

CITY OF COQUITLAM
3000 GUILDFORD WAY, COQUITLAM, BC V3B 7N2

STONEY CREEK STORM WATER TREATMENT
ISSUED FOR TENDER

LEGEND		
EXISTING	PROPOSED	DESCRIPTION
		IRON PROPERTY PIN
		BUILDING
		EDGE OF PAVEMENT
		CURB & GUTTER
		TRUCK ROUTE
		SANITARY SEWER
		SANITARY CONNECTION & INSPECTION CHAMBER
		STORM SEWER
		STORM CONNECTION & INSPECTION CHAMBER
		CATCH BASIN / LAWN BASIN LEAD
		FRENCH DRAIN
		STORM SEWER & CLEANOUT
		CATCH BASIN - TOP INLET & SIDE INLET
		LAWN DRAIN
		CATCH BASIN MANHOLE
		SWALE
		DITCH
		SIDEWALK (ASPHALT)
		SIDEWALK (CONCRETE)
		RETAINING WALL
		WATERMAIN
		WATER SERVICE CONNECTION
		WATER VALVE
		AIR VALVE
		HYDRANT & VALVE ASSEMBLY
		YARD HYDRANT
		CAPPED END
		WATER METER
		BLOW-OFF
		UNDERGROUND TELEPHONE & MANHOLE
		UNDERGROUND ELECTRICAL & MANHOLE
		GASMAIN
		TRAFFIC SIGNAL & STREET LIGHT U/G DUCTS
		HYDRO U/G DUCTS
		CABLE TV U/G DUCTS
		ORNAMENTAL STREET LIGHT - DAVIT
		ORNAMENTAL STREET LIGHT - POST TOP
		UTILITY POLE
		UTILITY POLE W/ LIGHT
		JUNCTION BOX
		GROUND ELEVATION
		DIRECTION OF OVERLAND FLOW



SITE PLAN
SCALE - 1:3000

DRAWING INDEX			
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	COVER SHEET		
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03	STORM SEWER - PLAN & PROFILE	NORTH ROAD	STA. 2+100 TO 2+200 & STA. 4+100 TO 4+120
04	STORM SEWER - PLAN & PROFILE	NORTH ROAD	STA. 2+110 TO 2+150



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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 (MMCAD), 102-211 COLUMBIA STREET, VANCOUVER, BC V6B 2R5.
3. THE CONTRACTOR IS TO NOTIFY THE CA AT THE FOLLOWING STAGES OF THE CONSTRUCTION SCHEDULE:
- 3.1. DELIVERY OF STORM SEWER MATERIAL TO SITE.
- 3.2. DELIVERY OF SANITARY SEWER MATERIALS TO SITE.
- 3.3. DELIVERY OF WATER WORKS MATERIALS TO SITE.
- 3.4. INITIAL INSTALLATION OF STORM SEWER, SANITARY SEWER, AND WATER WORKS CONSTRUCTION PRIOR TO BACKFILLING.
- 3.5. GRADING OF ROAD SURFACES PRIOR TO PAVING.
4. 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.
5. ALL WORK SHALL PASS THE INSPECTION OF THE ENGINEERING DEPARTMENT OF THE CITY OF COQUITLAM.
6. 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.
7. 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.
8. 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.
9. 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.
10. WORKSAFE B.C. IS TO BE NOTIFIED PRIOR TO THE START OF CONSTRUCTION.
11. 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).
12. 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.
13. 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.
14. 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 LAP JOINT WITH THE PROPOSED PAVEMENT UNLESS NOTED OTHERWISE OR AS DIRECTED BY THE CA.
15. EXISTING UNDERGROUND UTILITY TRENCHES ADJACENT TO THE PROPOSED UNDERGROUND UTILITY INSTALLATION SHALL BE ADEQUATELY PROTECTED FROM SLOUGHING IN ORDER TO PREVENT OVER-WIDTH EXCAVATION.
16. 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 200mm WIDE X 35mm DEEP LAP JOINT WITH THE PROPOSED PAVEMENT UNLESS NOTED OTHERWISE OR AS DIRECTED BY THE CA.
17. 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.
18. ANY MATERIAL SUBSTITUTION AND/OR CHANGE IN DESIGN MUST OBTAIN WRITTEN APPROVAL FROM THE CA 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.
19. 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.
20. 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.
21. 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.
22. FOR RECOMMENDATIONS REGARDING THE SUBSURFACE CONDITIONS, SITE PREPARATION, AND THE PROPOSED ROAD STRUCTURE, REFER TO THE GEOTECHNICAL REPORT PRIOR TO THE START OF CONSTRUCTION.
23. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM ADJACENT PROPERTY OWNERS FOR A TEMPORARY ENCROACHMENT ON PRIVATE PROPERTY.
24. ALL PAVEMENT MARKINGS, LINE PAINTING, DIRECTIONAL LINES/ARROWS/SIGNAGE ETC. SHALL BE PLACED IN ACCORDANCE WITH THE PAVEMENT MARKING AND SIGNAGE DESIGN DRAWINGS.
25. 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.
26. 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.
27. CONTACT COQUITLAM ENGINEERING DEPT. MIN. 48HRS PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR WORKS INSPECTOR.
28. ALL EXCAVATION WITHIN EXISTING TREE DRIP LINES TO BE BY HAND OR HYDRO-VAC.

29. 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 SITE GRADING, SITE SERVICING, AND SITE ELECTRICAL DRAWINGS SHOWING THE LOCATION AND ELEVATION OF ALL NEW AND EXISTING WORKS ENCOUNTERED ON THE PROJECT.
30. THE CONTRACTOR SHOULD KEEP RECORDS AND/OR PHOTOS OF EXISTING RETAINING WALLS, TREES, DRIVEWAYS AND WALKWAYS WHERE REQUIRED FOR GENERAL CONSTRUCTION NOTES #20 AND #31.
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 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 200mm WIDE X 35mm 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.
16. OVER-EXCAVATE (OPTIONAL): WHERE DIRECTED BY THE CONTRACT ADMINISTRATOR, EXCAVATE UNSUITABLE MATERIAL AND REPLACE WITH IMPORTED BASE GRAVEL OR CRUSHED GRANULAR SUB-BASE COMPACTED IN PLACE TO 95% MODIFIED PROCTOR DENSITY.
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.
21. NEW LINE PAINTING AND SIGNAGE AS PER M.U.T.C.D STANDARDS.

SANITARY SEWER NOTES

1. THE EXISTING 3750 AND 4000 SANITARY SEWER LOCATED ADJACENT TO THE PROPOSED STORM SEWER WORKS ON NORTH ROAD SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION.
2. A SANITARY BY-PASS SYSTEM SHALL BE INSTALLED AND WORKING PRIOR TO STARTING THE PROPOSED STORM WORKS. CONTRACTOR TO PROVIDE ALL REQUIRED BYPASS PUMPING AND/OR FLOW DIVERSION DURING THE STORM SEWER WORKS ON NORTH ROAD.
3. EXISTING INVERTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
4. TYPICAL TRENCH SECTION SHALL BE INSTALLED AS PER STD. DWG. COQ-G4.

