093

**THE RIDGE, LOT 7
 PEMBERTON, BC
 RETAINING WALL
 TYPICAL DETAILS (1/2)**

DRAWN BY: WG
 REVIEWED BY: SF
 DATE: MAY 14, 2021
 SCALE: NTS

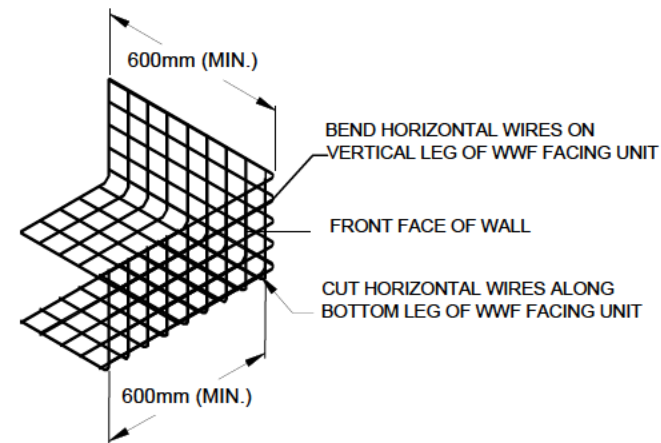
REVISION NO.:	DESCRIPTION	DATE
A	ISSUED FOR DISCUSSION	MAY 25, 2021

JOB NO: **1547**
 DRAWING NO: **1547-7-06**



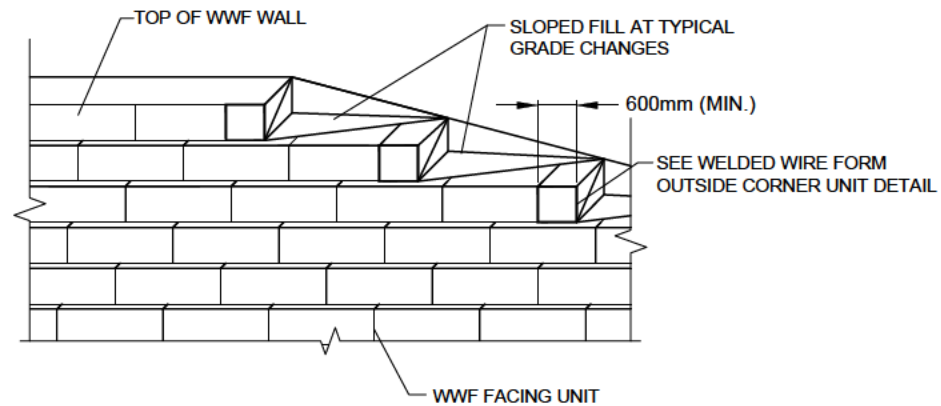
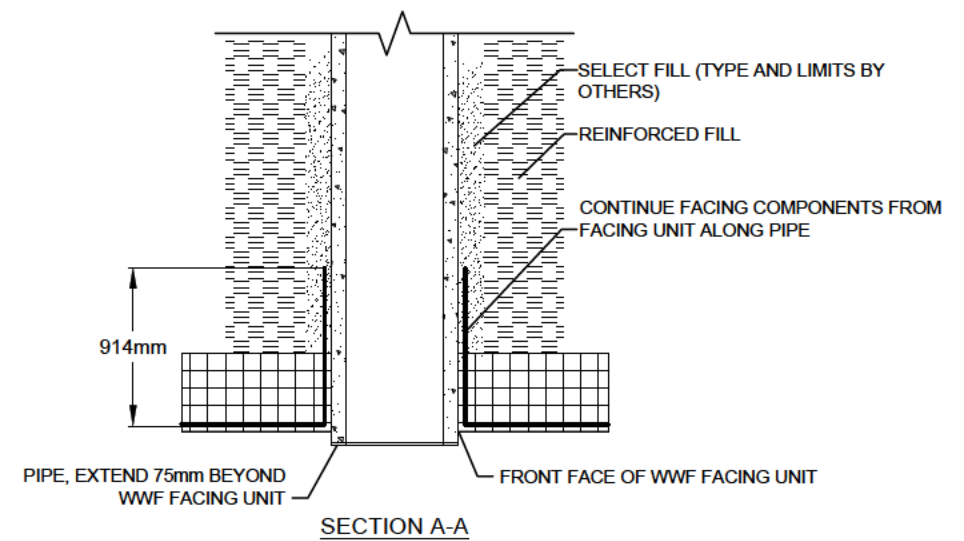
NOTE: MAINTAIN 600mm (MIN.) OF WIRE FORM ON EACH SIDE OF BEND.

WELDED WIRE FORM INSIDE CORNER UNIT



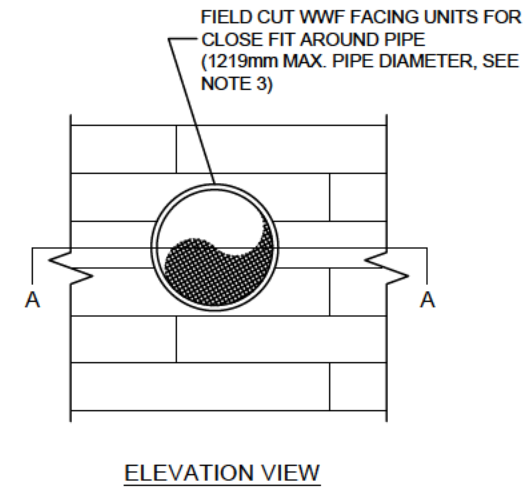
NOTE: MAINTAIN 600mm (MIN.) OF WIRE FORM ON EACH SIDE OF BEND.

WELDED WIRE FORM OUTSIDE CORNER UNIT



- NOTES:
1. SEE WELDED WIRE FORM (WWF) FACING DETAIL AND WWF OUTSIDE CORNER UNIT DETAIL FOR FACING MATERIALS AND DIMENSIONS.
 2. INSTALL ADJACENT WWF FACING UNITS TO PROVIDE 100mm OVERLAP OF HORIZONTAL WIRES.

TOP OF WWF WALL, FINISHING DETAIL



- NOTES:
1. SEE WELDED WIRE FORM (WWF) FACING UNIT DETAIL FOR FACING MATERIALS AND DIMENSIONS.
 2. SEE ELEVATION VIEW FOR GEOGRID TYPE, LOCATION, AND DIMENSIONS.
 3. TERMINATE GEOGRIDS NO MORE THAN 75mm FROM PIPE.
 4. CONTRACTOR RESPONSIBLE TO INSTALL PIPE WITH LEAK-PROOF JOINTS.

PIPE PENETRATION DETAIL AT WWF WALL FACE



SFA GEOTECHNICAL INC
 #1 - 38920 Queens Way
 Squamish, BC V8B 0K8
 604 898 1093

**THE RIDGE, LOT 7
 PEMBERTON, BC
 RETAINING WALL
 TYPICAL DETAILS (2/2)**

DRAWN BY: WG
 REVIEWED BY: SF
 DATE: MAY 14, 2021
 SCALE: NTS

REVISION NO.:	DESCRIPTION	DATE
A	ISSUED FOR DISCUSSION	MAY 25, 2021

JOB NO: **1547**
 DRAWING NO: **1547-7-07**

1. GENERAL

- 1.1. In these Notes, the Engineer is SFA Geotechnical.
- 1.2. These notes must be read in conjunction with 1547-7-01 to 1547-7-07.
- 1.3. The work described and shown involves the supply and installation of geogrid reinforced retaining walls with NILEX SIERRA SLOPE.
- 1.4. The retaining wall will be installed on an excavated, natural, undisturbed subgrade, or approved subgrade fill at the locations shown in the Architectural Drawings.
- 1.5. The Contractor shall confirm the locations and conditions of all man-made structures which could be affected or damaged by the work. Structures which may be affected or damaged by the work must be reported to the Engineer in advance of the work to take place. The Engineer may change the design or approve of modifications to installation techniques proposed by the Contractor to preclude damage or conflict with existing structures.

2. MATERIALS

- 2.1. The proposed retaining wall have been designed on the basis of Nillex Sierra Slope retaining walls inclined at 3H:8V as indicated in the design drawings. Alternate methods of support system will require redesign of the walls by the Engineer and may not be substituted without written authorization from the Engineer.
- 2.2. GEOGRID - The retaining walls have been designed on the basis of Tensar UX1500 with a long term design strength (a maximum allowable design strength of 52 kN/m for an 120 year design life. Alternative geogrid will require a redesign of the wall by the Engineer and may not be substituted without written authorization of the engineer. Geogrid coverage shall be 100%.
- 2.3. LEVELING PAD - Leveling pad fill shall consist of at least 300 mm of 19 mm minus crushed gravel.
- 2.4. FOUNDATION SOIL - FOUNDATION SOIL shall consist of native soils approved by the Engineer. Any grade reinstatement of the subgrade shall be completed using leveling pad materials.
- 2.5. REINFORCED BACKFILL - REINFORCED BACKFILL should consist of 75 mm minus pit run sand and gravel containing less than 2% fines or material otherwise approved by SFA.
- 2.6. RETAINED BACKFILL - RETAINED backfill should consist of clean sand or sand and gravel fill, with less than 5% fines.

3. EXECUTION

- 3.1. The native soils shall be sloped at MAX 3H:4V. The cut slopes may need to be flatter to satisfy soil conditions encountered.
- 3.2. The Engineer will inspect the excavation and approve subgrade prior to the placement of any fill soils.
- 3.3. The first course of the facing units shall be placed on the approved subgrade and alignment and level checked.
- 3.4. The reinforced backfill shall be placed and compacted behind the facing units and to the extent to the reinforced backfill shown in the cross sections.
- 3.5. Where the geogrid reinforcement is required, the geogrid reinforcement shall be placed to the facing units as per the manufactures instructions. The length and spacing of the geogrid reinforcement is shown on the cross sections.
- 3.6. Minimum burial depth shall be achieved after the first course of facing units is completed.
- 3.7. The geogrid reinforcement shall be placed at the elevations and to the extent shown on the cross sections or as directed by the Engineer.
- 3.8. The geogrid shall be laid horizontally in the direction perpendicular to the face of the retaining wall. The geogrid shall be pull taut, free of wrinkles and anchored prior to the backfill placement on the geogrid.
- 3.9. The geogrid reinforcement shall be continuous (COVERAGE RATIO OF 100%) throughout the embedment lengths with no overlap. Spliced connections between shorter pieces of geogrid are not permitted.
- 3.10. Where geogrid layers overlap a minimum of 75 mm of gravel should be placed between the layers.
- 3.11. Reinforced backfill shall be placed, spread, and compacted in such a manner that minimizes the development of slack in the geogrid.
- 3.12. Reinforced and retained backfill shall be placed and compacted in lifts not to exceed 300 mm.
- 3.13. Reinforced and retained backfill shall be compacted to 95% of the maximum density as determined by ASTM 1557 (Modified Proctor) or equivalent. The moisture content of the backfill material prior to and during compaction shall be uniformly distributed throughout each layer and shall be within 2% of the optimum moisture content for compaction.

- 3.14. Only lightweight hand-operated equipment shall be allowed within 1.0 m of the front face of the facing units.
- 3.15. Tracked construction equipment shall not be operated directly upon the geogrid reinforcement. A minimum fill thickness of 150 mm is required prior to operation of tracked vehicles over the geogrid. Track vehicles should not turn while on the geogrid to prevent tracks from displacing the fill and geogrid and damage or slack to result in the geogrid.

