

ELECTRICAL NOTES
GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) AND THE TOWNSHIP OF ESQUIMALT SUBDIVISION AND DEVELOPMENT CONTROL BYLAW No. 3128
- ELECTRICAL WORK SHALL CONFORM TO LATEST EDITION OF CANADIAN ELECTRICAL CODE AND BULLETINS PUBLISHED BY TECHNICAL SAFETY BC.
- ALL WORK SHALL CONFORM TO ALL APPLICABLE REGULATIONS OF WORKSAFE BC.
- THE CONTRACTOR SHALL SUPPLY ALL MATERIALS, EQUIPMENT AND LABOUR TO COMPLETE THE WORKS, EXCEPT AS NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES FOR PERMITS AND INSPECTIONS, AS REQUIRED BY TECHNICAL SAFETY BC.
- ALL SIGNAL HEAD SECTIONS SHALL BE WIRED SEPARATELY FROM THE HANDHOLE OF THE POLE TO EACH HEAD INCLUDING A SEPARATE NEUTRAL AND BONDING CONDUCTOR FOR EACH HEAD.
- ALL REDUNDANT HOLES IN POLES SHALL BE TREATED WITH GALVACON PAINT AND PLUGGED USING SUITABLE GALVANIZED PLUG OR COVER PLATE.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL CONCRETE BASES AND JUNCTION BOX SYMBOLS ARE NOT TO SCALE.
- THE CONTRACTOR SHALL NOT PRE-DRILL HOLES IN A SIGNAL POLE UNTIL AFTER THE BASE FOR THAT POLE HAS BEEN INSTALLED. THE CONTRACTOR SHALL ADVISE THE CONTRACT ADMINISTRATOR OF ANY ADJUSTMENTS MADE TO THE BASE LOCATION WHICH WILL EFFECT THE LOCATIONS OF HARDWARE TO BE MOUNTED ON THAT POLE PRIOR TO DRILLING.
- CONTRACTOR SHALL CONFIRM THE SERVICE CONNECTION WITH BC HYDRO.
- THE CONTRACTOR SHALL ENSURE THERE IS NO INTERRUPTION OF THE EXISTING LIGHTING DURING DARKNESS HOURS.
- ENSURE CLEARANCES FROM OVERHEAD UTILITY LINES MEET UTILITY AND WORKSAFE BC REGULATIONS PRIOR TO CONCRETE BASE INSTALLATION. CONTACT PBX ENGINEERING IN THE EVENT OF CONFLICT.
- ALL COMMON CIRCUIT WIRING SHALL BE TAGGED AND TY-RAPPED AS DETAILED IN THE MMCD, SECTION 26 56 01, SUBSECTION 3.8.
- HANDHOLES SHALL BE POSITIONED ON THE DOWNSTREAM TRAFFIC SIDE OF THE POLE OR BEHIND.
- LANE CLOSURES DURING CONSTRUCTION SHALL BE PERMITTED BETWEEN 9am AND 3pm ONLY UNLESS OTHERWISE COORDINATED WITH AND APPROVED BY THE TOWNSHIP. CONTRACTOR SHALL ADVISE THE TOWNSHIP OF ESQUIMALT 2 DAYS IN ADVANCE OF PLANNED LANE CLOSURE ACTIVITY TO ALLOW THE TOWNSHIP TO NOTIFY LOCAL EMERGENCY RESPONSE DEPARTMENTS INCLUDING FIRE DEPARTMENT, AMBULANCE, POLICE, AND BC TRANSIT OF ANY ROAD CLOSURES.

ELECTRICAL CIVIL NOTES

- ALL CONDUITS FROM JUNCTION BOXES TO BASES SHALL BE 53mm RPVC.
- ALL EMPTY CONDUITS SHALL HAVE A PULL STRING AND SHALL BE CAPPED. PULL STRING SHALL BE POLYPROPYLENE WITH A MINIMUM TENSILE STRENGTH OF 1.1 kN.
- ALL EXISTING WIRING, CONDUIT AND BASES TO BE REMOVED SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL NOT USE ANY FACTORY BENDS IN CONDUIT RUNS UNLESS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER IN THE FIELD. WHERE FACTORY 90 DEGREE BENDS ARE APPROVED, THE RADIUS SHALL BE GREATER THAN 900mm.
- ALL CONDUITS SHALL BE VERIFIED AND CLEANED USING THE FOLLOWING PROCEDURE: IN THE EVENT OF EXISTING CONDUIT FAILURE, NOTIFY CONTRACT ADMINISTRATOR.
 - TO VERIFY INTEGRITY OF CONDUIT, PULL THROUGH EACH DUCT, A HARD RUBBER MANDREL NOT LESS THAN 300mm LONG AND OF A DIAMETER 6mm LESS THAN INTERNAL DIAMETER OF DUCT, PRECEDED BY A SWAB OF SUITABLE DIAMETER TO REMOVE SAND, EARTH AND OTHER FOREIGN MATTER.
 - NOTIFY PROJECT ENGINEER IN THE EVENT OF CONDUIT FAILURE.
 - CLEAN DUCTS BEFORE LAYING. CAP ENDS OF DUCTS DURING CONSTRUCTION AND AFTER INSTALLATION TO PREVENT ENTRANCE OF FOREIGN MATERIALS.
 - TERMINATE CONDUIT ENDS IN THE JUNCTION BOX AS PER STANDARD DRAWINGS.
 - CLEAN AND VACUUM JUNCTION BOXES.
- POLES/POSTS SHALL BE OFFSET AS FOLLOWS UNLESS SPECIFIED OTHERWISE ON SITE PLANS:
 - POLES WITH CYCLIST PUSHBUTTONS SHALL BE INSTALLED 300mm FROM FACE OF CURB.
 - POLES WITHOUT CYCLIST PUSHBUTTONS SHALL BE INSTALLED MINIMUM 600mm FROM FACE OF CURB.

ELECTRICAL MATERIAL SPECIFICATIONS

- ALL MATERIALS SHALL BE NEW AND SUPPLIED FROM THE "APPROVED PRODUCTS LIST" EXCEPT WHERE NOTED. ALL LIKE MATERIALS SHALL BE FROM THE SAME MANUFACTURER.
- ELECTRICAL MATERIAL, EQUIPMENT AND FITTINGS MUST BEAR EVIDENCE OF C.S.A. APPROVAL OR SPECIAL CERTIFICATIONS ACCEPTABLE TO THE CHIEF ELECTRICAL INSPECTOR. UNAPPROVED ITEMS SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.
- CONDUCTORS SHALL BE STRANDED COPPER, RW90 XLPE INSULATED AND COLOUR CODED UNLESS OTHERWISE NOTED.
- JUNCTION BOXES SHALL BE (UNLESS NOTED OTHERWISE):
 - STREET LIGHTING/RRFB - DFW PLASTICS INC. DFW37C4-18-4DP BLANK C/W MANUFACTURERS BOLT DOWN LID. REFER TO MMCD STANDARD DRAWING E2.1.
 - TRAFFIC SIGNALS - DFW PLASTICS INC. DFW1703C4-18-4DP. JUNCTION BOX LID SHALL BE SECURED WITH MANUFACTURER'S SUPPLIED DEVICE. REFER TO MMCD STANDARD DRAWING E2.1.
- ALL NEW POLES SHALL BE GALVANIZED STEEL.
- SHOP DRAWINGS OF ALL NEW SIGNAL POLES MUST BE SIGNED AND SEALED BY A STRUCTURAL ENGINEER TO VERIFY POLE LOADING PASSES MoTT REQUIREMENTS.
- TRAFFIC SIGNAL CONTROLLER SYSTEM COMPONENTS:
 - ECONOLITE TS2 TYPE 1 PLUG-N-GO
 - P44DD CABINET
 - ECONOLITE COBALT CONTROLLER
 - 16 CHANNEL MMU SMART MONITOR
 - 8 PHASE 12 POSITION 16 CHANNEL BP
 - 16 CHANNEL DET. RACK
 - COMPUTER SHELF
 - FRAM FILTER
 ENSURE TRAFFIC CONTROLLER CABINET CONTAINS 16 LOAD SWITCH BAYS
- UPS EQUIPMENT - VALID MANUFACTURING: KSDA483014 CABINET INCLUDING:
 - FXM 1100 UPS: 017-201-32
 - AUTOMATIC TRANSFER SWITCH: 020-165-21
 - BATTERY CABLE KIT: SP96-022-94
 - 4x12VDC BATTERIES: 195 XTIV BATTERIES: 1810228
 - ALPHA GUARD BATTERY CHARGER: AG-CMT45C

LEGEND (SOLID FILL DENOTES EXISTING)

| | | | |
|--|--|--|------------------------------------|
| | DECORATIVE LUMINAIRE POLE | | RAISED CURB |
| | LUMINAIRE POLE (SINGLE) | | PROPERTY LINE |
| | 'F' DENOTES FRANGIBLE BASE TENON LUMINAIRE POLE | | EDGE OF GRAVEL SHOULDER |
| | LUMINAIRE POLE (DOUBLE) | | EDGE OF PAVEMENT |
| | RRFB POLE | | PAINT LINE |
| | DFW PLASTICS DFW37C4-18-4DP JUNCTION BOX | | FUTURE ELECTRICAL AND GEOMETRICS |
| | DFW PLASTICS DFW1703C4-18-4DP JUNCTION BOX (TRAFFIC SIGNALS) | | ELECTRICAL EQUIPMENT TO BE REMOVED |
| | SIGNAL POLE WITH SIGNAL HEAD MOUNTED ON SIDE | | PROPOSED UNDERGROUND CONDUIT |
| | COMBINATION LUMINAIRE/TRAFFIC SIGNAL POLE | | EXISTING UNDERGROUND CONDUIT |
| | LANE-USE SIGN POLE | | FENCE |
| | ILLUMINATED SIGN W/ AMBER FLASHERS | | CORRUGATED METAL PIPE (CULVERT) |
| | POWER/TELEPHONE POLE | | U/G UTILITY: |
| | PEC PHOTO ELECTRIC CELL | | 'G' DENOTES GAS |
| | RPVC RIGID P.V.C. CONDUIT | | 'S' DENOTES STORM DRAINS/SEWERS |
| | TRAFFIC CONTROLLER C/W UPS | | 'W' DENOTES WATER |
| | | | 'E' DENOTES ELECTRIC |
| | | | 'T' DENOTES TELEPHONE |
| | | | 'SAN' DENOTES SANITARY SEWER |

LED LUMINAIRE PRODUCT LIST

| MANUFACTURER | MODEL No. | WATTAGE | DISTRIBUTION TYPE | QUANTITY |
|-------------------|----------------------------------|----------|-------------------|----------|
| AMERICAN ELECTRIC | ATBO P203 MVOLT R2 3K NL P7 PCLL | 70W LED | TYPE II | 1 |
| AMERICAN ELECTRIC | ATBO P203 MVOLT R3 3K NL P7 SH | 70W LED | TYPE II | 5 |
| AMERICAN ELECTRIC | ATBO P303 MVOLT R3 3K NL P7 PCLL | 106W LED | TYPE III | 4 |
| AMERICAN ELECTRIC | ATBO P303 MVOLT R3 3K NL P7 SH | 106W LED | TYPE III | 3 |
| AMERICAN ELECTRIC | ATBO P453 MVOLT R3 3K NL P7 PCLL | 159W LED | TYPE II | 2 |

SEE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) - LATEST EDITION AND TOWNSHIP OF ESQUIMALT SUPPLEMENTAL SPECIFICATIONS FOR APPLICABLE STANDARDS AND DRAWINGS

TOWNSHIP OF ESQUIMALT

ESQUIMALT ROAD - PROJECT 2

STREET LIGHTING & SIGNALS

ISSUED FOR TENDER

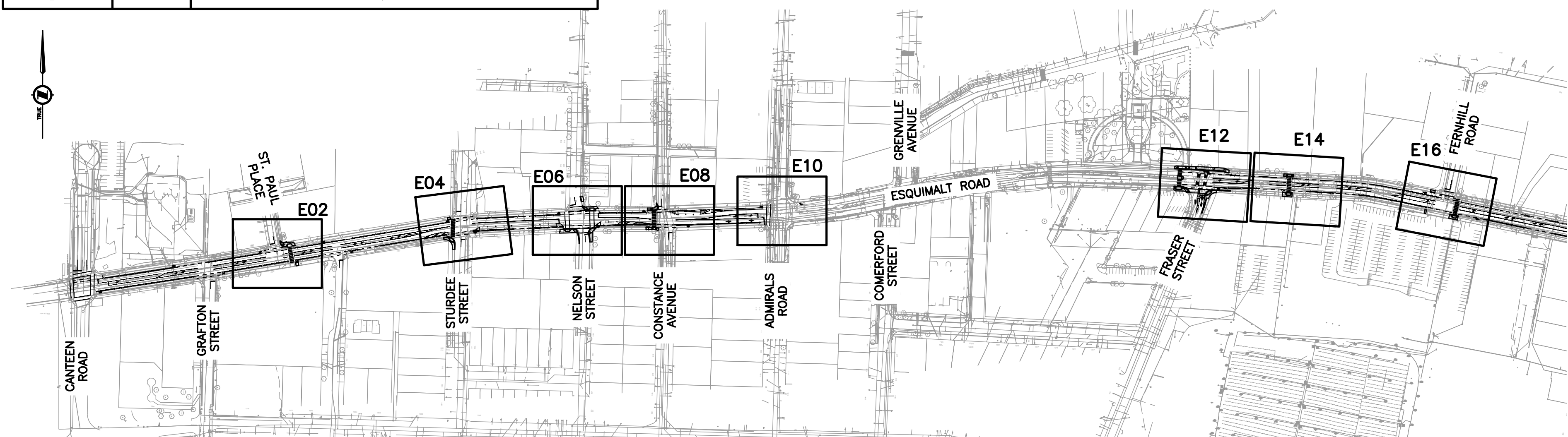
PBX ENGINEERING LTD.
PERMIT TO PRACTICE NUMBER:
1000208

DRAWING LIST

| DRAWING NO. | REV.NO | DESCRIPTION |
|-------------|--------|--|
| E01 | 1 | NOTES AND LEGEND |
| E02 | 1 | SITE PLAN ENLARGEMENT - ST. PAUL PLACE AT ESQUIMALT ROAD |
| E03 | 1 | ELEVATIONS - ST. PAUL PLACE AT ESQUIMALT ROAD |
| E04 | 1 | SITE PLAN ENLARGEMENT - STURDEE STREET AT ESQUIMALT ROAD |
| E05 | 1 | ELEVATIONS - STURDEE STREET AT ESQUIMALT ROAD |
| E06 | 1 | SITE PLAN ENLARGEMENT - NELSON STREET AT ESQUIMALT ROAD |
| E07 | 1 | ELEVATIONS - NELSON STREET AT ESQUIMALT ROAD |
| E08 | 1 | SITE PLAN ENLARGEMENT - CONSTANCE AVENUE AT ESQUIMALT ROAD |
| E09 | 1 | ELEVATIONS - CONSTANCE AVENUE AT ESQUIMALT ROAD |
| E10 | 1 | SITE PLAN ENLARGEMENT - ADMIRALS ROAD AT ESQUIMALT ROAD |
| E11 | 1 | ELEVATIONS - ADMIRALS ROAD AT ESQUIMALT ROAD |
| E12 | 1 | SITE PLAN ENLARGEMENT - FRASER STREET AT ESQUIMALT ROAD |
| E13 | 1 | ELEVATIONS - FRASER STREET AT ESQUIMALT ROAD |
| E14 | 1 | SITE PLAN ENLARGEMENT - 1188 ESQUIMALT ROAD |
| E15 | 1 | ELEVATIONS - 1188 ESQUIMALT ROAD |
| E16 | 1 | SITE PLAN ENLARGEMENT - FERNHILL ROAD AT ESQUIMALT ROAD |
| E17 | 1 | ELEVATIONS - FERNHILL ROAD AT ESQUIMALT ROAD |

APPROVED PRODUCT LIST

| PRODUCTS | MANUFACTURER | SPECIFICATIONS | EXCEPTIONS | SUPPLIER | COMMENTS |
|---|----------------------------------|---|------------|------------|--|
| POLES, SIGNAL ARM, AND ANCHOR BOLTS | WEST COAST ENGINEERING/NOVA POLE | MMCD/MoTT | - | CONTRACTOR | GALVANIZED |
| SIDE MOUNT BRACKETS | GREEN LITE | MoTT | - | CONTRACTOR | |
| SIGNAL HEADS | ECONOLITE/FORTRAN | MoTT | - | CONTRACTOR | |
| LED DISPLAYS | DIALIGHT 433 | MMCD/MoTT | - | CONTRACTOR | |
| PEDESTRIAN HEADS | ECONOLITE/FORTRAN | MoTT | - | CONTRACTOR | COLOUR TO MATCH EXISTING |
| COUNTDOWN LED PEDESTRIAN DISPLAYS | DURALIGHT | JXM200-VIHMCD JXM200-VIE | - | CONTRACTOR | COLOUR TO MATCH EXISTING |
| PEDESTRIAN PUSHBUTTON (AT RRFB CROSSINGS) | POLARA | INX 9WNO-Y-BD | - | CONTRACTOR | AUDIBLE MESSAGE "YELLOW LIGHTS ARE FLASHING" AND PBF9X15-X SIGN ADAPTER |
| PEDESTRIAN PUSHBUTTON (AT INTERSECTIONS) | POLARA | INS2 9VNO-Y-BD | - | CONTRACTOR | AUDIBLE TONE FOR EAST-WEST CROSSINGS SHALL BE A "CAN. MELODY" SOUND, NORTH-WEST CROSSINGS SHALL BE A "CHUCKOO" SOUND |
| CYCLIST PUSHBUTTON | POLARA | BULLDOG | - | CONTRACTOR | COLOUR TO MATCH EXISTING |
| SERVICE PANEL (AT RRFB CROSSING) | VALID MANUFACTURING | HWYSP12-6S-M | - | CONTRACTOR | |
| SERVICE PANEL (AT INTERSECTIONS) | VALID MANUFACTURING | HWYSP12-10S-M | - | CONTRACTOR | |
| JUNCTION BOXES | DFW PLASTICS INC | DFW37C4-18-4DP DFW1703C4-18-4DP | - | CONTRACTOR | |
| RRFB'S (120V HARDWIRED) | CARMANAH | R920-MX 300-AC C/W 91154 REMOTE BLE ANTENNA KIT | - | CONTRACTOR | |



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ELECTRICAL DRAWING: E01

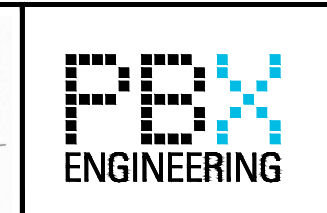
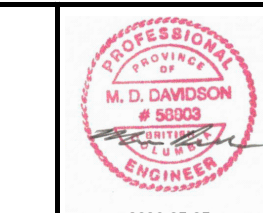
33995

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| REV NO | REVISIONS | DATE | DRAWN | APPR'D |
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| 1 | ISSUED FOR TENDER | 26/05/25 | PBX | MD |



STREET LIGHTING & SIGNALS
NOTES AND LEGEND

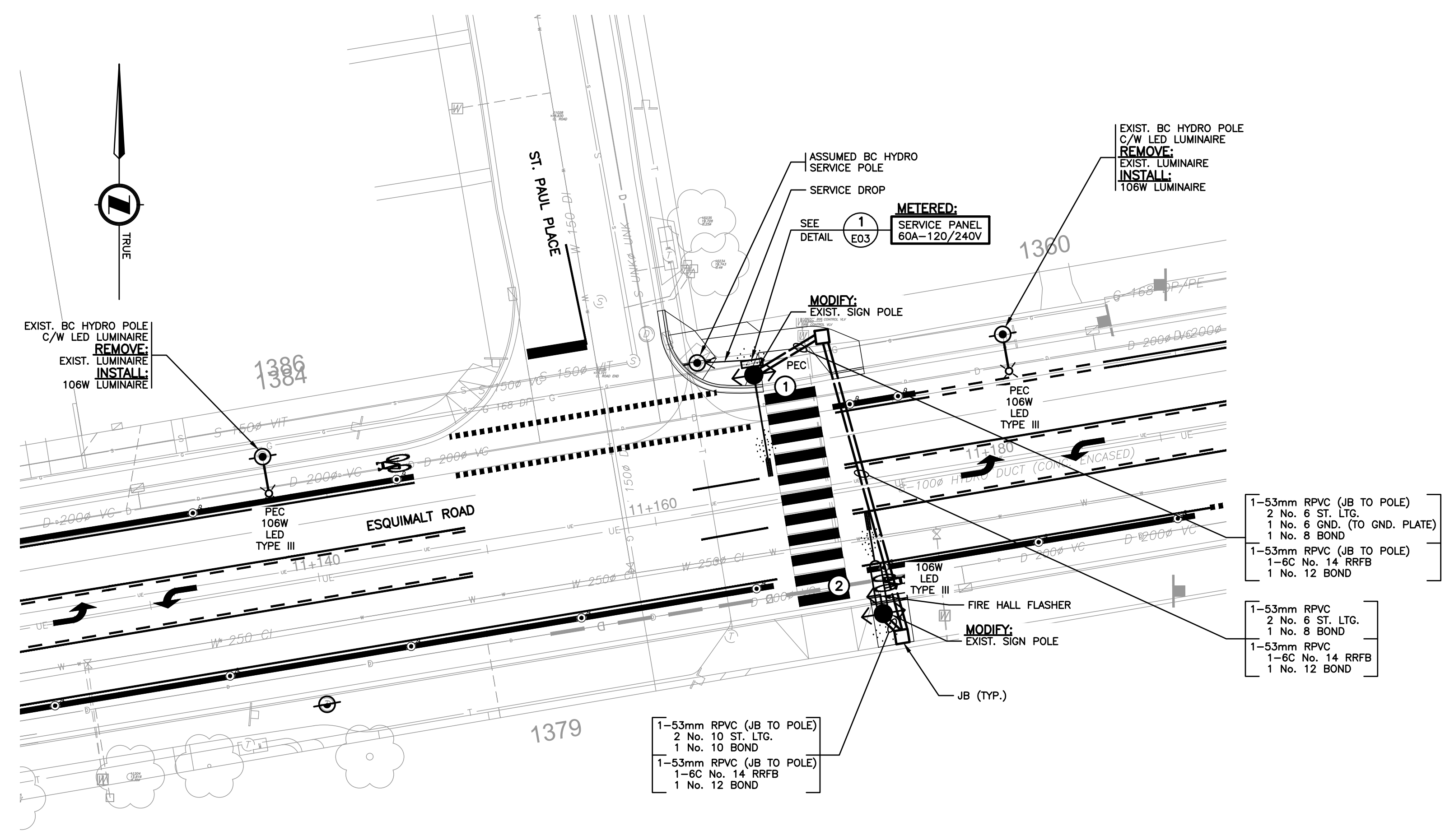


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| DRAWN BY | PBX | DESIGN BY | AJB | 1 |
| CHECKED BY | TN | APPROVED BY | MD | OF 17 |
| | | | | REV. 1 |

| INTERSECTION LIGHTING DESIGN CRITERIA | | |
|---|--|----------------------------------|
| INTERSECTION NAME | ESQUIMALT ROAD AT ST. PAUL PLACE | |
| ROAD CLASSIFICATION | MAJOR/LOCAL | |
| PEDESTRIAN CONFLICT | MEDIUM | |
| WATTAGE /TYPE / LUMINAIRE MANUFACTURER / MODEL NUMBER | 106W LED /TYPE III /AMERICAN ELECTRIC /ATBO P303 MVOLT R3 3K | |
| ILLUMINATION LEVEL (AVG.) | RECOMMENDED ILLUMINANCE 20.0 LUX | ACHIEVED ILLUMINANCE 21.3 LUX |
| UNIFORMITY RATIO (AVG:MIN) | 3.0:1 | 3.0:1 |

NOTE: BASED ON IESNA RP-8-25 (TABLE 12-1)

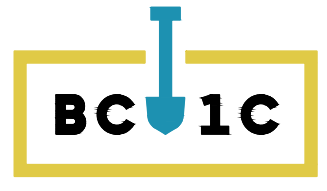


SITE PLAN ENLARGEMENT
0 1:200 10

ALL EQUIPMENT IS PROPOSED
UNLESS NOTED OTHERWISE

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**ELECTRICAL DRAWING: E02
33995**



CHECK BEFORE YOU DIG
CONTRACTOR SHALL CONFIRM THE LOCATIONS
OF ALL UNDERGROUND UTILITIES.

