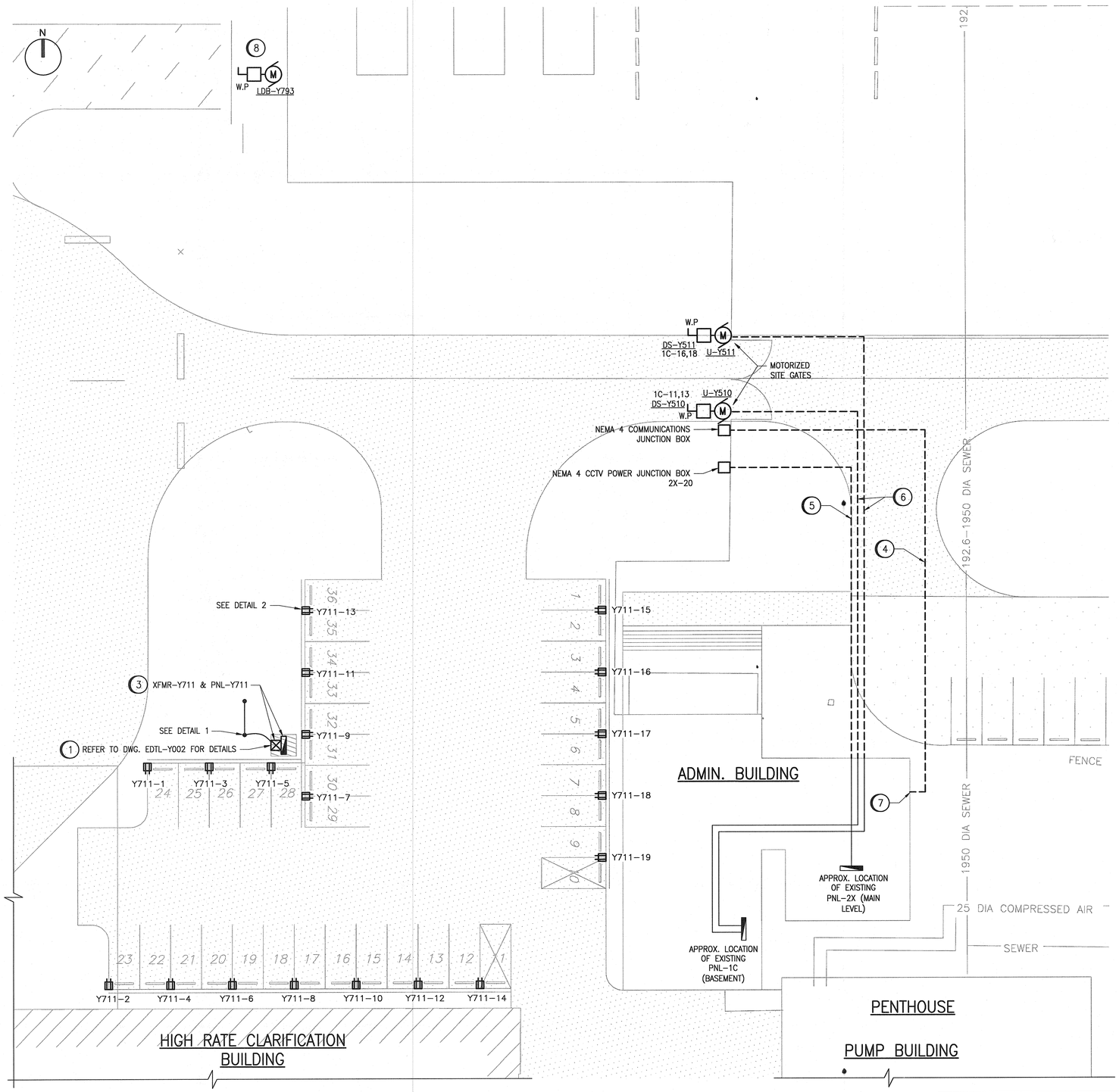
A1 SIZE – 594mm x 841mm



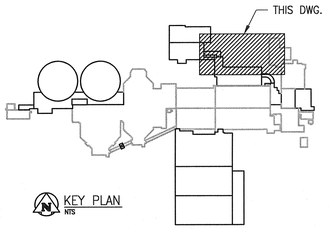

## PARKING AND GATE POWER AND SYSTEMS

1 : 200

1:200 2000 0 4000 8000

## GENERAL NOTES

1. REFER TO DWG. 1-0102-ESCH-Y002 & 1-0102-ESCH-M001 FOR PANEL SCHEDULES.
2. REFER TO DWG. 1-0102-ESLD-C005 FOR SINGLE LINE DRAWING.
3. REFER TO DWG. 1-0102-EGAD-M003 FOR PANEL BOARD PNL-1C LOCATION PLAN.
4. ALL GROUND SYSTEM CONNECTIONS (BELOW GRADE) SHALL BE MADE USING CADWELD.
5. THIS DRAWING SHOWS DEVICES AT THEIR APPROXIMATE LOCATION. EXACT LOCATIONS TO BE COORDINATED ON SITE.
6. CONTRACTOR SHALL REFER TO THE SITE SURVEY PLAN PRIOR TO PERFORMING ANY EXCAVATIONS.
7. ALL DEVICES SHOWN ON THIS DRAWING ARE NEW AND ARE TO BE PROVIDE BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. NOT ALL EXISTING DEVICES ARE SHOWN. THERE ARE A NUMBER OF BURIED CABLES, GROUND RODS, PARKING LOT PLUG POWER CABLES, AND OTHER SYSTEMS IN THE ADMIN BUILDING VICINITY WHICH NEED TO BE MAINTAINED, AND KEPT OPERATIONAL.
8. APPROXIMATE CABLE / CONDUIT ROUTING SHOWN. NOT ALL BENDS ARE SHOWN, CONFIRM EXACT ROUTING ON SITE, AND COORDINATE WITH OTHER TRADES.
9. RELOCATE THE LIFTMASTER SL595-100-21-H3 MOTORIZED GATE SYSTEM FROM THE CONSTRUCTION ENTRANCE AREA TO THE NEW GATE LOCATION SHOWN ON THIS DRAWING. WIRE AND CONNECT THE SYSTEM AT THIS NEW LOCATION, INCLUDING BUT NOT LIMITED TO OPERATOR INTERCONNECTION WIRING, SENSORS, ETC. FOR A COMPLETE AND WORKING SYSTEM. PROVIDE ALL NEW CABLING. THE ORIGINAL SYSTEM WAS ORDERED THROUGH
10. PROVIDE TWO (2) IPLC RECEPTACLE PROGRAMMING DEVICES TO THE CITY CONTRACT ADMINISTRATOR.



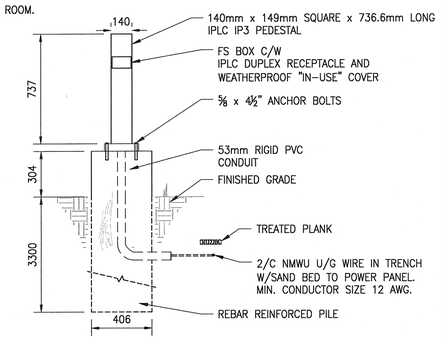

KEY PLAN
NTS

## SPECIFIC NOTES

1. PROVIDE WEATHERPROOF PARKING LOT TRANSFORMER AND PANEL BOARD, MOUNTED ON STRUCTURAL SUPPORTS.
2. PROVIDE PARKING RECEPTACLE COMPLETE WITH CONCRETE PILE AND IPLC IP3 POST AND RECEPTACLE (SEE DETAIL 2). PROVIDE REBAR REINFORCEMENT FOR PILE SIMILAR TO DETAIL A, DWG ELTG-Y002. PROVIDE LAMACOID TAG ATTACHED TO POST "RESTRICTED CAPACITY – BLOCK HEATERS ONLY". TYPICAL.
