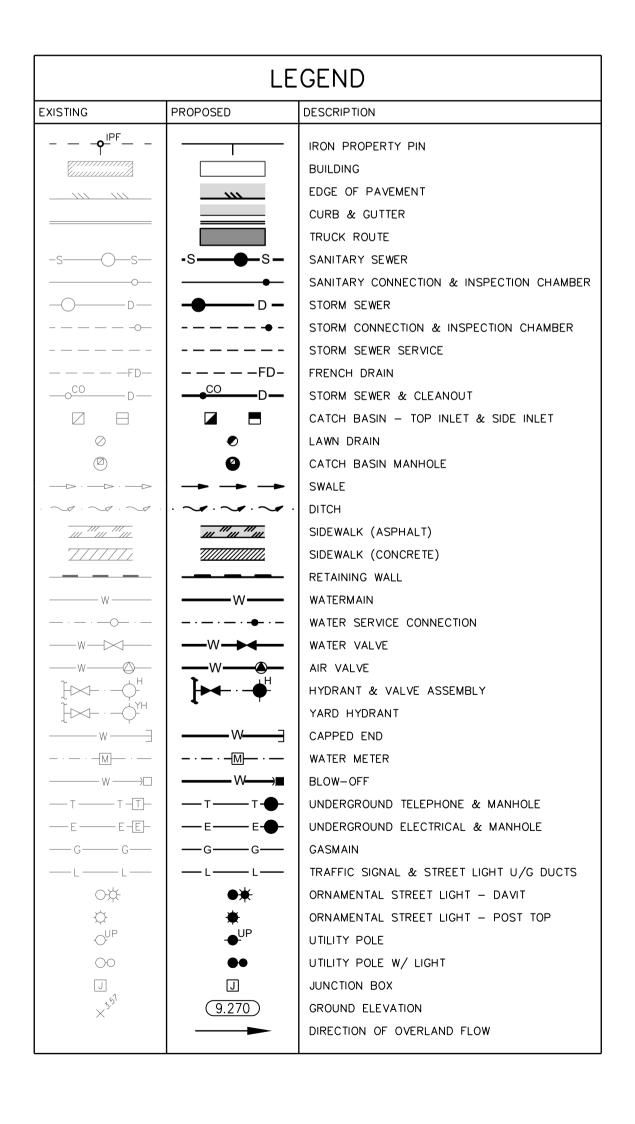


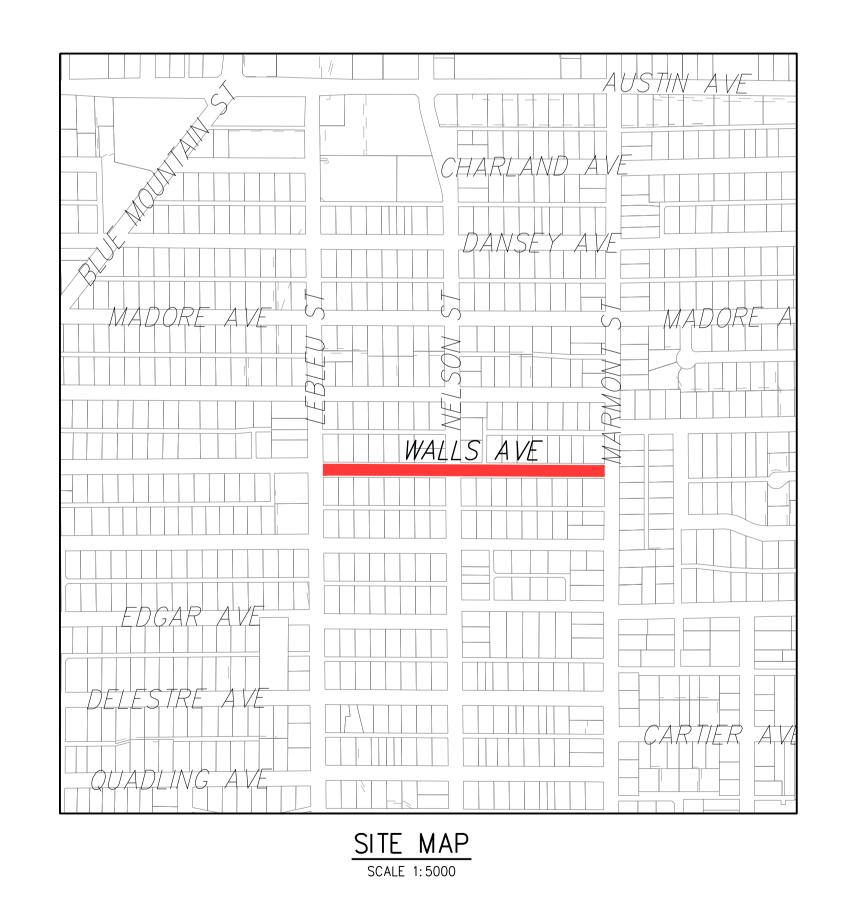
# CITY OF COQUITLAM

3000 GUILDFORD WAY, COQUITLAM, BC V3B 7N2

# WALLS AVE - LEBLEU ST TO MARMONT ST FRONTAGE IMPROVEMENT

## ISSUED FOR TENDER





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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 LATEST EDITION OF THE MASTER MUNICIPAL CONTRACT DOCUMENTS (MMCD), 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 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
- 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. FOR LANDSCAPING DETAILS AND DIMENSIONS, REFER TO THE LANDSCAPE DESIGN DRAWINGS PREPARED BY THE LANDSCAPING CONSULTANT
- 22. 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.
- 23. FOR RECOMMENDATIONS REGARDING THE SUBSURFACE CONDITIONS, SITE PREPARATION, AND THE PROPOSED ROAD STRUCTURE, REFER TO THE GEOTECHNICAL REPORT PRIOR TO THE START OF CONSTRUCTION.
- 24. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM ADJACENT PROPERTY OWNERS FOR A TEMPORARY ENCROACHMENT ON PRIVATE PROPERTY.
- 25. ALL PAVEMENT MARKINGS, LINE PAINTING, DIRECTIONAL LINES/ARROWS ETC. SHALL BE PLACED IN ACCORDANCE WITH THE PAVEMENT MARKING DESIGN DRAWINGS.
- 26. 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.

- 27. 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.
- 28. CONTACT COQUITLAM ENGINEERING DEPT. MIN. 48HRS PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR WORKS INSPECTOR.
- 29. ALL EXCAVATION WITHIN EXISTING TREE DRIP LINES TO BE BY HAND OR HYDRO-VAC.
- 30. 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.
- 31. THE CONTRACTOR SHOULD KEEP RECORDS AND/OR PHOTOS OF EXISTING ROCK WALLS, TREES, DRIVEWAYS AND WALKWAYS WHERE REQUIRED FOR GENERAL CONSTRUCTION NOTES #20 AND #32.
- 32. THE CONTRACTOR IS ADVISED TO REVIEW THE ELECTRICAL DESIGN DRAWINGS FOR COORDINATION AND INSTALLATION OF ELECTRICAL DUCT WORK AND FACILITIES.
- 33. 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.
- 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 200mm WIDE X 35mm DEEP LAP JOINT WITH PROPOSED PAVEMENT UNLESS NOTED OTHERWISE OR AS DIRECTED BY THE ENGINEER.
- 15. ALL PAVEMENT MARKINGS TO BE REINSTATED IN THE PLACE OF WORK. CONTRACTOR RESPONSIBLE TO PERFORM PRE AND POST CONSTRUCTION SURVEY WORK ESSENTIAL FOR THE REINSTATEMENT OF PAVEMENT MARKINGS.
- 16. OVER-EXCAVATE (OPTIONAL): WHERE DIRECTED BY THE CONTRACT ADMINISTRATOR, EXCAVATE UNSUITABLE MATERIAL AND REPLACE WITH IMPORTED BASE GRAVEL COMPACTED IN PLACE.
- 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. 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. ALL CHANGES ARE INCIDENTAL TO CONTRACT.

#### **WATER SERVICE CONNECTIONS NOTES:**

- WATER SERVICE RENEWAL/REPLACEMENT CRITERIA:
- WHERE EXISTING LOTS HAVE MORE THAN ONE EXISTING WATER CONNECTION, THE CONTRACTOR SHALL INVESTIGATE AND VERIFY WHICH CONNECTIONS ARE ACTIVE.
- 1.2. FOR LOT AREAS LESS THAN 465m<sup>2</sup>, ONE 19mm DIAMETER WATER SERVICE IS REQUIRED.
- 1.3. FOR LOT AREAS EQUAL TO OR GREATER THAN 465m2 AND LESS THAN 650m2, TWO 19mm DIAMETER WATER SERVICES ARE REQUIRED PER
- 1.4. FOR LOT AREAS EQUAL TO OR GREATER THAN 650m<sup>2</sup>, ONE 38mm DIAMETER WATER SERVICE IS REQUIRED PER LOT. IF MORE THAN ONE ACTIVE CONNECTION IS PRESENT ON THE LOT, ONE SERVICE SHALL BE UPGRADED TO 38mm AS NOTED AND REMAINING SERVICES SHALL BE CAPPED BY THE FUTURE DEVELOPER.
- 1.5. ACTIVE WATER SERVICES OLDER THAN 30 YEARS SHALL BE REPLACED AS DIRECTED BY THE CONTRACT ADMINISTRATOR.
- 1.6. INACTIVE CONNECTIONS SHALL BE CAPPED AT THE MAIN.
- 1.7. CONFIRM RENEWAL/REPLACEMENT STRATEGY WITH CONTRACT ADMINISTRATOR FOLLOWING INVESTIGATION OF EXISTING SERVICES.
- 2. THE MINIMUM COVER FOR WATERMAINS SHALL BE 1.0m WITH 0.3m COVER OVER VALVE STEMS UNLESS NOTED OTHERWISE.
- 3. THE MINIMUM GRADE FOR WATERMAINS SHALL BE 0.1%.
- 4. 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-W2d OR COQ-W2k AS APPLICABLE.
- 5. 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
- EXISTING INVERTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

- 7. 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.
- 8. TYPICAL TRENCH SECTION SHALL BE INSTALLED AS PER STD. DWG. COQ-G4.

#### SANITARY SERVICE CONNECTIONS NOTES:

- 1. SANITARY SERVICE RENEWAL/REPLACEMENT CRITERIA:
- 1.1. WHERE EXISTING LOTS HAVE MORE THAN ONE EXISTING SANITARY CONNECTION, THE CONTRACTOR SHALL INVESTIGATE AND VERIFY WHICH CONNECTION IS ACTIVE.
- 1.2. FOR LOT AREAS LESS THAN 650m<sup>2</sup>, ONE 100mm DIAMETER SANITARY SERVICE IS REQUIRED PER LOT. FOR LOT AREAS EQUAL TO OR GREATER THAN 650m<sup>2</sup>, ONE 150mm DIAMETER SANITARY SERVICE IS REQUIRED PER LOT.
- 1.3. INSPECTION CHAMBERS SHALL BE INSTALLED ON ALL ACTIVE SANITARY SERVICE CONNECTIONS.
- 1.4. INACTIVE CONNECTIONS SHALL BE CAPPED AT THE MAIN
- 1.5. ALL EXISTING ACTIVE ASBESTOS CONCRETE (AC) SERVICES SHALL BE REPLACED.
- 1.6. CONFIRM RENEWAL/REPLACEMENT STRATEGY WITH CONTRACT ADMINISTRATOR FOLLOWING INVESTIGATION OF EXISTING SERVICES.
- 2. SANITARY SERVICE CONNECTIONS SHALL BE 100mm OR 150mm DR 28 PVC AS NOTED AND INSTALLED AS PER THE COQ STANDARD DRAWING

SANITARY SERVICE CONNECTIONS SHALL BE INSTALLED FROM THE MAIN TO THE PROPERTY LINE AT GRADE OF 2.0% UNLESS NOTED OTHERWISE.

- ALL SERVICES SHALL ENTER THE MAIN AT A POINT JUST ABOVE THE SPRINGLINE. CONNECTIONS TO NEW MAINS SHALL BE MADE USING PVC WYE FITTINGS.
- SANITARY SERVICE INSPECTION CHAMBERS FOR 100mm & 150mm SANITARY SERVICE SHALL BE INSTALLED AS PER THE MMCD STANDARD DRAWING NO. S9. SANITARY INSPECTION CHAMBER LIDS TO BE RED IN COLOUR.
- 5. ALL WYES SHALL BE MANUFACTURED.
- 6. SANITARY 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.
- 7. EXISTING INVERTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 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.
- 9. TYPICAL TRENCH SECTION SHALL BE INSTALLED AS PER STD. DWG. COQ-G4.
- 10. INSPECTION CHAMBER LID TO BE 50mm BELOW THE SOD FINAL GRADE.

#### STORM SEWER NOTES:

- 1. STORM SERVICE RENEWAL/REPLACEMENT CRITERIA:
- 1.1. WHERE EXISTING LOTS HAVE MORE THAN ONE EXISTING STORM CONNECTION, THE CONTRACTOR SHALL INVESTIGATE AND VERIFY WHICH CONNECTIONS ARE ACTIVE.
- 1.2. ONE 150mm DIAMETER STORM SERVICE IS REQUIRED PER LOT. IF MORE THAN ONE ACTIVE CONNECTION IS PRESENT ON THE LOT, THE DOWNSTREAM SERVICE SHALL BE UPGRADED TO 150mm AND REMAINING SERVICES SHALL BE CAPPED BY THE FUTURE DEVELOPER.
- 1.3. INSPECTION CHAMBERS SHALL BE INSTALLED ON ALL ACTIVE STORM SERVICE CONNECTIONS.
- 1.4. INACTIVE CONNECTIONS SHALL BE CAPPED AT THE MAIN.
- 1.5. CONFIRM RENEWAL/REPLACEMENT STRATEGY WITH CONTRACT ADMINISTRATOR FOLLOWING INVESTIGATION OF EXISTING SERVICES.
- 2. STORM SERVICE CONNECTIONS SHALL BE 150mm DR 28 PVC AS NOTED AND INSTALLED AS PER COQ-S8A STANDARD DRAWING.
- 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 FITTING.
- STORM SERVICE INSPECTION CHAMBERS FOR 150mm STORM SERVICE SHALL BE INSTALLED AS PER THE COQ STANDARD DRAWING NO. S8A. STORM INSPECTION CHAMBER LIDS TO BE GREEN IN COLOUR.
- 5. ALL WYES SHALL BE MANUFACTURED.
- 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.
- 7. EXISTING INVERTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 8. 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.
- 9. TYPICAL TRENCH SECTION SHALL BE INSTALLED AS PER STD. DWG. COQ-G4.
- 10. STORM SEWER SHALL BE POLYVINYLCHLORIDE (PVC) PIPES WITH A MINIMUM SDR 35 SPECIFICATION UNLESS NOTED OTHERWISE. TYPICAL TRENCH SECTION SHALL BE INSTALLED AS PER THÉ CITY OF COQUITLAM STANDARD DRAWING NO. COQ-G4.
- 11. STORM SEWER MANHOLES SHALL BE 1050mm DIAMETER UNLESS OTHERWISE NOTED.
- 12. 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.
- 13. 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.
- 14. REFER TO ROAD DESIGN DRAWINGS FOR CATCH BASIN LOCATIONS AND ELEVATIONS.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE IN ENSURING THAT THE FINISHED RIM ELEVATION OF THE STORM SEWER MANHOLES MATCHES THE FINISHED ROAD GRADES AND ELEVATIONS.
- 16. EXISTING INVERTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 17. LAWN BASINS SHALL BE INSTALLED AS PER THE COQ STANDARD DRAWING NO. S12A TYPE 1. LAWN BASIN LEADS SHALL BE 150mm DIAMETER PVC PIPE WITH A MINIMUM SDR 28 SPECIFICATION UNLESS OTHERWISE NOTED.
- 18. 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.
- 19. THE CONTRACTOR IS TO PROVIDE CCTV CAMERA INSPECTIONS OF ALL STORM SEWERS UNDER 900mm DIAMETER, INCLUDING INSPECTION HARD COPIES AND DIGITAL FORMAT IN A FORMAT SATISFACTORY TO THE CA. ALL SEWERS ARE TO BE FLUSHED PRIOR TO CAMERA INSPECTIONS.
- 20. INSPECTION CHAMBER LID TO BE 50mm BELOW THE SOD FINAL GRADE.

ISSUED FOR TENDER

Edge of pavement

Watermain and valve —Water air valve -Water blowoff — Catch basin, top inlet -Catch basin, side inlet 🗆 Sanitary forcemain Gasmain and valve ——— G ————— Catch basin, round Hydro duct, MH – Drainage service – Telephone duct, MH - Drainage cleanout

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Sanitary service Hydro Guy Wire Sanitary cleanout Hydro Kiosk Utility pole(joint pole) Utility pole with light Streetlight, davit Streetlight, post top Comb signal pole Traffic signal pole Junction box

Vegetation Conifer Vegetation Deciduous Vegetation Shrub Survey Traverse Hub Survey Iron Pin Survey Lead Plug Survey Monument

2021-02-26 | VL | ISSUED FOR TENDER 2 | 2020-12-18 | RL | ISSUED FOR 90% DESIGN 2020-05-08 | VL | ISSUED FOR 50% DESIGN Date | By | Revisions

