

## **APPENDIX 'B'**

# **BROOKLANDS-ROSSER LAND DRAINAGE TRUNK SEWER INFORMATION**

Ferry Road and Riverbend Combined Sewer Relief  
 Contract 4  
 Dewatering of Brooklands-Rosser LDS Trunk

Bid Op 961-2014  
 Appendix B  
 Figure 1

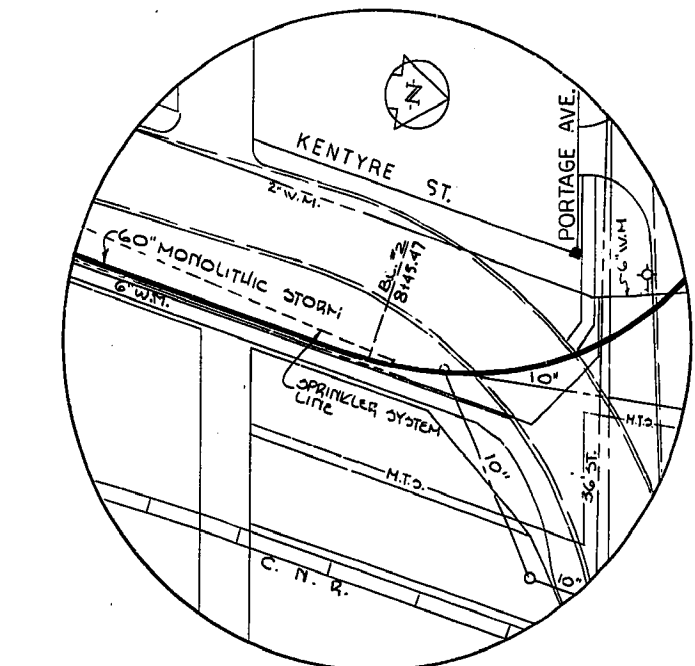
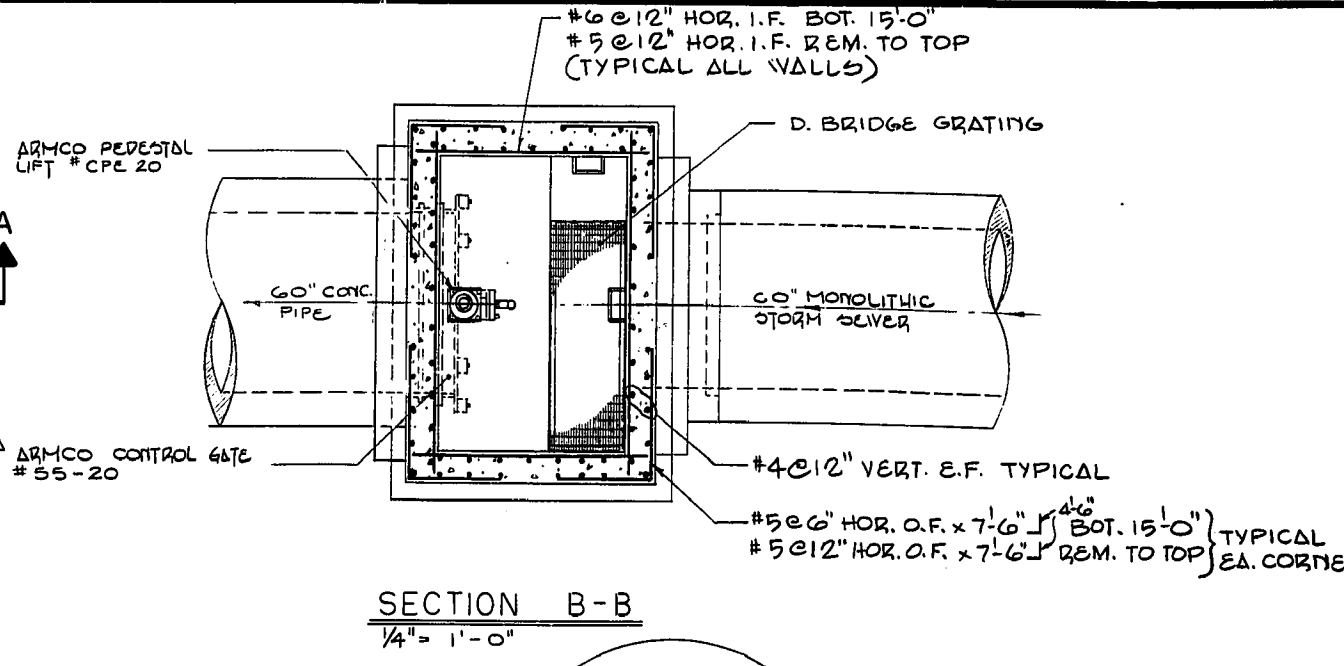
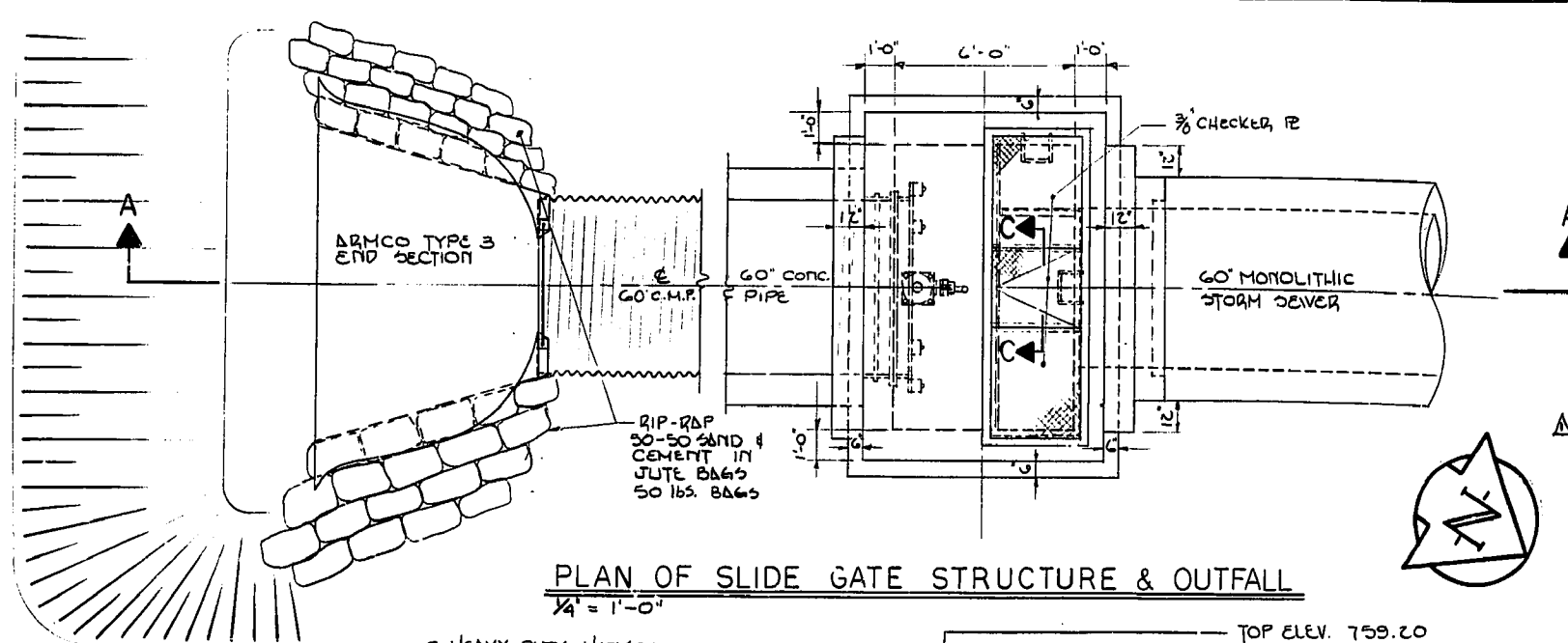
River Level **225.0**  
 Increments 20

