



TOWN OF CANMORE PROSPECT HEIGHTS RETAINING WALL

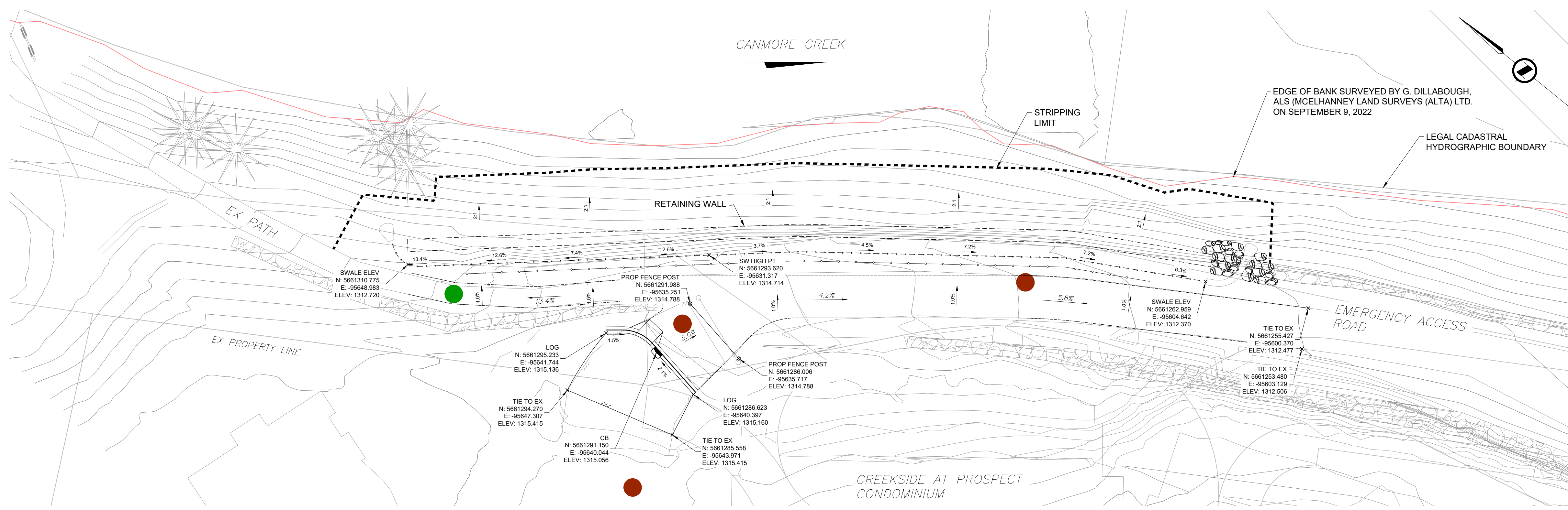


SITE PLAN
1:1000

PROJECT NUMBER: CAP7295
ISSUED FOR RFP
MAY 24, 2024

SHEET NO	SHEET TITLE	SHEET ID
GENERAL		
1	COVER	G-001
CIVIL		
2	REMOVALS AND SURFACEWORKS	C-101
3	GRADING AND PAVEMENT ELEVATIONS	C-102
4	DETAILS	C-103
STRUCTURAL		
5	GABION WALL GENERAL LAYOUT	ST-101
LANDSCAPE ARCHITECTURE		
6	TREE PROTECTION AND REMOVAL PLAN	TP-101
7	LANDSCAPING DETAILS	LA-101

FILE: G:\PROJECTS\62061\62061_PW-CIVIL.DWG [DATE: May 24, 2024 9:03:02 AM]



A5 GRADING AND PAVEMENT ELEVATIONS
1:200

NOTES

1. ALL PIPE SIZES ARE IN MILLIMETRES AND ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. ALL COORDINATES AND DISTANCES ARE BASED ON 3TM COORDINATE SYSTEM (NAD 83). STATIONS AND WORKPOINTS ON DRAWINGS ARE GIVEN IN GRID COORDINATES.

LEGEND



A	ISSUED FOR RFP	2024-05-24	ABM RC
NO.	DESCRIPTION	DATE (YYYY-MM-DD)	BY APPD

PERMIT

Permit to Practice
ISL Engineering and Land Services Ltd.
RM Signature: *D. B. B.*
RM APEGA ID: **80901**
Date: 2024-05-27

Permit Number P4741
The Association of Professional Engineers and Geoscientists of Alberta