4. CONSTRUCTION INSPECTION

The Contractor shall notify SFA Geotechnical Inc. a minimum 48 hours in advance of the commencement of the following aspects of the work:

- Site Stripping & Foundation Excavation
- Placement of the initial course of the facing units
- Drain Pipe Placement & Backfill Placement and Compaction behind wall
- Geogrid Placement



SFA GEOTECHNICAL INC
 #1 - 38920 Queens Way
 Squamish, BC V8B 0K8
 604 898 1093

**THE RIDGE, LOT 7
 PEMBERTON, BC
 RETAINING WALL
 NOTES**

DRAWN BY: WG
 REVIEWED BY: SF
 DATE: MAY 14, 2021
 SCALE: NTS

REVISION NO.:	DESCRIPTION	DATE
A	ISSUED FOR DISCUSSION	MAY 25, 2021

JOB NO: **1547**
 DRAWING NO: **1547-7-08**



1 – 38920 Queens Way
Squamish, BC V8B 0K8
604-898-1093

Coast Essential Construction Ltd.
200 – 100 Park Royal
West Vancouver, BC
V7T 1A2

March 5, 2021
File: 1547

Attention: Mr. Reid Madiuk

**Re: Preliminary Geotechnical Report, Proposed New Home,
Lot 7, The Ridge, Pemberton, BC**

1.0 INTRODUCTION

It is proposed to construct a new home on Lot 7 of The Ridge subdivision in Pemberton. The lot has legal description: Strata Lot 7 District Lot 211 Lillooet District Strata Plan EPS4695. SFA Geotechnical Inc. (SFA) has been engaged to provide geotechnical recommendations for the project.

The concept of the new home is in its preliminary stages and therefore drawings are not yet available. We understand that the home will be two to three stories and that a walk out basement is being considered. The home is to be constructed over reinforced concrete foundations with concrete foundation walls and wood frame construction above.

We understand that several retaining walls are to be included in the final design of the property and that a pool may be considered.

This report presents the results from our test pit investigation completed on February 24, 2021 and provides preliminary geotechnical recommendations for the proposed home. Additional geotechnical recommendations may be required for the retaining walls and the pool once the project scope has been confirmed.

This report has been prepared exclusively for our client, for their use, and the use of others on their design team, however, it remains the property of SFA Geotechnical Inc.

2.0 SITE DESCRIPTION

The lot is the 7th lot on the south side of the road accessing the subdivision. The property is bound to the north by the subdivision access road, to the south by a right of way, to the east by a private residential property and to the west by an undeveloped lot. The lot is undeveloped and generally slopes down to the south southwest.

A rock stack retaining wall has been constructed where the lot meets the subdivision access road to create a driveway for site access. The rock stack wall is aligned along the west property line. The lot has been recently filled with dredged river sand and gravel fill to create a level bench across the lot. The site preparation efforts and placement schedule of the fill are unknown.

3.0 FIELD INVESTIGATION

SFA visited the site on February 24, 2021 to complete a preliminary test pit investigation. Four shallow test pits were completed linearly down the fill slope to help characterize the native subgrade, determine the site preparation efforts and placement schedule of the fill, and determine the fill thickness in the area of the proposed home.

4.0 SUBSURFACE CONDITIONS

4.1 Soil Conditions

In general, the soil profile noted from the surface downwards consists of sand and gravel fill over topsoil, underlain by topsoil and weathered glacial till and in turn dense glacial till.

Fill (Dredged River Sand and Gravel)

The dredged river sand and gravel is generally clean and well graded between medium grained sand and medium grained gravel. The particles are rounded and loosely packed. The fill is at least 3.5 m thick at the crest of the fill slope.

Topsoil

The fill is underlain by approximately 0.3 m to 0.45 m of organic topsoil. The topsoil contains roots up to 2 cm thick and is dark brown to black.

Glacial Till

The fill is underlain by glacial till which comprises poorly graded silty sand and gravel. The upper 0.5 m of the glacial till is weathered and loose. The glacial till becomes dense at approximately 1 m below the pre-filling ground surface where it grades from tan to grey in colour.

For a more detailed description of the subsurface conditions refer to the test hole logs in Appendix A.

4.2 Groundwater Conditions

Perched ground water was observed within the glacial till. Based on surrounding grades it is likely that perched water is present within this stratum during wetter months and following snow melt. The perched water flow into the test pits was minor.

5.0 DISCUSSION

5.1 General Comments

SFA visited the site on February 24, 2021 to review four shallow test pits within the building envelope. The test pits indicate that the subgrade was not stripped of organics and that the fill appeared to be bulked into the site with no form of formal compaction.

Tension cracks were observed approximately 2 metres back from the crest of the recently placed sand and gravel slope. The slope below is at approximately 45 to 50 degrees which is steeper than would be recommended for this material type. The fill is not considered to be seismically stable.

The lot is accessed by a gravel driveway supported by a rock stack wall which we understand was constructed as part of the subdivision development. The rock stack wall ranges in height from approximately 2 m to 3.5 m and has a batter of approximately 1H:4V (horizontal to vertical). There is no evidence of geogrid or any other form of internal support for the wall.

SFA was not involved with the construction of the retaining wall or placement of fill and therefore cannot confirm how the retaining wall was constructed or how the fill was placed.

Provided the geotechnical consideration above are addressed as described below, we are of the opinion that the project is feasible from a geotechnical standpoint.

5.2 Site Grading Fill

The recently placed site grading fill is loose and was placed over organics. We understand that a project goal is to keep as much of the fill on site as possible. Therefore, it will be required to move the fill around the lot during the stripping of organics and construction of the home.

The fill slopes are not stable. Tension cracks indicate that the slope is moving, and failure could occur if the fill becomes saturated. If the face of the fill slope were to slide, the toe debris could extend beyond the property lines. We recommend that temporary fill slopes be reduced to 2.5H:1V to reduce the risk of slope failure.

Retaining walls will likely be required to achieved desired site grades and to accommodate the re-use of the fill which has been placed on the site. We estimate that the retaining walls will exceed 1.2 m in height and therefore will need to be engineered and a variance will be required from the Village of Pemberton in advance of their construction.

If it is decided that engineered retaining walls are required SFA would be able to provide retaining wall design and drawings once final site grading is known.

5.3 Existing Retaining Wall

The design and construction of the rock stack retaining wall which supports the gravel site access is not known. The retaining wall is up to 3.5 m in height and to our knowledge it has not been engineered. We recommend that the retaining wall be removed. If it is intended to keep the wall in place detailed investigation and analysis would be required and remedial work may be necessary.

6.0 DESIGN RECOMMENDATIONS

6.1 SITE PREPARATION

6.1.1 Stripping

Site stripping should be completed beneath foundations, retaining walls, pavement sections, and hard landscaping. Site stripping includes removal of any recently placed fill, organics, topsoil, weathered glacial till, and any other material considered to compromise the design recommendations stated herein to expose the underlying dense glacial till. We recommend that all foundations be lowered, if necessary, so that they are supported on a level subgrade of native silty sand and gravel glacial till.

SFA should be contacted to review stripped subgrade prior to placement of formwork.

The recently placed sand and gravel fill appears suitable for re-use as structural backfill which could be placed and compacted beneath grade supported slabs and for general backfill around the buildings. During stripping the sand and gravel fill should be carefully separated from the underlying topsoil and weathered glacial till.

6.1.2 Engineered Fill

Any grade reinstatement beneath foundations, grade supported slabs, or pavement sections should be completed with “engineered fill”. In the context of this report any “engineered fill” is defined as clean sand to sand and gravel fill, containing less than 8% fines, compacted in lifts to a minimum standard of 95% of its Modified Proctor Maximum Dry Density (ASTM D698) while at a moisture content that is within 2% of its optimum for compaction.

All fill materials should be placed and compacted under the review of SFA.

6.1.3 Excavations

We anticipate that the excavation could be up to one and a half levels on the northeast side, decreasing in depth towards the southwest. The final excavation cut height should be determined once a site survey and proposed foundation grades are available.

Much of the excavation will likely be in dense glacial till. It is assumed that excavations would be sloped.

All excavations and trenching must conform to WorkSafeBC requirements or a professional engineer must review any excavations exceeding 1.2 m in depth prior to worker entry.

6.2 Foundations

6.2.1 Spread Foundations

It is expected that foundations will be supported on the native subgrade soils of glacial till. Following the recommended site preparation, the subgrade soils are considered suitable to support conventional spread foundations at a serviceability limit state (SLS) bearing pressure of up to 175 kPa and a factored ultimate limit state (ULS) of 350 kPa.

All foundation subgrades must be reviewed by SFA prior to foundation construction.

6.2.2 Settlement of Foundations

Post construction settlements are estimated to be less than 25 mm with differential settlements of less than 1 in 300.

6.2.3 Seismic Design of Foundations

We expect the subgrade conditions underlying the site to be classified as Site Class C as defined in Table 4.1.8.4A of the 2018 British Columbia Building Code (2018 BCBC).

The subsurface soils beyond the depth of foundations are **not** considered prone to ground liquefaction or other forms of ground softening caused by earthquake induced ground motions.

6.2.4 Frost Protection

All foundations should be located a minimum of 0.6 m below site grades for frost protection.

6.3 Concrete Slabs on Grade

All grade supported concrete slabs, should be underlain by a minimum of 150 mm of 19 mm clear crushed gravel, to help prevent moisture from accumulating below the slab, placed over compacted “engineered fill” as described in this report. The gravel should be compacted in place. We recommend that a poly moisture barrier be placed overlying the gravel beneath the grade supported slabs to help reduce moisture within the concrete.

6.4 Foundation Drainage

We recommend that the building design include a conventional perimeter drainage system to help intercept and water at foundation-level and to ensure that groundwater does not accumulate below the floor slabs or adjacent to foundation walls. The under-slab fill should have a hydraulic connection to the perimeter drain to help ensure water does not build up below the slab or adjacent to foundation walls. This can be achieved with weep holes or by placing gravel below foundations.

6.5 Backfill

Backfill adjacent to the foundations should be completed with free draining material such as clean sand and gravel or crushed rock fill containing less than 5% fines. The backfill should be compacted in lifts. In areas where the backfill will support hard landscaping or pavement areas the material should be compacted to a minimum of 95% of its Modified Proctor Maximum Dry Density while at a moisture content that is within 2% of its optimum for compaction.

6.6 Earth Pressures on Buried Walls

We recommend that buried walls be designed for static and seismic earth pressures. We recommend that the wall be designed for a static pressure distribution of $5.0H$ (kPa) triangular, where H is the height of the restrained soil in metres. Dynamic loading induced by the design earthquake should be added to the static loads and should be taken as $1.7H$ (kPa) inverted triangular. The preceding loading recommendations assume that the backfill is a clean, free draining sand and gravel, the backfill is level behind the wall, and the wall is frictionless.

Our calculations assume that a back-of-wall drainage system will be installed to prevent the build up of any water pressure behind the walls. All earth pressures provided herein are based on unfactored soil parameters and are therefore unfactored loads.

6.0 FIELD REVIEWS

As is normally required for municipal Letters of Assurance, SFA Geotechnical Inc. will carry out sufficient field reviews during construction to ensure that the geotechnical design recommendations contained within this report have been adequately communicated to the design team and to the contractors implementing the design. These field reviews are not carried out for the benefit of the contractors and therefore do not in any way effect the contractors’ obligations to perform under the terms of his/her contract.

