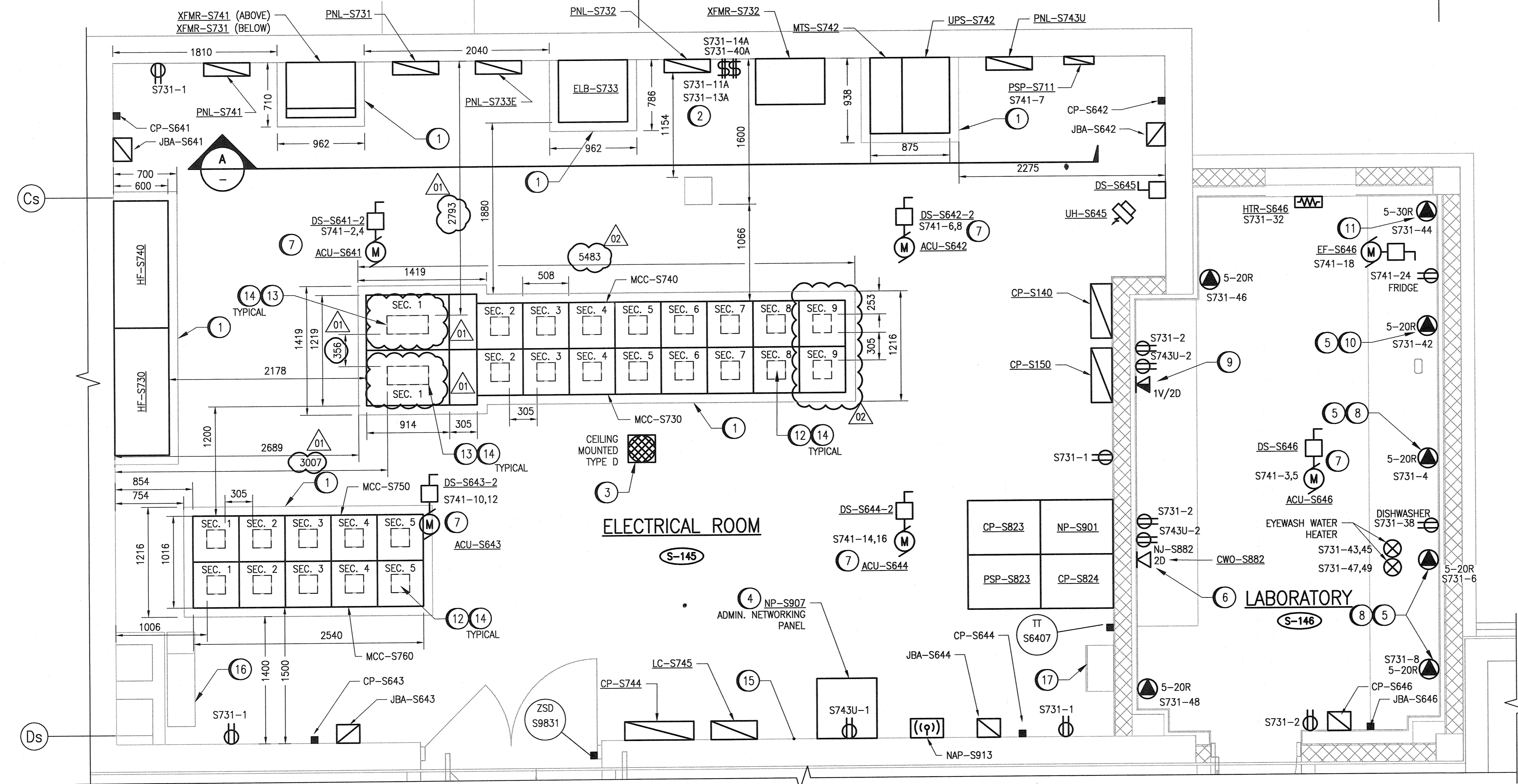
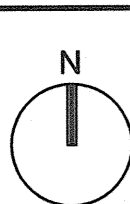
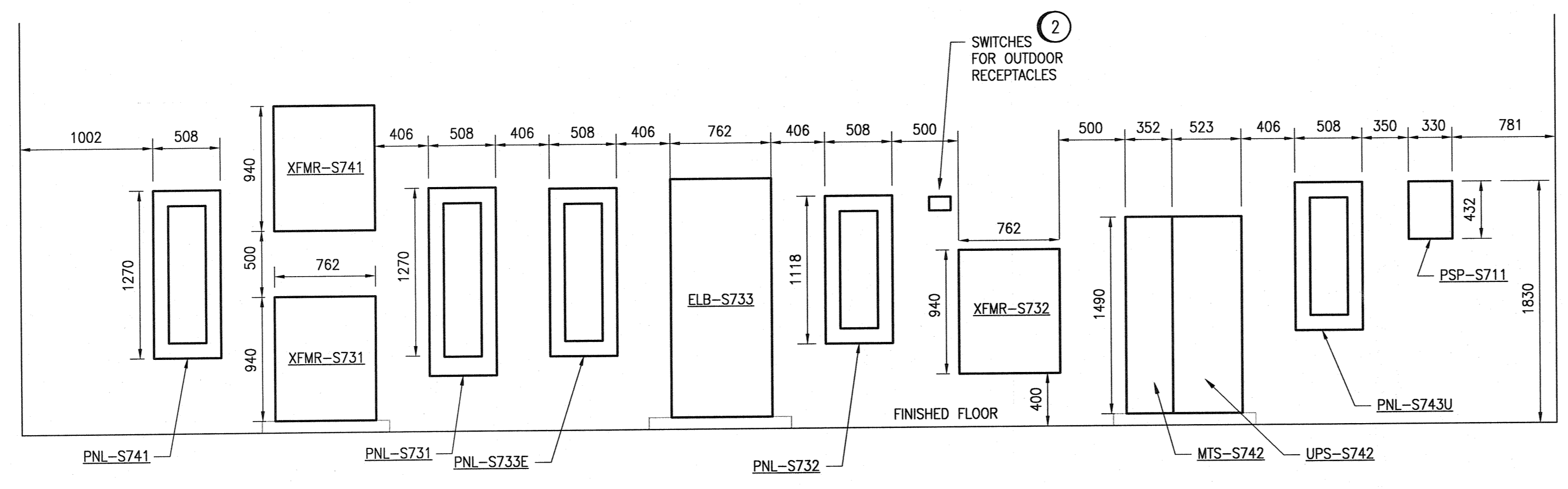