SEE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS
(MMCD) - LATEST EDITION AND TOWNSHIP OF
ESQUIMALT SUPPLEMENTAL SPECIFICATIONS FOR
APPLICABLE STANDARDS AND DRAWINGS

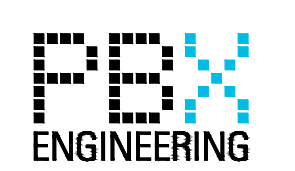
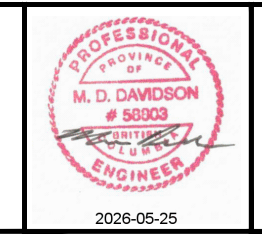
ISSUED FOR TENDER DESIGN NO.

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| REV NO | REVISIONS | DATE | DRAWN | APPR'D |
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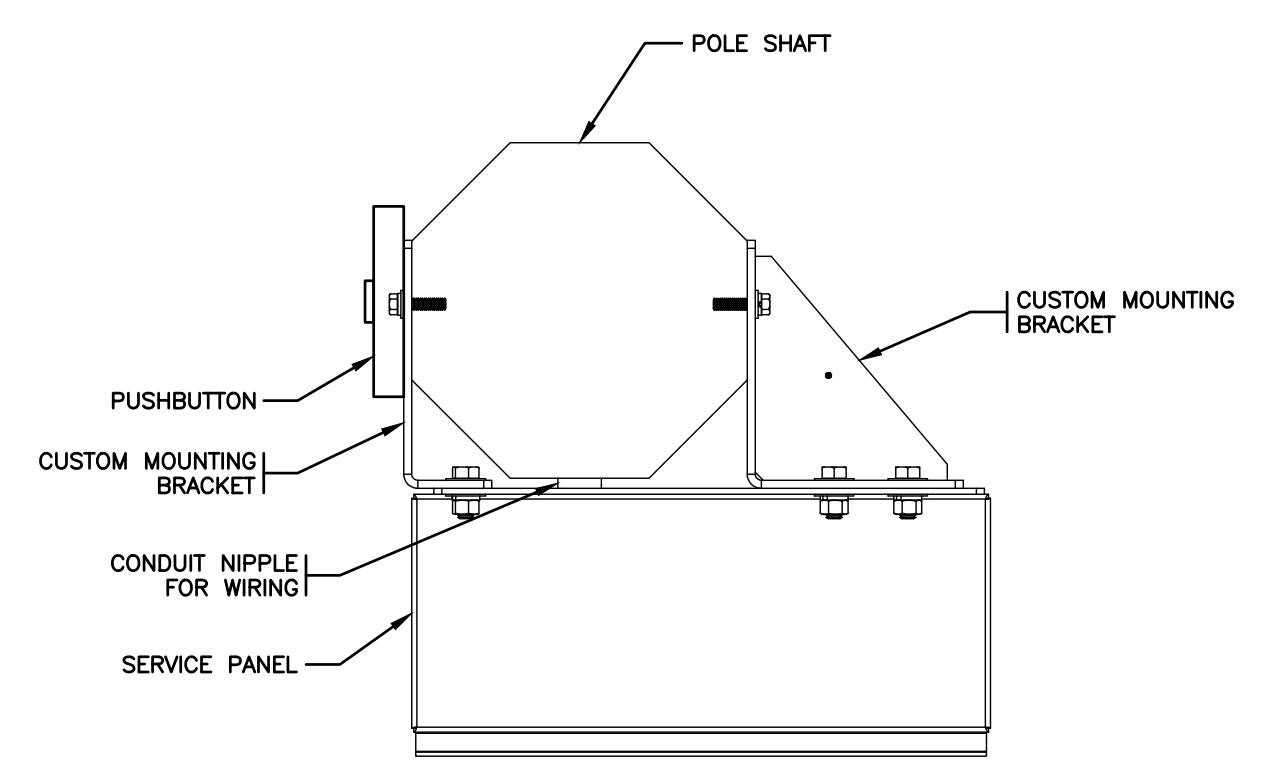
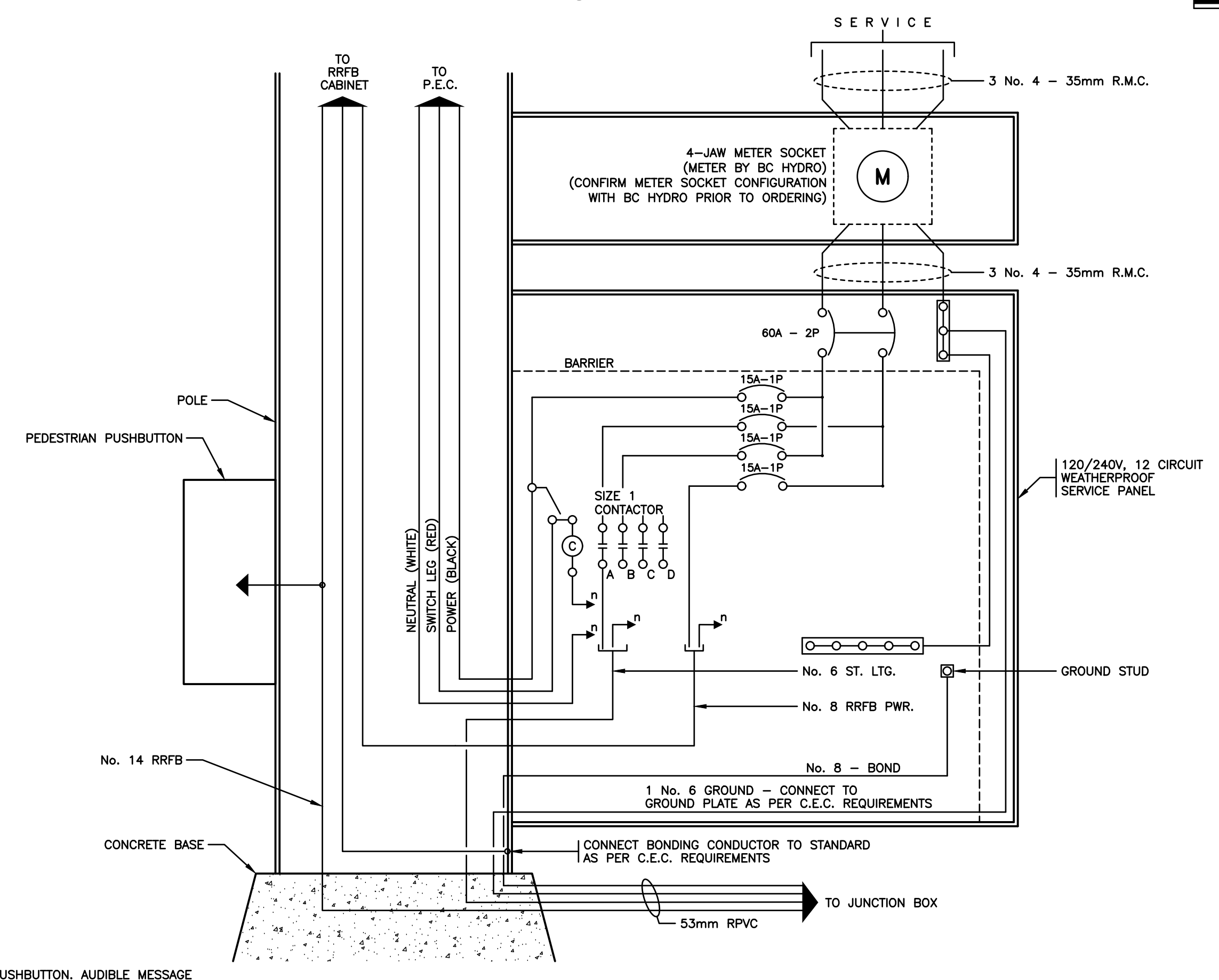
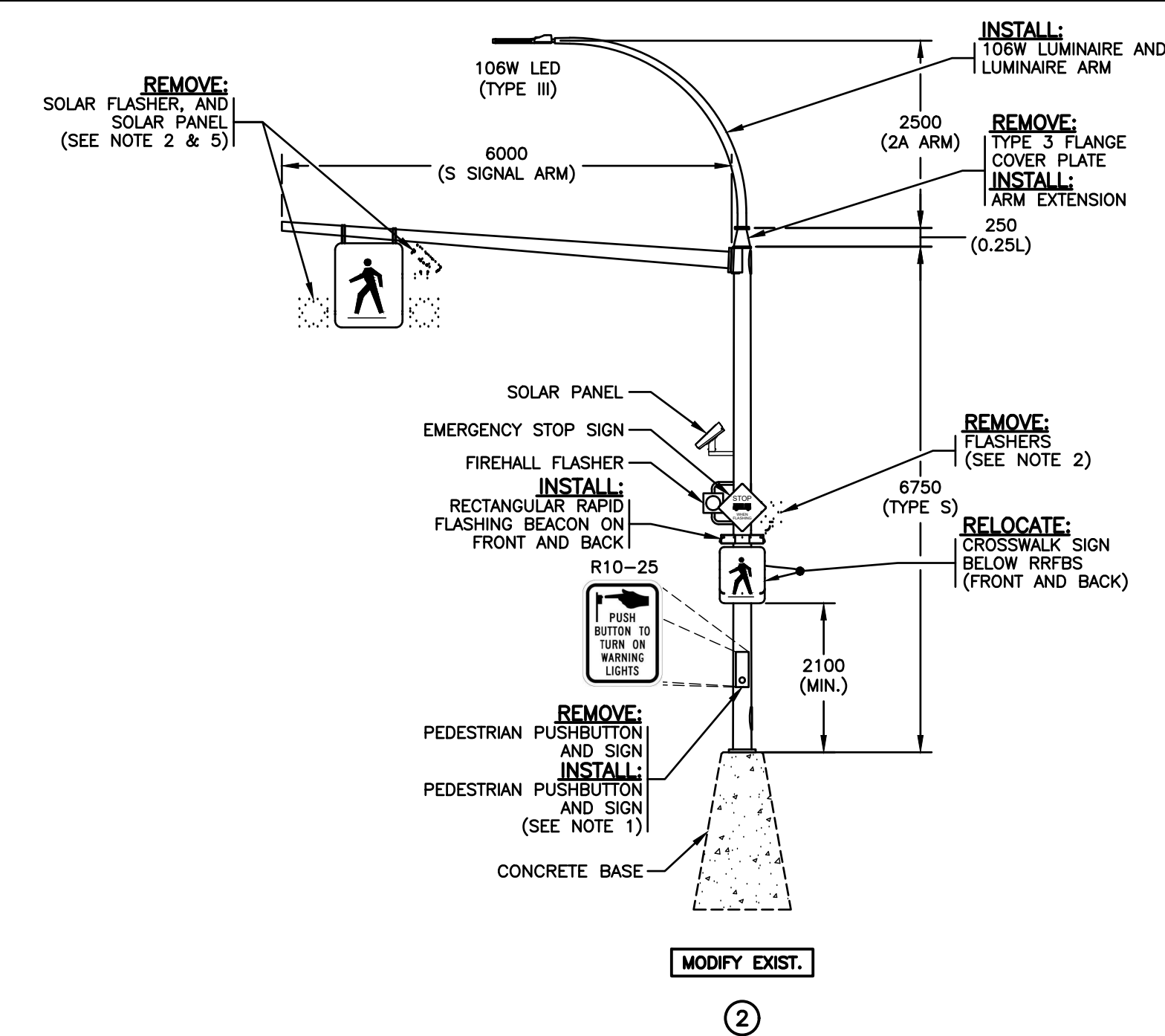
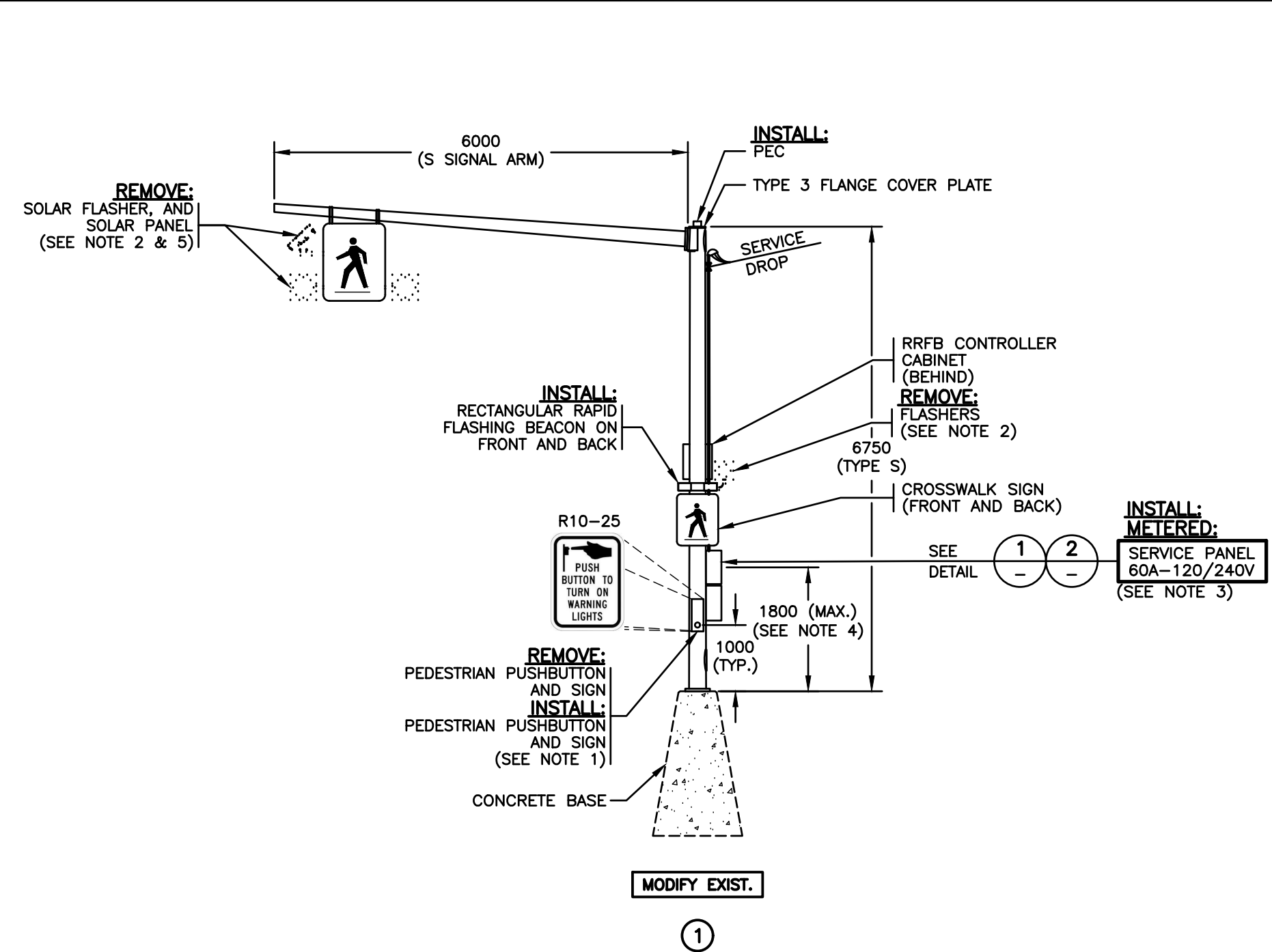


STREET LIGHTING & SIGNALS
SITE PLAN ENLARGEMENT - ST. PAUL PLACE AT ESQUIMALT ROAD



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| DRAWN BY | PBX | DESIGN BY | AJB | 2 |
| CHECKED BY | TN | APPROVED BY | MD | 17 |
| | | | | REV. 1 |



DETAIL 2 TOP VIEW OF CUSTOM MOUNTING BRACKET N.T.S.

FUNCTIONAL DESIGN OF MOUNTING BRACKET ONLY. CONTRACTOR TO PROVIDE ENGINEERED SHOP DRAWING FOR APPROVAL PRIOR TO FABRICATION.

- NOTES:**
1. PEDESTRIAN PUSHBUTTON SHALL BE POLARA INX AUDIBLE PUSHBUTTON. AUDIBLE MESSAGE SHALL BE "YELLOW LIGHTS ARE FLASHING".
 2. RETURN SOLAR FLASHER PANEL AND BATTERY TO ESQUIMALT PUBLIC WORKS YARD.
 3. SERVICE PANEL SHALL BE INSTALLED WITH CUSTOM MOUNTING BRACKET TO OFFSET SERVICE PANEL ON POLE TO PREVENT CONFLICT WITH PUSHBUTTON. CONTRACTOR SHALL SUBMIT SERVICE PANEL SHOP DRAWINGS FOR REVIEW PRIOR TO ORDERING. REFER TO DETAIL 2.
 4. SERVICE METERS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 1500mm AND MAXIMUM HEIGHT OF 1800mm TO THE CENTER OF THE VIEWING WINDOW.
 5. EXTERIOR OF SIGN STRUCTURE SHALL BE SEALED BY THE INSTALLATION OF METAL PLATES WHERE SOLAR FLASHER EQUIPMENT WAS REMOVED.

DETAIL 1 WIRING DIAGRAM - METERED SERVICE PANEL N.T.S.

