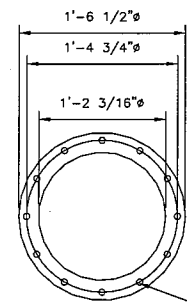
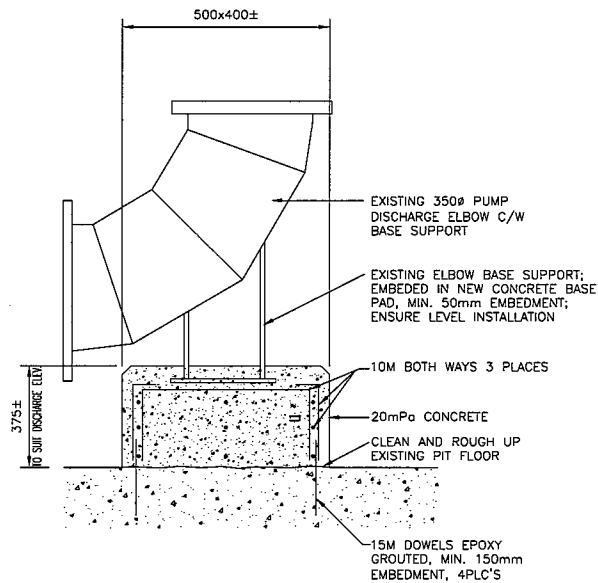


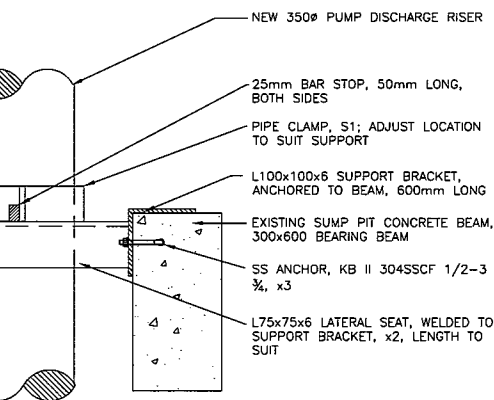
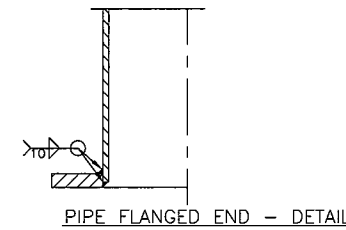
**A** NEW DISCHARGE PIPE ASSEMBLY  
SCALE 1:25



**B** NEW FABRICATED FLANGE, F1, TYP. x2  
SCALE 1:25



**C** NEW CONCRETE BASE ELBOW SUPPORT PAD  
NTS



NOTE  
PIPE SUPPORT, TYP. x2, AT EACH BEARING BEAM  
ALL STRUCTURAL STEEL SHALL BE PAINTED

**D** NEW RISER CLAMP SUPPORT  
NTS

FABRICATION MATERIALS				
PART NO.	QTY	SIZE (MM)	COMPONENT CODE	COMPONENT MATERIAL
<b>PIPE</b>				
1	6400	350	PIP1	A53 GR B PIPE, SCH 40, C.S., BW, EPOXY COATED
<b>FLANGES</b>				
F1	2	350	FLGSLP	1" THICK, ASTM A36 CUSTOM FLANGE TO SUIT EXISTING, BC 1'-4 3/4", 5/8" BOLTS; FIELD CHECK BEFORE FLANGE FABRICATION
ERECTION MATERIALS				
PART NO.	QTY	SIZE (MM)	COMPONENT CODE	COMPONENT MATERIAL
<b>GASKETS</b>				
G1	2	350	GAS4	ASTM D1330 GASKET, FF 150LB, 3mm, RUBBER, TRIM TO SUIT PUNCH HOLES TO SUIT BOLT CIRCLE
<b>BOLTS</b>				
B1	24	5/8	BOLTUG4	ANSI B16.5 5/8 C.S. BOLTS (FIELD CHECK EXISTING), A307 GR. A SQ. HD. WITH A563 NUTS, GR. A, HEX
<b>VALVES / IN-LINE ITEMS</b>				
PC1	1	350	PCOUPLING	PIPE COUPLING, ROBAR 1408, EPOXY COATED OR APPROVED EQUAL
<b>PIPE SUPPORTS</b>				
S1	2	350	PCLAMP	HEAVY DUTY CLAMP, ANVIL FIG 216 EPOXY COATED, OR APPR. EQ. PROVIDE STR. STEEL FRAME TO SUIT
<b>PIPE SPOOLS</b>				
1 2				

