



| DRAWING SCHEDULE |          |                |         |
|------------------|----------|----------------|---------|
| CATEGORY         | DWG. NO. | SHEET TITLE    | REV. NO |
| GENERAL          | 00       | COVER          |         |
|                  | 01       | GENERAL NOTES  | A       |
| PLAN             | 02       | PLAN           | B       |
| ELECTRICAL       | 03       | TRAFFIC SIGNAL | 1       |
|                  | 04       | ELEVATIONS     | 1       |

# COAST MERIDIAN AND HIGHLAND INTERSECTION SIGNAL DESIGN ISSUED FOR TENDER



File: C:\Users\ahOneDrive - ISL Engineering and Land Services\General - 33742\_COO\_Coast\_Meridian\_Highland\_Signal02\_CADD\02\_Drafting\02\_Production\33742\_SH\_COVER\_NOTES.dwg

**GENERAL NOTES:**

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE PLATINUM EDITION OF THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) AND CITY OF COQUITLAM SUPPLEMENTARY SPECIFICATIONS AND DETAIL DRAWINGS UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UTILITIES IS COMPILED FROM OWNER AND UTILITY SUPPLIED RECORD DRAWINGS AND ARE CONSIDERED APPROXIMATE ONLY. THE EXACT LOCATION AND EXTENT OF UTILITIES SHOULD BE DETERMINED BY CONSULTING THE LOCAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND INVERT ELEVATION BY HAND OR HYDROVAC EXCAVATION BEFORE CONSTRUCTION OF UTILITY CROSSINGS AND SHALL BE RESPONSIBLE FOR RESTORATION OF ANY DAMAGE TO EXISTING UTILITIES. ANY COSTS ASSOCIATED WITH UTILITY CONFLICTS THAT WERE NOT PRELOCATED WILL BE THE CONTRACTORS RESPONSIBILITY.
3. NOTIFY THE CITY OF COQUITLAM 48 HOURS IN ADVANCE OF ANY CONSTRUCTION OR UTILITY RELOCATION.
4. REPORT ANY DISCREPANCIES TO THE DESIGN ENGINEER A MIN 72 HOURS PRIOR TO CONSTRUCTION.
5. RESTORATION OF EXISTING DRIVEWAYS AND WALKWAYS TO CONFORM TO CITY SPECIFICATIONS.
6. BOULEVARDS ARE TO BE CONSTRUCTED TO THE PLATINUM EDITION OF THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) AND CITY OF COQUITLAM SUPPLEMENTARY SPECIFICATIONS AND DETAIL DRAWINGS UNLESS OTHERWISE SHOWN ON CONTRACT DRAWINGS. BOULEVARDS TO BE SLOPED TO INSPECTION CHAMBERS WHERE APPLICABLE.
7. EVERY EFFORT IS TO BE MADE TO SAVE EXISTING LANDSCAPING WITHIN THE ROAD R.O.W. LANDSCAPING IS TO BE RESTORED TO ITS ORIGINAL OR BETTER CONDITION. IN THE EVENT OF LANDSCAPING REMOVAL THE PROPERTY OWNER SHALL BE ADVISED OF THE REMOVAL AND THE LANDSCAPING PLACED IN OWNERS PROPERTY UPON THEIR REQUEST.
8. ALL SURVEY MONUMENTS WITHIN THE PROJECT BOUNDARIES SHALL BE PROTECTED DURING THE COURSE OF THE WORK. SHOULD ANY SURVEY MONUMENT REQUIRE RAISING OR RELOCATION, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEERING AND OPERATIONS DEPARTMENT AT LEAST 72 HOURS IN ADVANCE OF SCHEDULING WORK. ALL DISTURBED MONUMENTS WILL BE REPLACED BY A B.C. LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
9. SURVEY PINS DISTURBED DURING THE COURSE OF CONSTRUCTION SHALL BE REPLACED BY A B.C. LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
10. ALL PUBLIC ROADWAYS AFFECTED BY THE WORKS SHALL BE KEPT IN A CLEAN STATE AT ALL TIMES. DUST CONTROL MEASURES SHALL ALSO BE EMPLOYED DURING THE COURSE OF THE WORK.
11. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES, AND FOR COORDINATING THE VARIOUS PARTS OF THE WORK. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THERE IS NO DISRUPTION TO SERVICE, AND IF DISRUPTION IS ANTICIPATED, TO NOTIFY THE DESIGN ENGINEER A MINIMUM OF 72 HOURS PRIOR, AND OBTAIN APPROVAL FOR THE DISRUPTION.
12. THE CONTRACTOR SHALL PROVIDE TEMPORARY UTILITY POLE SUPPORTS NECESSARY TO COMPLETE THE WORKS AS AN INCIDENTAL ITEM TO GENERAL CONTRACT REQUIREMENTS WHERE AND AS REQUIRED.
13. CONTRACTOR TO MAINTAIN AN UP TO DATE SET OF AS-CONSTRUCTED DRAWINGS AT ALL TIMES. AS-CONSTRUCTED DRAWINGS TO BE DELIVERED TO THE ENGINEER AT SUBSTANTIAL PERFORMANCE FOR PREPARATION OF FINAL RECORD DRAWINGS. THE ENGINEER SHALL BE PROVIDED ACCESS TO REVIEW THE AS-CONSTRUCTED DRAWINGS AT ALL TIMES TO CONFIRM THEY ARE UP TO DATE.
14. THE CONTRACTOR SHALL MAINTAIN AND MONITOR THE PROVISIONS FOR EROSION CONTROL AND SEDIMENT AS PER CONTRACT DOCUMENTS.
15. THE CONTRACTOR SHALL ADJUST ALL AFFECTED MANHOLE FRAME AND COVERS A MIN. 24 HOURS PRIOR TO FINAL TOP LIFT PAVING. ANY ADJUSTMENTS THAT DO NOT MEET MMCD TOLERANCES SHALL BE IMMEDIATELY RESET AND CORRECTED.
16. ALL PAVEMENT MARKINGS PAINT TO BE THERMOPLASTIC.
17. ALL TOP LIFT PAVING JOINTS TO BE LOCATED UNDER THE THERMOPLASTIC CENTERLINE PAVEMENT MARKINGS.
18. ALL ASPHALT JOINT MUST BE SMOOTH AND WITHOUT VISIBLE BREAKS IN GRADE.
19. SUBMIT DENSITY TESTS TAKEN ON JOINTS. NO INDIVIDUAL TEST LESS THAN 95% DENSITY.
20. ALL LANE DIMENSIONS ARE MEASURED TO THE CENTER OF LANE LINES (FOR DOUBLE LINE THE MEASUREMENT IS TO THE MIDDLE POINT BETWEEN THE 2 LINES).

