

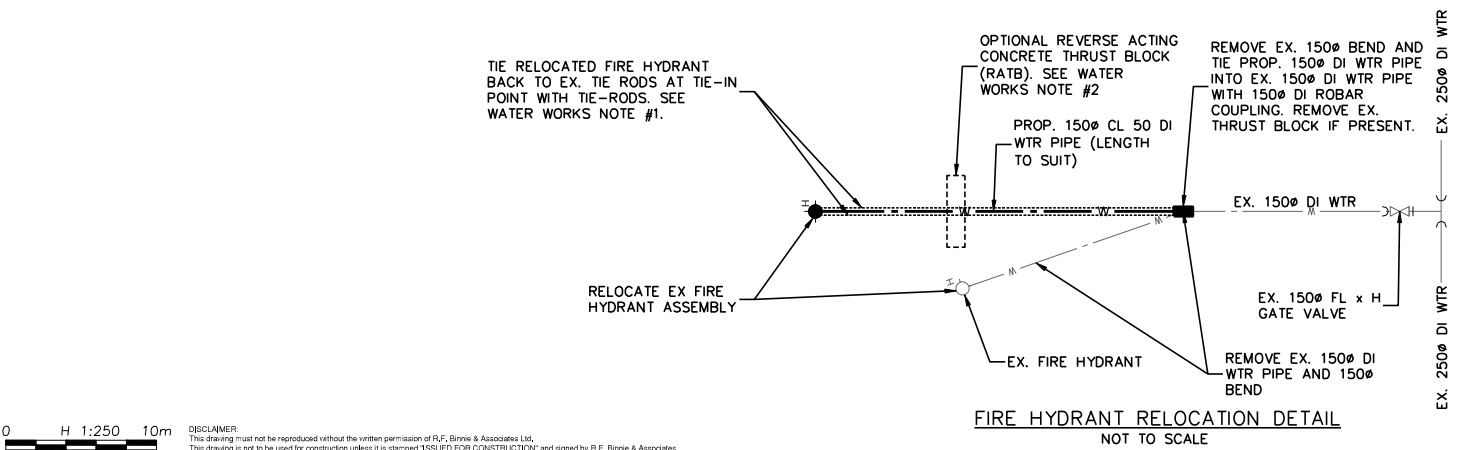
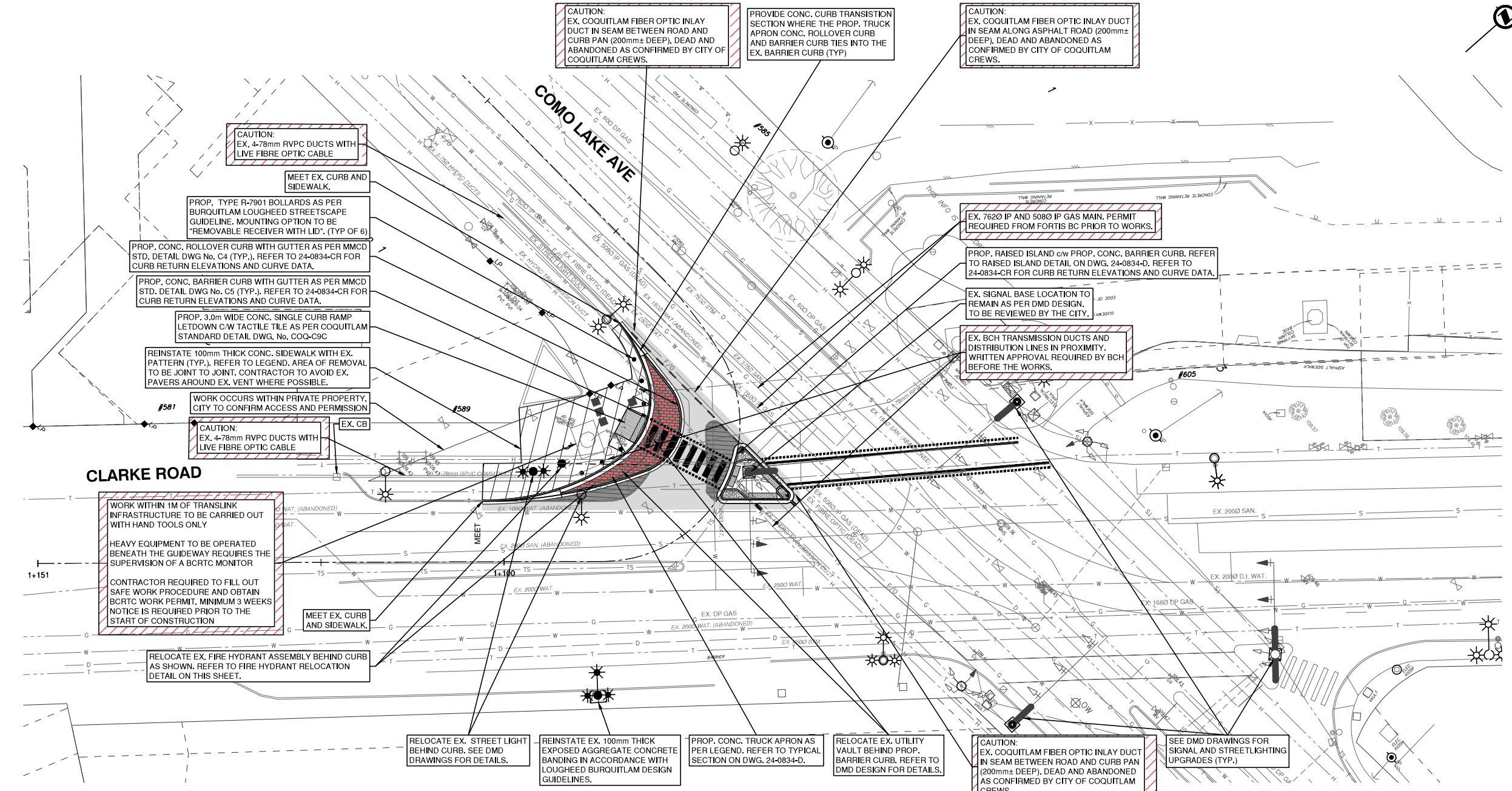
**BENCHMARK:**  
GEODETIC ELEVATIONS ARE DERIVED FROM  
G.P.S. OBSERVATION AT CUX 8074,  
ELEV. = 109.441m  
DATUM IS [CGVD28 (GVRD 2018)]

**GENERAL NOTES:**

1. THE PROPOSED WORKS WILL TAKE PLACE WITHIN LIMIT 1 & 2 OF TRANSLINK SKYTRAIN'S LIMITS OF APPROACH AND WILL REQUIRE SPECIFIC CONDITIONS, PRECAUTIONS, AND AUTHORIZATION FROM TRANSLINK TO UNDERTAKE THE PROPOSED WORKS.
2. FORTIS BC HIGH PRESSURE GAS PIPELINES ARE IN PROXIMITY OF PROPOSED WORKS. A FORTIS BC GAS PERMIT IS REQUIRED.
3. BC HYDRO TRANSMISSION DUCTS AND DISTRIBUTION LINES IN PROXIMITY. WRITTEN APPROVAL REQUIRED BY BCH BEFORE THE WORKS.
4. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION THROUGH PRE-LOCATES AND MANUAL DIGGING AS REQUIRED.