CUT PIPE LENGTH					
PIECE NO	LENGTH (FT-INS)	N.S. (MM)	REMARKS	END DNE	END TWD
<PS1>	3035	350		BEVEL	SQ.
<PS2>	3365	350		BEVEL	SQ, 330mm FIELD TRIM.

PIPE SURFACE PREPARATION AND PAINTING

SURFACES MUST BE CLEAN AND DRY. EMPLOY ADEQUATE METHODS TO REMOVE DIRT, DUST AND ALL OTHER CONTAMINANTS THAT COULD INTERFERE WITH ADHESION OF THE COATING TO SSPC-SP-6/NACE NO. 3, COMMERCIAL BLAST CLEANING.

APPLICATION WITHIN 4 HOURS OF THE CLEANING, AND WITH METAL TEMP. ABOVE MIN. 5° C, APPLY A 2 COMPONENT EPOXY PAINT. COVER FLANGE FACES, TO PROTECT MATING SURFACES FROM PAINT SPLATTER. ALLOW TO CURE. VISUALLY INSPECT THE PAINT COATING FOR DEFECTS; REPAIR ANY DEFECTS USING SAME PAINT SYSTEM AS REPAIR MATERIAL. FIELD REPAIR/PATCH ANY SCRATCHES OR BREAKS IN SURFACE PAINT, USING SAME PAINT SYSTEM AS PAINTING MATERIAL.

- GENERAL NOTES**
- PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS AND PROVINCIAL MECHANICAL ENGINEERING & INSPECTIONS BRANCH REQUIREMENTS.
  - COORDINATE WORKS WITH OTHER SUB-TRADES. REFER TO SPECIFIC DETAILS FOR CUTTING AND SEALING PENETRATIONS THROUGH OPENINGS & FIRE SEPARATIONS.
  - REFER TO TECHNICAL SPECIFICATIONS FOR PIPING AND FITTINGS MATERIAL SPECIFICATIONS AND INSTALLATION CONSTRUCTION REQUIREMENTS.
  - SUPPORT PIPING TO SUIT.
  - INVESTIGATE SITE PRIOR TO CONSTRUCTION TO CONFIRM ALL DIMENSIONS AND INSTALLATION REQ'S.
  - PERFORM ALL CUTTING & PATCHING NECESSARY FOR ANY REQUIRED OPENINGS.
  - NOT ALL EQUIPMENT/PIPING, ETC. IS SHOWN.

DESIGNED BY	AFG/AS	CHECKED BY	AFG
DRAWN BY	AS	APPROVED BY	
DATE	2011-02-23	DATE	2011-02-23

ALLIANCE Engineering Services Inc.

ENGINEER'S SEAL  
A.F.G. GOSSEN  
REGISTERED PROFESSIONAL ENGINEER

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT

RUE DE LA VERENDRYE PUMPING STATION  
FLOOD PUMPING STATION  
PUMP DISCHARGE PIPE REPLACEMENT  
PIPING DETAILS AND SPECIFICATION

SHEET 1 OF 1  
CITY DRAWING NUMBER  
1-0154L-M0003-001

CONSULTANT DRAWING NO. M.3

**APECN**  
Certificate of Authorization  
Alliance Engineering Services Inc.  
No.2906 Date: \_\_\_\_\_