



GENERAL NOTES:

GENERAL:

- DIMENSIONS ARE NOT TO SCALE.
- EXISTING DETAILS AND DIMENSIONS SHOWN ON ALL DRAWINGS ARE TAKEN FROM ORIGINAL CONTRACT DOCUMENTS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS PRIOR TO COMMENCING WITH THE WORK.
- ALL UNITS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

CONCRETE:

- ALL EXPOSED CONCRETE EDGES TO BE CHAMFERED 20 mm.
- ALL CONCRETE (SLABS, FOOTING & CAISSONS)
 - CSA A23.1, EXPOSURE CLASS S-1
 - f_c - 35 MPa @ 28 DAYS
 - AIR CONTENT 5% - 8%

REINFORCING STEEL:

- REINFORCING STEEL SHALL CONFORM TO CSA G30.18 GRADE 400.
- REINFORCING STEEL SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH CSA G164 TO A MINIMUM ZINC THICKNESS OF 610 g/m².
- CONCRETE CLEAR COVER SHALL BE 75 UNLESS NOTED OTHERWISE.
- WELDED WIRE FABRIC SHALL CONFIRM TO CSA-G30.15_M.
- WELDED WIRE FABRIC SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH CSA G164.

STRUCTURAL PIPES:

- ALL STRUCTURAL PIPES TO SHALL BE 250 Ø XXS, GALVANIZED.

CORRUGATED STEEL PIPES (CSP):

- ALL CSP'S SHALL BE 600 Ø 14 GAUGE GALVANIZED.

CONSTRUCTION SEQUENCE:

- INSTALL PILES C/W WITH PIPE INSERTS TO UNDERSIDE OF CONCRETE FOOTING.
- CONSTRUCT CONCRETE FOOTING. TOP ELEVATION TO MATCH EXISTING CURB GRADES.
- INSTALL 600 Ø CULVERTS AND ADD CONCRETE BASE INFILL AND COMPLETE STEEL PIPE INFILL.
- INSTALL SPRAY FOAM IN CULVERT AND INSTALL BOLLARD TOP CAP.

- Pump station to east curb Lagimodiere -16.5m
- Pump station to west curb access road - 13.7m
- Pump station to east curb access road - 7.7m
- Pump station vestibule to east curb access road - 5.0 m
- Frontage width of pump station - 55.4 m

PLAN
MacLEAN PUMPING STATION

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPV. 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.	
CONSTRUCTION COMPLETION DATE: YYYY MM DD	
NO.	REVISIONS
A	ADDENDUM#1
	DATE
	BY

KEMP ENGINEERING INC.

DESIGNED BY	FK	CHECKED BY	FK
DRAWN BY	TK	APPROVED BY	FK
SCALE:		RELEASED FOR CONSTRUCTION	
HORIZONTAL	AS NOTED		
VERTICAL			
DATE	2017 04 24	DATE	

PLOT DATE: 2017 04 24

ENGINEER'S SEAL

CONSULTANT DRAWING NUMBER

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

MacLEAN PUMPING STATION
INSTALLATION OF BOLLARDS SHEET 1 OF 2
GENERAL ARRANGEMENT AND GENERAL NOTES

SHEET 1 OF 2
CITY DRAWING NUMBER
D13673