DESIGNED	BY	DATE (YYYY-MM-DD)
DRAWN	LM	2024-05-22
CHECKED	ABM	2024-05-22



PROJECT

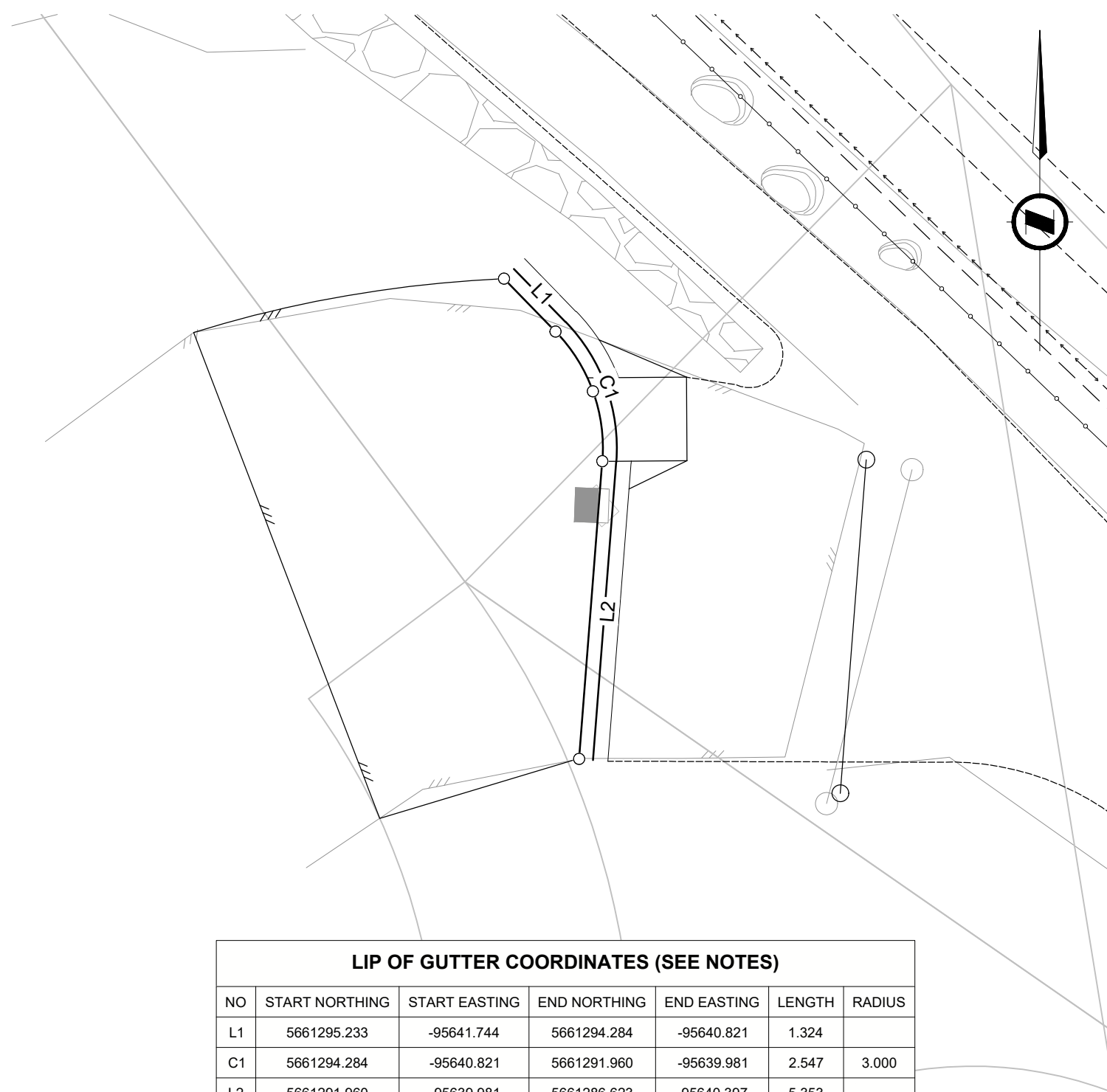
**TOWN OF CANMORE
PROSPECT HEIGHTS
RETAINING WALL**

SEC: 29 - TWP: 24 - RGE: 10 - W 5th M

SHEET TITLE

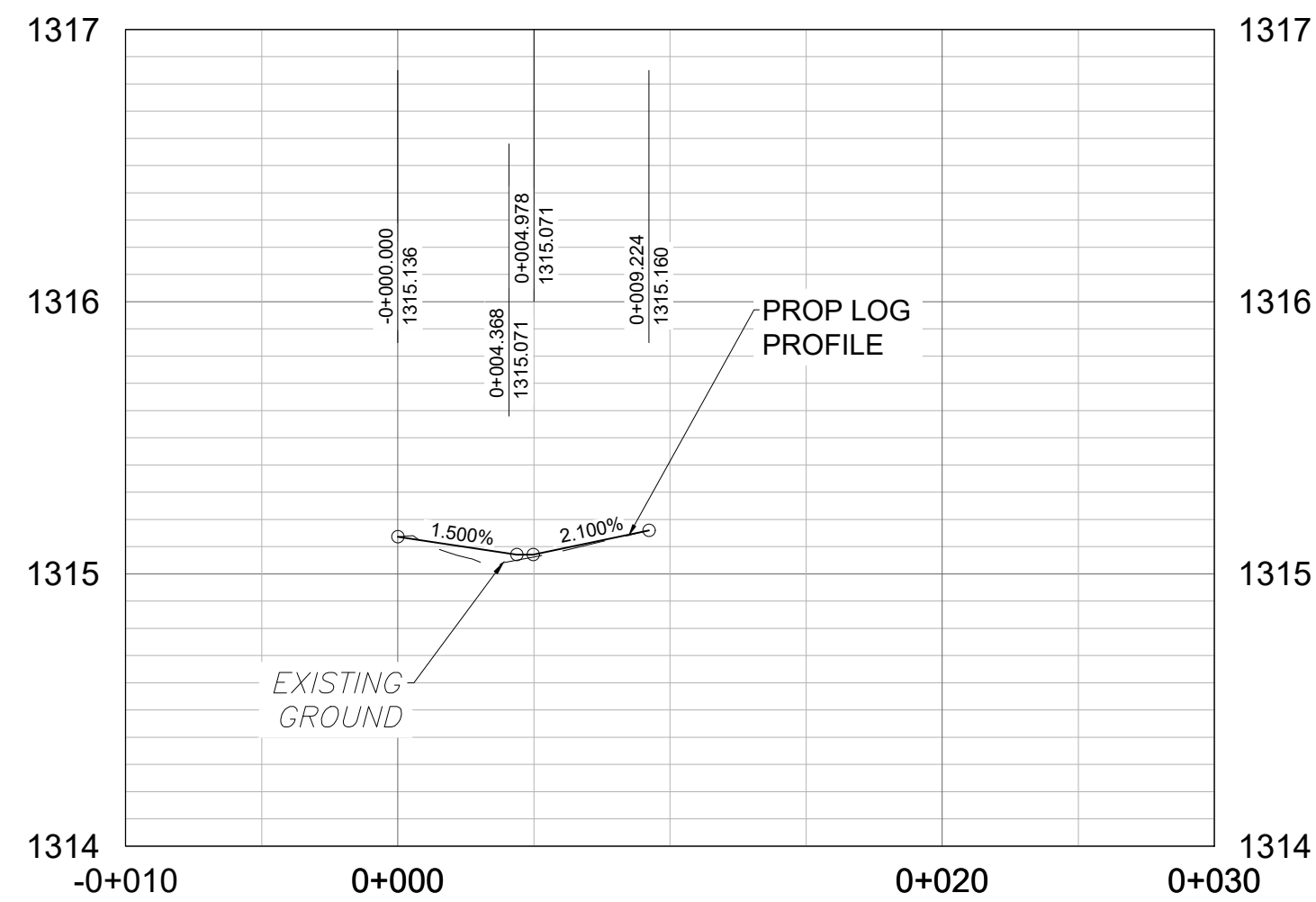
**CIVIL
GRADING AND PAVEMENT ELEVATIONS**

FILE NO. 62061_PW-Civil.dwg	ENG DWG NO.	
SHEET ID. C-102	SHEET NO. 03	
DRAWN	DATE (YYYY-MM-DD)	PROFILE NO.