ALL EQUIPMENT IS EXISTING UNLESS NOTED OTHERWISE

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SEE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) - LATEST EDITION AND TOWNSHIP OF ESQUIMALT SUPPLEMENTAL SPECIFICATIONS FOR APPLICABLE STANDARDS AND DRAWINGS

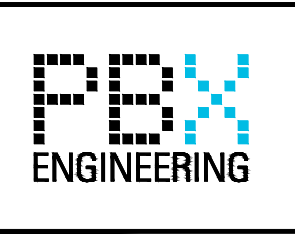
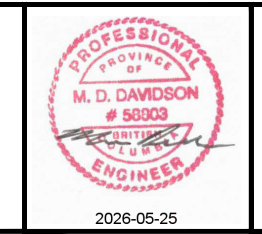
ELECTRICAL DRAWING: E03
33995

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| REV NO | REVISIONS | DATE | DRAWN | APPR'D |
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| 1 | ISSUED FOR TENDER | 26/05/25 | PBX | MD |



STREET LIGHTING & SIGNALS
ELEVATIONS - ST. PAUL PLACE AT ESQUIMALT ROAD

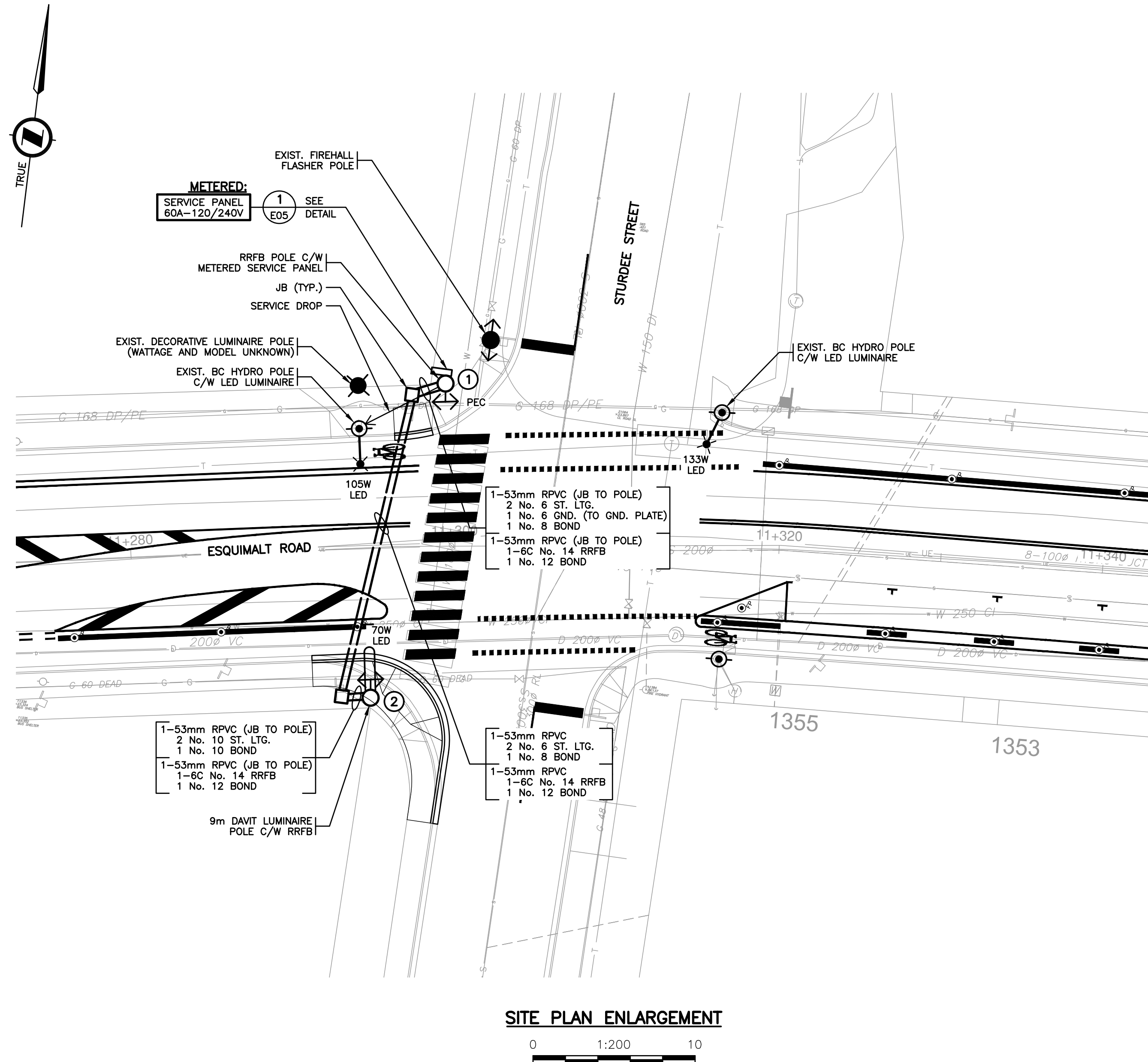


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| CHECKED BY | TN | APPROVED BY | MD | REV. 1 |

| INTERSECTION LIGHTING DESIGN CRITERIA | | |
|---|--|----------|
| INTERSECTION NAME | ESQUIMALT ROAD AT STURDEE STREET | |
| ROAD CLASSIFICATION | MAJOR/LOCAL | |
| PEDESTRIAN CONFLICT | MEDIUM | |
| WATTAGE /TYPE /LUMINAIRE MANUFACTURER /MODEL NUMBER | 70W LED /TYPE II /AMERICAN ELECTRIC /ATB0 P203 MVOLT R2 3K 105W LED /TYPE III /AMERICAN ELECTRIC /ATB0 P451 MVOLT R3 3K 133W LED /TYPE II /AMERICAN ELECTRIC /ATB2 40BLEDE10 MVOLT R3 4K | |
| ILLUMINATION LEVEL (AVG.) | 20.0 LUX | 29.6 LUX |
| UNIFORMITY RATIO (AVG:MIN) | 3.0:1 | 3.0:1 |

NOTE: BASED ON IESNA RP-8-25 (TABLE 12-1)



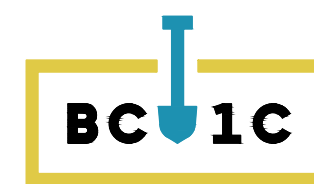
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ELECTRICAL DRAWING: E04

33995

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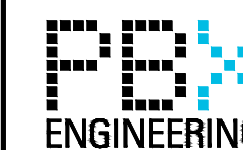
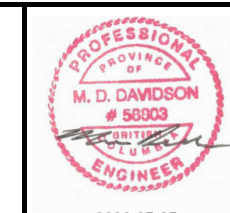


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APPLICABLE STANDARDS AND DRAWINGS



STREET LIGHTING & SIGNALS
SITE PLAN ENLARGEMENT - STURDEE STREET AT ESQUIMALT ROAD

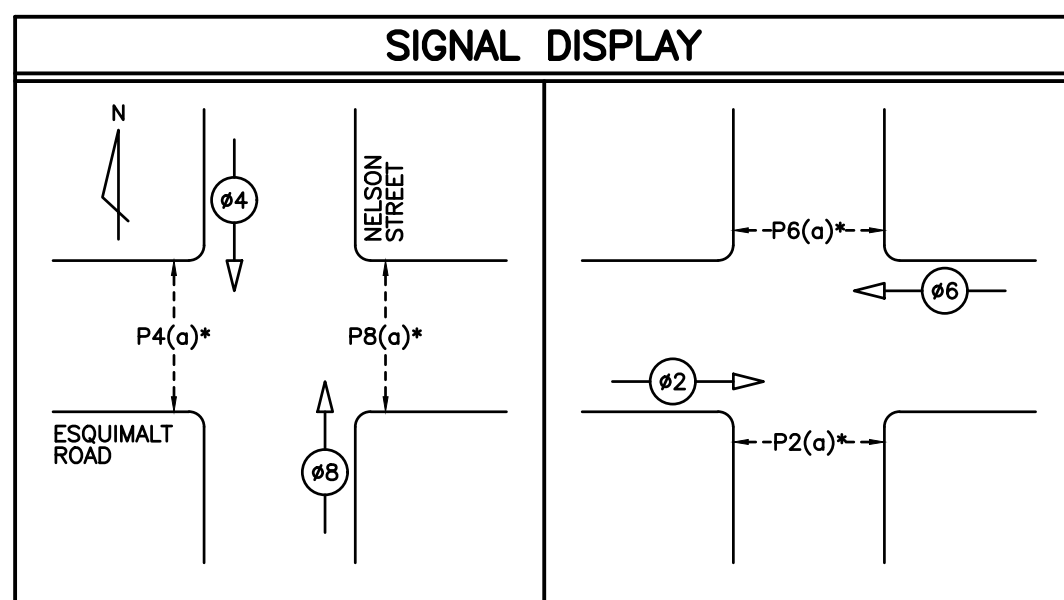


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| DRAWN BY | PBX | DESIGN BY | AJB | 4 OF 17 |
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| INTERSECTION LIGHTING DESIGN CRITERIA | | |
|--|--|----------------------|
| INTERSECTION NAME | ESQUIMALT ROAD AT NELSON STREET | |
| ROAD CLASSIFICATION | MAJOR/LOCAL | |
| PEDESTRIAN CONFLICT | MEDIUM | |
| WATTAGE/TYPE/ LUMINAIRE MANUFACTURER/ MODEL NUMBER | 70W LED/TYP II/AMERICAN ELECTRIC/ATBO P203 MVOLT R2 3K 106W LED/TYP III/AMERICAN ELECTRIC/ATBO P303 MVOLT R3 3K | |
| ILLUMINATION LEVEL (AVG.) | RECOMMENDED ILLUMINANCE | ACHIEVED ILLUMINANCE |
| UNIFORMITY RATIO (AVG:MIN) | 3.0:1 | 2.6:1 |

NOTE: BASED ON IESNA RP-8-25 (TABLE 12-1)



NOTE: (a) DENOTES PEDESTRIAN AUDIBLE SIGNAL
* DENOTES LEADING PEDESTRIAN INTERVAL
SEE NOTE 2

- 1-53mm RPVC
2 No. 6 CONT. PWR.
2 No. 6 ST. LTG.
21 No. 14 SIGNALS
1 No. 10 SIG. NEUT.
1 No. 8 BOND (FOR CONT. PWR.)
1 No. 8 BOND
- 1-53mm RPVC
2 CATSE (VIDEO DETECTION VC3, VC4)
1 No. 12 BOND
- 1-53mm RPVC (EMPTY)

| VIDEO DETECTOR CAMERA DETAILS | | |
|---------------------------------------|-------|------------------|
| CABLE DESCRIPTION | LABEL | VEHICLE MOVEMENT |
| VIDEO DETECTOR CAMERA No. 1 ON POLE 4 | VC1 | EASTBOUND (#2) |
| VIDEO DETECTOR CAMERA No. 2 ON POLE 5 | VC2 | SOUTHBOUND (#4) |
| VIDEO DETECTOR CAMERA No. 3 ON POLE 2 | VC3 | WESTBOUND (#6) |
| VIDEO DETECTOR CAMERA No. 4 ON POLE 3 | VC4 | NORTHBOUND (#8) |

NOTES:

- RETURN LED LUMINAIRE TO ESQUIMALT PUBLIC WORKS YARD.
- CONTRACTOR SHALL CONFIGURE OPPOSITE PEDESTRIAN SIGNALS TO ACTIVATE SIMULTANEOUSLY WHEN A CALL IS PLACED ON EITHER. DUAL ENTRY SHALL BE CONFIGURED FOR OPPOSING VEHICLE PHASES.
- CONTRACTOR SHALL CONTACT PBX ENGINEERING PRIOR TO INSTALLATION OF CONCRETE BASE TO CONFIRM OFFSET FROM BC HYDRO UTILITY POLE.

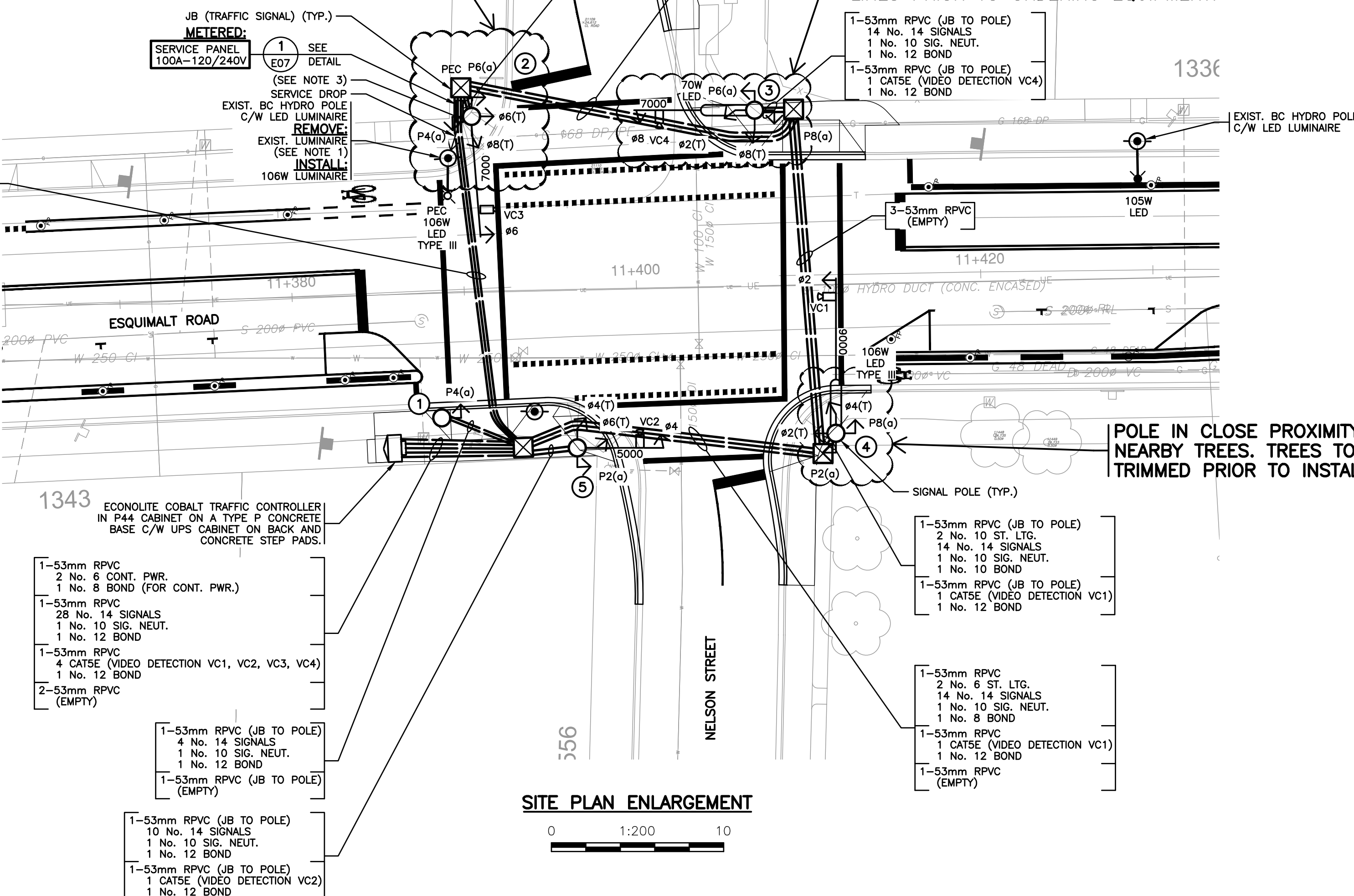
| REV NO | REVISIONS | DATE | DRAWN | APPR'D |
|--------|-------------------|----------|-------|--------|
| 1 | ISSUED FOR TENDER | 26/05/25 | PBX | MD |



POLE IN CLOSE PROXIMITY TO OVERHEAD BC HYDRO LINES. CONTRACTOR SHALL SURVEY OVERHEAD LINES PRIOR TO ORDERING EQUIPMENT.

POLE IN CLOSE PROXIMITY TO OVERHEAD BC HYDRO LINES. CONTRACTOR SHALL SURVEY OVERHEAD LINES PRIOR TO ORDERING EQUIPMENT.

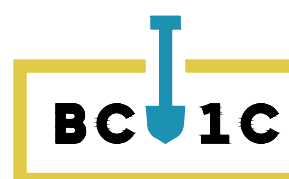
POLE IN CLOSE PROXIMITY TO NEARBY TREES. TREES TO BE TRIMMED PRIOR TO INSTALLATION.



SITE PLAN ENLARGEMENT

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 PBX ENGINEERING LTD. PRIOR TO ORDERING POLES.



CHECK BEFORE YOU DIG

CONTRACTOR SHALL CONFIRM THE LOCATIONS OF ALL UNDERGROUND UTILITIES.

SEE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) - LATEST EDITION AND TOWNSHIP OF ESQUIMALT SUPPLEMENTAL SPECIFICATIONS FOR APPLICABLE STANDARDS AND DRAWINGS

ALL EQUIPMENT IS PROPOSED UNLESS NOTED OTHERWISE

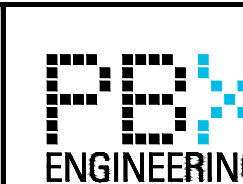
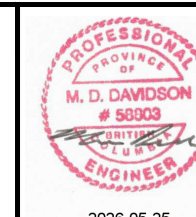
ISSUED FOR TENDER NOT FOR CONSTRUCTION