**TRAFFIC MANAGEMENT, NOTIFICATION AND APPROVALS NOTES:**

1. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION SIGNAGE, BARRIERS, FLASHING INDICATORS, ETC. AT ALL TIMES TO ENSURE THE SAFETY OF THE PUBLIC. TRAFFIC CONTROL WILL BE REQUIRED FOR ALL CONSTRUCTION WORKS WITHIN THE TRAVELED PORTION OF THE ROAD. NO ROAD SHALL BE CLOSED WITHOUT THE WRITTEN CONSENT OF THE DIRECTOR OF ENGINEERING AND OPERATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL EXCAVATED MATERIAL UNSUITABLE FOR REUSE AT A SUITABLE OFF-SITE DISPOSAL AREA, IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
3. THE CONTRACTOR SHALL ENSURE THAT ALL APPROVALS REQUIRED FOR THE PROPOSED WORKS HAVE BEEN OBTAINED FROM ALL AUTHORITIES AND AGENCIES PRIOR TO COMMENCING THE WORK.
4. THE CONTRACTOR SHALL ARRANGE FOR, AND COORDINATE THE WORKS DONE BY:
  - CITY OF COQUITLAM; AND
  - FRANCHISE UTILITIES (BC HYDRO, FORTIS GAS, BC TRANSMISSION CORP., SHAW CABLE, TELUS AND METRO VANCOUVER).
5. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE PERSONNEL AT LEAST 72 HOURS PRIOR TO THE WORK. SCHEDULING AND OTHER CONSTRUCTION CONSTRAINTS IMPOSED BY THESE WORKS SHALL BE TAKEN INTO ACCOUNT.
6. RESIDENTS DIRECTLY AFFECTED BY CONSTRUCTION OF THESE WORKS AND SERVICES SHALL BE GIVEN 5 DAYS WRITTEN NOTICE OF THE PROPOSED START OF CONSTRUCTION. THE CONTRACTOR IS TO DISTRIBUTE A NOTICE OF CONSTRUCTION LETTER TO ALL AFFECTED RESIDENTS AND BUSINESSES. FOLLOWING CONSTRUCTION ACTIVITY ON ANY PRIVATE PROPERTY, A WRITTEN RELEASE MAY BE REQUIRED FROM THE PROPERTY OWNER AT THE DISCRETION OF THE CITY.
7. A TRAFFIC AND PEDESTRIAN SAFETY CONTROL PLAN SHALL BE SUBMITTED BY THE CONTRACTOR PRIOR TO THE PRE-CONSTRUCTION MEETING.
8. APPROVALS FOR REQUIRED TREE CUTTING OR TRIMMING NOT INDICATED IN CONTRACT DRAWINGS SHALL BE OBTAINED BY THE CONTRACTOR FROM THE CITY PRIOR TO WORK BEING PERFORMED.
9. CONTRACTOR TO OBTAIN APPROVED LANE CLOSURE REQUEST FORM FOR ALL WORKS. APPROVED REQUESTS ARE CIRCULATED TO ALL EMERGENCY SERVICES.
10. CONTRACTOR TO SUBMIT A TRAFFIC MANAGEMENT PLAN WITH LANE CLOSURE REQUEST FOR ALL MAJOR ROADS AND ANY LOCAL ROADS WHICH REQUIRE ANY DETOURS.
11. ALL TRAFFIC CONTROL TO CONFORM TO THE LATEST EDITION OF THE BC TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS.
12. APPROVAL OF NOISE VARIANCE FOR ALL WORK OUTSIDE OF NORMAL APPROVED WORK HOURS REQUIRED BY THE CITY.
13. NOTICE OF CONSTRUCTION SIGNS TO BE INSTALLED AT ALL PROJECT LIMITS AND PREFERRED DETOUR ROUTE. NOTIFY CONTRACT ADMINISTRATOR WITH CONSTRUCTION SCHEDULE AND LOCATIONS. SIGNS PROVIDED AND INSTALLED BY THE CONTRACTOR.
14. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLETION OF ALL TAPED TEMPORARY AND PERMANENT PAINT AND THERMOPLASTIC PAVEMENT MARKINGS IN THE PLACE OF THE WORK. PERMANENT LANE MARKINGS ARE TO BE PLACED WITHIN SEVENTY-TWO (72) HOURS OF FINAL PAVING AND PERMANENT THERMOPLASTIC PAVEMENT MARKINGS ARE TO BE PLACED WITHIN FIVE (5) DAYS OF FINAL PAVING. ALL TEMPORARY MARKINGS TO BE REMOVED IMMEDIATELY FOLLOWING PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
15. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE TRAFFIC MANAGEMENT DETAILED SPECIFICATIONS IN THE CONTRACT DOCUMENTS.
16. THE CONTRACTOR SHALL COORDINATE ANY TEMPORARY RELOCATION OF BUS STOPS WITH COAST MOUNTAIN BUS COMPANY.
17. ALL TRAFFIC LOOPS TO BE REINSTATED.

PLOT DATE: July 11, 2024

| REV NO | REVISIONS         | DATE       | DRAWN | APPRD |
|--------|-------------------|------------|-------|-------|
| A      | ISSUED FOR TENDER | 2024/07/11 | EH    | CJB   |
|        |                   |            |       |       |
|        |                   |            |       |       |
|        |                   |            |       |       |



**GENERAL NOTES**  
COAST MERIDIAN AND HIGHLAND

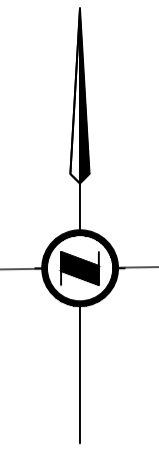


| SCALE      | AS SHOWN | DATE        | JULY - 2024 | DWG. NO. |
|------------|----------|-------------|-------------|----------|
| DRAWN BY   | EH       | DESIGN BY   | CJB         | 01 OF    |
| CHECKED BY | CJB      | APPROVED BY | CJB         | 04       |
|            |          |             |             | REV. A   |

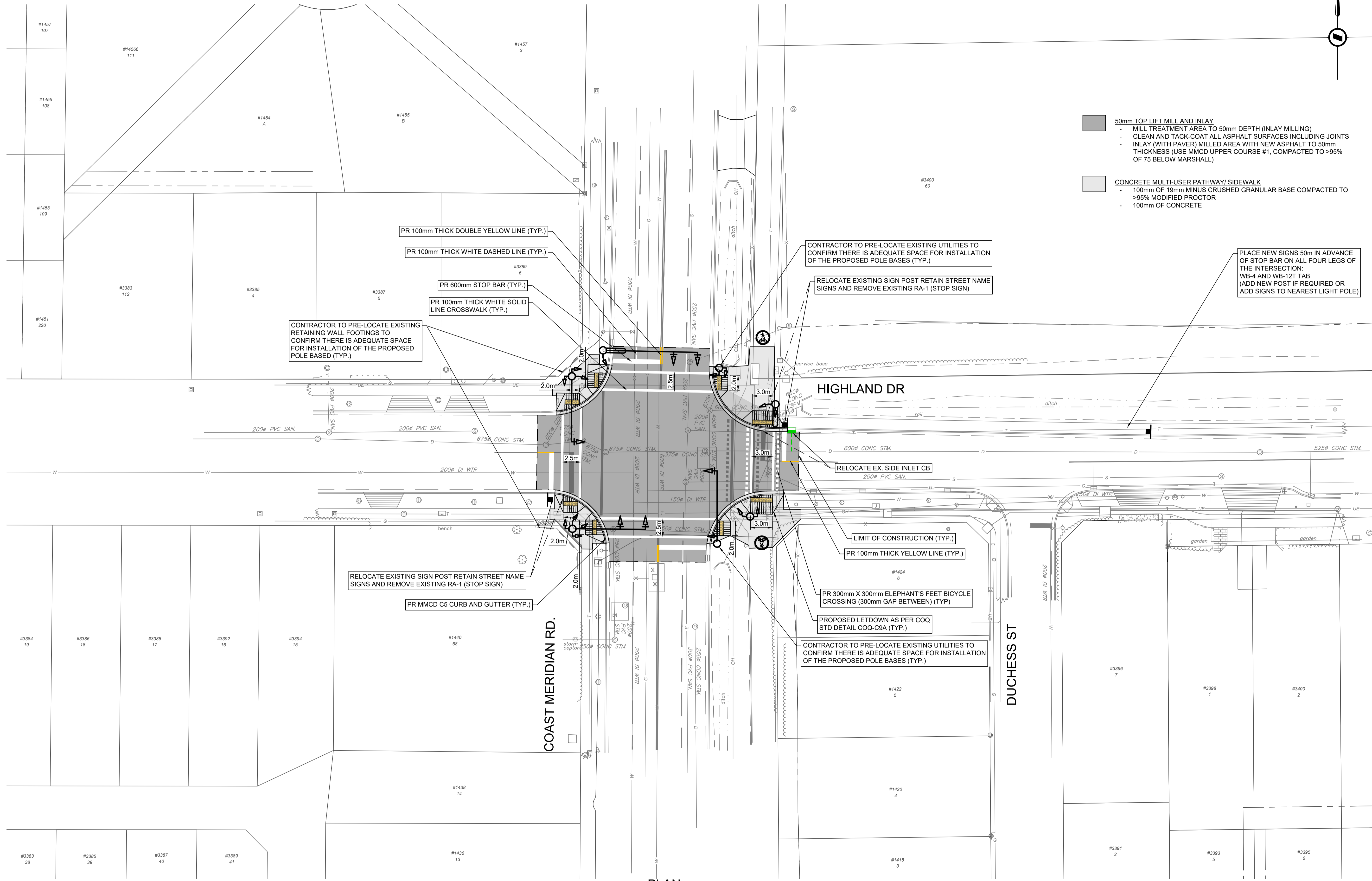
ISSUED FOR TENDER DESIGN NO.