WATER WORKS NOTES

1. THE EXISTING 2000 CI WATER MAIN LOCATED ADJACENT TO THE PROPOSED STORM SEWER WORKS ON NORTH ROAD SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION.
2. A SECTION OF THE EXISTING 2000 CI WATER MAIN FROM #825-NORTH ROAD TO JEFFERSON AVENUE SHALL BE ISOLATED AND TEMPORARILY TURNED OFF DURING THE STORM SEWER CONSTRUCTION WORKS ON NORTH ROAD. DURING THIS TIME, A TEMPORARY WATER SERVICE CONNECTION TO #831-NORTH ROAD SHALL BE PROVIDED. CONTRACTOR TO CO-ORDINATE THESE WORKS WITH THE CITY OF COQUITLAM.
3. THE MINIMUM COVER FOR WATERMAINS SHALL BE 1.0m WITH 0.3m COVER OVER VALVE STEMS UNLESS NOTED OTHERWISE.
4. THE MINIMUM GRADE FOR WATERMAINS SHALL BE 0.1%.
5. WATER SERVICE CONNECTIONS SHALL BE 19mm TO 38mm AS NOTED AND SHALL BE MUNICIPEX PIPE c/w CURB STOP AND VALVE BOX 0.3m FROM THE PROPERTY LINE AS PER STD. DWG. COQ-W2k, COQ-W2d OR COQ-W2l AS APPLICABLE.
6. WATER SERVICE CONNECTIONS SHALL BE INSTALLED BY THE CONTRACTOR FROM THE MAIN TO THE PROPERTY LINE INCLUDING THE CURB STOP OR WATER VALVE. WHERE RETAINING WALLS ARE PROPOSED AT THE PROPERTY LINE, THE SERVICE SHALL BE REPLACED TO 1m BEYOND THE PROPERTY LINE.
7. EXISTING INVERTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
8. FOR WATERMAIN TIE-INS, REFER TO COQUITLAM SUPPLEMENTAL SPECIFICATIONS 33 11 01S.3.23 - CONNECTION TO EXISTING MAINS. THE CONTRACTOR SHALL CONTACT THE CITY OF COQUITLAM PRIOR TO THE COMMENCEMENT OF TIE-IN AND CONNECTION PROCEDURES. TIE-INS AND CONNECTIONS SHALL BE COORDINATED WITH THE CITY OF COQUITLAM. TIE-INS AND CONNECTIONS TO THE EXISTING WATERMAIN SHALL BE PERFORMED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE CONTRACT ADMINISTRATOR. THE CONTRACTOR SHALL EXPOSE THE TIE-IN LOCATIONS. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS REQUIRED TO COMPLETE THE TIE-INS.
9. TYPICAL TRENCH SECTION SHALL BE INSTALLED AS PER STD. DWG. COQ-G4.
10. WHERE THE HORIZONTAL SEPARATION BETWEEN WATER MAIN AND EITHER A SANITARY OR A STORM SEWER IS LESS THAN 3 METERS, WRAP ALL WATER MAIN JOINTS WITH HEAT SHRINK PLASTIC, OR PACKED WITH COMPOUND AND WRAPPED WITH PETROLATUM TAPE IN ACCORDANCE WITH THE LATEST VERSION OF AWWA STANDARD C217, AND C214 OR C209.

11. REMOVE AND DISPOSE OF EX AC PIPE IN ACCORDANCE WITH WORKSAFE BC AND OTHER PERTINENT REGULATIONS.
12. WHERE WATER MAIN CROSSES A STORM OR SANITARY SEWER, THE WATER MAIN SHALL BE PLACED ABOVE WITH A MINIMUM CLEARANCE OF 0.5M. THE WATER MAIN MUST BE PLACED IN SUCH A MANNER TO ACCOMMODATE THE CROSSING AT MID POINT BETWEEN THE ENDS OF A FULL LENGTH OF PIPE, AND THE WATER MAIN JOINTS SHALL BE WRAPPED WITH HEAT SHRINK PLASTIC, OR PACKED WITH COMPOUND AND WRAPPED WITH PETROLATUM TAPE IN ACCORDANCE WITH THE LATEST VERSION OF AWWA STANDARD C217, AND C214 OR 209.

STORM SEWER NOTES

1. STORM SERVICE CONNECTIONS SHALL BE 150mm DR 28 PVC AS NOTED AND INSTALLED AS PER COQUITLAM STANDARD DRAWING S84.
2. STORM SERVICE CONNECTIONS SHALL BE INSTALLED FROM THE MAIN TO THE PROPERTY LINE AT 2% GRADE UNLESS NOTED OTHERWISE. ALL SERVICES SHALL ENTER THE MAIN AT A POINT JUST ABOVE THE SPRINGLINE. CONNECTIONS TO MAINS SHALL BE MADE USING WYE FITTINGS.
3. STORM SERVICE INSPECTION CHAMBERS FOR 150mm STORM SERVICE SHALL BE INSTALLED AS PER THE MMCD STANDARD DRAWING NO. S9. STORM INSPECTION CHAMBER LIDS TO BE GREEN IN COLOUR.
4. ALL WYES SHALL BE MANUFACTURED.
5. STORM SERVICE CONNECTIONS SHALL BE INSTALLED BY THE CONTRACTOR FROM THE MAIN TO THE PROPERTY LINE INCLUDING THE INSPECTION CHAMBER 0.3m FROM THE PROPERTY LINE UNLESS NOTED OTHERWISE.
6. EXISTING INVERTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. THE CONTRACTOR SHALL CONTACT THE CITY OF COQUITLAM AND THE CITY OF BURNABY PRIOR TO THE COMMENCEMENT OF TIE-IN AND CONNECTION PROCEDURES. TIE-INS AND CONNECTIONS SHALL BE COORDINATED WITH THE CITY OF COQUITLAM AND THE CITY OF BURNABY.
8. CONTRACTOR TO PROVIDE ALL REQUIRED BYPASS PUMPING AND/OR FLOW DIVERSION DURING PIPE INSTALLATION AND TIE-IN CONSTRUCTION.
9. STORM SEWER SHALL BE CONCRETE PIPES AND CONCRETE FITTINGS. ALL JOINTS SHALL BE INSTALLED WITH RUBBER GASKETS TO MAKE THEM WATER TIGHT UNLESS NOTED OTHERWISE.
10. SIGNED AND SEALED ENGINEERED SHOP DRAWINGS SHALL BE SUBMITTED FOR THE FOLLOWING:
- 10.1. ALL STORM SEWER CONCRETE BENDS AND CONCRETE WYES
- 10.2. ALL STORM SEWER CONCRETE REDUCERS
- 10.3. STORM SEWER MANHOLE D01, D02, AND D03
- 10.4. STORM WATER TREATMENT FACILITY
11. SIDE INLET TYPE CATCH BASINS SHALL BE INSTALLED AS PER THE CITY OF COQUITLAM STANDARD DRAWING NO. COQ-S11A UNLESS NOTED OTHERWISE. CATCH BASIN LEADS SHALL BE 150mm DIAMETER PVC PIPE WITH A MINIMUM SDR 28 SPECIFICATION UNLESS NOTED OTHERWISE. DOUBLE CATCH BASIN LEADS SHALL BE 200mm DIAMETER PVC PIPE WITH A MINIMUM SDR 35 SPECIFICATION UNLESS NOTED OTHERWISE.
12. FOR CATCH BASINS LOCATED ADJACENT TO A CURB, THE CATCH BASIN RIM ELEVATIONS SHALL BE SET 30mm BELOW THE FINISHED GUTTER LINE GRADE. FOR CATCH BASINS SURROUNDED BY PAVEMENT, THE CATCH BASIN RIM ELEVATIONS SHALL BE SET FLUSHED WITH THE FINISHED PAVEMENT. THE GUTTER AND ROAD SURFACE ARE TO BE SHAPED TO FORM A DISH AROUND THE INLET.
13. THE CONTRACTOR SHALL BE RESPONSIBLE IN ENSURING THAT THE FINISHED RIM ELEVATION OF THE STORM SEWER MANHOLES MATCHES THE FINISHED ROAD GRADES AND ELEVATIONS.
14. LAWN BASINS SHALL BE INSTALLED AS PER THE COQUITLAM STANDARD DRAWING S12A TYPE 1. LAWN BASIN LEADS SHALL BE 150mm DIAMETER PVC PIPE WITH A MINIMUM SDR 28 SPECIFICATION UNLESS OTHERWISE NOTED.
15. THE CONTRACTOR IS TO PROVIDE CCTV CAMERA INSPECTIONS OF ALL STORM SEWERS, INCLUDING INSPECTION HARD COPIES AND DIGITAL FORMAT IN A FORMAT SATISFACTORY TO THE CA. ALL SEWERS ARE TO BE FLUSHED PRIOR TO CAMERA INSPECTIONS. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE CCTV INSPECTIONS AND REPORTS, WHICH IS DEEMED TO BE INCLUDED IN THE UNIT PRICES TENDERED FOR THE ITEMS IN THE SCHEDULE OF QUANTITIES AND PRICES.
16. TYPICAL TRENCH SECTION SHALL BE INSTALLED AS PER STD. DWG. COQ-G4.
17. THE STORM WATER TREATMENT STRUCTURES SHALL HAVE A MIN. 200mm THICK GRANULAR BASE WHICH EXTENDS A MIN. 500mm BEYOND THE OUTER WALL. THE GRANULAR BASE SHALL BE 19mm CRUSHED GRANULAR BASE OR APPROVED EQUAL, COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
18. EXISTING SEWERS AND MANHOLES TO BE REMOVED AS PART OF THE TRENCH EXCAVATION FOR PROPOSED STORM SEWER WORKS.

