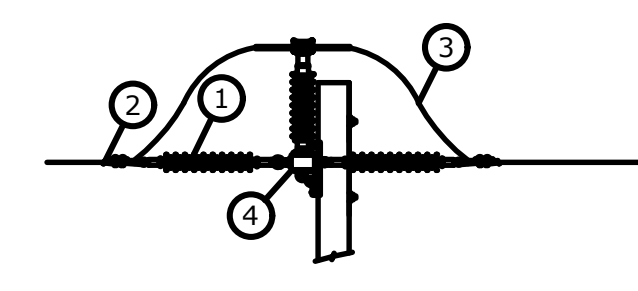


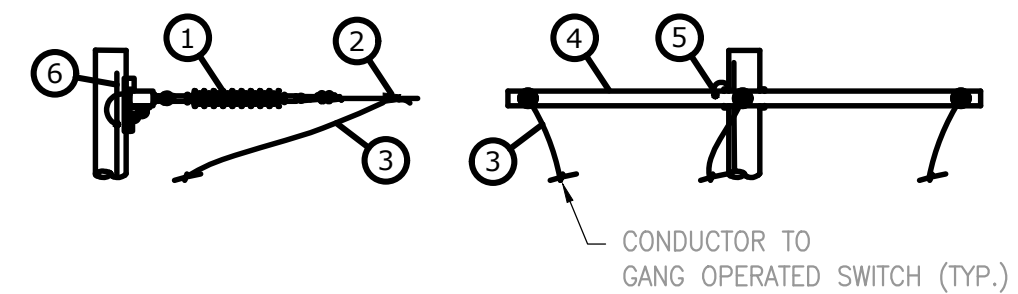
DETAIL 1 - EXISTING DEAD END ASSEMBLY CONNECTIONS

ITEM No.	DESCRIPTION
1.	INSULATOR, 25KV
2.	CLAMP, STRAIN OR AUTOMATIC DEAD END
3.	WIRE, USE CONDUCTOR SIZE
4.	CROSSARM
5.	GROUND CONNECTION
6.	2/0 BARE STRANDED COPPER WIRE