3. PROVIDE GROUND ELECTRODES AND CABLING FOR TRANSFORMER GROUND. REFER TO DETAIL 1.
4. PROVIDE BURIED 53mm RIGID PVC CONDUIT FROM ADMIN BUILDING AUTOMATION ROOM (M142) TO THE SECURE SIDE OF THE FENCE GATE. PROVIDE CAT 6 AND SPARE PULLCORD RUN IN CONDUIT SYSTEM. PROVIDE 30 FEET OF SPARE CABLING COILED UP AT BOTH ENDS. THE CITY CONTRACT ADMINISTRATOR WILL SUPPLY AND INSTALL THE CCTV CAMERA LOCATED AT THE GATE. CCTV CAMERAS WILL BE CONNECTED TO CONTROL PANEL NP-M906. SEE DRAWING AGAD-M002. PROVIDE NEMA 4 JUNCTION BOX AT FENCE.
5. PROVIDE 2C, 10 AWG RW90, 1C, 12 AWG RW90 BND RUN IN CONDUIT FROM ADMIN BUILDING CONTROL SYSTEM OFFICE M143 (CIRCUIT 2X-20) TO THE SECURE SIDE OF THE FENCE FOR POWER FOR A FUTURE CCTV CAMERA. ROUTE CABLING OUT OF ADMIN BUILDING VIA COMPUTER STORAGE ROOM M149 AND MECHANICAL ROOM M148. INTERIOR CONDUIT RUN INSIDE OF THE ADMIN BUILDING TO BE EMT. EXTERIOR CONDUIT TO BE BURIED 35mm RIGID PVC. PROVIDE NEMA 4 JUNCTION BOX AT FENCE. REFER TO ADMINISTRATION PANEL SCHEDULE ON DRAWING ESCH-M001. APPROXIMATE INTERIOR ROUTING SHOWN.
6. PROVIDE 2C, 8 AWG RW90, 1C, 10 AWG RW90 BND RUN IN CONDUIT FROM ADMIN BUILDING ELECTRICAL ROOM M117 (PNL-1C) TO EACH SITE GATE MOTOR OPERATOR U-Y510 AND U-Y511 (CIRCUITS SHOWN ON DRAWING). ROUTE CABLING OUT OF ADMIN BUILDING VIA BASEMENT MECHANICAL ROOM M148. INTERIOR CONDUIT RUN INSIDE OF THE ADMIN BUILDING TO BE EMT. EXCAVATE AND DIRECT BURY EXTERIOR PORTION TO MOTOR OPERATORS. APPROXIMATE ROUTING SHOWN. REFER TO ADMINISTRATION PANEL SCHEDULE ON DRAWING ESCH-M001.
7. ROUTE CONDUIT AND CABLING INTO THE FALSE FLOOR OF THE AUTOMATION ROOM.
8. PROVIDE 15kV POWER CABLE FROM GENERATOR SWITCHGEAR SGR-C790 IN ELECTRICAL BUILDING TO LOAD BANK LDB-Y793. PROVIDE 600V POWER FOR AUXILIARY SYSTEMS/COOLING AND CONTROLS FROM MCC-C720 IN ELECTRICAL BUILDING TO LDB-Y793. REFER TO SINGLE LINE DRAWINGS ESLD-C003 AND ESLD-C006. ROUTE BOTH CABLES THROUGH DUCT BANK. REFER TO DUCT BANK LAYOUT ON EGAD-A001.