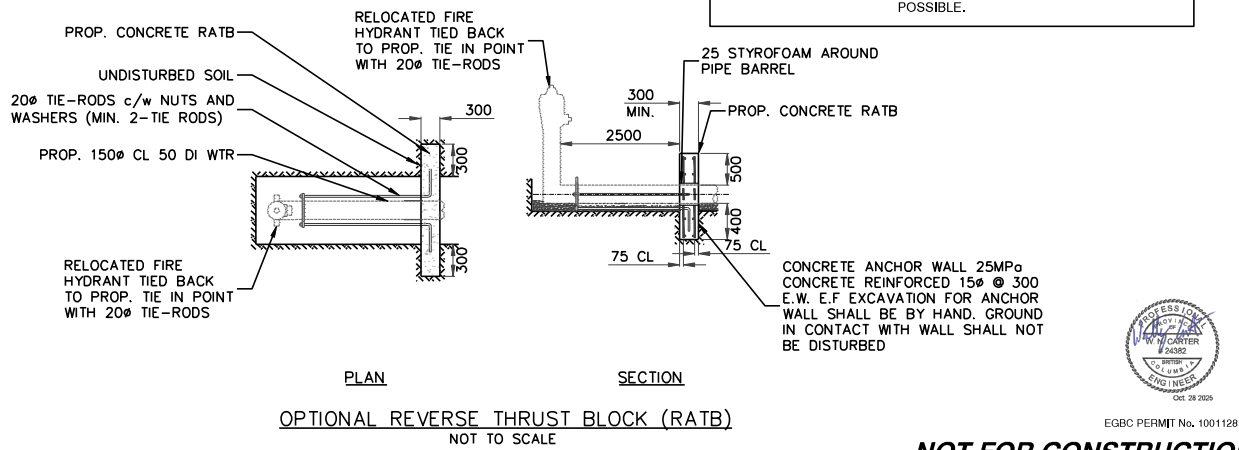
**LEGEND:**

- EX. ROAD RECONSTRUCTION ZONE:**
- REMOVE EXISTING ASPHALT.
  - REMOVE EXISTING BASE GRAVELS AS REQUIRED TO ACCOMMODATE PROP. GRADES, REGRADE AND RECOMPACT EX. BASE GRAVELS TO 95% MODIFIED PROCTOR DENSITY.
  - REPAVE WITH:
    - 50mm - MMCD UPPER COURSE #1 ASPHALT IN ONE LIFT
    - 75mm (MIN.) - MMCD LOWER COURSE #1 ASPHALT IN ONE LIFT, MATCH EX. ASPHALT THICKNESS IF THICKER THAN 75mm.
- FULL DEPTH ROAD WIDENING (WHERE SHOWN ON PLAN):**
- 50mm - MMCD UPPER COURSE #1 ASPHALT IN ONE LIFT.
  - 75mm (MIN.) - MMCD LOWER COURSE #1 ASPHALT IN ONE LIFT, MATCH EX. ASPHALT THICKNESS IF THICKER THAN 75mm.
  - 125mm - 25mm MINUS CRUSHED GRANULAR BASE COMPACTED TO 95% MPD
  - 300mm - 75mm MINUS CRUSHED GRANULAR SUBBASE COMPACTED TO 95% MPD
- TRUCK APRON:**
- 200mm THICK STAMPED AND COLORIZED CONCRETE USING DAVID BRICK RED-RIVER ROCK PATTERN. (TYP.)
- 100mm THICK CONCRETE SIDEWALK STREETScape REINSTATEMENT TO MATCH ORIGINAL CONDITIONS:**
- IN ACCORDANCE WITH LOUGHEED BURQUITLAM DESIGN GUIDELINES
  - SAWCUT CONC. SIDEWALK IN 0.36m X 0.36m SQUARE PATTERN WITH EXPOSED AGGREGATE CONCRETE BANDING.
  - EX. PAVERS AROUND EX. VENT TO BE PROTECTED AND MAINTAINED.
  - REMOVAL AND REINSTATEMENT TO BE COMPLETED JOINT TO JOINT WHERE POSSIBLE.



**WATER WORKS NOTES:**

1. CONTRACTOR TO CONFIRM IF THE EX. 1500 BEND LOCATED AT THE TIE-IN POINT HAS BEEN TIED BACK TO THE EX. 1500 GATE VALVE WITH TIE-RODS.
2. IF THE EX. 1500 BEND HAS NOT BEEN TIED BACK TO THE EX. 1500 GATE VALVE WITH TIE-RODS, THEN TIE THE RELOCATED FIRE HYDRANT BACK TO THE PROP. RATB WITH GALVANIZED TIE-RODS.
3. EX. THRUST BLOCK TO BE REMOVED IF PRESENT.



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

No.	Date	By	Revisions
6	10/28/2025	SV	REISSUED FOR TENDER
5	07/18/2025	PD	REISSUED FOR TENDER
4	06/11/2025	PD	ISSUED FOR TENDER
3	05/20/2025	SL	DRAFT 100% SUBMISSION - ISSUED FOR REVIEW
2	04/11/2025	SL	90% SUBMISSION - ISSUED FOR REVIEW
1	03/21/2025	GZ	PRELIMINARY DESIGN SUBMISSION

Design by	Date
10/28/2025	02/14/2025
Drawn by	Date
GZ	02/14/2025
Checked by	Date
WC	03/21/2025
Approved by	Date
PD	03/21/2025



Scale	1:250	Scale	1:25
horiz.		vert.	
Sheet	01	of	05
Eng. Project No.	24-0834		

Project	CLARKE RD AND COMO LAKE AVE INTERSECTION IMPROVEMENTS
Description	ROADWORKS
File	24-0834-R1
Rev.	6

EX. SIDEWALK RECONSTRUCTION ZONE:

- REMOVE EXIST. CONCRETE SIDEWALK.
- ADD GRANULAR BASE AS REQUIRED, REGRADE AND RECOMPACT TO 95% MODIFIED PROCTOR DENSITY.
- REINSTATE WITH 100mm THICK CONCRETE SIDEWALK, MATCH EX. SIDEWALK COLOR AND PATTERN (TYP.) IN ACCORDANCE WITH LOUHEED BURQUITLAM DESIGN GUIDELINES (SAWCUT CONC. SIDEWALK IN 0.36m X 0.36m SQUARE PATTERN WITH EXPOSED AGGREGATE CONCRETE BANDING)

PROP. CONC. BARRIER CURB WITH GUTTER AS PER MMCD STD. DETAIL DWG No. C5

PROP. CONC. TRUCK APRON VARIES

PROP. EXPANSION JOINT

PROP. CONC. ROLLER CURB WITH GUTTER AS PER MMCD STD. DETAIL DWG No. C4

PROP. REVERSE CONC. BARRIER CURB WITH GUTTER AS PER MMCD STD DWG No. C5

REMOVE EX. RAISED ISLAND VARIES

PROP. RAISED ISLAND VARIES

PROP. 100mm THICK BRUSHED FINISHED CONCRETE

PROP. CONCRETE CURB ON GRAVEL BASE AS PER COQUITLAM STANDARD DETAIL DWG. No. COQ-C6

PROP. MEDIAN INFILL TO BE 100mm THICK BRUSHED FINISHED CONCRETE

0.5m CURB CONSTRUCTION ZONE

SEE TYPICAL PAVEMENT JOINT DETAIL ON THIS DRAWING

CAUTION:  
EX. COQUITLAM FIBER OPTIC INLAY DUCT IN SEAM BETWEEN ROAD AND GUTTER (200mm± DEEP). DEAD AND ABANDONED AS CONFIRMED BY CITY OF COQUITLAM CREWS.

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DATUM IS [CGVD28 (GVRD 2018)]

**NOTES:**

- TACTILE PANELS TO BE ADA SOLUTIONS CAST IN PLACE. REPLACEABLE PANELS, TACTILE PANEL TO BE COLOUR YELLOW. PANELS TO BE 600mm DEEP WITH INSTALLED LENGTHS MATCHING THE WIDTH OF RAMP OPENING. ADJUST INDIVIDUAL PANELS AS NECESSARY TO MATCH THE RADIUS OF MEDIAN WHERE APPROPRIATE.
- ROUND AND SMOOTHEN EDGE OF CONCRETE BARRIER CURB TO PROVIDE A SMOOTH TRANSITION AT CURB TIE IN.
- MINIMUM CROSS FALL TO BE 2.0%

- ROAD WIDENING ZONE:**
- SAW CUT AND REMOVE EX. CONC. CURB AND EX. CONC. SIDEWALK. EXCAVATE TO DESIGN SUBGRADE AND RECOMPACT SUBGRADE TO 95% MODIFIED DENSITY. PROOF ROLL EXPOSED SURFACE AND OVEREXCAVATE AS DIRECTED BY CA.
  - RECONSTRUCT ZONE WITH:
    - 200mm THICK COLORED STAMPED CONCRETE
    - 150mm - 25mm MINUS CRUSHED GRANULAR BASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
    - 300mm - 75mm MINUS CRUSHED GRANULAR SUB-BASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY
    - 75mm MINUS CRUSHED GRANULAR SUB-BASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY AS REQUIRED FOR OVER EXCAVATION AS DIRECTED BY CA.