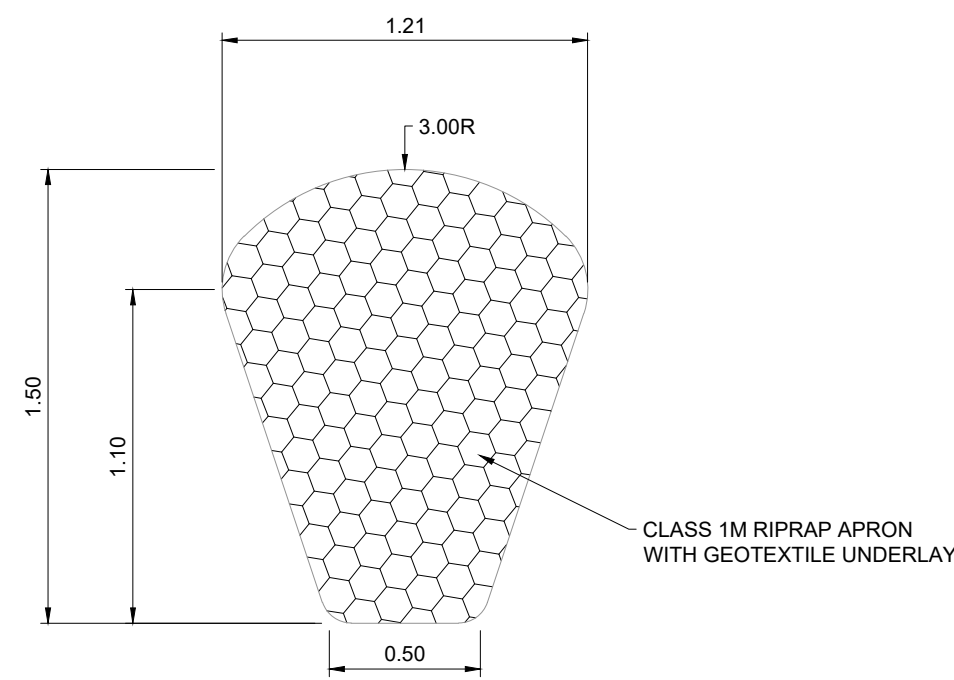


LIP OF GUTTER COORDINATES (SEE NOTES)						
NO	START NORTHING	START EASTING	END NORTHING	END EASTING	LENGTH	RADIUS
L1	5661295.233	-95641.744	5661294.284	-95640.821	1.324	
C1	5661294.284	-95640.821	5661291.960	-95639.981	2.547	3.000
L2	5661291.960	-95639.981	5661286.623	-95640.397	5.353	

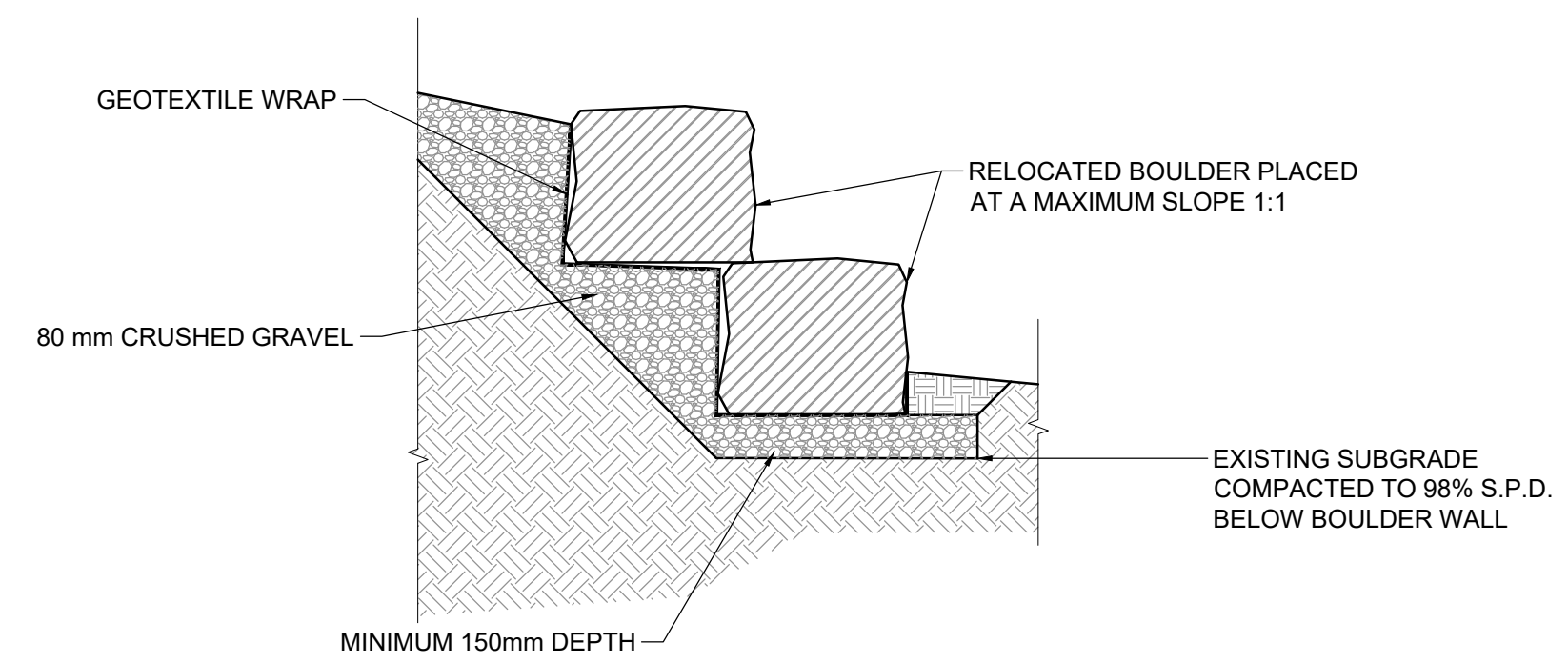
A3 PROSPECT HEIGHTS CURB AND GUTTER
1:100