Date Checked by Date Approved by





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

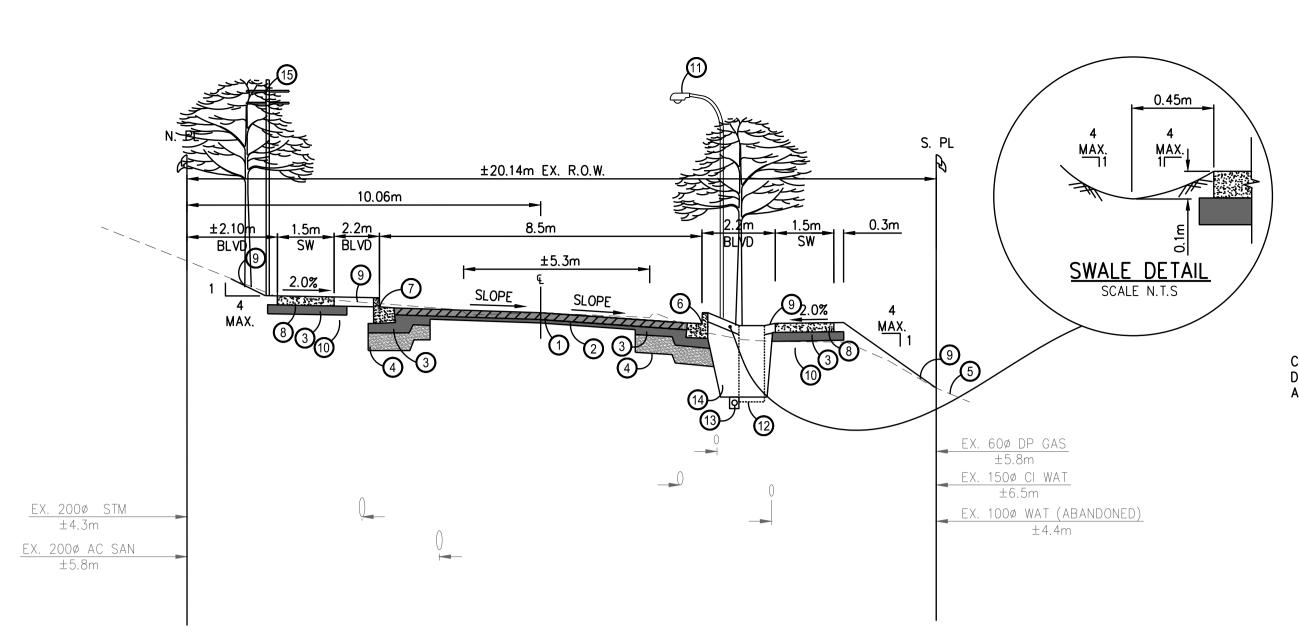
Sheet

Scale N.T.S. Scale N.T.S. Eng. Project No. 19-1082

**WALLS AVE** LEBLEU ST TO MARMONT ST Description GENERAL NOTES

File: 19-1082 - 2 - R1

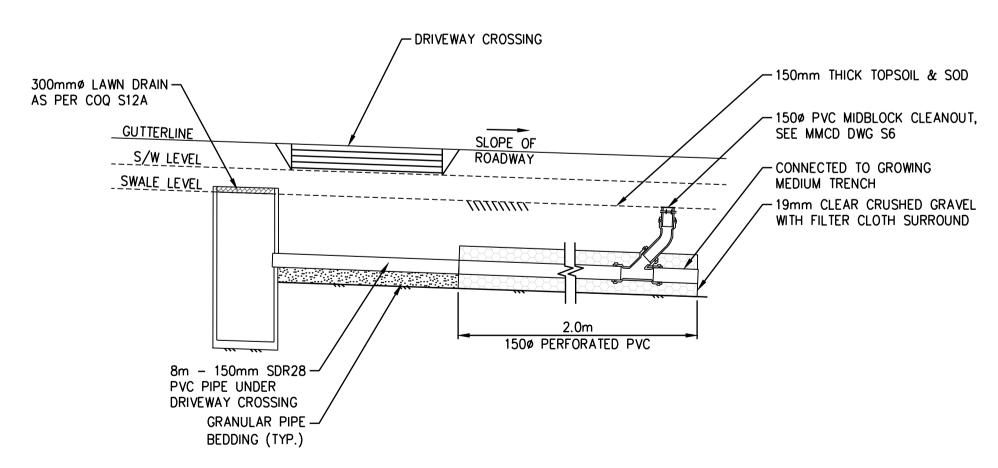
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WALLS AVE TYPICAL SECTION
FROM STA 6+155 TO STA 6+520

N.T.S

- 75mm THICK MMCD UPPER COURSE #1 PLACED IN SINGLE LIFT
- 2 MIN. 25mm THICK 25mm MINUS GRANULAR BASE COMPACTED TO 95 % MODIFIED PROCTOR DENSITY
- 3 100mm THICK 25mm MINUS GRANULAR BASE COMPACTED TO 95 % MODIFIED PROCTOR DENSITY
- 4 200mm THICK 75mm MINUS CRUSHED GRANULAR SUBBASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY
- 5 EXISTING GROUND
- 6 BARRIER TYPE CONCRETE CURB AND GUTTER AS PER MMCD STD. DWG. NO. C5
- 7) REVERSE BARRIER TYPE CONCRETE CURB AND GUTTER AS PER MMCD STD. DWG. NO. C5
- 8 100mm THICK 1.5m WIDE CONCRETE SIDEWALK AS PER MMCD STD. DWG. NO. C1
- 9 HYDROSEED, OR MIN. 0.9m DEEP GROWING MEDIUM TRENCH WHERE SPECIFIED ON LANDSCAPE DRAWING. REFER TO LANDSCAPE DRAWING FOR DETAILS.
- 10 SUBGRAGE FILL MATERIAL AS APPROVED BY GEOTECHNICAL ENGINEER
- 1 STREET LIGHTING SEE ELECTRICAL DRAWING FOR DETAILS
- 3000 LAWN DRAINS AS PER COQ-S12A TYPE 1
- 3 DISPERSAL TRENCH WITH 1500 PERFORATED PVC DRAIN AS PER COQ-SW3
- (14) SAND OR APPROVED EQUAL MATERIAL
- (15) HYDRO POLE SEE ELECTRICAL DRAWING FOR DETAILS

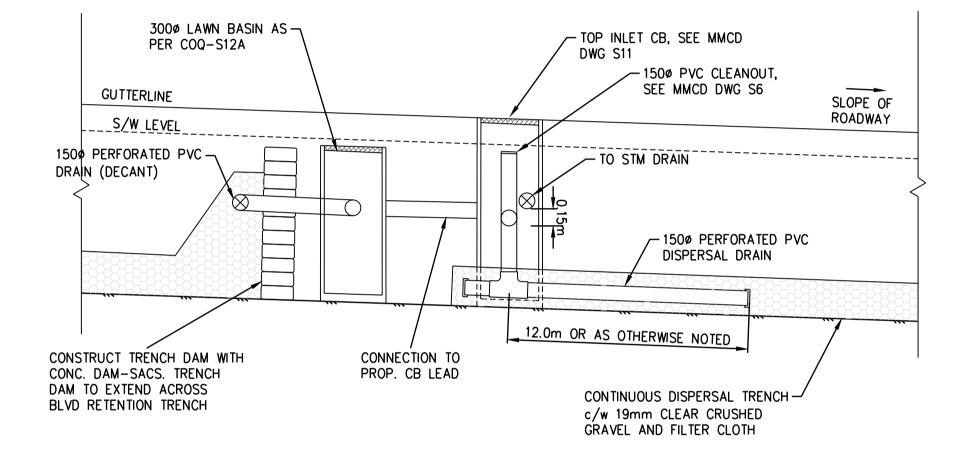


FRENCH DRAIN DETAILS

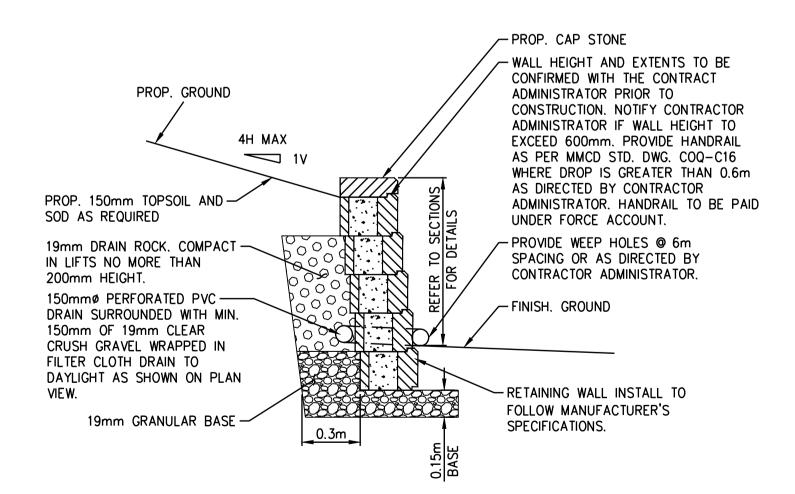
SCALE: N.T.S

LAWN DRAIN AS PER COQ S12A — SLOPE OF ROADWAY TOP INLET CB, SEE COQ 150ø PERFORATED PVC DRAIN -(DECANT) REFER TO COQ-SW3 FOR TRENCH AND BACKFILL **DETAILS** CONSTRUCT TRENCH DAM WITH CONC. DAM-SACS. TRENCH DAM TO EXTEND ACROSS BLVD RETENTION TRENCH 12m OR AS DISPERSAL TRENCH (CONTINUOUS) 19mm CLEAR CRUSHED -└─ 150¢ TERMINAL CLEANOUT OTHERWISE GRAVEL (TYP.) WITH FILTER CLOTH SURROUND AS PER MMCD DWG S6 — 150ø PERFORATED PVC 150ø MIDBLOCK CLEANOUT AS PER MMCD — DWG S6 DISPERSAL DRAIN

BOULEVARD RETENTION TRENCH DETAIL - PLAN

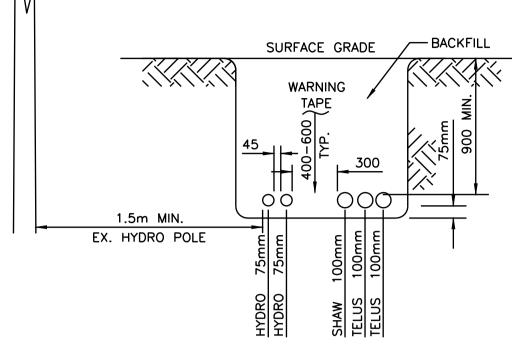


BOULEVARD RETENTION TRENCH DETAIL - PROFILE



SEGMENTAL RETAINING WALL TYPCIAL DETAIL

ALL DUCTS TO HAVE STRING INSIDE AND A CAP ON BOTH ENDS.



JOINT TRENCH TYPICAL DETAIL

SCALE: N.T.S.

	CATCH BASIN TABLE							
CB #	TYPE	LOCATION	PROP. GUTTERLINE ELEV.					
2-1	PROP. TOP INLET CATCH BASIN	STA. 6+183.43 @ S GUTTERLINE	93.680m					
2-2	PROP. TOP INLET CATCH BASIN	STA. 6+225.03 @ N GUTTERLINE	92.719m					
2-3	PROP. TOP INLET CATCH BASIN	STA. 6+255.69 @ S GUTTERLINE	91.824m					
2-4	PROP. TOP INLET CATCH BASIN	STA. 6+302.76 @ S GUTTERLINE	89.963m					
2-5	PROP. SIDE INLET CATCH BASIN	STA. 6+311.81 @ N GUTTERLINE	90.992m					
2-6	PROP. SIDE INLET CATCH BASIN	STA. 6+319.22 @ N GUTTERLINE	90.748m					
2-7	PROP. TOP INLET CATCH BASIN	STA. 6+363.30 @ S GUTTERLINE	87.713m					
2-8	PROP. TOP INLET CATCH BASIN	STA. 6+417.57 @ S GUTTERLINE	85.588m					
2-9	PROP. TOP INLET CATCH BASIN	STA. 6+462.57 @ S GUTTERLINE	83.732m					
2-10	PROP. TOP INLET CATCH BASIN	STA. 6+510.94 @ S GUTTERLINE	81.844m					

#### NOTE

 ALL CATCH BASIN RIMS SHALL BE SET 30mm BELOW THE GUTTER LINE. THE GUTTER AND ROAD SURFACE TO BE SHAPED TO FORM A DISH AROUND THE INLET.

**ISSUED FOR 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

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- Drainage service -

– Drainage cleanout

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Wire

Conifer

Deciduous
Shrub

Serse Hub
Pin
1 Plug
Ument

OIP

A Deciduous

Shrub

Strub

S

Design by Date
VL
Drawn by Date
RL
Checked by Date
TDB
Approved by Date
TDB





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Scale N.T.S. Scale N.T.S.
Sheet 02 of 17

Eng. Project No. 19-1082

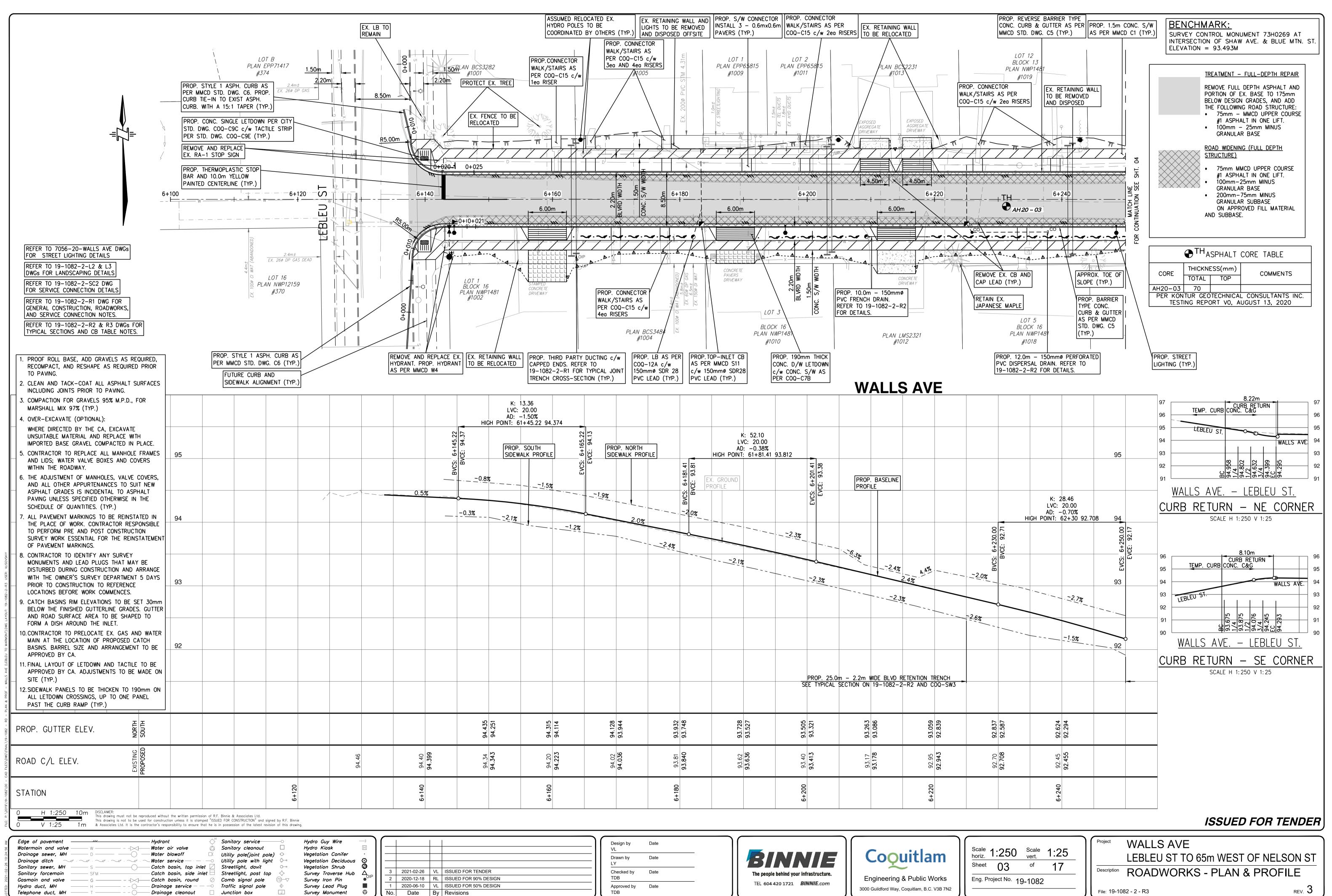
Project WALLS AVE
LEBLEU ST TO MARMONT ST