It is the contractors’ responsibility to advise SFA Geotechnical Inc. (a minimum of 24 hours in advance) that a field review is required. Geotechnical field reviews are normally required at the time of the following:

- | | |
|---------------------------|---|
| 1. Site Stripping | Review of excavation and stripped subgrade |
| 2. Subgrade | Review of foundation subgrade |
| 3. Backfill / Frost Depth | Review of adequacy of backfill and frost protection |
| 4. Slab-on-grade | Review of subgrade preparation for any grade supported concrete slabs |

It is critical that these reviews are carried out to ensure that our intentions have been adequately communicated. It is also critical that contractors working on the site view this document in advance of any work being carried out so that they are familiar with the sensitive aspects of the project. It is the responsibility of the developer to notify SFA Geotechnical Inc. when conditions or situations not outlined within this document are encountered.

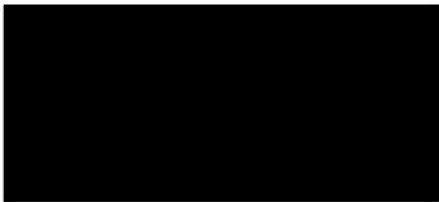
Additional field reviews will be required for the proposed retaining walls. Once site grading is available and retaining wall designs are complete the number of additional field reviews required can be estimated.

7.0 CLOSURE

This report is prepared solely for use by our client and their design team for this project as described to the general standards of similar work for similar projects in this area and no other warranty of any kind is expressed or implied. SFA Geotechnical Inc. accepts no responsibility for any other use of this report.

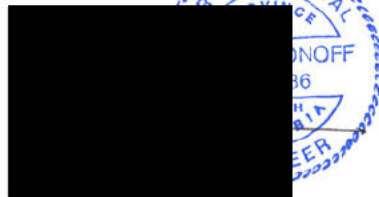
We are pleased to assist you with this project, and we trust this information is helpful and sufficient for your purposes at this time. However, please do not hesitate to call the undersigned if you should require any clarification or additional details.

For:
SFA Geotechnical Inc.

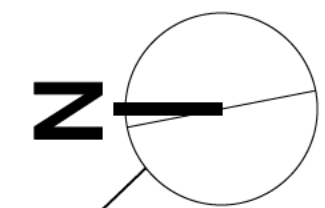
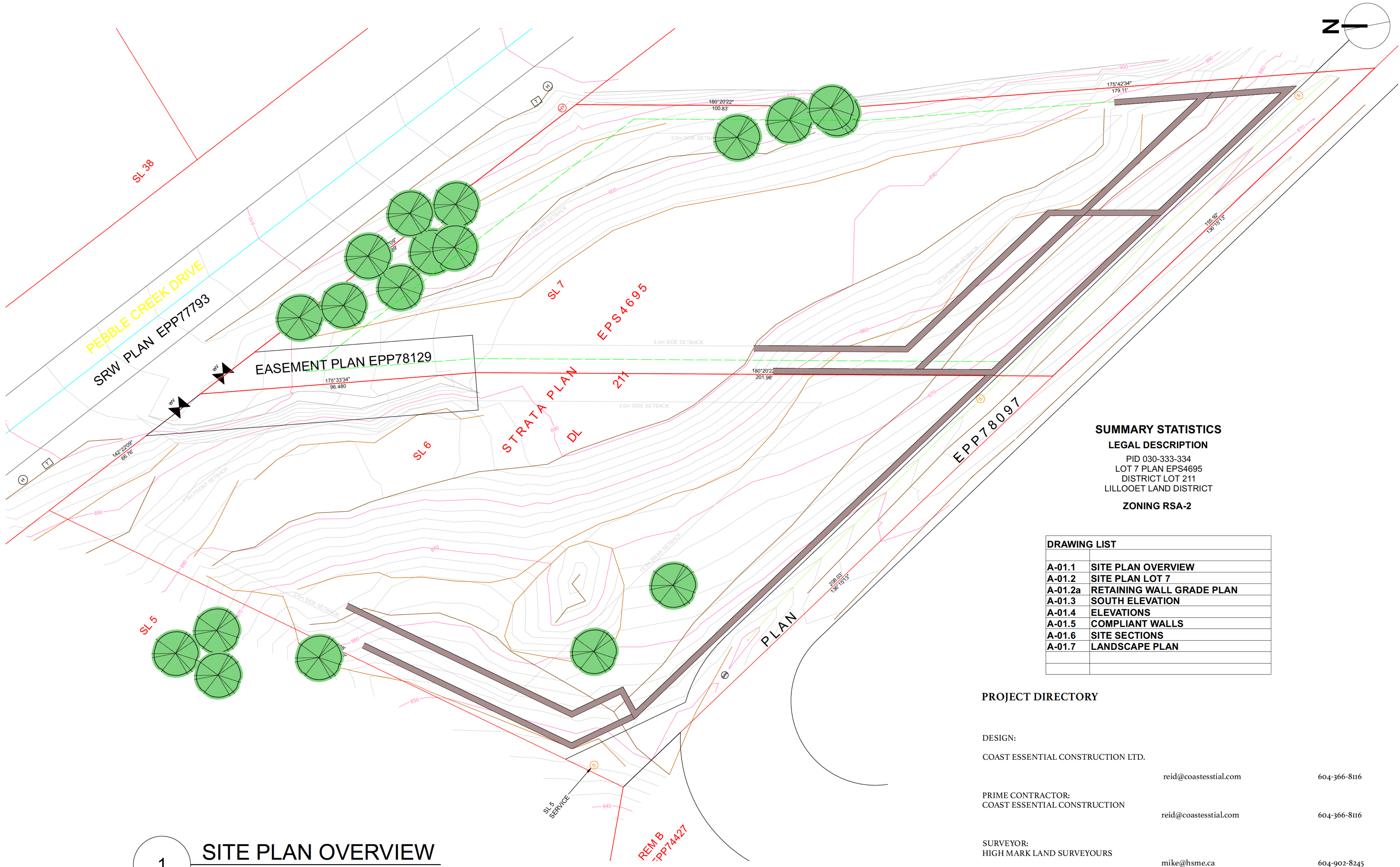


Jaret Bull, M.A.Sc.
Project Manager

Reviewed by: *March 5/2021*



Steven Fofonoff, M.Eng., P.Eng.
Principal



SUMMARY STATISTICS
LEGAL DESCRIPTION
 PID 030-333-334
 LOT 7 PLAN EPS4695
 DISTRICT LOT 211
 LILLOOET LAND DISTRICT
ZONING RSA-2

DRAWING LIST	
A-01.1	SITE PLAN OVERVIEW
A-01.2	SITE PLAN LOT 7
A-01.2a	RETAINING WALL GRADE PLAN
A-01.3	SOUTH ELEVATION
A-01.4	ELEVATIONS
A-01.5	COMPLIANT WALLS
A-01.6	SITE SECTIONS
A-01.7	LANDSCAPE PLAN

PROJECT DIRECTORY


DESIGN:			
COAST ESSENTIAL CONSTRUCTION LTD.	reid@coastesstial.com	604-366-8116	
PRIME CONTRACTOR:			
COAST ESSENTIAL CONSTRUCTION	reid@coastesstial.com	604-366-8116	
SURVEYOR:			
HIGH MARK LAND SURVEYORS	mike@hsme.ca	604-902-8245	
GEOTECHNICAL ENGINEER:			
SFA ENGINEERING	steven@sfaengineering.ca	604-785-8957	
STRUCTURAL ENGINEER:			
TWIN PEAKS ENGINEERING	btowsey@twinpeaksengineering.com	604-967-1701	

1 SITE PLAN OVERVIEW
 Scale: 1/16" = 1'-0"

THE CLIENT IS RESPONSIBLE FOR CHECKING ALL DIMENSIONS AND SHALL NOTIFY EC OF ANY DISCREPANCIES. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. ALL WINDOW AND DOOR SIZES ARE APPROXIMATE AND THE MANUFACTURER SHALL SUPPLY THE BUILDER WITH ACTUAL ROUGH OPENING DIMENSIONS. ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF COAST ESSENTIAL CONSTRUCTION LTD AND MAY NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN PERMISSION OF THE PARTIES.

No.	Date	By	Revision Notes
2	2021 06 17		ISSUED FOR VARIANCE
A	2021 03 22		ISSUED FOR GEOTECHNICAL REVIEW

No.	Date	Issue Notes



Design Firm
COAST ESSENTIAL CONSTRUCTION
 110-39279 QUEENS WAY
 SQUAMISH BC
 V8B0T5

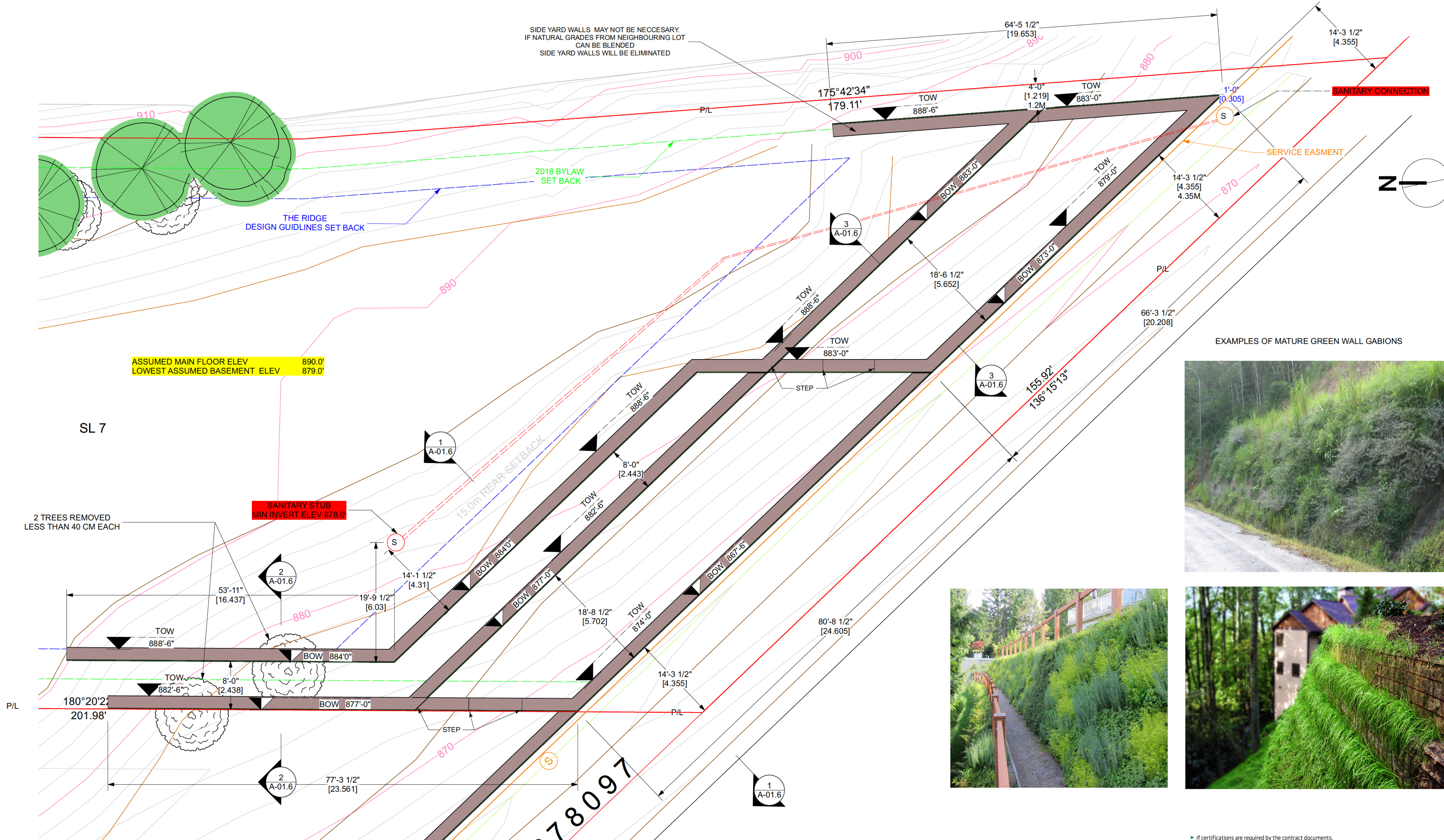
Consultant

Project Title
THE RIDGE LOT 7
 7510 PEBBLE CREEK DRIVE
 PEMBERTON BC

Sheet Title
SITE PLAN OVERVIEW

Project Manager REID MADIUK	Project ID Project ID
Drawn By	Scale 1/16" = 1' 0"
Reviewed By	Sheet No A-01.1
Date 2021 03 13	of 38
CAD File Name	