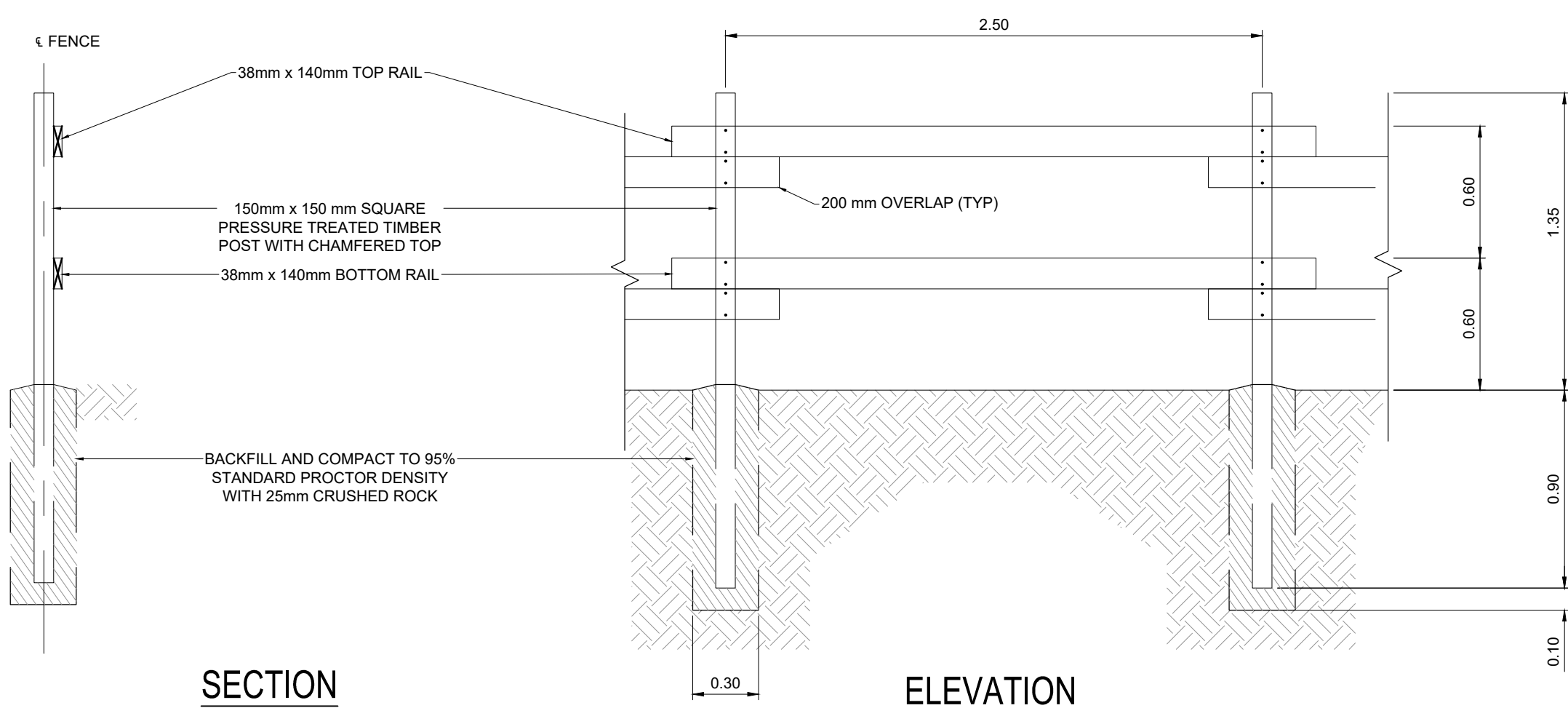
A4 PROSPECT HEIGHTS CURB AND GUTTER PROFILE
1:250