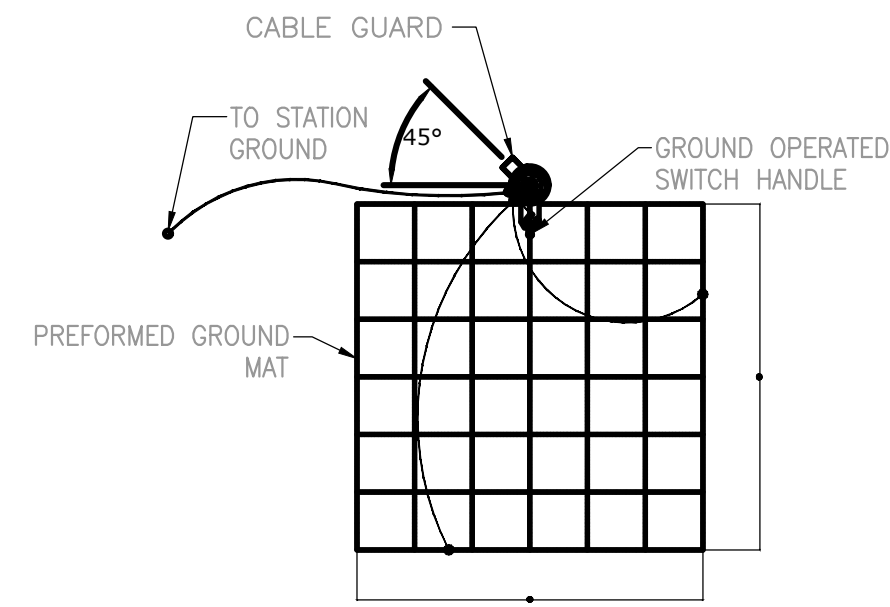
DETAIL 4 - EXISTING SWITCH BYPASS

ITEM No.	DESCRIPTION
1.	INSULATOR, 25KV
2.	CLAMP, STRAIN OR AUTOMATIC DEAD END
3.	WIRE, USE CONDUCTOR SIZE
4.	CROSSARM



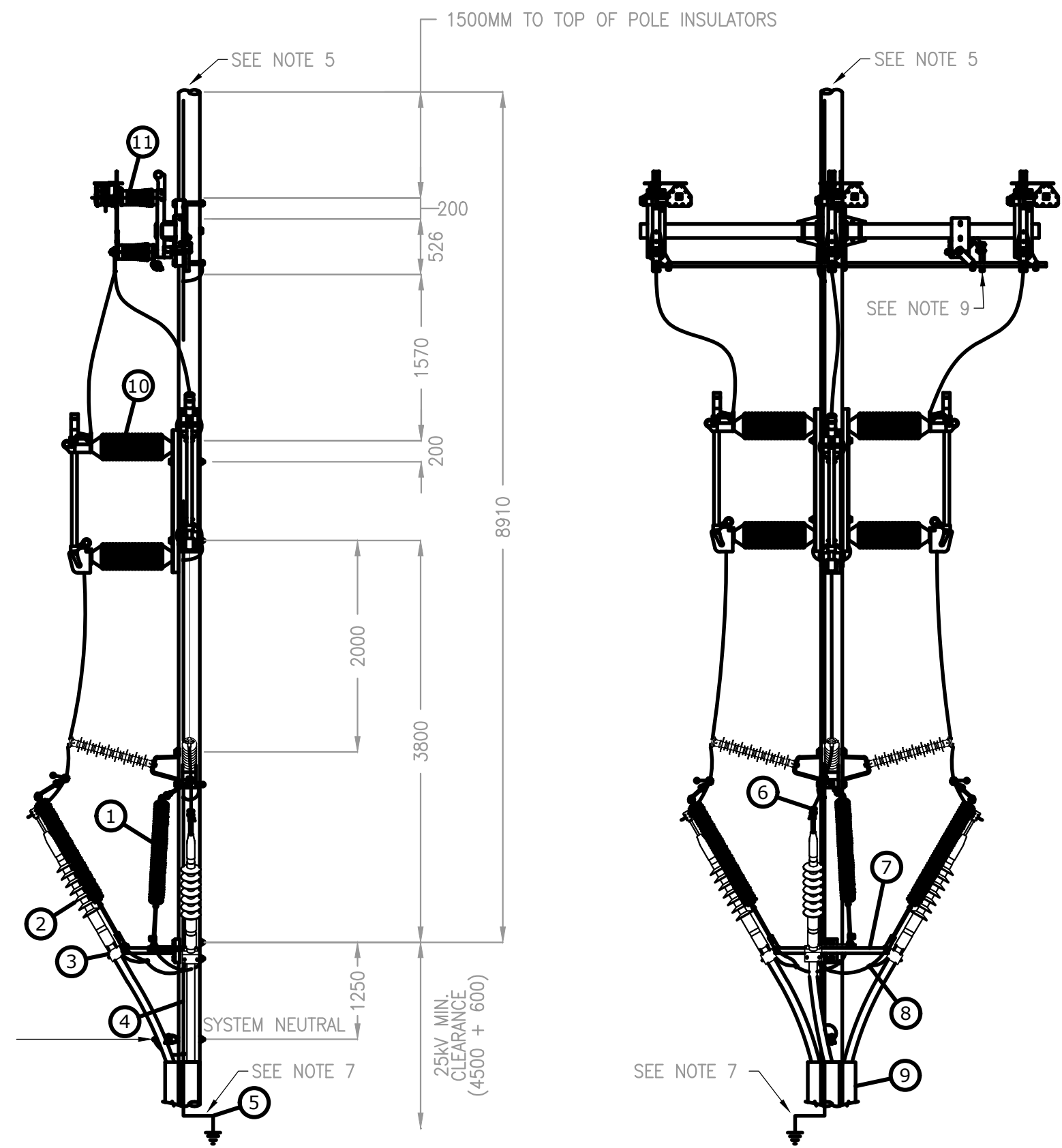
DETAIL 2 - NEW DEAD END ASSEMBLY CONNECTIONS