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 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.



EGBC PERMIT NO. 1001128

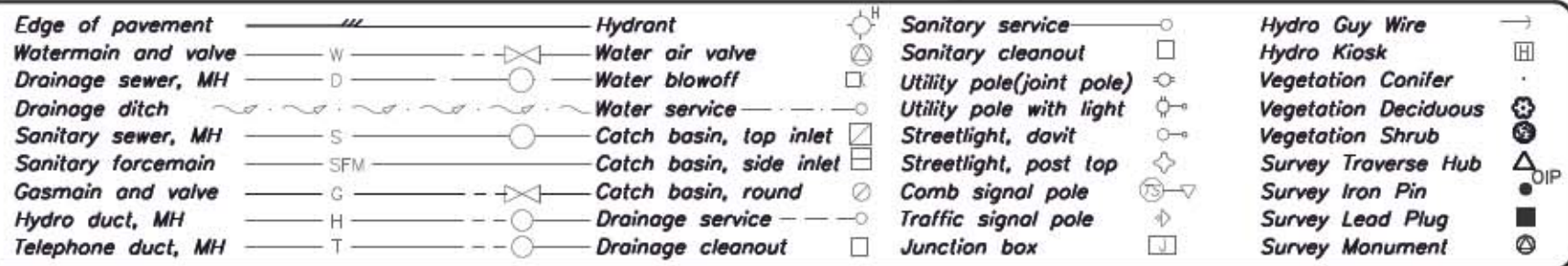
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AS SHOWN

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PLUTED: 2024-03-20 5:17:35 PM

Plot Date: March 20, 2024



No.	Date	By	Revisions
1	2024-03-20	LY	ISSUED FOR TENDER

Design by
KC

Date

Drawn by
LY

Date
2024-03-13

Checked by
WC

Date

Approved by
GL

Date

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ACCEPTED FOR CONSTRUCTION
Date: _____
Manager of Development Servicing

