CITY OF COQUITLAM

3000 GUILDFORD WAY, COQUITLAM, BC V3B 7N2

BOOTH CREEK BRIDGES AT LUCILLE STARR DRIVE COQUITLAM,BC

ISSUED FOR TENDER

LEGEND

EXISTING	PROPOSED	DESCRIPTION	EXISTING	PROPOSED	DESCRIPTION
IPF		IRON PROPERTY PIN	W	W	WATERMAIN
		BUILDING			WATER SERVICE CONNECTION
		EDGE OF PAVEMENT	W	W	WATER VALVE
		CURB & GUTTER	W	W	AIR VALVE
		TRUCK ROUTE	H	H	HYDRANT & VALVE ASSEMBLY
S S	S S	SANITARY SEWER	YH		YARD HYDRANT
		SANITARY CONNECTION & INSPECTION CHAMBER	W	W	CAPPED END
D	D	STORM SEWER	M	M	WATER METER
		STORM CONNECTION & INSPECTION CHAMBER	W	W	BLOW-OFF
		STORM SEWER SERVICE	T T	T T	UNDERGROUND TELEPHONE & MANHOLE
FD	FD	FRENCH DRAIN	E E	E E	UNDERGROUND ELECTRICAL & MANHOLE
CO D	CO D	STORM SEWER & CLEANOUT	G G	G G	GASMAIN
		CATCH BASIN - TOP INLET & SIDE INLET	L L	L L	TRAFFIC SIGNAL & STREET LIGHT U/G DUCTS
		LAWN DRAIN			ORNAMENTAL STREET LIGHT - DAVIT
		CATCH BASIN MANHOLE			ORNAMENTAL STREET LIGHT - POST TOP
		SWALE	UP	UP	UTILITY POLE
		DITCH			UTILITY POLE W/ LIGHT
		SIDEWALK (ASPHALT)	J	J	JUNCTION BOX
		SIDEWALK (CONCRETE)	x.xx	9.270	GROUND ELEVATION
		RETAINING WALL			DIRECTION OF OVERLAND FLOW

SITE MAP

SCALE - N.T.S.

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Coquitlam

EGBC PERMIT No. 1001128

NOT FOR CONSTRUCTION

23-0147 - BOOTH CREEK BRIDGES AT LUCILLE STARR DRIVE COQUITLAM,BC -

GENERAL CONSTRUCTION NOTES

1. ALL MATERIALS SUPPLIED AND CONSTRUCTION PERFORMED SHALL BE IN ACCORDANCE WITH THE CITY OF COQUITLAM DESIGN CRITERIA, THE LATEST EDITION OF WORKSAFE BC, THE MASTER MUNICIPAL CONTRACT DOCUMENTS (MMCD) - 2009 EDITION (PLATINUM BOOK), AND ANY OTHER APPLICABLE DESIGN CRITERIA, SPECIFICATIONS, STANDARD DRAWINGS, AND CONSTRUCTION SPECIFICATIONS.

2. ALL MATERIAL TESTING MUST BE DONE IN ACCORDANCE WITH THE MMCD; TESTING TO BE CARRIED OUT BY QUALIFIED MATERIAL TESTING FIRM AND PAID FOR BY THE CONTRACTOR. THE CONTRACTOR IS TO PROVIDE COPIES OF ALL TEST RESULTS TO THE CONTRACT ADMINISTRATOR (CA). THE CONTRACTOR IS TO NOTIFY THE CA 48 HOURS PRIOR TO CONSTRUCTION AND VERIFY THEY HAVE THE LATEST DRAWINGS ISSUED FOR CONSTRUCTION. COPIES OF THE MMCD CAN BE OBTAINED AT MASTER MUNICIPAL CONSTRUCTION DOCUMENTS ASSOCIATION (MMCDA), 102-211 COLUMBIA STREET, VANCOUVER, BC V6B 2R5.

3. THE CONTRACTOR IS TO NOTIFY THE CITY OF COQUITLAM ENGINEERING DEPARTMENT 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WITHIN THE ROAD ALLOWANCES AND RIGHTS-OF-WAYS.

4. ALL WORK SHALL PASS THE INSPECTION OF THE ENGINEERING DEPARTMENT OF THE CITY OF COQUITLAM.

5. THE CONTRACTOR SHALL HAVE COMPLETE CONTROL OF THE WORK AND SHALL EFFECTIVELY DIRECT AND SUPERVISE THE WORK SO AS TO ENSURE CONFORMANCE WITH THE CONTRACT DOCUMENTS, SUBJECT TO THE OWNER'S RIGHTS AS SPECIFICALLY SET OUT IN THE CONTRACT DOCUMENTS TO GIVE DIRECTIONS REGARDING WORK, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING THE VARIOUS PARTS OF THE WORK UNDER THE CONTRACT.

6. THE CONTRACTOR SHALL MAINTAIN THE WORK IN A TIDY CONDITION AND FREE FROM THE ACCUMULATION OF WASTE, DEBRIS, AND WASTE PRODUCTS, OTHER THAN THAT CAUSED BY THE OWNER OR ITS EMPLOYEES.

7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION SAFETY AT THE PLACE OF WORK AS AND TO THE EXTENT REQUIRED BY APPLICABLE CONSTRUCTION SAFETY LEGISLATION, REGULATIONS AND CODES, INCLUDING THE WORKERS COMPENSATION ACT AND APPLICABLE REGULATIONS, AND BY GOOD CONSTRUCTION PRACTICE.

8. THE CONTRACTOR SHALL ENSURE THAT ALL APPROVALS AND/OR PERMITS REQUIRED FOR THE PROPOSED WORKS HAVE BEEN OBTAINED FROM ALL AUTHORITIES AND AGENCIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

9. WORKSAFE B.C. IS TO BE NOTIFIED PRIOR TO THE START OF CONSTRUCTION.

10. THE LOCATIONS OF THE EXISTING UTILITIES, AS SHOWN ON THE DESIGN DRAWINGS, ARE APPROXIMATE ONLY AND THIS INFORMATION MAY NOT BE FULLY ACCURATE OR COMPLETE. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE AND EXPOSE ALL EXISTING UTILITIES AT ALL TIE-IN POINTS, AT ALL POINTS WHERE A CONFLICT MAY ARISE DURING THE CONSTRUCTION OF THE PROPOSED WORKS, AND TO CONFIRM DESIGN ELEVATIONS. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE CA FOR DIRECTIONS. THE CONTRACTOR SHALL ASSUME ALL COSTS AND EXPENSES THAT MAY OCCUR FOR DAMAGES, SUPPORT OF AND REPAIR TO SUCH PLANT BY REASON OF THE NEGLIGENCE OF HIS OPERATIONS. (EXISTING UTILITIES SHOWN ARE DERIVED FROM AS-BUILT INFORMATION AND ALL UTILITIES MAY NOT BE NECESSARILY SHOWN).

11. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE CAUSED TO EXISTING STREET OR SERVICES BY CONSTRUCTION EQUIPMENT AND/OR TRUCKS HAULING MATERIAL TO THE SITE. THIS MAY INCLUDE DAILY CLEANING OR SWEEPING EXISTING ROADS OF DIRT AND DEBRIS CAUSED BY CONSTRUCTION ACTIVITIES.

12. ALL CONSTRUCTION IN AND ABOUT A WATERCOURSE MUST RECEIVE PRIOR APPROVAL FROM THE PROVINCIAL MINISTRY OF ENVIRONMENT AND/OR THE FEDERAL DEPARTMENT OF FISHERIES AND OCEANS WHERE APPLICABLE.

13. ALL ASPHALT CUTS SHALL BE STRAIGHT WITH VERTICAL CLEAN EDGES SO THAT THE ASPHALT SURFACE MAY BREAK EVENLY AND CLEANLY. THE EDGE OF PAVEMENT SHALL BE SAWCUT AND KEYED TO FORM A MINIMUM 200mm WIDE x 50mm DEEP LAP JOINT WITH THE PROPOSED PAVEMENT UNLESS NOTED OTHERWISE OR AS DIRECTED BY THE CA.

14. EXISTING UNDERGROUND UTILITY TRENCHES ADJACENT TO THE PROPOSED UNDERGROUND UTILITY INSTALLATION SHALL BE ADEQUATELY PROTECTED FROM SLOUGHING IN ORDER TO PREVENT OVER-WIDTH EXCAVATION.

15. THE CONTRACTOR SHALL RESTORE THE EXISTING PAVEMENT ACROSS ALL TRENCH EXCAVATIONS TO ORIGINAL CONDITION OR BETTER AND THE FINISHED PAVEMENT SHALL BLEND IN SMOOTHLY WITH THE EXISTING PAVEMENT. THE EDGE OF PAVEMENT SHALL BE SAWCUT AND KEYED TO FORM A MINIMUM 300mm WIDE X 50mm DEEP LAP JOINT WITH THE PROPOSED PAVEMENT UNLESS NOTED OTHERWISE OR AS DIRECTED BY THE CA.

16. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR EXISTING SERVICES AND ANY SERVICES DISTURBED ARE TO BE REPLACED TO THE SATISFACTION OF THE CITY OF COQUITLAM OR OTHER APPROVING AGENCIES.

17. ANY MATERIAL SUBSTITUTION AND/OR CHANGE IN DESIGN MUST OBTAIN WRITTEN APPROVAL FROM THE CA AND ENGINEER OF RECORD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CITY SHALL BE NOTIFIED OF ANY SUBSTITUTION AND/OR CHANGE IN DESIGN. ANY CHANGE IN DESIGN WILL REQUIRE A DRAWING REVISION.

18. ALL SURVEY MONUMENTS, BENCHMARKS, AND LEGAL PINS MUST BE PROTECTED AND ANY DAMAGE CAUSED BY THE NEGLIGENCE OF THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

19. ALL EXISTING IMPROVEMENTS INCLUDING EXISTING LANDSCAPING, FENCES, SIDEWALKS, RETAINING WALLS, ETC. SHALL BE RESTORED TO THE SATISFACTION OF THE CITY OF COQUITLAM. THE CITY OF COQUITLAM MAY REQUIRE WRITTEN ACCEPTANCE BY THE AFFECTED PROPERTY OWNERS FOR RESTORATION WORKS PERFORMED BY THE CONTRACTOR.

20. JUNCTION BOXES, VALVE COVERS, MANHOLE FRAMES & COVERS WITHIN THE PAVED ROADWAY TO BE LEFT LOW AT BASE LEVEL AT THE TIME OF BASE LIFT ASPHALT AND RAISED JUST PRIOR TO THE FINAL LIFT OF PAVING.

21. FOR RECOMMENDATIONS REGARDING THE SUBSURFACE CONDITIONS, SITE PREPARATION, AND THE PROPOSED ROAD STRUCTURE, REFER TO THE GEOTECHNICAL REPORT DATED FEBRUARY 16, 2024 PREPARED BY KONTOR GEOTECHNICAL CONSULTANTS PRIOR TO THE START OF CONSTRUCTION.

22. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM ADJACENT PROPERTY OWNERS FOR A TEMPORARY ENCROACHMENT ON PRIVATE PROPERTY.

23. ALL PAVEMENT MARKINGS, LINE PAINTING, DIRECTIONAL LINES/ARROWS/SIGNAGE ETC. SHALL BE REINSTATED AFTER CONSTRUCTION

24. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING THE NECESSARY FIELD SURVEYS TO PERMIT THE LAYOUT, CONSTRUCTION AND MEASUREMENT OF QUANTITIES OF THE WORK FOR PAYMENT. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS FIELD SURVEY, WHICH IS DEEMED TO BE INCLUDED IN THE UNIT PRICES TENDERED FOR THE ITEMS IN THE SCHEDULE OF QUANTITIES AND PRICES.

    THE CA WILL PROVIDE THE CONTRACTOR WITH CAD FILE WHICH CONTAINS HORIZONTAL AND VERTICAL SURVEY CONTROLS. THE CONTRACTOR SHALL GIVE NOTICE OF HIS SURVEY REQUIREMENTS AT LEAST TWO WORKING DAYS IN ADVANCE OF THE WORK AND SHALL PROTECT AND MAINTAIN THE CONTROLS PROVIDED. THE CONTRACTOR SHALL ENSURE THAT THE AREAS RECEIVING THE CONTROLS ARE UNOBSTRUCTED AND CLEAR OF DEBRIS, EQUIPMENT, EXCAVATIONS AND ANY OTHER WORK PRIOR TO REQUESTING THE CONTROLS. RE-ESTABLISHMENT OF CONTROLS, SURVEY POSTS AND BENCHMARKS WHICH ARE DAMAGED OR LOST SHALL BE AT THE CONTRACTOR'S EXPENSE.

25. THE CONTRACTOR SHALL BE RESPONSIBLE IN PROVIDING TRAFFIC CONTROL, SIGNAGE, DELINEATORS, BARRICADES, AND OTHER MISCELLANEOUS WARNING DEVICES AS REQUIRED TO MAINTAIN VEHICLE AND PEDESTRIAN FLOW AND FOR EMERGENCY VEHICLE ACCESS. A TRAFFIC MANAGEMENT PLAN WILL BE PROVIDED AS REQUIRED.

26. CONTACT COQUITLAM ENGINEERING DEPT. MIN. 48HRS PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR WORKS INSPECTOR.

27. ALL EXCAVATION WITHIN EXISTING TREE DRIP LINES TO BE BY HAND OR HYDRO-VAC.

28. THE CONTRACTOR SHALL KEEP PROPER AS BUILT INFORMATION DURING CONSTRUCTION AND SUBMIT THE INFORMATION TO THE CONTRACT ADMINISTRATOR PRIOR TO THE REQUEST OF SUBSTANTIAL COMPLETION CERTIFICATE. THE CONTRACTOR SHALL PROVIDE TO THE CA ONE (1) SET OF AS-CONSTRUCTED DRAWINGS SHOWING THE LOCATION AND ELEVATION OF ALL NEW AND EXISTING WORKS ENCOUNTERED ON THE PROJECT.

29. THE CONTRACTOR SHOULD KEEP RECORDS AND/OR PHOTOS OF EXISTING RETAINING WALLS, TREES, DRIVEWAYS AND WALKWAYS WHERE REQUIRED.

30. THE CONTRACTOR IS ADVISED TO REVIEW THE STRUCTURAL DESIGN DRAWINGS FOR COORDINATION.

31. ALL TREES DESIGNATED TO BE SAVED ARE TO BE PROTECTED BY SNOW FENCING.

ROADWORKS NOTES

1. SUBGRADE AND GRANULAR BASE MATERIALS SHALL BE COMPACTED TO AT LEAST 95% OF THEIR MODIFIED PROCTOR DRY DENSITY UNLESS NOTED OTHERWISE. 97% FOR MARSHALL MIX.

2. ALL LOOSE AND ORGANIC MATERIAL SHALL BE EXCAVATED AND REMOVED FROM THE ROADWAY.

3. THE ROAD BASE SHALL EXTEND A MINIMUM OF 300mm BEYOND THE SIDEWALK AND/OR CURB AND GUTTER, WHICHEVER IS GREATER AND FILLED TO THE LEVEL OF THE SIDEWALK OR CURB FOR SUPPORT.

4. THE CRUSHED GRANULAR BASE COURSE SHALL BE PROOF-ROLLED OR TESTED IN ANOTHER APPROVED MANNER PRIOR TO THE PLACEMENT OF THE PROPOSED CONCRETE CURB AND GUTTER AND ROAD PAVEMENT.

5. THE PROPOSED PAVEMENT STRUCTURE SHALL BE AS DESIGNATED BY THE ROADWORKS DESIGN DRAWINGS.

6. ALL VALVE BOXES, MANHOLES, JUNCTION BOXES, ETC. WITHIN THE ROAD RIGHT OF WAY SHALL BE ADJUSTED TO FINISHED GRADE UNLESS NOTED OTHERWISE.

7. THE ADJUSTMENT OF MANHOLES, VALVE COVERS, AND ALL OTHER APPURTENANCES TO SUIT NEW ASPHALT GRADES IS INCIDENTAL TO ASPHALT PAVING UNLESS OTHERWISE SPECIFIED IN SCHEDULE OF QUANTITIES AND PRICES (TYP.).

8. CONTRACTOR TO REPLACE ALL MANHOLE FRAMES AND LIDS, WATER VALVE BOXES AND COVERS, AND GAS VALVE BOXES AND COVERS WITHIN THE ROADWAY AS DIRECTED BY CA.

9. LOCATIONS OF DRIVEWAYS, WHEELCHAIR RAMPS, ETC. SHALL BE CONFIRMED IN THE FIELD PRIOR TO CONSTRUCTION OF THE PROPOSED CONCRETE CURB AND GUTTER.

10. DRIVEWAY CROSSINGS SHALL BE INSTALLED PER THE DETAILS ON THE ROADWORKS DESIGN DRAWINGS, AS DESCRIBED IN CONTRACT DOCUMENTS OR AS DIRECTED BY CONTRACT ADMINISTRATOR.

11. CHANGES IN GRADE SHALL BE FORMED WITH SMOOTH CURVES.

12. THE CONTRACTOR SHALL SAWCUT THE EXISTING PAVEMENT WHERE INDICATED ON THE DRAWING OR AS DIRECTED BY THE CA.

13. CATCH BASIN RIM ELEVATIONS SHALL BE SET 30mm BELOW THE FINISHED GUTTER LINE GRADES. THE GUTTER AND ROAD SURFACE AREA TO BE SHAPED TO FORM A DISH AROUND THE INLET.

14. TIE-IN TO EXISTING PAVEMENT SHALL BE MADE BY CUTTING BACK THE EXISTING PAVEMENT TO SOUND MATERIAL AS NECESSARY TO PRODUCE A NEAT VERTICAL FACE WITH STRAIGHT EDGE PRIOR TO PLACING HOT MIX ASPHALTIC CONCRETE. EXPOSED PAVEMENT SURFACES SHALL BE CLEANED, PAINTED WITH TACK COAT, AND HEATED TO 65 DEGREES CELSIUS. THE FINISHED PAVEMENT SURFACE SHALL BLEND IN SMOOTHLY WITH EXISTING PAVEMENT. THE EDGE OF PAVEMENT SHALL BE SAWCUT AND KEYED TO FORM A MINIMUM 300mm WIDE X 75mm DEEP LAP JOINT WITH PROPOSED PAVEMENT UNLESS NOTED OTHERWISE OR AS DIRECTED BY THE ENGINEER.

15. ALL PAVEMENT MARKINGS AND SIGNAGE TO BE REINSTATED IN THE PLACE OF WORK UNLESS OTHERWISE NOTED. CONTRACTOR RESPONSIBLE TO PERFORM PRE AND POST CONSTRUCTION SURVEY WORK ESSENTIAL FOR THE REINSTATEMENT OF PAVEMENT MARKINGS AND SIGNAGE.

    REINSTATE ALL PAVEMENT MARKINGS AND SIGNAGE AS PER THE LATEST VERSION OF THE M.U.T.C.D. CANADA STANDARD. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.

16. OVER-EXCAVATION: WHERE DIRECTED ON THE DESIGN DRAWINGS AND BY THE CONTRACT ADMINISTRATOR, EXCAVATE UNSUITABLE MATERIAL AND REPLACE WITH LIGHTWEIGHT FILL PER GEOTECHNICAL ENGINEERS RECOMMENDATIONS AND APPROVAL.

17. CONTRACTOR TO IDENTIFY ANY SURVEY MONUMENTS AND LEAD PLUGS THAT MAY BE DISTURBED DURING CONSTRUCTION AND ARRANGE WITH THE OWNER'S SURVEY DEPARTMENT 5 DAYS PRIOR TO CONSTRUCTION TO REFERENCE LOCATIONS BEFORE WORK COMMENCES.

18. PROOF ROLL BASE, ADD GRAVELS AS REQ'D, RECOMPACT, AND RESHAPE AS REQ'D PRIOR TO PAVING.

19. CLEAN AND TACK-COAT ALL ASPHALT SURFACES INCLUDING JOINTS PRIOR TO PAVING.

20. CONTRACTOR MUST SET THE SURVEY LAYOUT OF THE PROPOSED CURB AND GUTTER AND SIDEWALK. A WALKTHROUGH WITH THE CONTRACT ADMINISTRATOR IS REQUIRED AFTER THE LAYOUT IS DONE. ADJUSTMENTS OF BOULEVARD, SIDEWALK ELEVATIONS AND LAYOUT MUST BE DONE AS INSTRUCTED BY THE CONTRACT ADMINISTRATOR. THESE ADJUSTMENTS ARE INCIDENTAL TO THE CONTRACT.