ITEM No.	DESCRIPTION
1.	INSULATOR, 25KV
2.	CLAMP, STRAIN OR AUTOMATIC DEAD END
3.	WIRE, USE CONDUCTOR SIZE
4.	CROSSARM
5.	GROUND CONNECTION
6.	2/0 BARE STRANDED COPPER WIRE



- NOTES:
- INSTALL PREFORMED GROUND MAT 150mm BELOW GRADE AND BACKFILL WITH COMBINATION OF 18mm SCREEN CRUSHED ROCK AND CONCRETE PAD, AND ENSURE CENTER LINE OF GROUND MAT MATCHES CENTER LINE OF HANDLE MECHANISM. THE MAT SHALL NOT MAKE ELECTRICAL CONTACT WITH ANY CONDUCTIVE MATERIAL UNLESS INDICATED OTHERWISE.
 - CONNECT PREFORMED GROUND MAT TO SWITCH HANDLE WITH TWO (2) 4/0 EXTRA FLEX BARE TINNED COPPER RISER SUPPLIED CADWELDED TO MAT. CONNECT 4/0 GROUND WIRE FROM STATION GROUND TO 4/0 EXTRA FLEX ABOVE GRADE.
 - USE 2/0 BARE STRANDED COPPER FOR POLE GROUND WIRE.
 - INSTALL GROUND WIRE ON ROAD SIDE OF POLE AND COVER ENTIRE LENGTH WITH MOULDING, EXCEPT AT POINTS OF CONNECTION, WHICH WILL BE LEFT EXPOSED.
 - THE POLE GROUND WIRE SHALL BE CONTINUOUS FROM THE GROUND MAT TO THE UPPERMOST POINT AND SHALL BE AT LEAST 50mm CLEAR OF ALL HARDWARE ON THE POLE.
 - COMPRESSION CONNECTORS SHALL BE USED ON ALL PERMANENT GROUND CONNECTIONS EXCEPT GROUND RODS.
 - SWITCH BASES TO BE BONDED WITH 2/0 CU. DEADEND HARDWARE ON 25KV SWITCHES TO BE BONDED WITH #4 CU TO THE 2/0 CU POLE GROUND.
 - INSULATOR IN SHAFT NOT REQUIRED WITH GROUND MAT.
 - BOND 2/0 CU POLE GROUND TO SYSTEM NEUTRAL.
 - MECHANICALLY SECURE BONDING CONDUCTOR EVERY 1 METER.

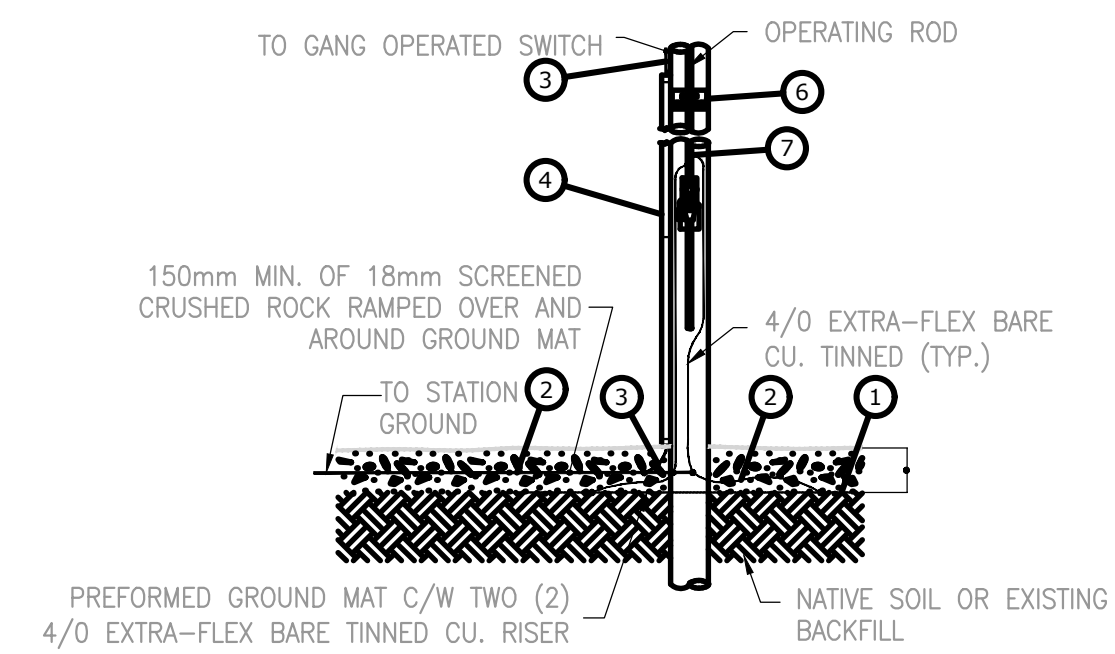
ITEM No.	DESCRIPTION
1.	PREFORMED GROUND MAT (6FT X 6FT)
2.	4/0 EXTRA FLEX BARE TINNED COPPER WIRE
3.	2/0 BARE STRANDED COPPER WIRE
4.	MOULDING
5.	CONNECTOR
6.	DANGER HIGH VOLTAGE SIGN
7.	CONNECTOR