- PROP. CONCRETE TRUCK APRON CONSTRUCTION ZONE:**
- SAW CUT AND REMOVE ASPHALT. EXCAVATE TO DESIGN SUBGRADE AND RECOMPACT SUBGRADE TO 95% MODIFIED DENSITY. PROOF ROLL EXPOSED SURFACE AND OVER EXCAVATE AS DIRECTED BY CA.
  - RECONSTRUCT ZONE WITH:
    - 200mm THICK COLORED STAMPED CONCRETE
    - 150mm - 25mm MINUS CRUSHED GRANULAR BASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY
    - 75mm MINUS CRUSHED GRANULAR SUB-BASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY AS REQUIRED FOR OVER EXCAVATION AS DIRECTED BY CA.

- EX. ROAD RECONSTRUCTION ZONE:**
- REMOVE EXISTING ASPHALT.
  - REMOVE EXISTING BASE GRAVELS AS REQUIRED TO ACCOMMODATE PROP. GRADES, REGRADE AND RECOMPACT EX. BASE GRAVELS TO 95% MODIFIED PROCTOR DENSITY.
  - REPAVE WITH:
    - 50mm - MMCD UPPER COURSE #1 ASPHALT IN ONE LIFT
    - 75mm (MIN.) - MMCD LOWER COURSE #1 ASPHALT IN ONE LIFT. MATCH EX. ASPHALT THICKNESS IF THICKER THAN 75mm.

- ROAD WIDENING ZONE:**
- SAW CUT AND REMOVE EX. ASPHALT AND EX. RAISED ISLAND. EXCAVATE TO DESIGN SUBGRADE AND RECOMPACT SUBGRADE TO 95% MODIFIED DENSITY. PROOF ROLL EXPOSED SURFACE AND OVEREXCAVATE AS DIRECTED BY CA.
  - RECONSTRUCT ZONE WITH:
    - 50mm - UPPER COURSE #1 ASPHALT
    - 75mm (MIN.) - LOWER COURSE #1 ASPHALT, MATCH EX. ASPHALT THICKNESS IF THICKER THAN 75mm
    - 125mm - 25mm MINUS CRUSHED GRANULAR BASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
    - 300mm - 75mm MINUS CRUSHED GRANULAR SUB-BASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY
    - 75mm MINUS CRUSHED GRANULAR SUB-BASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY AS REQUIRED FOR OVER EXCAVATION AS DIRECTED BY CA.

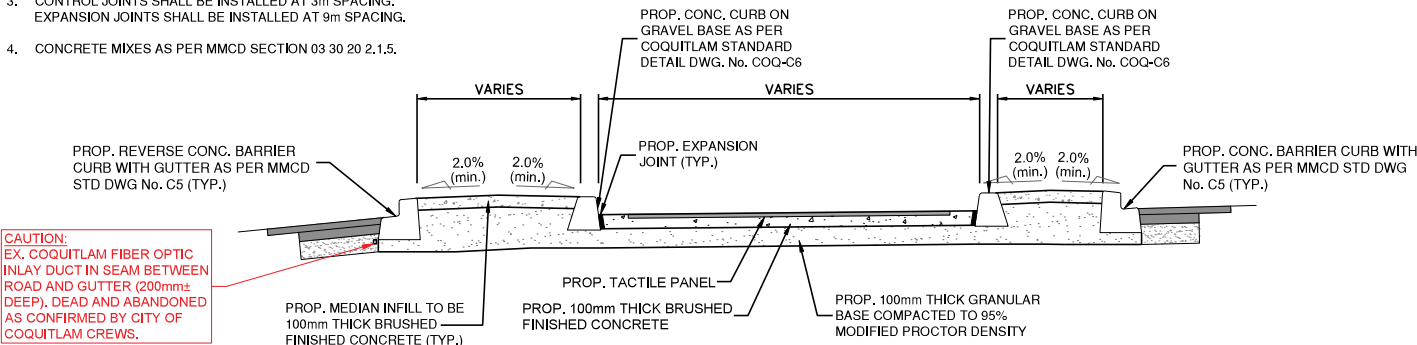
REMOVE EXISTING CONC. CURB AND RE-INSTATE WITH PROP. REVERSE CONC. BARRIER CURB WITH GUTTER AS PER MMCD STD DWG No. C5

- CURB CONSTRUCTION ZONE:**
- SAW CUT AND REMOVE EXISTING ASPHALT. EXCAVATE TO DESIGN SUBGRADE AND RECOMPACT SUBGRADE TO 95% MODIFIED DENSITY.
  - RECONSTRUCT ZONE WITH:
    - 50mm - UPPER COURSE #1 ASPHALT
    - 75mm (MIN.) - LOWER COURSE #1 ASPHALT, MATCH EX. ASPHALT THICKNESS IF THICKER THAN 75mm.
    - 125mm - 25mm MINUS CRUSHED GRANULAR BASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.

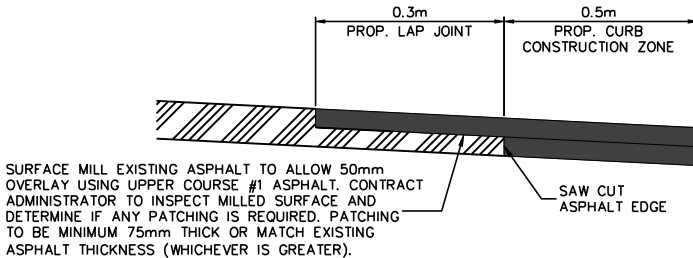
**PROP. CONCRETE TRUCK APRON NOTES:**

- SHALL BE 200mm THICK STAMPED AND COLORIZED CONCRETE USING DAVID BRICK RED-RIVER ROCK PATTERN.
- CONCRETE SHALL HAVE A MIN. 28 DAY COMPRESSIVE STRENGTH OF 32 MPa.
- CONTROL JOINTS SHALL BE INSTALLED AT 3m SPACING. EXPANSION JOINTS SHALL BE INSTALLED AT 9m SPACING.
- CONCRETE MIXES AS PER MMCD SECTION 03 30 20 2.1.5.

