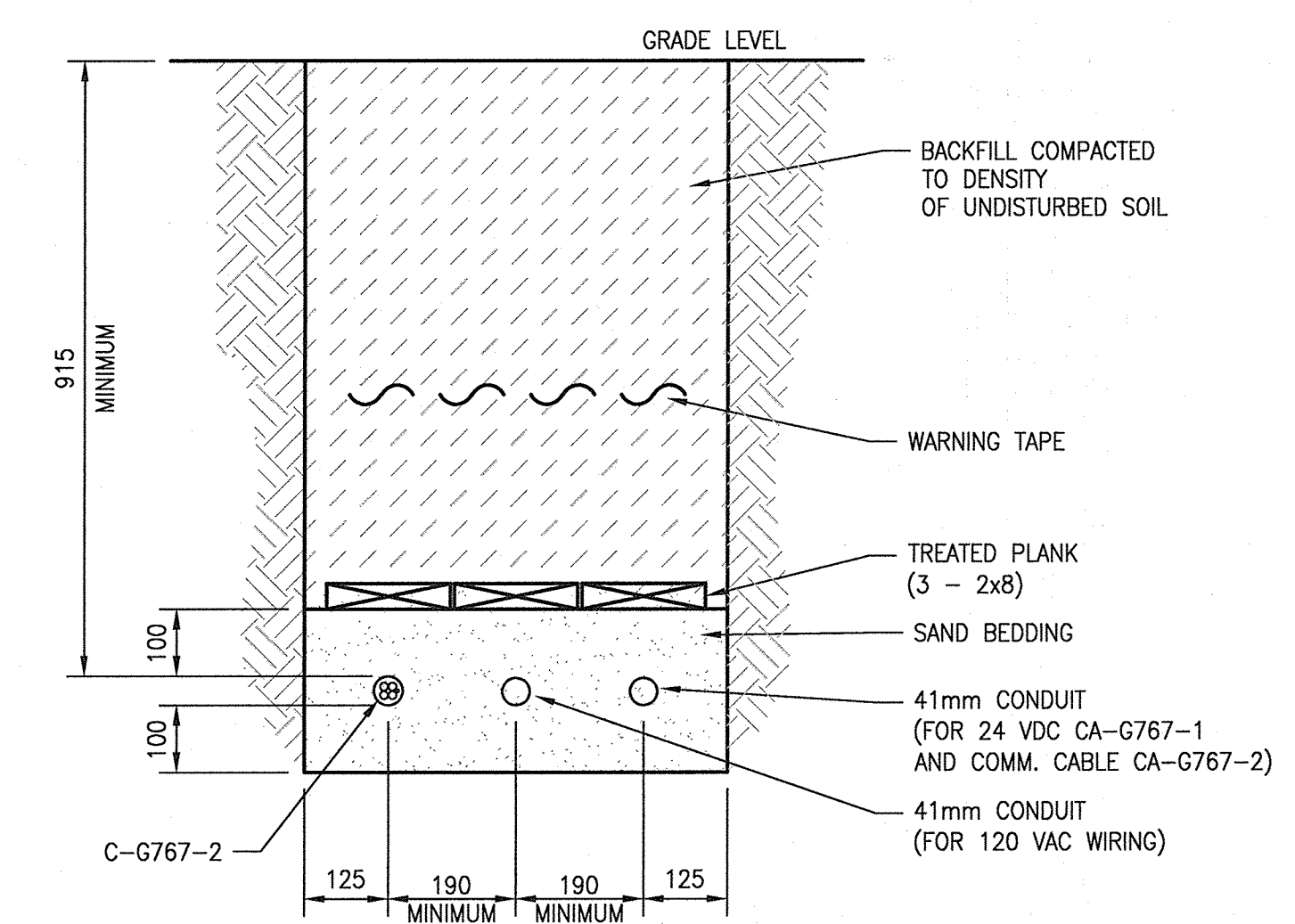


GENERATOR ROOM PLAN
SCALE: NTS



DETAIL 1- TRENCH LAYOUT
SCALE: NTS

DEMOLITION NOTES:

- (A) DEMOLISH EXISTING LUMINAIRE IN GENERATOR ROOM. REMOVE EXISTING WIRING FROM THE LUMINAIRE UP TO THE SOURCE PANELBOARD. CONDUIT TO REMAIN AND TO BE RE-USED. REUSE EXISTING LIGHT SWITCH.
- (B) DEMOLISH EXISTING GAS DETECTION CONTROLLER PZ-933-GS ALONG WITH ASSOCIATED WIRING.
- (C) DEMOLISH EXISTING LEL GAS DETECTION SENSOR AND WIRING.