ENVIRONMENTAL NOTES:

1. ALL WORK TO BE IN ACCORDANCE WITH MUNICIPAL, PROVINCIAL AND FEDERAL ENVIRONMENTAL REQUIREMENTS (BEST MANAGEMENT PRACTICES/GUIDELINES), INCLUDING ALL ASSOCIATED WORK AND OTHER WORKS NOT SPECIFIED ON THE CONTRACT DRAWINGS, BUT AS DIRECTED BY THE CONTRACT ADMINISTRATOR TO THE SATISFACTION OF THE PROJECT'S QUALIFIED ENVIRONMENTAL PROFESSIONAL.

2. CONTRACTOR IS RESPONSIBLE FOR BEING FAMILIAR WITH ALL MUNICIPAL, PROVINCIAL AND FEDERAL REQUIREMENTS.

3. THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN PREPARED BY A PROFESSIONAL ENGINEER OR CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL FOR APPROVAL BY THE CITY BEFORE STARTING ANY CONSTRUCTION.

4. AN APPROPRIATELY SIZED EMERGENCY SPILL KIT IS TO BE KEPT ON-SITE AT ALL TIMES THE CONTRACTOR IS OPERATING. SPILL KITS MUST INCLUDE BROOMS, SPILL PADS, GLOVES, AND CATCH BASIN BARRIERS.

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DEVELOP A SPILL RESPONSE PLAN THAT PROVIDES WRITTEN SAFE WORK PROCEDURES IN THE EVENT OF A SPILL.

6. CONTRACTOR TO PROVIDE TEMPORARY DRAINAGE AND GRADING AS REQUIRED IN AND AROUND THE SITE TO PROTECT THE EXCAVATION AND WORK AREA DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY DRAINAGE FROM INADEQUATE DRAINAGE PROTECTION. THE DISCHARGE OF ANY SUCH TEMPORARY WORKS SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ENVIRONMENTAL NOTES.

7. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING NO SEDIMENT OR SEDIMENT-LADEN WATER, RAW CONCRETE LEACHATE OR OTHER DELETERIOUS SUBSTANCE IS DISCHARGED FROM THE WORKS INTO ANY DITCH, WATERCOURSE, RAVINE AND STORM SEWER SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR TREATING AND FOR THE METHODS USED TO TREAT SEDIMENT-LADEN WATER.

8. CONTRACTOR TO MAINTAIN SILT CONTROL FACILITIES FROM CONTRACT START TO FINAL APPROVAL. CONTRACTOR IS RESPONSIBLE FOR TREATING AND FOR THE METHODS USED TO TREAT THE SITE RUNOFF TO ENSURE AT NO TIME DOES THE TOTAL SUSPENDED SOLIDS EXCEED 50 NTU. PH TO BE BETWEEN 6.5-8.5

9. AVOID EARTH DISTURBING ACTIVITIES DURING SUBSTANTIAL RAIN EVENTS.

10. ALL CATCH BASINS AND LAWN BASINS IN PROXIMITY TO THE SITE ARE TO BE FITTED WITH A SEDIMENT CONTROL DONUT (NILEX MEDIUM - PERMEABILITY 0.38 cms OR APPROVED EQUIVALENT) TO ENSURE STORM WATER QUALITY. CONTROL DEVICES TO BE MAINTAINED IN A FULLY FUNCTIONAL STATE AT ALL TIMES UNTIL FINAL COMPLETION OF THE WORKS.

11. CONTRACTOR IS RESPONSIBLE TO INSPECT ALL SILT CONTROL FACILITIES AND TO ENSURE MAINTENANCE OF ALL FACILITIES TO COMPLETION OF PROJECT.

12. SILT FENCE/FILTER FABRIC TO BE AMOCO 2130 AND AMOCO 4535 (C-10) RESPECTIVELY OR APPROVED EQUIVALENT.

TRAFFIC MANAGEMENT NOTES

1. REFER TO APPENDIX A - TRAFFIC MANAGEMENT DETAIL SPECIFICATIONS FOR DETAILS

2. A FULL ROAD CLOSURE OF LUCILLE STARR DRIVE WILL BE PERMITTED BETWEEN DRIVEWAY ACCESSES. DRIVEWAY ACCESS MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION EXCEPT AS PER NOTE 3.

3. WORK SHALL BE SCHEDULED SUCH THAT THE FULL-WIDTH EXCAVATION AND BACKFILL OF THE LIGHT WEIGHT FILL ZONE BE COMPLETED OVER A WEEKEND ROAD AND DRIVEWAY CLOSURE FROM FRIDAY PM THROUGH MONDAY AM WHILE BUSINESSES ARE CLOSED. DRIVEWAY ACCESS SHALL BE REINSTATED PRIOR TO BUSINESSES OPENING ON MONDAY MORNING.

4. THE EAST AND WEST APPROACHES SHALL BE COMPLETED ON DIFFERENT WEEKEND SHUTDOWNS.

5. DRIVEWAY ACCESS SHALL BE MAINTAINED AT ALL OTHER TIMES. WHERE REQUIRED, DRIVEWAY LETDOWNS SHALL BE POURED IN TWO POURS TO ALLOW FOR CONTINUOUS DRIVEWAY ACCESS.

NOT TO SCALE

2025-01-22

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Edge of pavement	Hydrant	Sanitary service	Hydro Guy Wire
Watermain and valve (W)	Water air valve	Sanitary cleanout	Hydro Kiosk
Drainage sewer, MH (D)	Water blowoff	Utility pole(joint pole)	Vegetation Conifer
Drainage ditch	Water service	Utility pole with light	Vegetation Deciduous
Sanitary sewer, MH (S)	Catch basin, top inlet	Streetlight, davit	Vegetation Shrub
Sanitary forcemain (SFM)	Catch basin, side inlet	Streetlight, post top	Survey Traverse Hub
Gasmain and valve (G)	Catch basin, round	Comb signal pole (TS)	Survey Iron Pin (OIP)
Hydro duct, MH (H)	Drainage service	Traffic signal pole	Survey Lead Plug
Telephone duct, MH (T)	Drainage cleanout	Junction box (J)	Survey Monument

No.	Date	By	Revisions
5	2025-01-10	LY	ISSUED FOR TENDER
4	2024-12-09	LY	ISSUED FOR COORDINATION
3	2024-09-03	SL	ISSUED FOR TENDER COORDINATION
2	2024-04-26	SL	ISSUED FOR 90% REVIEW
1	2024-02-19	RC	ISSUED FOR 50% REVIEW

Design by GL/RC — Date
Drawn by LY — Date
Checked by MJ — Date
Approved by GL — Date

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3000 Guildford Way, Coquitlam, B.C. V3B 7N2

Scale horiz. N.T.S. Scale vert. N.T.S.
Sheet 01 of 06
Eng. Project No. 23-0147

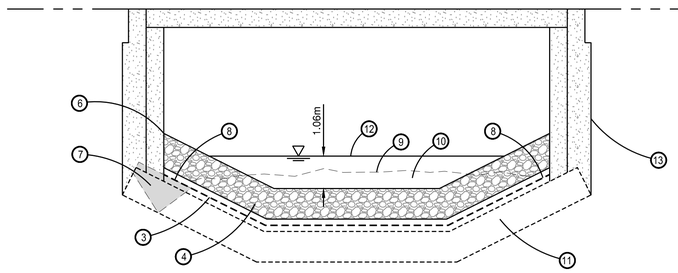
Project: LUCILLE STARR DRIVE AT BOOTH CREEK
Description: NOTES AND DETAILS
File: 23-0147-N2-1 REV. 5

Plot Date: January 10, 2025

PLOTTED: 2025-01-10 11:25:06 AM FILE: P:\2023\23-0147\00 - CAD FILES\DWG\FINAL\23-0147 - COVER

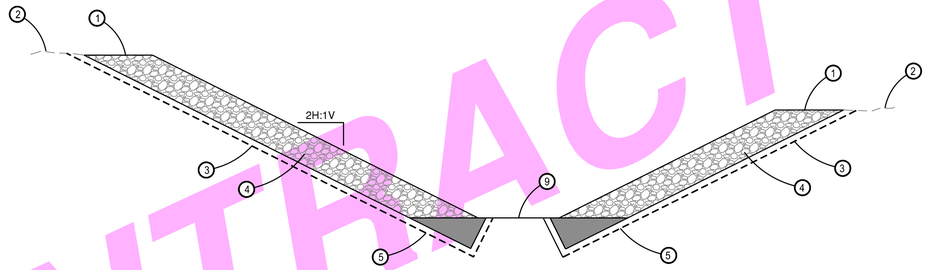
RIP RAP NOTES

1. CONTRACTOR TO CONFIRM UNDERGROUND UTILITY LOCATIONS, INCLUDING GAS MAIN, BEFORE EXCAVATION VIA BC ONE CALL. EXERCISE CAUTION DURING EXCAVATION TO AVOID DAMAGING UTILITIES. USE PROPER TECHNIQUES AND EQUIPMENT AND FOLLOW SAFETY PROTOCOLS TO PROTECT PERSONNEL AND THE ENVIRONMENT.
2. CONTRACTOR TO MAINTAIN ALL EXISTING PIPE OUTFALLS OPEN DURING AND AFTER INSTALLING RIP RAP PROTECTION.
3. THE PROPOSED RIP RAP SIZE WAS DETERMINED BASED ON AVAILABLE INFORMATION, WITHOUT DETAILED HYDROLOGIC AND HYDRAULIC ANALYSIS. THE EXISTING BRIDGE IS UNDER-SIZED, AND FURTHER EVALUATION FOR LONG-TERM REHABILITATION OF THE CROSSING IS RECOMMENDED.



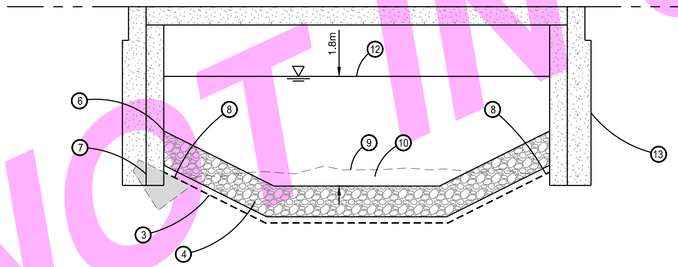
RIP RAP DETAIL SECTION 2 - SCHOOLHOUSE ST

N.T.S.



RIP RAP DETAIL SECTION 1

N.T.S.



RIP RAP DETAIL SECTION 2 - LUCILLE STARR DR

N.T.S.

1. EXTEND TOP OF RIP RAP ELEV. TO THE EX. TOP OF BANK
2. EX. TOP OF BANK
3. INSTALL GEOTEXTILE NILEX 4510 OR APPROVED EQUIVALENT
4. RIP RAP CLASS 50kg, MINIMUM 0.55m THICKNESS, ON 2H:1V SLOPE OR FLATTER
5. KEY RIP RAP TO CHANNEL BED, MINIMUM 1.0m DEPTH
6. EXTEND TOP OF RIP RAP TO MINIMUM 1.0m FROM THE BED OR ELEV. 2.9, WHICHEVER IS HIGHER
7. INFILL SCOURED HOLE BELOW THE ABUTMENT ON EITHER SIDES WITH NATIVE MATERIAL, WHERE APPLICABLE
8. EXPOSED STRUT, ABOVE THE EX. GROUND
9. EX. CHANNEL BED
10. EXCAVATE THE GROUND TO THE DEPTH OF THE ABUTMENT STRUT, INSTALL GEOTEXTILE AND RIP RAP MIN. 1.0m DEPTH, THEN BACKFILL WITH 0.3m OF NATURAL MATERIAL TO REPLICATE THE NATURAL CHANNEL BED.
11. EX. BURIED ABUTMENT STRUT, UNDER THE EX. GROUND
12. 2-YEAR HWL
13. EX. BRIDGE STRUCTURE TO REMAIN

W. G. LAU
41080
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
2025-01-22

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NOT TO SCALE

NOT FOR CONSTRUCTION ***TENDER***

Edge of pavement		Hydrant		Sanitary service		Hydro Guy Wire	
Watermain and valve	W	Water air valve		Sanitary cleanout		Hydro Kiosk	
Drainage sewer, MH	D	Water blowoff		Utility pole(joint pole)		Vegetation Conifer	
Drainage ditch		Water service		Utility pole with light		Vegetation Deciduous	
Sanitary sewer, MH	S	Catch basin, top inlet		Streetlight, davit		Vegetation Shrub	
Sanitary forcemain	SFM	Catch basin, side inlet		Streetlight, post top		Survey Traverse Hub	
Gasmain and valve	G	Catch basin, round		Comb signal pole		Survey Iron Pin	
Hydro duct, MH	H	Drainage service		Traffic signal pole		Survey Lead Plug	
Telephone duct, MH	T	Drainage cleanout		Junction box		Survey Monument	

No.	Date	By	Revisions
4	2025-01-10	LY	ISSUED FOR TENDER
3	2024-12-09	LY	ISSUED FOR COORDINATION
2	2024-09-03	SL	ISSUED FOR TENDER COORDINATION
1	2024-04-26	SL	ISSUED FOR 90% REVIEW

Design by GL/RC — Date
Drawn by LY — Date
Checked by MJ — Date
Approved by GL — Date

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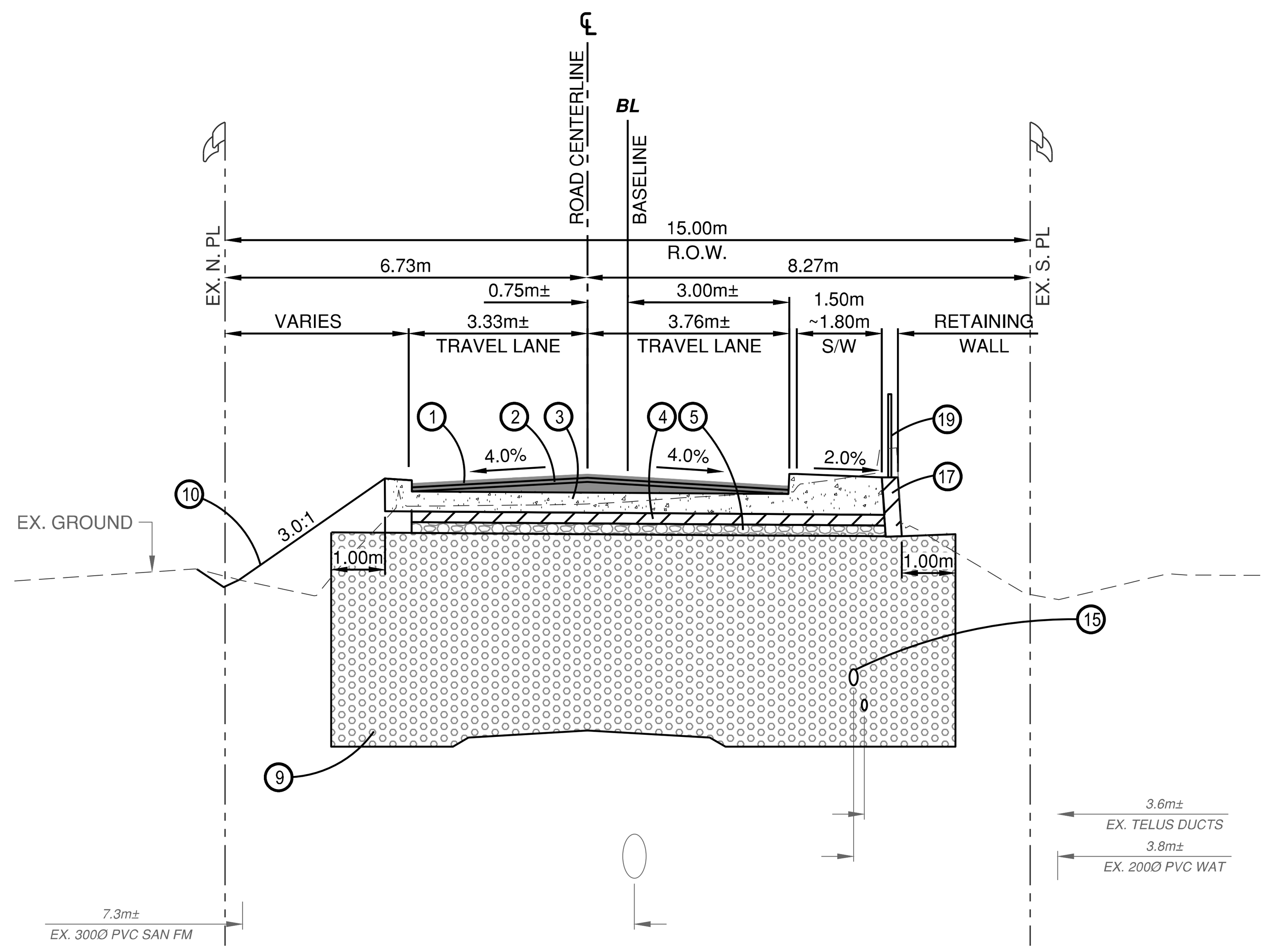
Scale horiz. N.T.S. Scale vert. N.T.S.
Sheet 02 of 06
Eng. Project No. 23-0147

Project: LUCILLE STARR DRIVE AT BOOTH CREEK
Description: NOTES AND DETAILS
File: 23-0147-N2-2 REV. 4

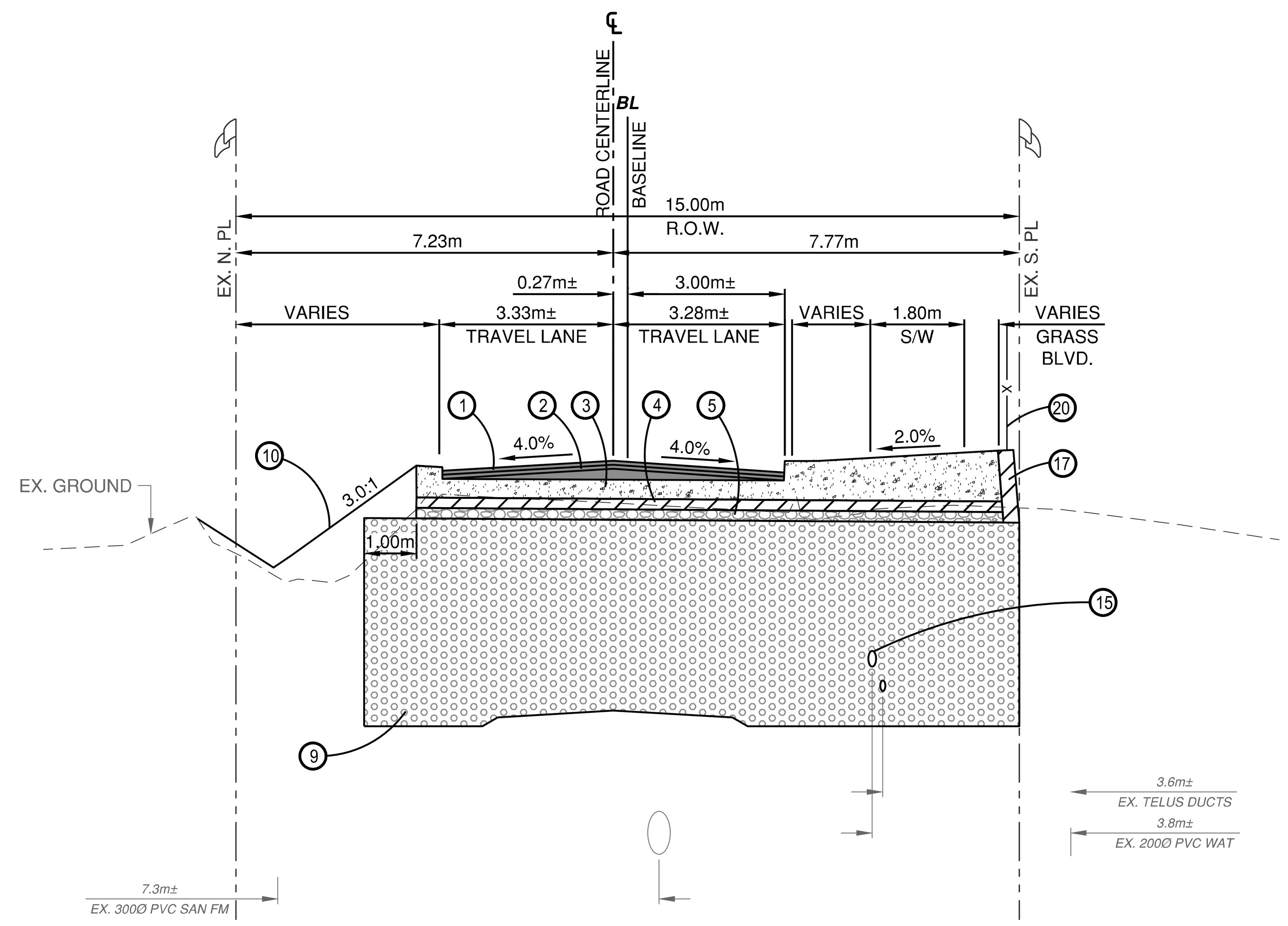
PLOTTED: 2025-01-10 | 2:25:37 AM FILE: P:\2023\23-0147\05 - CAD FILES\DWG\FINAL\23-0147 - COVER SHEET & NOTES - LUCILLE STARR DR\DWG LAYOUT: P 23-0147-N2-2 USER: LVU