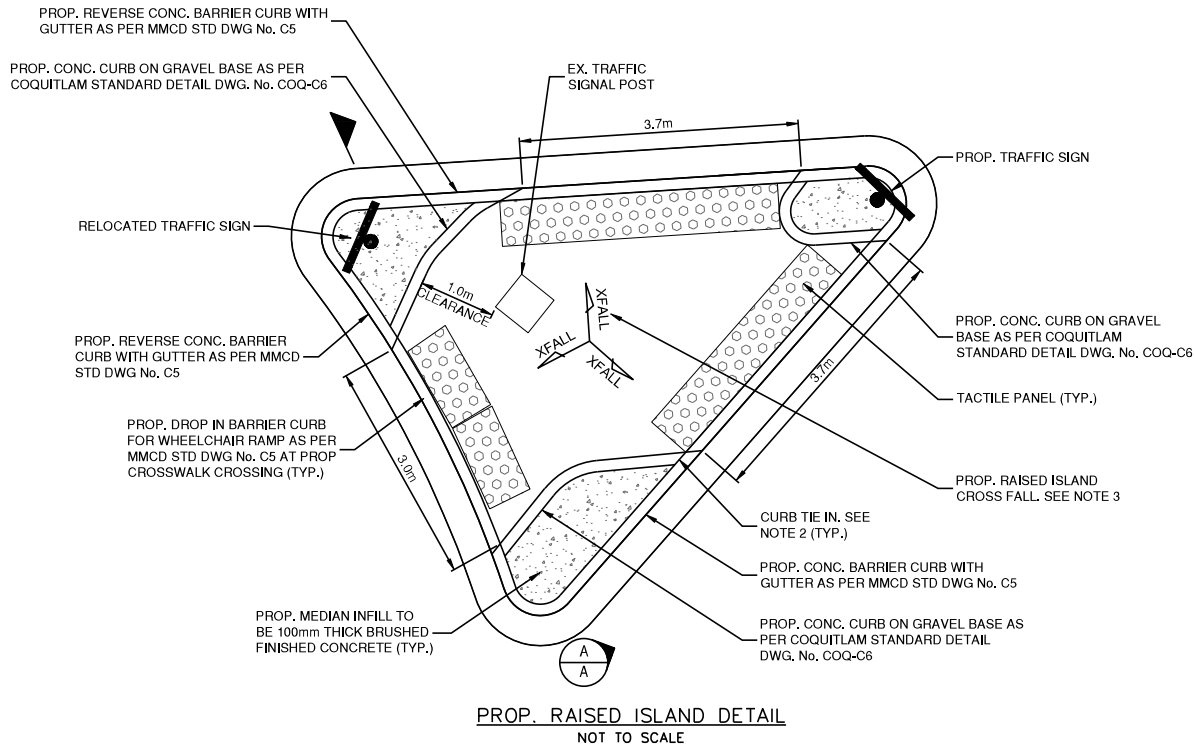
**TYPICAL SECTION  
NOT TO SCALE**



**TYPICAL PROP. RAISED ISLAND SECTION A-A  
NOT TO SCALE**



**TYPICAL PAVEMENT JOINT DETAIL  
NOT TO SCALE**



**PROP. RAISED ISLAND DETAIL  
NOT TO SCALE**



EGBC PERMIT No. 1001128

**NOT FOR CONSTRUCTION**

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

No.	Date	By	Revisions
6	10/28/2025	SV	REISSUED FOR TENDER
5	10/23/2025	SV	REISSUED FOR TENDER
4	07/18/2025	PD	REISSUED FOR TENDER
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Design by	Date
OT	03/21/2025
Drawn by	Date
OT	03/21/2025
Checked by	Date
WC	03/21/2025
Approved by	Date
PD	03/21/2025



Scale	1:250	Scale	1:250
horiz.		vert.	
Sheet	02	of	05
Eng. Project No.	24-0834		

Project	CLARKE RD AND COMO LAKE AVE INTERSECTION IMPROVEMENTS
Description	TYPICAL SECTIONS AND DETAILS
File	24-0834-D
REV.	6



**BENCHMARK:**  
GEODETIC ELEVATIONS ARE DERIVED FROM  
G.P.S. OBSERVATION AT CUX 8074,  
ELEV. = 109.441M  
DATUM IS [CGVD28 (GVRD 2018)]

**KEY NOTES - PAVEMENT MARKING**

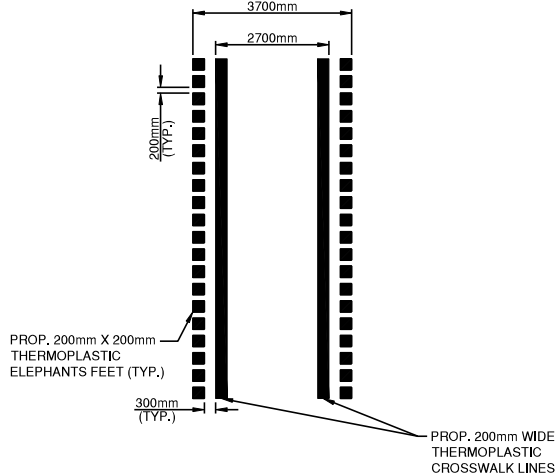
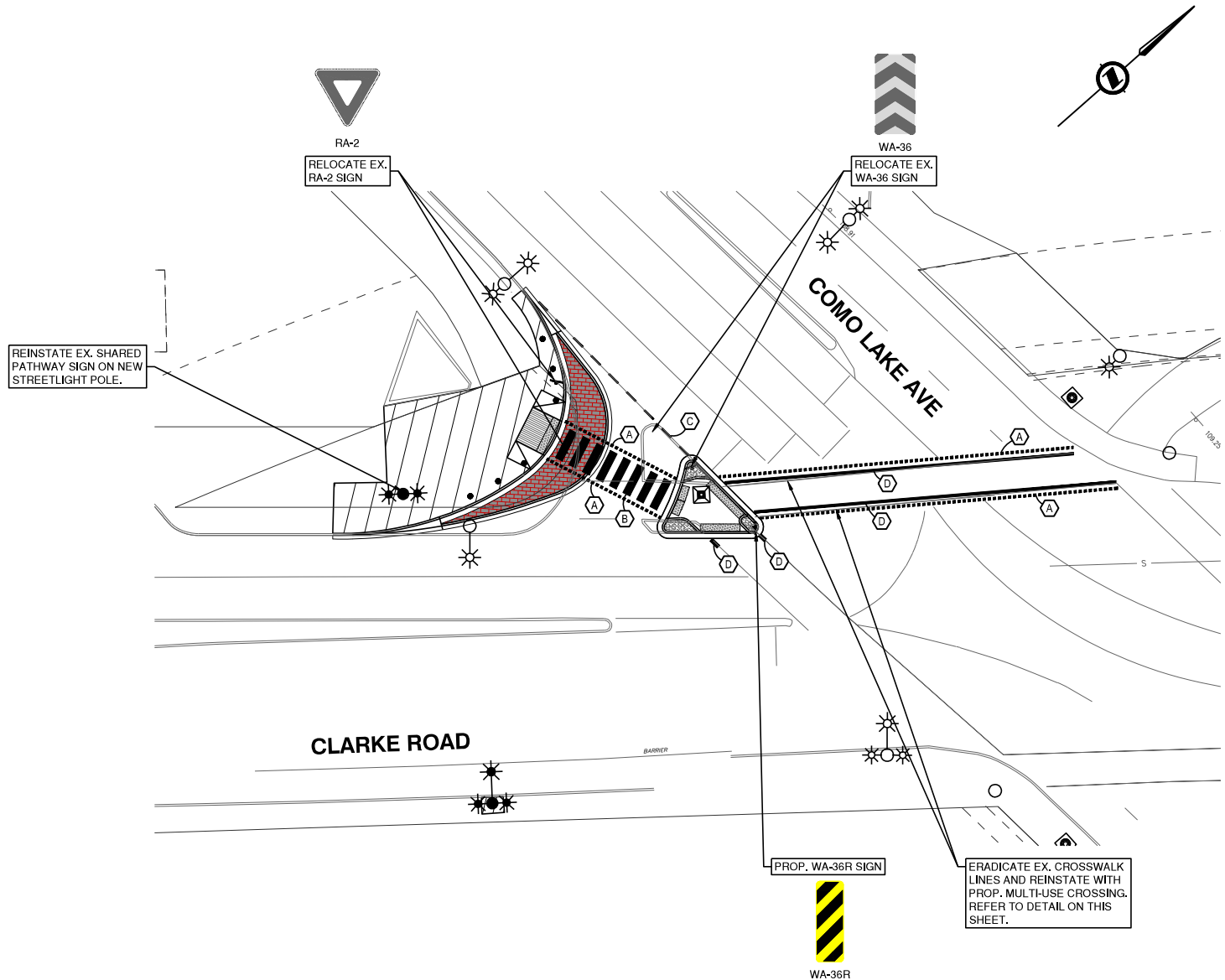
- A NEW 200mm WIDE ELEPHANTS FEET BICYCLE CROSSING LINES (2:2) AS PER MUTCD FIGURE C1-3.
  - B NEW 2.5m WIDE ZEBRA CROSSWALK AS PER MUTCD FIGURE C1-3.
  - C NEW 100mm WIDE SINGLE DASHED WHITE LINE (1:1) AS PER MUTCD FIGURE C1-1.
  - D REINSTATE 200mm WIDE SINGLE SOLID WHITE CROSSWALK LINES AS PER MUTCD FIGURE C1-3.
- \*ALL PAVEMENT MARKINGS THERMOPLASTIC