ELECTRICAL DRAWING: E06

33995

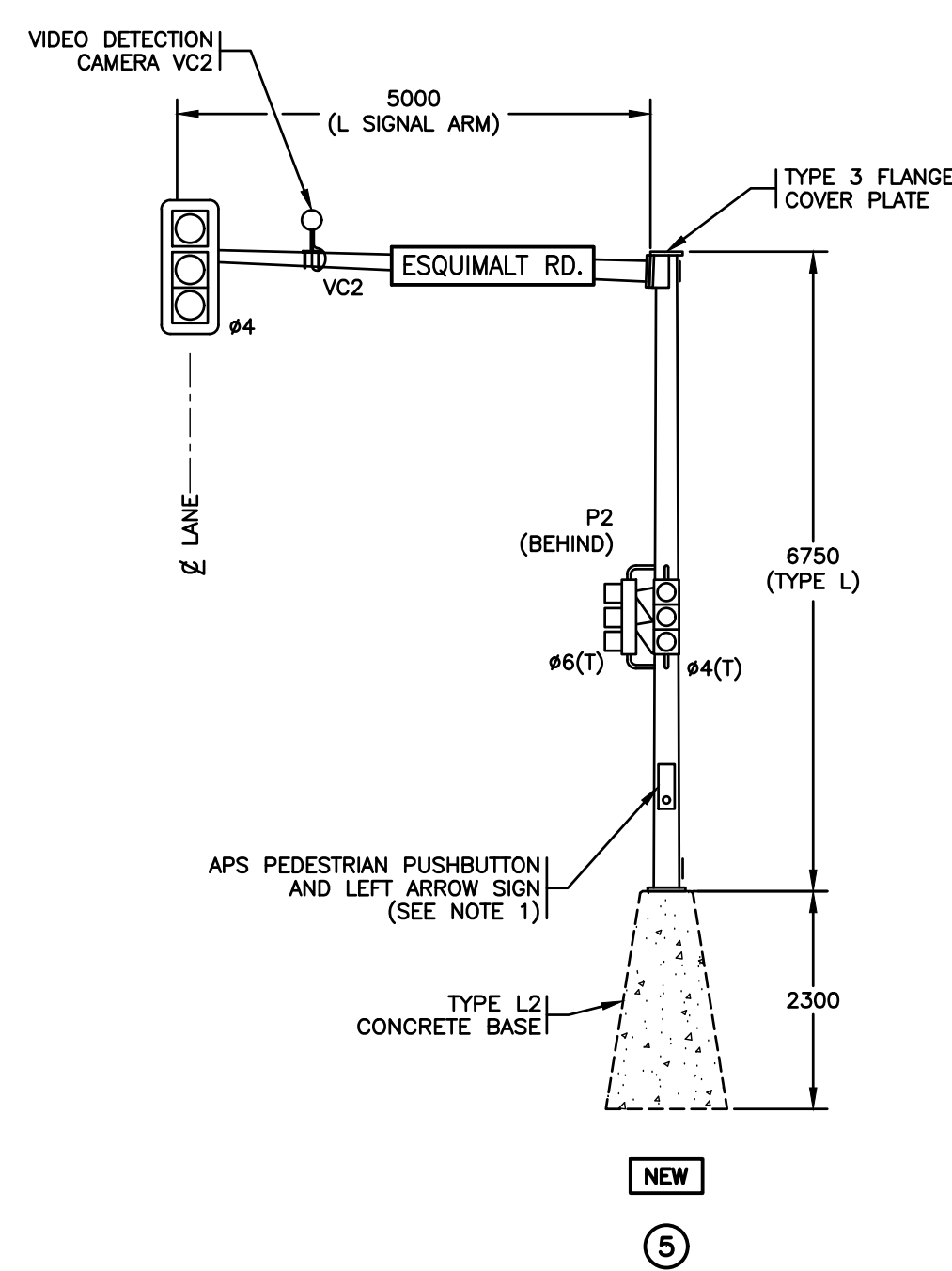
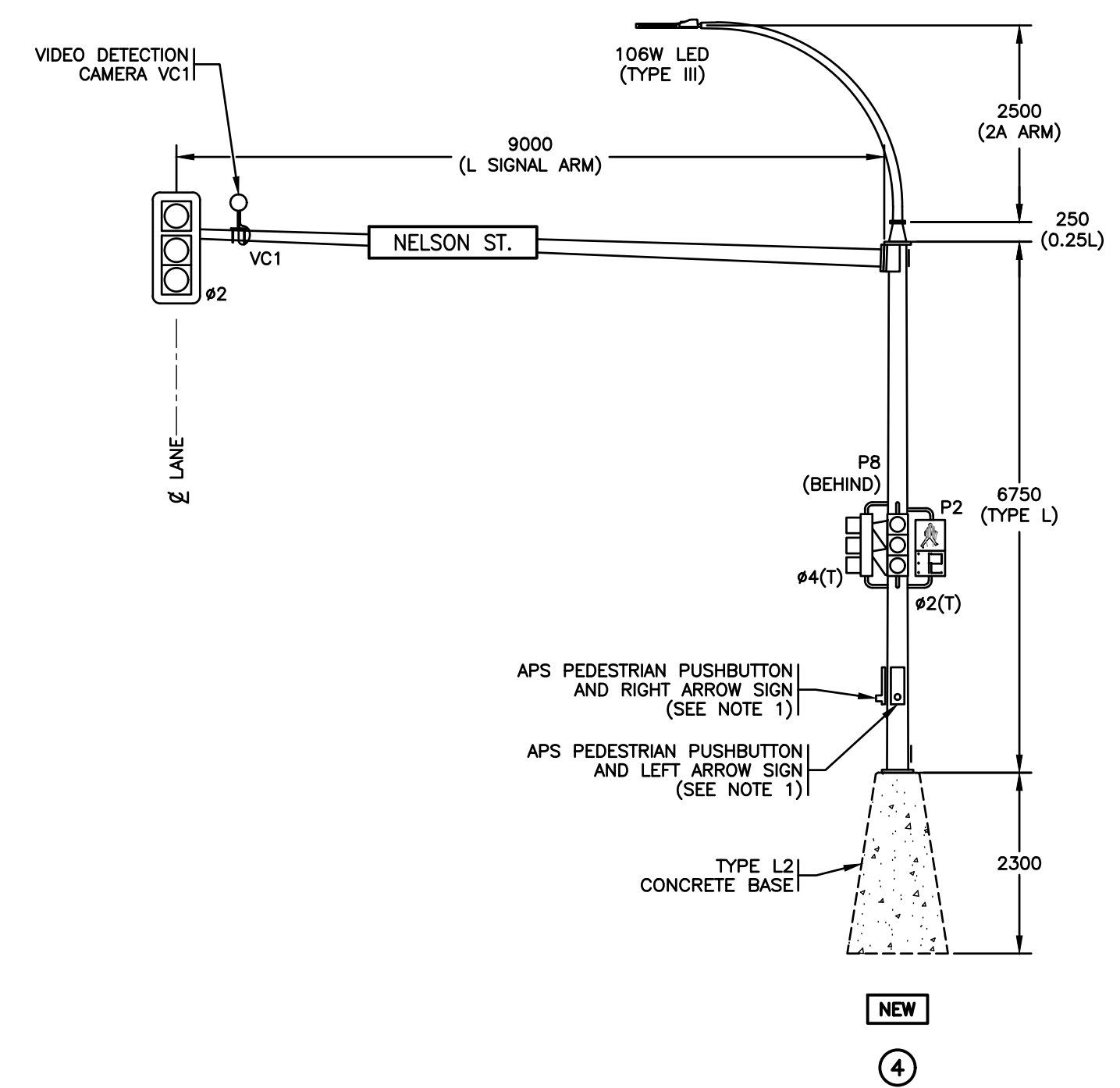
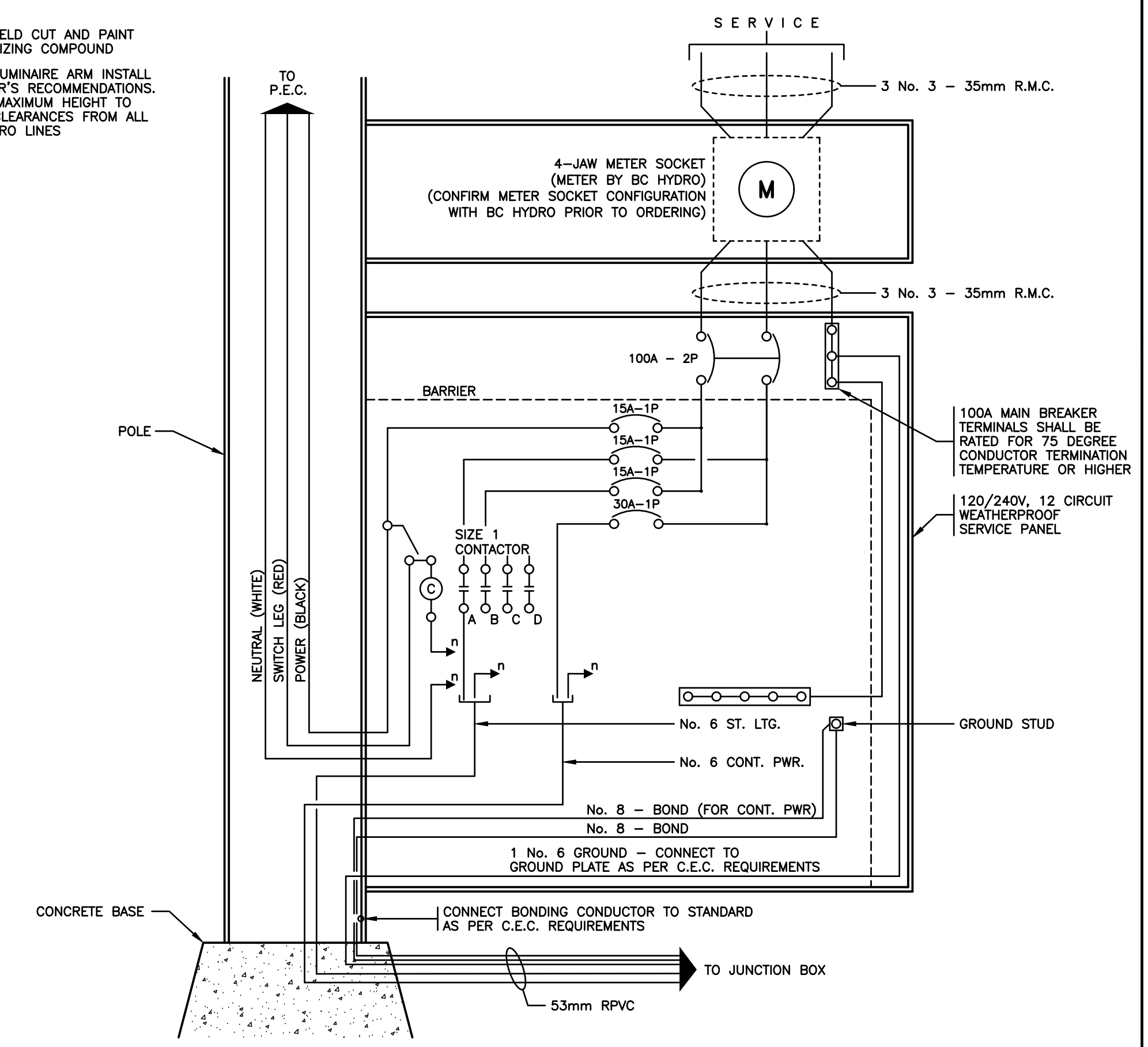
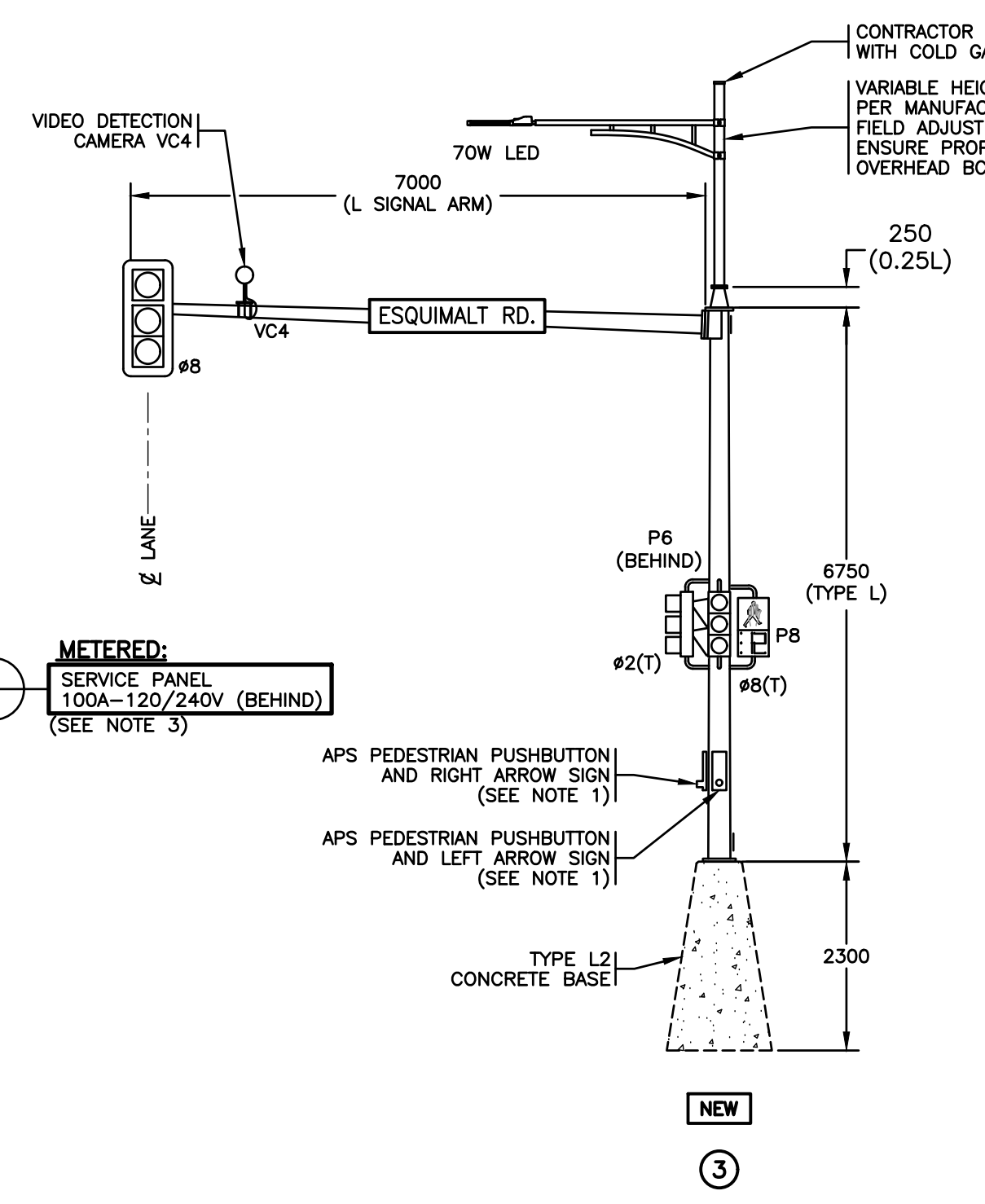
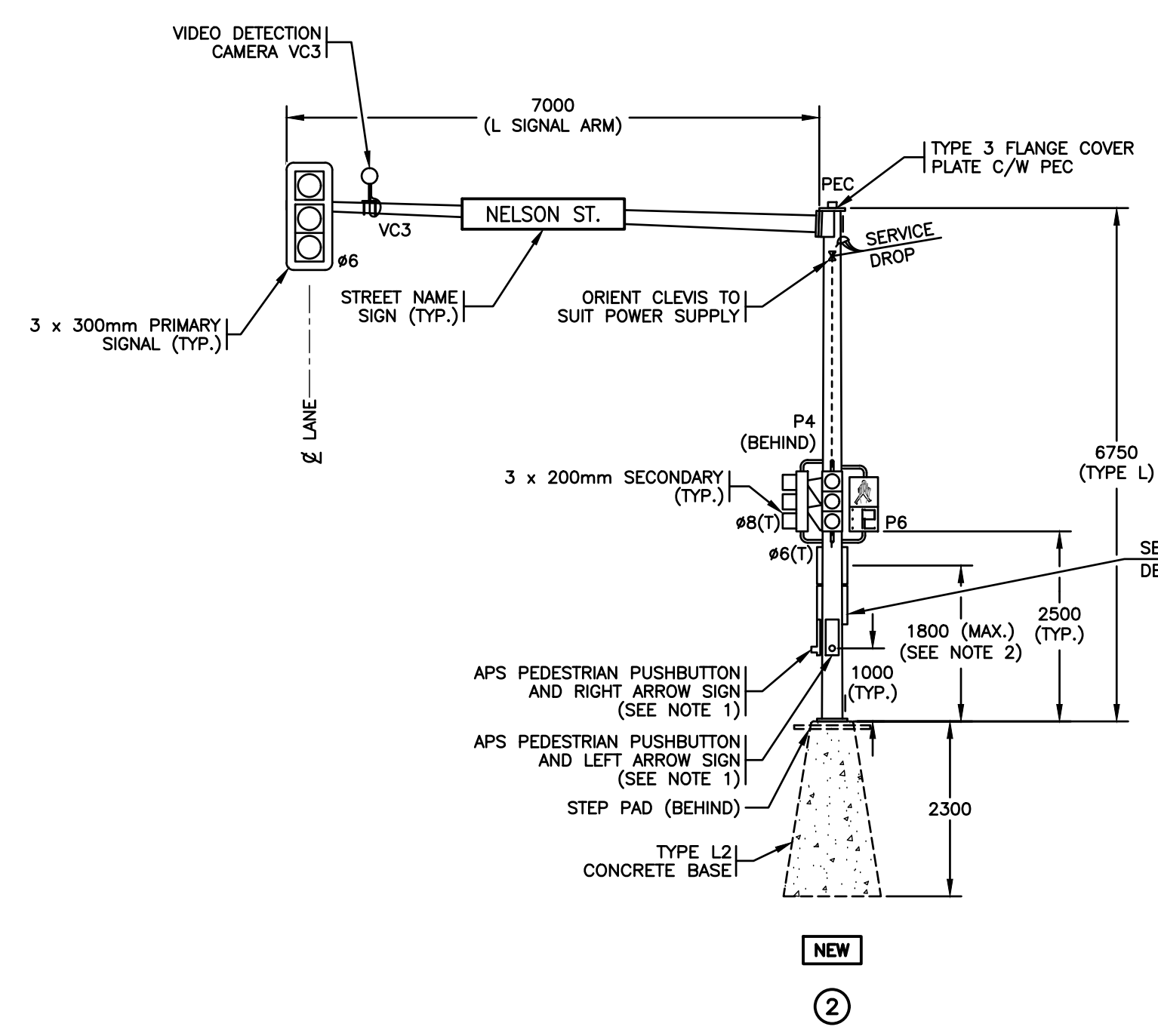
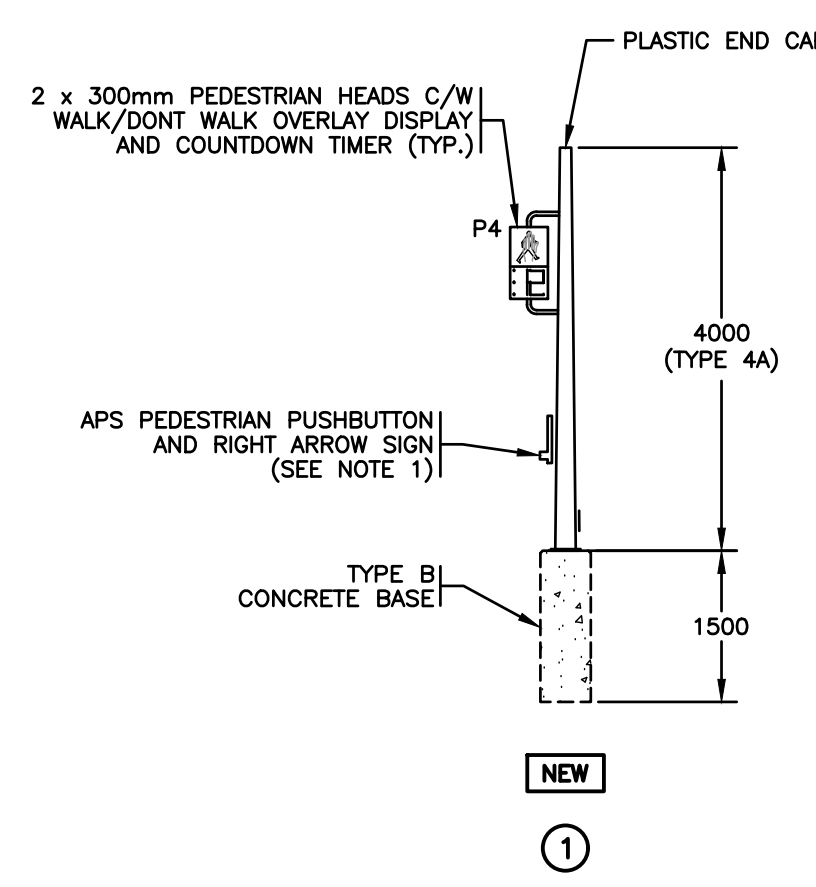
ISSUED FOR TENDER DESIGN NO.

| SCALE | AS NOTED | DATE | 26/05/25 | DWG. NO. |
|------------|----------|-------------|----------|----------|
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| CHECKED BY | TN | APPROVED BY | MD | 17 |
| | | | | REV. 1 |

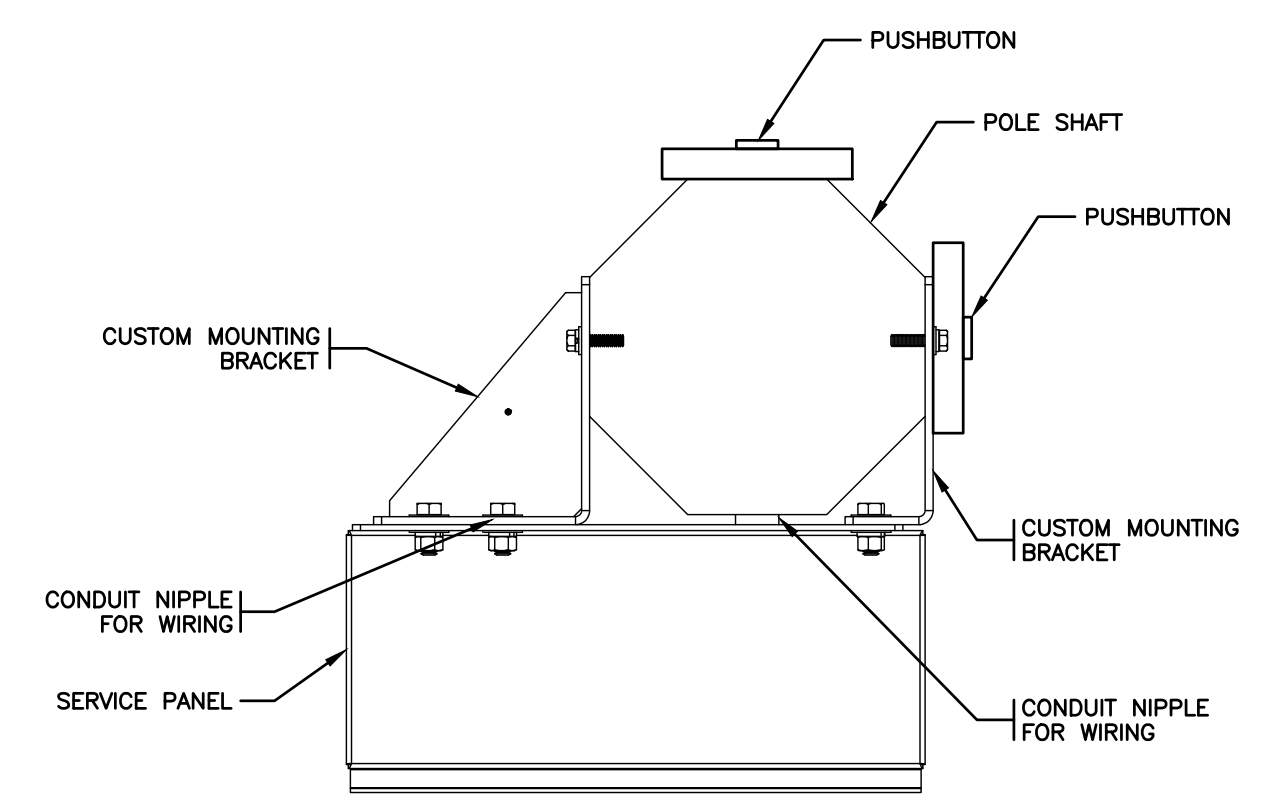


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'T' DENOTES TUNNEL VISORS



DETAIL 1-1 WIRING DIAGRAM - METERED SERVICE PANEL



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SEE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) - LATEST EDITION AND TOWNSHIP OF ESQUIMALT SUPPLEMENTAL SPECIFICATIONS FOR APPLICABLE STANDARDS AND DRAWINGS

- NOTES:**
1. PEDESTRIAN PUSHBUTTON SHALL BE POLARA INS AUDIBLE PUSH BUTTON.
 2. SERVICE METERS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 1500mm AND A MAXIMUM HEIGHT OF 1800mm TO THE CENTER OF THE VIEWING WINDOW.
 3. SERVICE PANEL SHALL BE INSTALLED WITH CUSTOM MOUNTING BRACKET TO OFFSET SERVICE PANEL ON POLE TO PREVENT CONFLICT WITH PUSHBUTTON. CONTRACTOR SHALL SUBMIT SERVICE PANEL SHOP DRAWINGS FOR REVIEW PRIOR TO ORDERING. REFER TO DETAIL 2

ELECTRICAL DRAWING: E07
33995

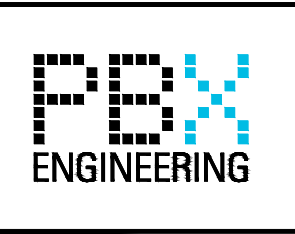
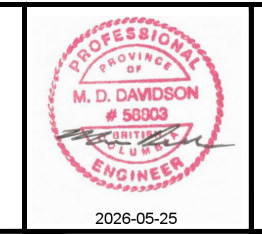
ISSUED FOR TENDER DESIGN NO.