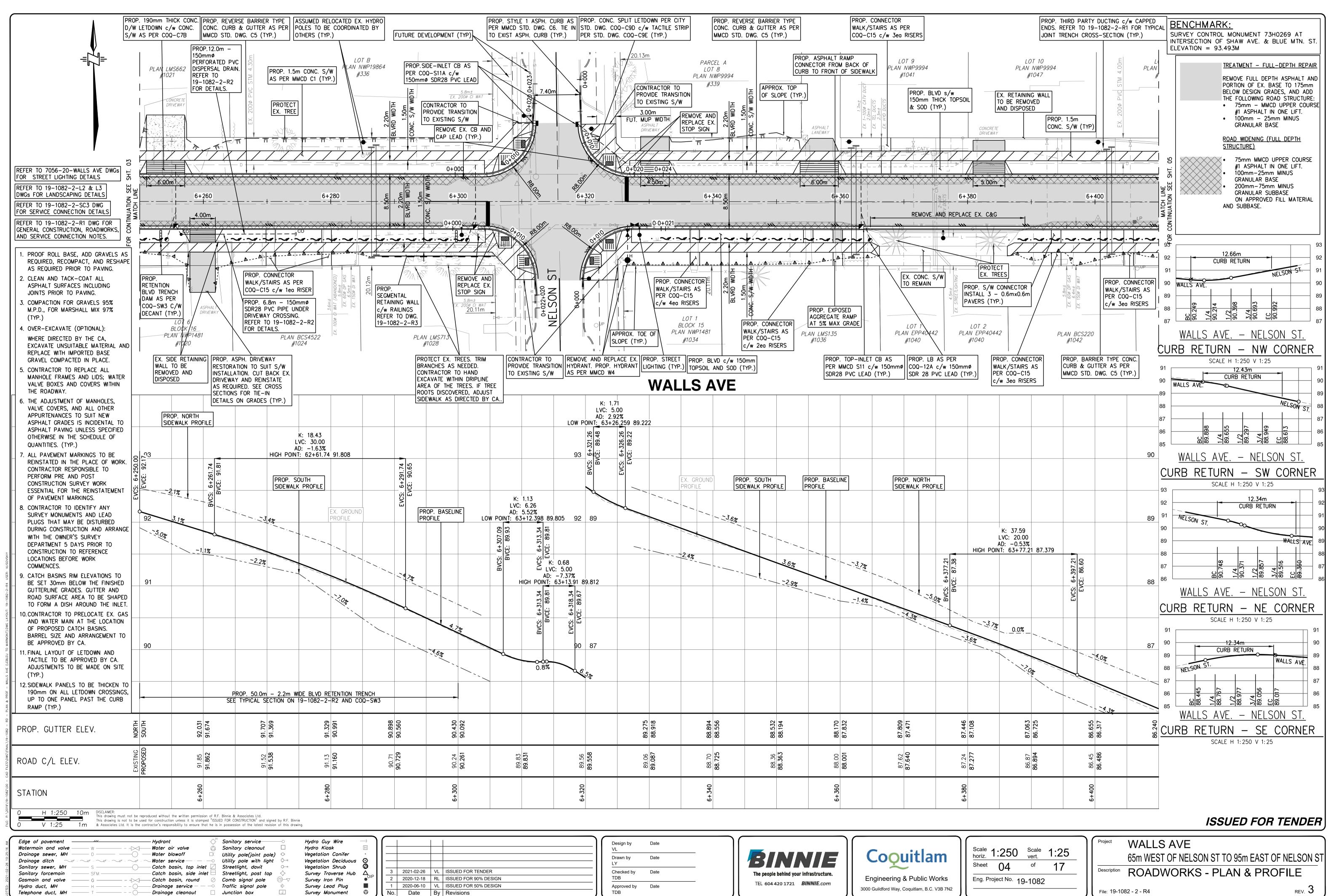
Description ROAD DETAILS

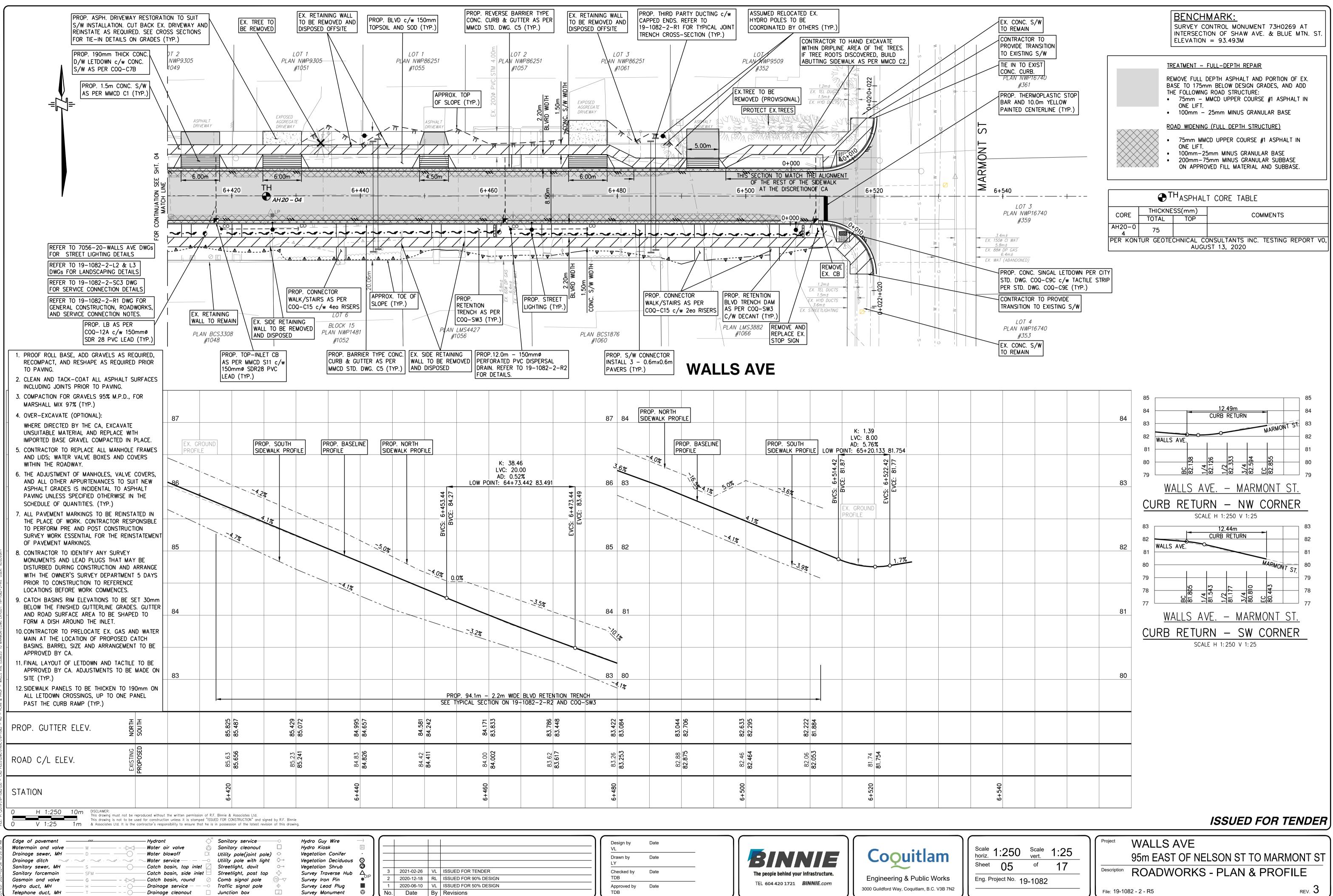
File: 19-1082 - 2 - R2

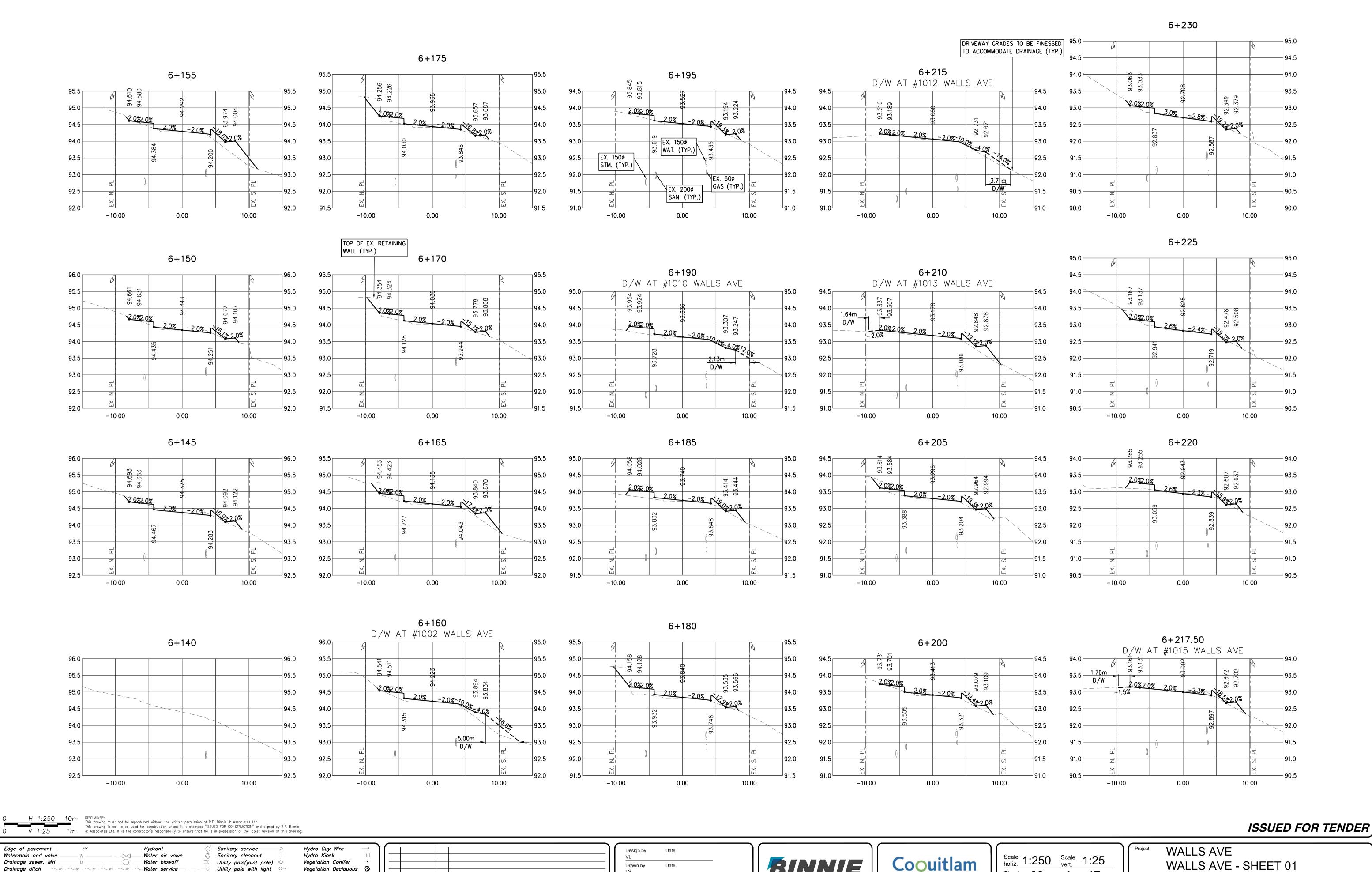
REV. 3

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WALLS AVE - SHEET 01 REV. 3File: 19-1082 - 2 - R6

Telephone duct, MH Plot Date: February 26, 2021

- Drainage cleanout Junction box

3 2021-02-26 VL ISSUED FOR TENDER 2020-12-18 RL ISSUED FOR 90% DESIGN No. Date By Revisions