CONSTRUCTION NOTES:

- (1) PROVIDE LED LUMINAIRE C/W MOUNTING ACCESSORIES. REFER TO DRAWING 1-0640M-E0042 002 FOR LUMINAIRE SCHEDULE. RETAIN AND DETERMINE EXISTING CIRCUIT AND PROVIDE PANEL AND CIRCUIT NUMBER ON AS BUILTS. RETAIN EXISTING LIGHT SWITCH.
- (2) PROVIDE MOTOR CONTROL CENTRE, MCC-G766. MODIFY/REROUTE EXISTING CONDUIT FOR PANEL Q LOCATED DIRECTLY BEHIND THE LOCATION OF THE NEW MCC-G766. PROVIDE NEW FEED TO EXHAUST FANS EF-G1, EF-G2, EF-G3, AND EF-G4 FROM MCC-G766. PROVIDE A 6 AWG BONDING CONDUCTOR THAT IS TAPPED FROM THE GROUNDING SYSTEM ASSOCIATED WITH THE GENERATORS.
- (3) PROVIDE EMERGENCY LIGHT C/W BATTERY UNIT. REFER TO DRAWING 1-0640M-E0042 002 FOR EMERGENCY LIGHTING AND EXIT SIGN BATTERY SCHEDULE. CONNECT TO EXISTING LIGHTING CIRCUIT IN GENERATOR ROOM. EXTEND CABLING AND CONDUIT AS REQUIRED.
- (4) PROVIDE A 100 KW, 600V LOAD BANK, LDB-G767 TO BE LOCATED OUTSIDE. PROVIDE CONCRETE PAD COMPLETE WITH BOLLARDS PROTECTION. REFER TO DRAWING 1-0640B-E0013 FOR WIRING DETAILS AND DRAWING 1-0640A-S0004 FOR PAD AND BOLLARD DETAILS.
- (5) PROVIDE 125A THERMAL MAGNETIC BREAKER CB-G767 FOR LOAD BANK LDB-G767. PROVIDE WALL MOUNT ENCLOSURE TO INSTALL CIRCUIT BREAKER. ENSURE ENCLOSURE IS SIZED TO ACCOMMODATE BREAKER.
- (6) PROVIDE HMI, HMI-G767, ASSOCIATED WITH LOAD BANK LDB-G767. HMI-G767 TO BE LOCATED IN WALL MOUNTED NEMA 3R ENCLOSURE (HMI MANUFACTURER TO SUPPLY ENCLOSURE). REFER TO DWG 1-0640B-E0013 FOR LOAD BANK CONNECTION DIAGRAM.
- (7) PROVIDE GAS DETECTION CONTROLLER AIT-G6901 FOR LEL (METHANE) DETECTION. PROVIDE JUNCTION BOX, CABLING, AND ALL NECESSARY MOUNTING ACCESSORIES. REFER TO DRAWING 1-0640B-A0002 FOR DETAILS.
- (8) PROVIDE LEL GAS DETECTOR SENSOR AE-G6901. WIRE TO NEW GAS DETECTOR CONTROLLER AIT-G6901. PROVIDE ALL NECESSARY MOUNTING HARDWARE AND ACCESSORIES. REFER TO DRAWING 1-0640B-A0002 FOR DETAILS.
- (9) PROVIDE GAS DETECTION HORN / STROBE AAH-G6901. PROVIDE ALL NECESSARY MOUNTING ACCESSORIES. REFER TO DRAWING 1-0640B-A0002.
- (10) CONTRACTOR TO ENSURE AREA IS SUITABLE FOR UNDERGROUND CABLE ROUTING. MODIFY IF NECESSARY. REFER TO DWG 1-0640B-E0013 FOR LOAD BANK CONNECTION DIAGRAM.
- (11) ENSURE EXISTING DAMPER 5 AND DAMPER 6 (DAMPER NOT CURRENTLY LABELLED ON SITE) CONTROL SCHEME IS RETAINED.
- (12) SCAN THE WALL PRIOR TO CORE DRILLING OR CUTTING. CORE DRILL HOLES TO SUIT CABLE AND CONDUIT SIZE. PROVIDE WEATHER PROOF SEAL FOR CABLE OR CONDUIT EXITING/ENTERING THE BUILDING.
- (13) PROVIDE CABLE FROM SWITCHBOARD SWDB-G1 (SEE DRAWING 1-0640B-E0007) TO LOAD BANK CIRCUIT BREAKER CB-G767 AND THEN FROM CB-G767 TO LOAD BANK LDB-G767 LOCATED OUTSIDE. OUTDOOR CABLE TO BE DIRECT BURIED.
- (14) PROVIDE NEW EXIT SIGN. PROVIDE BATTERY CONNECTION AS INDICATED. CONNECT 120V AC CONNECTION TO EXISTING LIGHTING CIRCUIT. MOUNT ON WALL. REFER TO SCHEDULE ON DWG 1-0640M-E0042-002 FOR EXIT SIGN MODEL.
- (15) PROVIDE GAS DETECTION CONTROLLER AIT-G6902 FOR CARBON MONOXIDE DETECTION. PROVIDE JUNCTION BOX, CABLING AND ALL NECESSARY MOUNTING ACCESSORIES. REFER TO DRAWING 1-0640B-A0003 FOR DETAILS.
- (16) PROVIDE CARBON MONOXIDE SENSOR AE-G6902. WIRE TO NEW GAS DETECTOR CONTROLLER AIT-G6902. PROVIDE ALL NECESSARY MOUNTING HARDWARE AND ACCESSORIES. REFER TO DRAWING 1-0640B-A0003 FOR DETAILS. SENSOR TO BE LOCATED NO MORE THAN 5 FEET ABOVE FINISHED FLOOR.