File: P:\24883_L_Esquimalt Rd. AT Improvements & UG Renewals\Drawings\CAD\Project 2E07_1.dwg | PLOT DATE: 20260525

| REV NO | REVISIONS | DATE | DRAWN | APPR'D |
|--------|-------------------|----------|-------|--------|
| 1 | ISSUED FOR TENDER | 26/05/25 | PBX | MD |



STREET LIGHTING & SIGNALS
ELEVATIONS - NELSON STREET AT ESQUIMALT ROAD

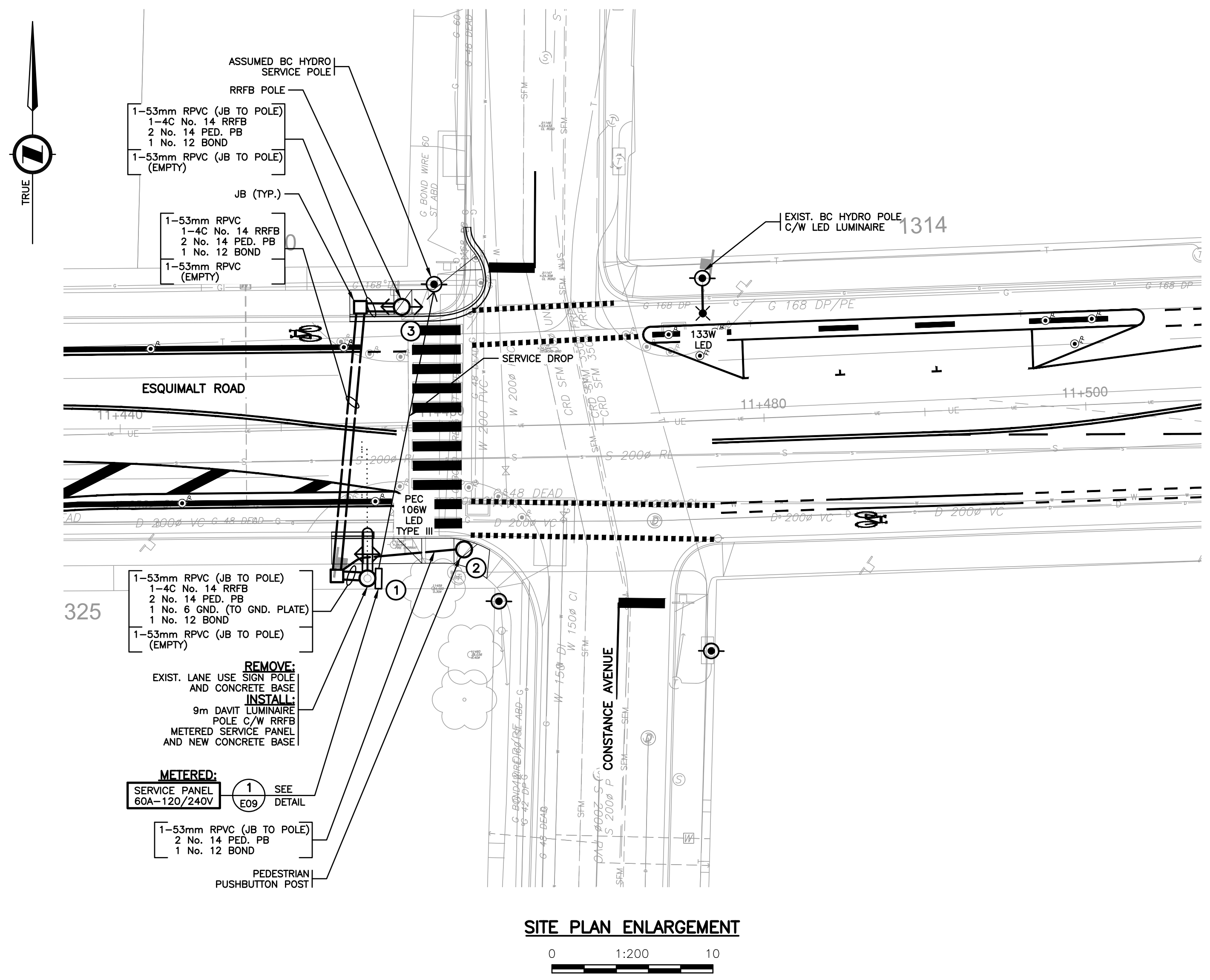


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|------------|----------|-------------|----------|----------|
| DRAWN BY | PBX | DESIGN BY | AJB | 7 OF 17 |
| CHECKED BY | TN | APPROVED BY | MD | REV. 1 |

| INTERSECTION LIGHTING DESIGN CRITERIA | | |
|---|---|----------------------------------|
| INTERSECTION NAME | ESQUIMALT ROAD AT CONSTANCE AVENUE | |
| ROAD CLASSIFICATION | MAJOR/LOCAL | |
| PEDESTRIAN CONFLICT | MEDIUM | |
| WATTAGE /TYPE /LUMINAIRE MANUFACTURER /MODEL NUMBER | 106W LED /TYPE III /AMERICAN ELECTRIC /ATB0 P303 MVOLT R3 3K 133W LED /TYPE III /AMERICAN ELECTRIC /ATB2 40BLEDE10 MVOLT R3 4K | |
| ILLUMINATION LEVEL (AVG.) | RECOMMENDED ILLUMINANCE 20.0 LUX | ACHIEVED ILLUMINANCE 22.7 LUX |
| UNIFORMITY RATIO (AVG:MIN) | 3.0:1 | 3.0:1 |

NOTE: BASED ON IESNA RP-8-25 (TABLE 12-1)

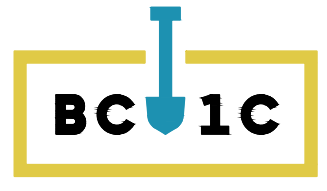


SITE PLAN ENLARGEMENT
 0 1:200 10

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**ELECTRICAL DRAWING: E08
 33995**



CHECK BEFORE YOU DIG
 CONTRACTOR SHALL CONFIRM THE LOCATIONS
 OF ALL UNDERGROUND UTILITIES.

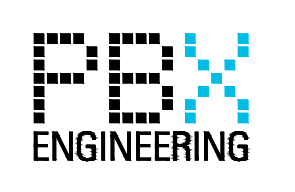
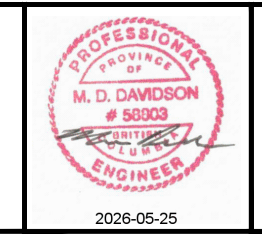
SEE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS
 (MMCD) - LATEST EDITION AND TOWNSHIP OF
 ESQUIMALT SUPPLEMENTAL SPECIFICATIONS FOR
 APPLICABLE STANDARDS AND DRAWINGS

ISSUED FOR TENDER DESIGN NO.

| REV NO | REVISIONS | DATE | DRAWN | APPR'D |
|--------|-------------------|----------|-------|--------|
| 1 | ISSUED FOR TENDER | 26/05/25 | PBX | MD |



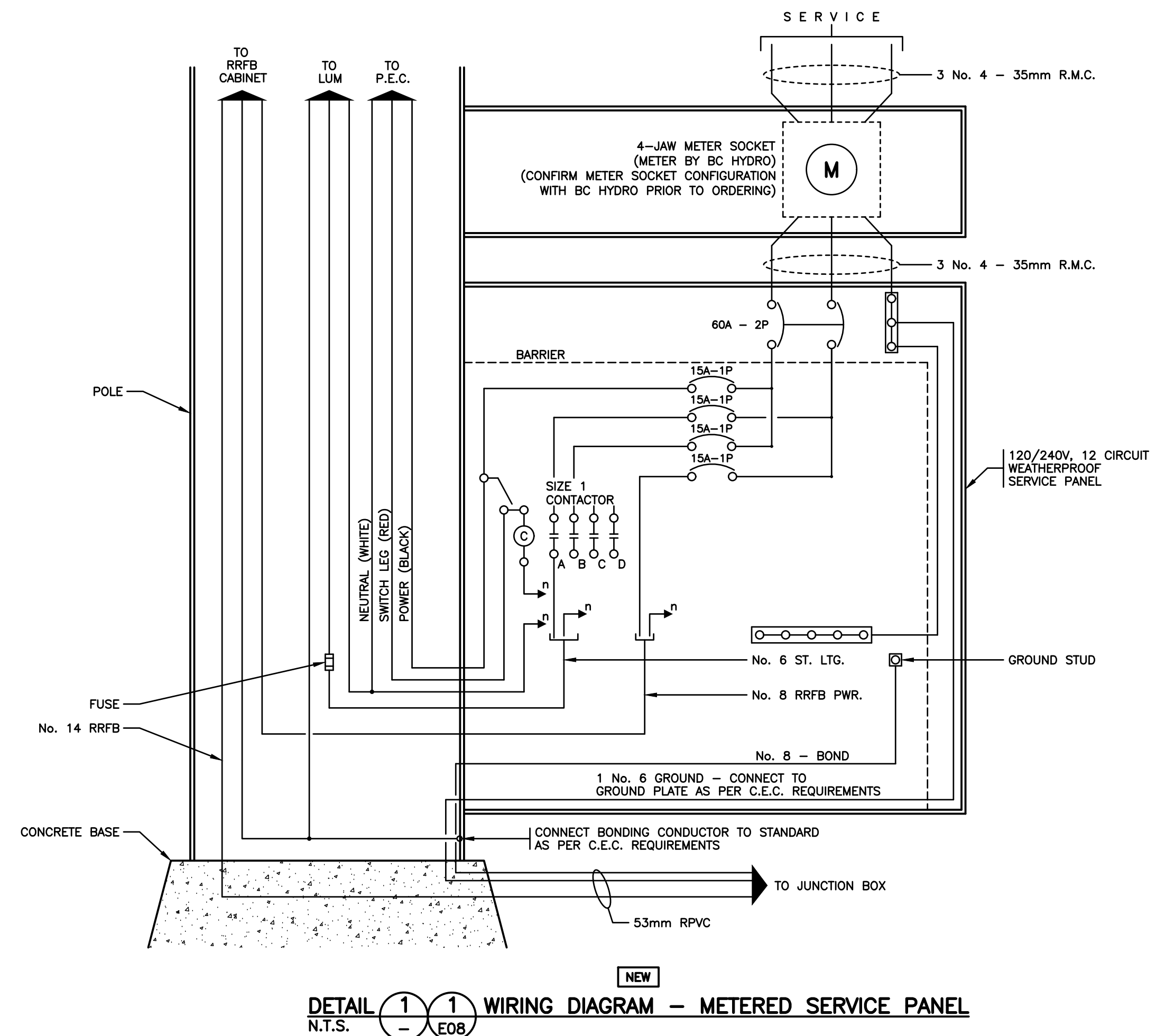
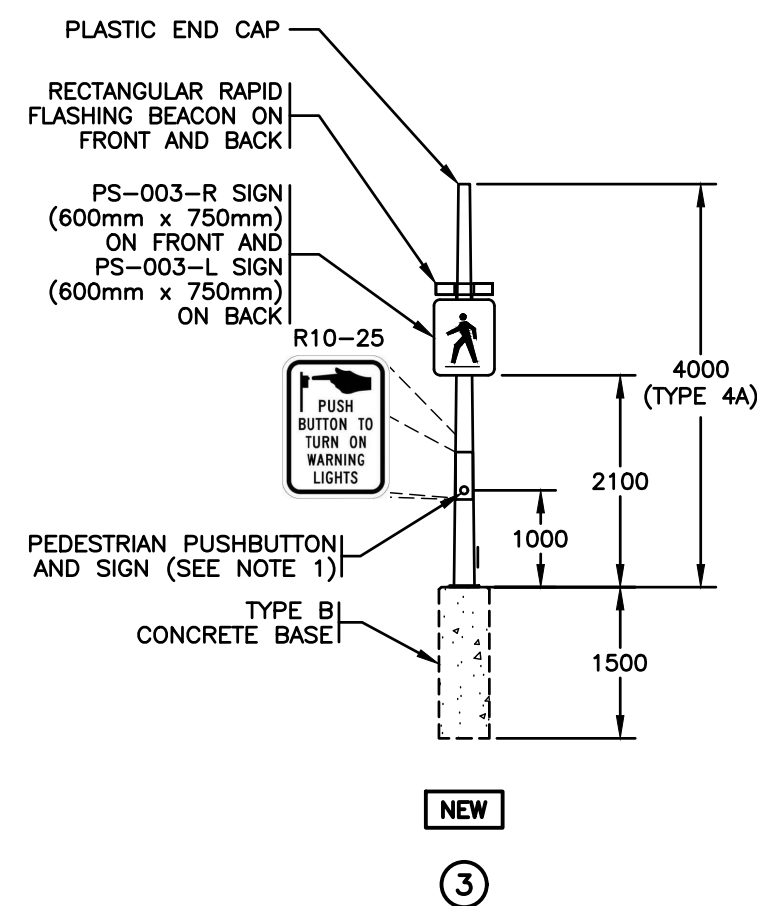
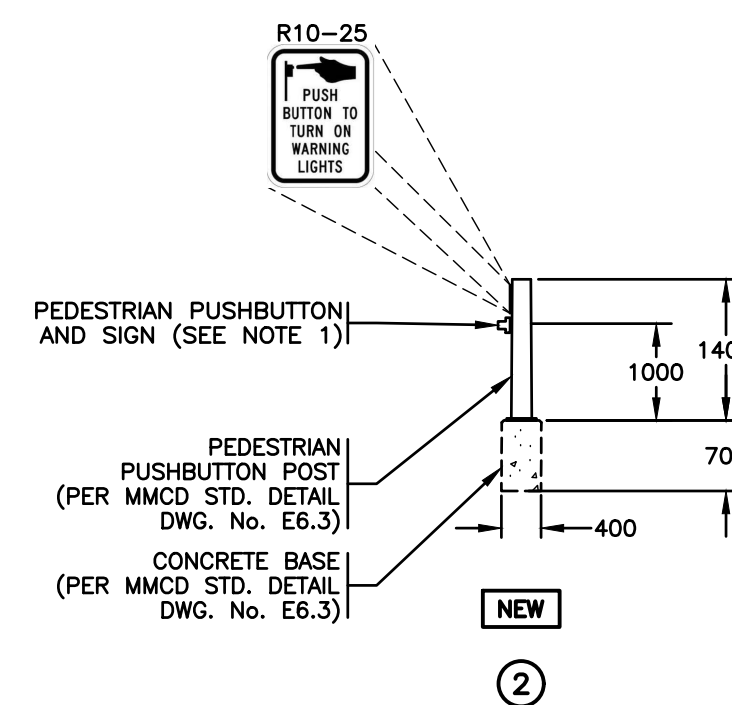
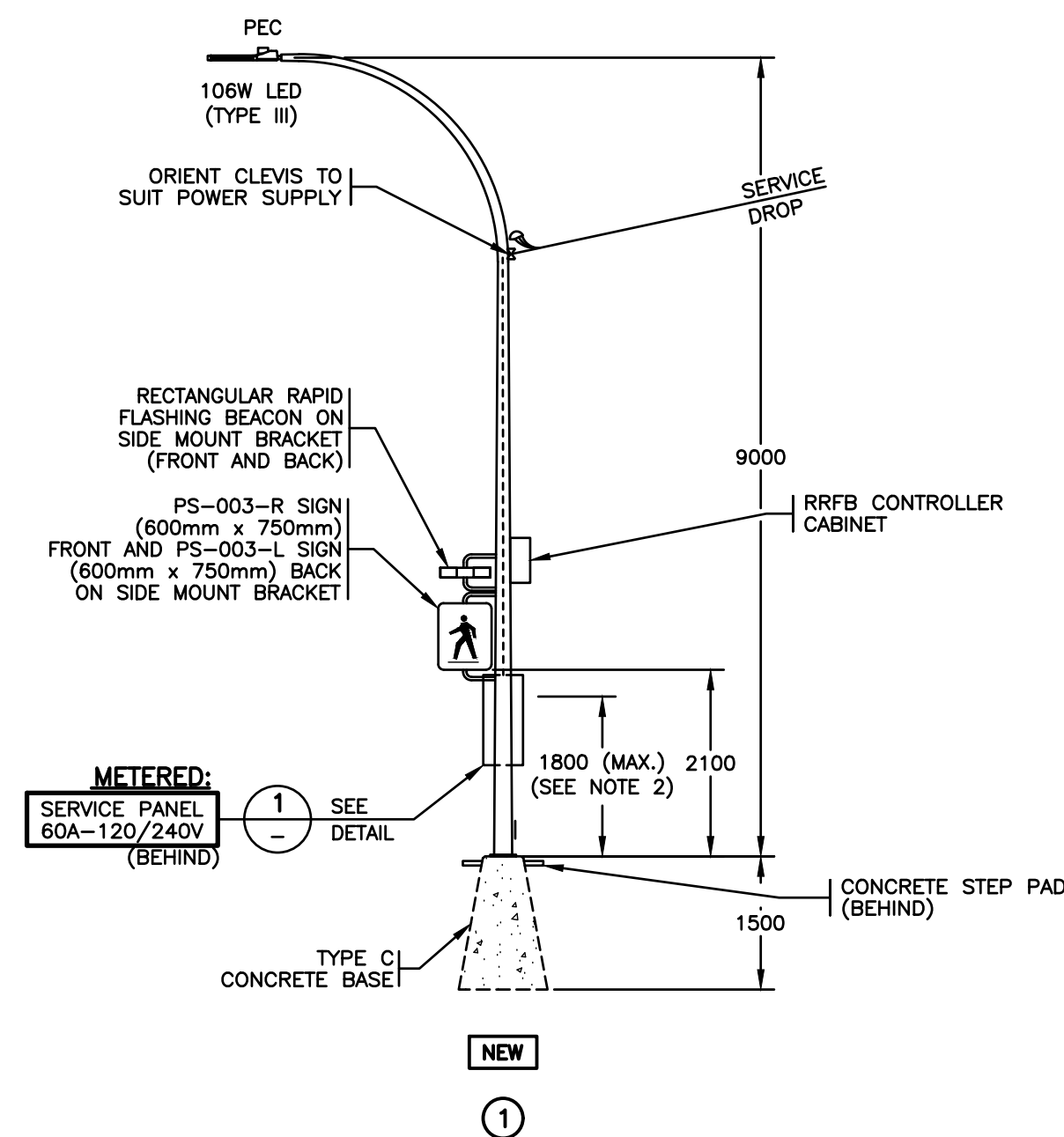
STREET LIGHTING & SIGNALS
SITE PLAN ENLARGEMENT - CONSTANCE AVENUE AT ESQUIMALT ROAD



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|------------|----------|-------------|----------|----------|
| DRAWN BY | PBX | DESIGN BY | AJB | 8 |
| CHECKED BY | TN | APPROVED BY | MD | 17 |
| | | | | REV. 1 |

File: P:\248831_Esquimalt Rd. AT Improvements & UG Renewals\Drawings\ACAD\Project 2\ERL_1.dwg | PLOT DATE: 20260525



NOTES:

1. PEDESTRIAN PUSHBUTTON SHALL BE POLARA INX AUDIBLE PUSHBUTTON. AUDIBLE MESSAGE SHALL BE "YELLOW LIGHTS ARE FLASHING".
2. SERVICE METERS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 1500mm AND A MAXIMUM HEIGHT OF 1800mm TO THE CENTER OF THE VIEWING WINDOW.