Vegetation Shrub

Survey Iron Pin

Traffic signal pole

Survey Lead Plug

Survey Monument

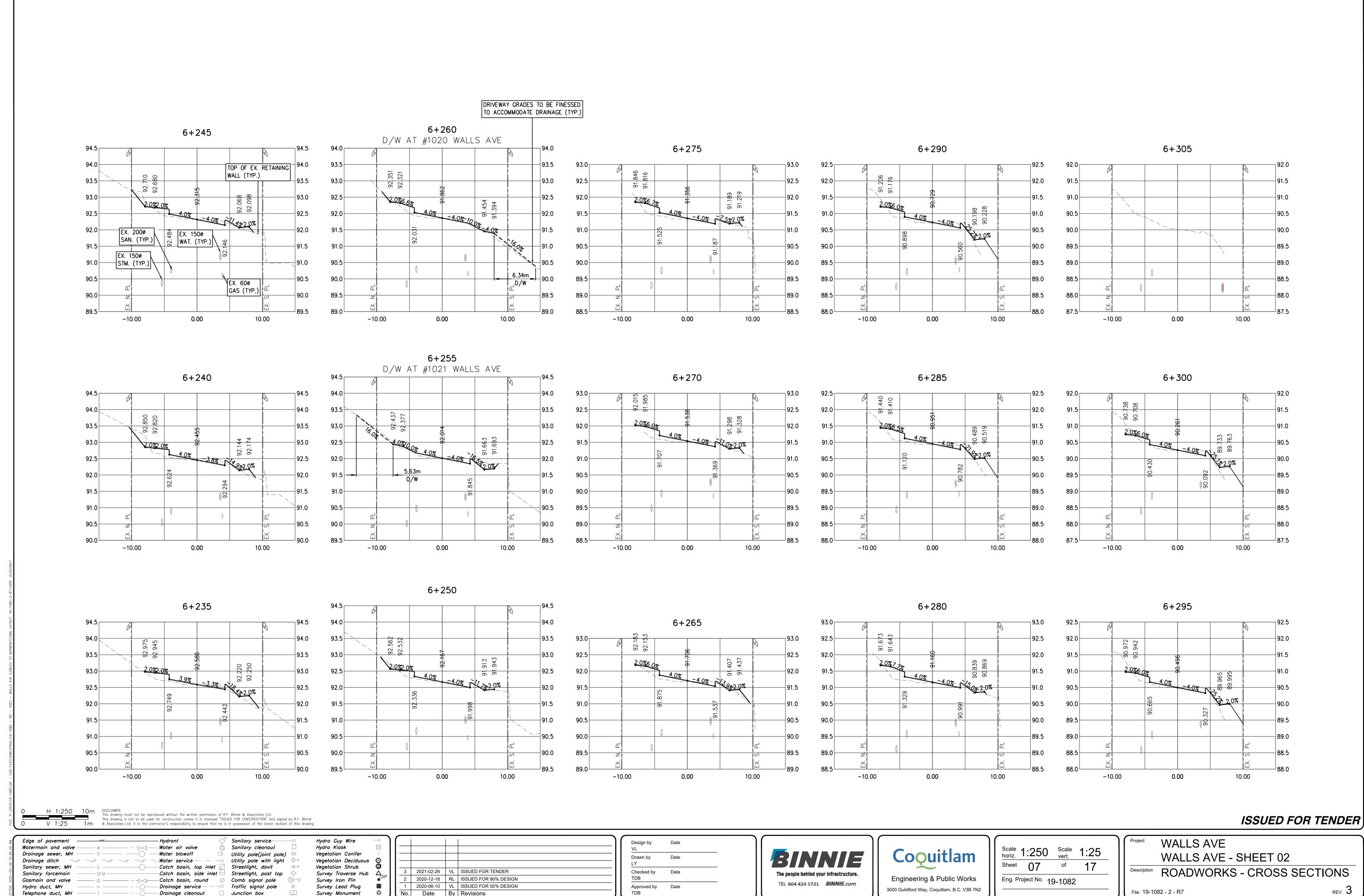
Survey Traverse Hub

Checked by Approved by

Coouitlam Engineering & Public Works TEL 604 420 1721 BINNIE.com

Sheet of Eng. Project No. 19-1082 3000 Guildford Way, Coquitlam, B.C. V3B 7N2

Pescription ROADWORKS - CROSS SECTIONS

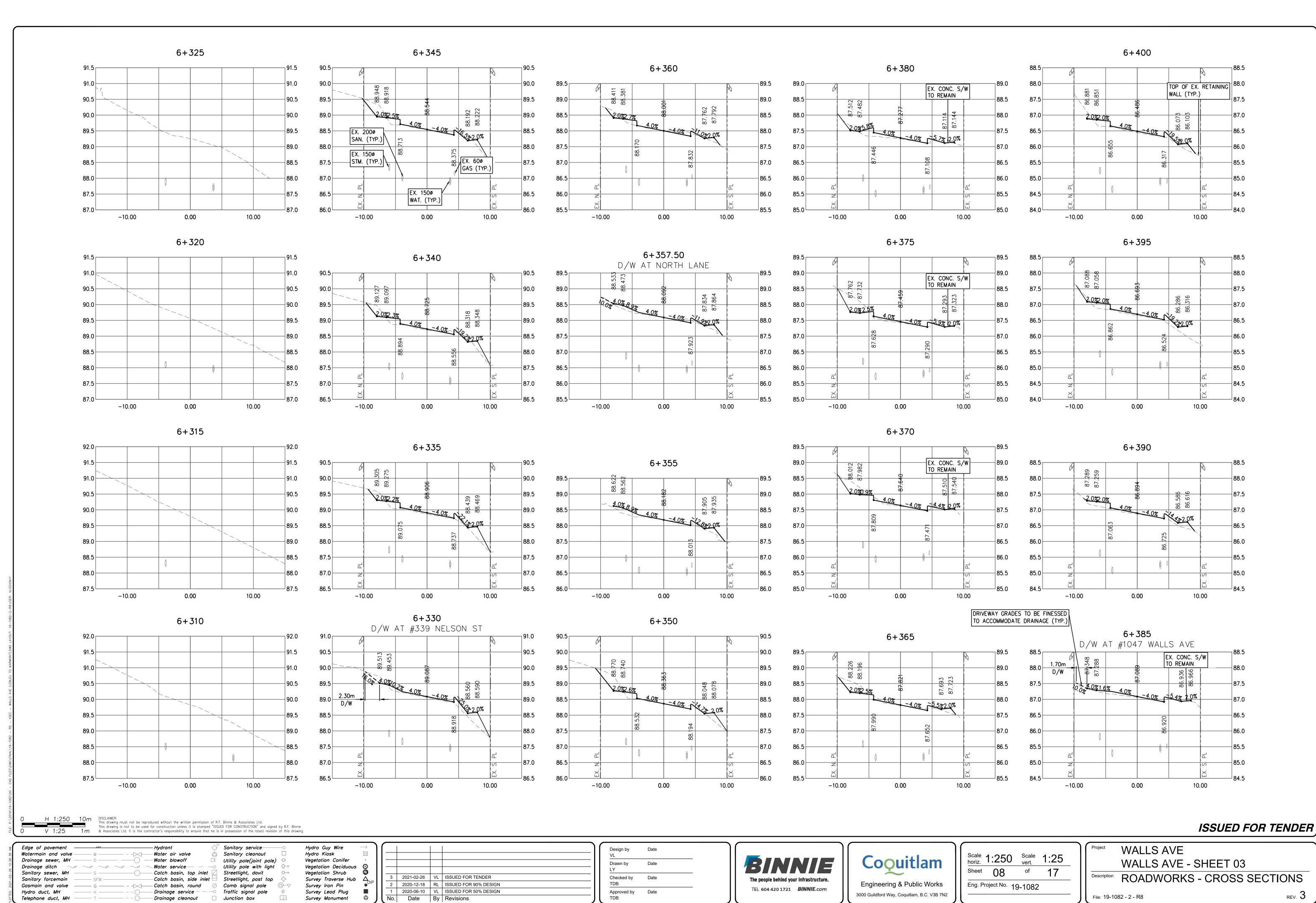


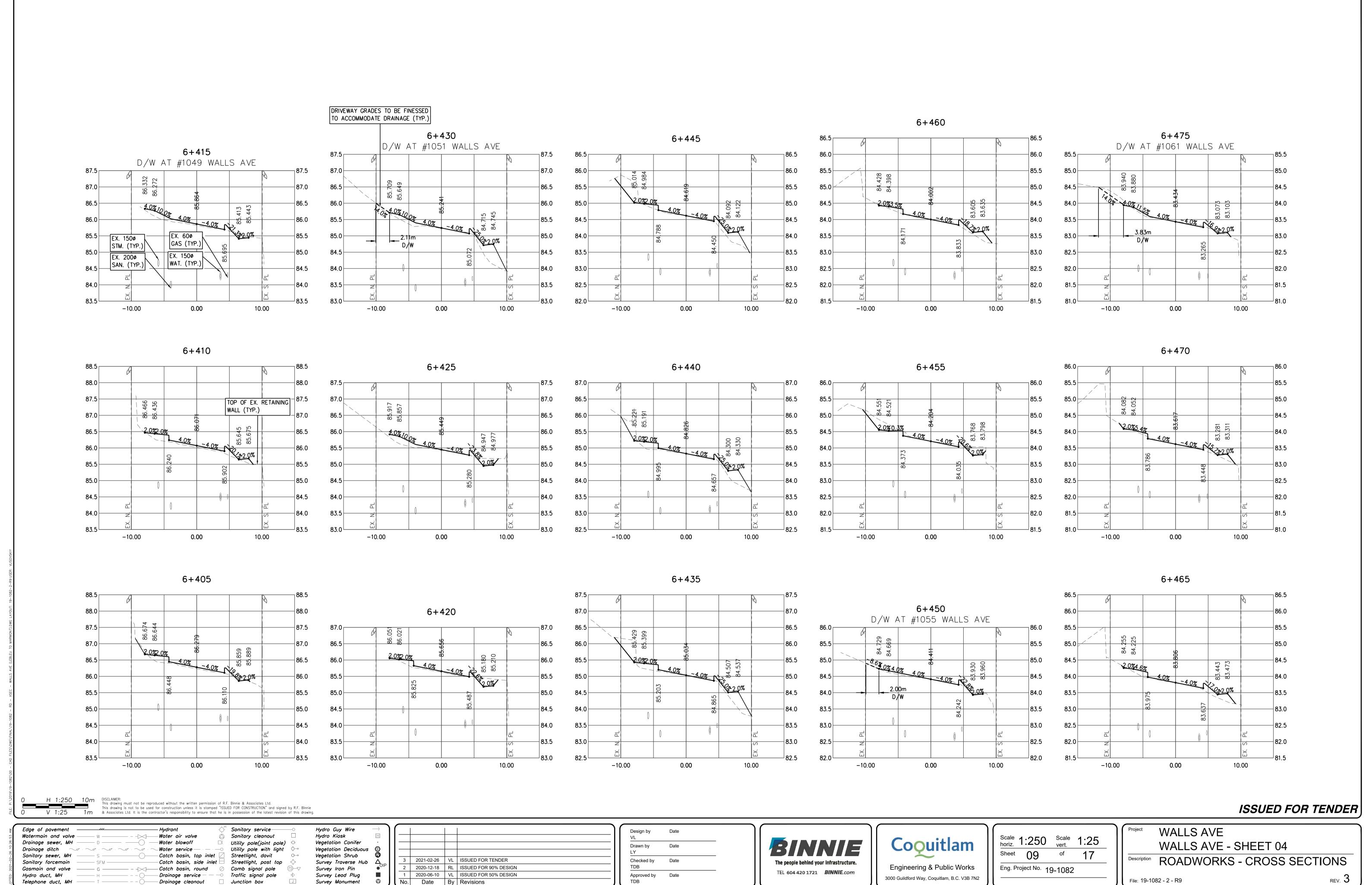
No. Date By Revisions

Survey Monument

Telephone duct, MH Plot Date: February 26, 2021 - Drainage cleanout

Junction box





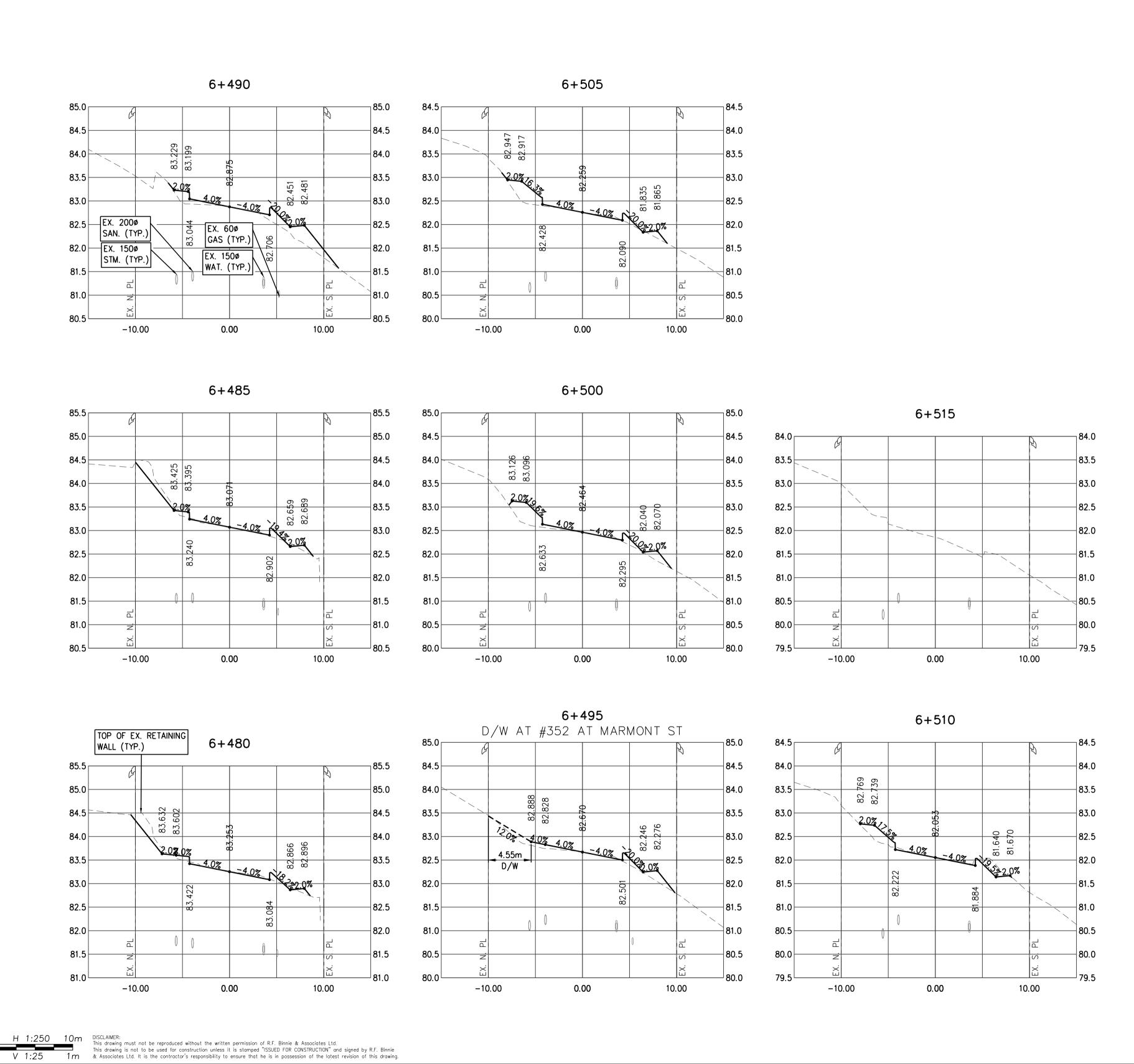
No. Date By Revisions

Survey Monument

File: 19-1082 - 2 - R9

Telephone duct, MH Plot Date: February 26, 2021 - Drainage cleanout

Junction box



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**WALLS AVE** Hydro Guy Wire Design by Hydro Kiosk Scale horiz. 1:250 Scale vert. 1:25
Sheet 10 of 17 Sanitary cleanout Coouitlam WALLS AVE - SHEET 05 Vegetation Conifer Vegetation Deciduous Vegetation Shrub Description ROADWORKS - CROSS SECTIONS Survey Iraverse Hub Survey Iran Pin 3 2021-02-26 VL ISSUED FOR TENDER Checked by Eng. Project No. 19-1082 2020-12-18 RL ISSUED FOR 90% DESIGN Engineering & Public Works Survey Iron Pin Survey Lead Plug TEL 604 420 1721 BINNIE.com 1 2020-06-10 VL ISSUED FOR 50% DESIGN Traffic signal pole Approved by rev. 33000 Guildford Way, Coquitlam, B.C. V3B 7N2 File: 19-1082 - 2 - R10 Survey Monument No. Date By Revisions Telephone duct, MH - Drainage cleanout Plot Date: February 26, 2021

## REFER TO SHEET 01 FOR SERVICE CONNECTION NOTES

\*NOTE: PROP. 190 & 380 WATER SERVICES ALONG WALLS AVE TO BE MUNICIPEX PIPE PER CITY OF COQUITLAM STD. DWG. COQ-W2d AND COQ-W2k. A.Y. MCDONALD SERVICE FITTING 4700QA CTS Q-COMP NUT IS AVAILABLE AT GIBSON WATERWORKS SUPPLY INC., 604-521-8022. ADVANCE ORDERING IS ADVISABLE FOR PROPER LEAD-TIME.

CONTRACTOR TO USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF A RETAINING WALL AND/OR ADJACENT STRUCTURE.

THE CONTRACTOR IS REQUIRED UNDER PART 20.78 OF THE WORKSAFE BC REGULATIONS TO ENGAGE THE SERVICES OF A QUALIFIED REGISTERED PROFESSIONAL WHEN EXCAVATING ADJACENT TO AN EXISTING STRUCTURE.

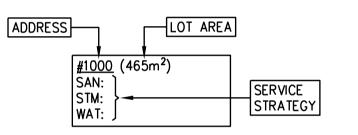
NO WORK IS TO PROCEED IN THE VICINITY OF THE STRUCTURE WITHOUT WRITTEN INSTRUCTIONS FROM THE QUALIFIED REGISTERED PROFESSIONAL AND SUCH COPY SUBMITTED TO THE CONTRACT ADMINISTRATOR.

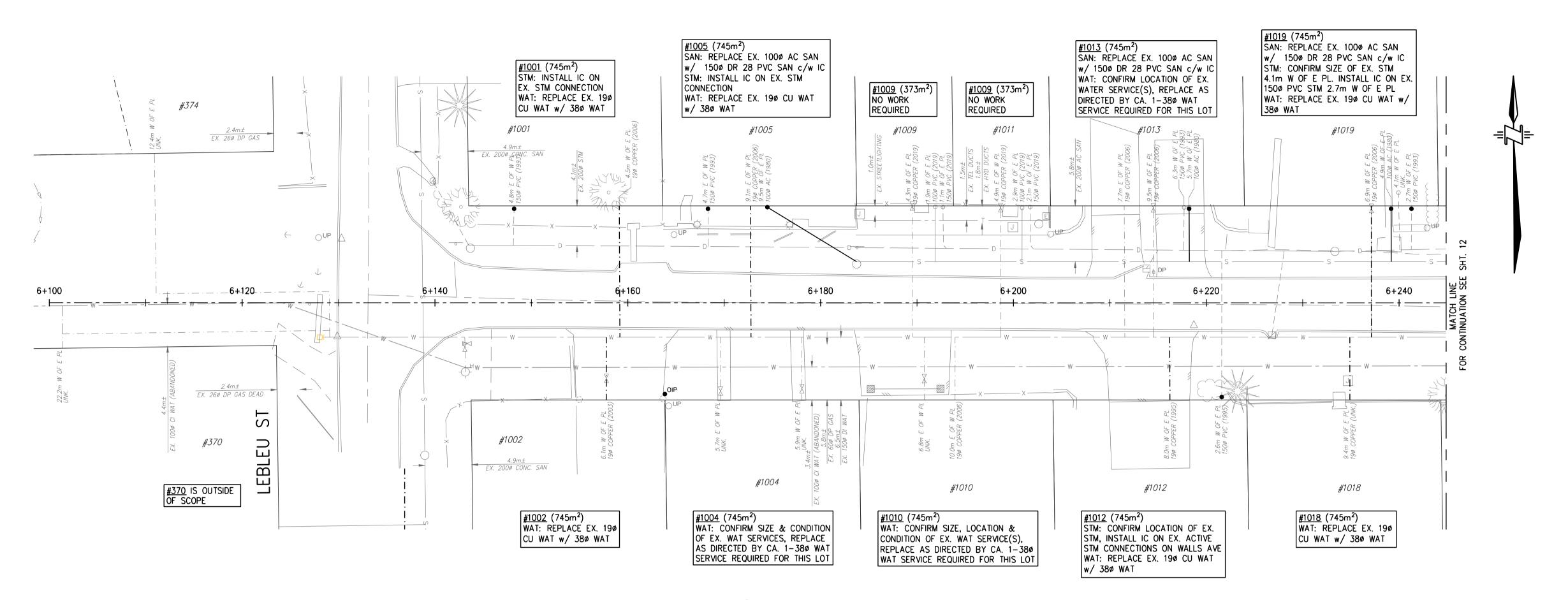
SAFE WORK PRACTICES FOR HANDLING ASBESTOS: WHEN ENCOUNTERED THE CONTRACTOR SHALL ABIDE BY/FOLLOW ALL REGULATIONS AS SET FORTH AND REQUIRED BY WORKSAFE BC FOR THE SAFE HANDLING OF ASBESTOS. FOR FURTHER INFORMATION REGARDING THE SAFE WORK PRACTICES FOR HANDLING ASBESTOS THE CONTRACTOR SHALL CONTACT WORKSAFE BC FOR CLARIFICATION.

PRE-LOCATE ALL EXISTING UTILITIES AND AFFECTED SERVICES PRIOR TO CONSTRUCTION. LOCATION OF SERVICE CONNECTIONS HAVE BEEN DERIVED FROM CITY OF COQUITLAM RECORDS AND ARE FOR GUIDANCE ONLY.

ALL EXCAVATION WITHIN EXISTING TREE DRIPLINES WHERE TREES ARE TO BE RETAINED SHALL BE BY HAND OR HYDRO-VAC.

#### LEGEND:





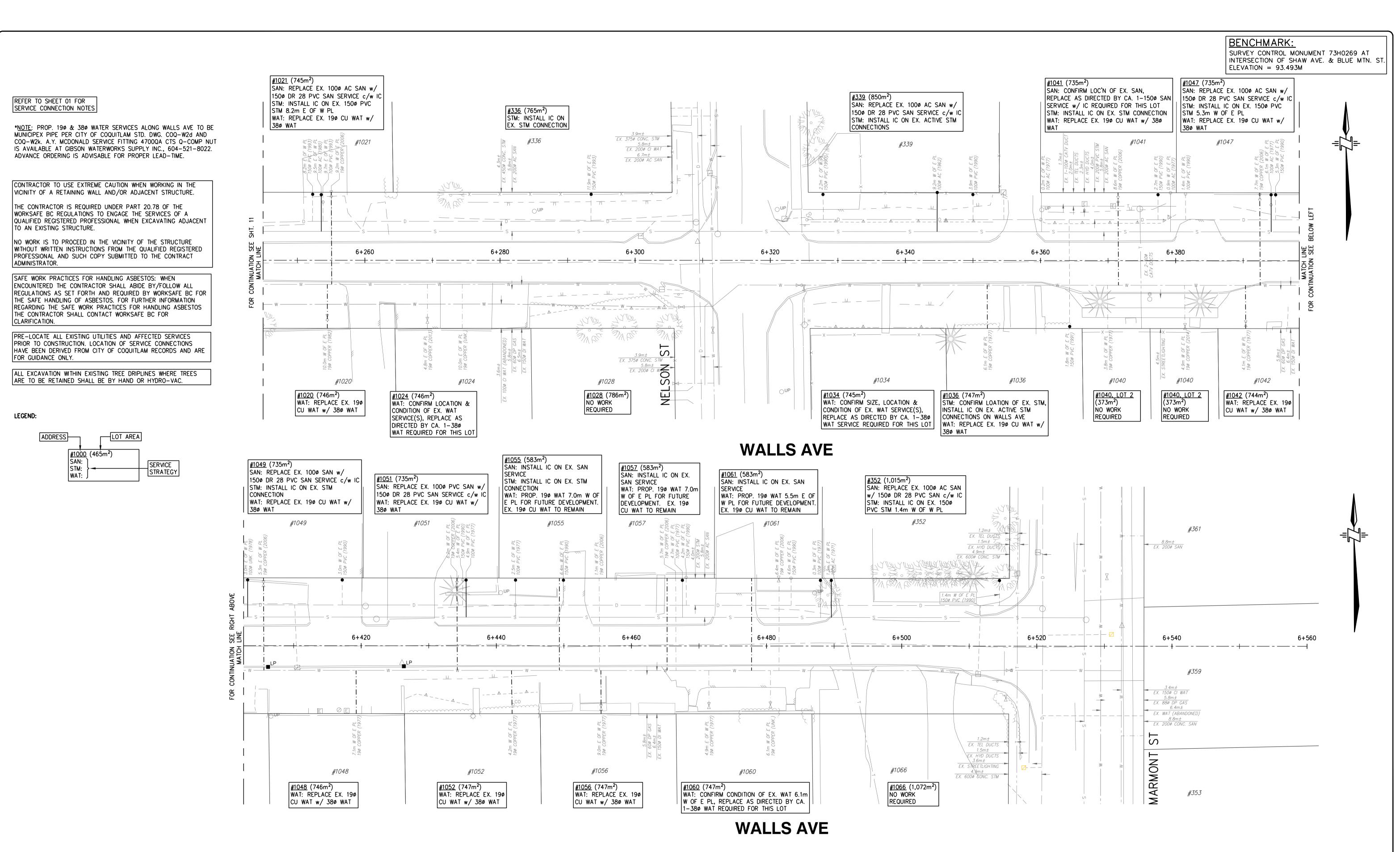
**WALLS AVE** 

H 1:250 10m

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**WALLS AVE** Design by Hydro Kiosk Scale horiz. 1:250 Scale vert. 1:25 BINNIE Coouitlam Vegetation Conifer LEBLEU ST TO 65m WEST OF NELSON ST Drawn by Utility pole with light Vegetation Deciduous 😲 Vegetation Shrub —Catch basin, top inlet Description SERVICE CONNECTION - PLAN 3 | 2021-02-26 | VL | ISSUED FOR TENDER Checked by Survey Traverse Hub Eng. Project No. 19-1082 Engineering & Public Works 2 | 2020-12-18 | RL | ISSUED FOR 90% DESIGN Survey Iron Pin Comb signal pole TEL 604 420 1721 BINNIE.com Traffic signal pole Survey Lead Plug 1 | 2020-06-10 | LY | ISSUED FOR 50% DESIGN Hydro duct, MH – Drainage service – Approved by REV. 33000 Guildford Way, Coquitlam, B.C. V3B 7N2 File: 19-1082 - 2 - SC1 Telephone duct, MH - Drainage cleanout Survey Monument No. Date By Revisions TDB Junction box