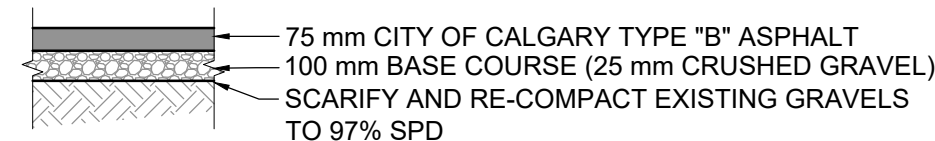
B2 RIP RAP APRON
1:25



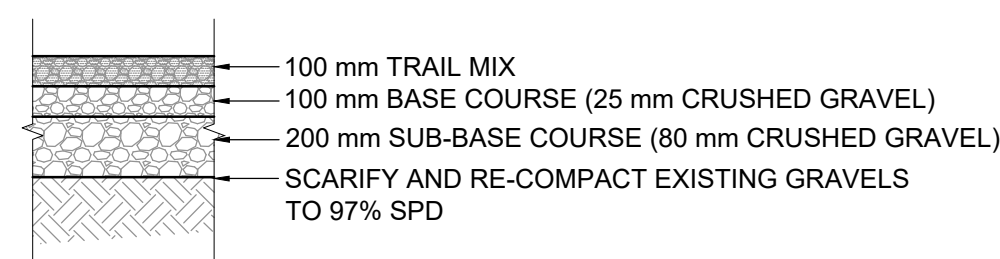
B3 BOULDER REINFORCED SLOPE
1:25



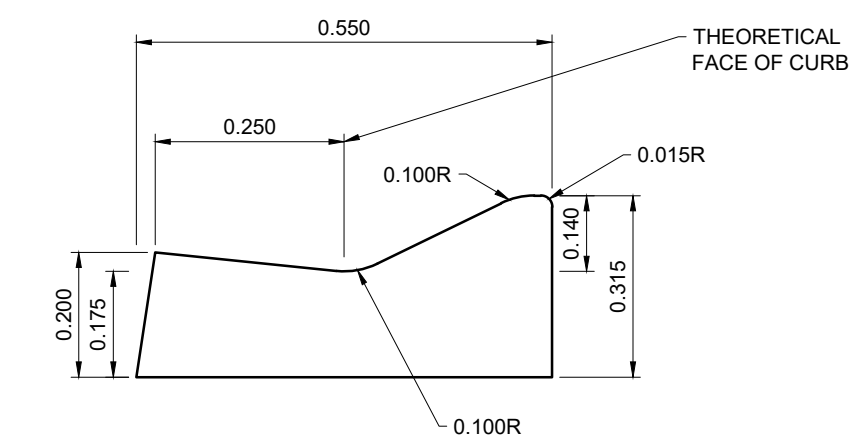
B1 HAND RAIL
SCALE 1:25



B4 ASPHALT STRUCTURE
1:25



B5 GRAVEL STRUCTURE
1:25



NOTE: CURB AND GUTTER SHALL BE CITY OF CALGARY 454.1003.008 LOW PROFILE ROLLED CURB WITH 250mm GUTTER. WITH AN INCREASED CURB FACE HEIGHT OF 0.140. 100mm BASE COURSE (25mm CRUSHED GRAVEL) SHALL BE PROVIDED UNDER CURB AND GUTTER.

B6 CURB AND GUTTER
1:10

- NOTES:
- ALL TIMBER TO BE PRESERVATIVE PRESSURE TREATED IN ACCORDANCE TO CSA 080.
 - ALL EXPOSED UNTREATED WOOD RESULTING FROM FABRICATION SHALL BE TOUCHED UP IN THE FIELD WITH COPPER NAPHTHENATE.
 - ALL RAILS TO BE ATTACHED TO POSTS ON WITH 1/2" X 6" LAG BOLTS COMPATIBLE WITH PRESSURE TREATED LUMBER. MINIMUM 4 BOLTS PER RAIL, 2 AT EACH POST.
 - LEAVE 1/2" GAP BETWEEN RAILS ON POSTS.

NOTES

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LEGEND



NAD 83 COORDINATES

NO.	DESCRIPTION	DATE (YYYY-MM-DD)	BY	APPD
A	ISSUED FOR RFP	2024-05-24	ABM	RC

PERMIT

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ISL Engineering and Land Services Ltd.
RM Signature: *D. Biron*
RM APEGA ID: **80901**
Date: 2024-05-27

Permit Number P4741
The Association of Professional Engineers and Geoscientists of Alberta

SEAL

PROFESSIONAL ENGINEER
ANDREW B. MONROE
134 607 2024-05-27

DESIGNED	BY	DATE (YYYY-MM-DD)
CC	CC	2024-05-22
DRAWN	LM	DATE (YYYY-MM-DD)
LM	LM	2024-05-22
CHECKED	ABM	DATE (YYYY-MM-DD)
ABM	ABM	2024-05-22