SEE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) - LATEST EDITION AND TOWNSHIP OF ESQUIMALT SUPPLEMENTAL SPECIFICATIONS FOR APPLICABLE STANDARDS AND DRAWINGS

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ELECTRICAL DRAWING: E09

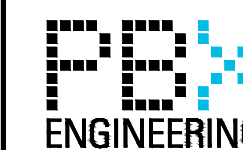
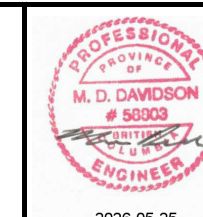
33995

ISSUED FOR TENDER DESIGN NO.

| REV NO | REVISIONS | DATE | DRAWN | APPR'D |
|--------|-------------------|----------|-------|--------|
| 1 | ISSUED FOR TENDER | 26/05/25 | PBX | MD |



STREET LIGHTING & SIGNALS
ELEVATIONS - CONSTANCE AVENUE AT ESQUIMALT ROAD

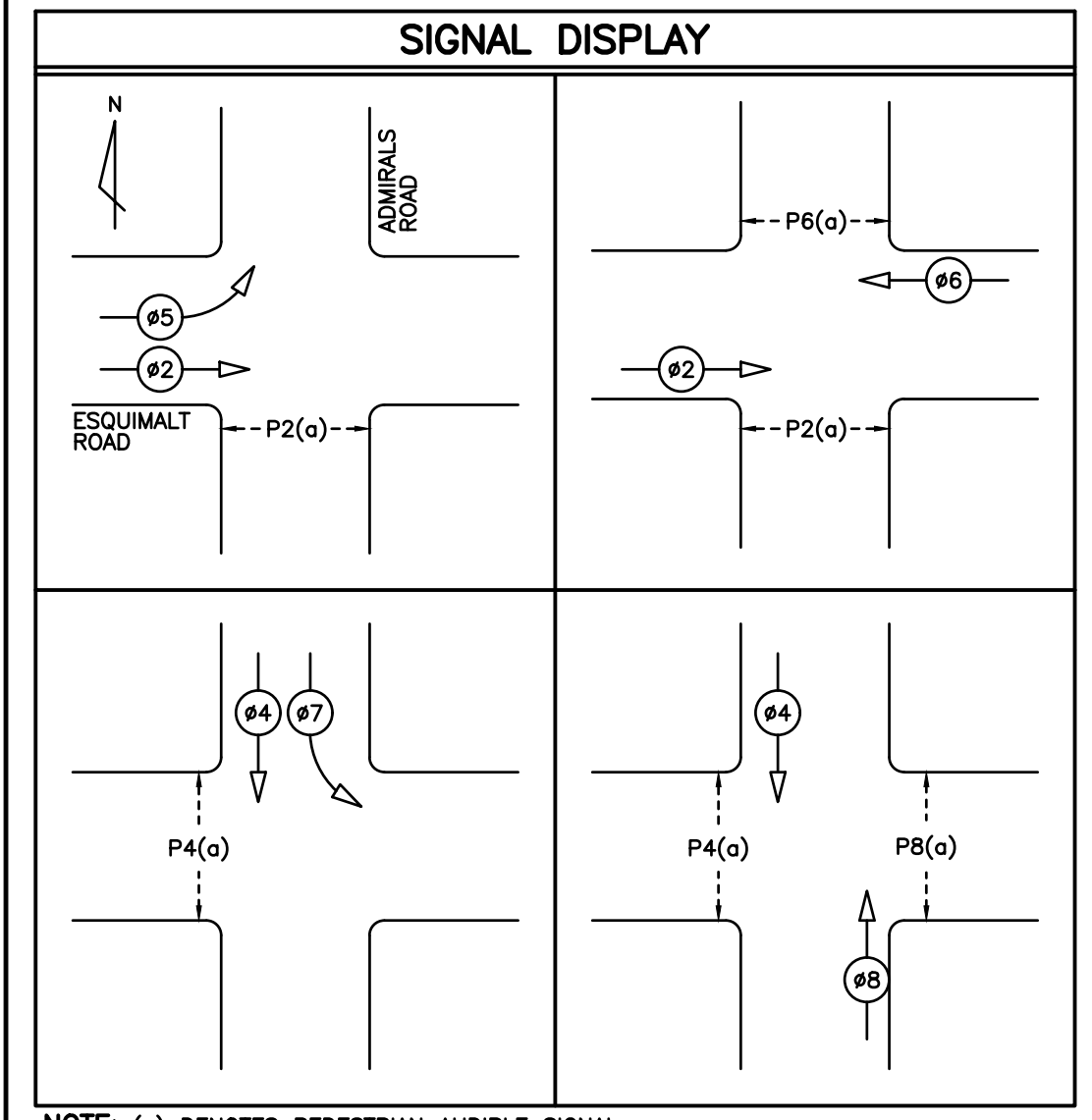


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| SCALE | AS NOTED | DATE | 26/05/25 | DWG. NO. |
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| CHECKED BY | TN | APPROVED BY | MD | 17 |
| | | | | REV. 1 |

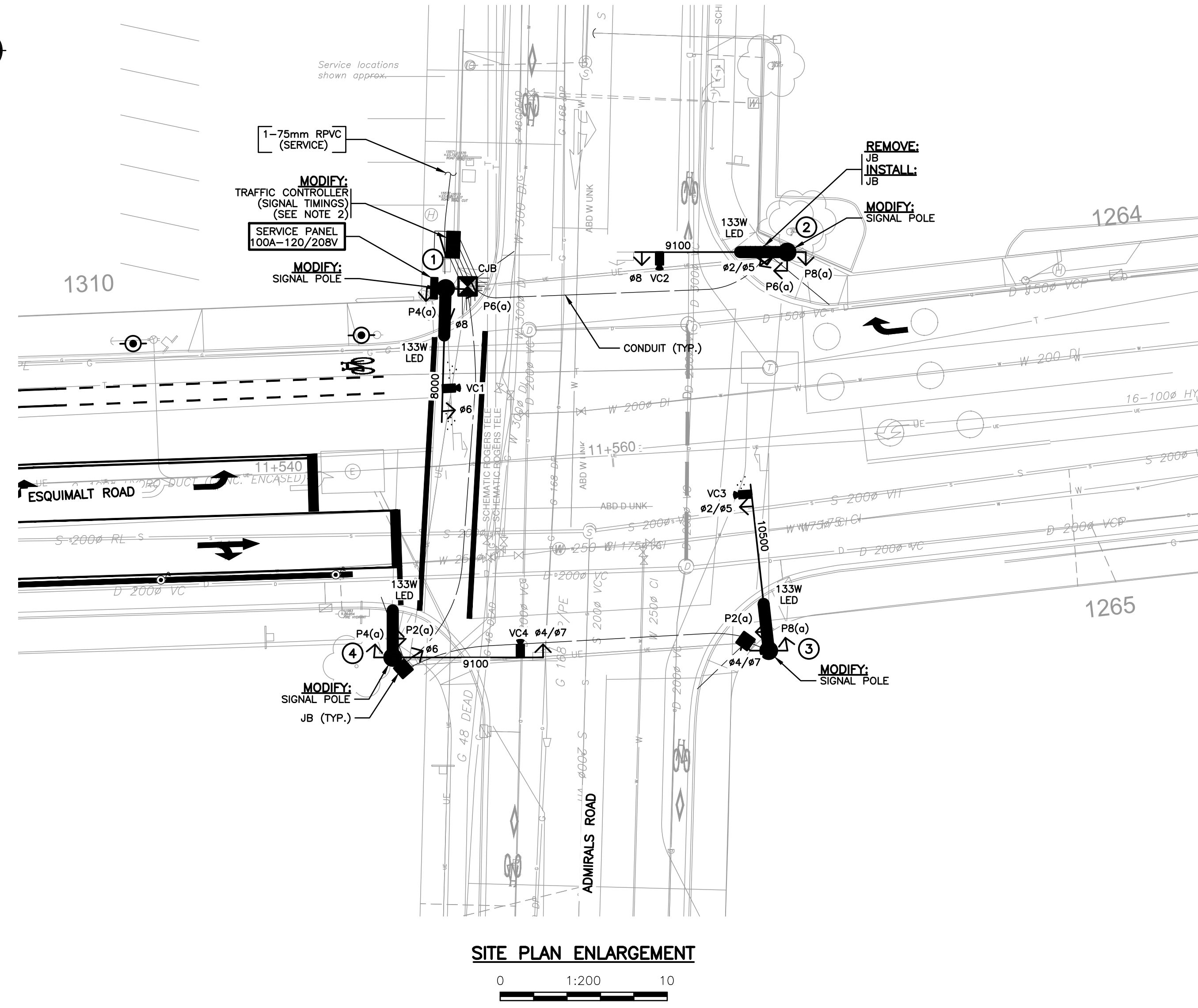
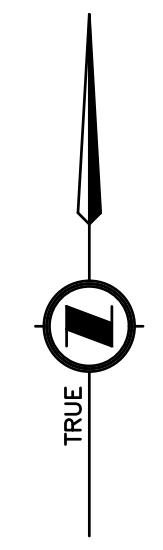
| INTERSECTION LIGHTING DESIGN CRITERIA | | |
|--|--|----------------------------------|
| INTERSECTION NAME | ESQUIMALT ROAD AT ADMIRALS ROAD | |
| ROAD CLASSIFICATION | MAJOR/MAJOR | |
| PEDESTRIAN CONFLICT | MEDIUM | |
| WATTAGE/TYPE/ LUMINAIRE MANUFACTURER/ MODEL NUMBER | 133W LED/TYPE III/AMERICAN ELECTRIC/ATB2 40BLEDE10 MVOLT R3 4K | |
| ILLUMINATION LEVEL (AVG.) | RECOMMENDED ILLUMINANCE 26.0 LUX | ACHIEVED ILLUMINANCE 38.1 LUX |
| UNIFORMITY RATIO (AVG:MIN) | 3.0:1 | 1.7:1 |

NOTE: BASED ON IESNA RP-8-25 (TABLE 12-1)



NOTE: (a) DENOTES PEDESTRIAN AUDIBLE SIGNAL

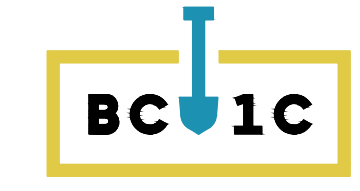
| VIDEO DETECTOR CAMERA DETAILS | | |
|---------------------------------------|-------|--------------------|
| CABLE DESCRIPTION | LABEL | VEHICLE MOVEMENT |
| VIDEO DETECTOR CAMERA No. 1 ON POLE 1 | VC1 | WESTBOUND (#6) |
| VIDEO DETECTOR CAMERA No. 2 ON POLE 2 | VC2 | NORTHBOUND (#8) |
| VIDEO DETECTOR CAMERA No. 3 ON POLE 2 | VC3 | EASTBOUND (#2/#5) |
| VIDEO DETECTOR CAMERA No. 4 ON POLE 3 | VC4 | SOUTHBOUND (#4/#7) |



| CONDUCTOR COLOUR CODE | | |
|-----------------------|----------------|----------------------|
| ITEM | SIGNAL SECTION | CONDUCTOR COLOUR |
| #2 | RED | RED |
| | YELLOW | YELLOW |
| #4 | YELLOW | RED |
| | GREEN | BROWN |
| #5 | GREEN | BLUE |
| | ARROW | BLUE (WHITE T.T.) |
| #6 | RED | RED |
| | YELLOW | YELLOW (RED T.T.) |
| #7 | GREEN | BLUE |
| | ARROW | BLUE (WHITE T.T.) |
| #8 | RED | RED |
| | YELLOW | BROWN (ORANGE T.T.) |
| P2(a) | DON'T WALK | YELLOW |
| | WALK | BLUE |
| P4(a) | DON'T WALK | BROWN |
| | WALK | BLUE |
| P6(a) | DON'T WALK | PURPLE (YELLOW T.T.) |
| | WALK | PURPLE (YELLOW T.T.) |
| P8(a) | DON'T WALK | BROWN (ORANGE T.T.) |
| | WALK | BLUE |
| CONTROLLER POWER | SWITCH LEG | RED |
| | POWER | BLACK |
| LUMINAIRE CCT. A | | RED |
| | | BLACK |
| LUMINAIRE CCT. B | | BLACK |
| | | BLUE |
| LUMINAIRE CCT. C | | RED |
| | | BLACK |
| PHOTOELECTRIC CELL | SWITCH LEG | RED |
| | POWER | BLACK |
| NEUTRAL | | WHITE |
| GROUND/BOND | | GREEN |

NOTE: T.T. DENOTES TAPE TRACER
(a) DENOTES PEDESTRIAN AUDIBLE SIGNAL

- NOTES:**
- CONTRACTOR SHALL REMOVE ALL REDUNDANT EXISTING WIRING IN ALL JUNCTION BOXES AND POLE HANDHOLES AS REQUIRED.
 - CONTRACTOR SHALL ADD LATEST SIGNAL TIMING SHEET AND DESIGN DRAWINGS TO INSIDE OF TRAFFIC CONTROLLER CABINET.



CHECK BEFORE YOU DIG
CONTRACTOR SHALL CONFIRM THE LOCATIONS OF ALL UNDERGROUND UTILITIES.

SEE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) - LATEST EDITION AND TOWNSHIP OF ESQUIMALT SUPPLEMENTAL SPECIFICATIONS FOR APPLICABLE STANDARDS AND DRAWINGS

ALL EQUIPMENT IS EXISTING
UNLESS NOTED OTHERWISE

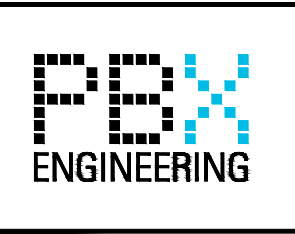
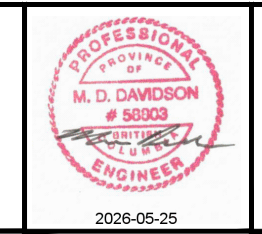
**ISSUED FOR TENDER
NOT FOR CONSTRUCTION**

**ELECTRICAL DRAWING: E10
33995**

| REV NO | REVISIONS | DATE | DRAWN | APPR'D |
|--------|-------------------|----------|-------|--------|
| 1 | ISSUED FOR TENDER | 26/05/25 | PBX | MD |



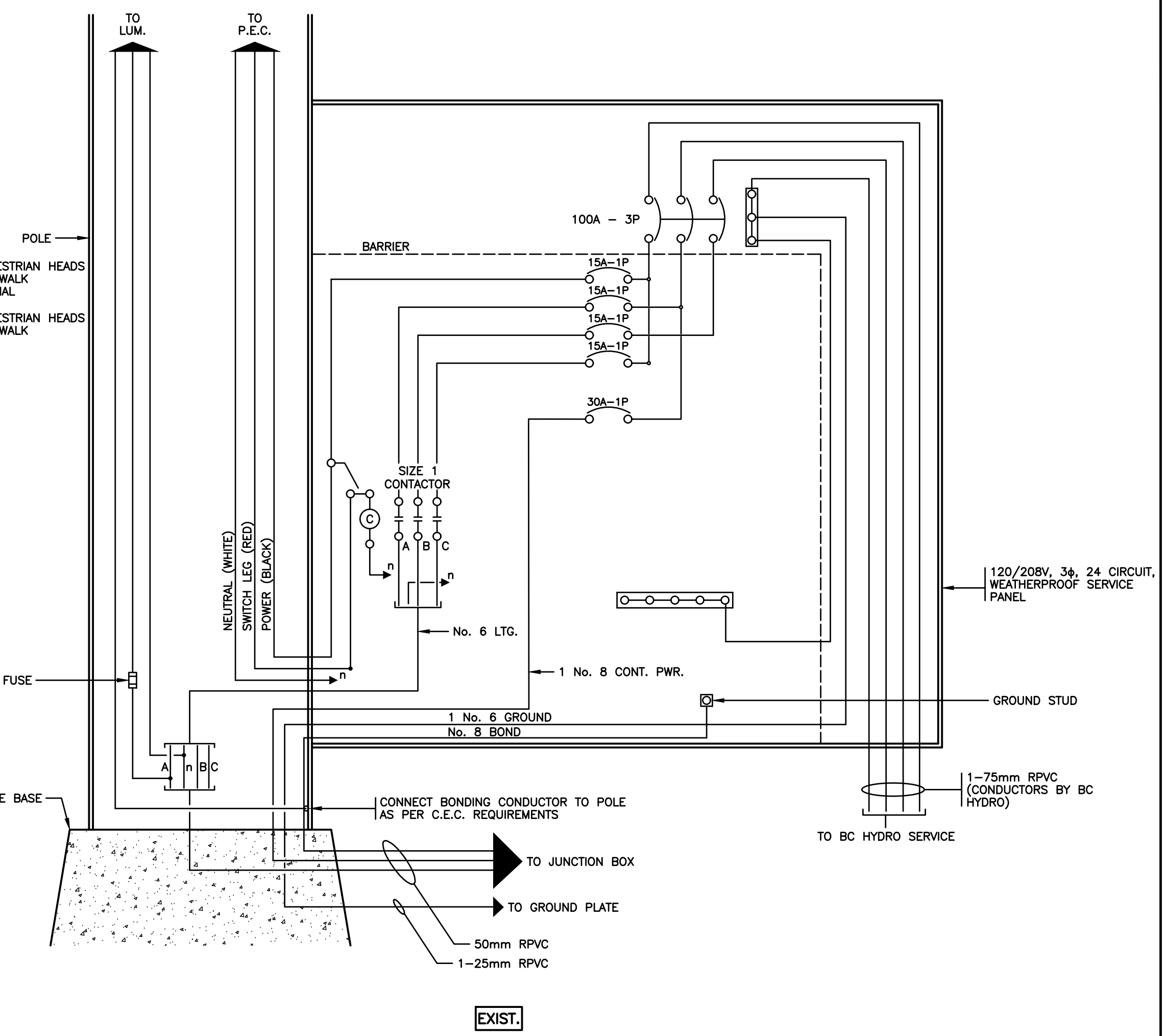
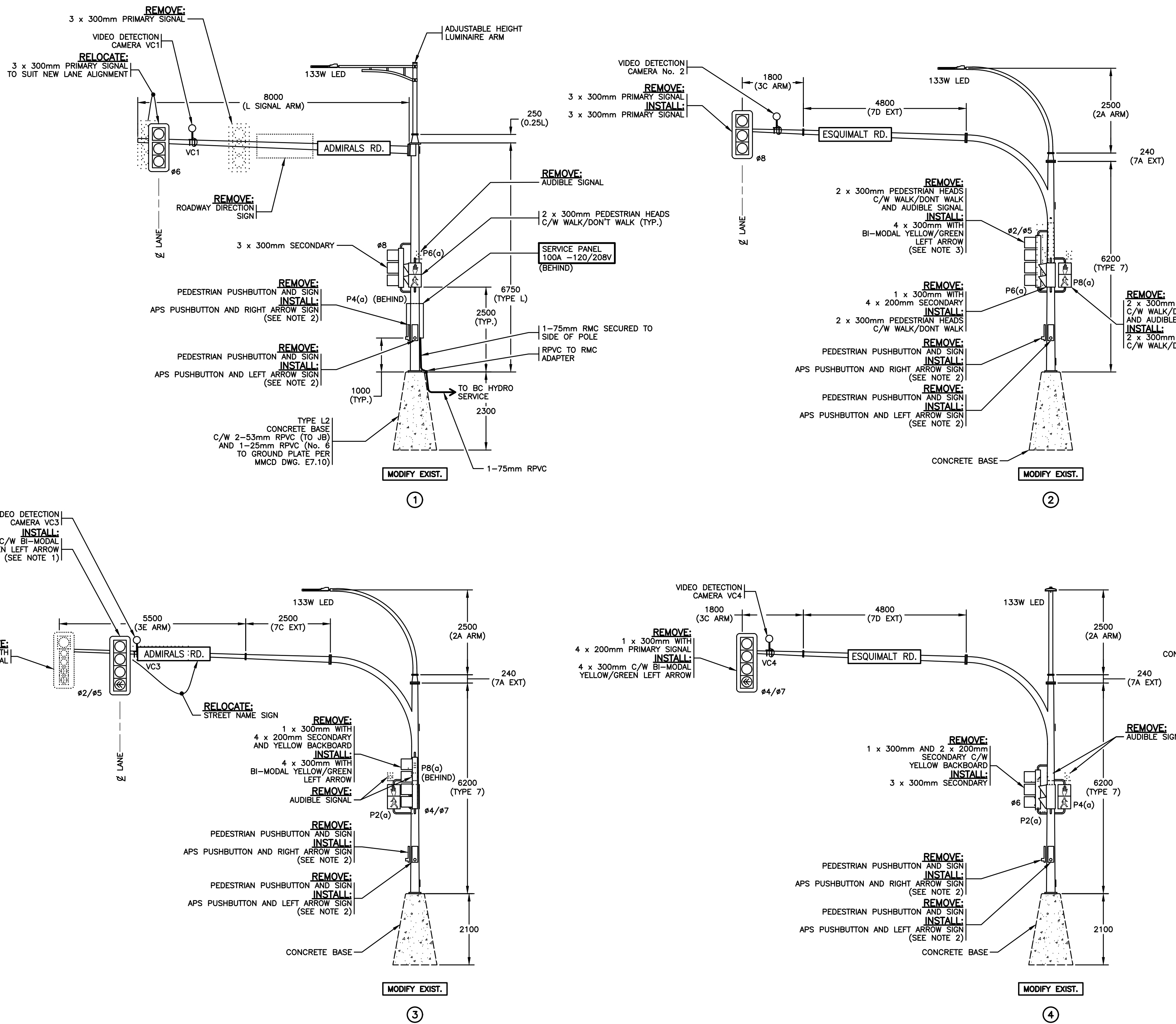
STREET LIGHTING & SIGNALS
SITE PLAN ENLARGEMENT - ADMIRALS ROAD AT ESQUIMALT ROAD



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|------------|----------|-------------|----------|----------|
| DRAWN BY | PBX | DESIGN BY | AJB | 10 |
| CHECKED BY | TN | APPROVED BY | MD | OF 17 |
| | | | | REV. 1 |

File: P:\24831_Esquimalt Rd. AT Improvements & UG Renewals\Drawings\CAD\Project 2\E10_1.dwg | PLOT DATE: 20260525



WIRING DIAGRAM - SERVICE PANEL (120/208V, 3Ø)
N.T.S.

ALL EQUIPMENT IS EXISTING
UNLESS NOTED OTHERWISE

ISSUED FOR TENDER
NOT FOR CONSTRUCTION

- NOTES:**
- CONTRACTOR SHALL INSTALL SIGNAL HEAD TO NOT CONFLICT WITH VIDEO DETECTION CAMERA.
 - PEDESTRIAN PUSHBUTTON SHALL BE POLARA INS AUDIBLE PUSHBUTTON.
 - SECONDARY SIGNAL HEAD SHALL BE INSTALLED ON ANGULAR FACE OF POLE 45 DEGREES TO BACK OF POLE. CONTRACTOR SHALL CONTACT PBX FOR FIELD REVIEW PRIOR TO INSTALLATION.