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

Scale
horiz. AS SHOWN
Sheet **01** of **04**
Eng. Project No. **23-0476**

Scale
vert. AS SHOWN

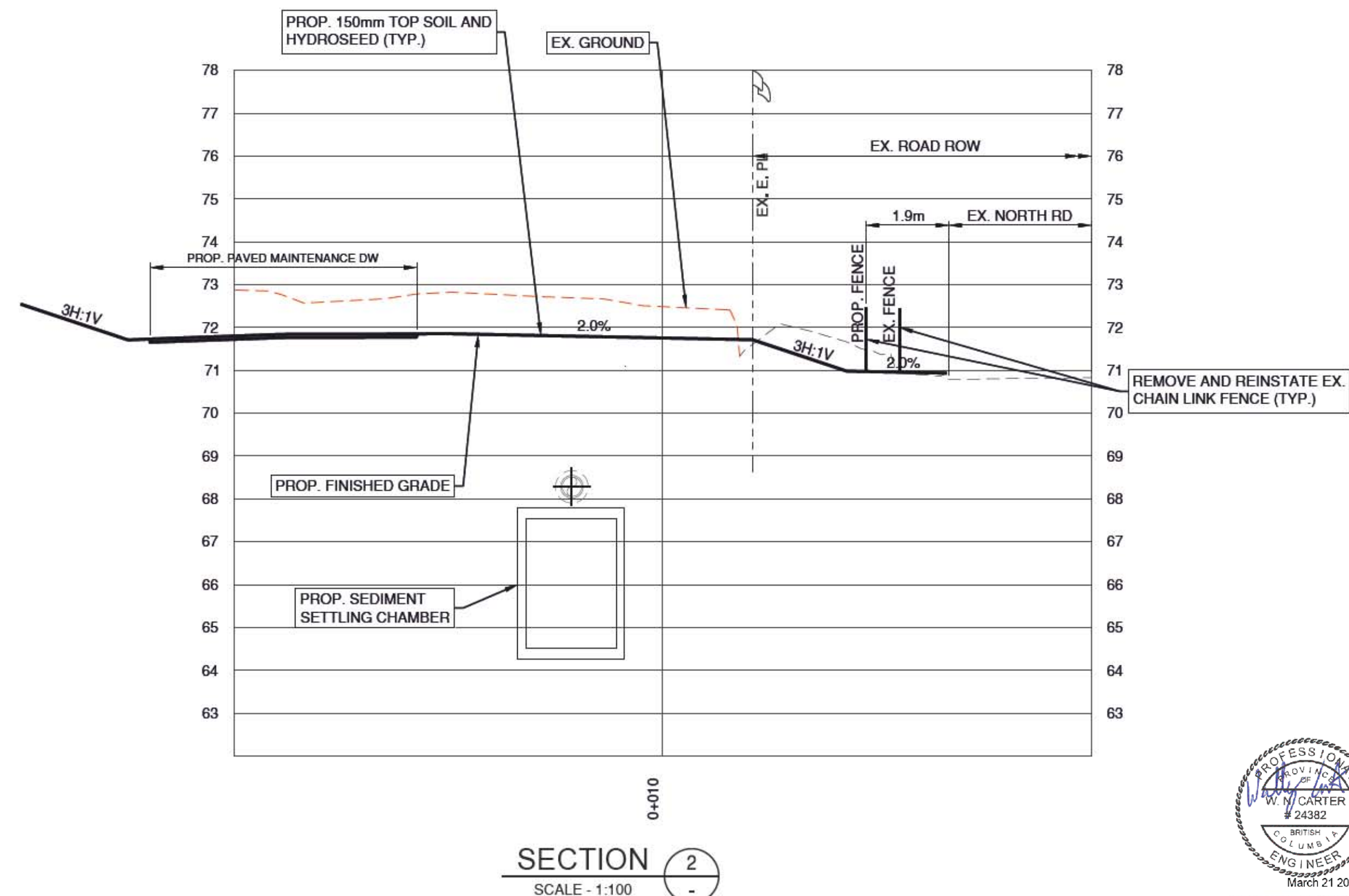