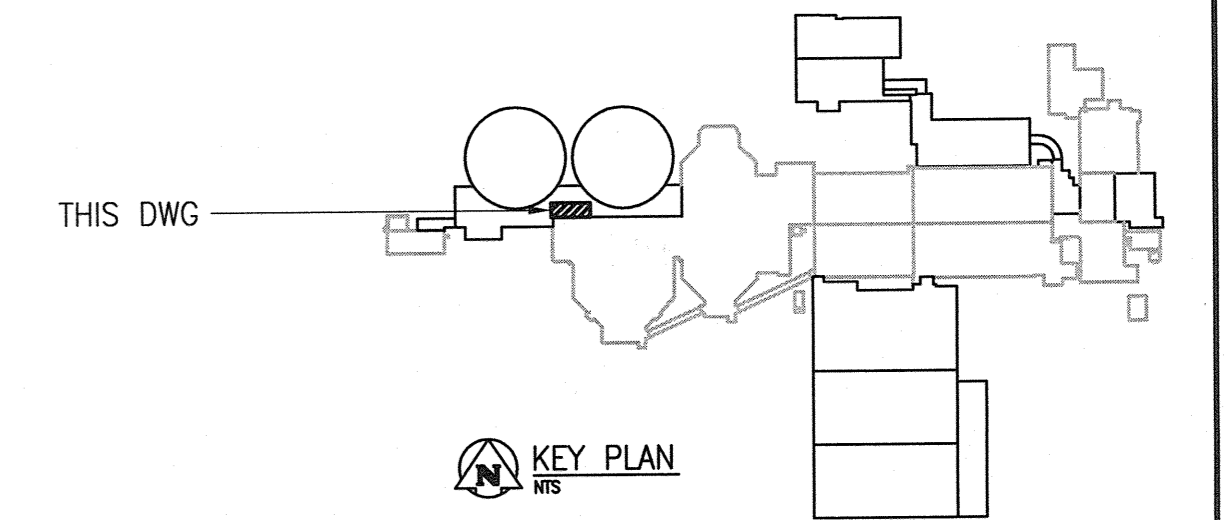
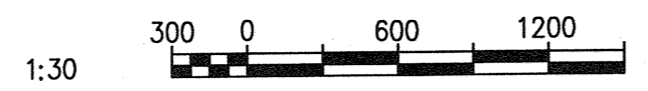
A1 SIZE - 594mm x 841mm



