

**UPPER LEVEL PLAN**  
1:150

NOTE:  
1. MINIMUM REQUIREMENTS FOR PIPE SUPPORT DESIGN CONCEPT TO BE FOLLOWED BY CONTRACTOR:  
FOUL AIR (FOA):  
-METAL BELLOWS EXPANSION JOINTS WHERE SHOWN ON DRAWING  
-FIXED PIPE SUPPORT (ANCHOR) WHERE SHOWN ON DRAWINGS  
-ROLLER PIPE SUPPORTS ON STRAIGHT PIPES BETWEEN TWO FIXED PIPE SUPPORTS SPACED AT 2.5M MAXIMUM  
-SLIDING PIPE SUPPORTS TO MAINTAIN 25mm OF LATERAL MOVEMENT ON EACH SIDE OF PIPE ON ALL OTHER SUPPORTS  
-AT FIXED PIPE SUPPORT LOCATIONS, PROVIDE HEAVY PIPE CLAMP WITH HANGER ROD, LATERAL AND LONGITUDINAL BRACING ANCHORED TO DOUBLE TEES. PROVIDE CLEVIS TYPE SUPPORT WITH HANGER ROD AT MAXIMUM 2.5M SPACING. PROVIDE LONGITUDINAL AND LATERAL BRACING EITHER SIDE OF BELLOW AND AT 10M SPACING ALONG FOA INSIDE PRIMARY CLARIFIER. SUPPORTS TO BE STAINLESS STEEL 316, ANCHORS 316 SST AND MINIMUM OF 20mm DIAMETER. ALL ANCHORS TO BE INSTALLED IN MIDDLE OF DOUBLE/LIN TEE WEB"

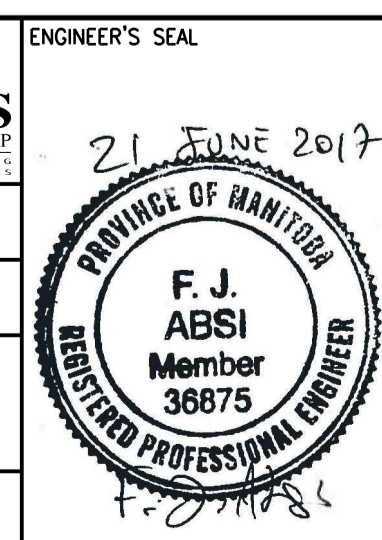


NO.	REVISIONS	DATE	DESIGN	CHECK
01	ISSUED FOR ADDENDUM 3 - 976-2016	2016/06/21	B.G.	J.C.
00	ISSUED FOR CONSTRUCTION - 976-2016	2017/04/05	D.G.	J.C.

**CH2MHILL**  
SNC-LAVALIN

DESIGNED BY: B. EDGAR  
DRAWN BY: B. COOPER  
SCALE: 1:150  
DATE: 2017/04/05  
CONSULTANT NO.: 474248

CHECKED BY: F. ABSI  
APPROVED BY: H.T. FREIHAMMER  
ISSUED FOR CONSTRUCTION BY: J. SHUMKA  
DATE: 2017/04/05



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

SOUTH END WATER POLLUTION CONTROL PLANT  
SEWPCC UPGRADING/EXPANSION PROJECT  
PROCESS  
PRIMARY CLARIFIERS  
UPPER LEVEL PLAN

CITY DRAWING NUMBER: 1-0102-PGAD-P002 | SHEET: 001 | REV: 01 | SIZE: A1