Plot Date: January 10, 2025



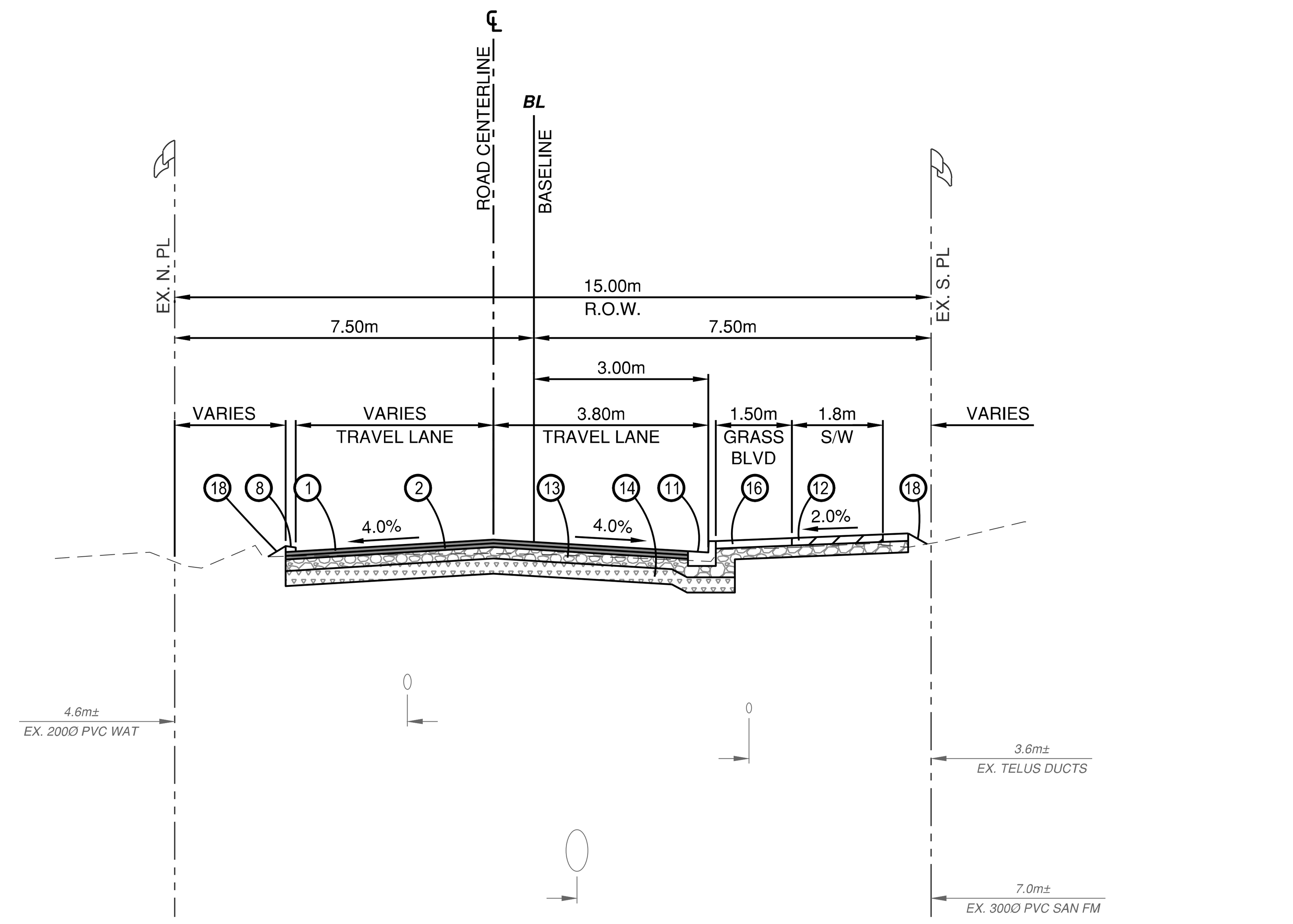
WEST APPROACH CONCRETE SLAB TYPICAL SECTION

FROM STA. 2+167.41 TO STA. 2+173.40
N.T.S.



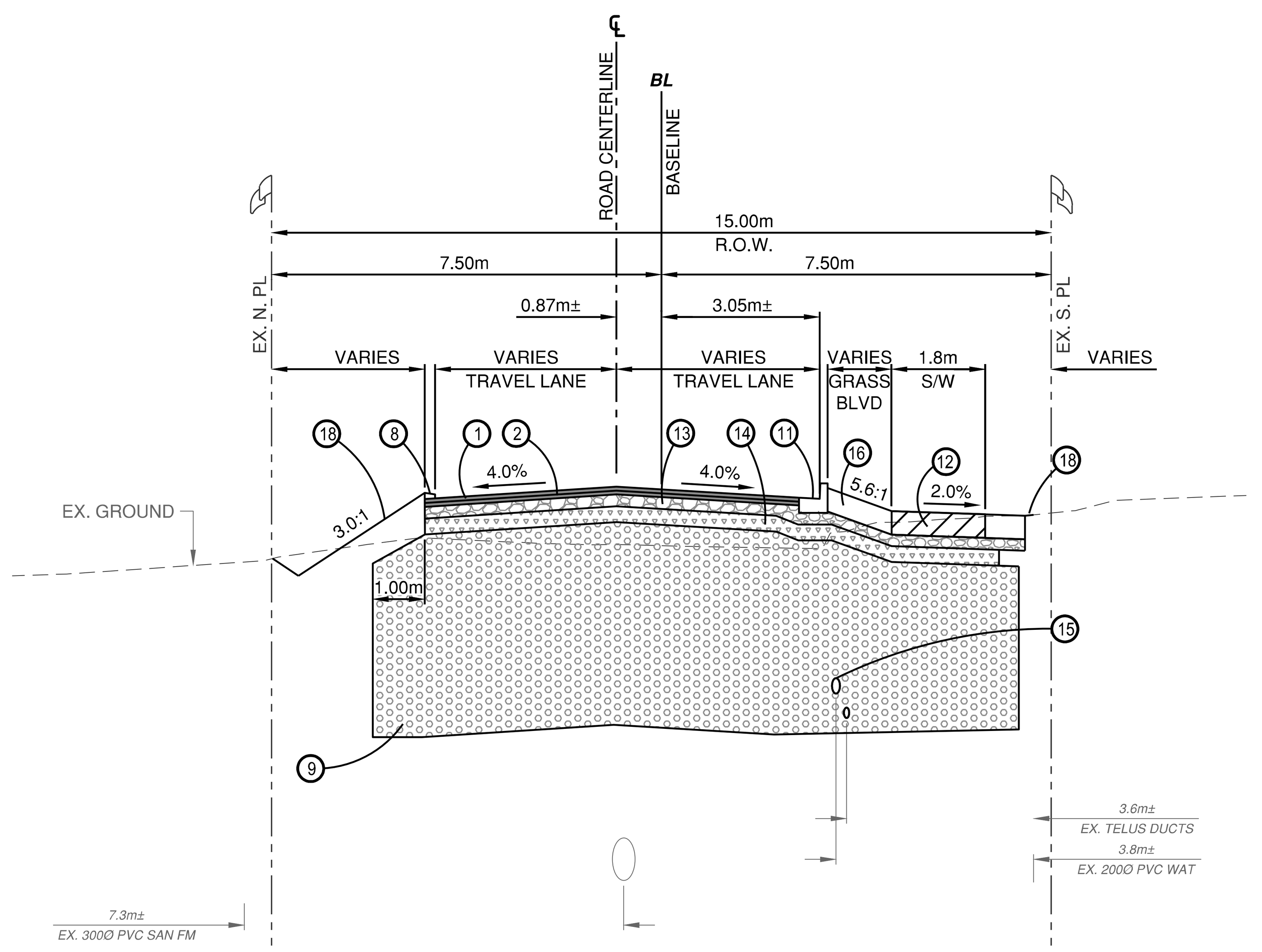
EAST APPROACH CONCRETE SLAB TYPICAL SECTION

STA. 2+182.43 TO STA. 2+188.41
N.T.S.



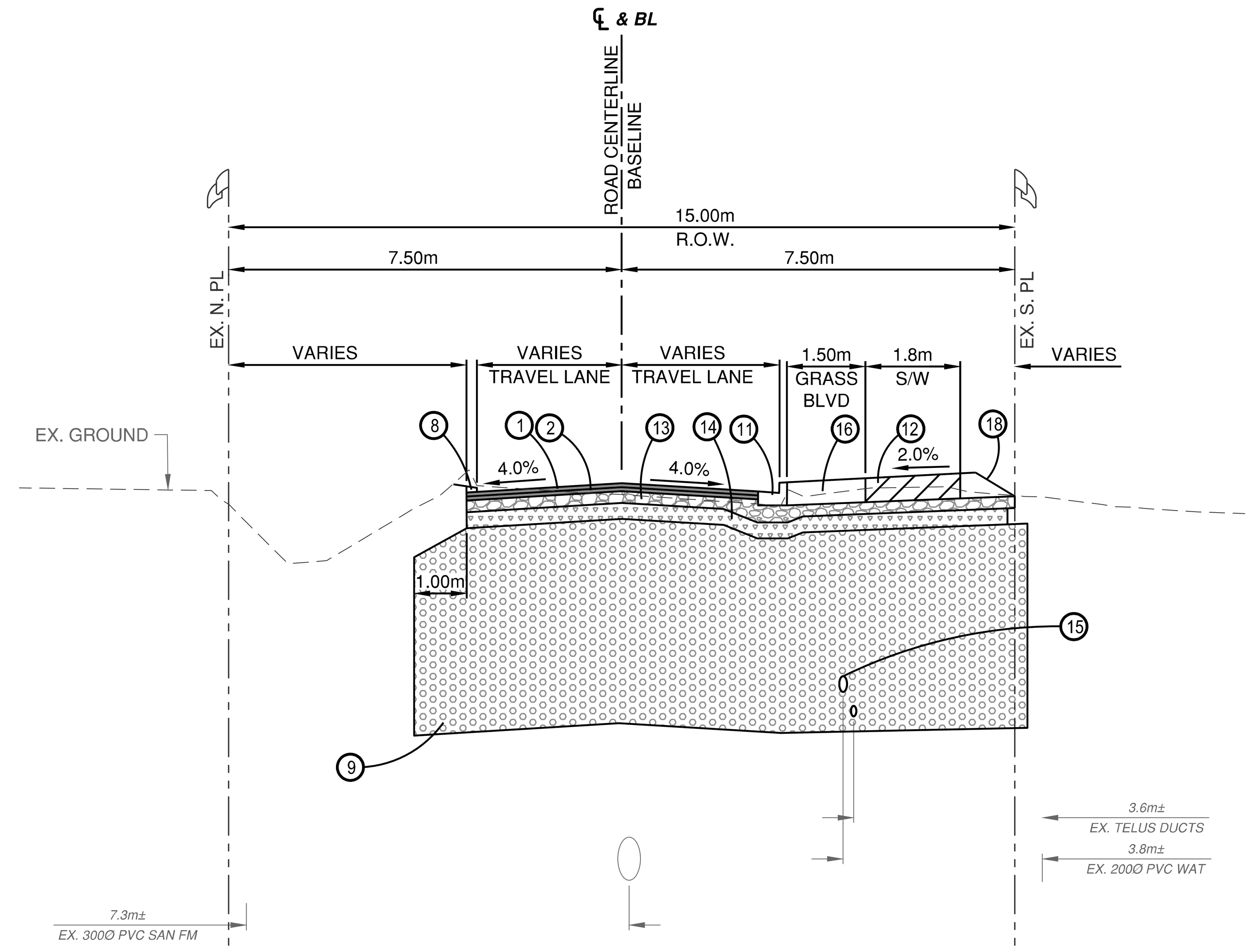
LUCILLE STARR DR TYPICAL SECTION

FROM STA. 2+134.09 TO STA. 2+148.40
STA. 2+207.43 TO STA. 2+227.00
N.T.S.



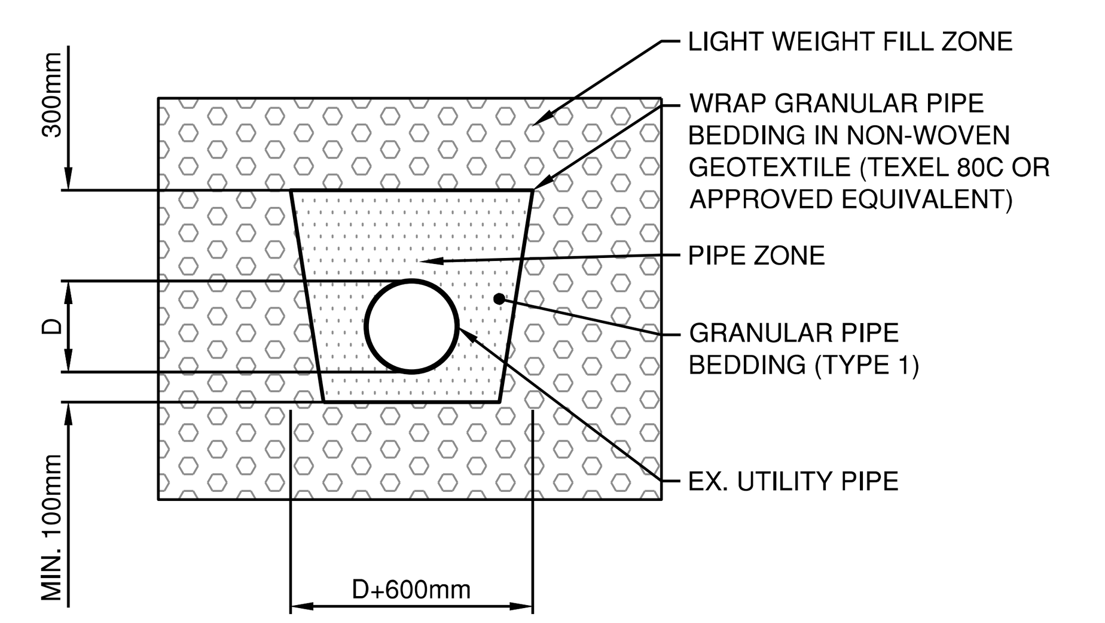
WEST LIGHT WEIGHT FILL TYPICAL SECTION

FROM STA. 2+149.50 TO STA. 2+173.50
N.T.S.



EAST LIGHT WEIGHT FILL TYPICAL SECTION

STA. 2+182.50 TO STA. 2+206.50
N.T.S.



REINSTATEMENT OF EX. UTILITY PIPE WITHIN LIGHT WEIGHT FILL ZONE

N.T.S.

1. 50mm THICK - MMCD UC#1 ASPHALT
2. 50mm THICK - MMCD LC#1 ASPHALT
PLACE ADDITIONAL LEVELING COURSE OF LC#1 OVER APPROACH SLAB AND BRIDGE DECK AS REQUIRED.
3. 300mm THICK REINFORCED CAST-IN-PLACE CONCRETE APPROACH SLAB AS PER STRUCTURAL DESIGN c/w CIP PARAPETS, SIDEWALKS AND CURBS
4. TWO LAYERS OF 6mm POLYETHYLENE SHEET BETWEEN CONCRETE SLAB AND 19mm CLEAR CRUSHED GRAVEL
5. 150mm THICK - 19mm CLEAR CRUSHED GRAVEL
6. CONCRETE CURB AS PER MMCD C5
7. PROP. CONCRETE SIDEWALK AS PER MMCD C1 (100mm THICK)
8. ASPHALT CURB AS PER MMCD C6 STYLE 1
9. 2.00m THICK LAYER OF LIGHT WEIGHT PUMICE (RED VESICULAR BASALT) WRAPPED IN NON-WOVEN GEOTEXTILE (TEXEL 80C OR APPROVED EQUIVALENT)
10. REGRADE EXISTING DITCH TO SUIT NEW GRADES
11. BARRIER TYPE CONCRETE CURB AND GUTTER AS PER MMCD C5
12. 100mm THICK CONCRETE SIDEWALK AS PER MMCD C1
13. 150mm THICK - 19mm MINUS CRUSHED GRANULAR BASE COMPACTED TO MIN. 95% M.P.D.
14. 300mm THICK - 75mm MINUS CRUSHED GRANULAR SUBBASE COMPACTED TO MIN. 95% M.P.D.
15. EXISTING PIPE TO BE SUPPORTED DURING CONSTRUCTION AND REINSTATED WITH PIPE BEDDING/ CUSHION C/W GEOTEXTILE SURROUND. SEE DETAIL IN THIS PAGE.
16. GRASS BOULEVARD
17. ALLAN BLOCK RETAINING WALL - REFER TO KONTUR GEOTECHNICAL DRAWINGS FOR DETAILS
18. REGRADE TO SUIT EXISTING GROUND
19. PROP. 1.20m HIGH HANDRAIL AS PER MMCD C14
20. PROP. FENCE AS PER MMCD C13

REFER TO LATEST GEOTECHNICAL REPORT PREPARED BY KONTUR FOR SUBGRADE PREP, LIGHTWEIGHT FILL GEOTEXTILE SPECIFICATIONS AND PLACEMENT METHODS. MATERIALS AND SUBGRADE TO BE REVIEWED BY GEOTECHNICAL ENGINEER.