**LEGEND**

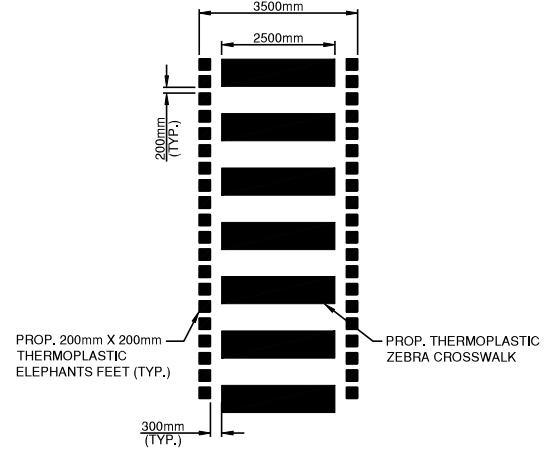
-  PROPOSED SIGN - SHOWN IN COLOR
-  EXISTING SIGN - SHOWN IN GRAY

**GENERAL NOTES - PAVEMENT MARKING**

- ALL PAVEMENT MARKINGS TO BE AS PER THE CURRENT EDITION OF THE T.A.C. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CANADA (M.U.T.C.D.).
- REFER TO M.U.T.C.D FIGURE C1-1 FOR PAVEMENT MARKINGS WIDTHS, SPACING AND COLOUR.
- NEW PAVEMENT MARKINGS TO BE THERMOPLASTIC.
- EXISTING SIGNS NOT PERTINENT TO NEW ROAD SHALL BE RETURNED TO CITY OF COQUITLAM WORKS YARD.



PROP. MULTI-USE CROSSING WITH TWIN PARALLEL LINE CROSSWALK DETAIL  
SCALE: N.T.S.



PROP. MULTI-USE CROSSING WITH ZEBRA CROSSWALK DETAIL  
SCALE: N.T.S.

0 10m  
H 1:250  
V 1:25

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

No.	Date	By	Revisions
4	07/18/2025	PD	REISSUED FOR TENDER
3	06/11/2025	PD	ISSUED FOR TENDER
2	05/20/2025	SL	DRAFT 100% SUBMISSION - ISSUED FOR REVIEW
1	04/11/2025	SL	90% SUBMISSION - ISSUED FOR REVIEW

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TEL 604 420 1721 BINNIE.com

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

Scale	1:250	Scale	1:25
horiz.		vert.	
Sheet	03	of	05
Eng. Project No.	24-0834		

Project **CLARKE RD AND COMO LAKE AVE INTERSECTION IMPROVEMENTS**

Description **PAVEMENT MARKINGS**

File **24-0834-PM1**

REV. **4**



EGBC PERMIT No. 1001128

**NOT FOR CONSTRUCTION**

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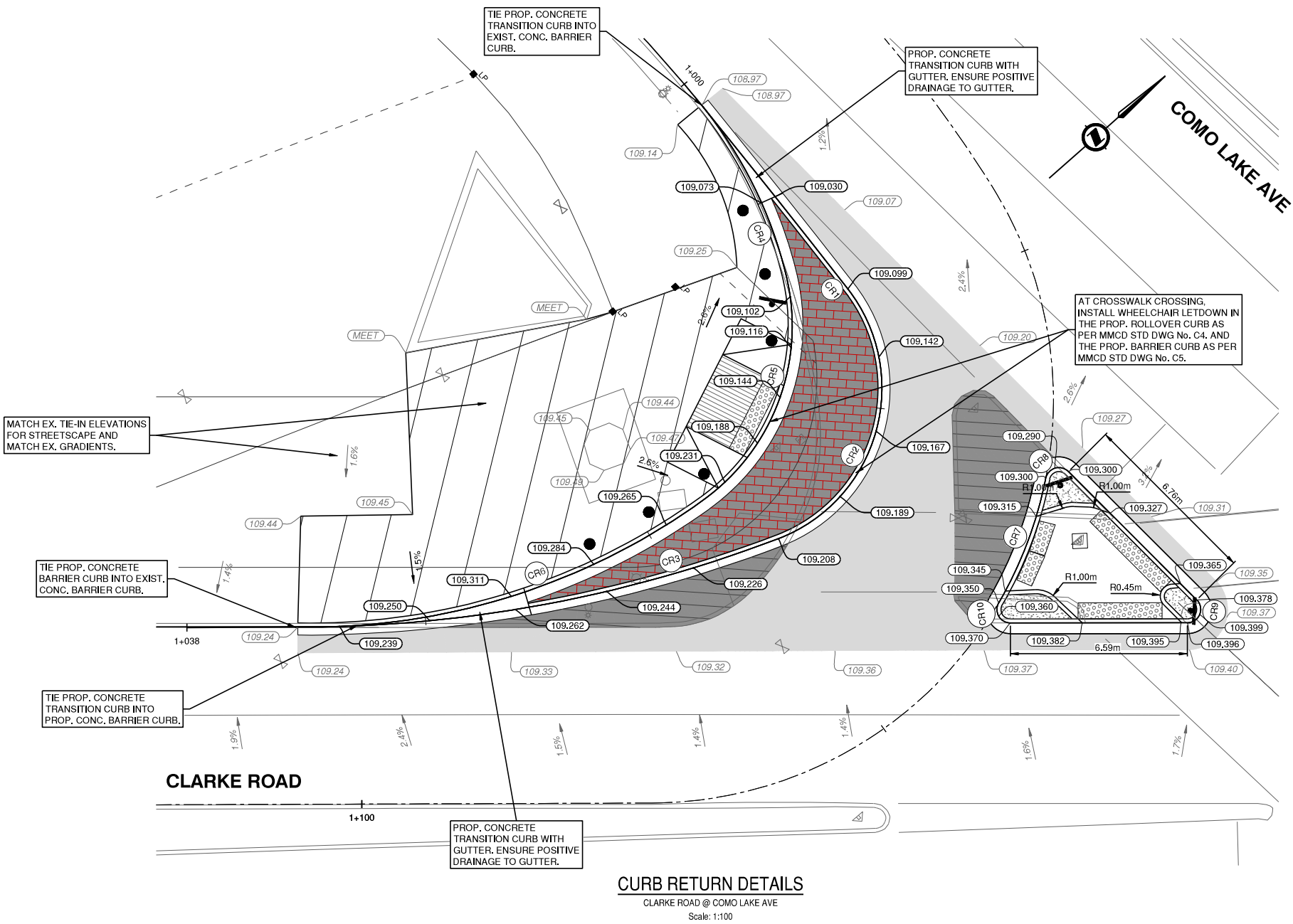
**NOTES:**

- TACTILE PANELS TO BE ADA SOLUTIONS CAST IN PLACE  
REPLACEABLE PANELS, TACTILE PANEL TO BE COLOUR YELLOW.  
PANELS TO BE 600mm DEEP WITH INSTALLED LENGTHS MATCHING  
THE WIDTH OF RAMP OPENING. ADJUST INDIVIDUAL PANELS AS  
NECESSARY TO MATCH THE RADIUS OF MEDIAN WHERE  
APPROPRIATE.
- ROUND AND SMOOTHEN EDGE OF CONCRETE BARRIER CURB TO  
PROVIDE A SMOOTH TRANSITION AT CURB TIE IN.
- MINIMUM CROSS FALL TO BE 2.0%

**LEGEND:**

109.00 - GUTTERLINE ELEVATION (PROPOSED)  
109.00 - GUTTERLINE ELEVATION (EXISTING)

