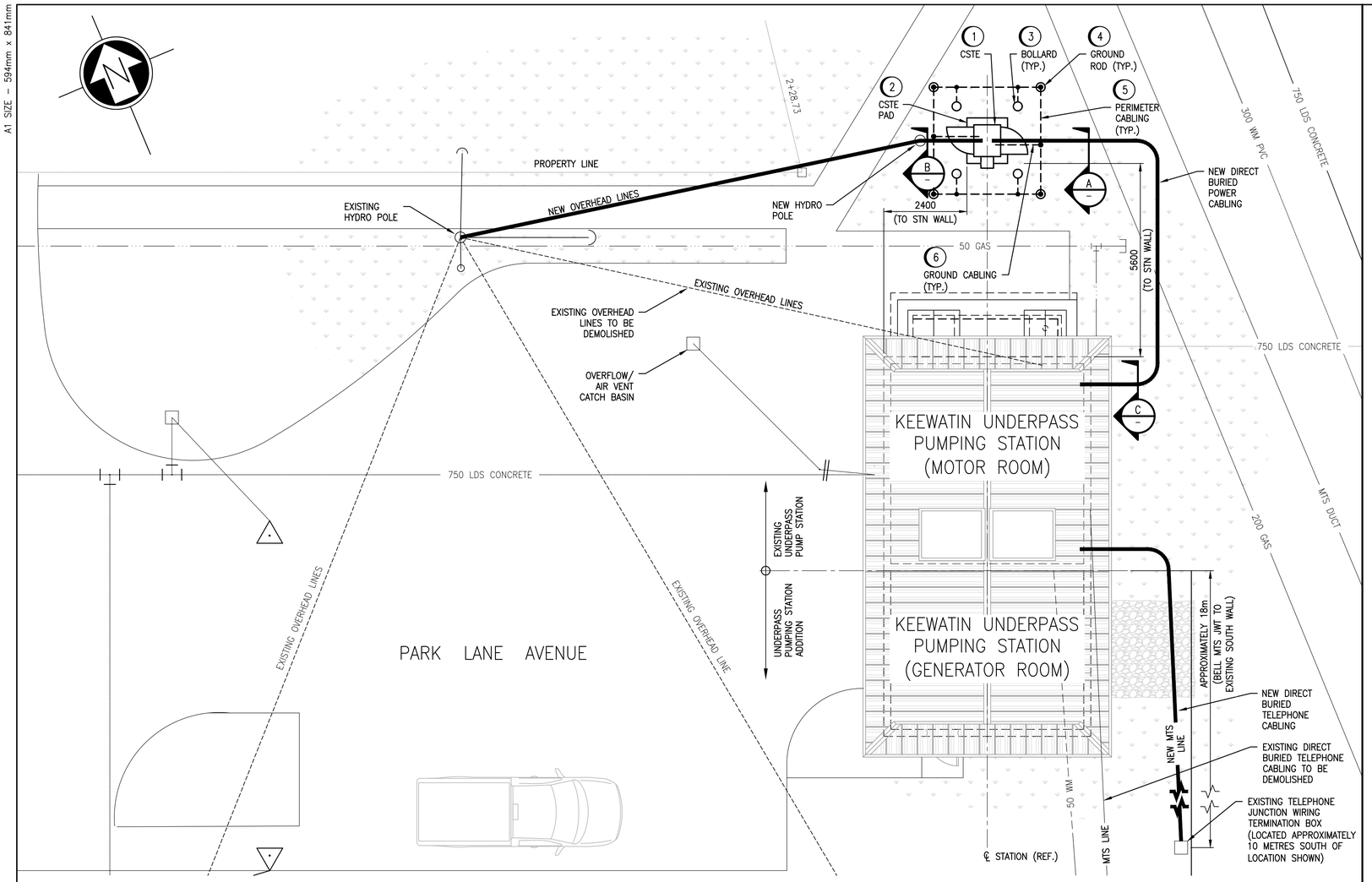
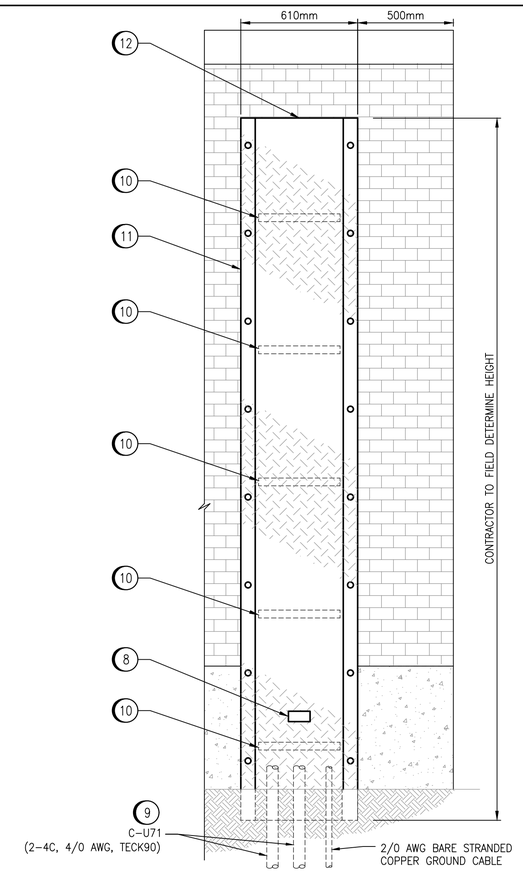
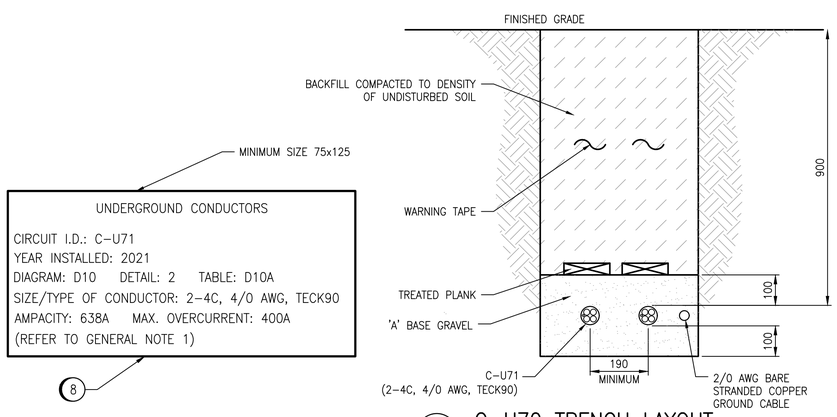
A1 SIZE – 594mm x 841mm