33742





- 50mm TOP LIFT MILL AND INLAY**
  - MILL TREATMENT AREA TO 50mm DEPTH (INLAY MILLING)
  - CLEAN AND TACK-COAT ALL ASPHALT SURFACES INCLUDING JOINTS
  - INLAY (WITH PAVER) MILLED AREA WITH NEW ASPHALT TO 50mm THICKNESS (USE MMCD UPPER COURSE #1, COMPACTED TO >95% OF 75 BELOW MARSHALL)
- CONCRETE MULTI-USER PATHWAY/ SIDEWALK**
  - 100mm OF 19mm MINUS CRUSHED GRANULAR BASE COMPACTED TO >95% MODIFIED PROCTOR
  - 100mm OF CONCRETE



CONTRACTOR TO PRE-LOCATE EXISTING RETAINING WALL FOOTINGS TO CONFIRM THERE IS ADEQUATE SPACE FOR INSTALLATION OF THE PROPOSED POLE BASED (TYP.)

CONTRACTOR TO PRE-LOCATE EXISTING UTILITIES TO CONFIRM THERE IS ADEQUATE SPACE FOR INSTALLATION OF THE PROPOSED POLE BASES (TYP.)

PLACE NEW SIGNS 50m IN ADVANCE OF STOP BAR ON ALL FOUR LEGS OF THE INTERSECTION:  
WB-4 AND WB-12T TAB  
(ADD NEW POST IF REQUIRED OR ADD SIGNS TO NEAREST LIGHT POLE)

PLAN  
SCALE: 1:250



File: C:\Users\eha\OneDrive - ISL Engineering and Land Services\General - 33742\_Coast\_Meridian\_Highland\_Signals\_CADD\20\_Drafting\202\_Productions\33742\_SH\_ROADWORKS.dwg

| PLOT DATE: July 11, 2024 |                      |            |       |       |
|--------------------------|----------------------|------------|-------|-------|
| REV NO.                  | REVISION DESCRIPTION | DATE       | DRAWN | APPRD |
| A                        | ISSUED FOR TENDER    | 2024/07/11 | EH    | CJB   |
|                          |                      |            |       |       |
|                          |                      |            |       |       |