CURVE TABLE					
CURVE No.	RADIUS	DELTA	LENGTH	BC NORTHING / EASTING	EC NORTHING / EASTING
CR1	500.000	1° 00' 06"	8.740	5458951.569 / 508321.071	5458952.002 / 508312.341
CR2	6.000	107° 05' 14"	11.214	5458943.484 / 508326.343	5458951.569 / 508321.071
CR3	50.000	19° 11' 01"	16.741	5458929.057 / 508318.006	5458943.484 / 508326.343
CR4	16.000	25° 31' 59"	7.130	5458950.181 / 508319.174	5458952.002 / 508312.341
CR5	8.000	67° 51' 19"	9.474	5458942.325 / 508323.420	5458950.181 / 508319.174
CR6	25.000	36° 51' 12"	16.080	5458927.883 / 508316.999	5458942.325 / 508323.420
CR7	15.000	18° 59' 31"	4.972	5458948.064 / 508333.556	5458952.437 / 508331.236
CR8	0.500	123° 46' 08"	1.080	5458952.437 / 508331.236	5458950.181 / 508319.174
CR9	0.500	134° 57' 11"	1.178	5458953.672 / 508338.344	5458952.843 / 508338.752
CR10	0.500	120° 16' 11"	1.050	5458947.893 / 508334.406	5458948.064 / 508333.556



**CURB RETURN DETAILS**  
CLARKE ROAD @ COMO LAKE AVE  
Scale: 1:100

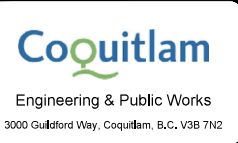
0 1:100 4m

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Edge of pavement	Hydrant	Sanitary service	Hydro Guy Wire
Watermain and valve	Water air valve	Sanitary cleanout	Hydro Kiosk
Drainage sewer, MH	Water blowoff	Utility pole (joint pole)	Vegetation Conifer
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Hydro duct, MH	Drainage service	Traffic signal pole	Survey Lead Plug
Telephone duct, MH	Drainage cleanout	Junction box	Survey Monument

No.	Date	By	Revisions
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Scale	1:100	Scale	1:100
horiz.		vert.	
Sheet	04	of	05
Eng. Project No.	24-0834		

Project	CLARKE RD AND COMO LAKE AVE INTERSECTION IMPROVEMENTS
Description	CURB RETURN
File	24-0834-CR
REV.	5

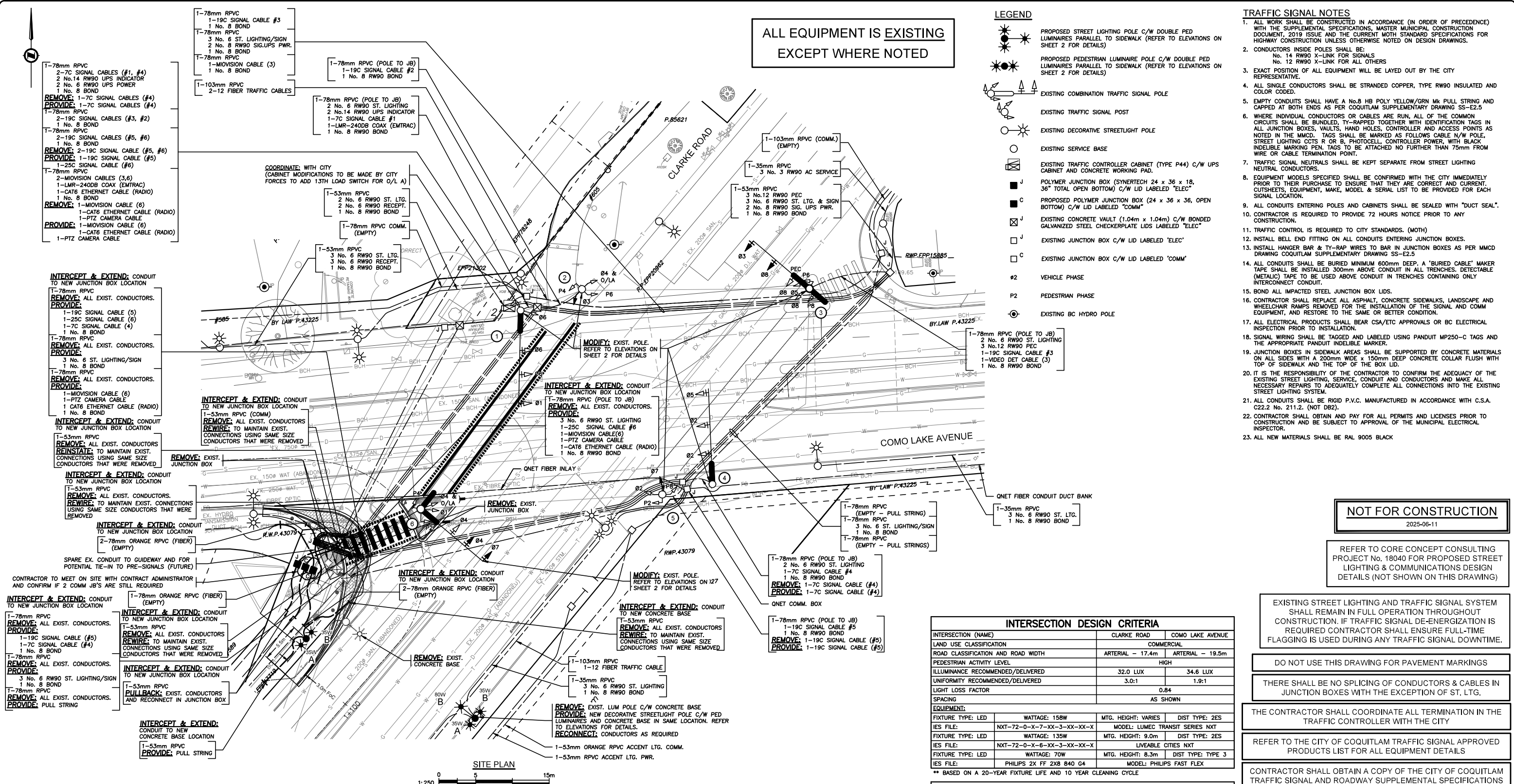


EGBC PERMIT No. 1001128

**NOT FOR CONSTRUCTION**







**CONTRACTOR TO COMPLETE WorkSafeBC 30M33 FORM BEFORE PROCEEDING WITH ANY WORKS AT THIS SITE**

**CONTRACTOR TO REFER TO TRANSLINK NOTES ON PAGE 3 PRIOR TO ANY WORK WITHIN SKYTRAIN LIMITS OF APPROACH**

**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.

**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.

**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.

**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)

**INTERSECTION DESIGN CRITERIA**

INTERSECTION (NAME)	CLARKE ROAD	COMO LAKE AVENUE
LAND USE CLASSIFICATION	COMMERCIAL	
ROAD CLASSIFICATION AND ROAD WIDTH	ARTERIAL - 17.4m	ARTERIAL - 19.5m
PEDESTRIAN ACTIVITY LEVEL		HIGH
ILLUMINANCE RECOMMENDED/DELIVERED	32.0 LUX	34.6 LUX
UNIFORMITY RECOMMENDED/DELIVERED	3.0:1	1.9:1
LIGHT LOSS FACTOR		0.84
SPACING		AS SHOWN

**EQUIPMENT:**

FIXTURE TYPE: LED	WATTAGE: 158W	MTG. HEIGHT: VARIES	DIST TYPE: 2ES
IES FILE:	NXT-72-0-X-7-XX-3-XX-XX-X	MODEL: LUMEC TRANSIT SERIES NXT	
FIXTURE TYPE: LED	WATTAGE: 135W	MTG. HEIGHT: 9.0m	DIST TYPE: 2ES
IES FILE:	NXT-72-0-X-6-XX-3-XX-XX-X	MODEL: LIVEABLE CITIES NXT	
FIXTURE TYPE: LED	WATTAGE: 70W	MTG. HEIGHT: 8.3m	DIST TYPE: TYPE 3
IES FILE:	PHILIPS 2X FF 2X8 B40 G4	MODEL: PHILIPS FAST FLEX	

