

MANITOBA HYDRO SCOPE OF WORK:

- 1. DEMOLISH UTILITY CABLING FEEDING 5 KV SERVICE ALONG WITH UTILITY CABLING FEEDING 120/240 VAC SERVICE.

FROM UTILITY FEEDER 1756N3
4.16 KV

WARNING
DANGEROUS ARC FLASH LEVELS
AT EQUIPMENT MARKED AS FOLLOWS:

DANGER
54.9 CAL/CM²
AFB: 4.68 M
WD: 0.46 M

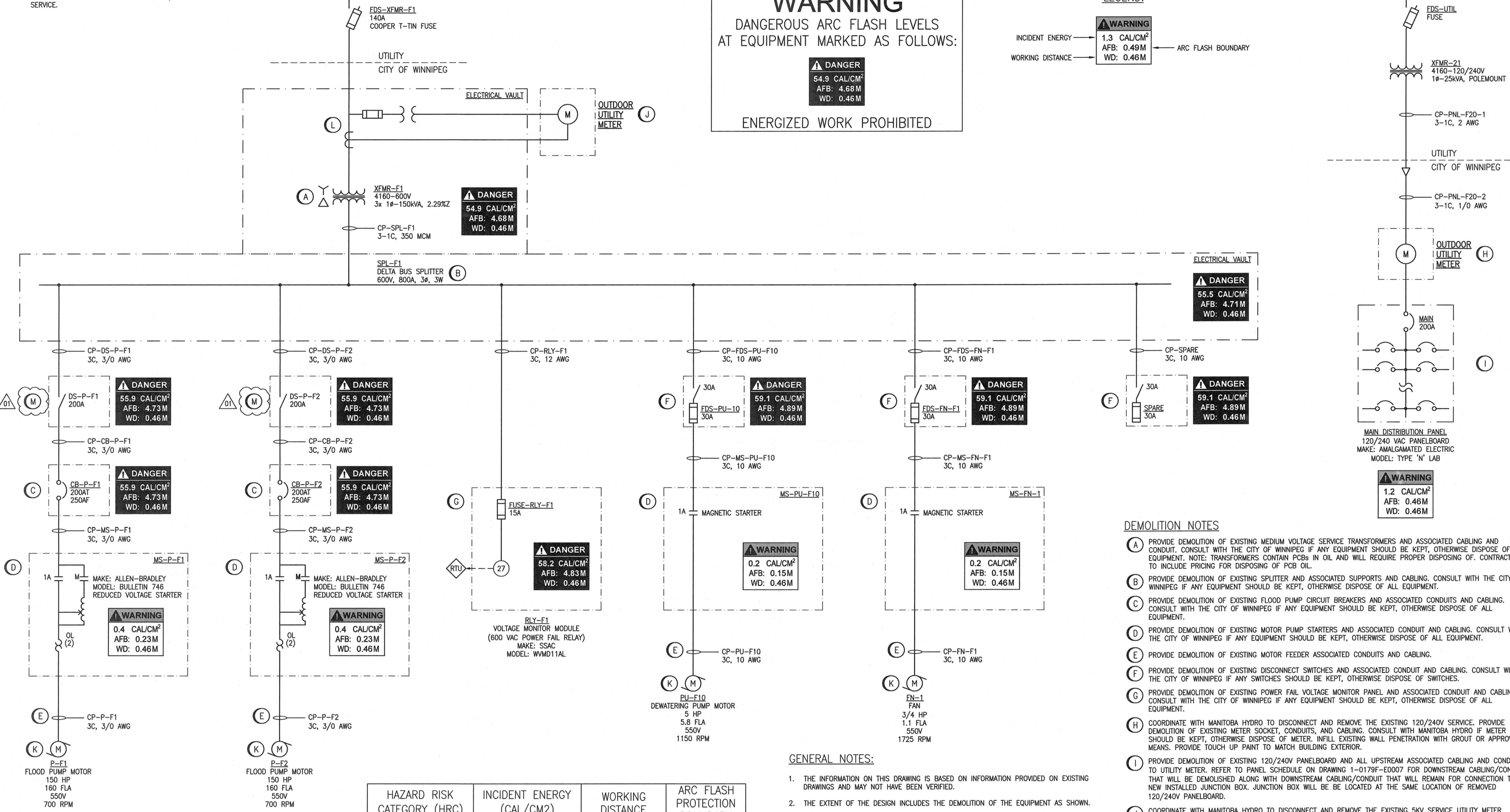
ENERGIZED WORK PROHIBITED

LEGEND:

INCIDENT ENERGY → **WARNING**
1.3 CAL/CM²
AFB: 0.49 M
WD: 0.46 M

WORKING DISTANCE →

ARC FLASH BOUNDARY



DEMOLITION NOTES

- (A) PROVIDE DEMOLITION OF EXISTING MEDIUM VOLTAGE SERVICE TRANSFORMERS AND ASSOCIATED CABLING AND CONDUIT. CONSULT WITH THE CITY OF WINNIPEG IF ANY EQUIPMENT SHOULD BE KEPT, OTHERWISE DISPOSE OF ALL EQUIPMENT. NOTE: TRANSFORMERS CONTAIN PCBs IN OIL AND WILL REQUIRE PROPER DISPOSING OF. CONTRACTOR TO INCLUDE PRICING FOR DISPOSING OF PCB OIL.
- (B) PROVIDE DEMOLITION OF EXISTING SPLITTER AND ASSOCIATED SUPPORTS AND CABLING. CONSULT WITH THE CITY OF WINNIPEG IF ANY EQUIPMENT SHOULD BE KEPT, OTHERWISE DISPOSE OF ALL EQUIPMENT.
- (C) PROVIDE DEMOLITION OF EXISTING FLOOD PUMP CIRCUIT BREAKERS AND ASSOCIATED CONDUITS AND CABLING. CONSULT WITH THE CITY OF WINNIPEG IF ANY EQUIPMENT SHOULD BE KEPT, OTHERWISE DISPOSE OF ALL EQUIPMENT.
- (D) PROVIDE DEMOLITION OF EXISTING MOTOR PUMP STARTERS AND ASSOCIATED CONDUIT AND CABLING. CONSULT WITH THE CITY OF WINNIPEG IF ANY EQUIPMENT SHOULD BE KEPT, OTHERWISE DISPOSE OF ALL EQUIPMENT.
- (E) PROVIDE DEMOLITION OF EXISTING MOTOR FEEDER ASSOCIATED CONDUITS AND CABLING.
- (F) PROVIDE DEMOLITION OF EXISTING DISCONNECT SWITCHES AND ASSOCIATED CONDUIT AND CABLING. CONSULT WITH THE CITY OF WINNIPEG IF ANY SWITCHES SHOULD BE KEPT, OTHERWISE DISPOSE OF SWITCHES.
- (G) PROVIDE DEMOLITION OF EXISTING POWER FAIL VOLTAGE MONITOR PANEL AND ASSOCIATED CONDUIT AND CABLING. CONSULT WITH THE CITY OF WINNIPEG IF ANY EQUIPMENT SHOULD BE KEPT, OTHERWISE DISPOSE OF ALL EQUIPMENT.
- (H) COORDINATE WITH MANITOBA HYDRO TO DISCONNECT AND REMOVE THE EXISTING 120/240V SERVICE. PROVIDE DEMOLITION OF EXISTING METER SOCKET, CONDUITS, AND CABLING. CONSULT WITH MANITOBA HYDRO IF METER SHOULD BE KEPT, OTHERWISE DISPOSE OF METER. INFILL EXISTING WALL PENETRATION WITH GROUT OR APPROVED MEANS. PROVIDE TOUCH UP PAINT TO MATCH BUILDING EXTERIOR.
- (I) PROVIDE DEMOLITION OF EXISTING 120/240V PANELBOARD AND ALL UPSTREAM ASSOCIATED CABLING AND CONDUIT TO UTILITY METER. REFER TO PANEL SCHEDULE ON DRAWING 1-0179F-E0007 FOR DOWNSTREAM CABLING/CONDUIT THAT WILL BE DEMOLISHED ALONG WITH DOWNSTREAM CABLING/CONDUIT THAT WILL REMAIN FOR CONNECTION TO A NEW INSTALLED JUNCTION BOX. JUNCTION BOX WILL BE LOCATED AT THE SAME LOCATION OF REMOVED 120/240V PANELBOARD.
- (J) COORDINATE WITH MANITOBA HYDRO TO DISCONNECT AND REMOVE THE EXISTING 5KV SERVICE UTILITY METER. PROVIDE DEMOLITION OF EXISTING OUTDOOR UTILITY METER, CONDUITS, AND CABLING. CONSULT WITH MANITOBA HYDRO IF METER SHOULD BE KEPT, OTHERWISE DISPOSE OF METER. INFILL EXISTING WALL PENETRATION WITH GROUT OR APPROVED MEANS. PROVIDE TOUCH-UP PAINT TO MATCH BUILDING EXTERIOR.
- (K) EXISTING MOTORS TO REMAIN.
- (L) PROVIDE DEMOLITION OF EXISTING 5KV UTILITY METERING CURRENT AND POTENTIAL TRANSFORMERS AND ALL ASSOCIATED CONDUIT AND CABLING. CONSULT WITH MANITOBA HYDRO IF METERING TRANSFORMERS SHOULD BE KEPT, OTHERWISE DISPOSE OF METERING TRANSFORMERS.
- (M) DEMOLISH ALL CABLING AND CONDUIT ASSOCIATED WITH EXISTING FLOOD PUMPS DISCONNECT SWITCHES. DISCONNECT SWITCHES WILL BE REUSED AND RELOCATED WITHIN THE MOTOR ROOM.