**ROAD WORKS**     **LETDOWNS AND PAVEMENT MARKINGS**  
COAST MERIDIAN AND HIGHLAND



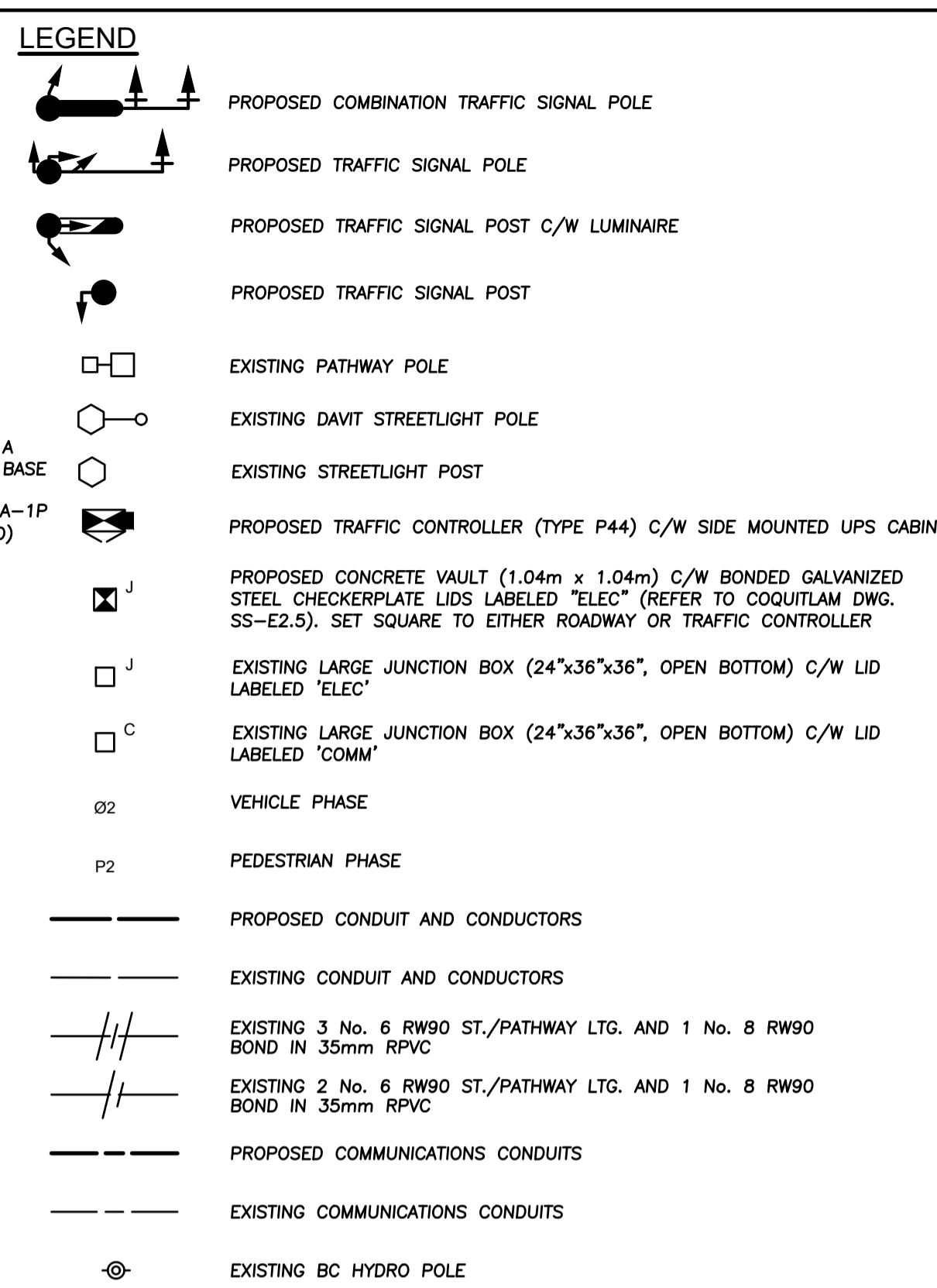
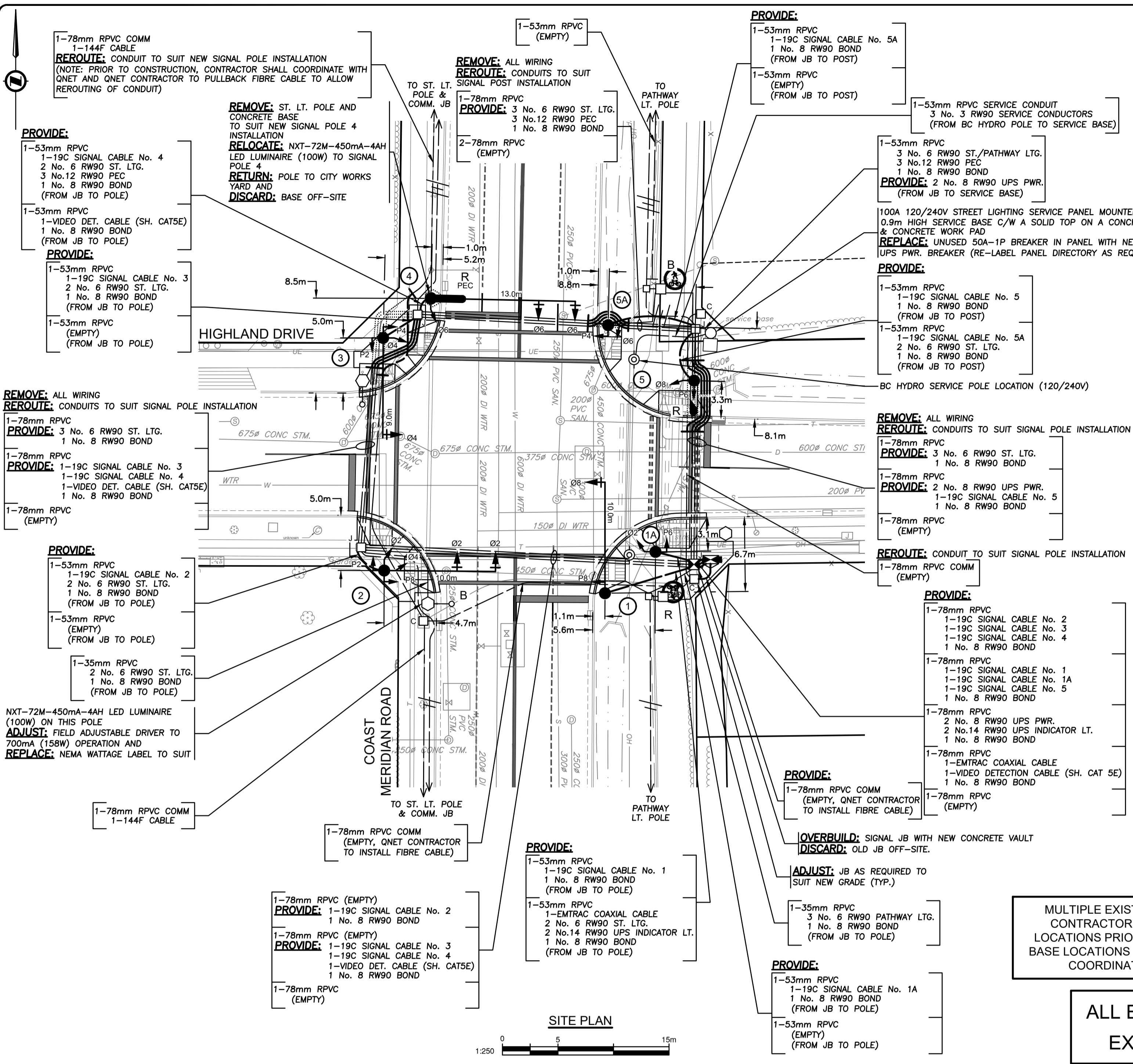
#201, 3090 Hemming Drive, Burnaby, B.C. V5C 6P9  
T: (604)920-2098 F: (604)920-2099

ISSUED FOR TENDER     DESIGN NO.

**33742**

|            |          |               |             |          |    |
|------------|----------|---------------|-------------|----------|----|
| SCALE      | AS SHOWN | CREATION DATE | JULY - 2024 | DWG. NO. | 02 |
| DRAWN BY   | EH       | DESIGN BY     | CJB         | OF       | 04 |
| CHECKED BY | CJB      | APPROVED BY   | CJB         | REV.     | B  |