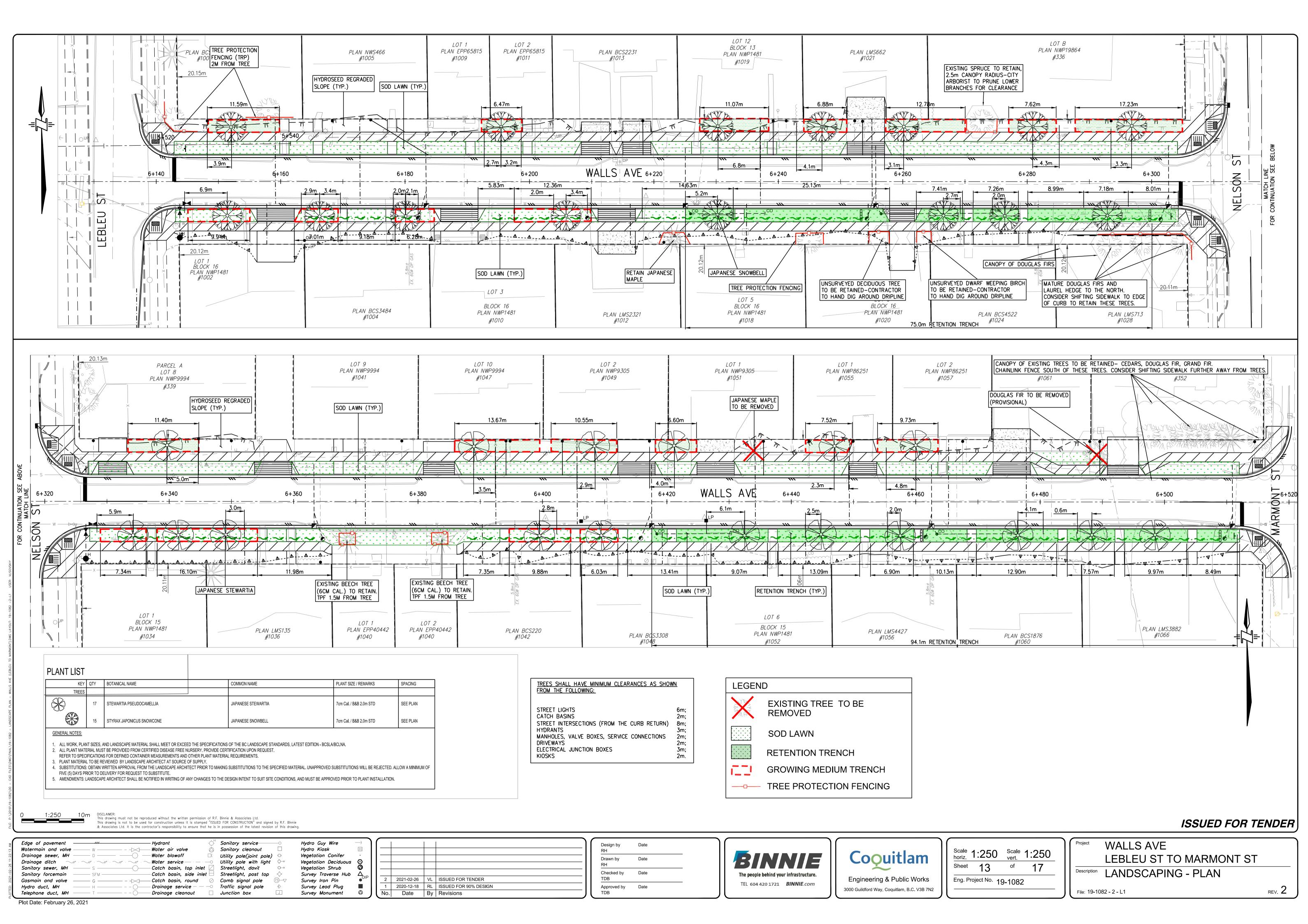


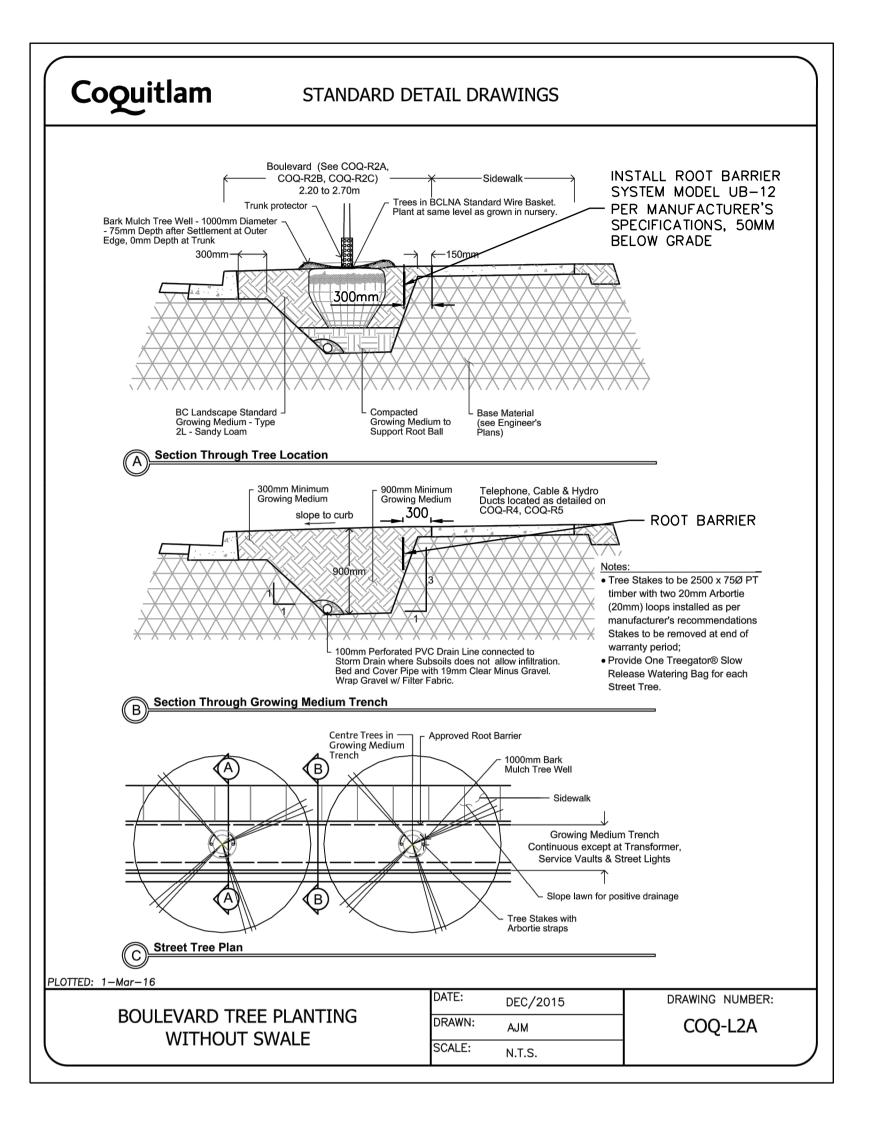
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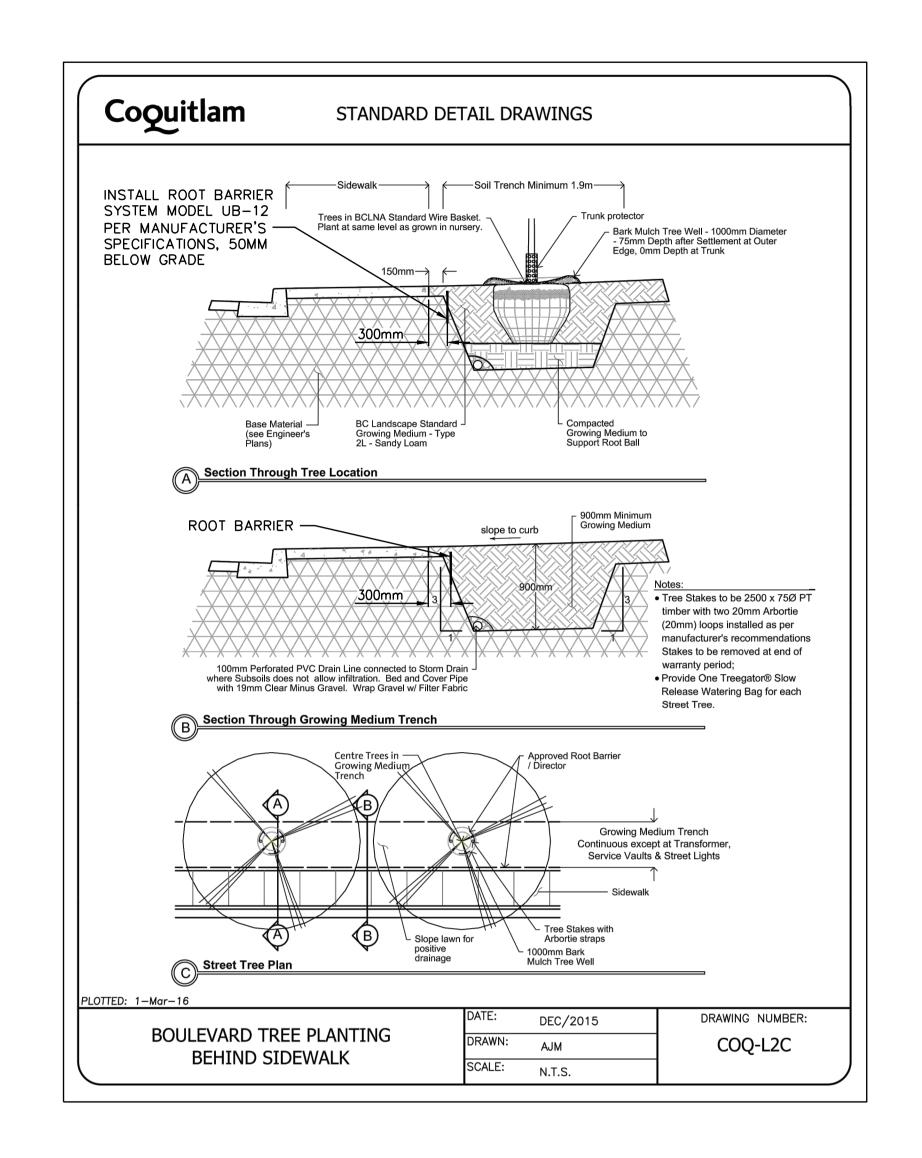
This drawing is not to be used for construction unless it is stamped "ISSUED FOR CONSTRUCTION" and signed by R.F. Binnie

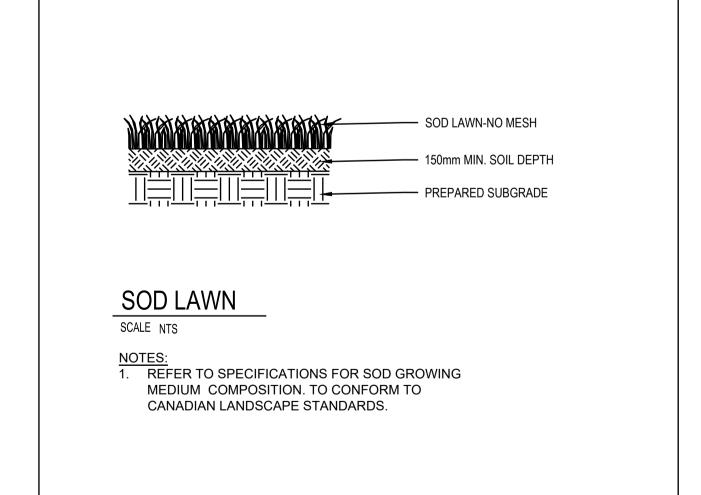
**ISSUED FOR TENDER** 

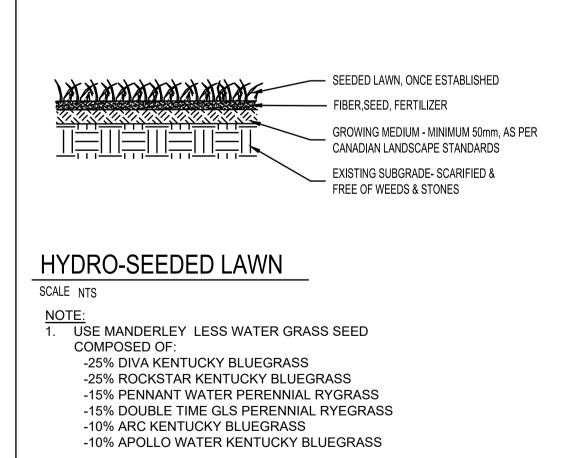
WALLS AVE Design by Hydro Kiosk Scale horiz. 1:250 Scale vert. 1:25
Sheet 12 of 17 BINNIE Coouitlam Vegetation Conifer 65m WEST OF NELSON ST TO MARMONT ST Drawn by Utility pole with light Vegetation Deciduous Vegetation Shrub Description SERVICE CONNECTION - PLAN 2021-02-26 | VL | ISSUED FOR TENDER Checked by Survey Traverse Hub Eng. Project No. 19-1082 Engineering & Public Works 2020-12-18 | RL | ISSUED FOR 90% DESIGN Survey Iron Pin Comb signal pole TEL 604 420 1721 BINNIE.com 2020-06-10 LY ISSUED FOR 50% DESIGN Traffic signal pole Survey Lead Plug Approved by Hydro duct, MH -Drainage service -REV. 33000 Guildford Way, Coquitlam, B.C. V3B 7N2 File: 19-1082 - 2 - SC2 Survey Monument Date By Revisions TDB Telephone duct, MH Drainage cleanout Junction box











#### **GENERAL NOTES**

- THE CITY IS TO BE INFORMED WHEN THE ENGINEERING PRE-CONSTRUCTION MEETING IS TO TAKE PLACE SO A PARKS REPRESENTATIVE CAN BE SENT TO THE MEETING TO DISCUSS THE OFFSITE LANDSCAPE WORKS. THE CITY CONTACT IS AIDON PYNE, 604-927-3665, APYNE@COQUITLAM.CA.
- ALL WORK AND MATERIALS SHALL MEET OR EXCEED THE REQUIREMENT OUTLINED IN THE CURRENT BC LANDSCAPE STANDARD. IF THERE IS A DISCREPANCY BETWEEN THE BC LANDSCAPE STANDARD AND COQUITLAM BYLAWS OR STANDARDS THE COQUITLAM DOCUMENTS SHALL TAKE PRECEDENT.
- ALL WORKS AND MATERIALS SHALL COMPLY WITH THE COQUITLAM SUBDIVISION AND DEVELOPMENT SERVICING BYLAW #3558 AND THE SUPPLEMENTARY SPECIFICATION AND DETAILED DRAWINGS TO MMCD 2009 EDITION.
- 4. PLANT SIZES SPECIFIED IN ACCORDANCE WITH BC LANDSCAPE STANDARDS, LATEST EDITION BCSLA/BCLNA. CONTAINER SIZES SPECIFIED AS PER CNTA STANDARDS. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES.
- 5. REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS.
- 6. SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY.
- 7. SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE (5) DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD, LATEST EDITION - BCSLA/BCLNA - DEFINITION OF CONDITIONS OF AVAILABILITY.
- AMENDMENTS: LANDSCAPE ARCHITECT SHALL BE NOTIFIED IN WRITING OF ALTERATIONS AND/OR CHANGES TO THE DESIGN INTENT TO
- SUIT SITE CONDITIONS, AND MUST BE APPROVED PRIOR TO PLANT INSTALLATION.

9. ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. PROVIDE CERTIFICATION UPON REQUEST.

### TREE PROTECTION ZONE INSIDE THE FENCED AREA 50 x 100 WOOD POSTS SET 300mm DEEP INTO FINISHED GRADE. -SPACE POSTS MAX. 2m APART. **INSTALL ADDITIONAL POSTS AND** DIAGONAL BRACING TO SUIT. PLASTIC MESH 'SNOW FENCING' SECURED TO WOOD FRAME 50 x 100 TOP & BOTTOM RAIL FINISHED GRADE TREE PROTECTION FENCING INSTALL TREE PROTECTION FENCING BEFORE SITE CLEARING AND ANY CONSTRUCTION BEGINS. MAINTAIN AND DO NOT MOVE TREE PROTECTION FENCING THROUGHOUT THE DURATION OF THE CLEARING AND CONSTRUCTION PHASE. REMOVE TREE PROTECTION FENCING WITHIN 2 WEEKS AFTER PROJECT COMPLETION. CONTRACTOR IS RESPONSIBLE FOR KEEPING BUILDING MATERIALS & LITTER OUT OF THE TREE PROTECTION ZONE OR AGAINST THE NO EXCAVATIONS, DRAIN OR SERVICE TRENCHES OR ANY OTHER DISRUPTION IS PERMITTED WITHIN THE TREE PROTECTION ZONE. CONTACT THE CONSULTING ARBORIST IF THERE ARE ANY PROPOSED DISTURBANCES PRIOR TO PROCEEDING. VEHICLES OR MACHINERY MAY NOT PASS WITHIN THE TREE PROTECTION ZONE AS COMPACTION WITHIN THE CRITICAL ROOT ZONE CAN CAUSE LONG TERM DAMAGE TO THE TREE. REPLANTING WITHIN THE TREE RETENTION AREA SHALL BE PERFORMED IN SUCH A MANNER AS TO MINIMIZE IMPACT TO ROOT ZONES TREE REMOVAL, PRUNING OF MAJOR BRANCHES AND ROOT SHOULD BE DONE UNDER THE DIRECTION OF THE CONSULTING ARBORIST MULCH AND ORGANICS LAYER AROUND EXISTING TREES TO REMAIN UNDISTURBED. MAINTAIN EXISTING GRADES AT PROTECTION BARRIER FOR ALL TREES TO BE RETAINED. REGRADING OUTSIDE OF PROTECTION BARRIER SHOULD NOT ADVERSELY COMPROMISE PROTECTED TREES. SIGNIFICANT DIRECT MECHANICAL DAMAGE TO TRUNKS OR LIMBS CANNOT BE REPAIRED. TREES MORTALLY DAMAGED BY THE CONTRACTOR MUST BE REPLACED BY THE CONTRACTOR AT HIS OR HER COST.

#### PLANTING NOTES

- 1. SACKING/BURLAP TO BE LOOSENED AND DROPPED TO THE BOTTOM OF THE PLANTING HOLE. ALL STRING, TWINE, ETC. TO BE REMOVED.
- 2. ALL WIRE BASKETS SHALL HAVE THE TOP 1/3 OF THE WIRE REMOVED PRIOR TO PLANTING.
- 3. ALL TREES SHALL BE SINGLED STEMMED.
- 4. PRIOR TO INSTALLATION OF GROWING MEDIUM, SCARIFY SIDE AND BOTTOM SURFACE OF UNDISTURBED SUBGRADE IN PLANTING AREAS AND PITS.

#### CITY OF COQUITLAM SUPPLEMENTARY PLANTING NOTES

- UNLESS OTHERWISE INDICATED ON APPROVED DRAWINGS, TREES ARE TO BE PLANTED ON THE CENTRE LINE OF THE BOULEVARD. WHERE TRENCHES ARE OFFSET FROM BOULEVARD CENTRE LINE, THE TRENCH MUST BE WIDENED TO PLANT TREES ON THE CENTRE LINE. THE TRENCH WIDENING WILL BE NO MORE THAN 300 MM ON EACH SIDE OF THE ROOT BALL TO MINIMIZE THE REDUCTION IN COMPACTED FILL SUPPORTING CURBS AND SIDEWALKS.
- FOR WIRE CAGE ROOTBALLS, CUT AWAY TOP ROOTBALL TIES AND FOLD BACK TOP PORTION OF WIRE CAGE SO IT DOES NOT PROTRUDE THROUGH BACKFILL SOIL WHEN FINISH GRADED.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ENSURE TREE HOLES ARE FREE DRAINING. INFORM CONTRACT ADMINISTRATOR IF TREE HOLE IS NOT FREE DRAINING. BACKFILL WITH PRE- MIXED PLANTING SOIL, TO BRING THE PLANT MATERIAL TO THE DEPTH THEY WERE ORIGINALLY GROWING.
- 4. AFTER FINISH GRADING IS COMPLETE AND ALL DEBRIS OR WEEDS HAVE BEEN REMOVED, PLACE BARK MULCH INSIDE TREE PLANTING SAUCER IN AN EVEN LAYER THAT SHALL BE 75 MM IN DEPTH AFTER SETTLING.
- 5. ENSURE MINIMUM DEPTH OF BARK MULCH 75 MM AFTER SETTLEMENT.
- 6. MULCH MATERIAL THAT IS SUSCEPTIBLE TO BLOWING MUST BE MOISTENED AND MIXED WITH TOPSOIL BEFORE APPLYING. WHEN MULCHING IS PLACED IN FALL, PLACE IMMEDIATELY AFTER PLANTING. WHEN MULCH IS PLACED IN SPRING, WAIT UNTIL SOIL HAS WARMED UP.

AS SHOWN

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Water air valve

Catch basin, top inlet

– Drainage cleanout

Sanitary service-

Sanitary cleanout

Utility pole(joint pole)

Utility pole with light

Comb signal pole

Traffic signal pole

Junction box

Hydro Guy Wire Hydro Kiosk Vegetation Conifer Vegetation Deciduous Vegetation Shrub Survey Traverse Hub  $\Delta$ 2021-02-26 | VL | ISSUED FOR TENDER Survey Iron Pin 2020-12-18 | RL | ISSUED FOR 90% DESIGN Survey Lead Plug Date By Revisions Survey Monument No.