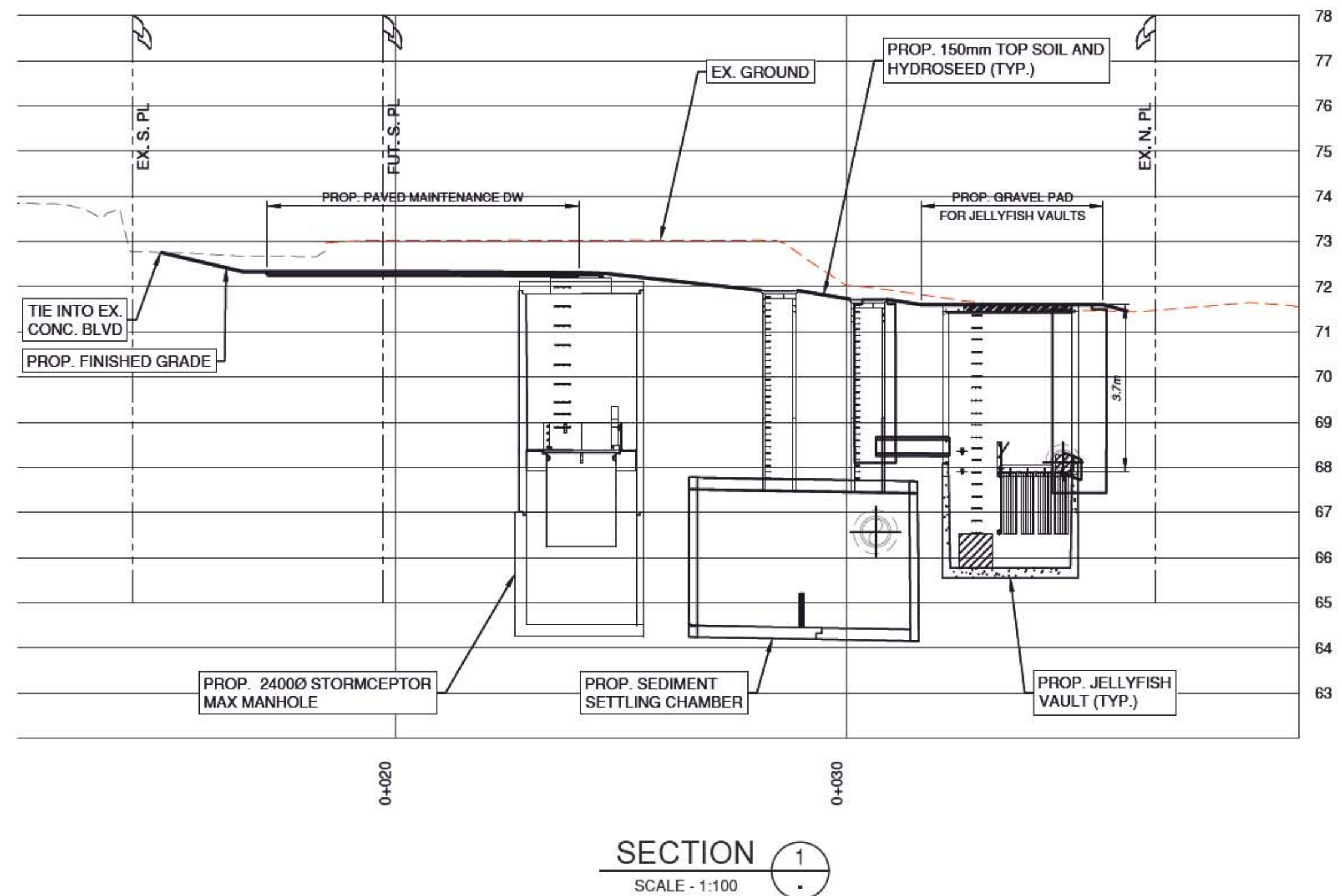
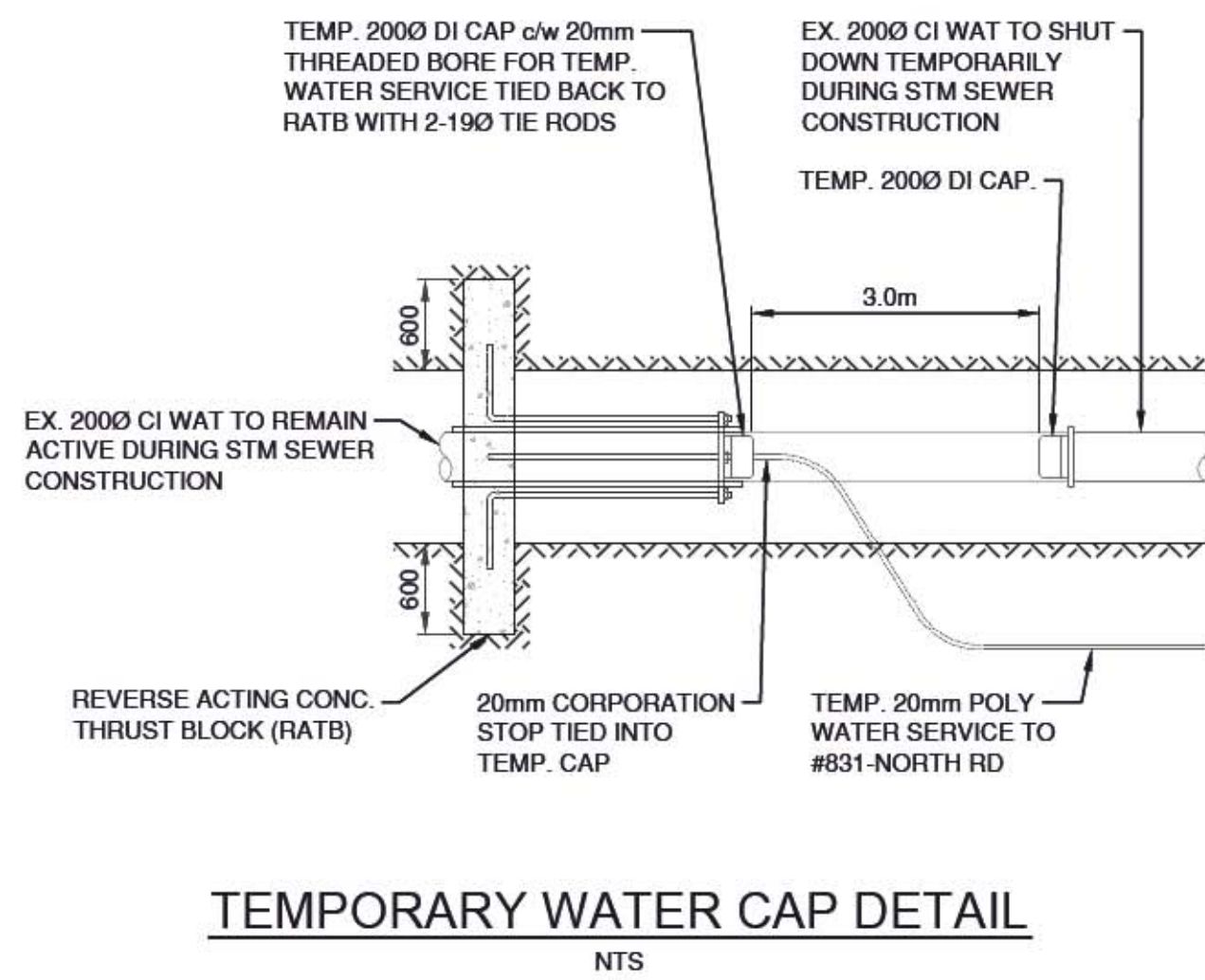
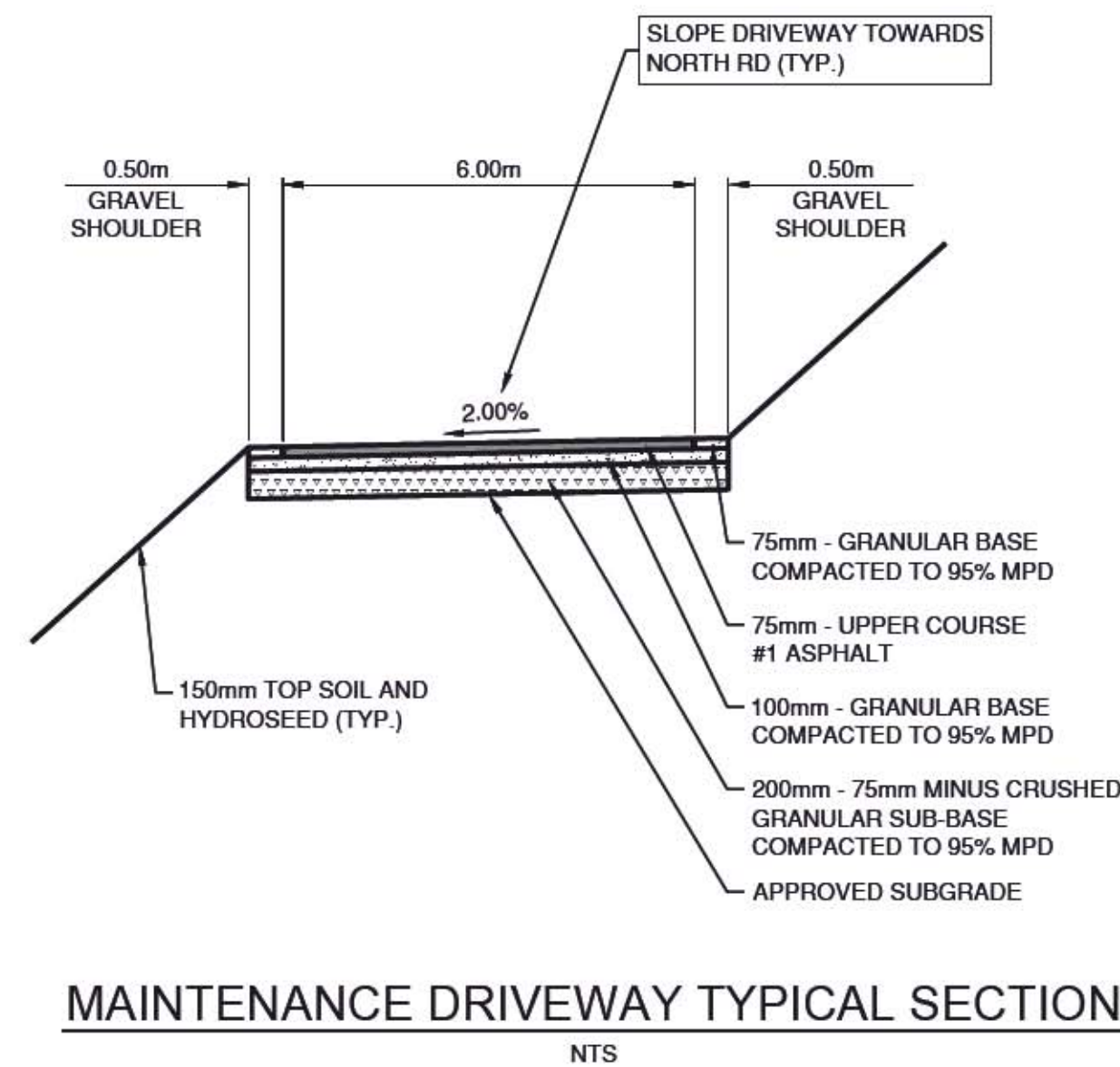
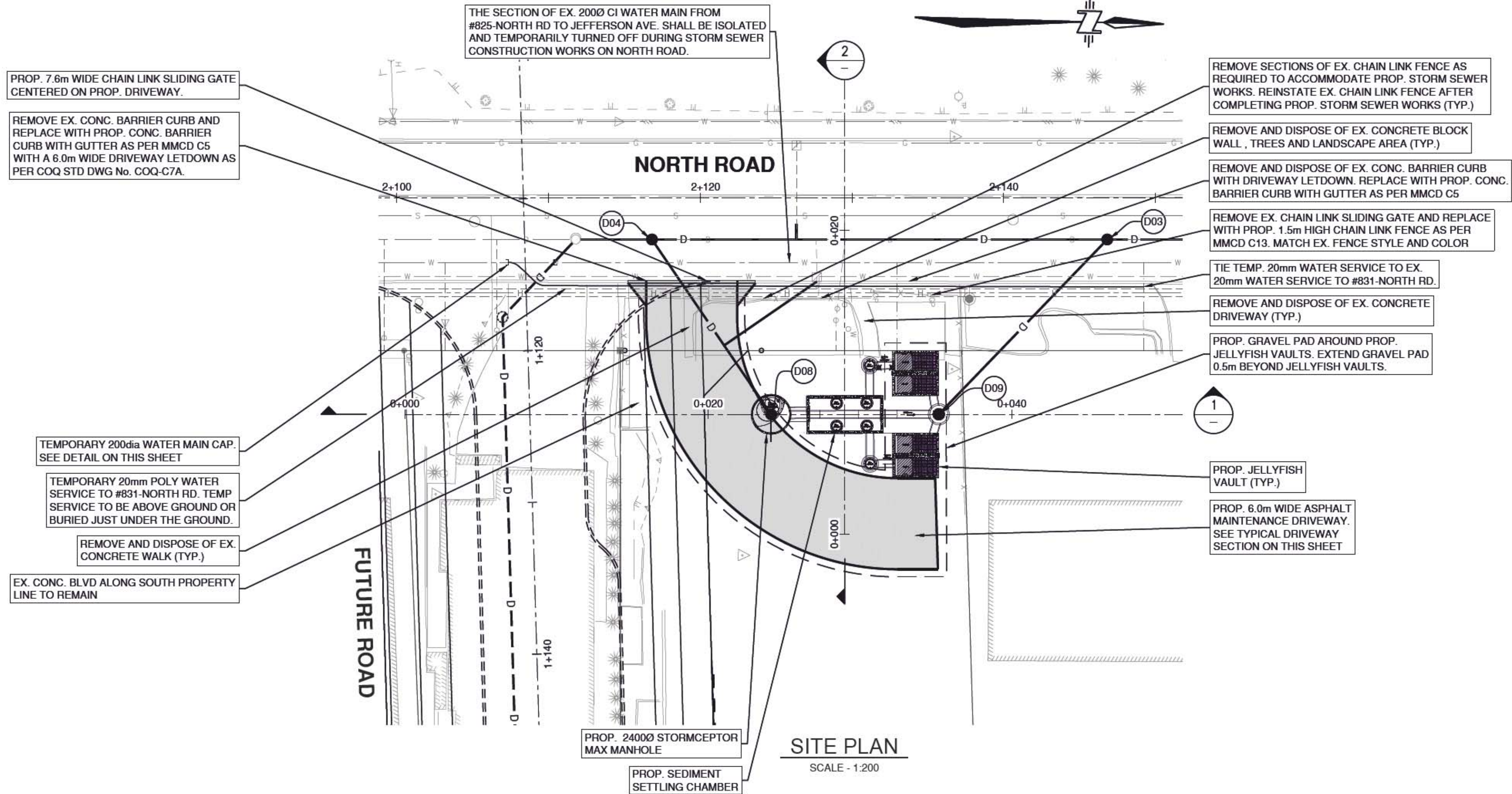
Project
NORTH ROAD