CONTRACTOR TO ENGAGE A GEOTECHNICAL ENGINEER TO COMPLY WITH MMCD GENERAL CONDITIONS 4.2, 4.3, AND 4.4

PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, W. G. LAU, 40560
EGBC PERMIT No. 1001128

NOT TO SCALE

NOT FOR CONSTRUCTION **TENDER**

Edge of pavement; Watermain and valve; Drainage sewer, MH; Drainage ditch; Sanitary sewer, MH; Sanitary forcemain; Gasmain and valve; Hydro duct, MH; Telephone duct, MH; Hydrant; Water air valve; Water blowoff; Water service; Catch basin, top inlet; Catch basin, side inlet; Catch basin, round; Drainage service; Drainage cleanout; Sanitary service; Sanitary cleanout; Utility pole(joint pole); Utility pole with light; Streetlight, davit; Streetlight, post top; Comb signal pole; Traffic signal pole; Junction box; Hydro Guy Wire; Hydro Kiosk; Vegetation Conifer; Vegetation Deciduous; Vegetation Shrub; Survey Traverse Hub; Survey Iron Pin; Survey Lead Plug; Survey Monument

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Design by GL/RC — Date
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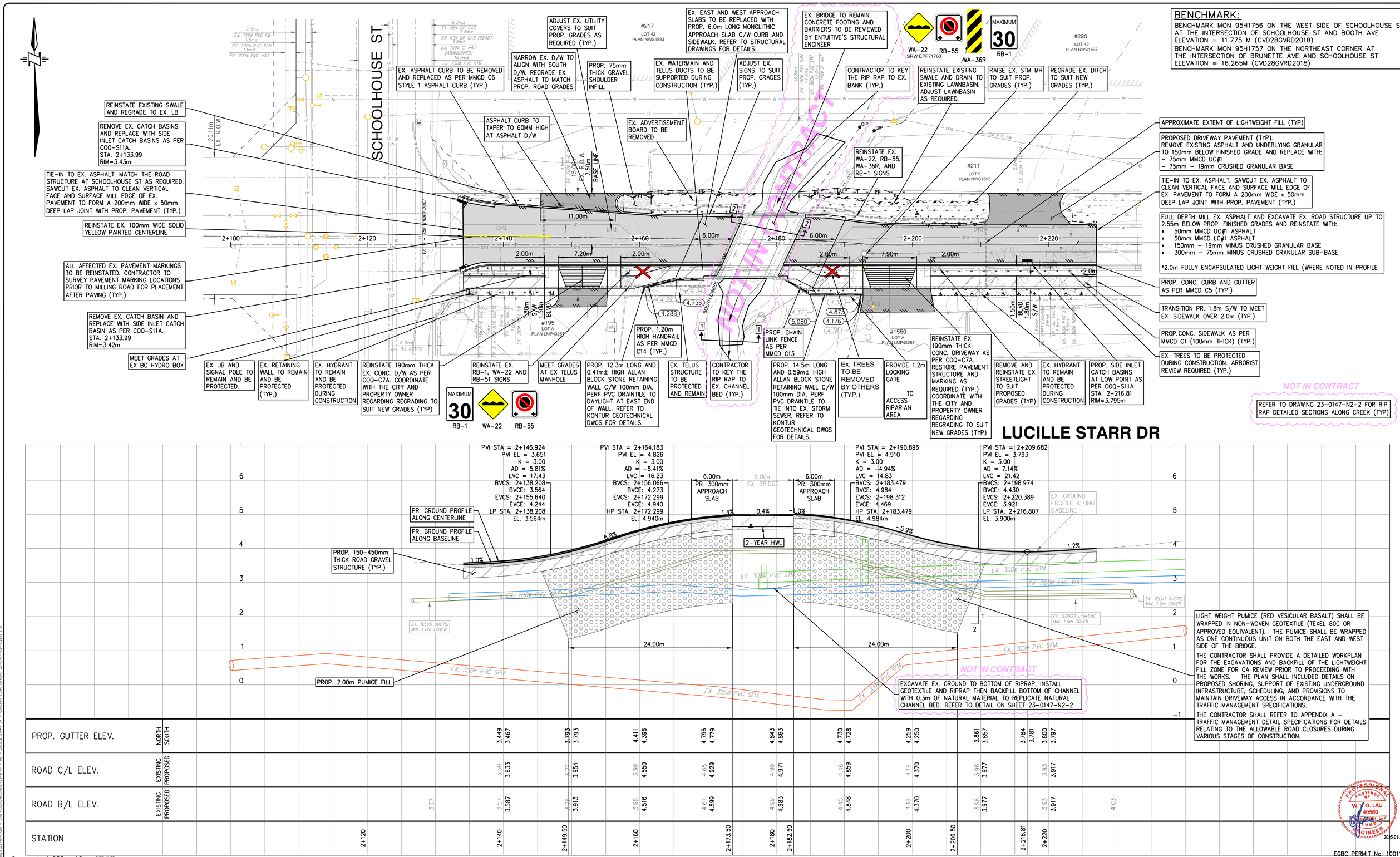
Coquitlam — Engineering & Public Works — 3000 Guildford Way, Coquitlam, B.C. V3B 7N2

Scale horiz. N.T.S. Scale vert. N.T.S.
Sheet 03 of 06
Eng. Project No. 23-0147

Project: LUCILLE STARR DRIVE AT BOOTH CREEK
Description: TYPICAL SECTIONS
File: 23-0147-TS2 REV. 4

Plot Date: January 10, 2025



BENCHMARK:

BENCHMARK MON 95H1756 ON THE WEST SIDE OF SCHOOLHOUSE ST AT THE INTERSECTION OF SCHOOLHOUSE ST AND BOOTH AVE ELEVATION = 11.775 M (CVD28GVRD2018)

BENCHMARK MON 95H1757 ON THE NORTHEAST CORNER AT THE INTERSECTION OF BRUNETTE AVE AND SCHOOLHOUSE ST ELEVATION = 16.265M (CVD28GVRD2018)

REINSTATE EXISTING SWALE AND REGRADE TO EX. LB

REMOVE EX. CATCH BASINS AND REPLACE WITH SIDE INLET CATCH BASINS AS PER COQ-S11A. STA. 2+133.99 RIM=3.43m

TIE-IN TO EX. ASPHALT. MATCH THE ROAD STRUCTURE AT SCHOOLHOUSE ST AS REQUIRED. SAWCUT EX. ASPHALT TO CLEAN VERTICAL FACE AND SURFACE MILL EDGE OF EX. PAVEMENT TO FORM A 200mm WIDE x 50mm DEEP LAP JOINT WITH PROP. PAVEMENT (TYP.)

REINSTATE EX. 100mm WIDE SOLID YELLOW PAINTED CENTERLINE

ALL AFFECTED EX. PAVEMENT MARKINGS TO BE REINSTATED. CONTRACTOR TO SURVEY PAVEMENT MARKING LOCATIONS PRIOR TO MILLING ROAD FOR PLACEMENT AFTER PAVING (TYP.)

REMOVE EX. CATCH BASIN AND REPLACE WITH SIDE INLET CATCH BASIN AS PER COQ-S11A. STA. 2+133.99 RIM=3.42m

MEET GRADES AT EX BC HYDRO BOX

EX. ASPHALT CURB TO BE REMOVED AND REPLACED AS PER MMCD C6 STYLE 1 ASPHALT CURB (TYP.)

NARROW EX. D/W TO ALIGN WITH SOUTH D/W. REGRADE EX. ASPHALT TO MATCH PROP. ROAD GRADES

ADJUST EX. UTILITY COVERS TO SUIT PROP. GRADES AS REQUIRED (TYP.)

ASPHALT CURB TO TAPER TO 60MM HIGH AT ASPHALT D/W

PROP. 75mm THICK GRAVEL SHOULDER INFILL

EX. ADVERTISEMENT BOARD TO BE REMOVED

EX. WATERMAIN AND TELUS DUCTS TO BE SUPPORTED DURING CONSTRUCTION (TYP.)

EX. EAST AND WEST APPROACH SLABS TO BE REPLACED WITH PROP. 6.0m LONG MONOLITHIC APPROACH SLAB C/W CURB AND SIDEWALK. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.

ADJUST EX. SIGNS TO SUIT PROP. GRADES (TYP.)

EX. BRIDGE TO REMAIN. CONCRETE FOOTING AND BARRIERS TO BE REVIEWED BY ENTUITIVE'S STRUCTURAL ENGINEER

CONTRACTOR TO KEY THE RIP RAP TO EX. BANK (TYP.)

REINSTATE EX. WA-22, RB-55, WA-36R, AND RB-1 SIGNS

REINSTATE EXISTING SWALE AND DRAIN TO EXISTING LAWNBASIN. ADJUST LAWNBASIN AS REQUIRED.

RAISE EX. STM MH TO SUIT PROP. GRADES (TYP.)

REGRADE EX. DITCH TO SUIT NEW GRADES (TYP.)

APPROXIMATE EXTENT OF LIGHTWEIGHT FILL (TYP)

PROPOSED DRIVEWAY PAVEMENT (TYP).
REMOVE EXISTING ASPHALT AND UNDERLYING GRANULAR TO 150mm BELOW FINISHED GRADE AND REPLACE WITH:
- 75mm MMCD UC#1
- 75mm – 19mm CRUSHED GRANULAR BASE

TIE-IN TO EX. ASPHALT. SAWCUT EX. ASPHALT TO CLEAN VERTICAL FACE AND SURFACE MILL EDGE OF EX. PAVEMENT TO FORM A 200mm WIDE x 50mm DEEP LAP JOINT WITH PROP. PAVEMENT (TYP.)

FULL DEPTH MILL EX. ASPHALT AND EXCAVATE EX. ROAD STRUCTURE UP TO 2.55m BELOW PROP. FINISHED GRADES AND REINSTATE WITH:
- 50mm MMCD UC#1 ASPHALT
- 50mm MMCD LC#1 ASPHALT
- 150mm – 19mm MINUS CRUSHED GRANULAR BASE
- 300mm – 75mm MINUS CRUSHED GRANULAR SUB-BASE

*2.0m FULLY ENCAPSULATED LIGHT WEIGHT FILL (WHERE NOTED IN PROFILE

PROP. CONC. CURB AND GUTTER AS PER MMCD C5 (TYP.)

TRANSITION PR. 1.8m S/W TO MEET EX. SIDEWALK OVER 2.0m (TYP.)

PROP.CONC. SIDEWALK AS PER MMCD C1 (100mm THICK) (TYP.)

EX. TREES TO BE PROTECTED DURING CONSTRUCTION. ARBORIST REVIEW REQUIRED (TYP.)

NOT IN CONTRACT

REFER TO DRAWING 23-0147-N2-2 FOR RIP RAP DETAILED SECTIONS ALONG CREEK (TYP)

EX. JB AND SIGNAL POLE TO REMAIN AND BE PROTECTED.

EX. RETAINING WALL TO REMAIN AND BE PROTECTED (TYP.)

EX. HYDRANT TO REMAIN AND BE PROTECTED DURING CONSTRUCTION

REINSTATE 190mm THICK EX. CONC. D/W AS PER COQ-C7A. COORDINATE WITH THE CITY AND PROPERTY OWNER REGARDING REGRADING TO SUIT NEW GRADES (TYP)

REINSTATE EX. RB-1, WA-22 AND RB-51 SIGNS

MEET GRADES AT EX TELUS MANHOLE

PROP. 1.20m HIGH HANDRAIL AS PER MMCD C14 (TYP.)

PROP. 12.3m LONG AND 0.41m± HIGH ALLAN BLOCK STONE RETAINING WALL C/W 100mm DIA. PERF PVC DRAINTILE TO DAYLIGHT AT EAST END OF WALL. REFER TO KONTUR GEOTECHNICAL DWGS FOR DETAILS.

EX. TELUS STRUCTURE TO BE PROTECTED AND REMAIN

CONTRACTOR TO KEY THE RIP RAP TO EX. CHANNEL BED (TYP.)

PROP. CHAIN LINK FENCE AS PER MMCD C13

PROP. 14.5m LONG AND 0.59m± HIGH ALLAN BLOCK STONE RETAINING WALL C/W 100mm DIA. PERF PVC DRAINTILE TO TIE INTO EX. STORM SEWER. REFER TO KONTUR GEOTECHNICAL DWGS FOR DETAILS.

Ex. TREES TO BE REMOVED BY OTHERS (TYP.)

PROVIDE 1.2m LOCKING GATE TO ACCESS RIPARIAN AREA

REINSTATE EX. 190mm THICK CONC. DRIVEWAY AS PER COQ-C7A. RESTORE PAVEMENT STRUCTURE AND MARKING AS REQUIRED (TYP.) COORDINATE WITH THE CITY AND PROPERTY OWNER REGARDING REGRADING TO SUIT NEW GRADES (TYP)

REMOVE AND REINSTATE EX. STREETLIGHT TO SUIT PROPOSED GRADES (TYP)

EX. HYDRANT TO REMAIN AND BE PROTECTED DURING CONSTRUCTION

PROP. SIDE INLET CATCH BASINS AT LOW POINT AS PER COQ-S11A STA. 2+216.81 RIM=3.795m

LUCILLE STARR DR

PVI STA = 2+146.924
PVI EL = 3.651
K = 3.00
AD = 5.81%
LVC = 17.43
BVCS: 2+138.208
BVCE: 3.564
EVCS: 2+155.640
EVCE: 4.244
LP STA. 2+138.208
EL. 3.564m

PVI STA = 2+164.183
PVI EL = 4.826
K = 3.00
AD = –5.41%
LVC = 16.23
BVCS: 2+156.066
BVCE: 4.273
EVCS: 2+172.299
EVCE: 4.940
HP STA. 2+172.299
EL. 4.940m

PVI STA = 2+190.896
PVI EL = 4.910
K = 3.00
AD = –4.94%
LVC = 14.83
BVCS: 2+183.479
BVCE: 4.984
EVCS: 2+198.312
EVCE: 4.469
HP STA. 2+183.479
EL. 4.984m

PVI STA = 2+209.682
PVI EL = 3.793
K = 3.00
AD = 7.14%
LVC = 21.42
BVCS: 2+198.974
BVCE: 4.430
EVCS: 2+220.389
EVCE: 3.921
LP STA. 2+216.807
EL. 3.900m

PR. GROUND PROFILE ALONG CENTERLINE

PR. GROUND PROFILE ALONG BASELINE

PROP. 150–450mm THICK ROAD GRAVEL STRUCTURE (TYP.)

6.00m PR. 300mm APPROACH SLAB

6.00m PR. 300mm APPROACH SLAB

1.0% 6.8% 1.4% 0.4% –1.0% –5.9% 1.2%

PROP. 2.00m PUMICE FILL

EXCAVATE EX. GROUND TO BOTTOM OF RIPRAP, INSTALL GEOTEXTILE AND RIPRAP THEN BACKFILL BOTTOM OF CHANNEL WITH 0.3m OF NATURAL MATERIAL TO REPLICATE NATURAL CHANNEL BED. REFER TO DETAIL ON SHEET 23-0147-N2-2

LIGHT WEIGHT PUMICE (RED VESICULAR BASALT) SHALL BE WRAPPED IN NON-WOVEN GEOTEXTILE (TEXEL 80C OR APPROVED EQUIVALENT). THE PUMICE SHALL BE WRAPPED AS ONE CONTINUOUS UNIT ON BOTH THE EAST AND WEST SIDE OF THE BRIDGE.

THE CONTRACTOR SHALL PROVIDE A DETAILED WORKPLAN FOR THE EXCAVATIONS AND BACKFILL OF THE LIGHTWEIGHT FILL ZONE FOR CA REVIEW PRIOR TO PROCEEDING WITH THE WORKS. THE PLAN SHALL INCLUDED DETAILS ON PROPOSED SHORING, SUPPORT OF EXISTING UNDERGROUND INFRASTRUCTURE, SCHEDULING, AND PROVISIONS TO MAINTAIN DRIVEWAY ACCESS IN ACCORDANCE WITH THE TRAFFIC MANAGEMENT SPECIFICATIONS.

THE CONTRACTOR SHALL REFER TO APPENDIX A – TRAFFIC MANAGEMENT DETAIL SPECIFICATIONS FOR DETAILS RELATING TO THE ALLOWABLE ROAD CLOSURES DURING VARIOUS STAGES OF CONSTRUCTION.

PROP. GUTTER ELEV.	NORTH			3.449	3.793	4.411	4.796		4.843		4.730	4.259		3.861	3.784	3.800	
	SOUTH			3.467	3.793	4.396	4.779		4.863		4.728	4.250		3.857	3.781	3.797	
ROAD C/L ELEV.	EXISTING			3.59	3.77	3.99	4.65		4.99		4.46	4.16		3.98		3.93	
	PROPOSED			3.633	3.954	4.550	4.929		4.971		4.859	4.370		3.977		3.917	
ROAD B/L ELEV.	EXISTING		3.57	3.57	3.76	3.98	4.67		4.99		4.45	4.16		3.98		3.93	4.03
	PROPOSED			3.587	3.913	4.516	4.899		4.983		4.848	4.370		3.977		3.917	
STATION		2+120		2+140	2+149.50	2+160		2+173.50	2+180	2+182.50		2+200	2+206.50		2+216.81	2+220	

0 H 1:250 10m
0 V 1:50 2m

W. G. LAU
40560
2025-01-22

EGBC PERMIT No. 1001128

NOT FOR CONSTRUCTION

TENDER

Edge of pavement	───	Hydrant		Sanitary service		Hydro Guy Wire	→
Watermain and valve	W	Water air valve		Sanitary cleanout	☐	Hydro Kiosk	H
Drainage sewer, MH	D	Water blowoff		Utility pole(joint pole)		Vegetation Conifer	
Drainage ditch		Water service		Utility pole with light		Vegetation Deciduous	
Sanitary sewer, MH	S	Catch basin, top inlet		Streetlight, davit		Vegetation Shrub	
Sanitary forcemain	SFM	Catch basin, side inlet		Streetlight, post top		Survey Traverse Hub	△
Gasmain and valve	G	Catch basin, round		Comb signal pole	TS	Survey Iron Pin	● OIP
Hydro duct, MH	H	Drainage service		Traffic signal pole		Survey Lead Plug	■
Telephone duct, MH	T	Drainage cleanout	☐	Junction box	J	Survey Monument	

No.	Date	By	Revisions
5	2025-01-10	LY	ISSUED FOR TENDER
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3	2024-09-03	SL	ISSUED FOR TENDER COORDINATION
2	2024-04-26	SL	ISSUED FOR 90% REVIEW
1	2024-02-19	RC	ISSUED FOR 50% REVIEW

Design by GL/RC Date
Drawn by LY Date
Checked by MJ Date
Approved by GL Date

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Engineering & Public Works
3000 Guildford Way, Coquitlam, B.C. V3B 7N2

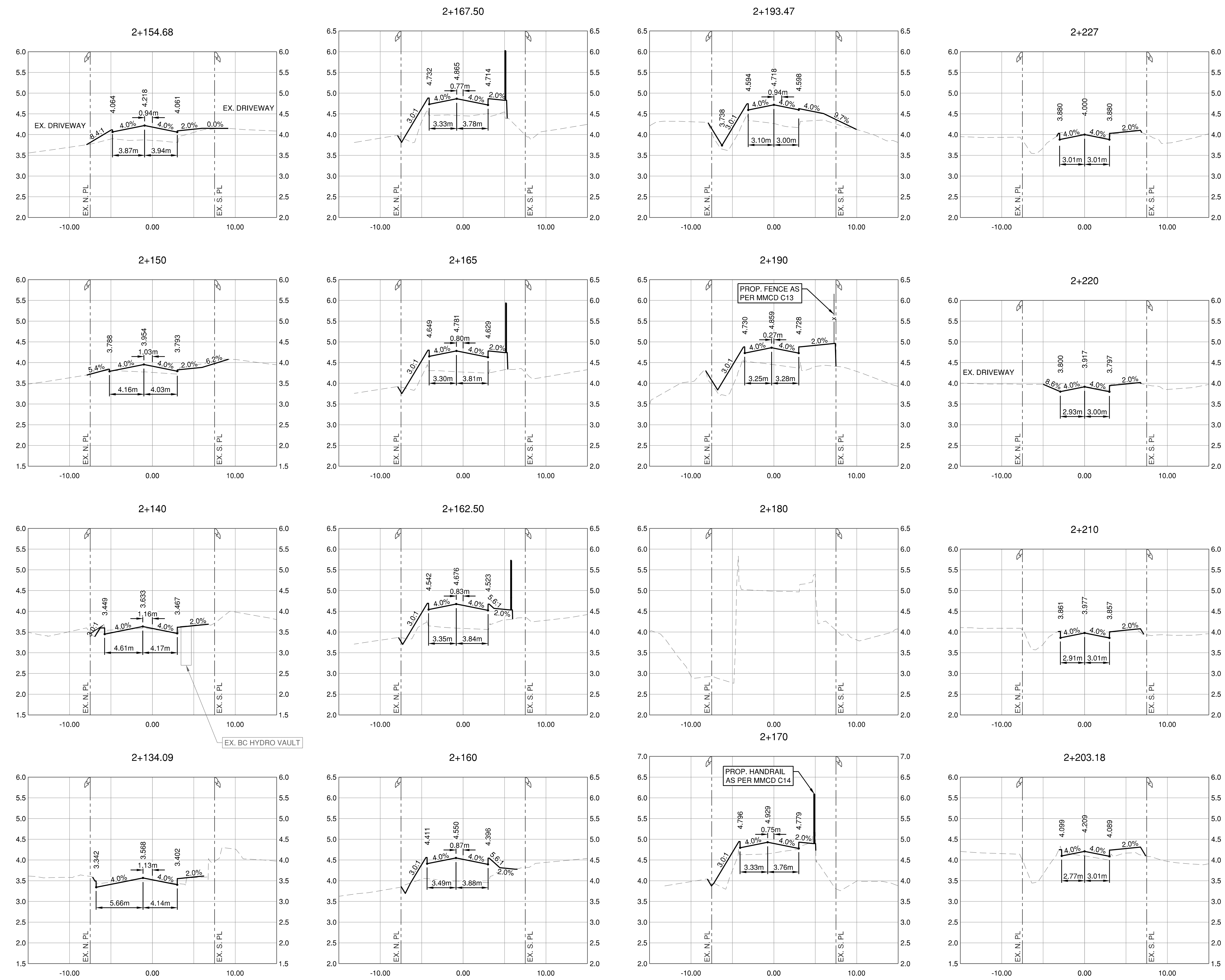
Scale horiz. 1:250 Scale vert. 1:50
Sheet 04 of 06
Eng. Project No. 23-0147

Project LUCILLE STARR DRIVE AT BOOTH CREEK
Description ROADWORKS - PLAN AND PROFILE
File: 23-0147-R2-1 REV. 5

FILE: P:\2023\23-0147\00 - CAD FILES\DWG\FINAL\23-0147 - RD - LUCILLE STARR DR - CONCEPT 1.DWG LAYOUT: 23-0147-R2-1(USER LY)

PLOTTED: 2025-01-10 11:25:11 AM

Plot Date: January 10, 2025



H 1:250 10m
V 1:50 2m

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This drawing is not to be used for construction unless it is stamped "ISSUED FOR CONSTRUCTION" and signed by R.F. Binnie & Associates Ltd. It is the contractor's responsibility to ensure that he is in possession of the latest revision of this drawing.