LEGEND:

- \$ 2-WAY SWITCH
- UNIT HEATER
- G711-Y(x) DENOTES SWITCHED CIRCUIT (IF APPLICABLE)
- DENOTES CIRCUIT #
- DENOTES PANELBOARD FEED

GENERAL NOTES:

- 1. ALL EQUIPMENT ARE NEW UNLESS SPECIFICALLY NOTED OTHERWISE AND SHALL BE PROVIDED BY THE CONTRACTOR.
- 2. FOR CABLE INSTALLATION, ARRANGE FOR INSPECTION BY THE CONTRACT ADMINISTRATOR PRIOR TO COVERING CABLES. INSPECTION TO OCCUR WITH BASE SAND AND CABLES INSTALLED AND 2 METERS OF TRENCH WITH COVER SAND AND PLANKS IN PLACE, BUT NOT BACKFILLED.
- 3. THE CABLE ROUTING DETAIL IS NOT EXACTLY TO SCALE. SITE CONFIRM ALL MEASUREMENTS.
- 4. REFER TO ASBESTOS REPORTS IN APPENDIX B. ASBESTOS IS PRESENT IN AND/OR PRESUMED TO BE PRESENT IN (BUT NOT LIMITED TO) THE FOLLOWING:

WALL : DRYWALL
VERMICULITE INSULATION (MASONRY)
PLASTER (QUARRY TILE & PREFORMED BLOCK)

1-0640B-A0003	LOOP DIAGRAM, AIT-G6902
1-0640M-P0012	PROCESS & INSTRUMENTATION DIAGRAM MISCELLANEOUS
1-0640A-S0004	STRUCTURAL, LDB-G767 LOAD BANK PLAN AND DETAILS
1-0640B-E0007	COLLECTION BLDG, 600V GENERATORS AND SWITCHGEAR
1-0640B-A0002	LOOP DIAGRAM, AIT-G6901, METHANE LEL DETECTION
1-0640M-E0042-002	PANELBOARD AND LUMINAIRE SCHEDULE
1-0640M-E0014	ELECTRICAL EQUIPMENT PLAN, GENERATOR ROOM
1-0640B-E0013	CONNECTION DIAGRAM, LOAD BANK LDB-G767
Q-MCP-187	CLI BUILDING - LIGHTING, POWER, HVAC & CABLE TRAY
DRAWING NUMBER	REFERENCE DRAWINGS

NOTES:
1. THIS DRAWING SUPERCEDES DRAWING 1-0640M-E0014.



SNC-LAVALIN INC. 148 Victoria Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080		ENGINEER'S SEAL PROVINCE OF MANITOBA V. ELIMBAN Member 34633 REGISTERED PROFESSIONAL ENGINEER Jan 01 2020	
DESIGNED BY: V. ELIMBAN	CHECKED BY: K. SAPIAK	DATE: 2019/06/19	ISSUED FOR CONSTRUCTION BY: A. WEISS
DRAWN BY: J. GRAGASIN	APPROVED BY: D. BECKER	DATE: 2019/06/19	DATE: 2019/10/18
SCALE: NTS	ISSUED FOR CONSTRUCTION BY: A. WEISS	DATE: 2019/06/19	DATE: 2019/10/18
CONSULTANT NO.:			
NO. REVISIONS	DATE	DESIGN	CHECK
01	ISSUED FOR ADDENDUM 3	2020/01/06	VE VE
00	ISSUED FOR TENDER AND CONSTRUCTION	2019/10/18	VE KS

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

MCPHILLIPS PUMPING STATION

ELECTRICAL EQUIPMENT PLAN
COLLECTION BUILDING
GENERATOR ROOM AND LOAD BANK LDB-G767

CITY DRAWING NUMBER: 1-0640B-E0008
SHEET: 01 OF 01
SCALE: A1