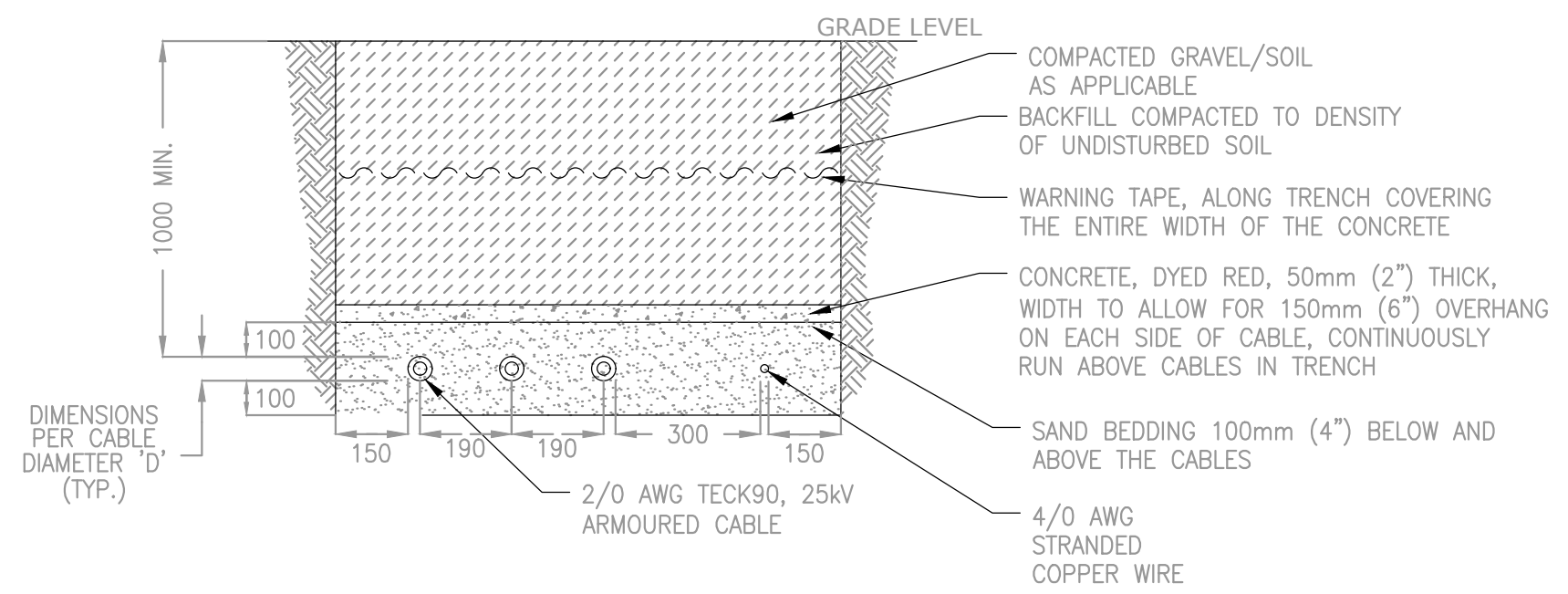
DETAIL 3 - POLE MOUNTED EQUIPMENT AND CONNECTIONS