SCALE AS SHOWN



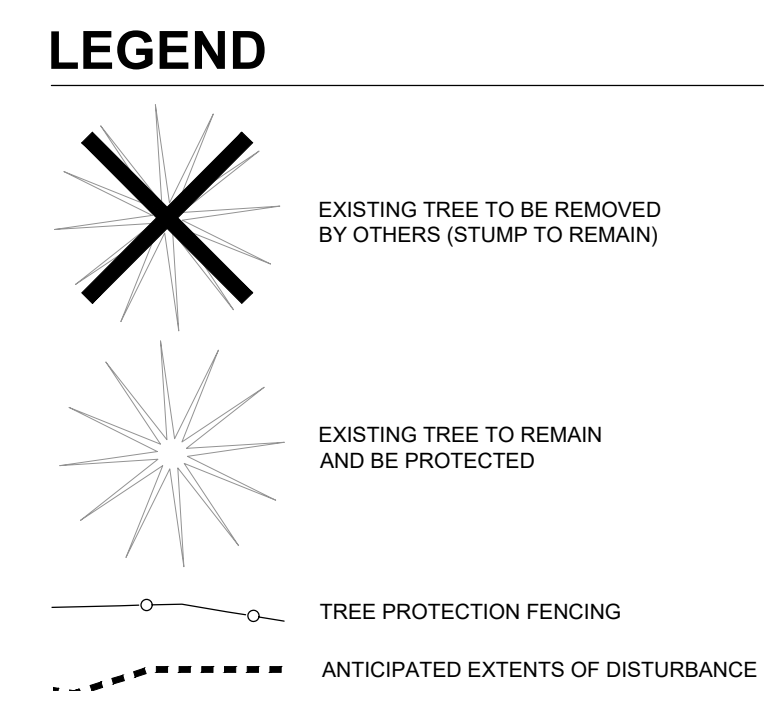
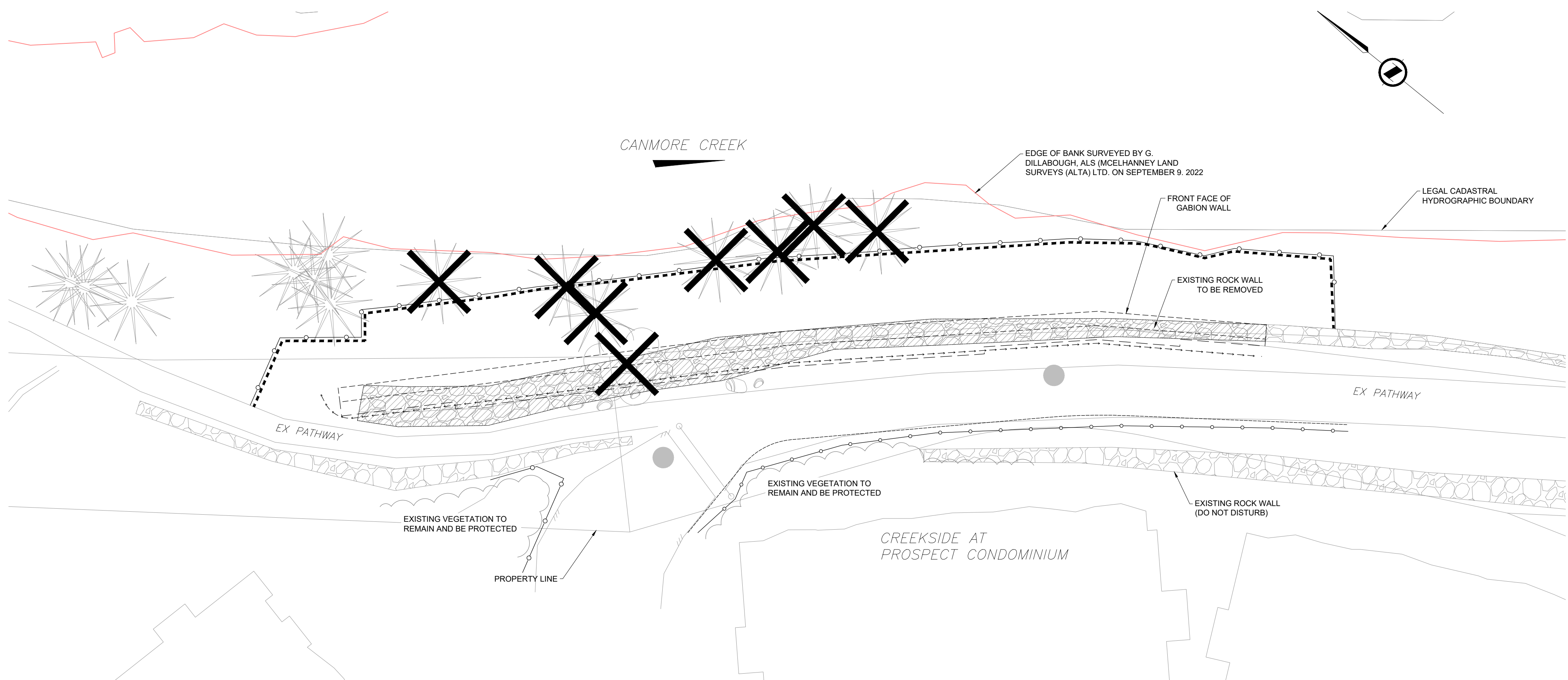
PROJECT

TOWN OF CANMORE PROSPECT HEIGHTS RETAINING WALL

SEC: 29 - TWP: 24 - RGE: 10 - W 5th M

SHEET TITLE		
CIVIL DETAILS		
FILE NO.	ENG DWG NO.	
62061_Civil_C-102.dwg		
SHEET ID.	SHEET NO.	
C-103	04	
BY	DATE (YYYY-MM-DD)	PROFILE NO.

FILE: G:\PROJECTS\62061\2024\05\20240520\20240520\1_TOC_BOW_RIVER_PATHWAY_DESIGN\CA02_CADD\20_DRAFTING\202_PROD\CONSTRUCTION\PROSPECTWALL\62061_PROSPECTWALL_LA.DWG DATE: May 23, 2024 1:11:10 PM



NOTES

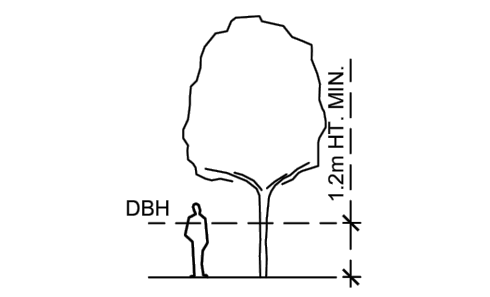
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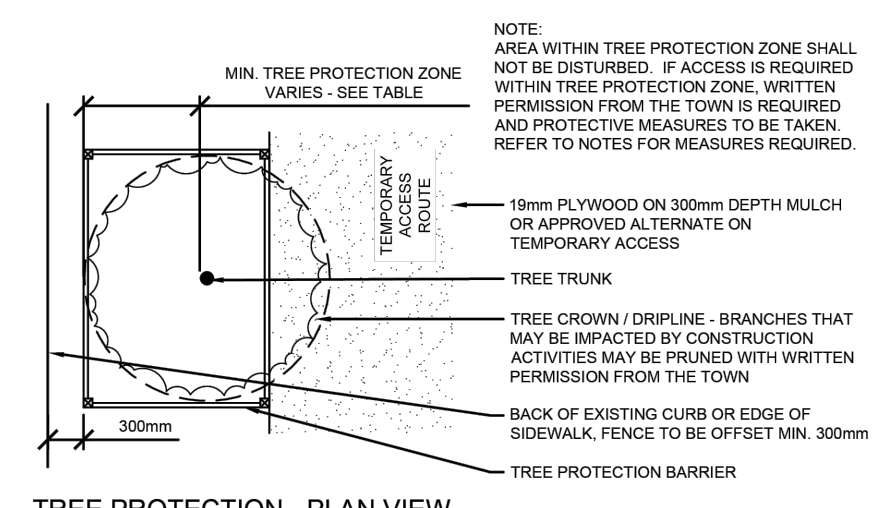
1 TREE REMOVALS AND PROTECTION PLAN
SCALE 1:200

TREE PROTECTION ZONE CALCULATION TABLE		
TRUNK DIAMETER (DBH)	TRUNK CIRCUMFERENCE	MIN. TREE PROTECTION ZONE DISTANCE
<150mm	<450mm	1.2 METERS
15-300mm	450-1350mm	1.8 METERS
31-400mm	87-1260mm	2.4 METERS
41-500mm	123-1500mm	3.0 METERS
51-600mm	155-1800mm	3.6 METERS
61-700mm	182-2100mm	4.2 METERS
71-800mm	213-2400mm	4.8 METERS
>800mm	>251cm	5.0 METERS

