






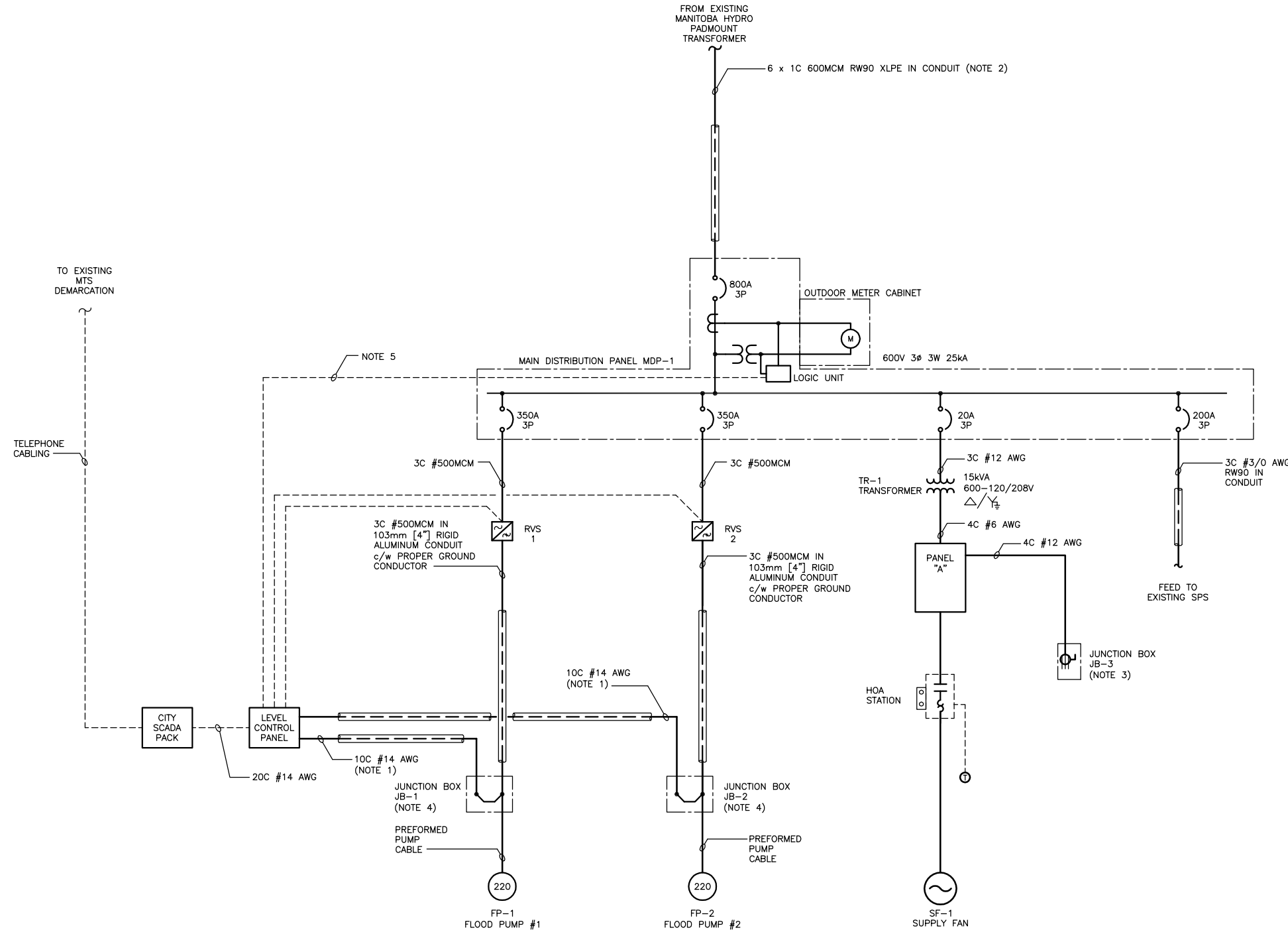


NOTES:

- CONTROL CABLING SHALL BE RUN IN SEPERATE 38ø [1-1/2"] CONDUIT.
- FEEDER SHALL BE IN ACCORDANCE WITH CEC DIAGRAM B-44 DETAIL 2.
- PROVIDE AN ELECTRICAL ENCLOSURE (JB-3) WITH 15A/600V/3P TWISTLOCK RECEPTACLE AND A 20A/208V/3P TWISTLOCK RECEPTACLE. ENCLOSURE SHALL HAVE AN INTERNAL PANEL WITH THE RECEPTACLES AND AN EXTERNAL DEAD-FRONT PANEL WHICH IS HINGED AND LOCKABLE. ENCLOSURE SHALL BE NEMA 4 RATED. RECEPTACLES ARE FOR THE HOOK-UP OF FUTURE PORTABLE EQUIPMENT SUCH AS SUMP PUMPS. INSTALL A BARRIER IN THE CONNECTION AREA BETWEEN THE 208V AND 600V WIRING.
- JUNCTION BOXES FOR THE CONNECTION TO THE PUMPS SHALL HAVE TERMINAL BLOCKS FOR THE CONNECTION OF THE CONTROLS WHICH ARE ISOLATED FROM THE POWER CONNECTION TO THE PUMPS BY A METALLIC BARRIER.
- MDP SHALL BE PROVIDED WITH A LOSS OF POWER ON ANY ONE PHASE SENSOR WITH A SPARE DRY CONTACT TO CONNECT TO CONTROLS/SCADA.

LEGEND:

-  REDUCED VOLTAGE STARTER
-  BREAKER
-  METER
-  CURRENT TRANSFORMER
-  VOLTAGE TRANSFORMER
-  DISTRIBUTION TRANSFORMER
-  MOTOR LOAD



1 SINGLE LINE / INTERCONNECTION DIAGRAM
SCALE: N.T.S.

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES



Certificate of Authorization
KGS Group

No. 245 Expiry: April 30, 2006

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPY. U/G STRUCTURES COMMITTEE DATE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M. ELEV.	NO.	REVISIONS	DATE	BY
	0	ISSUED FOR CONSTRUCTION	05/12/07	AP

KGS GROUP		CONSULTING ENGINEERS & PROJECT MANAGERS	
WINNIPEG (204) 896-1209		THUNDER BAY (807) 345-2233	
DESIGNED BY: AP	CHECKED BY: REW	APPROVED BY:	
DRAWN BY: GCN	RELEASED FOR CONSTRUCTION:		
HOR. SCALE: AS NOTED		DATE: 05/11/08	

ENGINEER'S SEAL
ORIGINAL DRAWING SIGNED BY A. PAWLKIEWICH 05/12/07
CONSULTANT DRAWING NO. **05-0107-13_19**

THE CITY OF WINNIPEG
WATER & WASTE DEPARTMENT

HAWTHORNE FLOOD PUMPING STATION UPGRADE ELECTRICAL SINGLE LINE DIAGRAM

SHEET **19** OF **24**
CAD FILE DRAWING NUMBER **05-0107-13**
CITY DRAWING NUMBER **LD-3256**