EGBC PERMIT No. 1001128

NOT FOR CONSTRUCTION

TENDER

Edge of pavement; Watermain and valve; Drainage sewer, MH; Drainage ditch; Sanitary sewer, MH; Sanitary forcemain; Gasmain and valve; Hydro duct, MH; Telephone duct, MH; Hydrant; Water air valve; Water blowoff; Water service; Catch basin, top inlet; Catch basin, side inlet; Catch basin, round; Drainage service; Drainage cleanout; Sanitary service; Sanitary cleanout; Utility pole(joint pole); Utility pole with light; Streetlight, davit; Streetlight, post top; Comb signal pole; Traffic signal pole; Junction box; Hydro Guy Wire; Hydro Kiosk; Vegetation Conifer; Vegetation Deciduous; Vegetation Shrub; Survey Traverse Hub; Survey Iron Pin; Survey Lead Plug; Survey Monument

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Design by GL/RC Date
Drawn by LY Date
Checked by MJ Date
Approved by TDB Date

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Coquitlam
Engineering & Public Works
3000 Guildford Way, Coquitlam, B.C. V3B 7N2

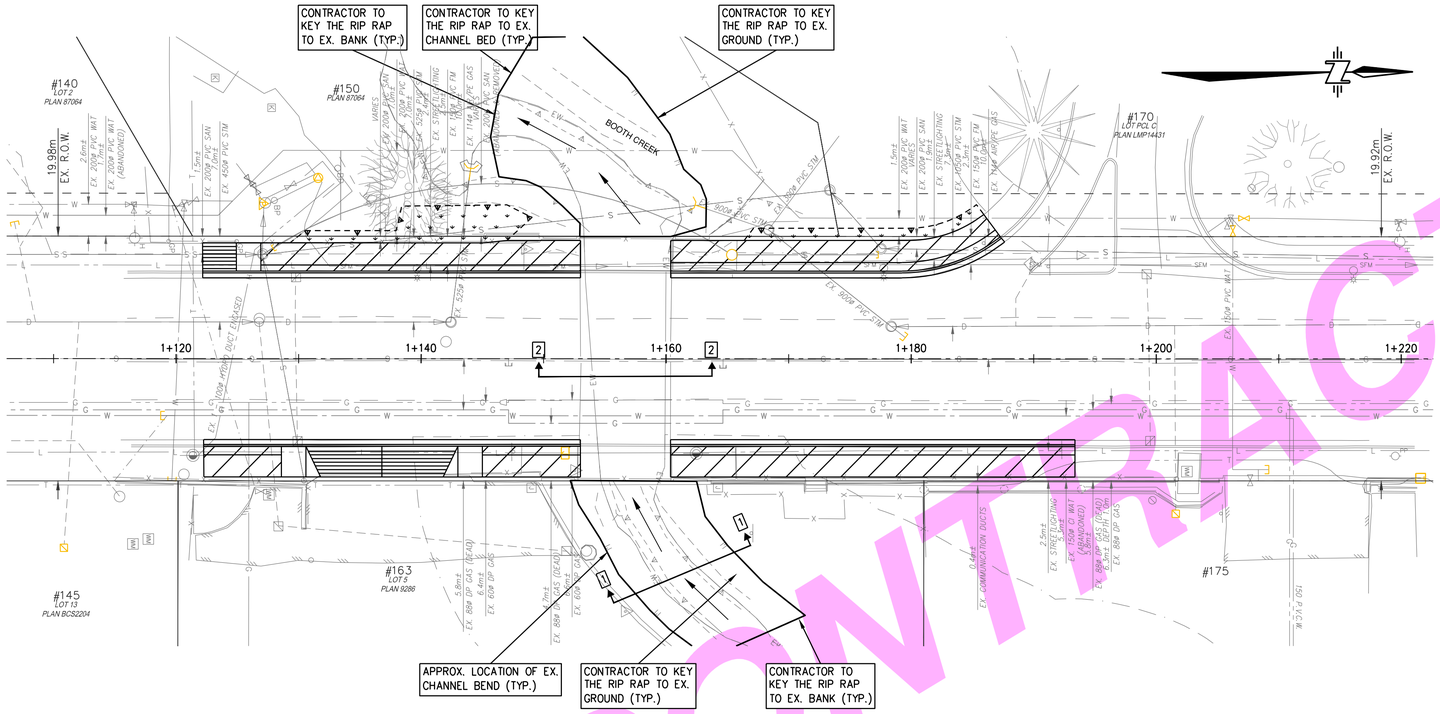
Scale horiz. 1:250 Scale vert. 1:50
Sheet 05 of 06
Eng. Project No. 23-0147

Project LUCILLE STARR DRIVE AT BOOTH CREEK
Description ROADWORKS - CROSS SECTIONS
File: 23-0147-XS2-1 REV. 4

W. Y. G. LAU 40560 PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA 2025-01-22

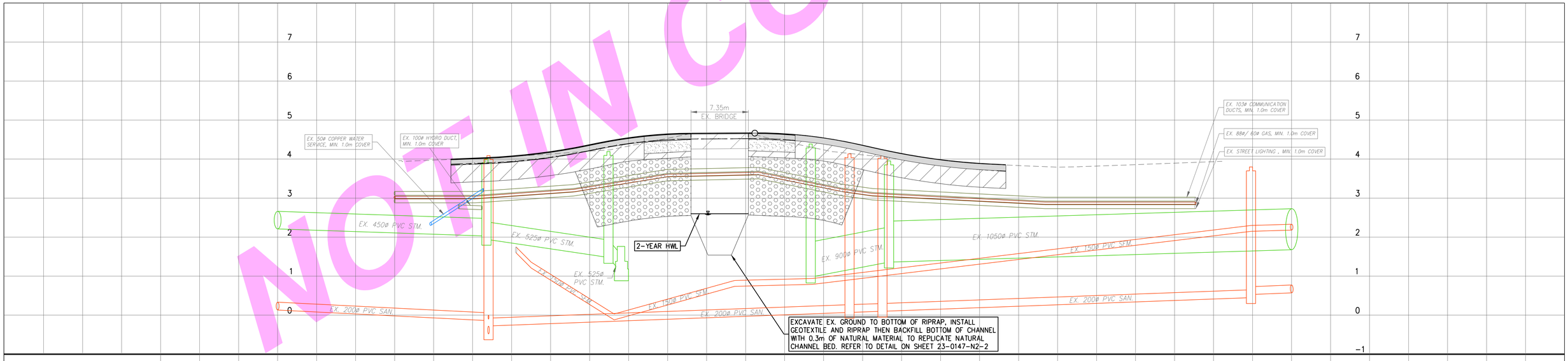
Plot Date: January 10, 2025

BENCHMARK:
BENCHMARK MON 95H1756 ON THE WEST SIDE OF SCHOOLHOUSE ST AT THE INTERSECTION OF SCHOOLHOUSE ST AND BOOTH AVE
ELEVATION = 11.775 M (CVD28GVRD2018)



SCHOOLHOUSE ST

REFER TO DRAWING 23-0147-N2-2 FOR RIP RAP DETAILED SECTIONS ALONG CREEK (TYP)



EXCAVATE EX. GROUND TO BOTTOM OF RIPRAP, INSTALL GEOTEXTILE AND RIPRAP THEN BACKFILL BOTTOM OF CHANNEL WITH 0.3m OF NATURAL MATERIAL TO REPLICATE NATURAL CHANNEL BED. REFER TO DETAIL ON SHEET 23-0147-N2-2

PROP. GUTTER ELEV.	WEST		3.940	4.220	4.497	4.525	4.397	3.996	3.730		
	EAST		3.931	4.220	4.497	4.525	4.396				
ROAD C/L ELEV.	EXISTING	3.97	4.07	4.20	4.53	4.66	4.24	4.02	3.88	3.79	3.86	3.94
	PROPOSED		4.07	4.36	4.64	4.66	4.54	4.13	3.88			
STATION		1+120		1+140		1+160		1+180		1+200		1+220

W. G. LAU
40560
2025-01-22

0 H 1:250 10m
0 V 1:50 2m

EGBC PERMIT No. 1001128

NOT FOR CONSTRUCTION

TENDER

Edge of pavement	Hydrant	Sanitary service	Hydro Guy Wire
Watermain and valve	Water air valve	Sanitary cleanout	Hydro Kiosk
Drainage sewer, MH	Water blowoff	Utility pole(joint pole)	Vegetation Conifer
Drainage ditch	Water service	Utility pole with light	Vegetation Deciduous
Sanitary sewer, MH	Catch basin, top inlet	Streetlight, davit	Vegetation Shrub
Sanitary forcemain	Catch basin, side inlet	Streetlight, post top	Survey Traverse Hub
Gasmain and valve	Catch basin, round	Comb signal pole	Survey Iron Pin
Hydro duct, MH	Drainage service	Traffic signal pole	Survey Lead Plug
Telephone duct, MH	Drainage cleanout	Junction box	Survey Monument

No.	Date	By	Revisions
4	2025-01-10	LY	ISSUED FOR TENDER
3	2024-12-09	LY	ISSUED FOR COORDINATION
2	2024-09-03	SL	ISSUED FOR TENDER COORDINATION
1	2024-04-26	SL	ISSUED FOR 90% REVIEW

Design by GL/RC Date
Drawn by LY Date
Checked by MJ Date
Approved by TDB Date

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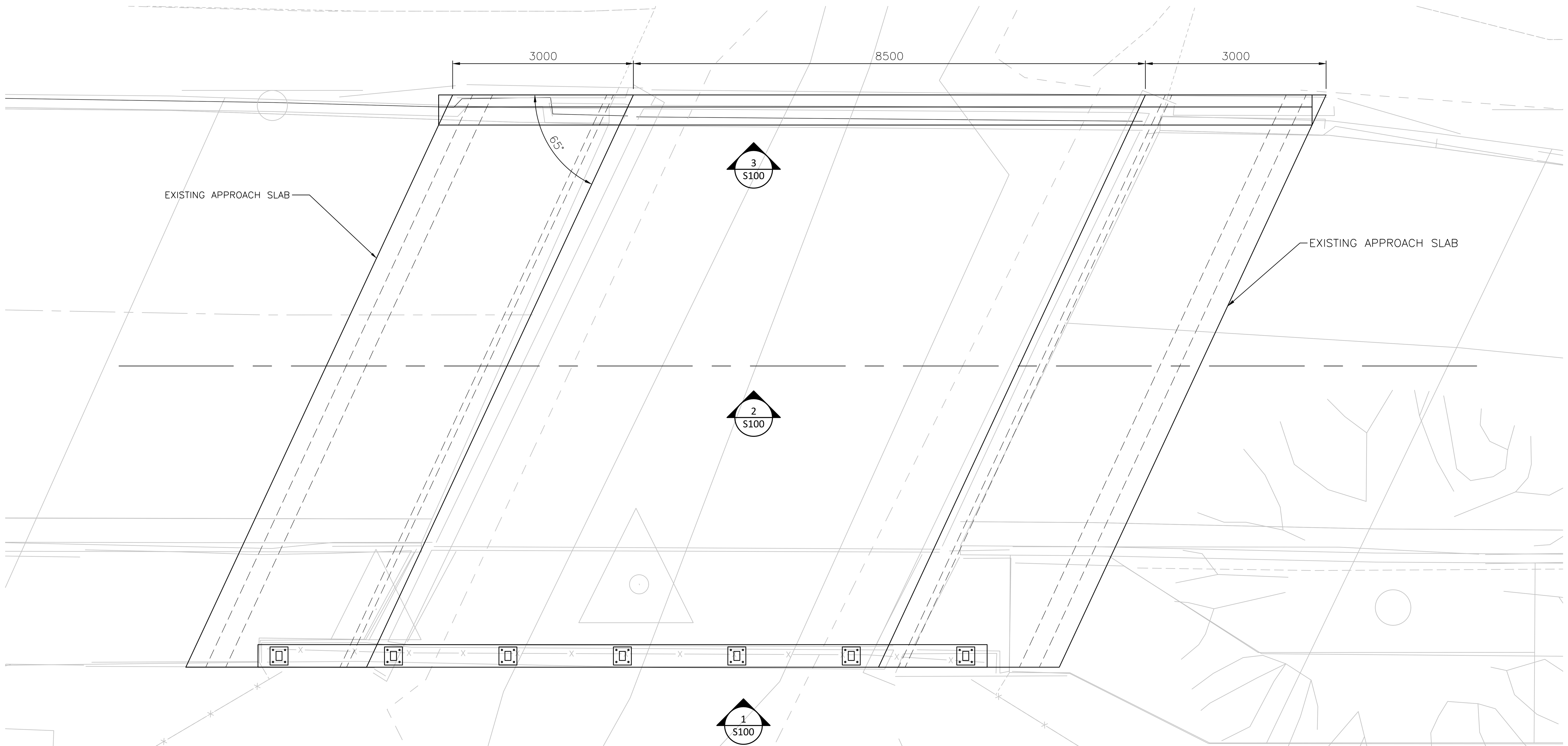
Scale horiz. 1:250 Scale vert. 1:50
Sheet 06 of 06
Eng. Project No. 23-0147

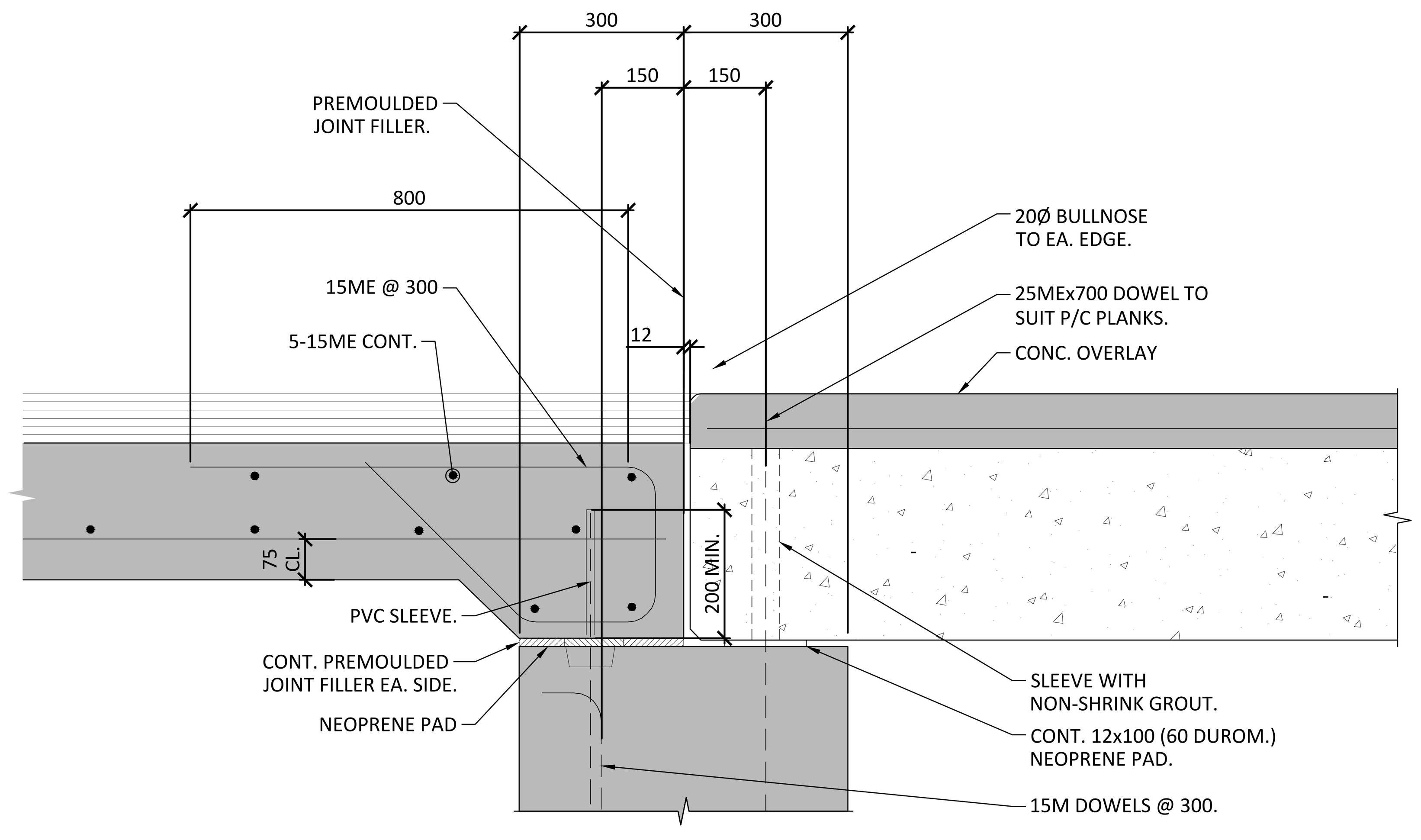
Project SCHOOLHOUSE STREET AT BOOTH CREEK
Description SCOUR PROTECTION
File: 23-0147-D1-1 REV. 4

FILE: P:\2023\23-0147\00 - CAD FILES\DWG\FINAL\23-0147 - RD - SCHOOLHOUSE ST - CONCEPT 1 - SCOUR PROTECTION.DWG LAYOUT: 23-0147-D1-1 USER: LYU
PLOTTED: 2025-01-10 11:25:39 AM

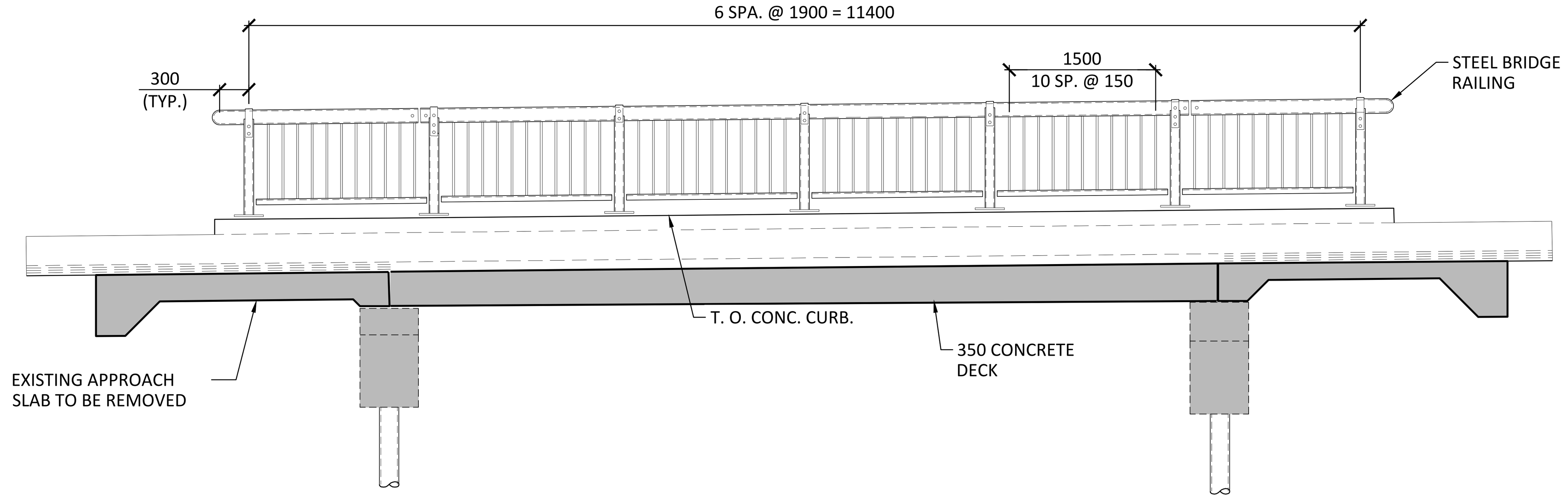
Plot Date: January 10, 2025



EXISTING PLAN
1:100

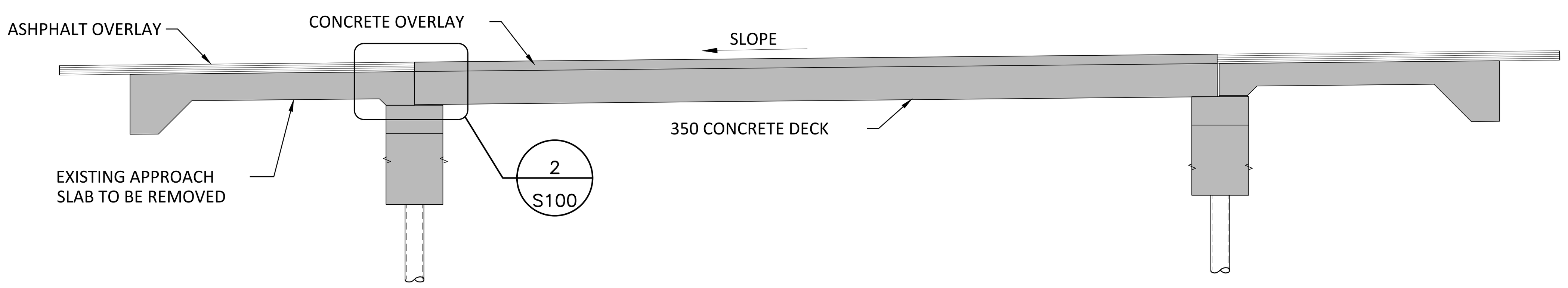


2 S100 DETAIL 1
1:10



1 S100 EXISTING SECTION ALONG SIDEWALK
1:50

3 S100 EXISTING SECTION ALONG NORTH ROAD BARRIER
1:50



2 S100 EXISTING SECTION ALONG ROAD CENTERLINE
1:50

AS SHOWN

PRELIMINARY

No.	Date	By	Revisions
0	2025-01-22	FH	ISSUED FOR TENDER

Design by HA — Date
Drawn by ET — Date
Checked by FH — Date
Approved by FM — Date