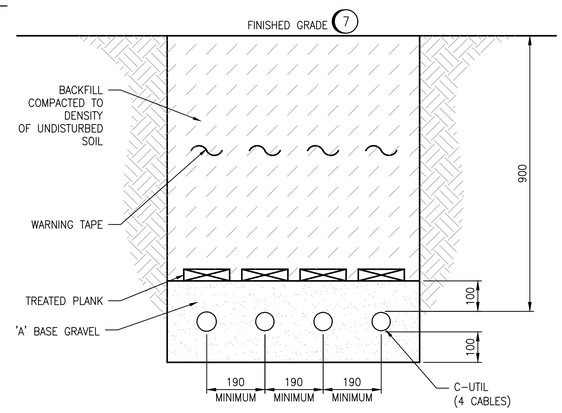

## SITE PLAN
SCALE: 1 : 75




## STATION EAST WALL SECTION
SCALE: N.T.S.




## C–U70 TRENCH LAYOUT
SCALE: N.T.S.




## C–UTIL TRENCH LAYOUT
SCALE: N.T.S.

## MANITOBA HYDRO SCOPE OF WORK:

1. PROVIDE AND INSTALL NEW UTILITY CABLING (C–UTIL) FROM EXISTING HYDRO POLE TO NEW HYDRO POLE. BETWEEN POLES, THE CABLING SHALL BE OVERHEAD. AT THE NEW POLE, UTILITY CABLING C–UTIL SHALL DROP DOWN POLE AND BE DIRECT BURIED TO CSTE–U70.
2. PROVIDE AND INSTALL NEW METER ALONG WITH METERING TRANSFORMERS IN CSTE–U70 METERING COMPARTMENT.
3. PROVIDE AND INSTALL NEW TREATED WOOD HYDRO POLE. THE POLE LENGTH SHALL BE 40 FEET WITH A MINIMUM OF 8 FEET INSTALLED BELOW GRADE.
4. DEMOLISH EXISTING UTILITY CABLING TO KEEWATIN STATION FROM EXISTING UTILITY POLE.

## BELL MTS SCOPE OF WORK:

1. PROVIDE AND INSTALL NEW TELEPHONE SERVICE CABLING TO KEEWATIN STATION. NEW TELEPHONE SERVICE CABLING SHALL BE DIRECT BURIED TO FROM EXISTING TELEPHONE JUNCTION WIRING TERMINATION (JWT) BOX TO KEEWATIN STATION MOTOR ROOM EAST WALL.
2. DEMOLISH EXISTING TELEPHONE CABLING BETWEEN MOTOR ROOM SOUTH WALL AND EXISTING TELEPHONE JUNCTION WIRING TERMINATION (JWT) BOX.

## GENERAL NOTES:

1. PERIMETER BURIED GROUND CABLE AND GROUND RODS SHALL BE INSTALLED AS PER DETAILS 1 AND 2 ON DRAWING 1–0304U–E0006.
2. ALL GROUND CABLES ARE BARE 2/0 AWG, COPPER, UNLESS OTHERWISE INDICATED.
3. THE STATED AMPACITY OF CABLE C–U71 ON THE LAMACOID IS FOR THE DIRECT BURIED PORTION OF THE CABLE. THE AMPACITY OF THE EXPOSED PORTION OF THE CABLE IS BASED ON CEC TABLE 2, 460 AMPS.
4. ALL TRENCHING AND BACKFILLING OF DIRECT BURIED CABLING SHALL BE PERFORMED BY THE CONTRACTOR INCLUDING FOR UTILITY (POWER AND TELEPHONE) BURIED CABLING. COORDINATE TRENCH DEPTHS REQUIRED FOR UTILITY CABLING.