**ROADWAY LIGHTING DESIGN CRITERIA PER: (CITY BYLAW 3558)**

STREET NAME(S)	CLARKE ROAD	
LAND USE CLASSIFICATION	COMMERCIAL	
ROAD CLASSIFICATION & WIDTH	ARTERIAL - 17.4m	
PEDESTRIAN ACTIVITY	HIGH	
ILLUMINANCE RECOMMENDED/DELIVERED	18.0 LUX	20.4 LUX
UNIFORMITY RECOMMENDED/DELIVERED (AVG:MIN)	3.0:1	3.0:1
LIGHT LOSS FACTOR		0.84
SPACING		32.0m (STAGGERED)

**EQUIPMENT:**

FIXTURE TYPE: LED	WATTAGE: 80W	MTG. HEIGHT: 8.3m	DIST TYPE: LE3S
IES FILE:	TR-80W48LED4K-G3-LE3S	MODEL: LUMEC TRANSIT SERIES	
FIXTURE TYPE: LED	WATTAGE: 70W	MTG. HEIGHT: 8.3m	DIST TYPE: TYPE 3
IES FILE:	PHILIPS 2X FF 2X8 B40 G4	MODEL: PHILIPS FAST FLEX	

**TRAFFIC SIGNAL NOTES**

- ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE (IN ORDER OF PRECEDENCE) WITH THE SUPPLEMENTAL SPECIFICATIONS, MASTER MUNICIPAL CONSTRUCTION DOCUMENT, 2019 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
- 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, VALVES, HAND HOLES, CONTROLLER AND ACCESS POINTS AS NOTED IN THE MMCD. TAGS SHALL BE MARKED AS FOLLOWS CABLE N/W POLE, STREET LIGHTING CTS R OR B, PHOTOCELL, CONTROLLER POWER, WITH BLACK INDELEBIL 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.
- 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)
- 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 IMPACTED 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.
- ALL ELECTRICAL PRODUCTS SHALL BEAR CSA/ETC APPROVALS OR BC ELECTRICAL INSPECTION PRIOR TO INSTALLATION.
- SIGNAL WRING SHALL BE TAGGED AND LABELED USING PANDUIT MP250-C TAGS AND THE APPROPRIATE PANDUIT INDELEBIL MARKER.
- 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.
- 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.
- 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.
- ALL NEW MATERIALS SHALL BE RAL 9005 BLACK

**NOT FOR CONSTRUCTION**

2025-06-11

REFER TO CORE CONCEPT CONSULTING PROJECT No. 18040 FOR PROPOSED STREET LIGHTING & COMMUNICATIONS DESIGN DETAILS (NOT SHOWN ON THIS DRAWING)

EXISTING STREET LIGHTING AND TRAFFIC SIGNAL SYSTEM SHALL REMAIN IN FULL OPERATION THROUGHOUT CONSTRUCTION. IF TRAFFIC SIGNAL DE-ENERGIZATION IS REQUIRED CONTRACTOR SHALL ENSURE FULL-TIME FLAGGING IS USED DURING ANY TRAFFIC SIGNAL DOWNTIME.

DO NOT USE THIS DRAWING FOR PAVEMENT MARKINGS

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

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

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 911

COQ. ASBUILT No. EXXXX

Benchmark:

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

Plot Date: June 10, 2025

**DMD & Associates**  
Electrical Consultants Ltd.  
#12-17558 104th Avenue, Surrey, BC, Canada V4N 1M1  
office@dmdeng.com Fax: 604-588-9010  
DMD PROJECT No. 8405-25-01 of 03

No.	Date	By	Revisions
4	2025-06-11	CB	ISSUED FOR TENDER
3	2025-05-14	CB	100% SUBMISSION
2	2025-04-11	CB	90% SUBMISSION
1	2025-02-25	CB	50% SUBMISSION

ACCEPTED FOR CONSTRUCTION Date: \_\_\_\_\_

Manager of Development Servicing \_\_\_\_\_

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

**PERMIT TO PRACTICE**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

PERMIT NUMBER: 1000771

The Association of Professional Engineers and Geoscientists of British Columbia

Design by: CB Date: 21-02-2025 Scale: 1:250

Drawn by: EK Date: 10-02-2025 Sheet of: 1 OF 3

Checked by: MC Date: 25-02-2025 Eng. Project No. \_\_\_\_\_

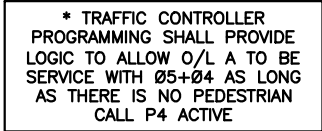
Approved by: XX Date: 10-02-2025

Project: **COMO LAKE AVENUE AND CLARKE ROAD TRAFFIC SIGNAL MODIFICATION**

Description: \_\_\_\_\_

File: 8405-25





**MODIFY:** EXIST. POLE (3)

**ELEVATIONS**

0 1:75 5





BC  
11  
CALL

CALL  
BEFORE  
YOU DIG!

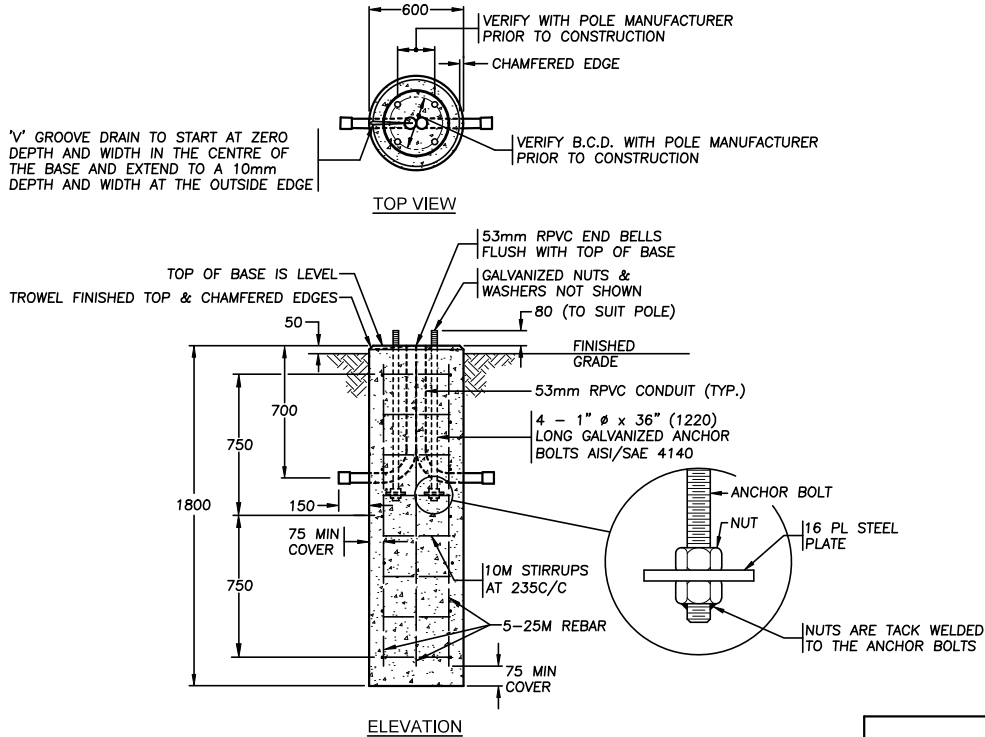
**1-800-474-6886**

or by CELLULAR MOBILE  
Newcomer Area 257-5940



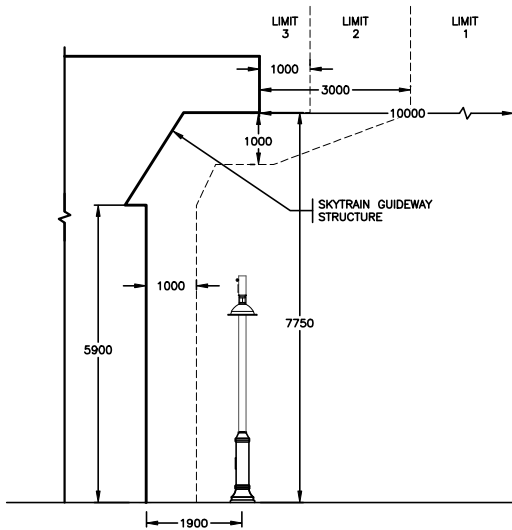
**CALL AT LEAST TWO FULL WORKING  
DAYS BEFORE YOU PLAN TO DIG**

NOT FOR CONSTRUCTION  
2025-06-11

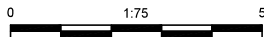


SPECIAL SONOTUBE CONCRETE BASE DETAIL FOR COMBINATION ROADWAY/PEDESTRIAN LUMINAIRE POLE

N.T.S.