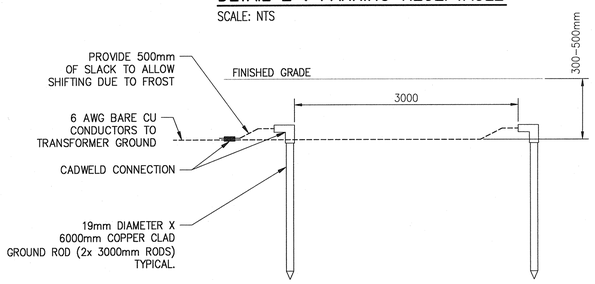
## LEGEND

- PARKING RECEPTACLE C/W POST
- PANELBOARD
- TRANSFORMER
- 3000mm LONG (19mm DIA) COPPER CLAD GROUND ROD




## DETAIL 2 : PARKING RECEPTACLE

SCALE: NTS




## DETAIL 1 : GROUND ELECTRODE

SCALE: NTS

| REFERENCE DRAWINGS | DESCRIPTION |
|---|---|
| 1-0102-EAAA-A001 | ELECTRICAL, LEGEND AND DETAILS |

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

| NO. | REVISIONS | DATE | DESIGN | CHECK |
|---|---|---|---|---|
| 00 | ISSUED FOR CONSTRUCTION – 976-2016 | 2017/04/05 | WE | DEB |

CH2MHILL. SNC·LAVALIN KGS GROUP

| | |
|---|---|
| DESIGNED BY: D. BECKER | CHECKED BY: D. BECKER |
| DRAWN BY: MJ. PERSSON | APPROVED BY: E. RYCZKOWSKI |
| SCALE: AS SHOWN | ISSUED FOR CONSTRUCTION BY: J. SHUMKA |
| DATE: 2016/07/08 | DATE: 2017/04/05 |
| CONSULTANT NO.: 474248 | |

ENGINEER'S SEAL: PROVINCE OF MANITOBA – D.E. BECKER – Member 23646 – REGISTERED PROFESSIONAL ENGINEER – April 5 2017

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE
SEWPCC UPGRADING/EXPANSION PROJECT
ELECTRICAL – LAYOUT AND DETAILS
POWER AND COMMUNICATION SITE PLAN

| CITY DRAWING NUMBER | SHEET | REV. | SIZE |
|---|---|---|---|
| 1-0102-EGAD-Y007 | 001 | 00 | A1 |

LAST SAVE: 2017/04/06 – 7:42am
PATH: C:\pw_workdir\ch2mhill__wbg\db010199\d0356711\1-0102-EGAD-Y007.dwg

PLOT DATE: Apr 06, 2017 – 7:42am

FILE NAME:1-0102-EGAD-Y007.dwg