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1075 West Georgia St., Suite 1020
Vancouver, BC V6E 3C9 Canada
+1 604 900 6224

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Engineering & Public Works
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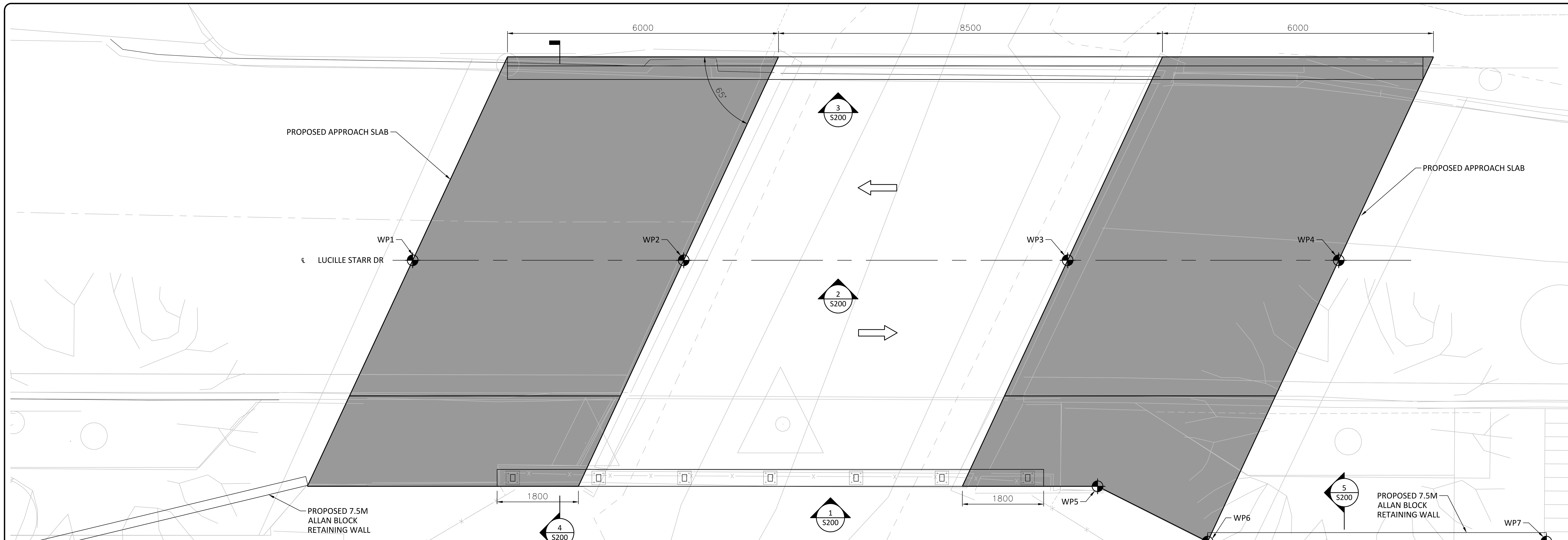
Scale horiz. AS SHOWN — Scale vert. AS SHOWN
Sheet 1 of 4
Eng. Project No. EN023-02738

Project: LUCILLE STARR BRIDGE REHABILITATION
Description: EXISTING SECTIONS
Drawing No: S100 — REV. 1

Plot Date: January 22, 2025



PROPOSED PLAN
1:50

SCOPE OF WORK

1) REMOVE STEEL BRIDGE RAILING END PANELS
2) REMOVE EXISTING SIDEWALKS AND CURB ON THE SOUTH SIDE AND ROAD BARRIER ON THE NORTH SIDE OF THE BRIDGE FROM BEARING CENTERLINE TO 6m BEYOND THE BRIDGE. PLACE TEMPORARY FALL PROTECTION SYSTEM. REMOVE EXISTING APPROACH SLABS. DO NOT REMOVE ANY SIDEWALK ON THE BRIDGE. NO MECHANICAL EXCAVATION IS PERMITTED WITHIN 2m of THE BRIDGE BEARING CENTERLINE AND WINGWALLS.
3) INSTALL NEW 6m LONG 300mm THICK CAST-IN-PLACE CONCRETE APPROACH SLABS, CAST NEW SIDEWALKS AND CURBS AND TIE THEM INTO EXISTING SIDEWALK AND REINSTATE STEEL BRIDGE RAILING END PANELS AND ROAD BARRIERS. INSTALL RETAINING WALL. REINSTALL TRAFFIC SIGN ON THE SOUTHEAST CORNER OF THE BRIDGE. COMPLETE NEW SIDEWALK AND ASPHALT AS PER CIVIL.

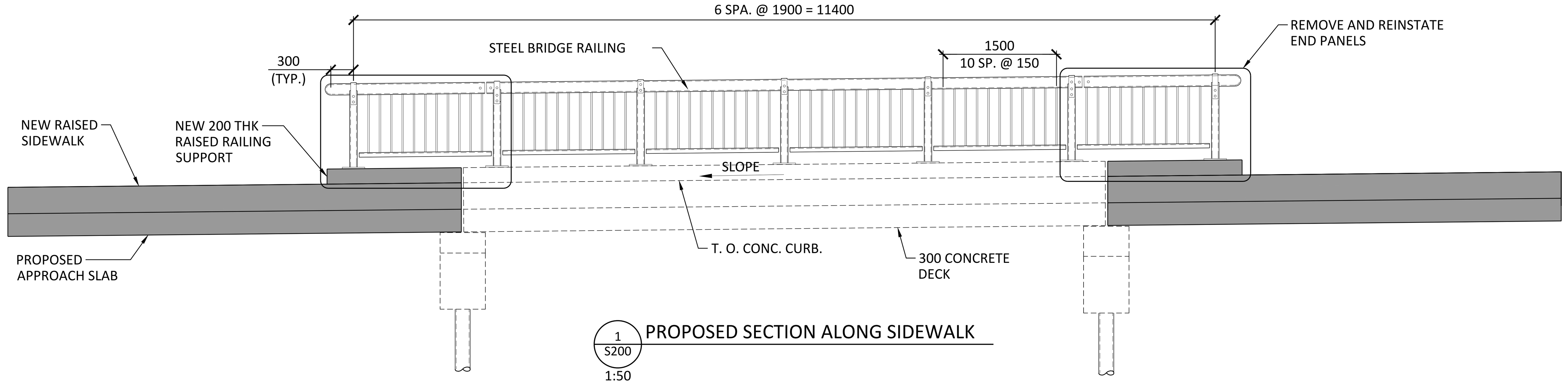
CONSTRUCTION SEQUENCE

STAGE 1- SOUTH SIDE:
1. REMOVE EXISTING STEEL BRIDGE RAILING END PANELS, APPROACH SLABS, SIDEWALKS, AND ASPHALT OVERLAY.
2. PREPARE SURFACE AND INSTALL DOWELS.
3. CAST NEW APPROACH SLABS AND SIDEWALKS.
4. REINSTATE STEEL BRIDGE RAILING END PANELS AND COMPLETE ALL THE WORK ON THE SOUTH SIDE.
5. SWITCH TRAFFIC.

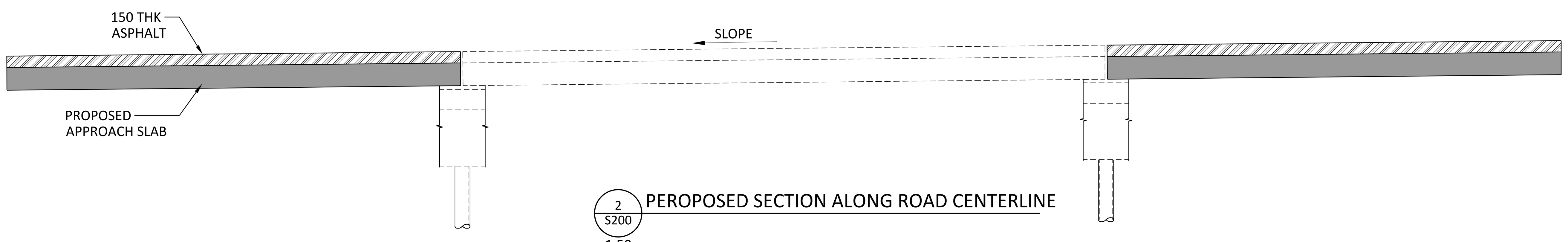
STAGE 2 - NORTH SIDE:
1. REMOVE EXISTING APPROACH SLABS, ROAD BARRIERS, AND ASPHALT OVERLAY.
2. PREPARE SURFACE AND INSTALL DOWELS.
3. CAST NEW APPROACH SLABS AND ROAD BARRIERS.

APPROACH SLAB WORKPOINT COORDINATES

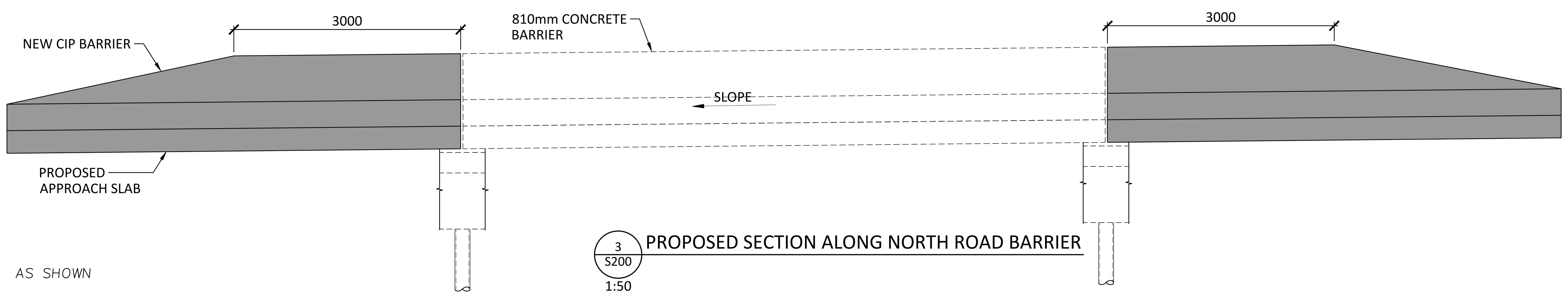
WP NO.	NORTHING	EASTING
WP1	5455966.7991	510995.5176
WP2	5455966.7991	511001.5176
WP3	5455966.7991	511010.0176
WP4	5455966.7991	511016.0176
WP5	5455961.7991	511010.6797
WP6	5455960.5754	511013.1155
WP7	5455960.5754	511020.6155



1 S200 PROPOSED SECTION ALONG SIDEWALK
1:50

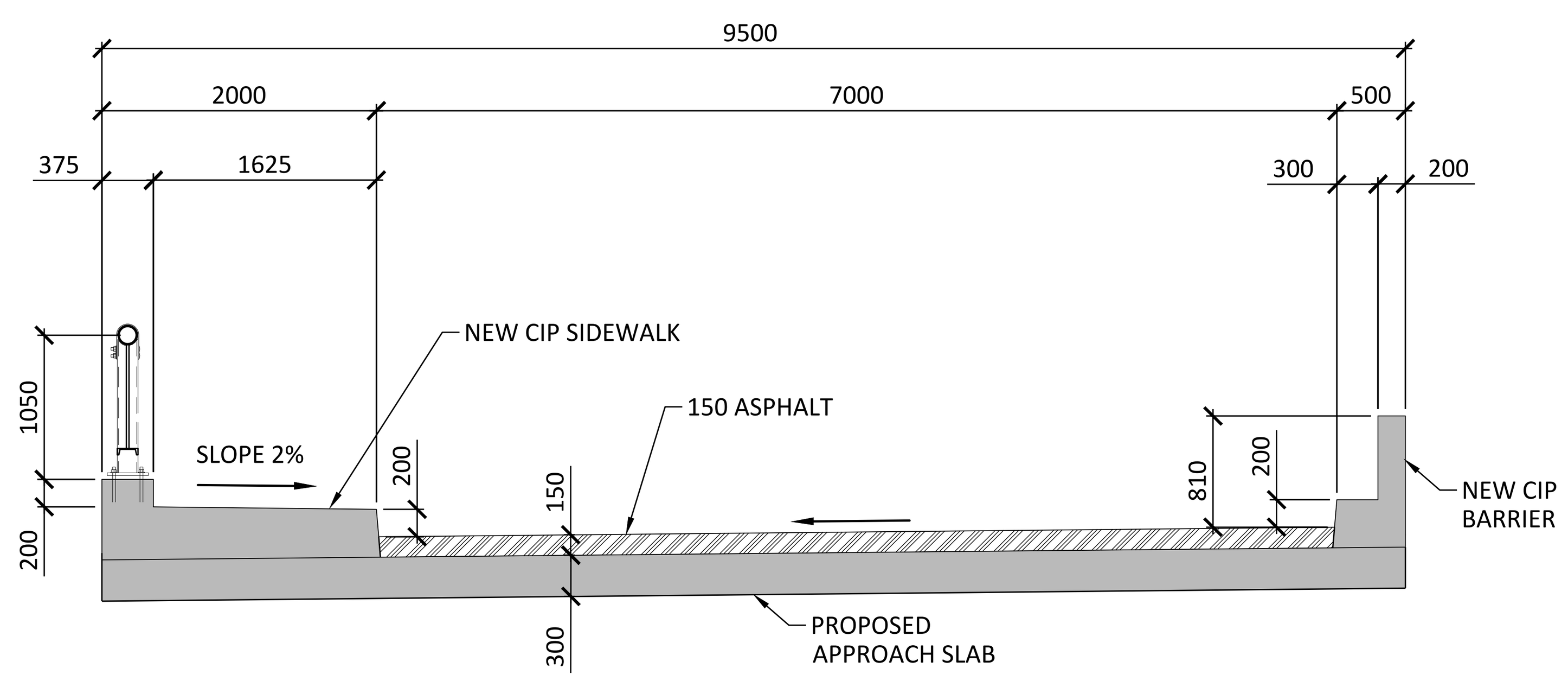


2 S200 PEROPOSED SECTION ALONG ROAD CENTERLINE
1:50

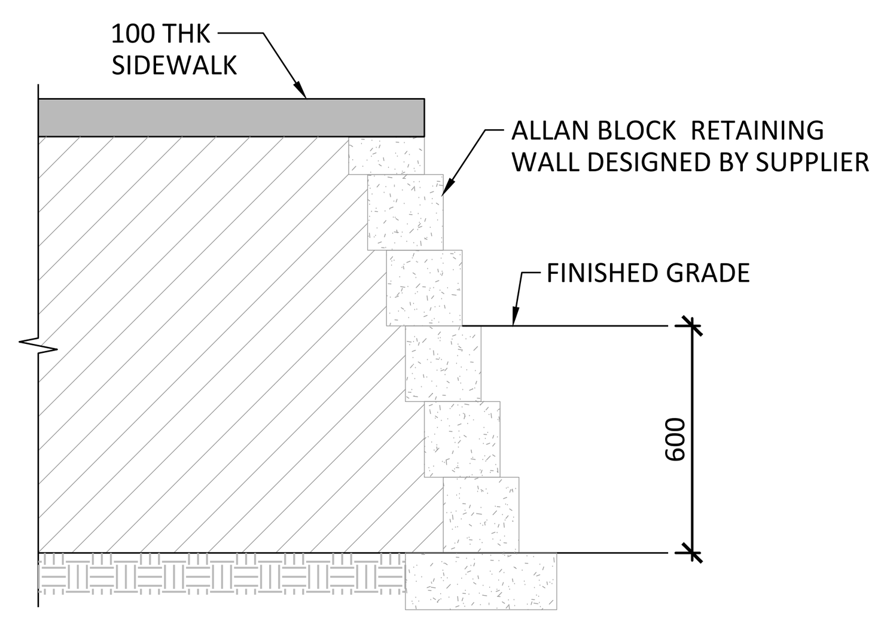


3 S200 PROPOSED SECTION ALONG NORTH ROAD BARRIER
1:50

AS SHOWN



4 S200 TYPICAL TRANSVERSE SECTION THROUGH APPROACH SLAB
1:50



5 S200 TYPICAL RETAINING WALL SECTION
1:20

PRELIMINARY

PROFESSIONAL ENGINEER, PROVINCE OF ... F. T. HRISTOV 2025-01-22

No.	Date	By	Revisions
0	2025-01-22	FH	ISSUED FOR TENDER

Design by HA — Date
Drawn by ET — Date
Checked by FH — Date
Approved by FM — Date