O/H SKYTRAIN GUIDEWAY CHECK - NEW PEDESTRIAN POLE AT S/W CORNER OF COMO LAKE AVENUE AND CLARKE ROAD



NOTES (APPLY TO SPECIAL SONOTUBE FOUNDATION):

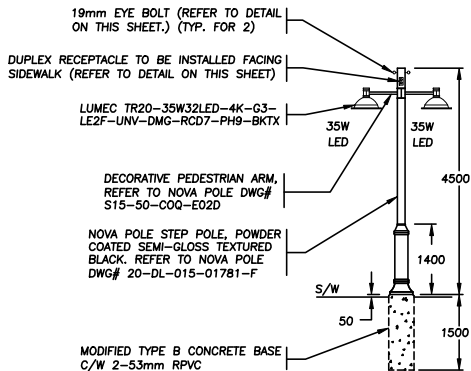
1. ALL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH CAN/CSA G14-M92
2. APPLY LUBRIPLATE OR OTHER SUITABLE GREASE TO EXPOSED PORTION OF ANCHOR BOLTS AND NUTS PRIOR TO POLE INSTALLATION
3. CONCRETE TO HAVE A MINIMUM STRENGTH OF 30MPa at 28 DAYS.
4. FOOTINGS ARE DESIGNED FOR SOILS WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 125kPa.
5. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
6. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MINISTRY STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2012 ISSUE) UNLESS OTHERWISE NOTED ON THESE DRAWINGS OR IN THE SPECIAL PROVISIONS.
7. BACKFILL SHALL BE S.G.S.B. IN ACCORDANCE WITH SECTION 202 OF BC MoT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NO MORE THAN 150mm THICK TO 100% STANDARD PROCTOR MAXIMUM DENSITY (ASTM D-698).
8. CONTRACTOR SHALL PROVIDE ALL MEANS NECESSARY TO ENSURE THAT EXCAVATIONS SHALL REMAIN DRY DURING CONSTRUCTION.
9. ALL EXPOSED EDGES SHALL BE CHAMFERED 20 x 20 U.N.O.
10. CONFIRM ANCHOR BOLTS AND THEIR PLAN ORIENTATION PRIOR TO SETTING IN CONCRETE FORMS.

120V SERVICE LOAD (SOUTHWEST OF INTERSECTION) (EXISTING 100A-120/240V SERVICE KIOSK AT COMO LAKE & CLARKE)						
WATTAGE (W)	CCT.PHASE	EXISTING	REMOVED	NEW	TOTAL No. OF LIGHTS	CURRENT(A)
158W (LED)	A	0	0	3	3	3.95A
	B	0	0	3	3	3.95A
135W (LED)	A	3	3	0	0	0.00A
	B	3	2	0	1	1.13A
80W (LED)	A	1	1	0	0	0.00A
	B	0	0	1	1	0.67A
70W (LED)	A	2	0	0	2	1.17A
	B	0	0	0	0	0.00A
35W (LED)	A	6	0	1	7	2.04A
	B	3	1	0	2	0.58A
1.11% VOLTAGE DROP						

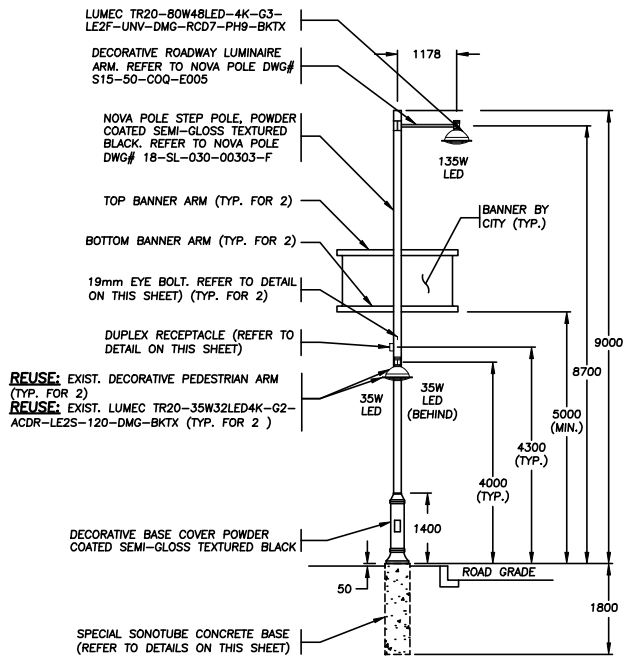
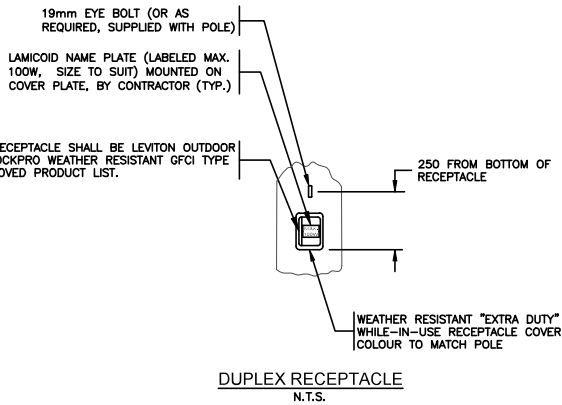
\* BASED ON ULTIMATE DESIGN

TRANSLINK NOTES:

1. BEFORE WORK COMMENCES, CONTACT SKYTRAIN'S WAYSIDE AND/OR SAFETY DEPARTMENTS 604-520-3641 OR AFTER HOURS 604-520-5555.
2. PROMINENTLY DISPLAY AT THE WORKSITE SKYTRAIN'S EMERGENCY NUMBER: 604-520-5555, HAVE IMMEDIATE AVAILABILITY TO A MEANS OF CONTACTING SKYTRAIN.
3. ENSURE ALL EMPLOYEES ARE MADE AWARE OF SKYTRAIN'S LIMITS OF APPROACH AND THE ASSOCIATED LIMITATIONS.
4. CONTRACTOR TO REFER TO THE SKYTRAIN LIMITS OF APPROACH DOCUMENT SO THAT ALL NECESSARY PRECAUTIONS ARE FOLLOWED FOR WORKING IN LIMIT 1, 2, AND 3.

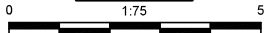


PROPOSED PEDESTRIAN LUMINAIRE POLE C/W DOUBLE LUMINAIRES PARALLEL TO SIDEWALK (ON CLARKE ROAD)



PROPOSED STREET LIGHTING POLE C/W DOUBLE PED LUMINAIRES PARALLEL TO SIDEWALK (ON CLARKE ROAD)

ELEVATIONS



NOT FOR CONSTRUCTION

2025-06-11



COQ. ASBUILT No.

EXXXX

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 5M3  
www.dmdeng.com office@dmdeng.com Fax: 604588-8012  
DMD PROJECT No. 8405-25-03 of 03

No.	Date	By	Revisions
4	2025-06-11	CB	ISSUED FOR TENDER
3	2025-05-14	CB	100% SUBMISSION
2	2025-04-11	CB	80% SUBMISSION
1	2025-03-25	CB	50% 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: \_\_\_\_\_

PERMIT NUMBER: 1000771

The Association of Professional Engineers and Geoscientists of British Columbia



Design by

CB

Date

21-02-2025

Scale

1:75

Drawn by

EK

Date

10-02-2025

Sheet of

3 OF 3

Checked by

MC

Date

25-02-2025

Eng. Project No.

Approved by

XX

Date

DD-MM-YYYY

Project

COMO LAKE AVENUE  
AND CLARKE ROAD

Description

TRAFFIC SIGNAL MODIFICATION

File: 8405-25

Plot Date: June 10, 2025