THE RIDGE LOT 7 COMBINED.vwx



SIDE YARD WALLS MAY NOT BE NECESSARY. IF NATURAL GRADES FROM NEIGHBOURING LOT CAN BE BLENDED SIDE YARD WALLS WILL BE ELIMINATED

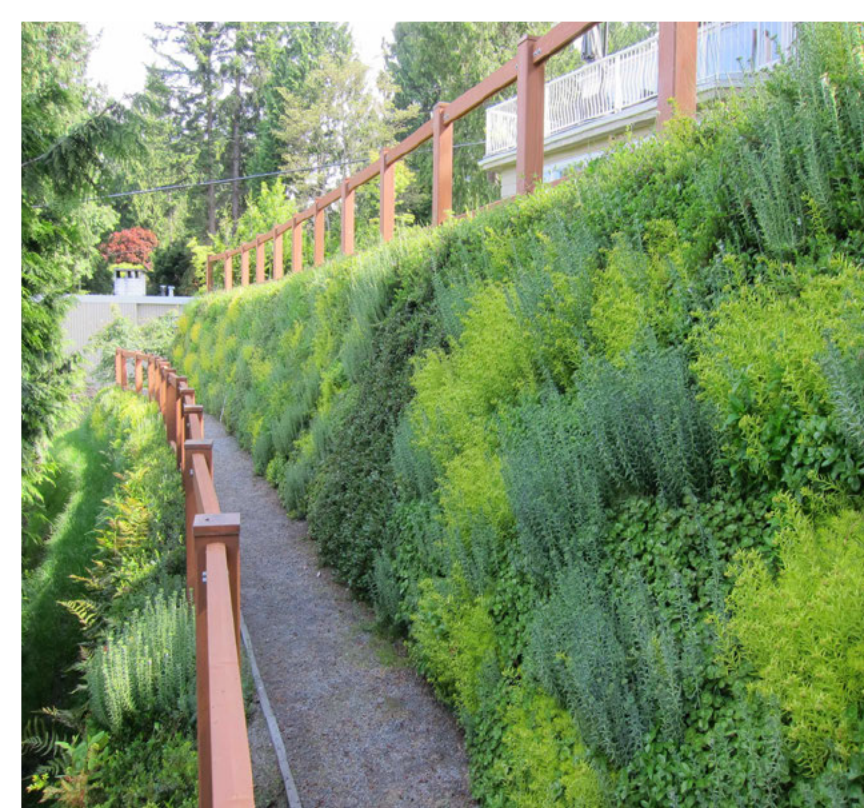
ASSUMED MAIN FLOOR ELEV 890.0'
LOWEST ASSUMED BASEMENT ELEV 879.0'

SL 7

2 TREES REMOVED LESS THAN 40 CM EACH

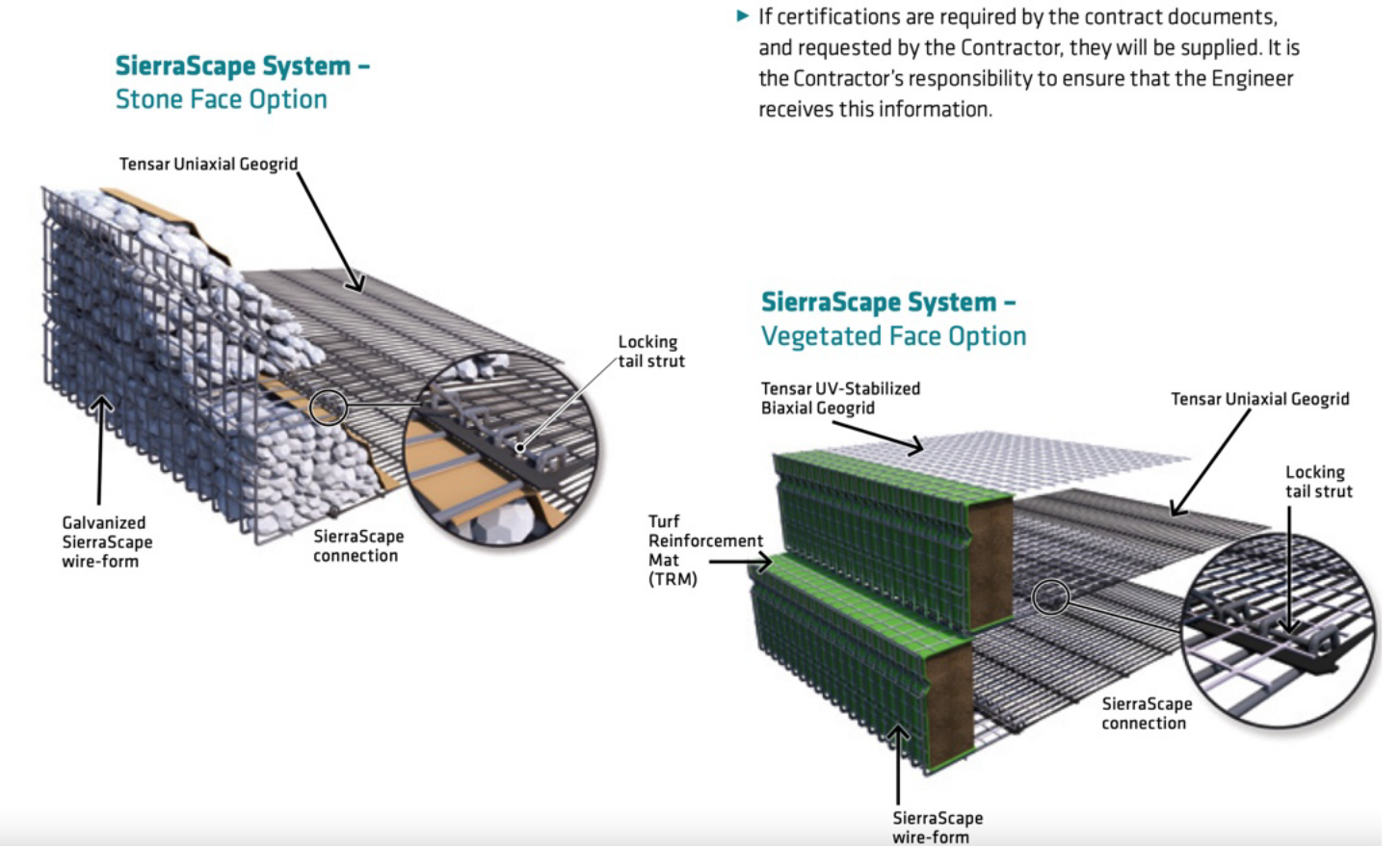
SANITARY STUB MIN INVERT ELEV 878.0

EXAMPLES OF MATURE GREEN WALL GABIONS



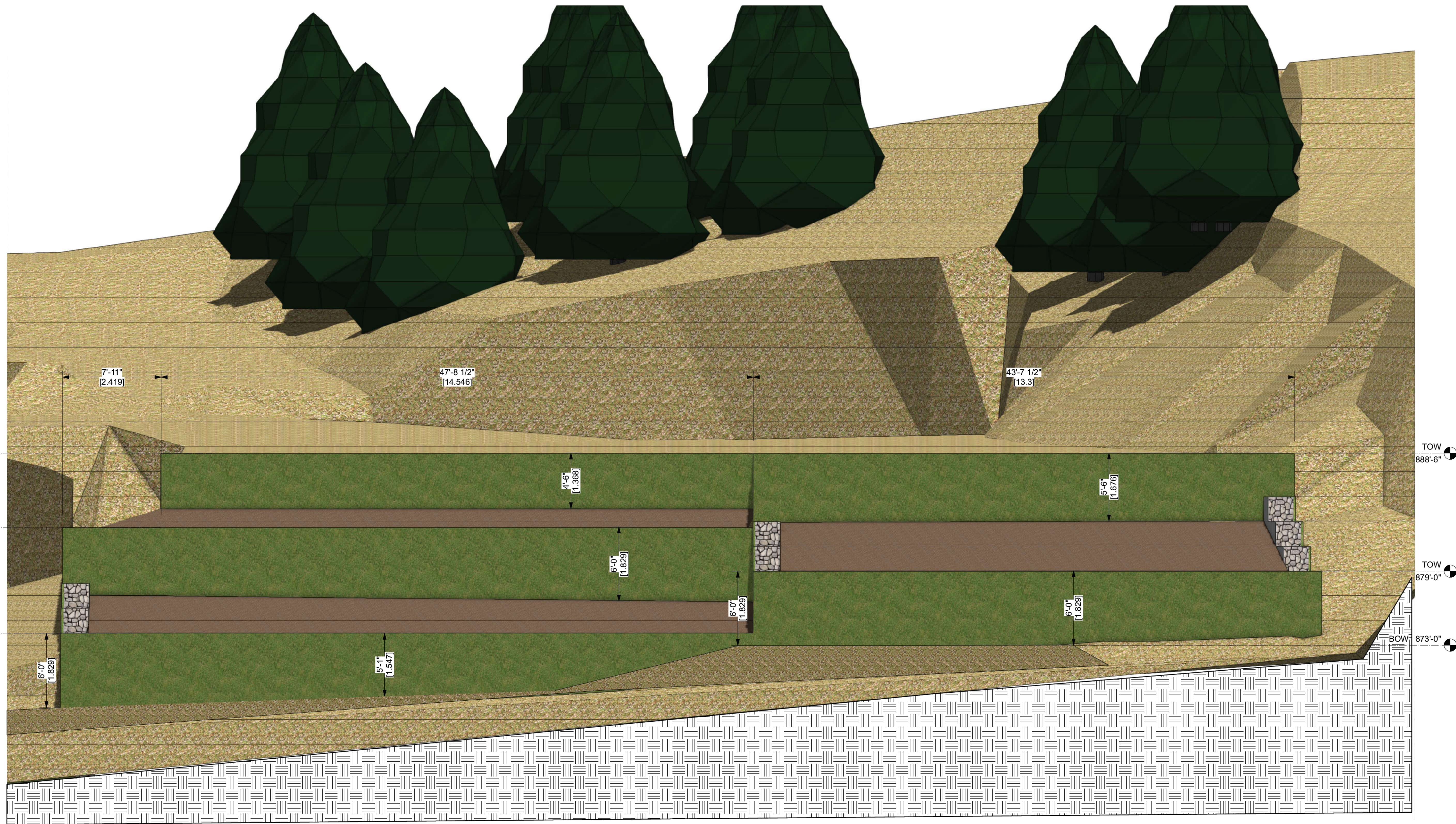
ALL RETAINING TO BE NILEX SIERRA SCAPE GABIONS OR SIMILAR
SOME ROCK STACK MAY BE USED FOR FEATURES
SEE GEOTECHNICAL ENGINEERING FOR DETAILS
LOCK BLOCKS MAY BE USED AS FOOTERS IF FULLY BURIED AND NOT VISIBLE
NATIVE AND NATURAL PLANT SELECTION WITHING PLANTING BEDS
ROCK PIT AND DRAINAGE TO BE BUILT TO GEOTECHNICAL ENGINEERS RECOMENDATIONS
ALL SERVICES TO BE RUN AT MIN DEPTHS UNDER FINISHED GRADES
ALL SERVICES TO TO BE INSTALLED UNDER RETAINING WALLS WITH CLEANOUTS AND LOCATIONS MARKED

Scale: 1/8" = 1'-0"
1
SITE PLAN LOT 7




If certifications are required by the contract documents, and requested by the Contractor, they will be supplied. It is the Contractor's responsibility to ensure that the Engineer receives this information.