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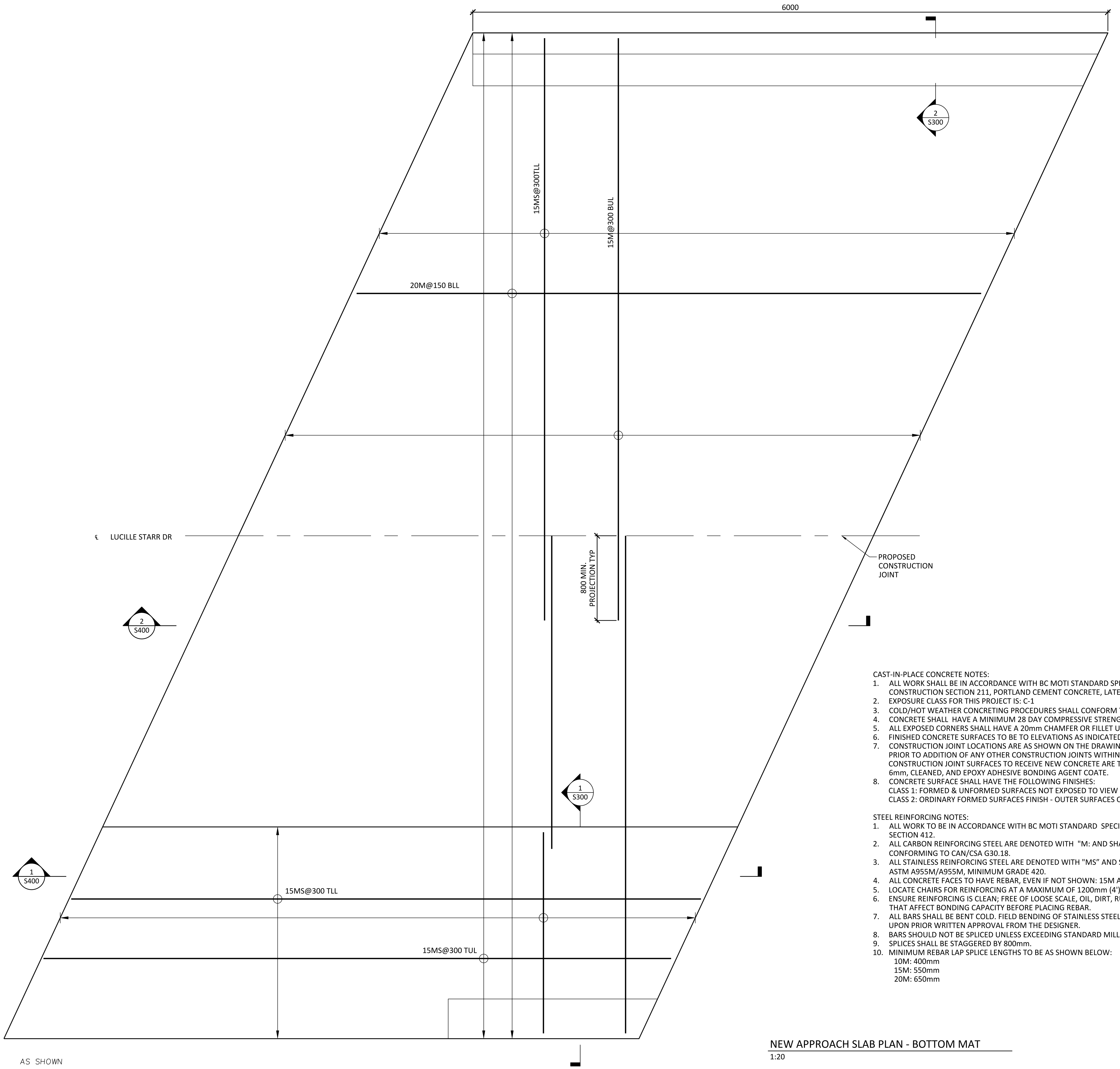
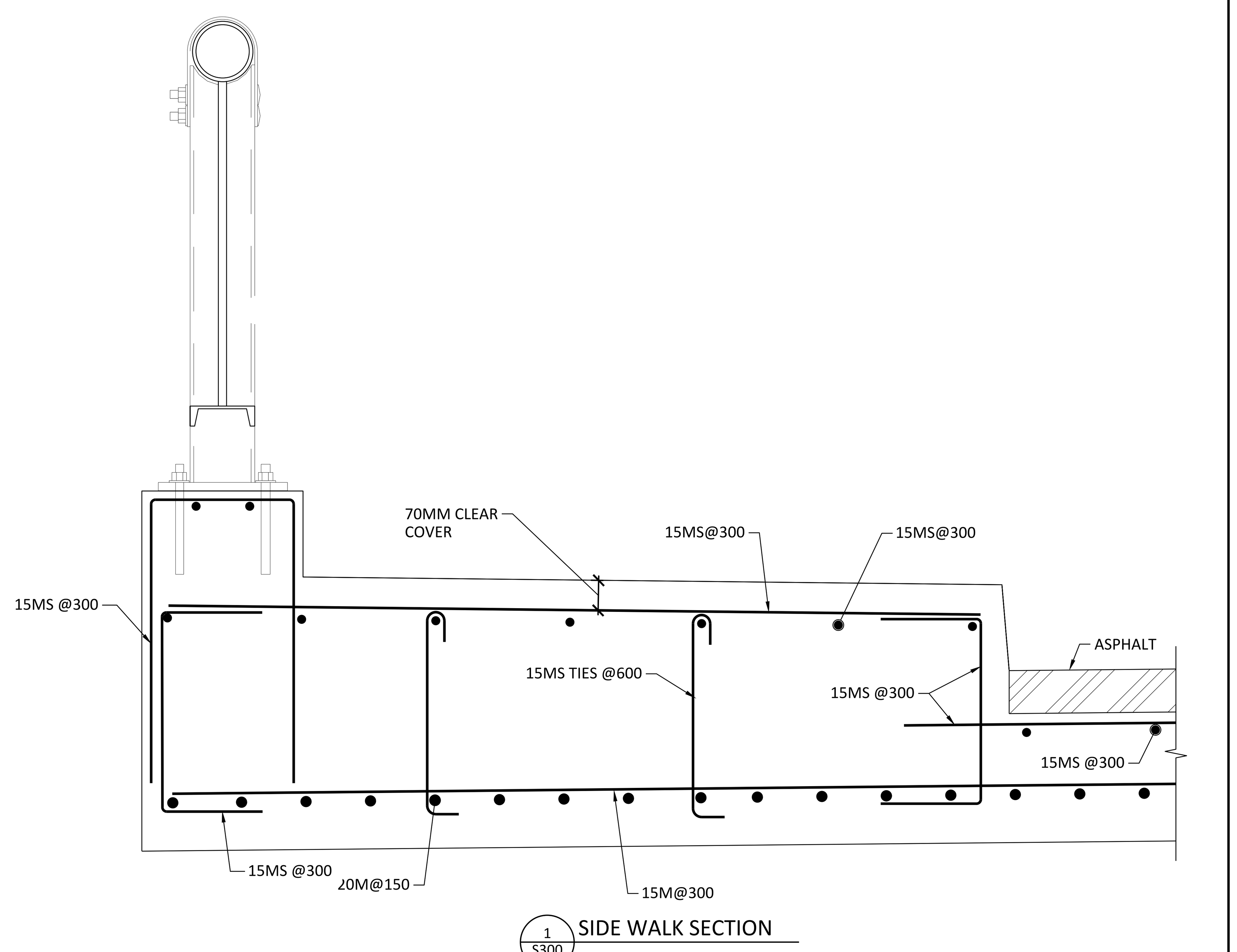
Scale horiz. AS SHOWN — Scale vert. AS SHOWN
Sheet 2 of 4
Eng. Project No. EN023-02738

Project: LUCILLE STARR BRIDGE REHABILITATION
Description: PROPOSED SECTIONS
Drawing No: S200 — REV. 1

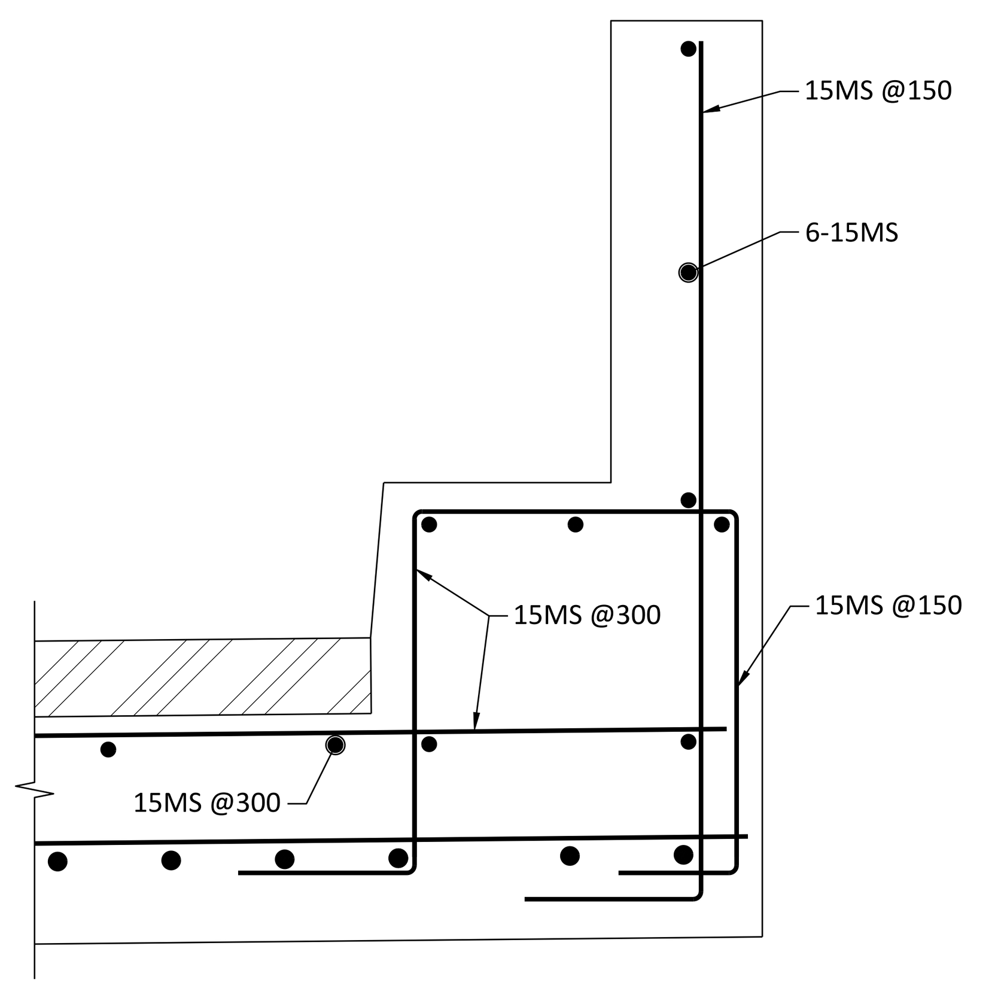
Plot Date: January 22, 2025



NEW APPROACH SLAB PLAN - BOTTOM MAT
1:20



1 S300 SIDE WALK SECTION
1:10



2 S300 CURB SECTION
1:10

CAST-IN-PLACE CONCRETE NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH BC MOTI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION SECTION 211, PORTLAND CEMENT CONCRETE, LATEST EDITION.
2. EXPOSURE CLASS FOR THIS PROJECT IS: C-1
3. COLD/HOT WEATHER CONCRETING PROCEDURES SHALL CONFORM TO CAN/CSA A23.1.
4. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 35 MPa.
5. ALL EXPOSED CORNERS SHALL HAVE A 20mm CHAMFER OR FILLET UNLESS NOTED OTHERWISE.
6. FINISHED CONCRETE SURFACES TO BE TO ELEVATIONS AS INDICATED ON THE DRAWINGS.
7. CONSTRUCTION JOINT LOCATIONS ARE AS SHOWN ON THE DRAWINGS. CONTRACTOR TO ADVISE ENGINEER PRIOR TO ADDITION OF ANY OTHER CONSTRUCTION JOINTS WITHIN THE PROJECT.
   CONSTRUCTION JOINT SURFACES TO RECEIVE NEW CONCRETE ARE TO BE ROUGHENED TO AN AMPLITUDE OF 6mm, CLEANED, AND EPOXY ADHESIVE BONDING AGENT COATE.
8. CONCRETE SURFACE SHALL HAVE THE FOLLOWING FINISHES:
   CLASS 1: FORMED & UNFORMED SURFACES NOT EXPOSED TO VIEW - ALL BURIED SURFACES.
   CLASS 2: ORDINARY FORMED SURFACES FINISH - OUTER SURFACES OF CAST-IN-PLACE Concrete

STEEL REINFORCING NOTES:

1. ALL WORK TO BE IN ACCORDANCE WITH BC MOTI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION SECTION 412.
2. ALL CARBON REINFORCING STEEL ARE DENOTED WITH "M: AND SHALL BE GRADE 400W, DEFORMED BARS, CONFORMING TO CAN/CSA G30.18.
3. ALL STAINLESS REINFORCING STEEL ARE DENOTED WITH "MS" AND SHALL BE CONFORMING TO ASTM A276 AND ASTM A955M/A955M, MINIMUM GRADE 420.
4. ALL CONCRETE FACES TO HAVE REBAR, EVEN IF NOT SHOWN: 15M AT 300mm WITH STANDARD HOOKS AT ENDS.
5. LOCATE CHAIRS FOR REINFORCING AT A MAXIMUM OF 1200mm (4') CENTRES.
6. ENSURE REINFORCING IS CLEAN; FREE OF LOOSE SCALE, OIL, DIRT, RUST, AND ANY OTHER FOREIGN COATINGS THAT AFFECT BONDING CAPACITY BEFORE PLACING REBAR.
7. ALL BARS SHALL BE BENT COLD. FIELD BENDING OF STAINLESS STEEL REINFORCING BARS IS ONLY ALLOWED UPON PRIOR WRITTEN APPROVAL FROM THE DESIGNER.
8. BARS SHOULD NOT BE SPLICED UNLESS EXCEEDING STANDARD MILL LENGTH (18m).
9. SPLICES SHALL BE STAGGERED BY 800mm.
10. MINIMUM REBAR LAP SPLICE LENGTHS TO BE AS SHOWN BELOW:
    10M: 400mm
    15M: 550mm
    20M: 650mm

AS SHOWN

PRELIMINARY

PROFESSIONAL ENGINEER PROVINCE OF ... F. T. HRISTOV # 31... 2025-01-22

No.	Date	By	Revisions
0	2025-01-22	FH	ISSUED FOR TENDER

Design by HA	Date
Drawn by ET	Date
Checked by FH	Date
Approved by FM	Date

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Scale horiz. AS SHOWN | Scale vert. AS SHOWN
Sheet 3 of 4
Eng. Project No. EN023-02738

Project: LUCILLE STARR BRIDGE REHABILITATION
Description: REINFORCEMENT DETAILS
Drawing No: S300 REV. 1

1
S400
PROPOSED LONGITUDINAL SECTION ALONG SIDEWALK
1:10

2
S400
PROPOSED LONGITUDINAL SECTION ALONG ROAD CENTERLINE
1:10

AS SHOWN

PRELIMINARY

PROFESSIONAL ... F.T. HRISTOV ... 2025-01-22

No.	Date	By	Revisions
0	2025-01-22	FH	ISSUED FOR TENDER

Design by HA — Date
Drawn by ET — Date
Checked by FH — Date
Approved by FM — Date

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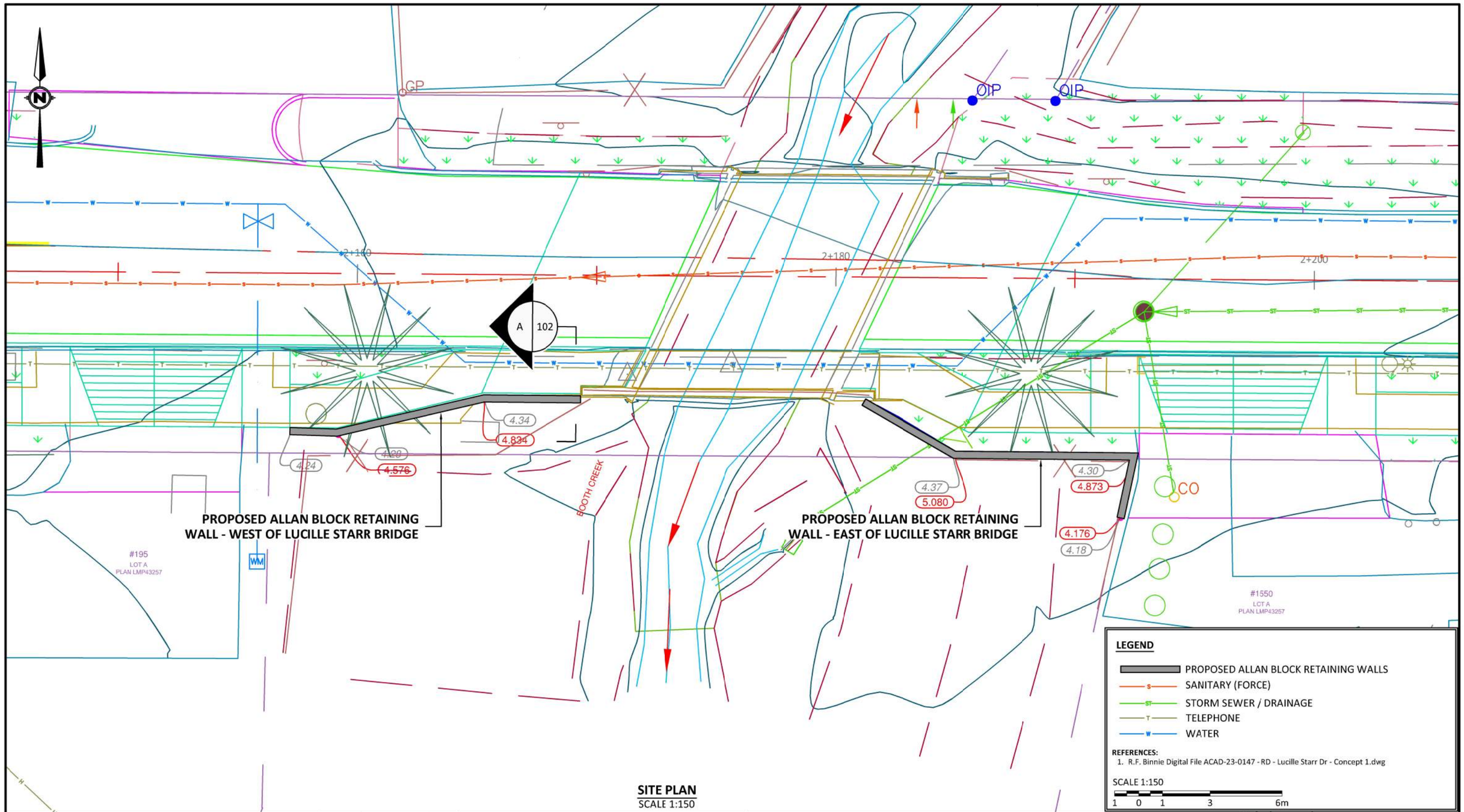
Scale horiz. AS SHOWN — Scale vert. AS SHOWN
Sheet 4 of 4
Eng. Project No. EN023-02738

Project: LUCILLE STARR BRIDGE REHABILITATION
Description: REINFORCEMENT DEATILS
Drawing No: S400 — REV. 1

Plot Date: January 22, 2025



SITE PLAN
SCALE 1:150

January 8, 2025 11:41:43 AM

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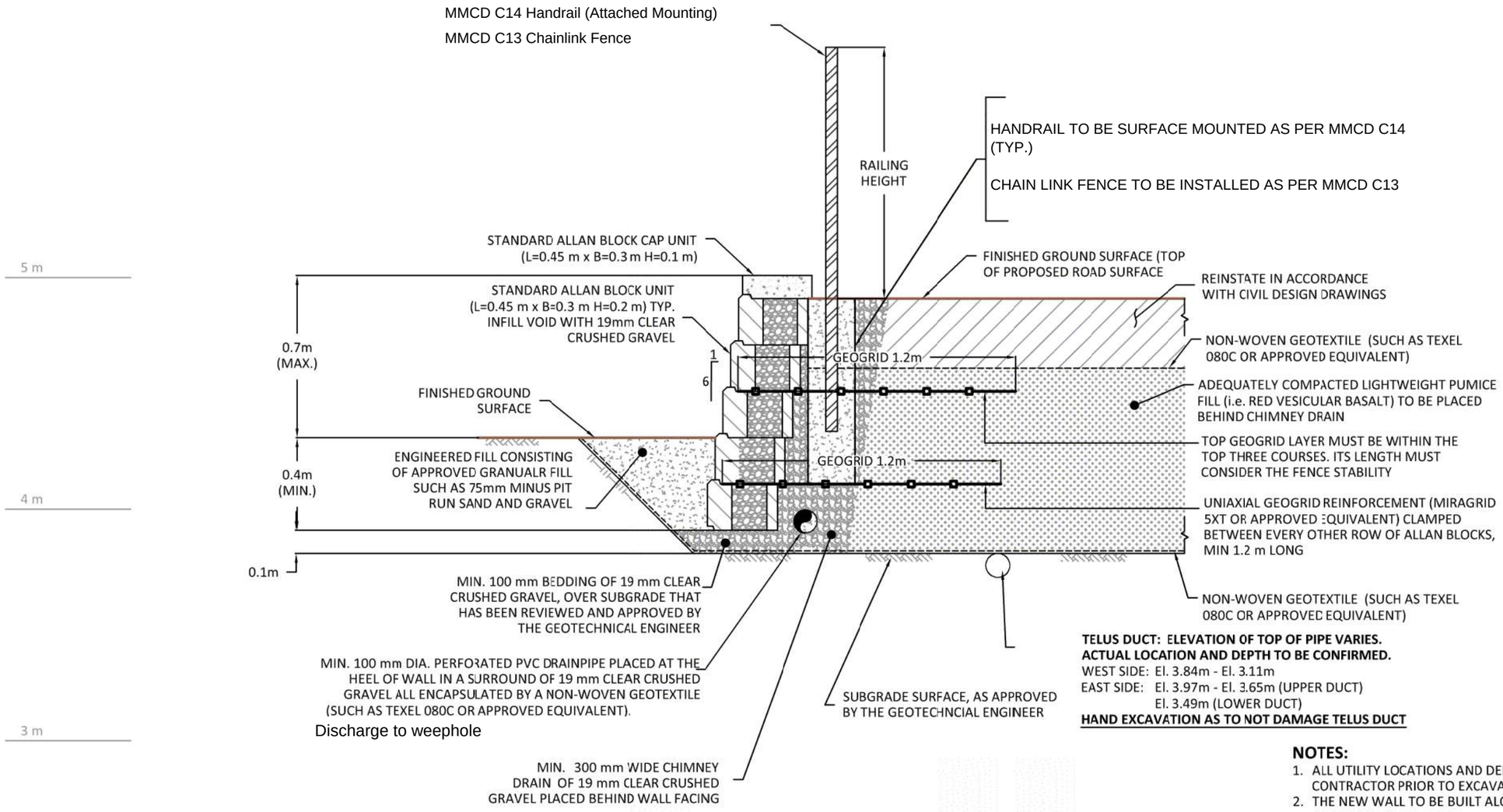
PROVINCE OF BRITISH COLUMBIA
J. Y. TANAKA
37219
2025-01-08
EGBC Permit to Practice #1000925

VERSIONS		
NO	DESCRIPTION	DATE
0	ISSUED FOR REVIEW	2025-01-07

TITLE: SITE PLAN			PROJECT NO.: K-231474-01
CLIENT: R.F. BINNIE & ASSOCIATES LTD.	DATE: 2025-01-07	SCALE: 1:150	DWG NO.: G101
PROJECT LOCATION: PROPOSED ALLAN BLOCK RETAINING WALLS - EAST/WEST OF LUCILLE STARR BRIDGE, LUCILLE STARR DR. (EAST OF THE INTERSECTION AT SCHOOLHOUSE ST. AND LUCILLE STARR DR.) COQUITLAM, B.C.	DRAFT: SG	DESIGN: XH	CHECK: PS



TYPICAL ELEVATION VIEW
SCALE 1:20

NOTES:

1. ALL UTILITY LOCATIONS AND DEPTHS MUST BE LOCATED BY THE CONTRACTOR PRIOR TO EXCAVATION.
2. THE NEW WALL TO BE BUILT ALONG EXISTING WALL ALIGNMENT/FOOTPRINT
3. ALL ENGINEERED AND LIGHTWEIGHT FILL MATERIALS MUST BE PLACED IN THIN LIFTS (NO THICKER THAN 300 mm AND COMPACTED TO AT LEAST 95% OF THE MATERIAL'S MODIFIED PROCTOR MAXIMUM DRY DENSITY (MPMDD) VALUE
4. THIS DETAIL DOES NOT ACCOUNT FOR VEHICLE IMPACT.