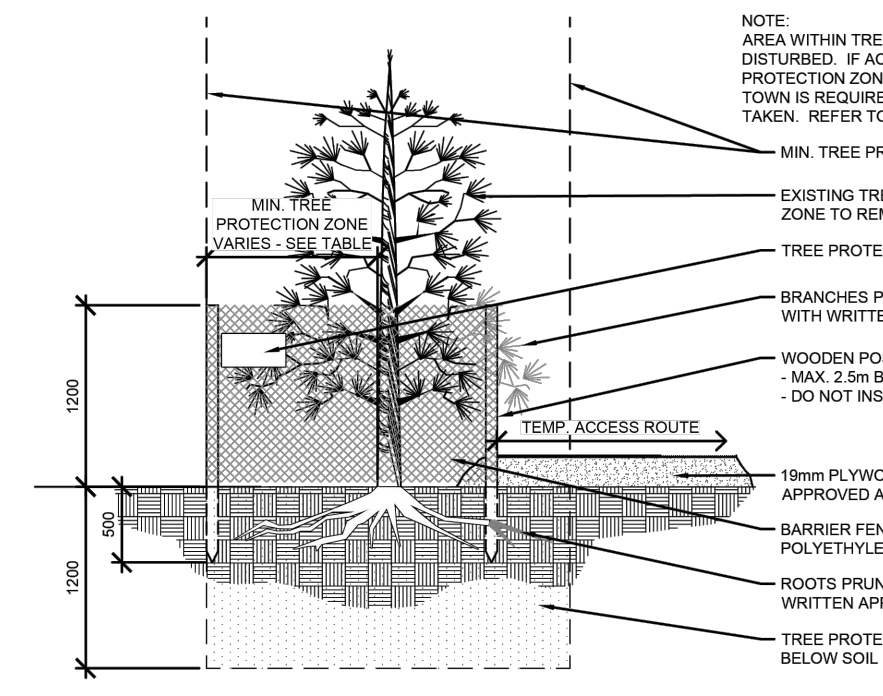
• MIN. PROTECTION DISTANCE IS MEASURED FROM OUTSIDE EDGE OF TREE TRUNK FROM EACH SIDE
• DBH = DISTANCE AT BREAST HEIGHT (1.2m ABOVE GROUND)