No.	Date	By	Revision Notes
3	2021 06 17		ISSUED FOR VARIANCE
B	2021 03 22		ISSUED FOR GEOTECHNICAL REVIEW
No.	Date	Issue Notes	
Design Firm COAST ESSENTIAL CONSTRUCTION 110-39279 QUEENS WAY SQUAMISH BC V8B0T5			
Consultant 			
Project Title THE RIDGE LOT 7 7510 PEBBLE CREEK DRIVE PEMBERTON BC			
Sheet Title SITE PLAN LOT 7			
Project Manager REID MADIUK	Project ID	Project ID	
Drawn By	Scale	1/8" = 1' 0"	
Reviewed By	Sheet No.	A-01.2	
Date 2021 03 13		of 38	
CAD File Name THE RIDGE LOT 7 COMBINED.vwx			



1 SOUTH ELEVATION
Scale: 1/4" = 1'-0"

No.	Date	By	Revision Notes
K	2021 06 17		ISSUED FOR VARIANCE
A	2021 03 22		ISSUED FOR GEOTECHNICAL REVIEW
No.	Date	Issue Notes	



Coast
Essential
Construction

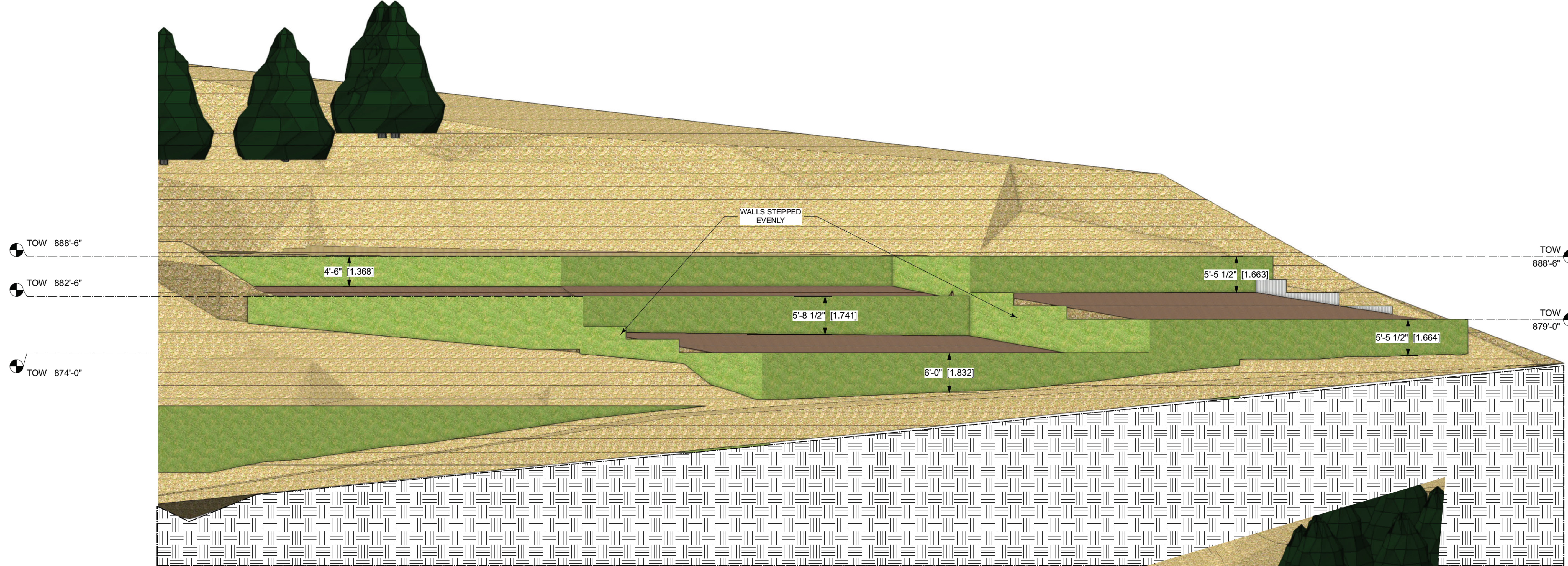
Design Firm
COAST ESSENTIAL CONSTRUCTION
110-39279 QUEENS WAY
SQUAMISH BC
V8B0T5

Consultant

Project Title
**THE RIDGE LOT 7
7510 PEBBLE CREEK DRIVE
PEMBERTON BC**

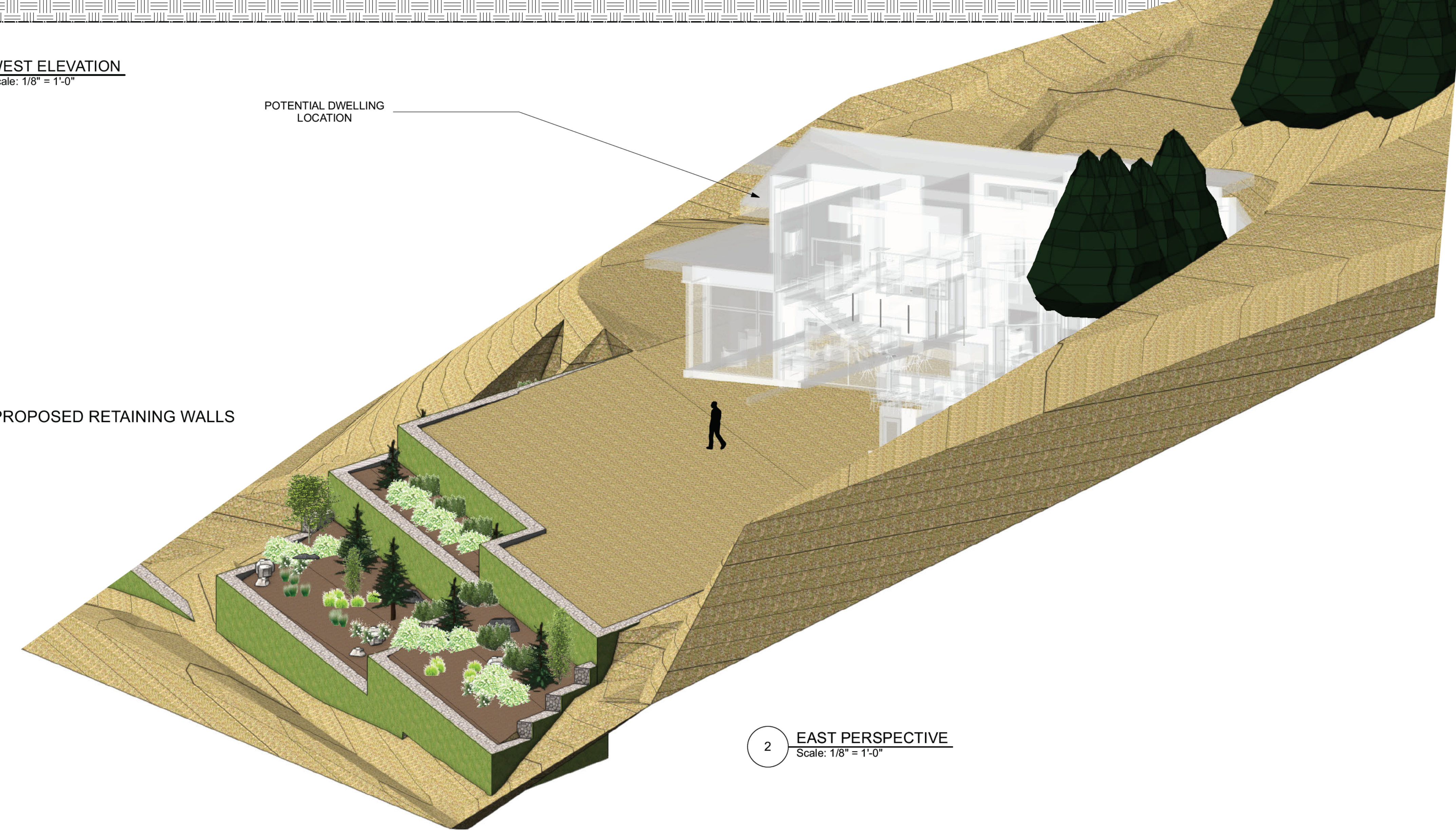
Sheet Title
SOUTH ELEVATION

Project Manager REID MADIUK	Project ID Project ID
Drawn By	Scale 1/4" = 1' 0"
Reviewed By	Sheet No. A-01.3
Date 2021 03 14	of 38
CAD File Name THE RIDGE LOT 7 COMBINED purged.vwx	