SCALE 1:20
0.2 0 0.2 0.4 0.8 m

January 8, 2025 5:23:02 PM

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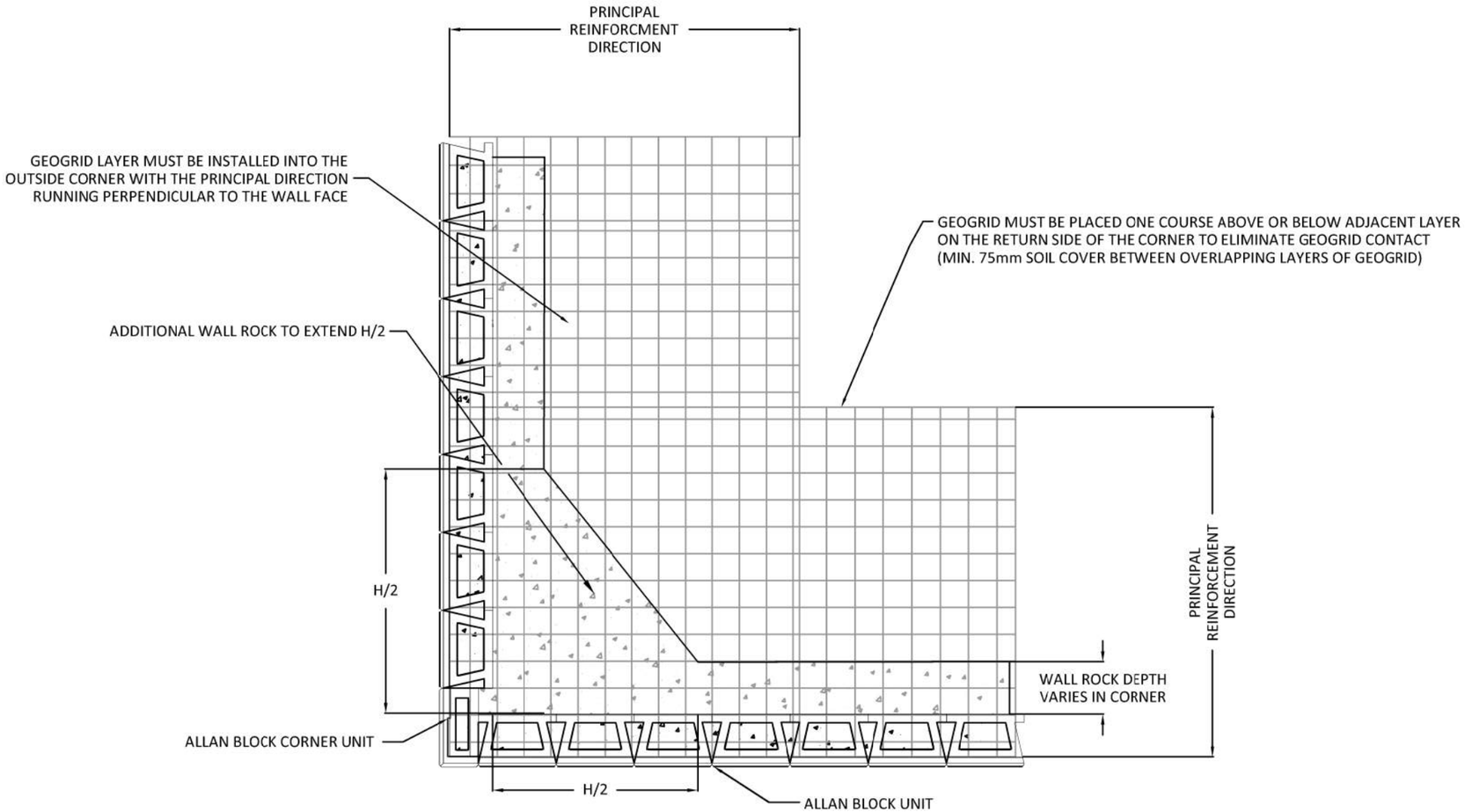
EGBC Permit to Practice #1000925
2025-01-08

VERSIONS		
NO	DESCRIPTION	DATE
0	ISSUED FOR REVIEW	2025-01-07

TITLE: SECTION A - TYPICAL ELEVATION VIEW
PROJECT NO.: K-231474-01
CLIENT: R.F. BINNIE & ASSOCIATES LTD.
DATE: 2025-01-07
SCALE: 1:20
DWG NO.: G102
PROJECT LOCATION: PROPOSED ALLAN BLOCK RETAINING WALLS - EAST/WEST OF LUCILLE STARR BRIDGE, LUCILLE STARR DR. (EAST OF THE INTERSECTION AT SCHOOLHOUSE ST. AND LUCILLE STARR DR.) COQUITLAM, B.C.
DRAFT: SG
DESIGN: XH
CHECK: PS



REFERENCE: "AB-01-Geogrid-Typical.DWG" BY ALLAN BLOCK

January 8, 2025 11:43:45 AM

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J. Y. TANAKA
37219
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VERSIONS		
NO	DESCRIPTION	DATE
0	ISSUED FOR REVIEW	2025-01-07

TITLE: TYPICAL CORNER DETAIL

PROJECT NO.: K-231474-01

CLIENT: R.F. BINNIE & ASSOCIATES LTD.

DATE: 2025-01-07 | SCALE: N.T.S. | DWG NO.: G103

PROJECT LOCATION: PROPOSED ALLAN BLOCK RETAINING WALLS - EAST/WEST OF LUCILLE STARR BRIDGE, LUCILLE STARR DR. (EAST OF THE INTERSECTION AT SCHOOLHOUSE ST. AND LUCILLE STARR DR.) COQUITLAM, B.C.

DRAFT: SG | DESIGN: XH | CHECK: PS

DESIGN AND CONSTRUCTION SPECIFICATIONS

Kontur Geotechnical Consultants Inc. (Kontur) understands that it is planned to construct two sections of Allan Block retaining walls to support the eastbound sidewalk along Lucille Starr Drive, Coquitlam, BC. The walls will be geogrid reinforced, about 14.5 m (EAST) and 12.3 m (WEST) long, respectively; and up to about 0.7 m (EAST) and 0.5 m (WEST) high. A return on each end of the wall may be required.

The following notes provide general design and construction specifications for the proposed retaining wall. These notes must be read in conjunction with the typical retaining wall details/drawings and the manufacturers specifications. Responsibilities of the owner, contractor and engineer, are also detailed.

CONTACT INFORMATION

Client: R.F. Binnie & Associates Ltd., Todd Bowie, P. Eng., CCA | e. TBowie@binnie.com
Engineer: J.Y. (Yoshi) Tanaka, P.Eng. | t. 778.730.1821 | e. ytanaka@kontur.ca
Contractor: TBD

PART A - GENERAL REQUIREMENTS

1. The work shall be carried out in accordance with all applicable bylaws and regulations for this site, including WorkSafe BC Regulations and Guidelines.
2. The work described in this plan should be completed in reference to the Geotechnical Report prepared by Kontur Geotechnical Consultants Inc. (Kontur) for this project dated February 16, 2024.
3. This plan shall not be used to layout the retaining wall. Layout of the proposed retaining wall is to be completed based on the appropriate survey and civil design drawings.
4. The Contractor is responsible for and shall:
   - 4.1. All relevant permits from governing authorities must be in place prior to start of construction.
   - 4.2. If applicable, permission from adjacent property owners must be obtained and written confirmation of such permission forwarded to Kontur at least 2 days prior to commencing work on the adjacent properties.
   - 4.3. Provide all necessary labour, materials, and equipment, to carry out the work as specified in this plan and by the Geotechnical Engineer. The retaining wall should be constructed as shown on the drawings included in this plan.
   - 4.4. Provide adequate temporary drainage control in and around the proposed retaining wall in a manner that does not detrimentally influence surroundings lands.
   - 4.5. Take all necessary steps to protect all instrumentation, equipment, and apparatuses, from damage and/or disturbance due to any causes, such as on-site operations, vandalism/theft, and/or weather.
   - 4.6. Repair or replace any instrumentation, equipment, and/or apparatuses, that are damaged or disturbed (as a result of the Contractor's operations or failure to provide adequate protection) to the satisfaction of the *Engineer.* This will be done at no additional cost to the Owner.
   - 4.7. Cooperate fully with the Engineer, Surveyor, and Owner to provide all reasonable assistance as necessary.
   - 4.8. The contractor will undertake proper survey control to ensure the proposed retaining wall is constructed according to the design drawings with respect to property lines, building lines, ground surface, and finished grades. Report any dimensional discrepancies to Kontur Geotechnical Consultants Inc.
   - 4.9. Provide an appropriate 'as-built' survey upon completion. This is to be completed by a Professional Land Surveyor registered in British Columbia.
   - 4.10. The Owner shall be responsible for the repair of any sidewalks, paved surface /roads, buried utility services, and any other structures/buildings, that may be influenced by the construction of the proposed retaining wall as described in this plan. It is recommended as part of the due diligence process, that a pre-construction and post-construction assessment be completed to visually document the condition of theses surfaces, structures/ and or buildings.
   - 4.11. Site to be enclosed by fencing or hoarding prior to start of excavation. Hoarding/fencing to be acceptable to municipal bylaws.
   - 4.12. The Contractor shall maintain the overall responsibility for site safety.

PART B - MATERIAL REQUIREMENTS

1. **ENGINEERED BACKFILL** should consist of free-draining Engineered Fill with less than 5% (by dry weight) passing the No. 200 sieve, such as 75mm minus pit run sand and gravel. The material should be free of any saturated and unsuitable materials. Samples of the proposed Engineered Backfill should be submitted to the Engineer for testing, review, and approval, well in advance of placement on-site.
2. **LIGHTWEIGHT FILL** should consist of lightweight pumice (i.e. red vesicular basalt) that will not break down or degrade during the placement and compaction. The material should have a dry density of between 750 and 850 kg/m^3, and a maximum moist dry density of 1,000 kg/m^3.
3. **COMPACTION REQUIREMENTS.** Unless indicated otherwise by the Geotechnical Engineer in writing, fill materials should be compacted to at least 95% of the materials' Modified Proctor Maximum Dry Density value as approved by the Engineer. Fill materials should be placed in lifts no thicker than 300mm and be compacted near the material's optimum moisture content.
4. **GEOGRID** panels should consist of at least Miragrid 5XT, or approved equivalent, and should be placed between every second row of blocks as shown on the drawings. The geogrid panels should be clamped between the blocks and extended into the backfill zone and pulled taut such that there is no 'slack' in the geogrid panel. Geogrid panels shall be continuous, extending from the face of the allan block wall to the back of the reinforced zone for a total continuous horizontal lenght of 1.2 m. Where geogrid panels overlap, a min. 75mm of granular backfill should be placed to separate the panels.
5. **GEOTEXTILE**should consist of a new non-woven filter fabric such as Texel 080C, or approved equivalent, where required.
6. **BEDDING OR LEVELING COURSE** should be a minimum 150mm thick of 19mm clear crushed gravel or approved equivalent should be placed on the excavated and approved surface. 'Pea' gravel and/or sand is not an acceptable material for this purpose. The bedding must be properly compacted according to the requirements of the Geotechnical Engineer.
7. **CHIMNEY ZONE** is required and must be placed directly behind the blocks. The chimney zone should be at least 300mm wide and consist of an approved 'free-draining' material such as 19mm clear crushed gravel, or approved equivalent. A separating layer of geotextile may be required.
8. **A DRAIN** is required at the heel of the wall within the drainage zone and should consist of at least a 100mm Ø perforated PVC drain pipe in a min. 150mm surround of 19mm clear crushed gravel all encapsulated by a non-woven geotextile.

PART C - EXECUTION OF THE WORK

1. The Contractor shall submit details of the proposed construction schedule, methods, and equipment to the Engineer well in advance of the anticipated start date of the work.
2. **Site Preparation**
   - 2.1. The Contractor shall utilize suitable construction equipment to properly perform the work.
   - 2.2. Where excavation exceeds a depth of 1.2m, WorkSafe B.C. Regulations for stable excavations should be followed to ensure a safe working area. Excavation is not permitted within a 1.5H:1V (Horizontal:Vertical) gradient line projected below adjacent footings, retaining walls, or other structures, without the written direction of the Geotechnical Engineer. Unsupported excavated slopes may be inclined no steeper than 1H:1V, unless otherwise directed in writing by the Geotechnical Engineer. Flatter slopes may be necessary depending on actual site conditions. Temporary shoring and/or underpinning support may be required where the unsupported temporary slope inclinations cannot be achieved. An initial review in advance of any excavation for this project should be completed by the Geotechnical Engineer.
   - 2.3. All existing buried services/structures, building foundations, concrete, debris, and/or unsuitable materials, should be stripped and removed from the site and appropriately disposed of off-site.
   - 2.4. All vegetation and other unsuitable materials within the proposed retaining wall area are to be completely stripped and removed, and properly disposed of off-site.
   - 2.5. All loose, saturated, and/or unsuitable material must be removed from beneath the footprint of the proposed retaining wall to expose undisturbed natural soil. The excavated surface must be reviewed and approved by the Geotechnical Engineer prior to placement of any fill, leveling course, and/or wall blocks.
   - 2.6. The excavated surface must be protected from becoming disturbed and kept dry. Provisions to adequately collect, drain, and discharge groundwater seepage and/or surface water runoff must be implemented in accordance with local Erosion and Sediment Control

KONTUR GEOTECHNICAL CONSULTANTS inc.
Unit 107, 2071 Kingsway Avenue, Port Coquitlam, B.C. V3C 6N2
t. 1 (778) 730 1747 | toll-free. +1 (833) 301 7575 | e. info@kontur.ca | www.kontur.ca

SEAL: PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — J. Y. TANAKA # 37219
EGBC Permit to Practice #1000925

VERSIONS		
NO	DESCRIPTION	DATE
0	ISSUED FOR REVIEW	2025-01-07

TITLE: GENERAL NOTES AND SPECIFICATIONS
PROJECT NO.: K-231474-01
CLIENT: R.F. BINNIE & ASSOCIATES LTD.
DATE: 2025-01-07 | SCALE: | DWG NO.: G104
PROJECT LOCATION: PROPOSED ALLAN BLOCK RETAINING WALLS - EAST/WEST OF LUCILLE STARR BRIDGE, LUCILLE STARR DR. (EAST OF THE INTERSECTION AT SCHOOLHOUSE ST. AND LUCILLE STARR DR.) COQUITLAM, B.C.
DRAFT: SG | DESIGN: XH | CHECK: PS

January 8, 2025 5:22:29 PM

bylaws. Any seepage and/or surface runoff must be reported to the Geotechnical Engineer.

2.7. Retaining wall should be placed on a properly stripped and prepared subgrade surface approved by the Geotechnical Engineer.

3.0. **Retaining Wall Construction**

3.1. The lower row of blocks can be placed directly on the bedding or leveling layer. Stacking and interlocking of each block should follow the manufacturer's specifications. The outer face of the wall should be battered at 1H:6V in accordance with the drawings. Vertical batters are not permitted unless specified in the drawings.

3.2. Placement and compaction of backfill shall start from the blocks and proceed away from the face of the wall. No more than three row of blocks may be placed at one time until the area behind the rows of blocks is properly backfilled and compacted. Heavy equipment must be kept more than 1 meter away from back of the blocks during construction. Hand-operated compaction equipment may be used within this zone taking care not to damage the wall.

3.3. Backfill behind the allan block Retaining walls to a distance equal to the length of the geogrid and to the top of the highest geogrid shall consist of free-draining granular material.

3.4. Off-site Considerations. the Contractor is responsible for street clean up to meet municipal requirements.

3.5. Geogrids shall be installed at the lengths, elevations, and locations shown on the drawings herein. Changes to geogrid layout are not permissible without the expressed written consent of the Geotechnical Engineer. Geogrid reinforcement shall be continuous throughout their embedment length. Geogrid-to-Geogrid connection is not allowed.

3.6. Tracked construction equipment shall not be operated directly on the geogrid reinforcement. A minimum backfill thickness of 150mm is required for operation of tracked vehicles over the geogrid reinforcement. Turning of tracked vehicles should be kept to a minimum to prevent tracks from displacing the fill and/or geogrid reinforcement.

3.7. A minimum of 75mm of engineered fill shall be placed between overlapping layers of geogrid reinforcement.

Materials testing services will be required in order to assist with confirming the suitability and placement of engineered fills. This may include in-situ compaction, grain size analysis, and moisture density (proctor) tests.

PART D: RESPONSIBILITIES:

1. To 'sign-off' on the retaining wall, Kontur must visit the site at regular intervals during construction to review construction is being completed in accordance with the intent of the design presented herein. Kontur requires at least 48 hours of advanced notice to schedule necessary field reviews. It is the responsibility of the contractor to notify Kontur when the work is ready for review. While not limited to, the following key construction stages may include:
    1.1. Review of proposed engineered backfill material
    1.2. Review of Stripping and excavation works;
    1.3. Review of exposed/prepared subgrade surface;
    1.4. Review placement and compaction of fills;
    1.5. Review of geogrid and geotextile installation;
    1.6. Review of construction of retaining wall
2. Failure to inform the Geotechnical Engineer on a regular basis during construction of the wall may result in non-compliance and subsequently, an in-ability for Kontur to provide "sign-off" for this project.
3. The Contractor shall construct the retaining wall as detailed in the drawings. Any problems, anomalies, or conditions inconsistent with the design during construction must be reported immediately to the Geotechnical Engineer. Changes to the design must be confirmed in writing to and as approved by the Geotechnical Engineer.
4. It is the Contractor's responsibility to ensure a safe working environment in accordance with WorkSafe BC guidelines and regulations.
5. It is the Contractor's responsibility to confirm prior to excavation that there is no conflict with buried utility services (eg. water, gas, sewer). It is also the contractor's responsibility to ensure any existing buried utility services are properly protected/supported during construction and if required, temporarily re-routed around the construction area as required.
6. It is the Contractor's responsibility to layout and survey the proposed wall locations. A survey completed by a Professional Land Surveyor of BC should be completed to layout the wall.
7. It is the Owner's responsibility to ensure all property line setbacks are followed.
8. It is the Owner's responsibility to ensure that where encroachment onto neighboring lands is necessary, for either temporary or permanent purposes, that encroachment permissions are obtained in advance of construction, in a written Encroachment Agreement between land owners.
9. Kontur assumes no liability or responsibility for damage to any underground utilities, non-conformance with property boundaries or property line setbacks, and/or the means and methods to construct the retaining wall.

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