- ### TRAFFIC SIGNAL NOTES
- ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE (IN ORDER OF PRECEDENCE) WITH THE SUPPLEMENTAL SPECIFICATIONS, MASTER MUNICIPAL CONSTRUCTION DOCUMENT, 2009 ISSUE AND THE CURRENT MOTH STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION UNLESS OTHERWISE NOTED ON DESIGN DRAWINGS.
  - CONDUCTORS INSIDE POLES SHALL BE: No. 14 RW90 X-LINK FOR SIGNALS, No. 12 RW90 X-LINK FOR ALL OTHERS
  - A TRON HEB A4 WEATHERPROOF FUSE HOLDER, C/W A 10A BUSS KTK FUSE AND 2 'L' TYPE INSULATING BOOTS, SHALL BE INSTALLED IN EACH LUMINAIRE & SIGN LIVE CONDUCTOR, IN THE HANDHOLE.
  - EXACT POSITION OF ALL EQUIPMENT WILL BE LAYED OUT BY THE CITY REPRESENTATIVE.
  - ALL SINGLE CONDUCTORS SHALL BE STRANDED COPPER, TYPE RW90 INSULATED AND COLOR CODED.
  - EMPTY CONDUITS SHALL HAVE A No.8 HB POLY YELLOW/GRN MK PULL STRING AND CAPPED AT BOTH ENDS AS PER COQUITLAM SUPPLEMENTARY DRAWING SS-E2.5
  - WHERE INDIVIDUAL CONDUCTORS OR CABLES ARE RUN, ALL OF THE COMMON CIRCUITS SHALL BE BUNDLED, TY-RAPPED TOGETHER WITH IDENTIFICATION TAGS IN ALL JUNCTION BOXES, VAULTS, HAND HOLES, CONTROLLER AND ACCESS POINTS AS NOTED IN THE MMCD. TAGS SHALL BE MARKED AS FOLLOWS CABLE N/W POLE, STREET LIGHTING CCTS R OR B, PHOTOCELL, CONTROLLER POWER, WITH BLACK INDELIBLE MARKING PEN. TAGS TO BE ATTACHED NO FURTHER THAN 75mm FROM WIRE OR CABLE TERMINATION POINT.
  - TRAFFIC SIGNAL NEUTRALS SHALL BE KEPT SEPARATE FROM STREET LIGHTING NEUTRAL CONDUCTORS.
  - ALL SIGNAL HEADS AND LUMINAIRES SHALL BE BONDED WITH A SEPARATE No.12 RW90 CONDUCTOR (GREEN) AT THE HANDHOLE, AS REQUIRED.
  - EQUIPMENT MODELS SPECIFIED SHALL BE CONFIRMED WITH THE CITY IMMEDIATELY PRIOR TO THEIR PURCHASE TO ENSURE THAT THEY ARE CORRECT AND CURRENT. CUTSHEETS, EQUIPMENT, MAKE, MODEL & SERIAL LIST TO BE PROVIDED FOR EACH SIGNAL LOCATION.
  - ALL CONDUITS ENTERING POLES AND CABINETS SHALL BE SEALED WITH 'DUCT SEAL'.
  - CONTRACTOR IS REQUIRED TO PROVIDE 72 HOURS NOTICE PRIOR TO ANY CONSTRUCTION.
  - TRAFFIC CONTROL IS REQUIRED TO CITY STANDARDS. (MOTH)
  - ALL POLES, ARMS, ETC. TO BE GALVANIZED, PRIMED AND POWDER-COATED IN COLOUR. EQUIVALENT TO COQUITLAM LAMP STANDARD GREEN RAL 6028, UNLESS OTHERWISE NOTED OR APPROVED. ANCHOR BOLT NUT COVERS SHALL MATCH POLE COLOUR (TYPICAL).
  - INSTALL BELL END FITTING ON ALL CONDUITS ENTERING JUNCTION BOXES.
  - INSTALL HANGER BAR & TY-RAP WIRES TO BAR IN JUNCTION BOXES AS PER MMCD DRAWING COQUITLAM SUPPLEMENTARY DRAWING SS-E2.5
  - ALL CONDUITS SHALL BE BURIED MINIMUM 600mm DEEP. A 'BURIED CABLE' MAKER TAPE SHALL BE INSTALLED 300mm ABOVE CONDUIT IN ALL TRENCHES. DETECTABLE (METALIC) TAPE TO BE USED ABOVE CONDUIT IN TRENCHES CONTAINING ONLY INTERCONNECT CONDUIT.
  - BOND ALL STEEL JUNCTION BOX LIDS.
  - CONTRACTOR SHALL REPLACE ALL ASPHALT, CONCRETE SIDEWALKS, LANDSCAPE AND WHEELCHAIR RAMPS REMOVED FOR THE INSTALLATION OF THE SIGNAL AND COMM EQUIPMENT, AND RESTORE TO THE SAME OR BETTER CONDITION.
  - BACKBOARDS WITH PLUMBIZER GAPS OR KNOCKOUT SECTIONS WILL NOT BE ACCEPTED FOR ANY HEAD MOUNTED WITH OTHER THAN PLUMBIZER STYLE HARDWARE.
  - ALL ELECTRICAL PRODUCTS SHALL BEAR CSA/ETC APPROVALS OR BC ELECTRICAL INSPECTION PRIOR TO INSTALLATION.
  - SIGNAL WIRING SHALL BE TAGGED AND LABELED USING PANDUIT MP250-C TAGS AND THE APPROPRIATE PANDUIT INDELIBLE MARKER.
  - SECURITY HARDWARE TO BE USED ON ALL POLES, SECURITY BITS ARE TO BE SUBMITTED TO THE CITY AFTER SIGNAL HAS BEEN FULLY COMPLETED.
  - CONCRETE VAULTS AND JUNCTION BOXES LOCATED IN NON-PAVED OR NON-SIDEWALK AREAS ARE TO BE PROTECTED FROM MOWER OR EROSION/VEGETATION DAMAGE WITH A 200mm WIDE x 150mm DEEP CONCRETE COLLAR FLUSH WITH TOP EDGES OF THE TOP OF THE BOX LID. COLLAR TO BE BUILT DOWN AWAY FROM BOX OPENING AT 3% TO DIRECT WATER AWAY FROM BOX OPENING. REFER TO COQUITLAM SUPPLEMENTAL SPECIFICATION FOR DETAILS.
  - JUNCTION BOXES IN SIDEWALK AREAS SHALL BE SUPPORTED BY CONCRETE MATERIALS ON ALL SIDES WITH A 200mm WIDE x 150mm DEEP CONCRETE COLLAR FLUSH WITH TOP OF SIDEWALK AND THE TOP OF THE BOX LID.
  - 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.
  - POLYMER CONCRETE 24 x 36 x 36 PULL BOXES SHALL BE INSTALLED AS SHOWN ON STANDARD DETAIL MMCD DRAWING E2.3 C/W 2 PIECE BOLT DOWN LIDS. REPLACE 150mm FINE DRAIN ROCK WITH 300mm FINE DRAIN ROCK.
  - BOTTOM OF JUNCTION BOXES SHALL BE OPEN. BOTTOM SECTIONS SHALL BE SUPPORTED WITH CONCRETE BRICKS AND USE CRUSHED GRAVEL TO DRAIN WATER.
  - ALL BOLT DOWN JUNCTION BOX LIDS SHALL BE TIER 15 (20K) RATED.
  - EXTRAC ANTENNA SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL BRACKET WITH NEOPRENE GASKET MATERIAL TO FORM A SEAL BETWEEN BRACKET AND POLE. NEOPRENE SHALL BE FULLY ENCLOSED WITHIN OUTER EDGES OF THE BRACKET SUCH THAT NONE IS VISIBLE AFTER THE BRACKET IS MOUNTED. EXTRAC ANTENNA CABLE (TIMES COMMUNICATION CABLE LMR-2400S) WILL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR. EXTRAC CABLE WILL RUN CONTINUOUS WITH NO SPLICES FROM CONTROLLER TO THE EXTRAC ANTENNA. TERMINATION OF CABLE TO BE DONE BY COBRA ELECTRIC.
  - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THE ADEQUACY OF THE EXISTING STREET LIGHTING, SERVICE, CONDUIT AND CONDUCTORS AND MAKE ALL NECESSARY REPAIRS TO ADEQUATELY COMPLETE ALL CONNECTIONS INTO THE EXISTING STREET LIGHTING SYSTEM.
  - CONTRACTOR SHALL SAND OFF PAINT AT GROUNDING/BONDING POINTS WITHIN POLE HAND HOLE ALLOWING FOR METAL-TO-METAL CONTACT.
  - ALL CONDUITS SHALL BE RIGID P.V.C. MANUFACTURED IN ACCORDANCE WITH C.S.A. C22.2 No. 211.2. (NOT DB2).
  - CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND LICENSES PRIOR TO CONSTRUCTION AND BE SUBJECT TO APPROVAL OF THE MUNICIPAL ELECTRICAL INSPECTOR.

EXISTING CONDUITS ARE SHOWN DIAGRAMMATICALLY AND MAY NOT REFLECT ACTUAL LOCATION. CONTRACTOR SHALL RE-ROUTE EXISTING SIGNAL & COMMUNICATION PRE-DUCTING AS REQUIRED TO SUIT INSTALLATION OF NEW CONCRETE BASES. CONTRACTOR SHALL MAINTAIN RECORD OF CHANGES AND PROVIDE AS-BUILT MARK UP TO DMD & ASSOCIATES FOR RECORD DRAWING PURPOSES.

FIBRE CABLING DESIGN TO BE COMPLETED BY QNET AND TO BE INSTALLED BY QNET CONTRACTOR.

CONTRACTOR SHALL COORDINATE WITH QNET AND QNET CONTRACTOR ON CONSTRUCTION TIMELINES. CONTACT BRENT GALPIN OR DWAIN ROPER AT 604-927-3626.

EXISTING STREET LIGHTING SHALL REMAIN IN OPERATION THROUGHOUT CONSTRUCTION.

REFER TO CITY DWG. No. E1040, E1117, E1230 & E1234 FOR EXISTING ST. LTG. & TRAFFIC SIGNAL PRE-DUCTING ALONG COAST MERIDIAN RD. AND HIGHLAND DR.

REFER TO CITY DWG. No. C2046 FOR EXISTING COMMUNICATIONS ALONG COAST MERIDIAN RD.