1 WEST ELEVATION
Scale: 1/8" = 1'-0"

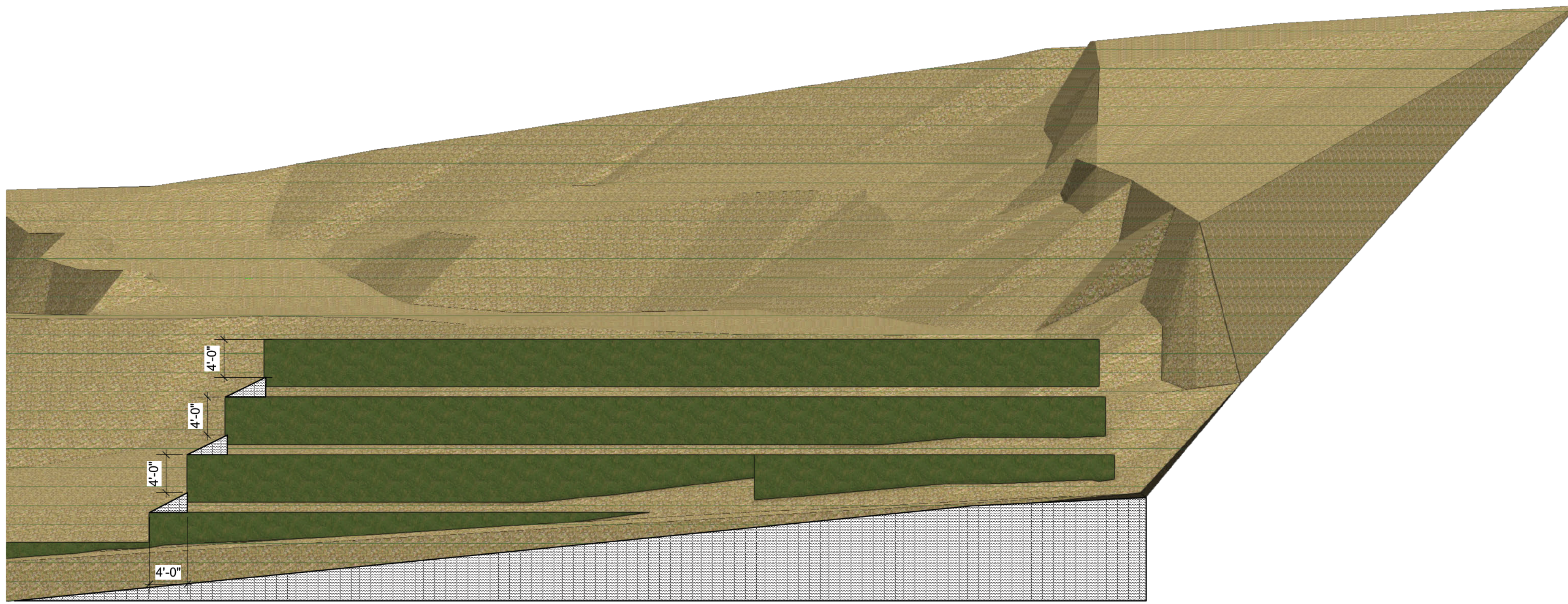
POTENTIAL DWELLING LOCATION



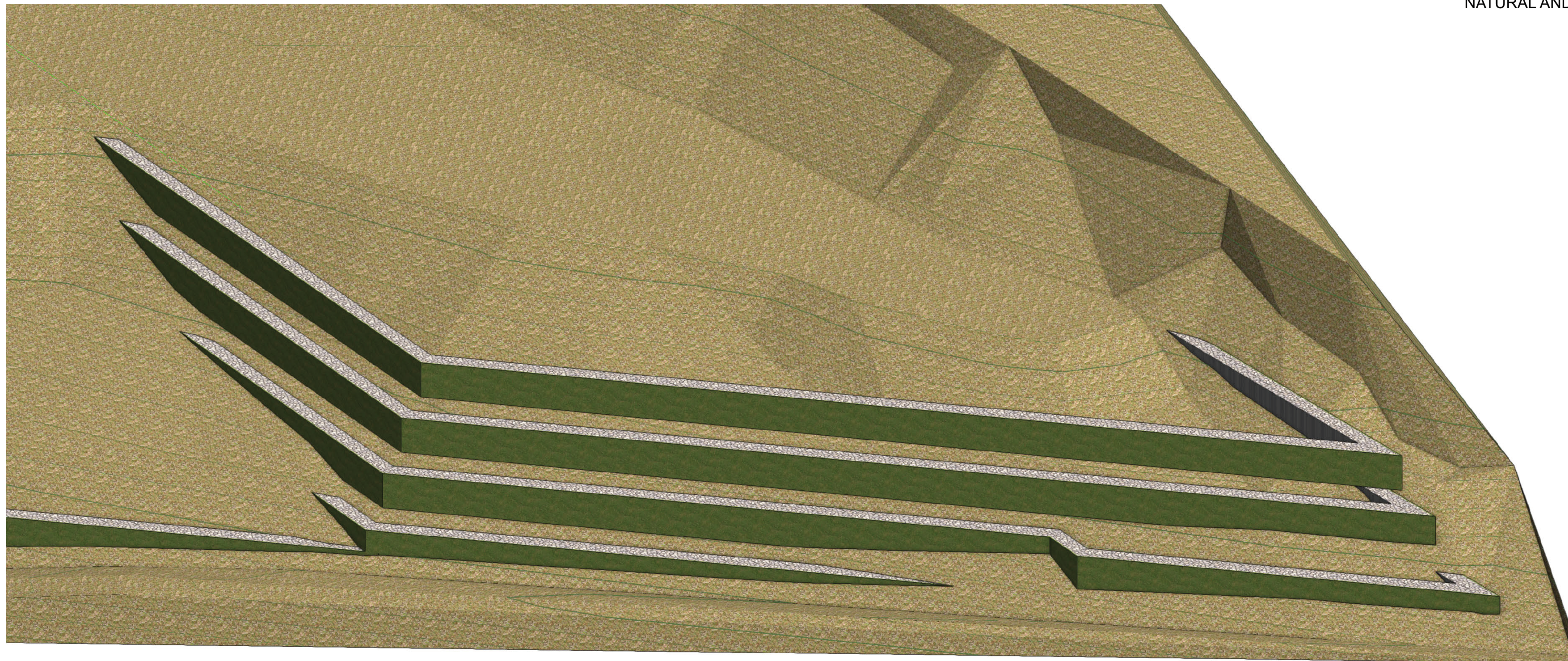
2 EAST PERSPECTIVE
Scale: 1/8" = 1'-0"

FINISHED GRADES SHOWN IN PROPOSED RETAINING WALLS

No.	Date	By	Revision Notes
B	2021 04 04		ISSUED FOR VARIANCE
A	2021 03 22		ISSUED FOR GEOTECHNICAL REVIEW
No.	Date	Issue Notes	
			
Design Firm COAST ESSENTIAL CONSTRUCTION 110-39279 QUEENS WAY SQUAMISH BC V8B0T5			
Consultant			
Project Title THE RIDGE LOT 7 7510 PEBBLE CREEK DRIVE PEMBERTON BC			
Sheet Title ELEVATIONS			
Project Manager	REID MADIUK	Project ID	Project ID
Drawn By		Scale	1/8" = 1' 0"
Reviewed By		Sheet No.	A-01.4
Date	2021 03 14		of 38
CAD File Name	THE RIDGE LOT 7 COMBINED purged.vwx		




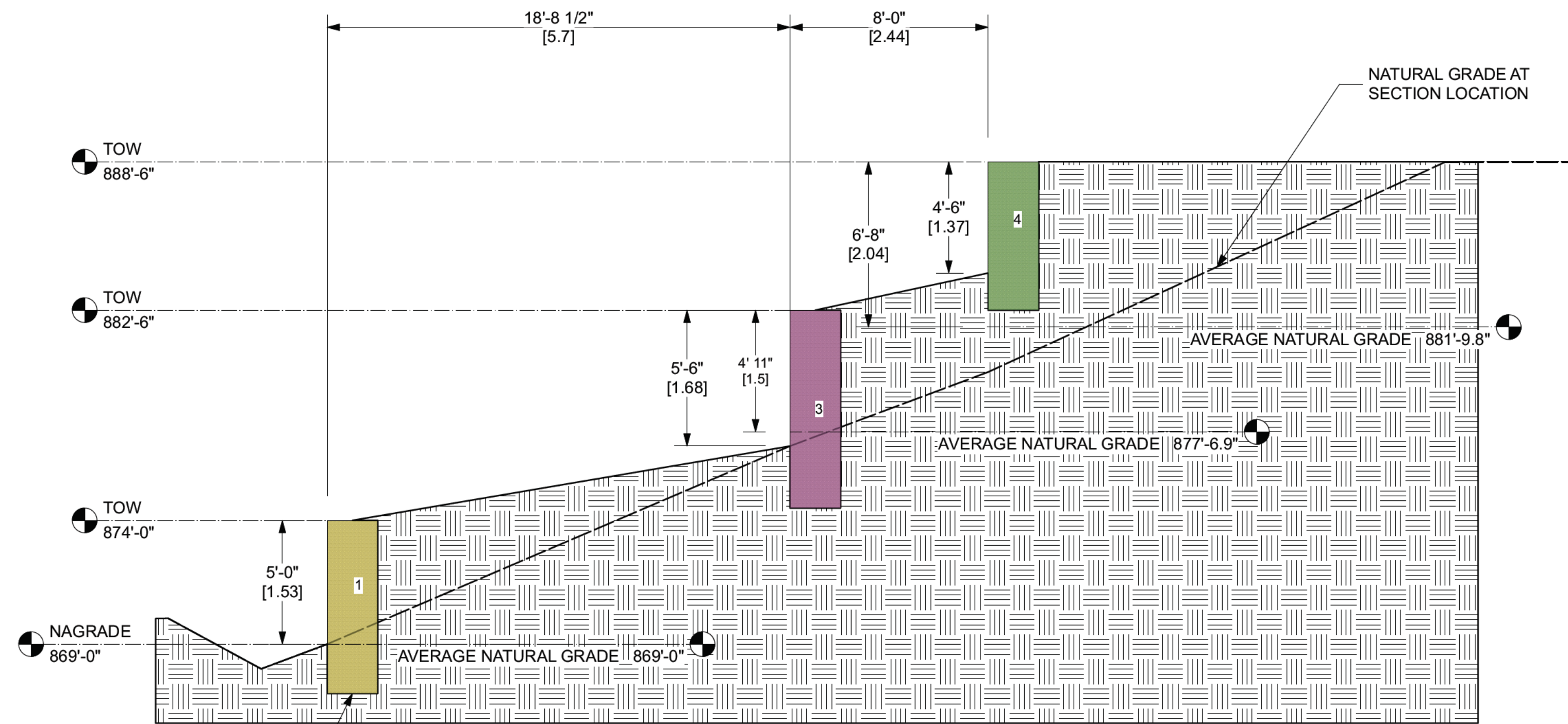
1 SOUTH ELEVATION
Scale: 1/8" = 1'-0"