SECONDARY CLARIFIER WEST ELECTRICAL ROOM & LABORATORY
SCALE: 1 : 30



A EQUIPMENT ELEVATION
SCALE: 1 : 30



GENERAL NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE EXACT SIZE OF ALL ELECTRICAL EQUIPMENT WITH THE VENDOR SHOP DRAWINGS AND THE CONCRETE SUBCONTRACTOR PRIOR TO POURING THE CONCRETE HOUSEKEEPING PADS.
2. ALL WIRING ASSOCIATED WITH RECEPTACLES WILL BE RUN IN CONDUIT.
3. THERE ARE STRUCTURAL EXPANSION JOINTS IN THE FACILITY (NOT SHOWN ON ELECTRICAL). PROVIDE EXPANSION COUPLINGS AND FITTINGS FOR ALL CONDUIT CROSSING THE JOINTS. DO NOT LOCATE RIGID DEVICES ACROSS OR ON TOP OF THE EXPANSION JOINTS.
4. EQUIPMENT WITH NO CIRCUIT NUMBERS SHOWN ARE TO BE FED FROM THE 600 VAC MCC. TYPICAL.
5. ALL CONDUIT SHALL BE RIGID, THREADED ALUMINUM CONDUIT, EXCEPT FOR CONDUIT RUN WITHIN THE ELECTRICAL ROOM. THE ELECTRICAL ROOM IS NON-HAZARDOUS AND PRESSURIZED.
6. TEST AND ADJUST THE AUDIBILITY OF THE PUBLIC ADDRESS SYSTEM TO BEST SUIT THE SPACE.
7. IN ACCORDANCE WITH CEC REQUIREMENTS 15A AND 20A RECEPTACLES WITHIN 1.5 METERS OF WASHBASINS AND SINKS SHALL BE PROTECTED BY GFCI BREAKERS.
8. ALL ELECTRICAL DISTRIBUTION EQUIPMENT, INCLUDING 600VAC SWITCHGEAR, DRY TYPE TRANSFORMERS, PANELBOARDS, MCCs, HARMONICS FILTERS, UPS ARE TO BE SCHNEIDER ELECTRIC EQUIPMENT. PHYSICAL SIZES SHOWN ARE BASED ON SCHNEIDER EQUIPMENT. BATTERY BANK SIZE SHOWN IS BASED ON LUMACELL ARGES CENTRAL SYSTEM

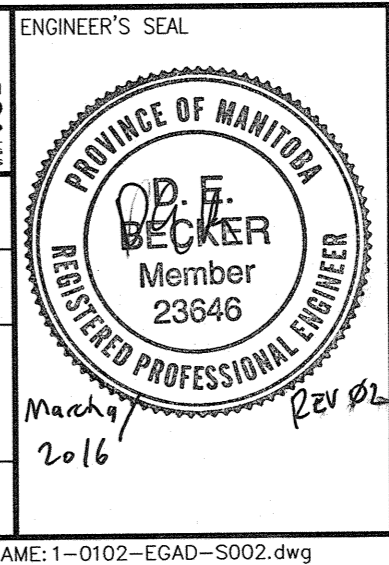
SPECIFIC NOTES:

- 1 PROVIDE HOUSEKEEPING PAD 89mm HIGH, EXTEND 100mm ON EACH SIDE OF THE EQUIPMENT WITH 19mm CHAMFERED EDGES. PROVIDE REINFORCEMENT AND ANCHOR PAD TO FLOOR SLAB.
- 2 GANGED SWITCHES FOR OUTDOOR RECEPTACLES. PROVIDE LAMACOID ABOVE SWITCH INDICATING RESPECTIVE CIRCUIT IDENTIFIER AND RECEPTACLE DESCRIPTION. REFER TO PANEL SCHEDULE ON ESCH-S001 FOR RECEPTACLE DESCRIPTION.
- 3 PROVIDE CEILING MOUNTED SPEAKER ASSOCIATED WITH FACILITY PUBLIC ADDRESS SYSTEM. SPEAKER SHALL BE SURFACE MOUNTED COMPLETE WITH BACKBOX. MOUNT SPEAKER CLEAR OF OBSTRUCTIONS. REFER TO DRAWING 1-0102-ESCH-S001 FOR SPEAKER AND BACKBOX MODEL.
- 4 PROVIDE ADMIN NETWORKING PANEL, NP-S907 AND INSTALL DUPLEX RECEPTACLE INSIDE OF PANEL FED FROM UPS POWER (CIRCUIT NUMBER SHOWN ON DWG). PROVIDE FIBRE PATCH CORDS WITH LC CONNECTORS IN CONDUIT FOR ADMIN AND SECURITY NETWORKS (4 FIBRES TOTAL) FROM PROCESS NETWORK PATCH PANEL TO ADMIN NETWORKING PANEL.
- 5 RECEPTACLES ON COUNTER WITHIN 1.5 METERS OF THE LABORATORY SINK SHALL BE FED FROM A GFCI CLASS A BREAKER.
- 6 PROVIDE DATA RECEPTACLES C/W CAT5E CABLING TO AUTOMATION NETWORK SWITCH NP-S901.
- 7 REFER TO DWG. EDWG-S003 FOR WIRING OF ACU-S641, ACU-S642, ACU-S643, ACU-S644.
- 8 PROVIDE RECEPTACLES MOUNTED ABOVE COUNTER.
- 9 PROVIDE VOICE/DATA RECEPTACLE C/W CAT5E CABLING. PROVIDE DATA AND VOICE CABLING TO ADMIN NETWORKING PANEL NP-S907.
- 10 PROVIDE 5-20R RECEPTACLE FOR CONVECTION OVEN ABOVE COUNTER. PROVIDE SUITABLE PLUG AND CORD ASSEMBLY CONNECTED TO EQUIPMENT.
- 11 PROVIDE 5-30R RECEPTACLE FOR MUFFLE FURNACE ABOVE COUNTER. PROVIDE SUITABLE PLUG AND CORD ASSEMBLY CONNECTED TO EQUIPMENT.
- 12 PROVIDE 200x200mm HOLES IN THE FLOOR BELOW THE MCC SECTIONS FOR CABLE ENTRY. TYPICAL.
- 13 PROVIDE 200x457mm HOLES IN THE FLOOR BELOW THE MCC MAIN BREAKER SECTION FOR CABLE ENTRY.
- 14 INSTALL FIRESTOPPING SYSTEM THAT MEETS THE REQUIREMENTS OF ULC STANDARD CAN/ULC-S115. TYPICAL.
- 15 ENSURE DESIGNATED AREA (660mmX660mm) ADJACENT TO NP-S907 IS CLEAR TO ACCOMMODATE SWINGING OF NP-S907.
- 16 PROVIDE CONCRETE FLOOR HOLE PENETRATION (305mm BY 800mm) TO ALLOW FOR CABLE TRAY PENETRATION TO THE PUMP ROOM BELOW. PROVIDE FIRESTOPPING OF PENETRATION.
- 17 PROVIDE CONCRETE FLOOR HOLE PENETRATION (305mm BY 508mm) TO ALLOW FOR CABLE TRAY PENETRATION TO THE PUMP ROOM BELOW. PROVIDE FIRESTOPPING OF PENETRATION.



NO.	REVISIONS	DATE	DESIGN	CHECK
02	MODIFICATION OF MCC HOUSEKEEPING PAD	03/2016	SLJ	DEB
01	MODIFICATION OF FLOOR PENETRATION	02/2016	WE	DEB
00	ISSUED FOR TENDER - B.O. 899-2015	01/2016	WE	DEB

CH2MHILL.
SNC-LAVALIN
DESIGNED BY: V. ELIMBAN
DRAWN BY: MJ. PERSSON
CHECKED BY: D. BECKER
APPROVED BY: E. RYCZKOWSKI
SCALE: 1:30
DATE: 2014/04/07
ISSUED FOR CONSTRUCTION BY: T. TURZAK
DATE: 2016/01/29
CONSULTANT NO.: 474248



THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
SOUTH END WATER POLLUTION CONTROL CENTRE
SEWPCC UPGRADING/EXPANSION PROJECT
ELECTRICAL - POWER LAYOUT
SECONDARY CLARIFIERS 4 AND 5
WEST ELECTRICAL ROOM & LABORATORY
CITY DRAWING NUMBER: 1-0102-EGAD-S002
SHEET: 001
REV.: 02
SIZE: A1

LAST SAVE: 2016/03/09 - 3:02pm
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