## SPECIFIC NOTES:

1. PROVIDE AND INSTALL NEW PADMOUNT 600V CUSTOMER SERVICE TERMINATION ENCLOSURE CSTE–U70, COMPLETE WITH MAIN BREAKER. CSTE SHALL HAVE SEPARATE BREAKER AND METERING COMPARTMENTS
2. PROVIDE AND INSTALL NEW CSTE FIBREGLASS UTILITY PAD FOR MOUNTING CSTE–U70. FIBREGLASS UTILITY PAD SHALL BE SIZED SUCH THAT A TOP OF PAD EXTENDS A MINIMUM OF 150MM (6" INCHES) PAST ALL CSTE SIDES. BACKFILL AREA TO MATCH EXISTING ONCE PAD IS INSTALLED.
3. PROVIDE AND INSTALL NEW BOLLARDS AS SHOWN. INSTALLATION SHALL BE AS PER CITY OF WINNIPEG DRAWING SCD–135. EACH BOLLARD SHALL BE PROVIDED WITH A GROUND CONNECTION TO PERIMETER GROUND CABLING. GROUND CABLE SHALL BE BOLTED ON A WELDED STEEL TAB USING A 2–HOLE NEMA LONG BARREL COMPRESSION LUGS.
4. PROVIDE AND INSTALL NEW GROUND RODS AS SHOWN. REFER TO DRAWING 1–0304U–E0006, DETAIL 1
5. PROVIDE AND INSTALL NEW PERIMETER 2/0 AWG BARE GROUND CABLING. GROUND CABLING SHALL CONNECT WITH ALL GROUND RODS.
6. PROVIDE NEW 2/0 AWG BARE COPPER CABLING FROM CSTE–U70 TO PERIMTER GRID CABLING. PROVIDED TWO (2) SEPARATE GROUNDING CONNECTIONS FOR CSTE–U70 CONNECTED TO TWO (2) DIFFERENT PERIMETER GROUNDING CONDUCTOR RUNS.
7. CONFIRM EXACT TRENCH SIZE (DEPTH, WIDTH & LENGTH) TO EXCAVATE FOR MANITOBA HYDRO. CONTRACTOR SHALL BACKFILL TRENCH ONCE UTILITY CABLING C–UTIL IS INSTALLED IN THE TRENCH.
8. PROVIDE AND INSTALL TWO NEW C–F71 LAMACOIDS FOR IDENTIFICATION OF UNDERGROUND CABLING, ONE FOR EACH END OF THE CABLING, AS PER CITY OF WINNIPEG BYLAW RULE 2–100. LAMACOID ON DIAMOND CHECKER PLATE SHALL BE INSTALLED A MINIMUM OF 300MM ABOVE FINISHED GRADE LEVEL.
9. MAINTAIN A MINIMUM 100% CABLE DIAMETER SPACING BETWEEN CABLES.
10. PROVIDE AND INSTALL NEW BACK–TO–BACK STAINLESS STEEL UNISTRUT FOR SECURING CABLING TO BUILDING EXTERIOR WALL.
11. PROVIDE AND INSTALL NEW ENCLOSED DIAMOND CHECKER PLATE COVER TO CONCEAL CABLING.
12. DIAMOND CHECKER PLATE COVER SHALL BE FULLY SEALED AT THE TOP OF THE PLATE TO PREVENT THE INGRESS OF WATER. PROVIDE TOP PIECE COMPLETE WITH CONTINUOUS WELDED SEAMS TO THE VERTICAL SECTION. PROVIDE SEALANT TO FULLY SEAL CHECKER PLATE TO EXISTING BRICK WALL.

| DRAWING NUMBER | REFERENCE DRAWINGS |
|---|---|
| 1–0304U–E0004 | ELECTRICAL AND LIGHTING PLAN LAYOUT |
| 1–0304U–E0003 | ELECTRICAL SINGLE LINE DIAGRAM |

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES
1 0 1 2 3 4m
1 : 75

APEGM Certificate of Authorization
SNC-Lavalin Inc.
No. 4489

| NO. | REVISIONS | DATE | DESIGN | CHECK |
|---|---|---|---|---|
| 00 | ISSUED FOR CONSTRUCTION | 2021/03/24 | KS | BC |

SNC·LAVALIN
SNC-LAVALIN INC.
148 Nature Park Way
Winnipeg, MB, Canada R3P 0X7
204-786-8080

| | |
|---|---|
| DESIGNED BY: K. SAPIAK | CHECKED BY: K. SAPIAK |
| DRAWN BY: K. SAPIAK | APPROVED BY: B. CLEVEN |
| SCALE: 1:75 | ISSUED FOR CONSTRUCTION BY: K. ZUREK |
| DATE: 2021/03/16 | DATE: 2021/03/24 |
| CONSULTANT NO.: 665338 | |

ENGINEER'S SEAL
PROVINCE OF MANITOBA
K. K. SAPIAK
Member 33675
REGISTERED PROFESSIONAL ENGINEER
2021-03-24

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

KEEWATIN UNDERPASS PUMPING STATION
2021 UPGRADES
ELECTRICAL SITE PLAN AND DETAILS
PUMPING STATION AND GENERATOR ROOM

| CITY DRAWING NUMBER | SHEET | REV. | SIZE |
|---|---|---|---|
| 1–0304U–E0017 | 001 | 00 | A1 |

1–0304U–E0017–001.dwg

LAST SAVE: 2021/03/24 – 9:08am
PATH: M:\665338\ENG\47ELE\DD – General DWG\1–0304U–E0017–001.dwg