2 SW ISO
Scale: 1/8" = 1'-0"

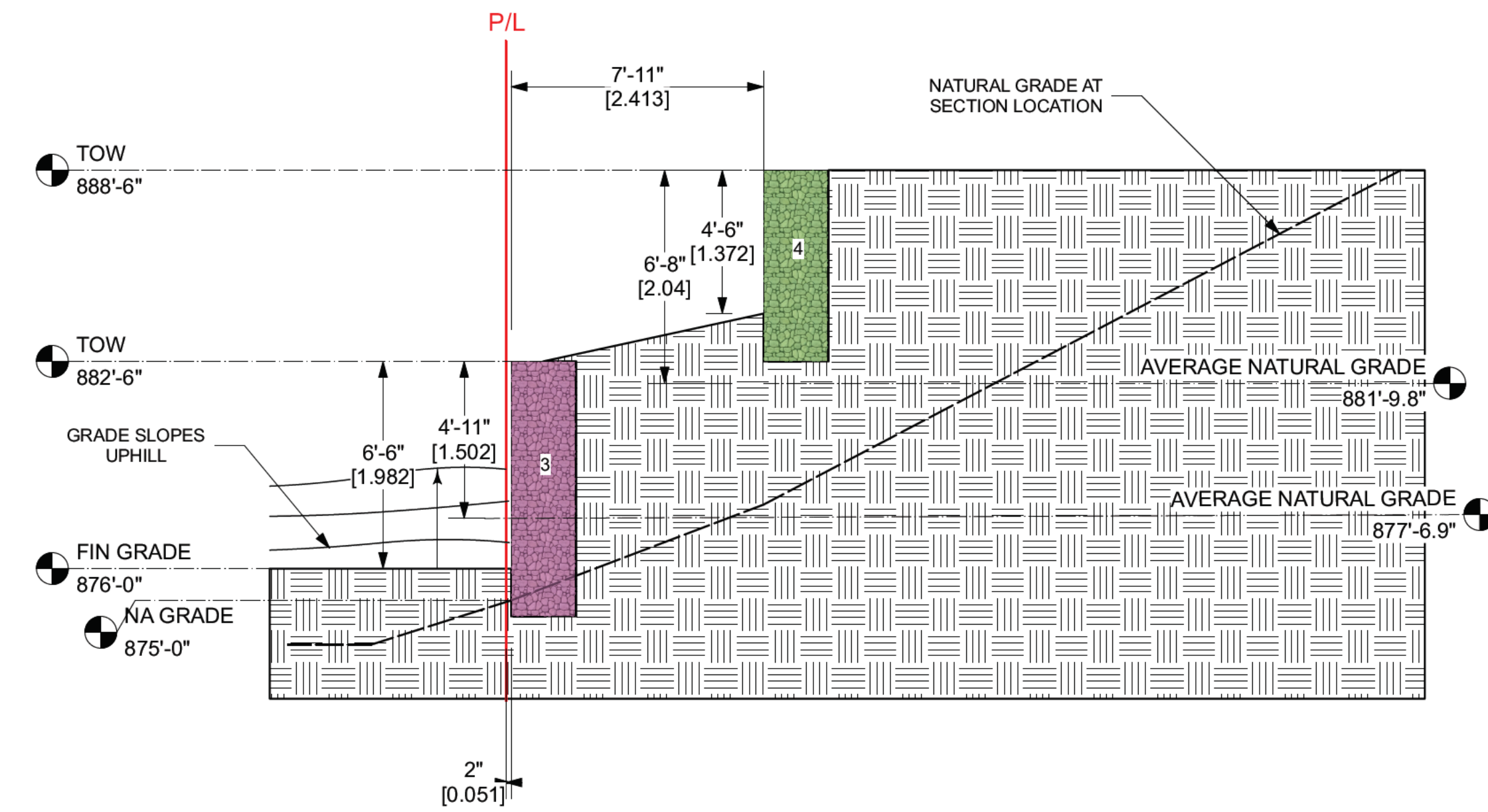
BYLAW COMPLIANT WALLS
 THIS DRAWING IS FOR REFERENCE ONLY
 REFERENCE WALLS SHOWN IN A 1H:1V SLOPE
 WITH MAXIMUM EXPOSED FACE OF 4' AS PER BYLAW.
 COMPLIANT WALLS ALTHOUGH PROVIDE MORE USABLE SPACE,
 DO NOT CONFORM TO THE GRADES OR FIT NATURAL CONTOURS
 AS SUGGESTED IN THE HILLSIDE DESIGN GUIDELINES .
 PROPOSED WALLS FIT THE LANDSCAPE AND CONTOURS IN A MORE
 NATURAL AND ESTHETIC FORM.

No.	Date	By	Revision Notes
B	2021 04 04		ISSUED FOR VARIANCE
A	2021 03 22		ISSUED FOR GEOTECHNICAL REVIEW
No.	Date	Issue Notes	
			
Design Firm COAST ESSENTIAL CONSTRUCTION 110-39279 QUEENS WAY SQUAMISH BC V8B0T5			
Consultant 			
Project Title THE RIDGE LOT 7 7510 PEBBLE CREEK DRIVE PEMBERTON BC			
Sheet Title COMPLIANT WALLS			
Project Manager	REID MADIUK	Project ID	Project ID
Drawn By		Scale	1/8" = 1' 0"
Reviewed By		Sheet No.	A-01.5
Date	2021 03 22		of 38
CAD File Name	THE RIDGE LOT 7 COMBINED purged.vwx		

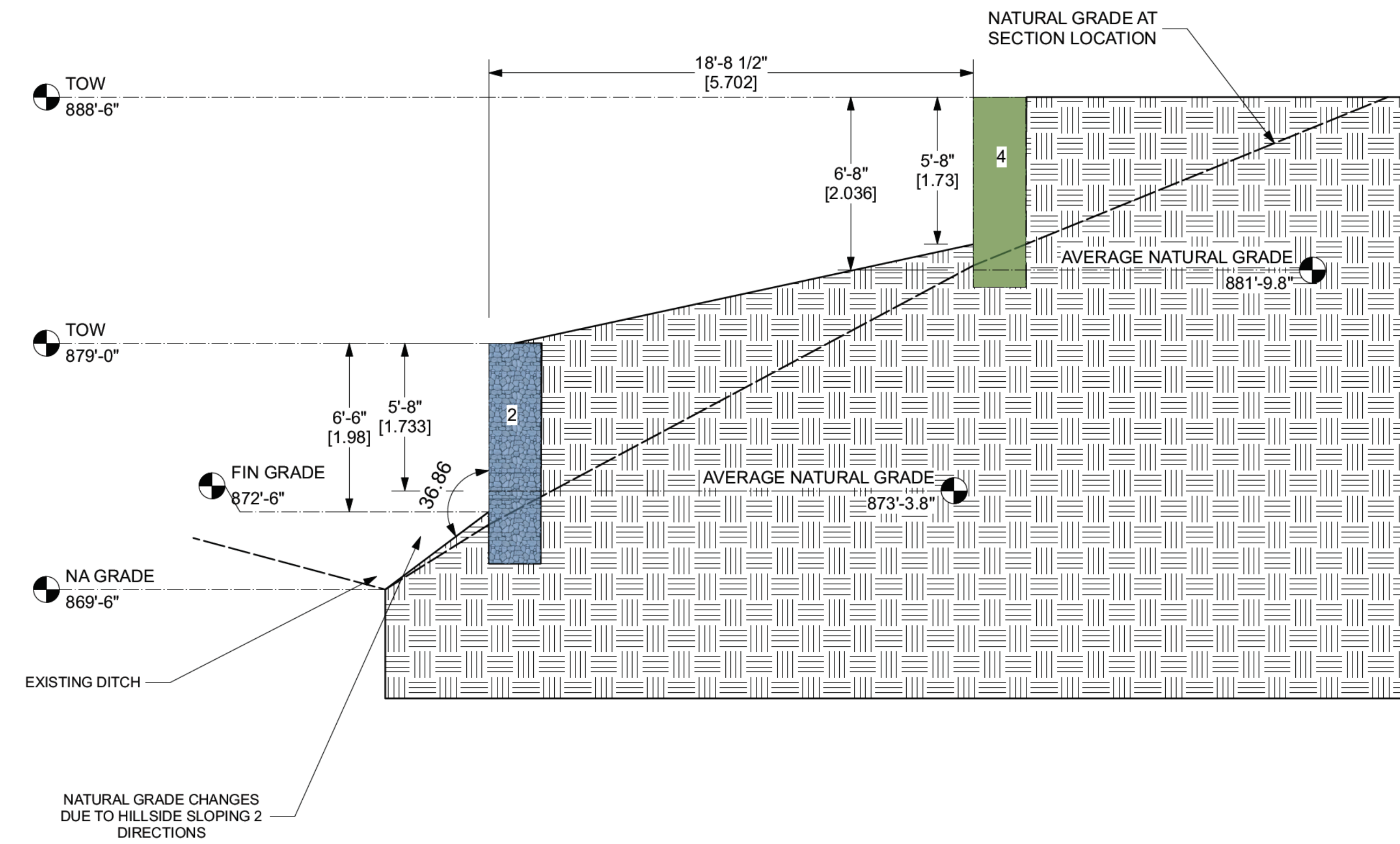


WALLS SHOWN BELOW NATURAL GRADES FOR STRUCTURAL PURPOSES ONLY. DEPTHS OF WALLS WILL VARY DEPENDING ON GEOTECHNICAL REVIEW. ALL WALL HEIGHTS TAKEN FROM AVERAGE NATURAL GRADE AS PER BYLAW SECTION 7.21 (a) i

1 A-01.2 SITE SECTION SOUTH
Scale: 1/4" = 1'-0"



2 A-01.2 SITE SECTION WEST
Scale: 1/4" = 1'-0"



3 A-01.2 SITE SECTION
Scale: 1/4" = 1'-0"

7.21 Retaining Walls

- (a) In a residential zone, a single retaining wall shall:
- Not exceed a Height of 1.2 m measured from the average natural grade level at its base, and
 - Not be located within 0.6 m, measured horizontally, of any other retaining wall.

PART 22: RETAINING STRUCTURES

- 22.1. A registered professional shall undertake the design and conduct field reviews of the construction of a retaining wall greater than 1.2 meters in height.
- 22.2. Sealed copies of the design plan and field review reports prepared by the registered professional for all retaining walls greater than 1.2 meters in height shall be submitted to the Chief Building Official prior to acceptance of the works.