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

Engineering & Public Works

Scale AS SHOWN horiz.	Scale vert.	AS SHOWN
Sheet 14	of	17

WALLS AVE

File: 19-1082 - 2 - L2

LEBLEU ST TO MARMONT ST Description LANDSCAPING - DETAILS

Plot Date: February 26, 2021

Gasmain and valve

Telephone duct, MH

REV. 2

**ISSUED FOR TENDER** 

#### STREET LIGHTING NOTES

- UNLESS OTHERWISE INDICATED, ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF COQUITLAM CURRENT SUBDIVISION CONTROL BYLAWS, CITY OF COQUITLAM SUPPLEMENTARY SPECIFICATIONS AND DETAILED DRAWINGS, CITY OF COQUITLAM APPROVED MATERIALS AND PRODUCTS LISTINGS, AND 2009 MMCD PLATINUM
- THE CONTRACTOR SHALL REFER TO COQUITLAM RECORD DRAWINGS, FOR ALL CITY UTILITIES AND INFRASTRUCTURE, SERVICE LOCATIONS AND DETAILS. THE EXACT

LOCATION OF THESE UTILITIES SHALL BE CONFIRMED ON SITE BY THE DESIGN ENGINEERS, CIVIL OR ELECTRICAL CONTRACTORS, AND WITH CITY OF COQUITLAM

- 3. BCOneCall call before you dig. The locations of existing underground utilities (fortis, BC hydro, shaw and telus) are shown in an approximation ONLY, AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES, INCLUDING CITY OF COQUITLAM INFRASTRUCTURE PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES.
- 4. PRIOR TO STREET LIGHT BASE INSTALLATIONS, THE CONTRACTOR SHALL ENSURE THAT ALL STREET LIGHT POLES, FIXTURES AND RELATED EQUIPMENT MEETS OR EXCEED BC HYDRO CLEARANCE STANDARDS FOR ABOVE AND BELOW GROUND INFRASTRUCTURES, TELUS OR SHAW, AND WORKSAFEBC CLEARANCE REQUIREMENTS FOR ALL OVERHEAD PRIMARY AND SECONDARY (120/240V) CONDUCTORS. CONTRACTOR IS RESPONSIBLE TO REPORT ANY CONFLICTS OR DISCREPANCIES TO THE CITY OF COQUITLAM. AND TO THE DESIGN ENGINEERS.
- 5. THE CONTRACTOR SHALL NOTIFY PROVINCIAL AND CITY OF COQUITLAM INSPECTORS 24 HOURS PRIOR TO COMMENCEMENT OF UNDERGROUND ELECTRICAL WORK.
- 6. THE CIVIL/ELECTRICAL CONTRACTOR SHALL OBTAIN PERMITS FROM THE CITY OF COQUITLAM, AND FROM TECHNICAL SAFETY BC (WAS BC SAFETY AUTHORITY).
- THE TECHNICAL SAFETY BC (WAS BC SAFETY AUTHORITY) SHALL BE MADE AWARE OF THE (POSSIBLE) USE OF AN IRRIGATION SYSTEM WITHIN THE STREET LIGHT POLES. IRRIGATION POWER SHALL BE POWERED FROM METERED CIRCUITS.
- 8. ALL STREET LIGHT WIRING SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH CSA, CANADIAN ELECTRICAL CODE, PROVINCE OF BRITISH COLUMBIA AMENDMENTS AND ALL BULLETINS ISSUED BY TECHNICAL SAFETY BC (WAS BC SAFETY AUTHORITY), INCLUDING THE PROVINCIAL ELECTRICAL INSPECTION AMENDMENTS.
- 9. HYDRO SERVICE DIP CONNECTIONS SHALL BE PER BC HYDRO STANDARDS OR PER MMCD 2009. NOTE: HYDRO DIP SERVICES MUST USE A STEEL GUARD OVER RPVC CONDUITS. THE USE OF RIGID CONDUIT AND/OR RPVC TO RIGID CONDUIT FITTINGS IS NO LONGER PERMITTED.
- 10. MINIMUM DEPTH FOR UNDERGROUND CONDUIT DUCTING SHALL BE 600-MM (MINIMUM) BELOW BOULEVARD AND SIDEWALKS, AND 900-MM (MINIMUM) BENEATH ASPHALT. PER CITY OF COQUITLAM SUBDIVISION AND DEVELOPMENT SERVICING BYLAWS.
- 11. ALL CONDUITS SHALL BE RIGID P.V.C MANUFACTURED IN ACCORDANCE WITH C.S.A. C22.2 No. 211.2 (NOT DBII).
- 12. CONCRETE STREET LIGHT / SERVICE BASES WITH MORE THAN 2 CONDUITS SHALL BE NOTED ON THE PLANS. AS AN EXAMPLE, "THIS BASE HAS (X) CONDUITS"
- 13. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE TYPE RW90 (MINIMUM), STRANDED COPPER, INSULATED, AND COLOUR CODED PER DRAWINGS.
- 14. NEW STREET LIGHTING DESIGNS SHALL ONLY BE 120/240V.

TO COQUITLAM TRAFFIC OPERATIONS

- 15. UNLESS OTHERWISE INDICATED: ALL POLES, ARMS, SERVICE BASES, HAND ACCESS COVERS, SECURITY COVERS, AND RE-ENFORCED STEEL BACKING BARS, SHALL BE GALVANIZED, PRIMED AND POWER-COATED. CONSULT THE PLANS FOR SPECIFIC COLOURS.
- 16. ALL STREET LIGHT HAND-HOLE COVERS SHALL BE PROVIDED WITH SECURITY COVERS REINFORCED U-SHAPED REINFORCED BACKER BARS AND SECURITY BOLTS. TWO MAJOR POLE MANUFACTURERS OFFER ENHANCED SECURITY DEVICES:
  - a. WEST COAST ENGINEERING OFFERS "BULLDOG" COVERS, RE-ENFORCED U-SHAPED STEEL BACKING BARS AND PROVIDED WITH ROUND HOCKEY PUCK STYLE
  - LOCKS. CONTRACTOR SHALL SUPPLY AND INSTALL LOCKS, AND PROVIDE KEYS TO COQUITLAM TRAFFIC OPERATIONS. b. NOVA POLE OFFERS A REINFORCED COVER, REVERSE THREADED SECURITY BOLT, AND ROBUST BACKER BAR. CONTRACTOR SHALL PROVIDE ONE (1) TOOL BIT
  - c. THE ABOVE ITEMS DO NOT APPLY TO SPECIALTY POLES, SUCH AS PHILLIPS, LUMEC, QUATTRO, ETC. CONSULT THOSE COMPANIES FOR THEIR SECURITY
  - d. THE WIRE SENTRY PRODUCT IS NOT APPROVED FOR USE IN COQUITLAM
- 17. ALL THREADED BOLTS, NOT USED FOR ELECTRICAL CONNECTIONS, SHALL HAVE ANTI-SEIZE COMPOUND APPLIED. THIS ALSO APPLIES TO SECURITY BOLTS NOTED ABOVE
- 18. PHOTO ELECTRIC CONTROL (PEC) SHALL ONLY BE SOLID-STATE DESIGN, WITH ELECTROMECHANICAL CONTACTS.
- 19. PEC CONDUCTORS SHALL BE #12 RW90, COLOURS: RED, BLACK AND WHITE. THE PEC CONDUCTORS SHALL BE A COMPLETE RUN, WITHOUT SPLICES, FROM THE PEC TO THE ELECTRICAL PANEL. BUNDLED SEPARATE OF THE STREET LIGHTING CONDUCTORS.
- 20. LUMINAIRES SHALL BE WIRED WITH #12 RW90 CONDUCTORS. BLACK AND WHITE FOR 120V SERVICE. BLACK AND RED FOR 240V SERVICE. WIRING BUNDLED SEPARATE OF THE PHOTO-ELECTRIC CONTROL (PEC) CONDUCTORS.
- 21. LUMINAIRES ON BLACK CONDUCTOR ARE IDENTIFIED WITH A B DESIGNATION NEXT TO THE LUMINAIRES
- 22. LUMINAIRES ON RED CONDUCTOR ARE IDENTIFIED WITH A R DESIGNATION NEXT TO THE LUMINAIRES
- 23. EACH LUMINAIRE SHALL BE PROVIDED WITH A TRON HEB-AA FUSE-HOLDER C/W 2 L-TYPE INSULATING BOOTS, OR PRE-APPROVED EQUIVALENT. THE FUSE-HOLDER SHALL BE ACCESSIBLE IN THE HAND-HOLE COVER.
- 24. EACH FUSE HOLDER SHALL BE PROVIDED WITH ONE 10-AMPERE BUSS KTK-TYPE FUSE (600V), WIRED IN THE LIVE CONDUCTOR(S). THE FUSE HOLDER SHALL BE ACCESSIBLE FROM THE HAND-HOLE ACCESS. OR JUNCTION BOX.
- 25. ALL LUMINAIRE FIXTURES SHALL BE BONDED WITH A NUMBER 12 RW90 GREEN CONDUCTOR. THIS CONDUCTOR SHALL TERMINATE INTO THE BONDING CONDUCTOR RUN AT THE BASE OF THE POLE.
- 26. THE BOND STUD OPENING SHALL BE AT THE REAR OF THE POLE AND SHALL NOT BE ON THE FLANGE OF THE ACCESS HOLE OPENING
- 27. THE INTERIOR COLOUR-FINISHED SURFACE SURROUNDING THE BOND STUD SHALL BE GROUND OFF TO THE GALVANIZING OR BARE STEEL FOR THE ELECTRICAL BOND ADHERENCE. TO ENSURE A PROPER BOND AND REDUCE CORROSION OR RUSTING, THE BONDING STUD SHALL BE INSTALLED IMMEDIATELY AFTER THE GRINDING.
- 28. THE BONDING STUD IN EACH POLE SHALL COMPRISE OF ONE 3/8-16 BOLT 1.5-INCHES LONG, ONE SPLIT LOCK WASHER, AND TWO HEX NUTS. THE SPLIT LOCK-WASHER SHALL BE SLID ONTO THE BOLT ON THE INSIDE OF THE POLE, AND HELD TIGHTLY IN PLACE WITH THE FIRST NUT. THIS NUT SHALL BE TIGHTENED TO SPECIFICATION. THE RING TERMINAL SHALL BE SANDWICHED BETWEEN THE TWO HEX NUTS. THE LAST NUT HOLDS THE RING TERMINAL IN PLACE. ALL HARDWARE SHALL BE TIGHTENED TO SPECIFICATIONS.
- 29. ALL POLES SHALL BE BONDED WITH A NO 8 RW90 BONDING CONDUCTOR. THE CONTRACTOR SHALL SUPPLY A 4WAY PIGTAIL SPLICE TO THE POLE BOND, AND WITH A RING LUG TERMINAL BENEATH THE BONDING HARDWARE.
- 30. ALL LARGE GAUGE, MULTIPLE CONDUCTOR SPLICES, WHICH MAY EXCEED THE LARGER WIRE NUTS, SHALL UTILIZE SPLIT BOLT HARDWARE, DUCT SEALANT, AND WITH WEATHER-RESISTANT / WATER-PROOF CONNECTION MEANS. THE STANDARD HOUSE-HOLD "WIRE NUT" IS NOT WATER PROOF.
- 31. ALL LARGE GAUGE (# 8 OR LARGER) SPLICES AND CONNECTIONS, WITHIN JUNCTION BOXES OR HAND ACCESS OPENINGS, SHALL BE SEALED WITH TAPE CONSISTING OF BISHOP BI-SEAL PHÎLLIPS ROTRUNDA OR 3M SELF HOLDING TAPE; COVERED WITH PVC TAPE AND DIPPED IN 3M SCOTCHCOAT. OR PRE-APPROVED EQUIVALENT.
- 32. FUSE HOLDERS IN HAND HOLE ACCESS AND JUNCTION BOXES SHALL UTILIZE AN IDEAL INDUSTRIES OR BUCHANAN CONSTRUCTION PRODUCTS 65 KIT WATER-PROOF FUSE HOLDER, OR APPROVED EQUIVALENT. EACH FUSE-HOLDER SHALL BE PROVIDED WITH ONE 10-A BUSS KTK-TYPE FUSE, WIRED IN THE LIVE CONDUCTOR(S). FOR 240V LINE TO LINE SERVICES, ONE TWO FUSE SHALL BE USED.
- 33. WIRING AND FUSE-HOLDERS IN POLE HAND ACCESS AND/OR JUNCTION BOXES SHALL BE MARKED WITH YELLOW WATER-PROOF WIRE MARKER TAGS, AND ATTACHED USING TIE-WRAPS. LABELLING SHALL BE WITH A WATERPROOF SHARPIE INK PEN.
- 34. WHERE POSSIBLE, JUNCTION BOXES SHALL BE AVOIDED. JUNCTION BOXES PROVIDE AN EASY ACCESS FOR WIRE THEFT. HOWEVER, IF JUNCTION BOXES ARE REQUIRED FOR 3 OR MORE CONDUITS/CONNECTIONS, CITY OF COQUITLAM HAS STANDARDIZED ON DUO-MOLD JUNCTION BOXES BY SYNERTECH. PREFERRED SIZE IS 11X18X12, 24" TOTAL, 2 SECTIONS DEEP (MINIMUM). OTHER SIZES MAY BE REQUIRED PER THE DESIGN PLANS.
- 35. JUNCTION BOXES IN SOFT BOULEVARD (GRASS, SOIL, ETC.), A 200-MM WIDE BY 150MM DEEP CONCRETE SUPPORT RING IS REQUIRED, TO HELP SUPPORT AND PROTECT THE JUNCTION BOX FROM LAWN MOWERS, ETC.
- 36. JUNCTION BOXES SHALL BE PROVIDED WITH RPVC SUPPORT BARS TO SUPPORT THE ELECTRICAL CONNECTIONS AND FUSE HOLDERS (IF USED). THE RPVC BARS SHALL
- BE ATTACHED INTO THE JUNCTION BOX SIDEWALLS. THE ELECTRICAL CONNECTIONS AND FUSE—HOLDERS WILL BE HELD IN PLACE BY TIE—WRAPS 37. JUNCTION BOXES WITH METALLIC LIDS (NEW OR EXISTING) SHALL BE BONDED WITH A NO 8 RW90 BONDING CONDUCTOR WITH A SUITABLY SIZED RING LUG, AND
- STAINLESS STEEL HARDWARE. THE CONTRACTOR SHALL SÚPPLY A PIGTAIL SPLICE FROM THE INTERNAL BONDING CONDUCTORS TO THE METALLIC LID BOND
- 38. JUNCTION BOXES FOR ELECTRICAL APPLICATIONS (TRAFFIC SIGNALS, STREET LIGHTING, ETC.) THE LIDS SHOULD BE ETCHED ELEC, JUNCTION BOXES FOR COMMUNICATIONS - THE LIDS SHOULD BE ETCHED COMM, ALL UPPERCASE LETTERS.
- 39. SYNERTEC 24 x 36 x 36 PULL BOXES SHALL BE INSTALLED AS SHOWN ON STANDARD DETAIL MMCD DRAWING E2.3 C/W BOLT DOWN 2 PIECE LIDS. REPLACE 150mm FINE DRAIN ROCK WITH 300mm FINE DRAIN ROCK.
- 40. ALL JUNCTION BOXES SHALL BE 2 SECTIONS DEEP. BOTTOM OF JUNCTION BOXES SHALL BE OPEN. BOTTOM SECTIONS SHALL BE SUPPORTED WITH CONCRETE BRICKS AND USE CRUSHED GRAVEL TO DRAIN WATER.
- 41. ALL BOLT DOWN JUNCTION BOX LIDS SHALL BE TIER 15 (20K) RATED OR GREATER.
- 42. WIRING CONNECTIONS, SPLICES AND FUSE-HOLDERS IN JUNCTION BOXES SHALL BE KEPT OUT OF WATER
- 43. ALL CONDUITS SHALL BE PROVIDED WITH A NYLON PULL LINE. CAPS SHALL HOLD THE NYLON CORD IN PLACE.
- 44. EMPTY CONDUITS / CONDUITS ONLY (CO) SHALL BE CAPPED AT EACH END
- 45. WATER OR OTHER OBSTRUCTIONS ARE NOT PERMITTED IN CONDUITS. CONDUITS WITH WATER OR OTHER OBSTRUCTIONS SHALL BE BLOWN CLEAR.
- 46. PER PER COQUITLAM SUBDIVISION BYLAWS, MINIMUM SPACING BETWEEN STREET LIGHTS AND: a. TREES SHALL BE 6-METERS
  - b. KIOSKS SHALL BE 3M c. DRIVEWAYS SHALL BE 2-METERS (EXCLUDING THE FLARE)

- e. MANHOLES, VALVE BOXES, SERVICE CONNECTIONS SHALL BE 2-METERS f. JUNCTION BOXES SHALL BE 2-METERS
  - 49. STREET LIGHT BOLTS SHALL HAVE COLOUR-CODED NUT CAPS.

48. STREET LIGHT BASE FLANGES SHALL BE LEVEL ON TWO HORIZONTAL AXIS.

d. HYDRANTS SHALL BE 3-METERS

- 50. IT SHALL BE THE CONTRACTORS / DEVELOPERS RESPONSIBILITY TO SUBMIT THE ELECTRICAL PERMITS TO THE ASSIGNED COQUITLAM FIELD INSPECTOR. COQUITLAM TRAFFIC OPERATIONS (OR ASSIGNED) WILL INSPECT THE INSTALLATIONS AND PROVIDE A DEFICIENCY LIST (IF NECESSARY). TRAFFIC OPERATIONS WILL ISSUE A REQUEST
- 51. DEVELOPERS ARE REQUIRED TO PAY A FLAT-RATE CHARGE TO CITY OF COQUITLAM FOR NEW BC HYDRO CONNECTION FEES. THIS DOES NOT APPLY WHERE NEW STREET LIGHTS ARE CONNECTED INTO EXISTING SERVICES.
- 52. THE CONTRACTOR SHALL SUBMIT THE ELECTEICAL PERMIT TO TERRY WILSON AT THE CITY OF COQUITLAM FOR ENTRY INTO THE BC HYDRO SLIM SYSTEM.
- 53. JUNCTION BOXES (IF USED), TOPS SHALL BE LEVEL ON 2 AXIS.

#### **CONCRETE BASE NOTES**

- 1. THE CONCRETE BASES SHALL BE PER MMCD2009 STANDARDS AND PLANS. PROVIDED WITH APPROPRIATE CONDUITS PER ENGINEERING REQUIREMENTS
- THE CONCRETE BASE SHALL NOT BE FORMED ONSITE, AND SHALL NOT BE FORMED BY THE ELECTRICAL CONTRACTOR. THE CONCRETE BASE SHALL BE PROVIDED FROM A PRECAST COMPANY, SUCH AS AE PRECAST, ARMTEC, LANGLEY CONCRETE, ETC.
- 3. CONCRETE BASES FOR A SERVICE BASE:
  - a. STREET LIGHTING: 40 AND 60-AMPERE PANELS, CONCRETE BASE WITH 5 OR MORE RPVC CONDUITS, PER CITY OF COQUITLAM SUPPLEMENTAL PLAN SS-E&.3,
  - b. TRAFFIC SIGNAL: 100-AMPERE PANELS, CONCRETE BASE WITH 2 53MM RPVC CONDUITS, PER CITY OF COQUITLAM SUPPLEMENTAL PLAN SS-E&.3, LOWER
  - c. PRIOR TO SERVICE BASE INSTALLATIONS, THE CONTRACTOR SHALL ENSURE THE CONCRETE BASE IS PROPERLY ORIENTATED SUCH THAT THE SERVICE CONDUIT (SC) IS ALIGNED TO THE PROTECTED AREA WITHIN THE ELECTRICAL PANEL WITHIN THE SERVICE BASE. REFER TO COQUITLAM SUPPLEMENTAL DRAWINGS SS
  - d. THE CONCRETE BASE SHALL BE INSTALLED TO ENSURE THE CONCRETE BASE IS PROPERLY ALIGNED FOR THE SERVICE BASE ACCESS DOOR. PER CITY OF COQUITLAM SUPPLEMENTAL PLAN SS-E7.3, THE SERVICE BASE ACCESS DOOR SHALL BE ON THE DOWNWARD SIDE OF TRAFFIC.
  - e. CITY OF COQUITLAM CIVIL INSPECTOR SHALL ATTEND WHEN THE CONCRETE BASE IS TO BE INSTALLED, TO CONFIRM COMPLIANCE TO CITY OF COQUITLAM REQUIREMENT, WITH 12 HOURS ADVANCE NOTIFICATION.
- 4. THE CIVIL/ELECTRICAL CONTRACTOR SHALL ENSURE STREET LIGHT POLES, FIXTURES AND RELATED EQUIPMENT MEETS OR EXCEEDS BC HYDRO AND WORKSAFEBO CLEARANCE REQUIREMENTS, FOR ALL OVERHEAD PRIMARY AND SECONDARY LINES. CONTRACTOR IS RESPONSIBLE TO REPORT ANY CONFLICTS OR DISCREPANCIES TO THE CITY OF COQUITLAM, AND TO THE DESIGN ENGINEERS
- 5. CONCRETE BASES WITH MORE THAN 2 CONDUITS SHALL BE NOTED ON THE PLANS. AS AN EXAMPLE, "THIS BASE HAS (X) CONDUITS"
- CONCRETE BASES SHALL BE PROVIDED WITH A V-GROOVE TO DISPERSE STANDING WATER. IF A V-GROOVE IS NOT AVAILABLE, THEN ROUND FLAT STAINLESS STEEL WASHERS SHALL BE MOUNTED BETWEEN THE CONCRETE BASE AND THE BOTTOM OF THE SERVICE BASE. U-SHAPED SHIMS NOT ACCEPTABLE.
- 7. CONCRETE BASE TOPS SHALL BE 7-CM (~2.5-INCHES) ABOVE FINAL GRADE CONCRETE BASES SHALL BE LEVEL ON TWO HORIZONTAL AXIS
- 8. STREET LIGHT BOLTS SHALL HAVE COLOUR-CODED NUT CAPS.