THERE SHALL BE NO SPLICING OF CONDUCTORS & CABLES IN JUNCTION BOXES WITH THE EXCEPTION OF ST. LTG.

THE CONTRACTOR SHALL COORDINATE ALL TERMINATION IN THE TRAFFIC CONTROLLER WITH THE CITY

REFER TO THE CITY OF COQUITLAM TRAFFIC SIGNAL APPROVED PRODUCTS LIST FOR ALL EQUIPMENT DETAILS

THE CITY OF COQUITLAM SHALL BE RESPONSIBLE FOR PROGRAMMING THE TRAFFIC SIGNAL. CONTRACTOR SHALL PROVIDE THE CITY 3 WEEKS NOTICE IN ADVANCE OF WORK BEING REQUIRED. ALL COST RELATED TO THIS WORK WILL BE BORNE BY THE CITY.

CONTRACTOR SHALL OBTAIN A COPY OF THE CITY OF COQUITLAM TRAFFIC SIGNAL AND ROADWAY SUPPLEMENTAL SPECIFICATIONS PRIOR TO CONSTRUCTION.

DO NOT USE THIS DRAWING FOR PAVEMENT MARKINGS.

ALL JUNCTION BOX LOCATIONS AND CONDUIT ROUTING ARE DIAGRAMMATIC AND ARE NOT TO SCALE. CONTRACTOR TO AVOID UNDERGROUND CONFLICTS AND NOT INSTALL ANYTHING ON PRIVATE PROPERTY.

BC CALL BEFORE YOU DIG  
1-800-474-6886  
or by CELLULAR #6886  
Vancouver Area 257-8940

COQ. ASBULT No. EXXXX

CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU PLAN TO DIG

MULTIPLE EXISTING UTILITIES ARE NOTED AT THIS LOCATION. CONTRACTOR IS REQUIRED TO DAYLIGHT PROPOSED POLE LOCATIONS PRIOR TO CONSTRUCTION AND CONFIRM CONCRETE BASE LOCATIONS ARE FEASIBLE. CONTACT DMD & ASSOCIATES TO COORDINATE IF LOCATION CHANGES ARE REQUIRED.

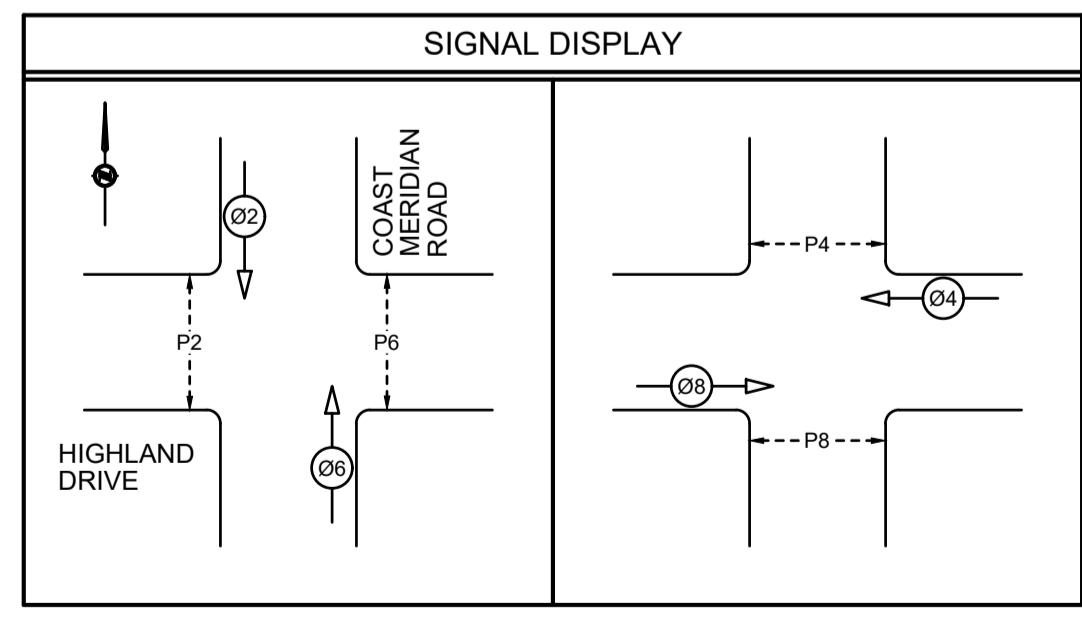
ALL EQUIPMENT IS EXISTING EXCEPT WHERE NOTED

**CAUTION!**  
**EXCAVATION NEAR OVERHEAD UTILITY POLE**  
ANY UNDERGROUND EXCAVATION WITHIN SOIL FOUNDATION INTERACTION AREA REQUIRES TEMPORARY UTILITY POLE SUPPORT. REFER TO ES55 E3-04 GUIDE FOR CIVIL EXCAVATION NEAR DISTRIBUTION POLES FOR DETAILS. REFER TO BC HYDRO WORK ON WOOD POLES MANUAL (ON SAFEHUB) AND BC HYDRO 2017-1-F POLE HOLDING REQUIREMENTS FOR APPROVED TEMPORARY POLE SUPPORT METHODS. FOR MORE INFORMATION CONTACT [workmethods@bchydro.com](mailto: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/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  
2024-07-12

| INTERSECTION DESIGN CRITERIA<br>PER: (CITY BYLAW 3558)   |                             |                                |                |
|--|-----------------------------|--------------------------------|----------------|
| INTERSECTION (NAME)  | COAST MERIDIAN ROAD         | HIGHLAND DRIVE                 |                |
| LAND USE CLASSIFICATION  | RESIDENTIAL                 | RESIDENTIAL                    |                |
| ROADWAY CLASSIFICATION & WIDTH   | ARTERIAL-14.0m              | COLLECTOR-11.0m                |                |
| PEDESTRIAN ACTIVITY LEVEL  | MEDIUM                      | LOW                            |                |
| ILLUMINATION RECOMMENDED/DELIVERED   | 22.0 LUX                    | 22.7 LUX                       |                |
| UNIFORMITY RECOMMENDED/DELIVERED   | 3.0:1                       | 2.2:1                          |                |
| LIGHT LOSS FACTOR  | 0.82                        |                                |                |
| <b>EQUIPMENT</b>   |                             |                                |                |
| FIXTURE TYPE: LED  | WATTAGE: 28W                | MTG. HEIGHT: 6.0m              | DIST TYPE: 2ES |
| IES FILE:  | NXT-24S-350mA-2ES-3000K.ies | MODEL: NXT-24S-350mA-2ES-3000K |                |
| FIXTURE TYPE: LED  | WATTAGE: 28W                | MTG. HEIGHT: 6.5m              | DIST TYPE: 2ES |
| IES FILE:  | NXT-24S-350mA-2ES-4000K.ies | MODEL: NXT-24S-350mA-2ES-4000K |                |
| FIXTURE TYPE: LED  | WATTAGE: 100W               | MTG. HEIGHT: 7.5m              | DIST TYPE: 4AH |
| IES FILE:  | NXT-72M-450mA-4AH-4000K.ies | MODEL: NXT-72M-450mA-4AH-4000K |                |
| FIXTURE TYPE: LED  | WATTAGE: 158W               | MTG. HEIGHT: 11.0m             | DIST TYPE: 4AH |
| IES FILE:  | NXT-72M-700mA-4AH-4000K.ies | MODEL: NXT-72M-700mA-4AH-4000K |                |
| * BASE ON A 20-YEAR FIXTURE LIFE, 10-YEAR CLEANING CYCLE AND LENS OPTIC DEPRECIATION OF 4% OVER 20 YEARS |                             |                                |                |
| ** PATHWAY LIGHT CONTRIBUTION NOT INCLUDED IN CALCULATIONS.  |                             |                                |                |