SEE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) - LATEST EDITION AND TOWNSHIP OF ESQUIMALT SUPPLEMENTAL SPECIFICATIONS FOR APPLICABLE STANDARDS AND DRAWINGS

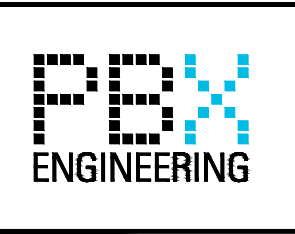
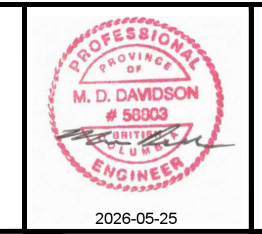
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33995

| REV NO | REVISIONS | DATE | DRAWN | APPR'D |
|--------|-------------------|----------|-------|--------|
| 1 | ISSUED FOR TENDER | 26/05/25 | PBX | MD |



STREET LIGHTING & SIGNALS
ELEVATIONS - ADMIRALS ROAD AT ESQUIMALT ROAD

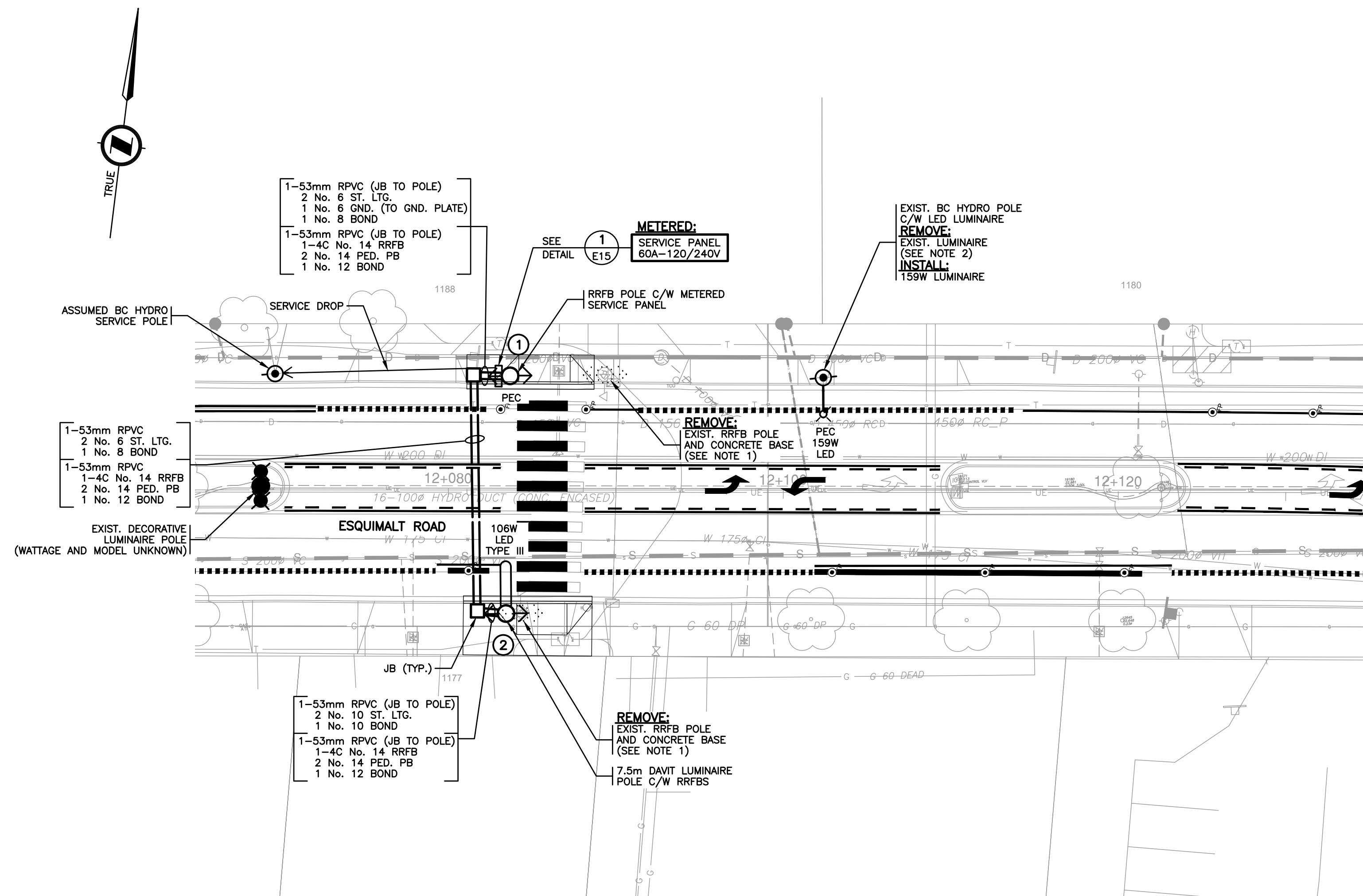


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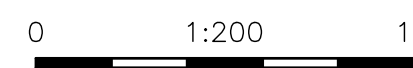
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|------------|----------|-------------|----------|----------|
| DRAWN BY | PBX | DESIGN BY | AJB | 11 |
| CHECKED BY | TN | APPROVED BY | MD | OF 17 |
| | | | | REV. 1 |

| PEDESTRIAN CROSSWALK LIGHTING DESIGN CRITERIA | | |
|--|---|----------------------|
| ROADWAY LOCATION | PEDESTRIAN CROSSWALK AT 1188 ESQUIMALT ROAD | |
| PEDESTRIAN CONFLICT | MEDIUM | |
| WATTAGE/TYPE/ LUMINAIRE MANUFACTURER/ MODEL NUMBER | 106W LED/TYPE III/AMERICAN ELECTRIC/ATBO P303 MVOLT R3 3K 159W LED/TYPE II/AMERICAN ELECTRIC/ATBO P453 MVOLT R2 3K | |
| VERTICAL CROSSWALK ILLUMINANCE (AVG.) | RECOMMENDED ILLUMINANCE | ACHIEVED ILLUMINANCE |
| | 20.0 LUX | 20.3 LUX |

NOTE: BASED ON IESNA RP-8-25 SECTION 12.6.4



SITE PLAN ENLARGEMENT



ALL EQUIPMENT IS PROPOSED
UNLESS NOTED OTHERWISE

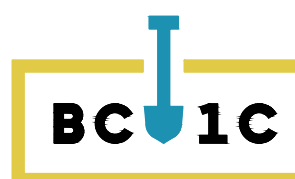
ISSUED FOR TENDER
NOT FOR CONSTRUCTION

ELECTRICAL DRAWING: E14

33995

NOTES:

1. RETURN RRFB AND SOLAR COMPONENTS TO ESQUIMALT PUBLIC WORKS YARD.
2. RETURN LED LUMINAIRE TO ESQUIMALT PUBLIC WORKS YARD.



CHECK BEFORE YOU DIG
CONTRACTOR SHALL CONFIRM THE LOCATIONS
OF ALL UNDERGROUND UTILITIES.

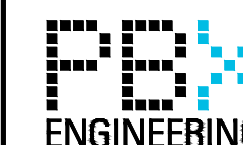
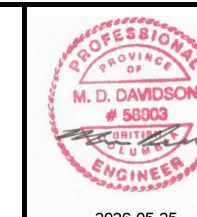
SEE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS
(MMCD) - LATEST EDITION AND TOWNSHIP OF
ESQUIMALT SUPPLEMENTAL SPECIFICATIONS FOR
APPLICABLE STANDARDS AND DRAWINGS

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| REV NO | REVISIONS | DATE | DRAWN | APPR'D |
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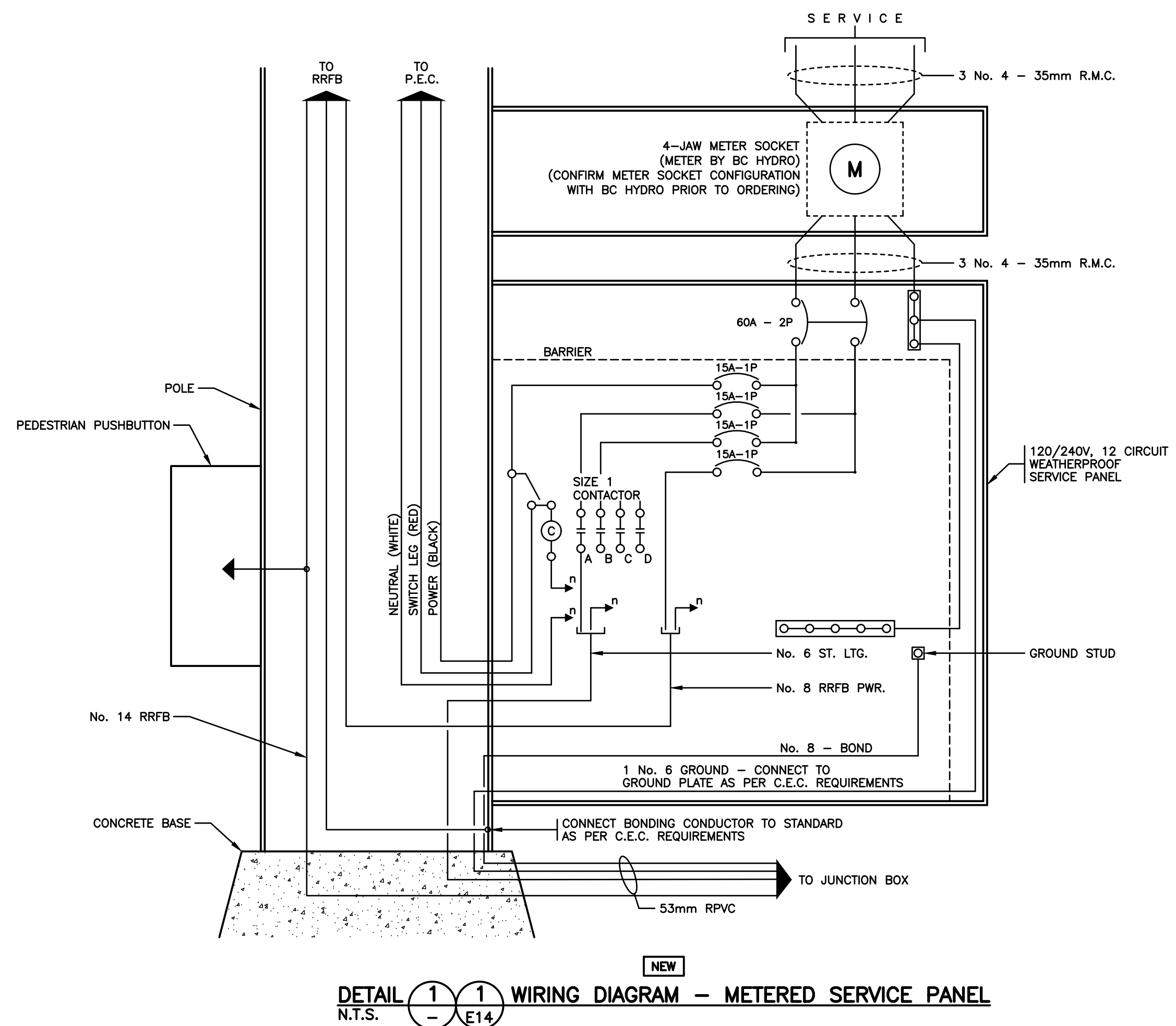
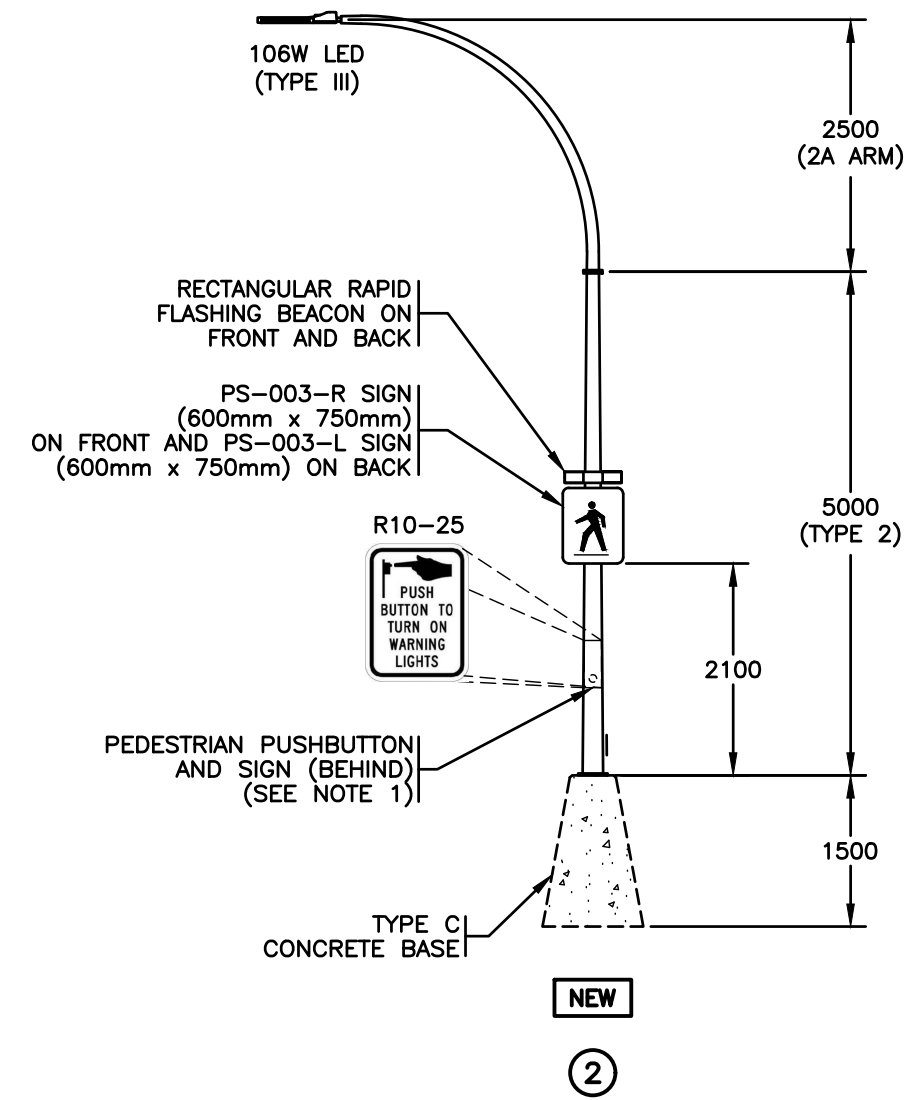
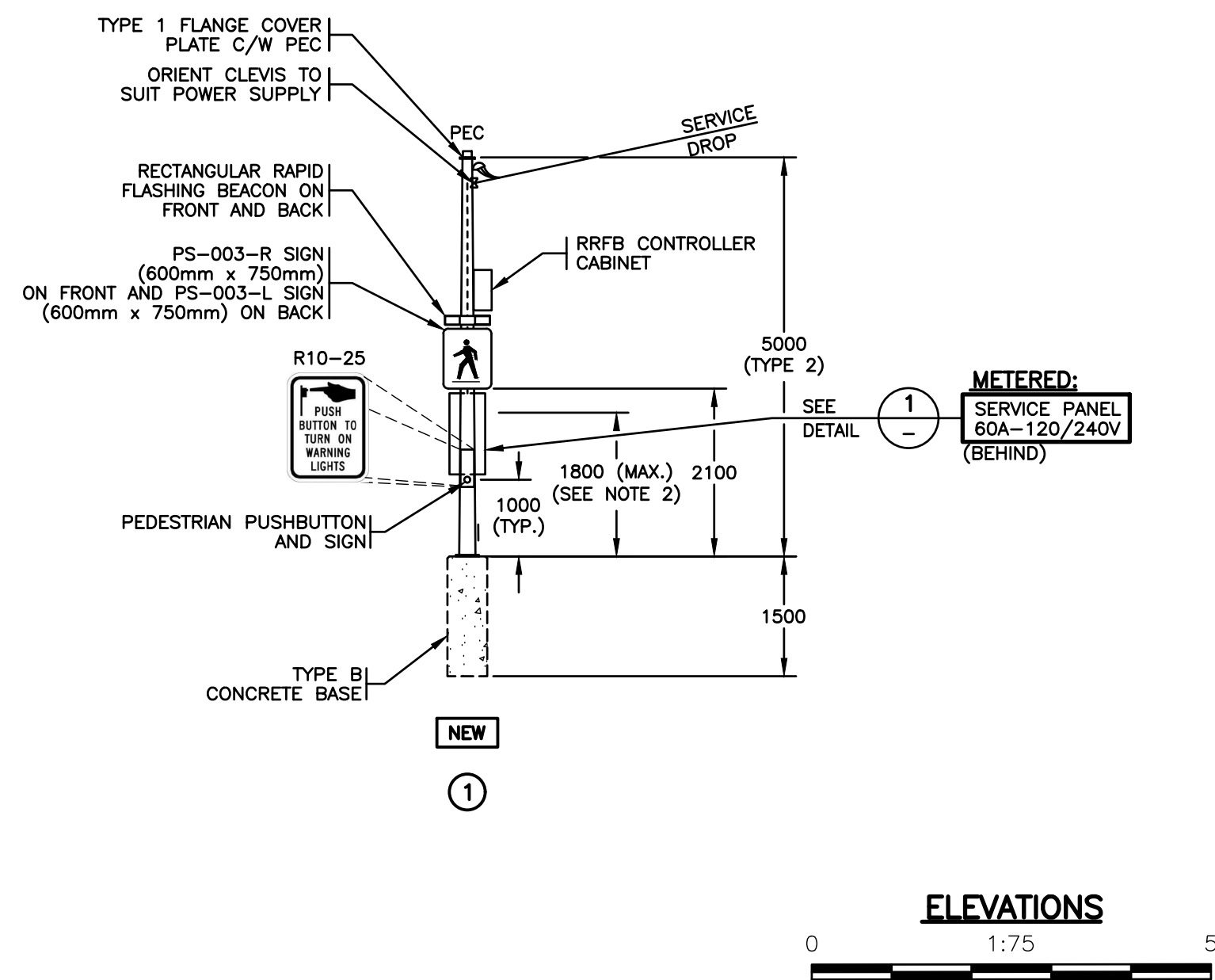


STREET LIGHTING & SIGNALS
SITE PLAN ENLARGEMENT - 1188 ESQUIMALT ROAD



PBX ENGINEERING Ltd.
Suite 201 - 1221 Broad St.
Victoria BC V8W 2A4
Tel 250.388.7222
www.pbxeng.com

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| DRAWN BY | PBX | DESIGN BY | AJB | 14 |
| CHECKED BY | TN | APPROVED BY | MD | OF 17 |
| | | | | REV. 1 |



DETAIL 1 1 WIRING DIAGRAM - METERED SERVICE PANEL
N.T.S. - E14

- NOTES:**
1. PEDESTRIAN PUSHBUTTON SHALL BE POLARA INS AUDIBLE PUSHBUTTON. AUDIBLE MESSAGE SHALL BE "YELLOW LIGHTS ARE FLASHING".
 2. SERVICE METERS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 1500mm AND A MAXIMUM HEIGHT OF 1800mm TO THE CENTER OF THE VIEWING WINDOW.