SEE GEOTECHNICAL DRAWINGS FOR SPECIFICATIONS
MAXIMUM EXPOSED WALL HEIGHT OF 6'6" (2M) FACE

No.	Date	By	Revision Notes

No.	Date	Issue Notes



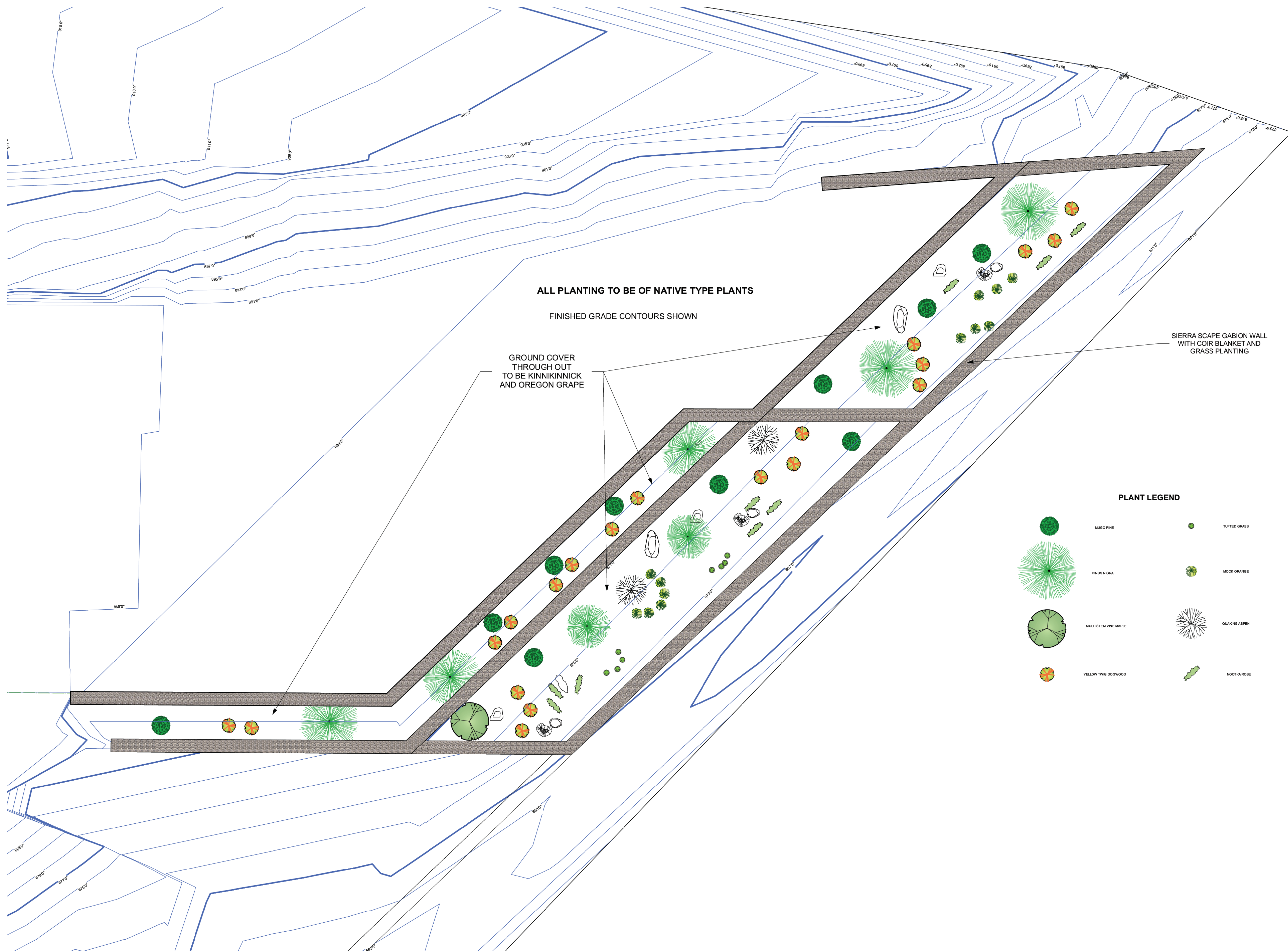
COAST ESSENTIAL CONSTRUCTION
110-39279 QUEENS WAY
SQUAMISH BC
V8B0T5

THE RIDGE LOT 7
7510 PEBBLE CREEK DRIVE
PEMBERTON BC

SITE SECTIONS

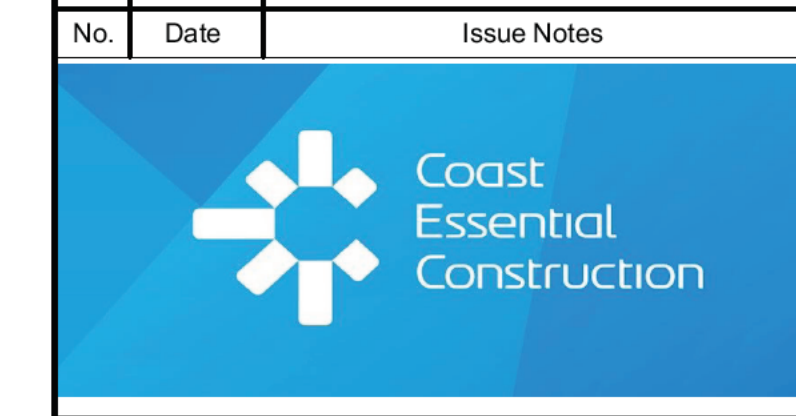
Project Manager REID MADIUK	Project ID Project ID
Drawn By	Scale 1:1
Reviewed By	Sheet No A-01.6
Date 2021 04 07	of 38
CAD File Name	

THE RIDGE LOT 7 COMBINED purged.vwx



No.	Date	By	Revision Notes

No.	Date	Issue Notes



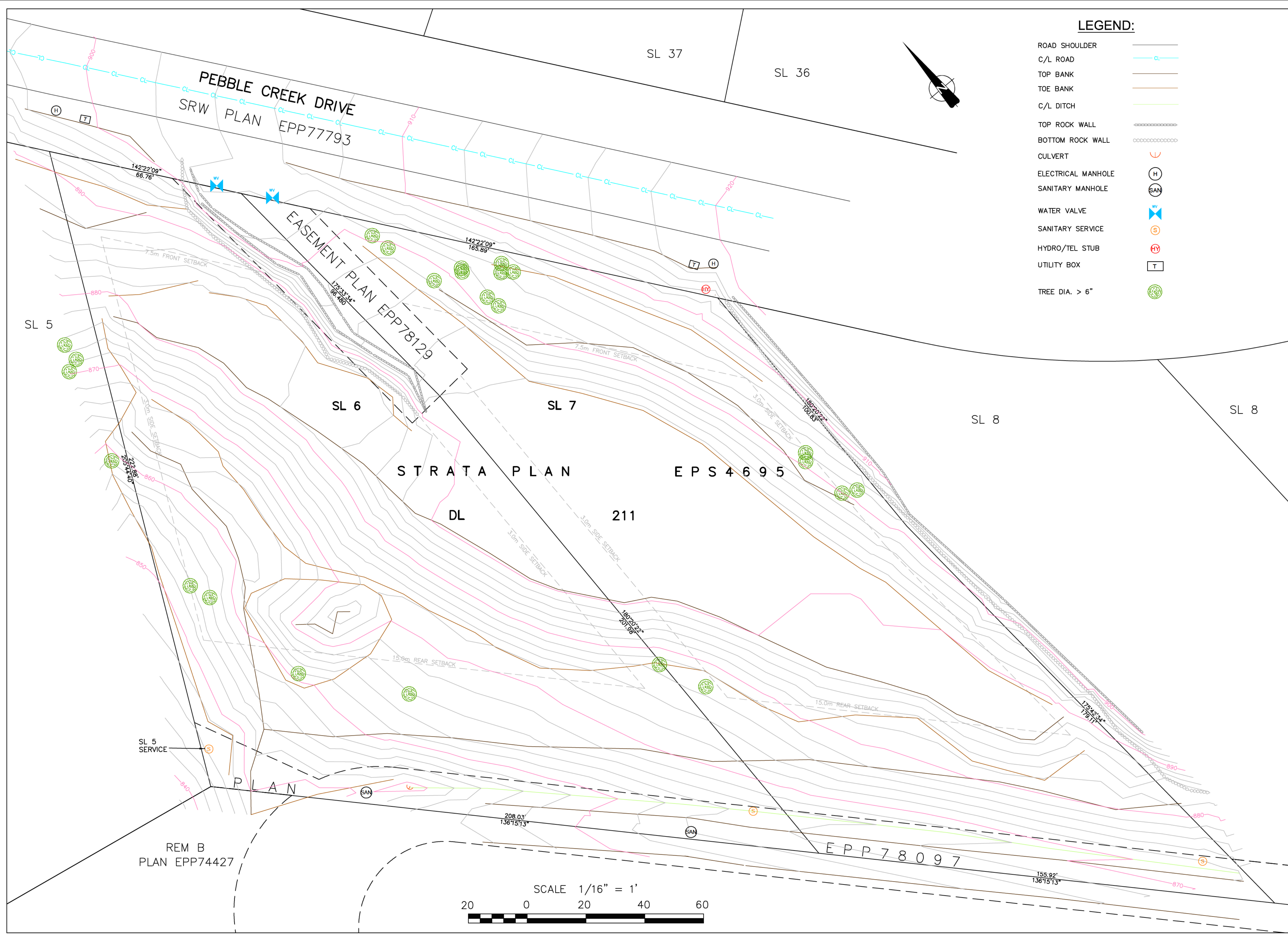
COAST ESSENTIAL CONSTRUCTION
110-39279 QUEENS WAY
SQUAMISH BC
V8B0T5

THE RIDGE LOT 7
7510 PEBBLE CREEK DRIVE
PEMBERTON BC

LANDSCAPE PLAN

Project Manager REID MADIUK	Project ID Project ID
Drawn By	Scale 1:96
Reviewed By	Sheet No A-01.7
Date 2021 05 06	of 38
CAD File Name	

THE RIDGE LOT 7 COMBINED purged.vwx



LEGEND:

- ROAD SHOULDER
- C/L ROAD
- TOP BANK
- TOE BANK
- C/L DITCH
- TOP ROCK WALL
- BOTTOM ROCK WALL
- CULVERT
- ELECTRICAL MANHOLE H
- SANITARY MANHOLE SAN
- WATER VALVE WV
- SANITARY SERVICE S
- HYDRO/TEL STUB HY
- UTILITY BOX T
- TREE DIA. > 6" T

STRATA LOT 6
 PID #: 030-333-326
 CIVIC ADDRESS: 7508 Pebble Creek Drive, Pemberton, BC
 CHARGES, LIENS AND INTERESTS: CA2874965, CA4950098, CA5871774, CA5871775, CA6513043, CA6513049, CA6513055, CA6513056, CA6555908, CA6555917, CA6555926, CA7093931, CA7093932

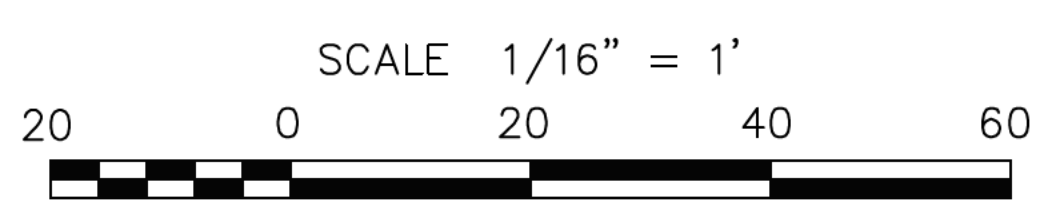
STRATA LOT 7
 PID #: 030-333-334
 CIVIC ADDRESS: 7510 Pebble Creek Drive, Pemberton, BC
 CHARGES, LIENS AND INTERESTS: CA2874965, CA4950098, CA5871774, CA5871775, CA6513043, CA6513049, CA6513055, CA6513056, CA6555908, CA6555917, CA6555927, CA7093931, CA7093932

NOTES:
 BEARINGS ARE GRID, DERIVED FROM STRATA PLAN EPS4695
 DISTANCES & ELEVATIONS ARE IN FEET UNLESS OTHERWISE NOTED
 ELEVATIONS ARE ORTHOMETRIC, DERIVED FROM STATIC GPS OBSERVATIONS USING THE HT 2.0 GEOD MODEL.
 FIELD WORK WAS COMPLETED ON FEBRUARY 15th, 2021
 CONTOUR INTERVAL IS 2.0'
 SETBACK INFORMATION OBTAINED FROM SCHEDULE D OF STRATA DOCUMENTS. MUST BE CONFIRMED WITH VILLAGE OF PEMBERTON

THIS PLAN IS FOR DESIGN PURPOSES ONLY AND IS NOT TO BE USED FOR THE LOCATION OF PROPERTY LINES OR ANY OTHER USE WHATSOEVER. HIGHMARK LAND SURVEYING AND ENGINEERING LTD ACCEPTS NO RESPONSIBILITY OR LIABILITY FOR ANY DAMAGES THAT MAY BE SUFFERED BY A THIRD PARTY AS A RESULT OF ANY DECISIONS MADE, OR ACTIONS TAKEN BASED ON THIS DOCUMENT.
 ALL RIGHTS RESERVED. NO PERSON MAY COPY, REPRODUCE, TRANSMIT OR ALTER THIS DOCUMENT IN WHOLE OR IN PART WITHOUT THE CONSENT OF HIGHMARK LAND SURVEYING AND ENGINEERING LTD.

THIS TOPOGRAPHIC PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROFESSIONAL REFERENCE MANUAL, CERTIFIED CORRECT ON THE 15th OF FEBRUARY, 2021

B.C.L.S.
"THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED"



REV	INITIAL	DATE	DESCRIPTION
-		FEB 18/21	MV
			DATE DRAWN

TOPOGRAPHIC PLAN
 OF STRATA LOT 6 AND 7, DL 211, LILLOOET DISTRICT STRATA PLAN EPS4695

SCALE: 1/16" = 1'	SHEET: 1 OF 1	FILE: T21007D
-------------------	---------------	---------------