- NOTES:
- REFER TO MANUFACTURER DRAWINGS AND INSTRUCTIONS TO CONFIRM SPACING INSTALLATION REQUIREMENTS OF SWITCH AND POWER FUSES.
 - INSTALL AND TERMINATE ALL EQUIPMENT AS PER MANUFACTURER REQUIREMENTS.
 - PROVIDE COMPRESSION CONNECTIONS TO ALL ALL PERMANENT GROUND CONNECTIONS.
 - INSTALL INSULATING TUBING WHEN A PIPE IS USED AS THE OPERATING HANDLE.
 - REFER TO DETAILS 1 AND 2 FOR CONNECTIONS ABOVE GANG OPERATED SWITCH.
 - PROVIDE A 1500MM CLEARANCE ABOVE GANG OPERATED SWITCHES.
 - REFER TO DETAIL 5 FOR GROUND CONNECTIONS AT GROUND LEVEL.
 - NOT ALL CONENCTIONS SHOWN.
 - NOT ALL PARTS OF GANG OPERATED SWITCH ARE SHOWN. REFER TO MANUFACTURER DRAWINGS FOR DETAILS AND INSTALLATION REQUIREMENTS.

ITEM No.	DESCRIPTION
1.	ARRESTER, LIGHTNING, MOV, 70KV MCOV
2.	25KV TERMINATION KIT
3.	BRACKET, TERMINATION, CABLE CLAMP
4.	2/0 BARE STRANDED COPPER WIRE
5.	GROUNDING ASSEMBLY
6.	CONNECTOR, COMPRESSION ROD OR STUD OR NEMA 4 HOLE NEMA PAD
7.	BRACKET, TERMINATION, 3 PHASE, POLE MOUNT
8.	CONNECTOR
9.	CABLE GUARD
10.	25KV POWER FUSE ASSEMBLY C/W 25KV, 175A, XKA RATED FUSES
11.	25KV, 900A RATED VERTICAL GANG OPERATED SWITCH C/W OPERATING MECHANISM



DETAIL 5 - GROUNDING OF GANG OPERATED SWITCH HANDLE



- NOTES:
- LOCATE ALL EXISTING UNDERGROUND SERVICES PRIOR TO STARTING EXCAVATION WORK.
 - PROVIDE MINIMUM 50MM SPACE BETWEEN EACH CABLE.
 - PROVIDE INDIVIDUAL CONDUIT SLEEVE FOR EACH CABLE AT ALL ROAD CROSSINGS AND PULL CABLE THROUGH.
 - FOR CABLE INSTALLATION, ARRANGE FOR INSPECTION BY THE CONTRACT ADMINISTRATOR PRIOR TO COVERING CABLES. INSPECTION TO OCCUR WITH BASE AND CABLES INSTALLED AND 3M OF TRENCH WITH COVER SAND AND CONCRETE IN PLACE, BUT NOT BACKFILLED.
 - THE CABLE ROUTING DETAIL IS NOT EXACTLY TO SCALE. SITE CONFIRM ALL MEASUREMENTS.

DETAIL 6 - 25KV CABLE TRENCH (3 CABLES AND GROUND)



 148 Nature Park Way, Winnipeg, Manitoba Canada R3P 0X7 204-786-8080				ENGINEER'S SEAL 		 THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT	
DESIGNED BY: A. ENTZ ARAUJO DRAWN BY: A. NADRES SCALE: NTS DATE: 2026/02/23 CONSULTANT NO.: 708186				CHECKED BY: V. ELIMBAN APPROVED BY: V. ELIMBAN ISSUED FOR CONSTRUCTION BY: B. SOLOWAY DATE: 2026/05/01		WEST END WATER POLLUTION CONTROL CENTRE ELECTRICAL FEEDER CABLE REPLACEMENT & UPGRADES POLE MOUNTED EQUIPMENT INSTALLATION DETAILS	
00 ISSUED FOR CONSTRUCTION NO. REVISIONS				2026/05/01 DATE		CITY DRAWING NUMBER 1-0103-EDTL-Y001	
				AEA DESIGN		SHEET 001 REV. 00 SIZE A1	