GENERAL NOTES:

- 1. THE INFORMATION ON THIS DRAWING IS BASED ON INFORMATION PROVIDED ON EXISTING DRAWINGS AND MAY NOT HAVE BEEN VERIFIED.
- 2. THE EXTENT OF THE DESIGN INCLUDES THE DEMOLITION OF THE EQUIPMENT AS SHOWN.

PRE-DEMOLITION NOTES:

- 1. COORDINATE WITH MANITOBA HYDRO TO ARRANGE FOR A SERVICE UPGRADE.
- 2. NO TEMPORARY POWER FROM MANITOBA HYDRO IS REQUIRED FOR THE FLOOD PUMPS WHILE DEMOLITION/CONSTRUCTION IS UNDERWAY. A TEMPORARY GENERATOR WILL NEED TO BE PROVIDED FOR LOADS ASSOCIATED WITH HEATING, LIGHTING, ETC DURING DEMOLITION AND NEW CONSTRUCTION. THE STATION CONTAINS DOMESTIC WATER PIPING AND ASSOCIATED HEAT TRACING. IT IS THE RESPONSIBILITY TO ENSURE THE DOMESTIC WATER PIPING DOES NOT FREEZE. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES RESULTING FROM DOMESTIC WATER PIPING FREEZING.

HAZARD RISK CATEGORY (HRC)	INCIDENT ENERGY (CAL/CM ²)	WORKING DISTANCE	ARC FLASH PROTECTION BOUNDARY
D	> 40.0	DANGEROUS - ENERGIZED WORK NOT PERMITTED	
4	40.0	0.46 METRES	4.00 METRES
3	25.0	0.46 METRES	3.10 METRES
2	8.0	0.46 METRES	1.55 METRES
1	4.0	0.46 METRES	1.10 METRES
0	1.2	0.46 METRES	0.46 METRES

1-0179F-E0007	ELECTRICAL PLAN LAYOUT MAIN FLOOR DEMOLITION
DRAWING NUMBER	REFERENCE DRAWINGS

<p>SNC-LAVALIN</p> <p>DESIGNED BY: K. SAPIAK DRAWN BY: K. SAPIAK SCALE: NTS</p>		<p>SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080</p> <p>CHECKED BY: B. CLEVEN APPROVED BY: B. CLEVEN</p> <p>ISSUED FOR CONSTRUCTION BY: K. ZUREK DATE: 2018/08/22</p>		<p>ENGINEER'S SEAL</p> <p>PROVINCE OF MANITOBA 2019-01-24 K. K. SAPIAK REGISTERED PROFESSIONAL ENGINEER Member 33675</p>		<p>THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT</p> <p>ROLAND FLOOD PUMPING STATION 2019 UPGRADES ELECTRICAL SINGLE LINE DIAGRAM DEMOLITION</p>	
<p>01 ADDED LOCAL SWITCHES, ISSUED FOR CONSTRUCTION 2019/01/24 KS BC</p> <p>00 ISSUED FOR TENDER AND CONSTRUCTION 2018/12/14 KS BC</p>		<p>DATE: 2018/08/22</p> <p>CONSULTANT NO.:</p>		<p>CITY DRAWING NUMBER</p> <p>1-0179F-E0002</p>		<p>SHEET</p> <p>001</p> <p>REV.</p> <p>01</p> <p>SIZE</p> <p>A1</p>	