| 120V SERVICE LOAD<br>(EXIST. 100A - 120/240V SERVICE PANEL ON NORTHEAST QUADRANT OF COAST MERIDIAN ROAD AND HIGHLAND DRIVE INTERSECTION CCTS. 2 & 4) |           |          |         |     |                     |            |
|--|-----------|----------|---------|-----|---------------------|------------|
| WATTAGE (W)  | CCT.PHASE | EXISTING | REMOVED | NEW | TOTAL No. OF LIGHTS | CURRENT(A) |
| 92W (LED) ST. NAME   | R         | 0        | 0       | 2   | 2                   | 1.53A      |
|  | B         | 0        | 0       | 2   | 2                   | 1.53A      |
| 28W (LED)  | R         | 0        | 0       | 1   | 1                   | 0.23A      |
|  | B         | 0        | 0       | 0   | 0                   | 0.00A      |
| 45W (LED)  | R         | 4        | 0       | 0   | 4                   | 1.50A      |
|  | B         | 5        | 0       | 0   | 5                   | 1.88A      |
| 100W (LED)   | R         | 2        | 1       | 0   | 1                   | 0.83A      |
|  | B         | 2        | 1       | 0   | 1                   | 0.83A      |
| 117W (LED)   | R         | 1        | 0       | 0   | 1                   | 0.98A      |
|  | B         | 1        | 0       | 0   | 1                   | 0.98A      |
| 135W (LED)   | R         | 2        | 0       | 0   | 2                   | 2.25A      |
|  | B         | 1        | 0       | 0   | 1                   | 1.13A      |
| 158W (LED)   | R         | 0        | 0       | 1   | 1                   | 1.32A      |
|  | B         | 0        | 0       | 1   | 1                   | 1.32A      |
| 1.23% VOLTAGE DROP   |           |          |         |     |                     |            |

Benchmark:  
Contractor to contact Telus, BC Hydro, FortisBC and BC one call prior to construction to confirm locations of utilities and appurtenances requiring adjustment.

**DMD & Associates**  
Electrical Consultants Ltd.  
#12-17358 104th Avenue, Surrey, BC, Canada V4N 0A6  
www.dmdeng.com 604-589-8010  
office@dmdeng.com Fax 604-589-9012  
DMD PROJECT No. 8094-24-01 of 02

| No. | Date       | By  | Revisions         |
|-----|------------|-----|-------------------|
| 1   | 2024-07-12 | DIS | ISSUED FOR TENDER |
| 2   | 2024-05-10 | DIS | FIRST SUBMISSION  |

ACCEPTED FOR CONSTRUCTION  
Date: \_\_\_\_\_  
Manager of Development Servicing

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

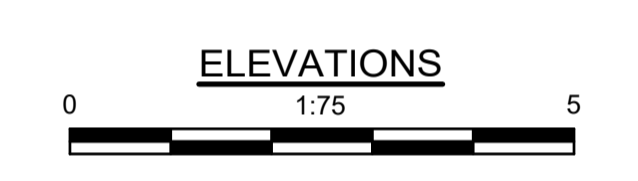
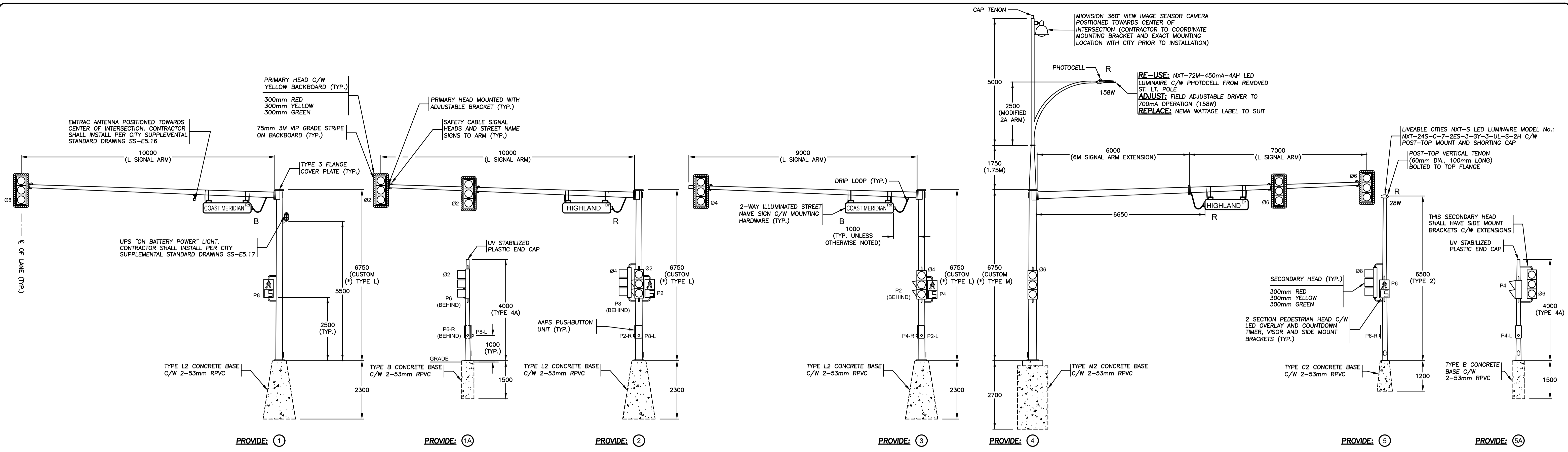
PERMIT TO PRACTICE  
Signature: \_\_\_\_\_  
Date: 2024-07-12  
PERMIT NUMBER: 1000771  
The Association of Professional Engineers and Geoscientists of British Columbia

Seal: \_\_\_\_\_

| Design by   | Date       | Scale            |
|-------------|------------|------------------|
| DIS         | 2024-05-10 | 1:250            |
| Drawn by    | Date       | Sheet of         |
| V.J.        | 2024-05-10 | 03 OF 04         |
| Checked by  | Date       | Eng. Project No. |
| DIS         | 2024-05-10 | 79050            |
| Approved by | Date       |                  |
| DJW         | 2024-05-10 |                  |

Project: **COAST MERIDIAN ROAD AND HIGHLAND DRIVE**  
Description: **TRAFFIC SIGNAL**  
File: 8094-24  
**SITE PLAN, LEGEND AND NOTES**





ALL SIGNAL DISPLAY SHALL HAVE TUNNEL VISORS

ALL SIGNAL AND PEDESTRIAN DISPLAYS SHALL BE LED

USE CONDUCTOR #7 FOR SECONDARY PB RETURN. TAPE WHITE IN HANDHOLE AND CONTROLLER CABINET

THE CONTRACTOR SHALL SUPPLY AND INSTALL THE FOLLOWING MATERIALS. REFER TO THE CITY OF COQUITLAM TRAFFIC SIGNAL APPROVED PRODUCT LIST **AND** CONTACT BERNARD TUNG 604-927-6257 AT THE CITY OF COQUITLAM TRAFFIC DEPARTMENT FOR SPECIFIC MATERIAL DETAILS PRIOR TO ORDERING:

- 1) TRAFFIC CONTROLLER & CABINET C/W 3M GRAPHIC WRAP, COORDINATE DESIGN WITH THE CITY OF COQUITLAM
- 2) BOLT-ON UPS SYSTEM & CABINET C/W 3M GRAPHIC WRAP, COORDINATE DESIGN WITH THE CITY OF COQUITLAM
- 3) FIBRE OPTIC SWITCH, REFER TO CITY OF COQUITLAM APPROVED PRODUCT LIST
- 4) FIBRE OPTIC CABLE, SPLICE CLOSURE, AND TERMINATION FOR CONTROLLER CABINET, SUPPLIED AND INSTALLED BY FIBRE OPTIC CONTRACTOR, COORDINATE WITH QNET REPRESENTATIVE
- 5) MIOVISION EQUIPMENT C/W MOUNTING BRACKET AND CABLE
- 6) EMTRAC ANTENNA, MOUNTING BRACKET AND CABLING (TERMINATIONS TO BE COMPLETED BY COBRA ELECTRIC)
- 7) POLARA NAVIGATOR IDS2 SYSTEM
- 8) ILLUMINATED STREET NAME SIGNS C/W MOUNTING HARDWARE

CONTRACTOR SHALL HIRE COBRA ELECTRIC TO COMPLETE THE EMTRAC CABLE TERMINATION. ALL COSTS SHALL BE BORNE BY THE CITY

CONTRACTOR WILL DELIVER CONTROLLER & UPS CABINETS, ALL CONTROLLER EQUIPMENT, EMTRAC PRE-EMPTION SYSTEM, VIDEO DETECTION SYSTEM AND POLARA SYSTEM TO THE CITY OF COQUITLAM FOR TESTING AND PROGRAMMING. UPON COMPLETION THE CONTRACTOR WILL PICK UP AND INSTALL EQUIPMENT AT SITE.

ON SITE CONTROLLER START UP AND COMMISSIONING WILL BE DONE BY THE CITY OF COQUITLAM TRAFFIC OPS STAFF, AND THE CONTRACTOR. (CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, QUALIFIED ELECTRICIAN(S) AND BUCKET TRUCK) ALL COSTS FOR THIS WORK SHALL BE BORNE BY THE CITY

NEW POLES DENOTED WITH (\*) ARE TO BE CUSTOM. POLE LOADING ANALYSIS MUST BE COMPLETED BY THE POLE MANUFACTURER TO ENSURE POLE(S) ARE CHECKED FOR FATIGUE AND FATIGUE LOADING IN COMPLIANCE WITH CAN/CSA-S6-19 AND AASHTO 2013 SECTION 11 STANDARDS. CONTRACTOR IS REQUIRED TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS FOR ALL NEW POLE(S).

ALL CONCRETE BASES SHALL HAVE ANCHOR BOLT PROJECTION CONFIRMED AGAINST CUSTOM SIGNAL POLES TO ENSURE THEY PROTRUDE FAR ENOUGH OUT OF THE CONCRETE BASE.

REFER TO THE CITY OF COQUITLAM TRAFFIC SIGNAL APPROVED PRODUCTS LIST FOR ALL EQUIPMENT DETAILS

THE CITY OF COQUITLAM SHALL BE RESPONSIBLE FOR PROGRAMMING THE TRAFFIC SIGNAL. CONTRACTOR SHALL PROVIDE THE CITY 3 WEEKS NOTICE IN ADVANCE OF WORK BEING REQUIRED. ALL COST RELATED TO THIS WORK WILL BE BORNE BY THE CITY.

THE CONTRACTOR SHALL COORDINATE ALL TERMINATIONS IN THE TRAFFIC CONTROLLER WITH THE CITY

CONTRACTOR SHALL OBTAIN A COPY OF THE CITY OF COQUITLAM TRAFFIC SIGNAL AND ROADWAY SUPPLEMENTAL SPECIFICATIONS PRIOR TO CONSTRUCTION.

**NOT FOR CONSTRUCTION**  
2024-07-12

| CONDUCTOR COLOUR CODE<br>(FROM HANDHOLE TO SIGNAL) |                     |                                     |
|--|---------------------|-------------------------------------|
| ITEM   | SIGNAL SECTION      | CONDUCTOR COLOUR                    |
| #2   | RED                 | RED                                 |
|  | YELLOW<br>GREEN     | YELLOW<br>BLUE                      |
| #4   | RED                 | RED                                 |
|  | YELLOW<br>GREEN     | BROWN<br>BLUE                       |
| #6   | RED                 | RED                                 |
|  | YELLOW<br>GREEN     | YELLOW (RED T.T.)<br>BLUE           |
| #8   | RED                 | RED                                 |
|  | YELLOW<br>GREEN     | BROWN (ORANGE T.T.)<br>BLUE         |
| P2   | DON'T WALK          | YELLOW                              |
|  | WALK<br>PUSH BUTTON | BLUE<br>PURPLE/PURPLE (YELLOW T.T.) |
| P4   | DON'T WALK          | BROWN                               |
|  | WALK<br>PUSH BUTTON | BLUE<br>PURPLE/PURPLE (BTOWN T.T.)  |
| P6   | DON'T WALK          | YELLOW (RED T.T.)                   |
|  | WALK<br>PUSH BUTTON | BLUE<br>PURPLE/PURPLE (RED T.T.)    |
| P8   | DON'T WALK          | BROWN (ORANGE T.T.)                 |
|  | WALK<br>PUSH BUTTON | BLUE<br>PURPLE/PURPLE (ORANGE T.T.) |
| ITEM   | CIRCUITS            | CONDUCTOR COLOUR                    |
| SIGNAL NEUTRAL                                     | NEUTRAL             | WHITE                               |
| CONTROLLER/UPS                                     | POWER               | BLACK                               |
| STREET LIGHTING                                    | POWER<br>POWER      | BLACK<br>RED                        |
| PANEL SUPPLY                                       | POWER<br>POWER      | BLACK<br>RED                        |
| PHOTOCELL  | POWER               | BLACK                               |
|  | SWITCH LEG          | RED                                 |
| NEUTRAL  | NEUTRAL             | WHITE                               |
| GROUND/BOND  | GROUND/BOND         | GREEN                               |

NOTE: T.T. DENOTES TAPE TRACER.

Benchmark:  
Contractor to contact Telus, BC Hydro, FortisBC and BC one call prior to construction to confirm locations of utilities and appurtenances requiring adjustment.

**DMD**  
DMD & Associates  
Electrical Consultants Ltd.  
#12-17358 104A Avenue, Surrey, BC, Canada V4N 0A2  
www.dmdeng.com 604-589-9010  
office@dmdeng.com Fax 604-589-9012  
DMD PROJECT No. 8094-24-02 of 02

| No. | Date       | By  | Revisions         |
|-----|------------|-----|-------------------|
| 1   | 2024-07-12 | DIS | ISSUED FOR TENDER |
|     | 2024-05-10 | DIS | FIRST SUBMISSION  |

ACCEPTED FOR CONSTRUCTION  
Date: \_\_\_\_\_  
Manager of Development Servicing

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

PERMIT TO PRACTICE  
Signature: \_\_\_\_\_  
Date: 2024-07-12  
PERMIT NUMBER: 1000771  
The Association of Professional Engineers and Geoscientists of British Columbia

Seal:

| Design by   | Date       | Scale            |
|-------------|------------|------------------|
| DIS         | 2024-05-10 | 1:75             |
| Drawn by    | Date       | Sheet of         |
| VJ          | 2024-05-10 | 04 OF 04         |
| Checked by  | Date       | Eng. Project No. |
| DIS         | 2024-05-10 | 79050            |
| Approved by | Date       |                  |
| DJW         | 2024-05-10 |                  |

Project: **COAST MERIDIAN ROAD AND HIGHLAND DRIVE**  
Description: **TRAFFIC SIGNAL ELEVATIONS**  
File: 8094-24