SEE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) - LATEST EDITION AND TOWNSHIP OF ESQUIMALT SUPPLEMENTAL SPECIFICATIONS FOR APPLICABLE STANDARDS AND DRAWINGS

ALL EQUIPMENT IS PROPOSED
UNLESS NOTED OTHERWISE

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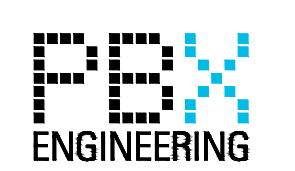
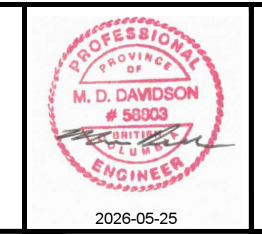
ELECTRICAL DRAWING: E15
33995

File: P:\24883_L_Esquamalt Rd. AT Improvements & UG Renewals\Drawings\CAD\Project 2\E15.dwg | PLOT DATE: 20260525

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STREET LIGHTING & SIGNALS
ELEVATIONS - 1188 ESQUIMALT ROAD

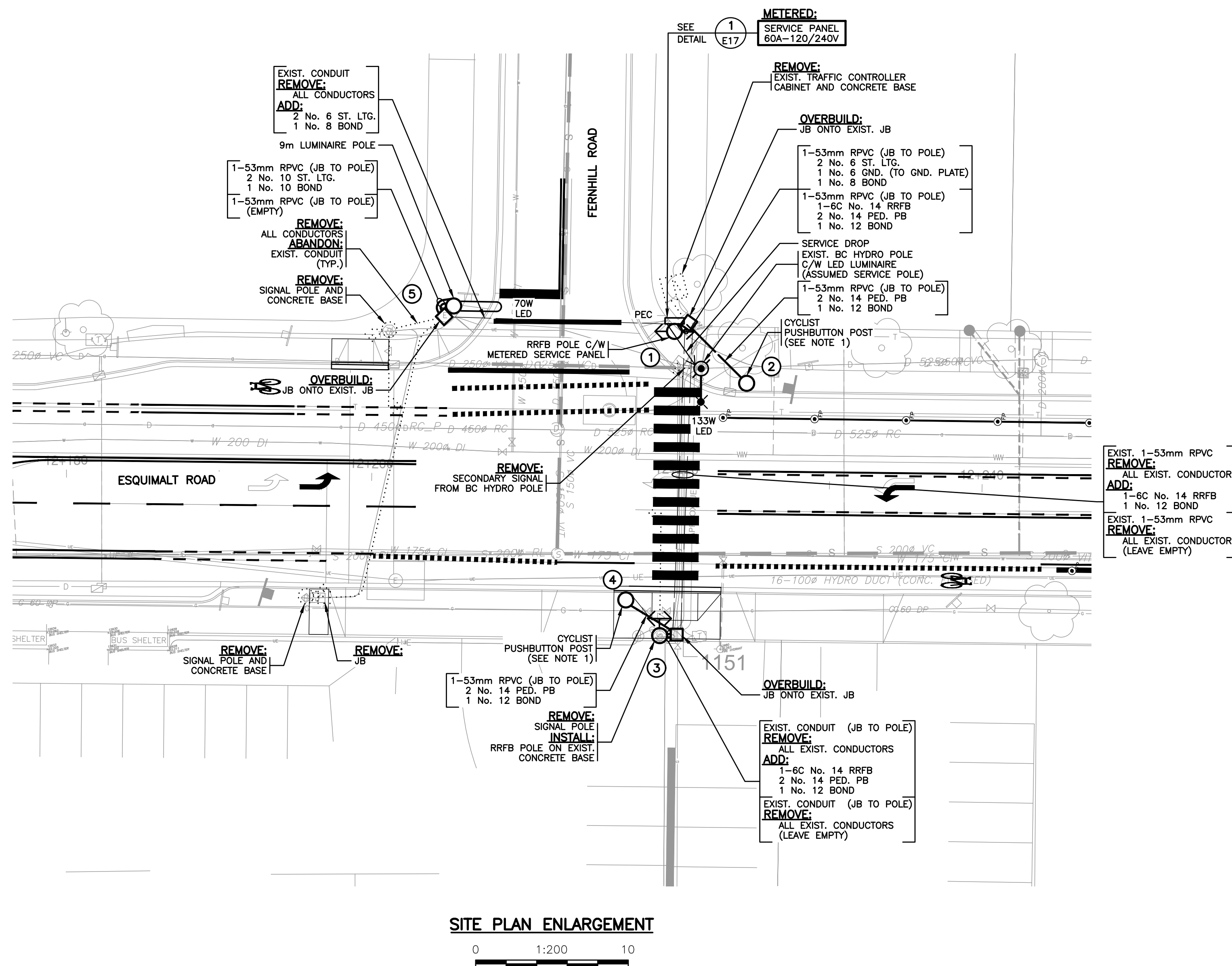


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| DRAWN BY | PBX | DESIGN BY | AJB | 15 |
| CHECKED BY | TN | APPROVED BY | MD | OF 17 |
| | | | | REV. 1 |

| INTERSECTION LIGHTING DESIGN CRITERIA | | |
|---|---|----------------------------------|
| INTERSECTION NAME | ESQUIMALT ROAD AT FERNHILL ROAD | |
| ROAD CLASSIFICATION | MAJOR/LOCAL | |
| PEDESTRIAN CONFLICT | MEDIUM | |
| WATTAGE /TYPE /LUMINAIRE MANUFACTURER /MODEL NUMBER | 70W LED /TYPE II /AMERICAN ELECTRIC /ATBO P203 MVOLT R2 3K 133W LED /TYPE III /AMERICAN ELECTRIC /ATB2 40BLEDE10 MVOLT R3 4K | |
| ILLUMINATION LEVEL (AVG.) | RECOMMENDED ILLUMINANCE 20.0 LUX | ACHIEVED ILLUMINANCE 20.2 LUX |
| UNIFORMITY RATIO (AVG:MIN) | 3.0:1 | 2.8:1 |

NOTE: BASED ON IESNA RP-8-251 (TABLE 12-1)



EXIST. 1-53mm RPVC
REMOVE:
ALL EXIST. CONDUCTORS
ADD:
1-6C No. 14 RRFB
1 No. 12 BOND
EXIST. 1-53mm RPVC
REMOVE:
ALL EXIST. CONDUCTORS
(LEAVE EMPTY)

ALL EQUIPMENT IS PROPOSED
UNLESS NOTED OTHERWISE

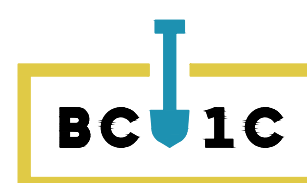
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ELECTRICAL DRAWING: E16

33995

NOTES:

1. CYCLIST PUSHBUTTON POLES SHALL BE INSTALLED 0.3m FROM FACE OF CURB. WHERE OFFSET CANNOT BE MET, CONTRACTOR SHALL INSTALL PUSHBUTTON EXTENSION. PUSHBUTTON EXTENSION SHALL BE PELCO SE-2169-PNC 12 INCH.



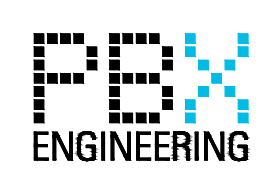
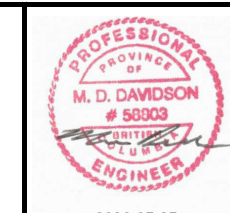
CHECK BEFORE YOU DIG
CONTRACTOR SHALL CONFIRM THE LOCATIONS
OF ALL UNDERGROUND UTILITIES.

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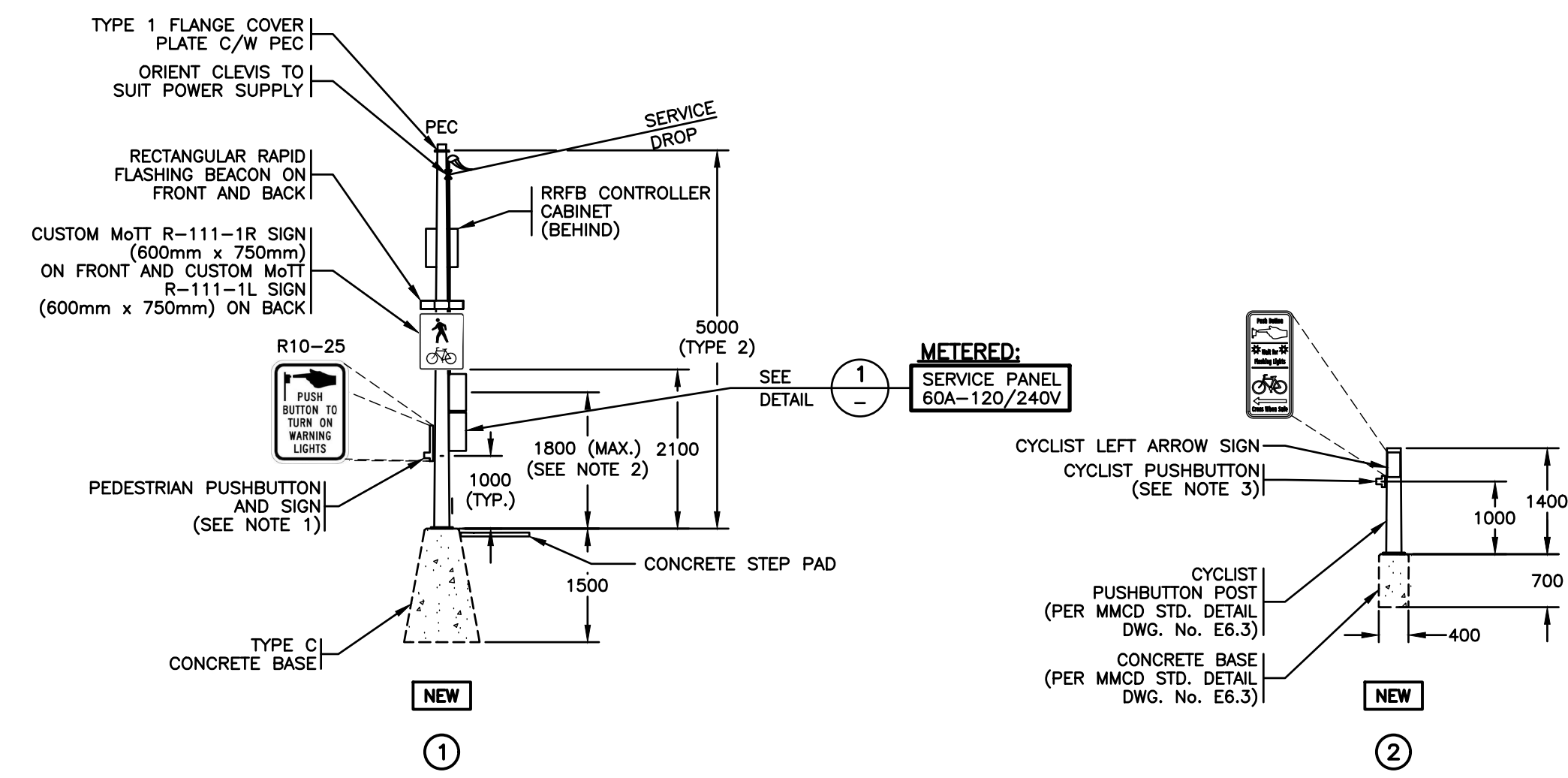
STREET LIGHTING & SIGNALS
SITE PLAN ENLARGEMENT - FERNHILL ROAD AT ESQUIMALT ROAD



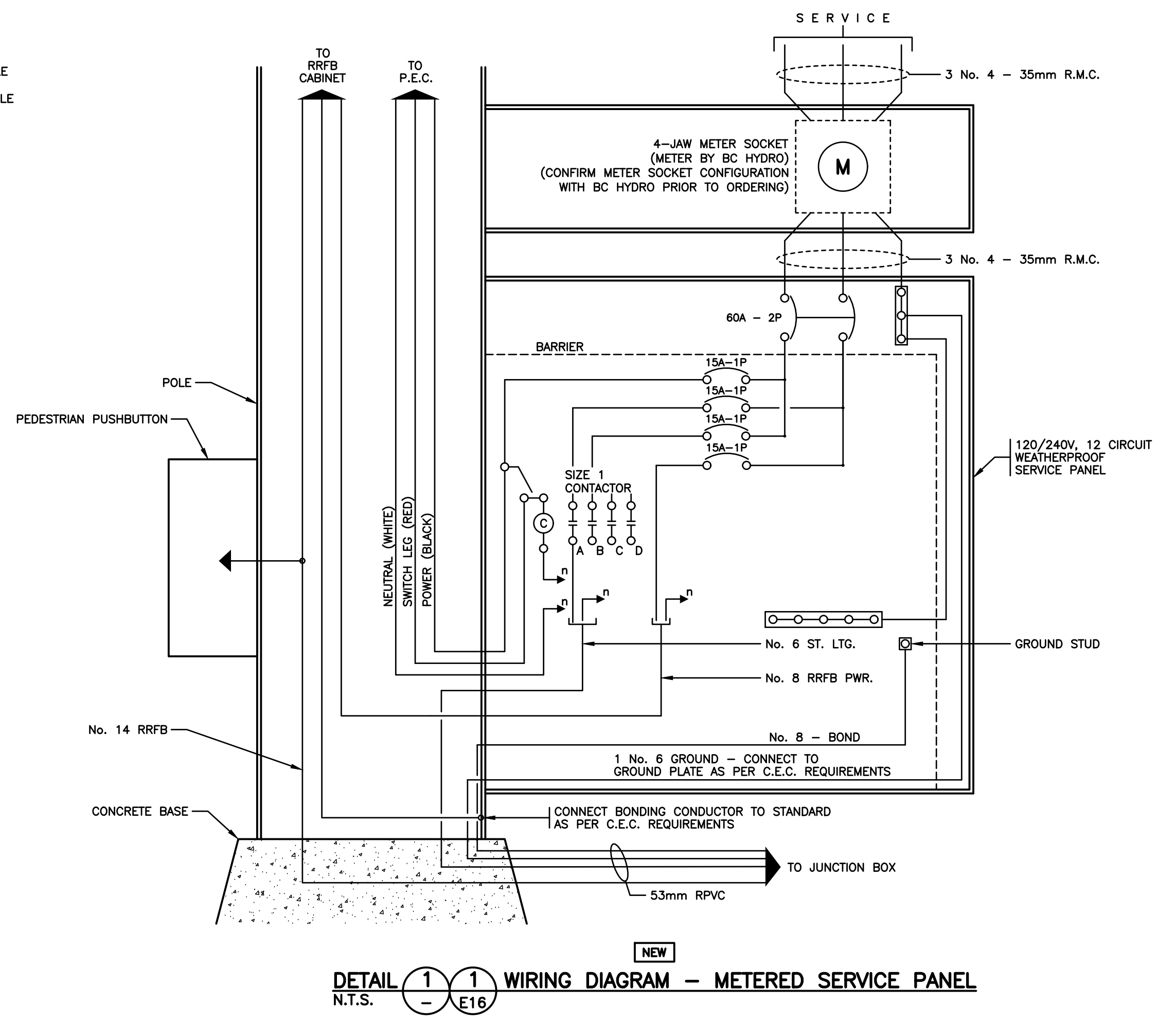
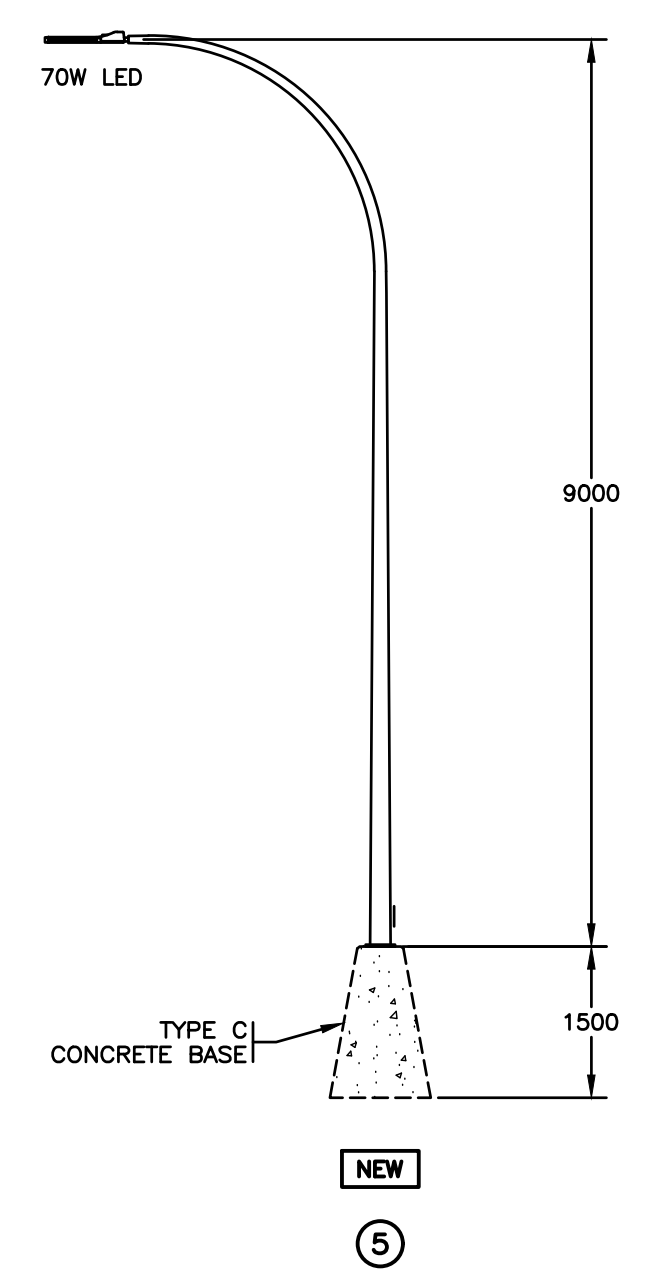
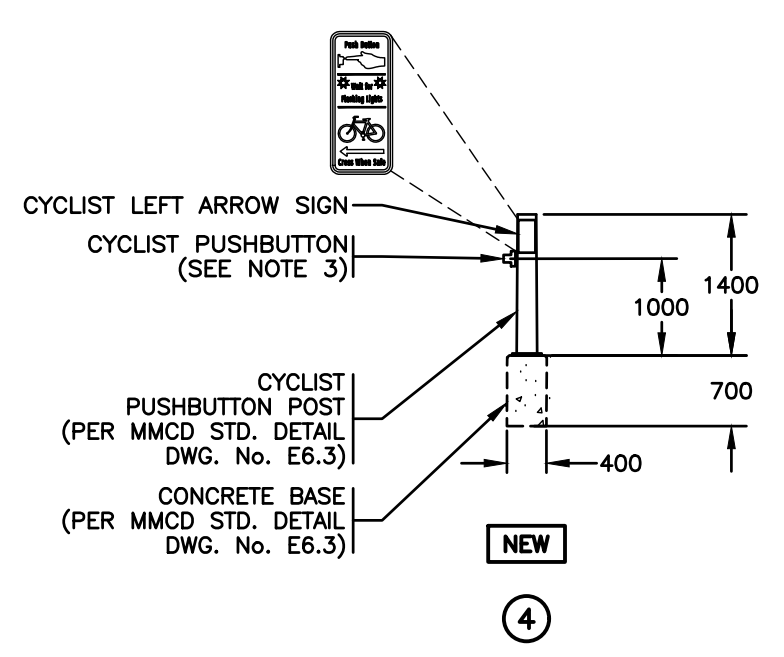
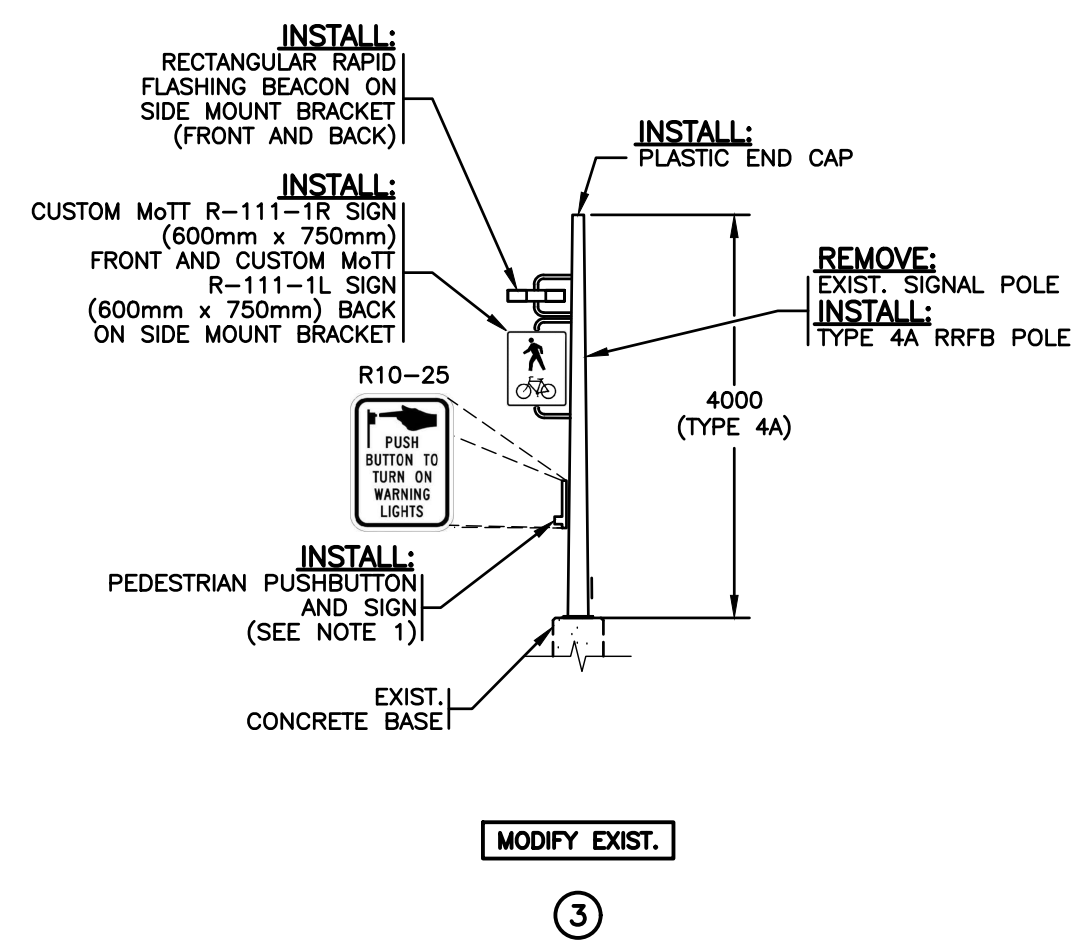
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ELEVATIONS
0 1:75 5



DETAIL 1 1 WIRING DIAGRAM - METERED SERVICE PANEL
N.T.S. E16

- NOTES:**
1. PEDESTRIAN PUSHBUTTON SHALL BE POLARA INX AUDIBLE PUSHBUTTON. AUDIBLE MESSAGE SHALL BE "YELLOW LIGHTS ARE FLASHING".
 2. SERVICE METERS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 1500mm AND A MAXIMUM HEIGHT OF 1800mm TO THE CENTER OF THE VIEWING WINDOW.
 3. CYCLIST PUSHBUTTON SHALL BE POLARA BULLDOG PUSHBUTTON.

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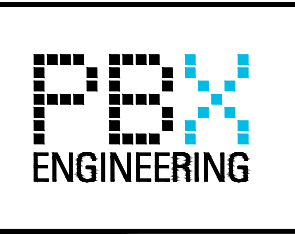
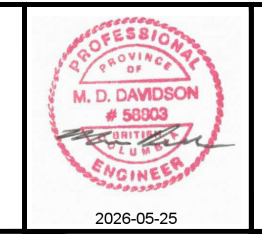
ELECTRICAL DRAWING: E17
33995

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STREET LIGHTING & SIGNALS
ELEVATIONS - FERNHILL ROAD AT ESQUIMALT ROAD



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| CHECKED BY | TN | APPROVED BY | MD | 17 |
| | | | | REV. 1 |