DBH MEASUREMENT - ELEVATION
not to scale



TREE PROTECTION - PLAN VIEW
not to scale



TREE PROTECTION - ELEVATION VIEW
not to scale

2 TREE PROTECTION DETAIL
NTS

TREE PROTECTION NOTES

- TREE PROTECTION MEASURE TO COMPLY WITH THE TOWN'S TREE PROTECTION GUIDELINES AND POLICIES.
- TOWN OF CANMORE REPRESENTATIVE TO REVIEW TREE PROTECTION MEASURES PRIOR TO BEGINNING WORK ON THE SITE.
- THE TREE PROTECTION MEASURES SHOWN ON THESE SHEETS ARE THE MINIMUM REQUIRED BY THE CONTRACTOR. POSTS AND TREE PROTECTION BARRIERS TO EXTEND TO THE MINIMUM TREE PROTECTION ZONE DISTANCE AS NOTED ON THE TABLE ON THIS SHEET UNLESS OTHERWISE NOTED ON THE PLANS AND AS APPROVED BY THE TOWN OF CANMORE REPRESENTATIVE.
- POSTS AND TREE PROTECTION BARRIERS TO BE SET BACK FROM EXISTING CURB & SIDEWALK 300mm MIN.
- FENCE MATERIAL: MIN. ORANGE BARRIER FENCE WITH FIXED WOOD POSTS. ALTERNATIVES MAY BE ACCEPTED BY TOWN'S REPRESENTATIVE. ALTERNATE MATERIALS SUBSTITUTION TO BE REQUESTED BY CONTRACTOR AND ACCEPTED BY TOWN'S REPRESENTATIVE PRIOR TO INSTALLATION.
- PROVIDE TREE ROOT PROTECTION WITH 19mm PLYWOOD OVER 300mm OF WOOD MULCH (OR APPROVED ALTERNATE) WHERE TEMPORARY ACCESS EXTENDS INTO TREE PROTECTION ZONE.
- PRUNING OF BRANCHES OR ROOTS THAT MAY BE IMPACTED BY CONSTRUCTION ACTIVITIES MAY BE PERMITTED WITH WRITTEN PERMISSION FROM THE TOWN AND MUST BE CARRIED OUT BY A CERTIFIED ARBORIST. ROOTS EXPOSED DURING EXCAVATION TO BE PRUNED FLUSH WITH EXCAVATION WALL.
- NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION, CONSTRUCTION OR REMOVAL.
- ANY EXCEPTIONS TO TREE PROTECTION ZONE ALTERATIONS REQUIRE WRITTEN APPROVAL FROM THE TOWN OF CANMORE PARKS DEPARTMENT.
- ALL UTILITY LOCATIONS ARE TO BE IDENTIFIED PRIOR TO ANY GROUND DISTURBANCE AND ADHERE TO SAFE DIG PRACTICES AND SETBACK REQUIREMENTS.
- IDENTIFY ALL PROPOSED TEMPORARY ACCESS ROUTES AND LAYDOWN AREAS ON A COPY OF THE TREE PROTECTION PLAN AS PART OF THE ECO PLAN.
- THE CONTRACTOR SHALL MINIMIZE WORK WITHIN TWO (2) METERS OF DRIPLINE OF TREES THAT ARE DESIGNATED TO BE RETAINED EXCEPT WHERE NECESSARY.
- NO STOCKPILING OF ANY KIND IS PERMITTED WITHIN THE TREE PROTECTION FENCE OR WITHIN FIVE (5) METERS OF DRIPLINE OF ANY TREES TO BE RETAINED EXCEPT WHEN THE SURFACE IS CONCRETE OR ASPHALT.
- WHERE ACCESS OR WORK ACTIVITIES ARE REQUIRED OVER THE ROOT ZONES THE CONTRACTOR SHALL ENSURE THE USE OF THE FOLLOWING ROOT PROTECTION MEASURES:
 - WHERE SIDEWALK, CURB, FENCE POST AND PAVEMENT REMOVAL OR PLACEMENT, OR EXCAVATION OPERATIONS OCCUR THAT WILL IMPACT TREE ROOTS 50mm OR GREATER IN DIAMETER, THE TOWN WILL DETERMINE HOW THESE ROOTS WILL BE HANDLED.
 - ANY ROOTS 50mm OR LARGER DAMAGED DURING GRADING OR CONSTRUCTION SHALL BE REPORTED IMMEDIATELY TO THE TOWN REPRESENTATIVE. THE TOWN REPRESENTATIVE WILL REVIEW THE DAMAGE AND PROVIDE DIRECTION FOR INJURY CLEANUP.
 - ANY ROOTS SMALLER THAN 50mm DIAMETER DAMAGED DURING GRADING OR CONSTRUCTION SHALL BE EXPOSED BY THE CONTRACTOR TO SOUND TISSUE AND CLEANLY CUT WITH A SAW.
 - INJURY TO ANY TREE DURING THE PERFORMANCE OF WORK SHALL BE REPORTED TO THE TOWN IMMEDIATELY FOR EVALUATION SO THAT APPROPRIATE TREATMENTS CAN BE APPLIED. NO TREATMENT SHALL BE APPLIED WITHOUT THE PRIOR APPROVAL FROM THE TOWN REPRESENTATIVE.
- THE FOLLOWING CANOPY AND TREE TRUNK PROTECTION MEASURES ARE REQUIRED FOR ALL TREES WITHIN 5m OF THE WORK ZONE:
 - FENCE AND POST MATERIALS TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR PER THE DRAWINGS AND APPROVED BY THE TOWN PRIOR TO CONSTRUCTION.
 - EXTENT OF FENCING SHOWN ON DRAWINGS IS SUBJECT TO CONFIRMATION ON SITE, AND THROUGH DISCUSSIONS WITH THE TOWN OF CANMORE REPRESENTATIVE.
 - THE PROTECTIVE FENCING SHALL BE REMOVED ONLY WITH THE APPROVAL OF THE TOWN REPRESENTATIVE. THE CONTRACTOR SHALL CONTACT THE TOWN FOR APPROVAL IF FENCE RELOCATION IS REQUIRED DURING CONSTRUCTION.
 - OVERHEAD BRANCHING LIKELY TO BE DAMAGED BY EQUIPMENT OPERATION SHALL BE BROUGHT TO THE ATTENTION OF THE TOWN REPRESENTATIVE PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. PREVENTATIVE MEASURES (PRUNING OR TYING BACK OF SMALL BRANCHES LESS THAN 25mm) AS APPROVED BY THE TOWN REPRESENTATIVE SHALL BE PROPERLY EXECUTED BEFORE THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
 - REQUIRED TREE PRUNING OF LARGE BRANCHES (LARGER THAN 25mm) FOR CLEARANCE DURING CONSTRUCTION SHALL BE PERFORMED BY THE TOWN. PRUNING SHALL BE PROPERLY EXECUTED BEFORE THE COMMENCEMENT OF WORK IN THE AREA.
 - THE CONTRACTOR SHALL IDENTIFY ANY REQUIRED PRUNING IN THE TREE PROTECTION PLAN SECTION OF THE ECO PLAN. THE COST OF THIS SHALL BE BORNE BY THE TOWN WHO SHALL CARRY OUT ANY PRUNING WORK IDENTIFIED IN THE TREE PROTECTION PLAN PRIOR TO START OF CONSTRUCTION.
- PENALTIES: IF DAMAGE, OR LOSS OF TREES, OCCURS AS A RESULT OF DAMAGE OR THE CONTRACTOR'S FAILURE TO FOLLOW THE FOREGOING MEASURES, THE TOWN WILL DETERMINE REPAIR TREATMENT AND REPLACEMENT COSTS. PENALTIES MAY INCLUDE COMPENSATION FOR DAMAGE AND/OR REPLACEMENT VALUE TREES ASSESSED PER THE TOWN'S TREE PROTECTION GUIDELINES AND IN ACCORDANCE TO THE RECOMMENDED METHODOLOGY PROVIDED IN THE MOST CURRENT EDITION OF THE GUIDE FOR PLANT APPRAISAL AUTHORED BY THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS AND PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE. THESE COSTS AS DETERMINED BY THE TOWN SHALL BE DEDUCTED FROM PAYMENTS TO THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF TEMPORARY TREE PROTECTION MEASURES AT CONSTRUCTION COMPLETION AFTER APPROVAL BY THE TOWN. CONTRACTOR TO MAKE REPAIRS TO LANDSCAPED AREAS DISTURBED DURING REMOVAL OF TEMPORARY TREE PROTECTION MEASURES TO THE SATISFACTION OF THE TOWN.

NO.	DESCRIPTION	DATE (YYYY-MM-DD)	BY	APPD
A	ISSUED FOR RFP	2024-05-24	ABM	RC
PERMIT		SEAL		
		May 23 2024 The Alberta Association of Landscape Architects Jeff Schurek		
DESIGNED	SP	DATE (YYYY-MM-DD)	2024-05-01	
DRAWN	SP	DATE (YYYY-MM-DD)	2024-05-09	
CHECKED	JS	DATE (YYYY-MM-DD)	2024-05-10	



TOWN OF CANMORE PROSPECT HEIGHTS RETAINING WALL
SEC. 29 - TWP: 24 - RGE: 10 - W 5th M

TREE PROTECTION PLAN

FILE NO.	62061_Prospect Wall_LA.dwg	ENG DWG NO.	
SHEET ID.	TP-101	SHEET NO.	06
DRAWN	BY	DATE (YYYY-MM-DD)	PROFILE NO.