Description
GENERAL NOTES & DETAILS

File
23-0476-ND1

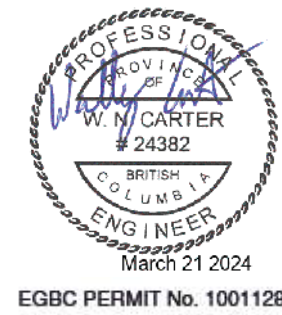
REV. **1**

BENCHMARK:
MONUMENT 73H0196 SIT ON C/L OF CLAREMONT ST.
230 METRES NORTH OF COMO LAKE AVE.
ELEV. = 89.566M (CVD28GVRD2018)



AS SHOWN

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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 Canifer
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	Camb 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
1	2024-03-20	LY	ISSUED FOR TENDER

Design by	Date
KC	
Drawn by	Date
LY	2024-03-13
Checked by	Date
WC	
Approved by	Date
GL	



Scale	AS SHOWN	Scale	AS SHOWN
horiz.		vert.	
Sheet	02	of	04
Eng. Project No.	23-0476		

Project	NORTH ROAD
Description	STORM SEWER - SITE PLAN, SECTIONS, & DETAILS
File	23-0476-TS1
REV.	1

BENCHMARK:
MONUMENT 73H0196 SIT ON C/L OF CLAREMONT ST.
230 METRES NORTH OF COMO LAKE AVE.
ELEV. = 89.566M (CVD28GVRD2018)

INSTALL TEMPORARY WATER TIGHT PLUG IN EX. SAN MH NORTH INVERT AND PROVIDE TEMPORARY SAN SEWER BY-PASS SYSTEM DURING STORM SEWER CONSTRUCTION WORKS ON NORTH ROAD. TEMPORARY SAN. BY-PASS SYSTEM PLANS TO BE SUBMITTED TO CITY FOR REVIEW.

INSTALL TEMPORARY 200Ø CAP WITH 19mm IPT FOR TEMPORARY WATER SERVICE TO #831-NORTH RD DURING STORM SEWER CONSTRUCTION WORKS ON NORTH ROAD. REFER TO SHEET 2 FOR DETAILS.

REMOVE EX. CB AND REPLACE WITH PROP. SIDE INLET CB AS PER COQUITLAM STANDARD DETAIL DWG. No. COQ-S11A c/w 150Ø DR28 PVC LEAD @ 2.0% MIN. TIE PROP. CB LEAD INTO PROP. 450Ø STM PIPE

REMOVE EX. 900Ø STM PIPE FROM EX. STM MH NORTH OUTLET AND TIE-INTO EX. STM MH WITH A PROP. 900Ø x 1050Ø CONC. ECCENTRIC REDUCER. GROUT JOINT WATER TIGHT.