- 1. UNLESS OTHERWISE INDICATED, ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF COQUITLAM CURRENT SUBDIVISION CONTROL BYLAWS, CITY OF COQUITLAM SUPPLEMENTARY SPECIFICATIONS AND DETAILED DRAWINGS, CITY OF COQUITLAM APPROVED MATERIALS AND PRODUCTS LISTINGS. MMCD 2009 MAY APPLY.
- UNLESS OTHERWISE INDICATED, THE SERVICE BASE AND ACCESS COVERS ARE TO BE GALVANIZED, PRIMED AND POWDER-COATED IN COLOUR PER THE DESIGN PLANS. STANDARD COLOUR: GREEN PER RAL6028.
- 3. THE ACCESS DOOR FOR THE SERVICE BASE SHALL BE DOWNSTREAM OF TRAFFIC.
- 4. THE SERVICE BASE SHALL BE MOUNTED ON A PRE-FORMED CONCRETE BASE:
  - a. THE CONCRETE BASE SHALL NOT BE FORMED ONSITE, AND SHALL NOT BE FORMED BY THE ELECTRICAL CONTRACTOR. THE CONCRETE BASE SHALL BE PROVIDED FROM A PRECAST COMPANY, SUCH AS AE PRECAST, ARMTEC, LANGLEY CONCRETE, ETC.
  - b. Street lighting: 40 and 60-ampere panels, concrete base with 5 or more rpvc conduits, per city of coquitlam supplemental plan SS-E7.3, UPPER DETAIL
  - c. TRAFFIC SIGNAL: 100-AMPERE PANELS, CONCRETE BASE WITH TWO 53MM RPVC CONDUITS, PER CITY OF COQUITLAM SUPPLEMENTAL PLAN SS-E7.3, LOWER
- THE SERVICE BASE SHALL BE MOUNTED ON A PRE-FORMED CONCRETE BASE: THE SERVICE BASE SHALL BE PROVIDED WITH TWO 3/8-16 THREADED HOLES IN THE UPPER FLANGE AND WITH MATING CLEARANCE HOLES ON THE COVER. THESE HOLES SHALL BE AT THE TOP, ONE HOLE ON EITHER SIDE OF THE LOCKING TAB. THE
- 6. THE SERVICE BASE COVER SHALL NOT BE A SNUG FIT INTO THE SERVICE BASE OPENING. SOME LEEWAY SHALL BE PROVIDED TO FIT THE LOCKING TAB AND BOLTS THROUGH THE CLEARANCE OPENINGS.

CONTRACTOR SHALL PROVIDE 2 EACH 3/8-16 STAINLESS STEEL BOLTS, FLAT WASHERS AND ANTI-SEIZING COMPOUND. THE CITY MAY INSTALL SECURITY BOLTS.

- 7. THE LOCKING TAB SHALL BE OF A ROBUST DESIGN AND MANUFACTURE, AND SHALL ACCEPT A STANDARD CITY PADLOCK. A WCE BULLDOG PRODUCT SHALL NOT BE
- THE SERVICE BASE SHALL BE PROVIDED WITH A BONDING TAB. THE COLOUR-FINISHED SURFACE SURROUNDING THE BOND TAB SHALL BE GROUND OFF TO GALVANIZING OR TO BARE STEEL FOR THE ELECTRICAL BOND ADHERENCE. TO ENSURE A PROPER BOND AND REDUCE CORROSION OR RUSTING, THE BONDING STUD SHALL BE INSTALLED IMMEDIATELY AFTER THE GRINDING.
- 9. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE TYPE RW90 (MINIMUM), STRANDED COPPER, INSULATED, AND COLOUR CODED PER DRAWINGS.
- 10. THE ELECTRICIAN SHALL PROVIDE A NO 8 GAUGE RW90 BOND WITH A RING LUG FROM THIS TAB INTO THE ELECTRICAL PANEL ONTO THE BONDING BUSS. THE 3/8-16 BOLT SHALL CONSIST OF ONE 3/8-16 BOLT, SPLIT LOCK WASHER AND 2 HEX NUTS. THE RING TERMINAL IS SANDWICHED BETWEEN THE 2 NUTS. TIGHTEN TO
- 11. THE ELECTRICAL PANEL WITHIN THE SERVICE BASE SHALL BE:
  - a. FABRICATED FROM STAINLESS STEEL OR ALUMINUM. THE ELECTRICAL PANEL SHALL BE SET STRAIGHT, AND PARALLEL TO INTERNAL SERVICE BASE SURFACES. AMPERAGE CAPACITIES PER DESIGN DRAWINGS.
  - b. PROVIDED WITH A MAIN DISCONNECT, 2P-40A, 2P-60A, OR 2P-100A, 120/240V PER THE DESIGN PLANS, BRANCH BREAKERS ARE REQUIRED ONLY FOR THE 100-AMPERE PANELS.
  - c. PROVIDED WITH AN SPD (SURGE PROTECTION DEVICE), MOUNTED WITHIN THE ELECTRICAL PANEL, AND WITH FAULT PROTECTION (CIRCUIT BREAKERS, FUSING,
  - d. PANEL SHALL BEAR ELECTRICALLY APPROVED LABELS FOR USE IN CANADA. SUCH AS CSA, ETL, CULUS, SPECIAL INSPECTIONS, ETC.

#### 12. SURGE PROTECTION DEVICE SPECIFICATIONS:

- a. ELECTRICAL ACCREDITATIONS: CSA, ETL, CULUS, ETC.
- b. SYSTEM VOLTAGE AND FREQUENCY: 120/240V, 50/60 HERTZ

FUSE-HOLDER. PUSH-BUTTON CIRCUIT BREAKERS ARE NOT ACCEPTABLE.

PEC WIRING. GROUPING SHALL BE DONE WITH ELECTRICIANS TAPE.

ETC.). FOR DETAILED SPD SPECIFICATIONS, REFER TO NOTE 12 FOLLOWING.

- c. MINIMUM DISCHARGE RATING: 20KA
- d. PROVIDED WITH LED STATUS INDICATORS, VISIBLE WHEN THE SERVICE BASE OR ELECTRICAL PANEL IS REMOVED. WITHOUT THE USE OF TOOLS.
- e. PREFERRED MANUFACTURERS: MERSEN AND SQUARE-D. ALL OTHERS SHALL BE PRE-APPROVED.
- 13. THE PEC FUSE-HOLDER AND FUSE SHALL BE MOUNTED ON THE FRONT PANEL, NEAR THE HOA OR OHA ROTARY SWITCH. THIS APPLIES TO 40A, 60A AND 100A ELECTRICAL PANELS
- 14. THE PEC BYPASS SWITCH SHALL PER MMCD, A HEAVY-DUTY, 3-POSITION MAINTAINED, HOA OR OHA ROTARY SWITCH. A 2-POSITION ROTARY OR TOGGLE SWITCHES ARE NOT ACCEPTABLE
- 15. THE FRONT PANEL PEC FUSE-HOLDER AND THE PEC BYPASS SWITCH SHALL BE PROVIDED WITH LABELS, DETAILS PER MMCD DRAWINGS
- 17. PEC CONDUCTORS SHALL BE #12 RW90, COLOURS: RED, BLACK AND WHITE. THE PEC CONDUCTORS SHALL BE A COMPLETE RUN, WITHOUT SPLICES, FROM THE PEC

16. THE PHOTO-ELECTRIC CONTROL (PEC) CIRCUIT FUSING SHALL PER MMCD, USE A 10-AMPERE KTK TYPE FUSE (600V), AND SUITABLE FRONT PANEL MOUNTED

- TO THE ELECTRICAL PANEL. BÜNDLED SEPARATE OF THE STREET LIGHTING CONDUCTORS. 18. THE CONTRACTOR SHALL ENSURE THE SERVICE BASE IS PROPERLY ORIENTATED SUCH THAT THE SERVICE CONDUIT (SC) IS ALIGNED TO THE PROTECTED AREA WITHIN
- THE ELECTRICAL PANEL. 19. STREET LIGHTS MOUNTED ON A SERVICE BASE SHALL BE WIRED PER MMCD DRAWINGS. LUMINAIRE CONDUCTORS SHALL BE GROUPED TOGETHER, AND SEPARATE OF THE
- 20. GAPS OR OPENINGS BETWEEN THE STREET LIGHT POLE BASE FLANGES, THE OPENINGS FOR THE NUTS AND BOLTS, TO THE TOP OF THE SERVICE BASE, SHALL BE SEALED WITH RTV SEALANT.

- 21. STREET LIGHT MOUNTING NUTS TO CONCRETE BASE SHALL HAVE COLOUR-CODED NUT CAPS.
- 22. HYDRO SERVICE (DIP) CONNECTIONS SHALL BE PER BC HYDRO STANDARDS OR PER MMCD (CURRENT EDITION). NOTE: HYDRO DIP SERVICES SHALL USE A STEEL GUARD OVER RPVC CONDUITS. THE USE OF RIGID CONDUIT AND/OR RPVC TO RIGID CONDUIT FITTINGS IS NO LONGER PERMITTED.
- 23. THE ELECTRICAL CONTRACTOR SHALL PRE-TEST THE OPERATION OF THE ELECTRICAL PANEL WITHIN THE SERVICE BASE. THIS INCLUDES TESTING THE OHA/HOA SWITCH AND PEC FOR DAYTIME / NIGHTTIME SIMULATION. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AN EMAIL TO TRAFFIC OPERATIONS STAFF TO ADVISE THE SERVICE BASE HAS BEEN DULY TESTED AND READY FOR CONNECTION.

#### LUMINAIRE FIXTURE NOTES

CITY OF COQUITLAM USES MULTIPLE LED LUMINAIRE STYLES. SOME LUMINAIRE INFORMATION IS BELOW.

- 1. LUMINAIRE FIXTURES SHALL BEAR ELECTRICALLY APPROVED LABELS FOR USE IN CANADA. SUCH AS CSA, CEC, ULC, SPECIAL INSPECTIONS, ETC.
- 2. UNLESS OTHERWISE NOTED, LOCAL/RESIDENTIAL STREETS SHALL BE LED 3000-DEGREES KELVIN, AND 4000-DEGREES KELVIN FOR ALL OTHERS.
- 3. LUMINAIRES SHALL BE LED AND AS PER THE DESIGN DRAWINGS.
- 4. MULTI-USE PATHWAY (MUP), SIDEWALKS AND WALKWAY LIGHTING SHALL BE LED, 4000-DEGREES KELVIN, PER CITY OF COQUITLAM APPROVED PRODUCTS LIST. LED WATTAGES, POLE STYLE AND HEIGHT, POLE COLOUR AND CONCRETE BASE PER DESIGN PLANS.
- 5. PHOTO ELECTRIC CONTROL (PEC) SHALL ONLY BE SOLID-STATE DESIGN, WITH ELECTROMECHANICAL CONTACTS.
- THE PEC SOCKET SHALL BE PROVIDED WITH 7—CONTACTS (FUTURE SMART LIGHTING PROVISIONS). EACH LUMINAIRE SHALL BE PROVIDED WITH A 3—PIN TWIST LOCK SHORTING CAP (EXCEPT WHERE A PEC IS REQUIRED).
- 7. PEC CONDUCTORS SHALL BE #12 RW90. COLOURS: RED, BLACK AND WHITE. THE PEC CONDUCTORS SHALL BE A CONTINUOUS RUN, WITHOUT SPLICES, TO THE ELECTRICAL PANEL. BUNDLED SEPARATE FROM THE LUMINAIRE CONDUCTORS.
- 8. A NOTE SHALL BE PROVIDED TO INDICATE: PEC AIMED IN A NORTHERN DIRECTION.
- 9. LED LUMINAIRE FIXTURES SHALL BE PROVIDED WITH AN LED WATTAGE/LUMEN LABEL (BLACK LETTERING ON WHITE BACKGROUND). LABEL SHALL BE VISIBLE FROM THE

PROPOSED DAVIT STREETLIGHT POLE (6.6m - 35W LED TYPE 2ES DISTRIBUTION) C/W 0.9m SERVICE BASE

ON A TYPE C3 CONCRETE BASE AND CONCRETE WORKING PAD PROPOSED DAVIT STREETLIGHT POLE (7.5m - 35W LED TYPE 2ES DISTRIBUTION) ON A TYPE C2 CONCRETE

FUTURE DAVIT STREETLIGHT POLE

EXISTING DAVIT STREETLIGHT POLE

LUMINAIRE ON RED PHASE CONDUCTOR

LUMINAIRE ON BLACK PHASE CONDUCTOR

—— SC —— PROPOSED 3 No. 6 RW90 SERVICE CONDUCTORS IN 53mm RPVC

UE - PROPOSED 2 No.6 RW90 ST. LTG. & 1 No.8 RW90 BOND IN 35mm RPVC

—— CO —— PROPOSED 1-35mm RPVC STUB-OUT FOR FUTURE EXTENSION (CAP & MARK LOCATION)

ASSUMED BC HYDRO POLE

EXISTING BC HYDRO POLE

NOT FOR CONSTRUCTION 2021-02-11



COQ. ASBUILT No. **EXXXX** 



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DMD PROJECT No. 7056-20-01 of 02

2021-02-11 PO PROVINCE ₩ K. G. SCOTT # 47441 O BRITISH + Ken de de

		11-02-2021	RI	ISSUED FOR TENDER	KGS
		11-01-2021	RI	90% SUBMISSION	KGS
		23-09-2020	YJ	50% SUBMISSION	KGS
l	No.	Date	Ву	Revisions	Eng.
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Design by KGS 13-08-2020 Drawn by 13-08-2020 Checked by KGS 13-08-2020 Approved by

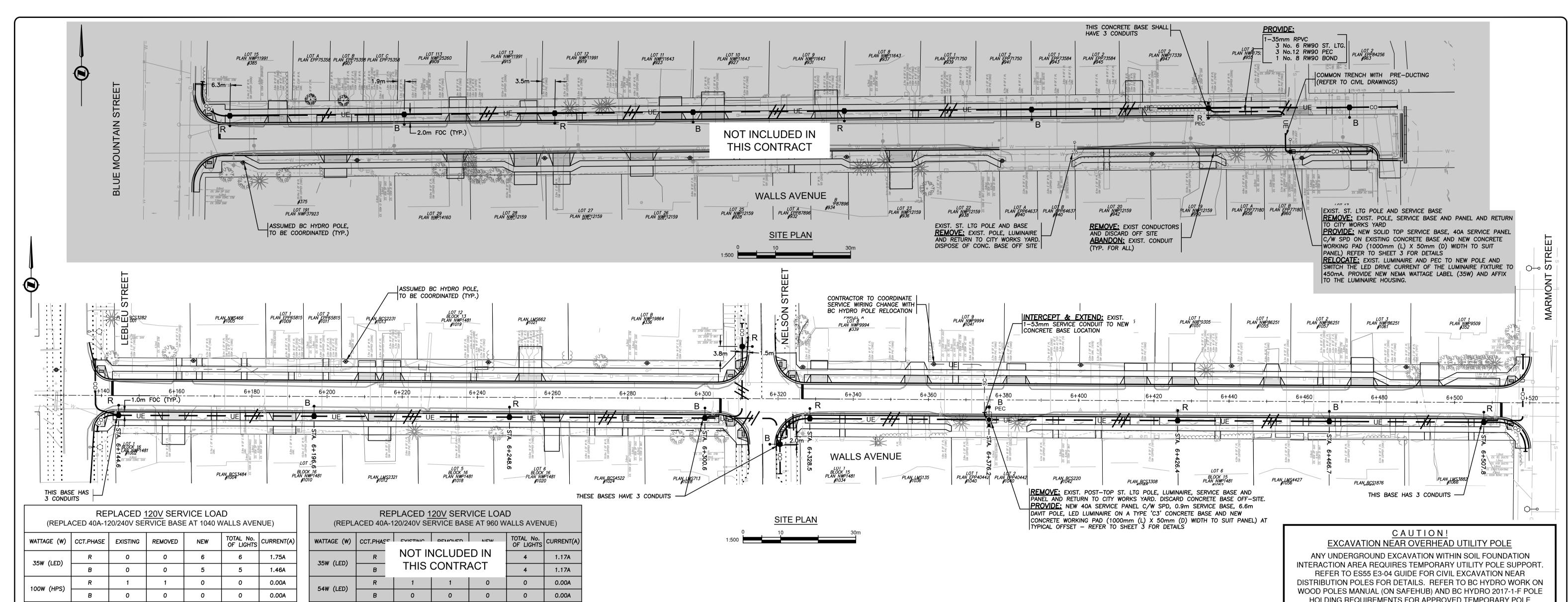
Engineering & Public Works

Sheet Eng. Project No. 3000 Guildford Way, Coquitlam, B.C. V3B 7N2

Scale Scale horiz. vert.