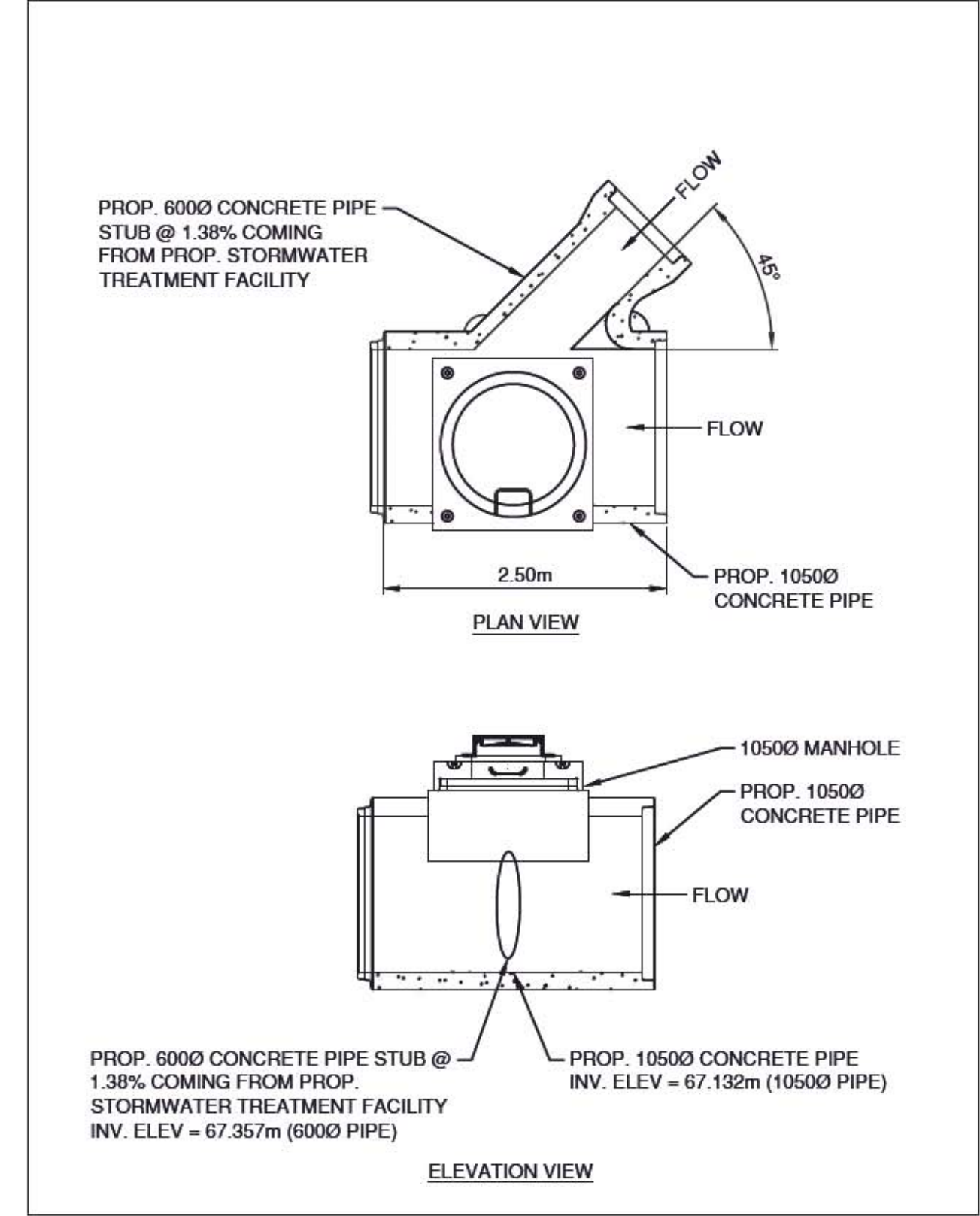
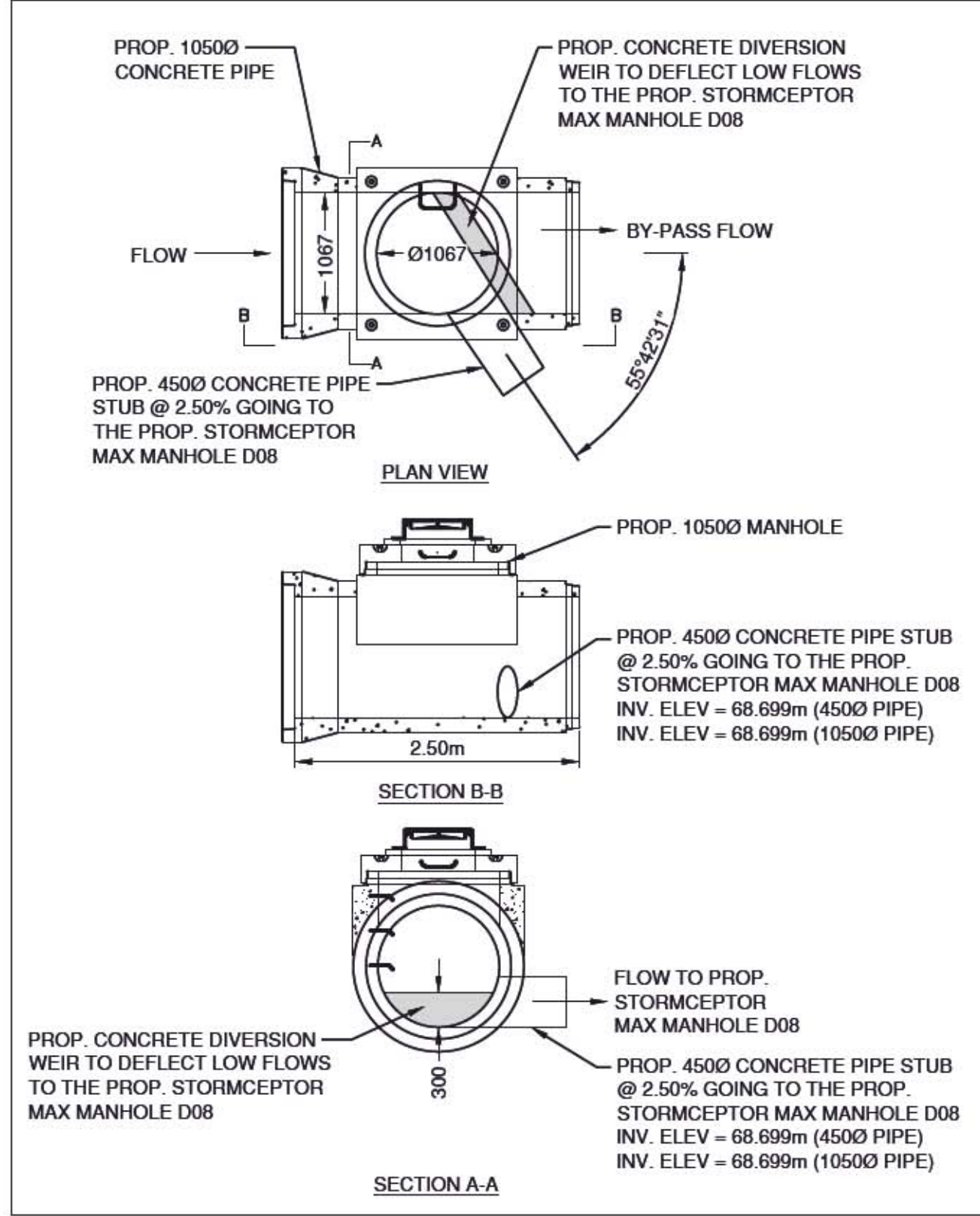
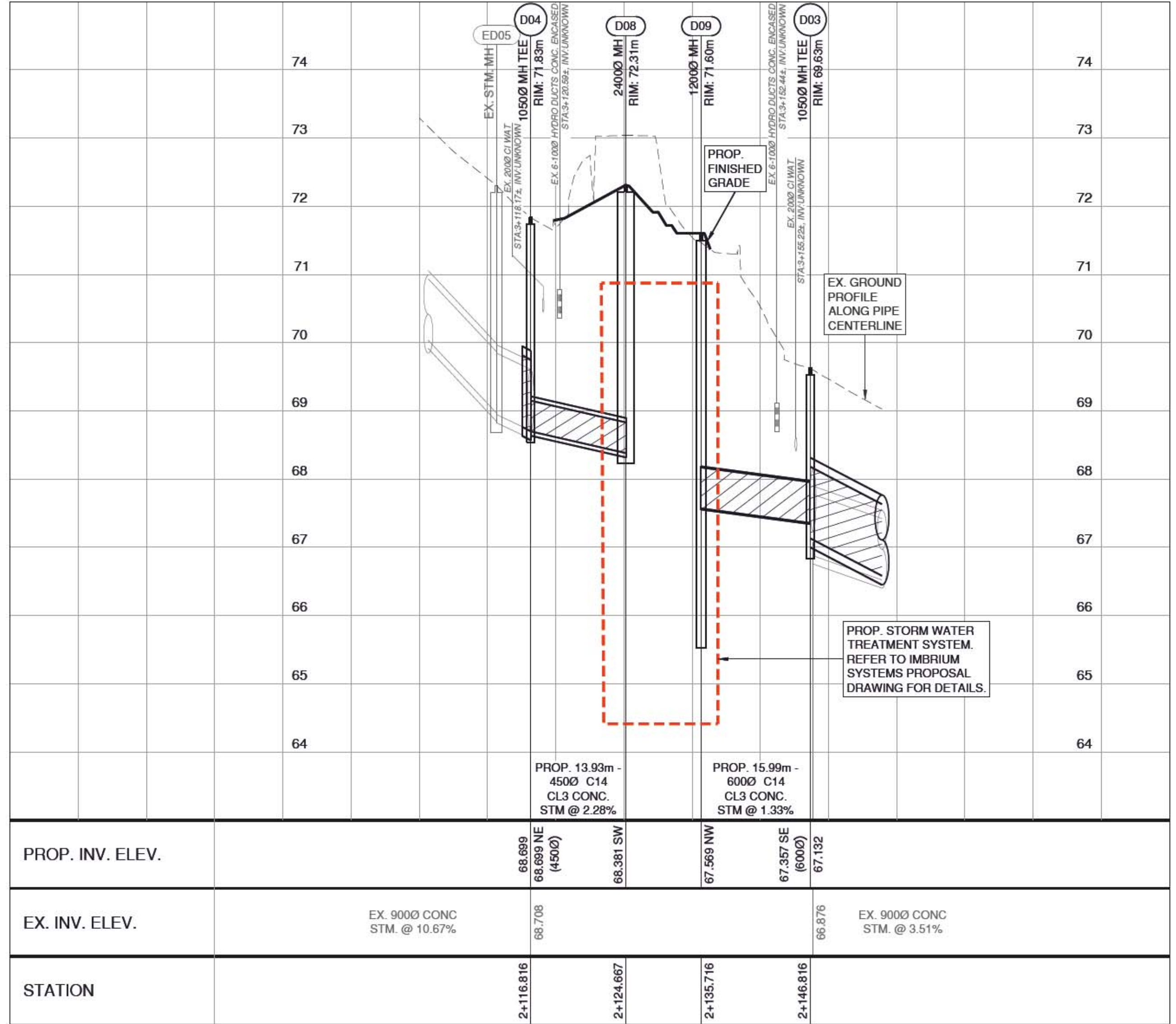
PROP. 1050Ø MANHOLE TEE c/w 450Ø WYE CONNECTION AND FLOW DIVERSION WEIR. REFER TO DETAIL "C" ON THIS SHEET. CONTRACTOR TO PROVIDE SIGNED AND SEALED ENGINEERED SHOP DRAWINGS FOR APPROVAL.

PROP. 1050Ø MANHOLE TEE c/w 600Ø WYE CONNECTION. REFER TO DETAIL "B" ON THIS SHEET. CONTRACTOR TO PROVIDE SIGNED AND SEALED ENGINEERED SHOP DRAWINGS FOR APPROVAL.

PROTECT EX. 200Ø CI WAT DURING CONSTRUCTION (TYP)

PROP. STORMWATER TREATMENT FACILITY. REFER TO IMBRIUM SYSTEMS PROPOSAL DRAWING FOR DETAILS. CONTRACTOR TO PROVIDE SIGNED AND SEALED ENGINEERED SHOP DRAWINGS FOR APPROVAL.

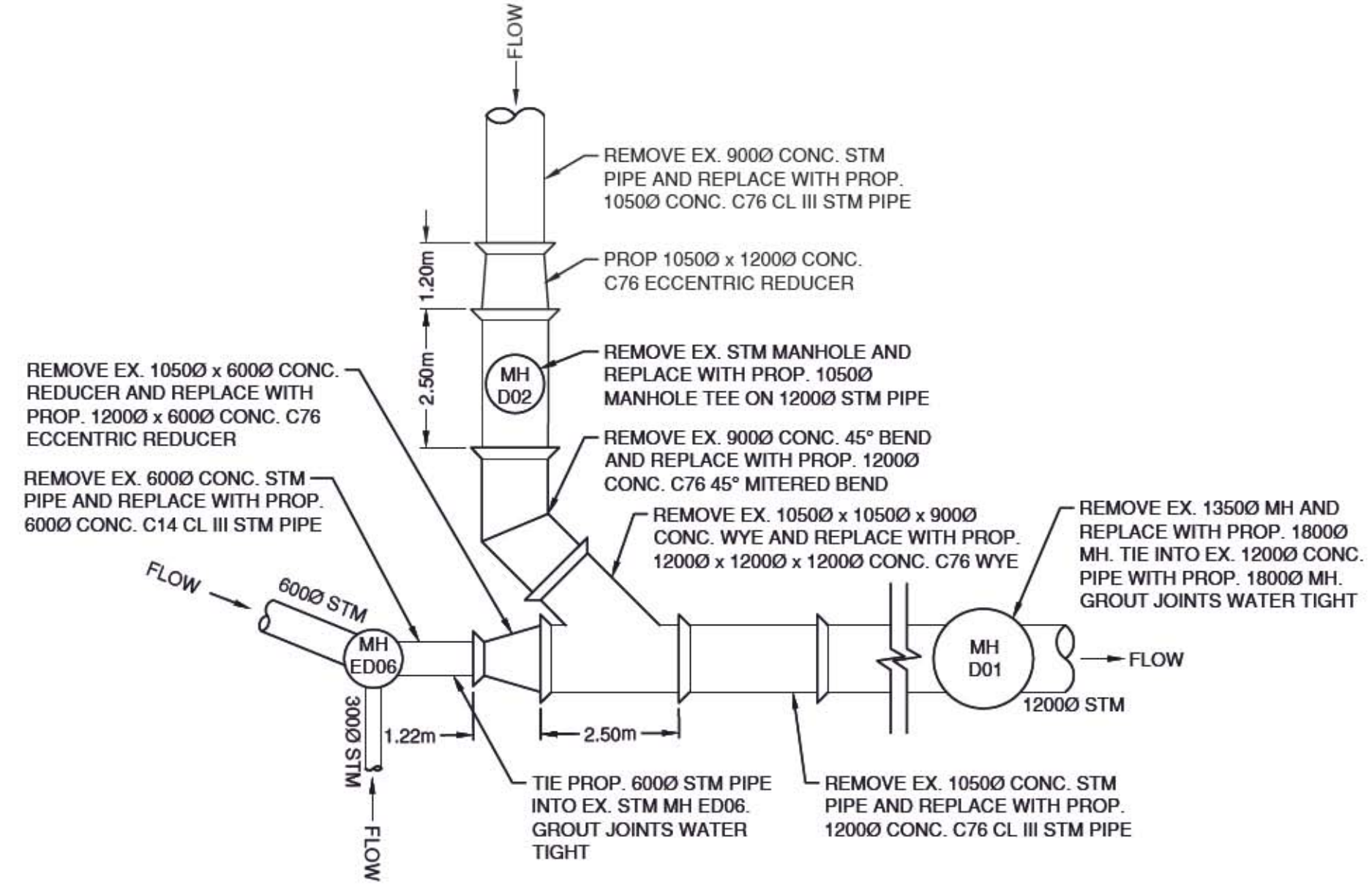
NORTH ROAD



IMBRIUM DESIGN SPECIFICATIONS FOR THE STORM WATER TREATMENT FACILITY:

- STORM WATER QUALITY DESIGN FLOW, Q_{WD} , TO BE TREATED BY THE STORM WATER TREATMENT FACILITY IS 450 LITRES/SEC.

DESIGN FLOW CALCULATED BY IMBRIUM SYSTEMS BASED ON: POST DEVELOPMENT CONDITIONS FOR A CATCHMENT AREA OF 48.1HA HAVING A WEIGHTED RUNOFF COEFFICIENT VALUE OF $R = 0.76$. A 91% WATER QUALITY RUNOFF VOLUME CAPTURE WAS USED TO ACCOUNT FOR CLIMATE CHANGE INCREASES (SAME AS WASHINGTON STATE ECOLOGY RECOMMENDATIONS).
- TREATMENT SYSTEM TO HAVE A BY-PASS SYSTEM TO ALLOW FLOWS LARGER THAN THE WATER QUALITY DESIGN FLOW TO BE DIVERTED AROUND THE STORM WATER TREATMENT FACILITY.
- REFER TO IMBRIUM SYSTEM'S PROPOSAL DRAWING FOR GENERAL ARRANGEMENTS AND DETAILS.
- SYSTEM TO INCLUDE A FLUSH MOUNT SLEEVE FOR A 3" DIAMETER DAVIT ARM POLE AND RECEIVER TO ALLOW FOR ACCESS TO THE FOUR JELLYFISH UNITS.



NOT FOR CONSTRUCTION

0 H 1:500 20m
0 V 1:50 2m

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No.	Date	By	Revisions
1	2024-03-20	LY	ISSUED FOR TENDER

Design by	Date
KC	
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Engineering & Public Works
3000 Guildford Way, Coquitlam, B.C. V3B 7N2

Scale
horiz. 1:500
Sheet 04
Eng. Project No. 23-0476

Scale
vert. 1:50
of 04

Project
NORTH ROAD
STA. 2+110 TO 2+150

Description
STORM SEWER - PLAN & PROFILE

File
23-0476-D2

REV. 1