BLUE MOUNTAIN ST TO MARMONT ST Description STREET LIGHTING

File: 7056-20-Walls Ave



ROADWAY LIGHTING DESIGN CRITERIA PER: (CITY BYLAW 3558 & TAC TABLE 9.2)						
INTERSECTION (NAME)			WALLS AVENUE -	BLUE	MTN. ST. TO GREENBELT	
LAND USE CLASSIFICAT	ION			RESID	ENTIAL	
ROADWAY CLASSIFICATIO	ROADWAY CLASSIFICATION & WIDTH			LOCAL	. 8.5m	
PEDESTRIAN CONFLICT				LC	DW W	
LUMINANCE RECOMMEN	DED/DELIVER	NOT INCL	UDED IN		0.3 cd/m <sup>2</sup>	
UNIFORMITY RECOMMENDED/DELIVER THIS CON			ITRACT		1.6:1	
UNIFORMITY RECOMMEN	IDED/DELIVER	11110 001			2.7:1	
LV RATIO RECOMMENDE	D/ DELIVERED	(VLMAX:AVG)	0.4:1 0.4:1		0.4:1	
LIGHT LOSS FACTOR			0.86			
SPACING	SPACING			49.8m (ONE SIDED)		
EQUIPMENT						
FIXTURE TYPE: LED	WATTAGE: 35W		MTG. HEIGHT: 7.5m DIST TYPE: 2ES			
IES FILE:	NXT-24S-450i	mA-2ES-3000K	MODEL: NXT-24S	SERIES		

0.30% VOLTAGE DROP

	INTERSECTION DESIGN CRITERIA								
	PER: (CITY BYLAW 3558 & TAC TABLE 10.1)								
	INTERSECTION (NAME)		LEBLEU STREET	WALLS AVENUE					
	LAND USE CLASSIFICA	TION	RESIDENTIAL	RESIDENTIAL					
	ROADWAY CLASSIFICAT	ION & WIDTH	LOCAL 8.5m LOCAL 8.						
	PEDESTRIAN CONFLICT	•	LOW	LOW					
	LUMINANCE RECOMME	NDED/DELIVERED	8.0 LUX	10.0 LUX					
	UNIFORMITY RECOMME	NDED/DELIVERED	6.0:1	1.7:1					
	LIGHT LOSS FACTOR		0.86						
	SPACING		AS SHOWN						
	EQUIPMENT								
	FIXTURE TYPE: LED	WATTAGE: 35W	MTG. HEIGHT: 7.5m	DIST TYPE: 2ES					
	IES FILE:	NXT-24S-450mA-2ES-3000K	MODEL: NXT-24S SERIES						
	FIXTURE TYPE: LED	WATTAGE: 35W	MTG. HEIGHT: 7.5m DIST TYPE: 2ES						
	IES FILE:	NXT-24S-450mA-2ES-3000K	MODEL: NXT-24S SERIES						
* BASED ON ULTIMATE LAYOUT									
		INTERSECTION (NAME) LAND USE CLASSIFICAT ROADWAY CLASSIFICAT PEDESTRIAN CONFLICT LUMINANCE RECOMME UNIFORMITY RECOMME LIGHT LOSS FACTOR SPACING EQUIPMENT FIXTURE TYPE: LED IES FILE: FIXTURE TYPE: LED IES FILE:	PER: (CITY BYLAW 3558  INTERSECTION (NAME)  LAND USE CLASSIFICATION  ROADWAY CLASSIFICATION & WIDTH  PEDESTRIAN CONFLICT  LUMINANCE RECOMMENDED/DELIVERED  UNIFORMITY RECOMMENDED/DELIVERED  LIGHT LOSS FACTOR  SPACING  EQUIPMENT  FIXTURE TYPE: LED WATTAGE: 35W  IES FILE: NXT-24S-450mA-2ES-3000K  FIXTURE TYPE: LED WATTAGE: 35W  IES FILE: NXT-24S-450mA-2ES-3000K	PER: (CITY BYLAW 3558 & TAC TABLE 10  INTERSECTION (NAME)  LEBLEU STREET  LAND USE CLASSIFICATION  RESIDENTIAL  ROADWAY CLASSIFICATION & WIDTH  PEDESTRIAN CONFLICT  LOW  LUMINANCE RECOMMENDED/DELIVERED  B.O LUX  UNIFORMITY RECOMMENDED/DELIVERED  CONTROL OF SPACING  SPACING  SPACING  AS S  EQUIPMENT  FIXTURE TYPE: LED  WATTAGE: 35W  IES FILE:  NXT-24S-450mA-2ES-3000K  MTG. HEIGHT: 7.5m  IES FILE:  NXT-24S-450mA-2ES-3000K  MTG. HEIGHT: 7.5m  MTG. HEIGHT: 7.5m					

0.34% VOLTAGE DROP

ROADWAY LIGHTING DESIGN CRITERIA								
	PER: (CITY BYLAW 3558 & TAC TABLE 9.2)							
INTERSECTION (NAME)		WALLS AVENUE - LE BL	EU ST. TO MARMONT ST.					
LAND USE CLASSIFICAT	TION	RESID	ENTIAL					
ROADWAY CLASSIFICATI	ION & WIDTH	LOCAL	. 8.5m					
PEDESTRIAN CONFLICT		LC	DW .					
LUMINANCE RECOMMEN	NDED/DELIVERED	0.3 cd/m²	0.3 cd/m²					
UNIFORMITY RECOMME	NDED/DELIVERED (AVG:MIN)	6.0:1	1.9:1					
UNIFORMITY RECOMME	NDED/DELIVERED (MAX:MIN)	10.0:1	3.6:1					
LV RATIO RECOMMEND	ED/ DELIVERED (VLMAX:AVG)	0.4:1 0.4:1						
LIGHT LOSS FACTOR		0.86						
SPACING		52.0m (ONE SIDED)						
EQUIPMENT	EQUIPMENT							
FIXTURE TYPE: LED	WATTAGE: 35W	MTG. HEIGHT: 7.5m	DIST TYPE: 2ES					
IES FILE:	NXT-24S-450mA-2ES-3000K	MODEL: NXT-24S SERIES						

INTERSECTION DESIGN CRITERIA							
	PER: (CITY BYLAW 355	8 & TAC TABLE 10	0.1)				
INTERSECTION (NAME)		NELSON STREET	WALLS AVENUE				
LAND USE CLASSIFICA	ATION	RESIDENTIAL	RESIDENTIAL				
ROADWAY CLASSIFICAT	TION & WIDTH	LOCAL 8.5m	LOCAL 8.5m				
PEDESTRIAN CONFLIC	Г	LOW	LOW				
LUMINANCE RECOMME	NDED/DELIVERED	8.0 LUX	11.8 LUX				
UNIFORMITY RECOMME	ENDED/DELIVERED	6.0:1	1.7:1				
LIGHT LOSS FACTOR		0.	86				
SPACING		AS S	HOWN				
EQUIPMENT							
FIXTURE TYPE: LED	WATTAGE: 35W	MTG. HEIGHT: 7.5m	DIST TYPE: 2ES				
IES FILE:	NXT-24S-450mA-2ES-3000K	MODEL: NXT-24S SERIES	5				
FIXTURE TYPE: LED	WATTAGE: 35W	MTG. HEIGHT: 7.5m	DIST TYPE: 2ES				
IES FILE:	NXT-24S-450mA-2ES-3000K	MODEL: NXT-24S SERIES	5				

HOLDING REQUIREMENTS FOR APPROVED TEMPORARY POLE SUPPORT METHODS. FOR MORE INFORMATION CONTACT workmethods@bchydro.com

#### LOCATING EQUIPMENT

FOR CLARITY CONDUITS, JUNCTION BOXES AND STREETLIGHT POLES MAY NOT BE SHOWN AT DESIGN OFFSETS. CONTRACTOR SHALL LOCATE ALL EQUIPMENT BASED ON STATIONS AND/OR OFFSETS AS NOTED AND SHALL NOT RELY ON COORDINATES OBTAINED FROM DMD DIGITAL DRAWINGS. CONTRACTOR TO REPORT ANY CONFLICTS OR DISCREPANCIES TO DMD & ASSOCIATES PRIOR TO ORDERING EQUIPMENT.

#### **CHECK BEFORE YOU DIG**

CONTRACTOR SHALL REFER TO MUNICIPAL RECORD / CIVIL DESIGN DRAWINGS FOR ALL OTHER UTILITIES, SERVICE LOCATIONS, AND DETAILS. THE EXACT LOCATION OF THESE UTILITIES SHALL BE DETERMINED ON SITE BY THE CONTRACTOR. CONTRACTOR TO REPORT ANY CONFLICTS OR DISCREPANCIES TO DMD & ASSOCIATES PRIOR TO ORDERING BASES.

#### OVERHEAD POWER LINE CONFLICTS

CONTRACTOR SHALL CONFIRM ON SITE PRIOR TO CONSTRUCTION THAT POLES & EQUIPMENT WILL MEET WorkSafeBC CLEARANCE REQUIREMENTS FOR OVERHEAD PRIMARY AND SECONDARY LINES. CONTRACTOR TO REPORT ANY CONFLICTS OR DISCREPANCIES TO DMD & ASSOCIATES PRIOR TO ORDERING POLES AND INSTALLING CONCRETE BASES.

NOT FOR CONSTRUCTION 2021-02-11

ALL EQUIPMENT IS NEW **EXCEPT WHERE NOTED** 



COQ. ASBUILT No. EXXXX



#### **DMD & Associates Electrical Consultants Ltd.**

#12-17358 104A Avenue, Surrey, BC, Canada V4N 5M3 604/589-9010 www.dmdeng.com office@dmdeng.com Fax 604/589-9012 DMD PROJECT No. 7056-20-02 of 02



_				
	11-02-2021	RI	ISSUED FOR TENDER	KGS
	11-01-2021	RI	90% SUBMISSION	KGS
	23-09-2020	YJ	50% SUBMISSION	KGS
No	o. Date	Ву	Revisions	Eng.

Design by	Date
KGS	13-08-2020
Drawn by	Date
YJ	13-08-2020
Checked by	Date
KGS	13-08-2020
Approved by	Date



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

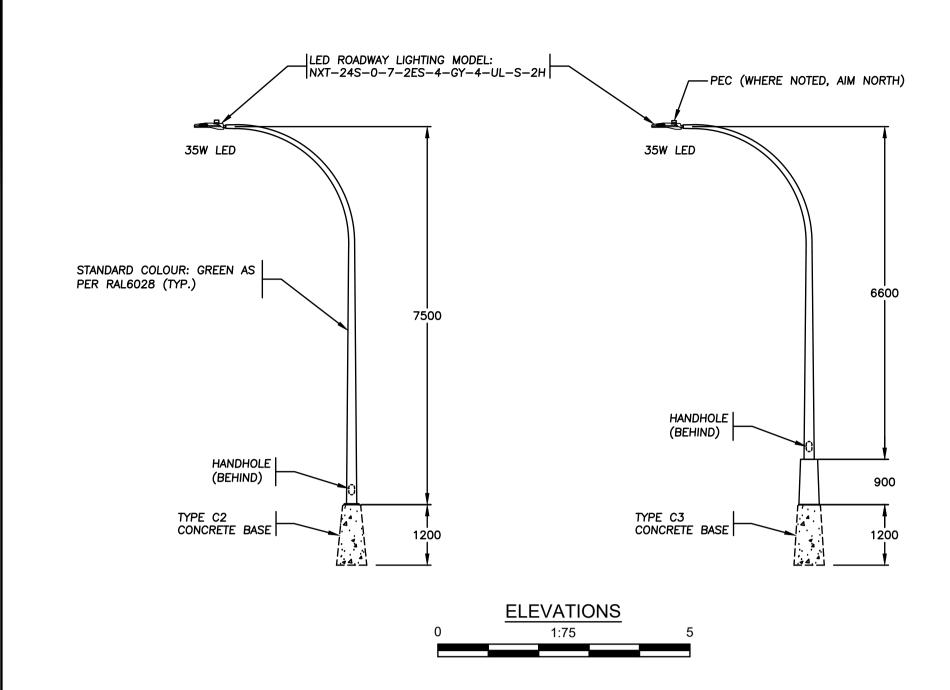
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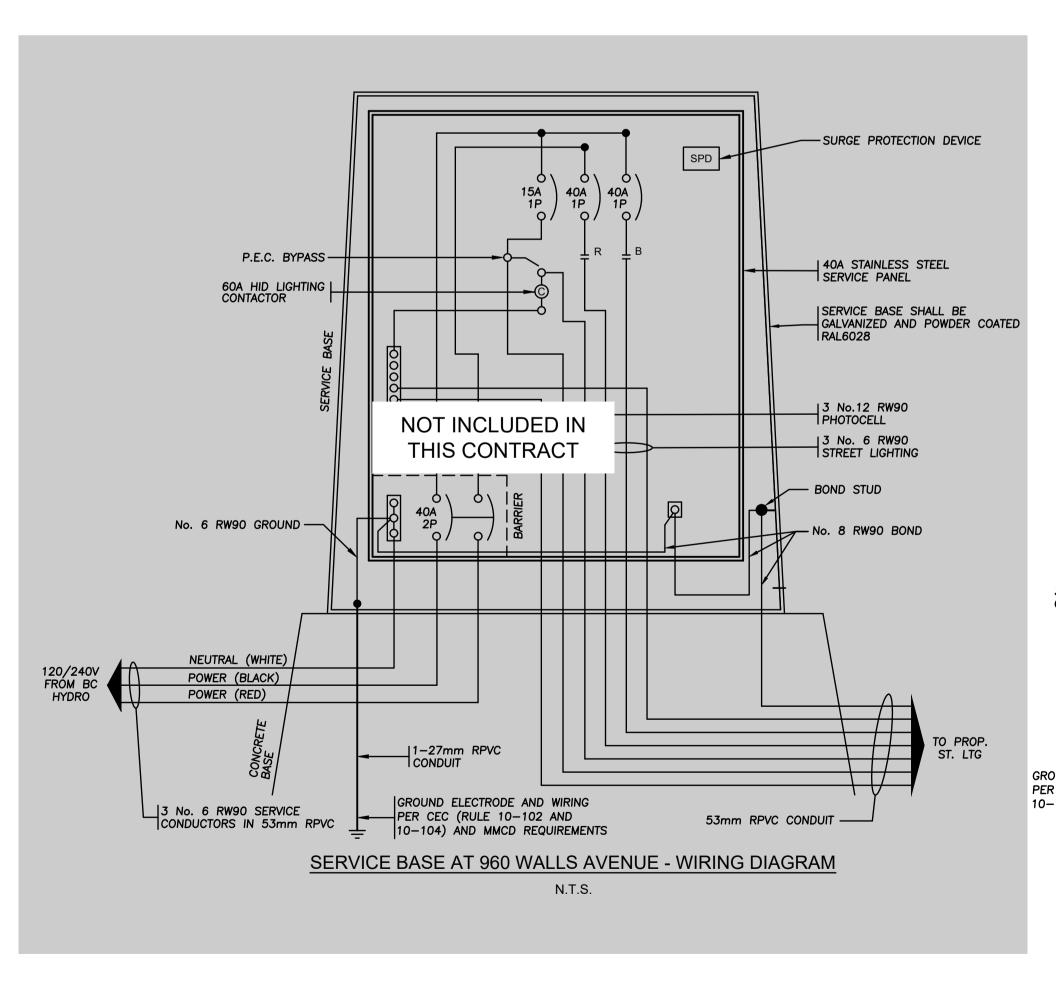
Eng. Project No.

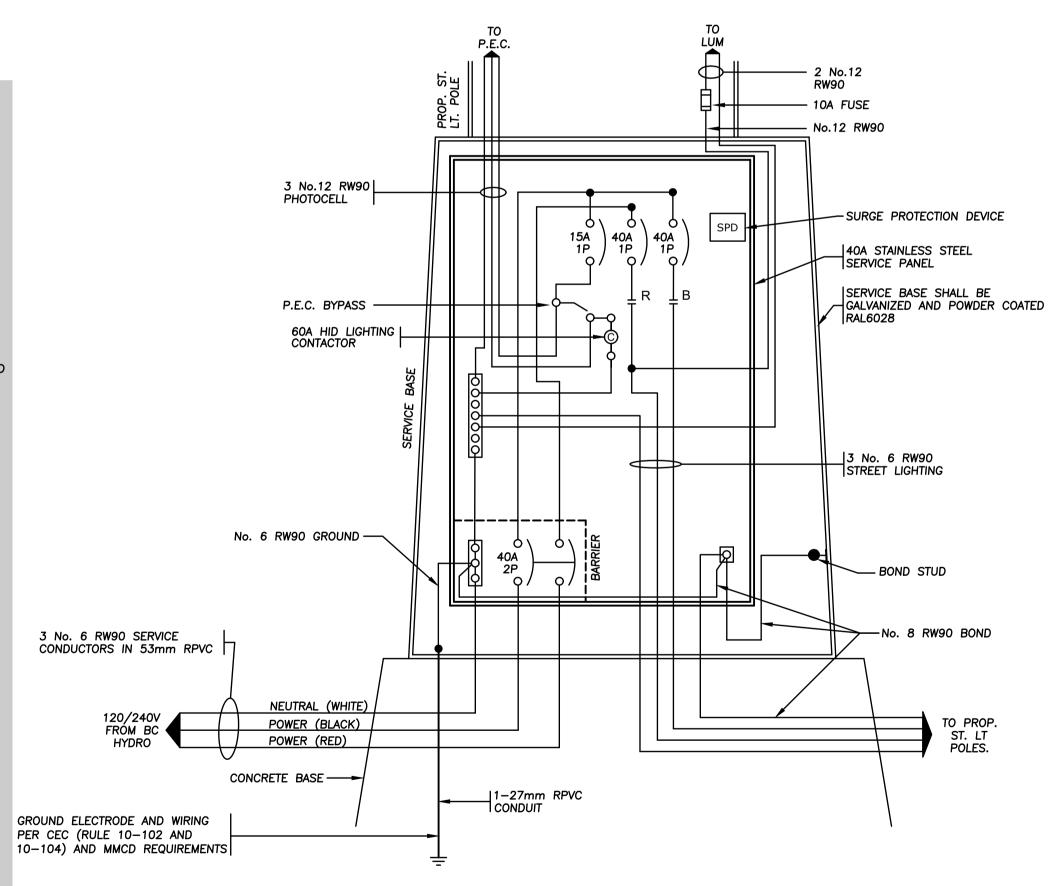
**WALLS AVENUE** BLUE MOUNTAIN ST TO MARMONT ST

Description STREET LIGHTING

File: 7056-20-Walls Ave







SERVICE BASE AT 1040 WALLS AVENUE - WIRING DIAGRAM

ALL EQUIPMENT IS <u>NEW</u>
EXCEPT WHERE NOTED

NOT FOR CONSTRUCTION
2021-02-11



COQ. ASBUILT No.



#### DMD & Associates Electrical Consultants Ltd.

#12-17358 104A Avenue, Surrey, BC, Canada V4N 5M3 www.dmdeng.com 604/589-9010 office@dmdeng.com Fax 604/589-9012 DMD PROJECT No. 7056-20-02 of 02

2021-02-11

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			11-02-2021	RI	ISSUED FOR TENDER	KGS
			11-01-2021	RI	90% SUBMISSION	KGS
			23-09-2020	YJ	50% SUBMISSION	KGS
	l	No.	Date	Ву	Revisions	Eng.
	-					

Design by	Date
KGS	13-08-2020
Drawn by	Date
YJ	13-08-2020
Checked by	Date
KGS	13-08-2020
Approved by	Date

Coouitlam

	Sheet	3
Engineering & Public Works	Eng. Proj	ect No.
3000 Guildford Way, Coquitlam, B.C. V3B 7N2		

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	Sheet	3	of	3
ı	Eng. Pro	piect No.		

)	Project	WALLS AVENUE
		BLUE MOUNTAIN ST TO MARMONT ST
	Description	STREET LIGHTING

File: 7056-20-Walls Ave