Obtain Assiniboine River Level at St.James Bridge from  
<http://winnipeg.ca/publicworks/pwddata/riverlevels/>

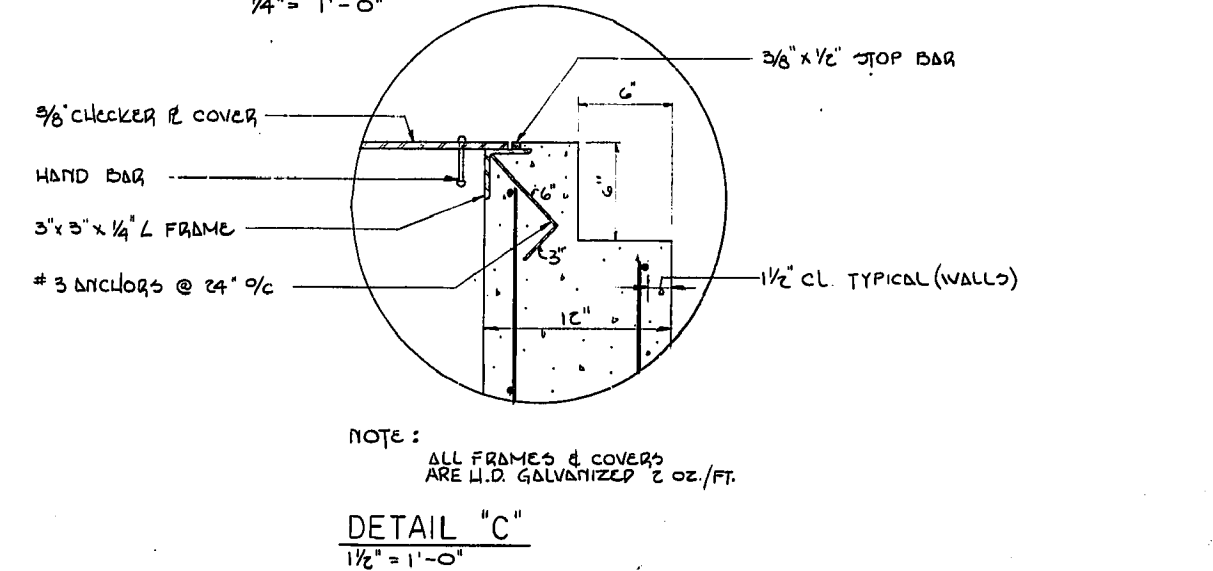
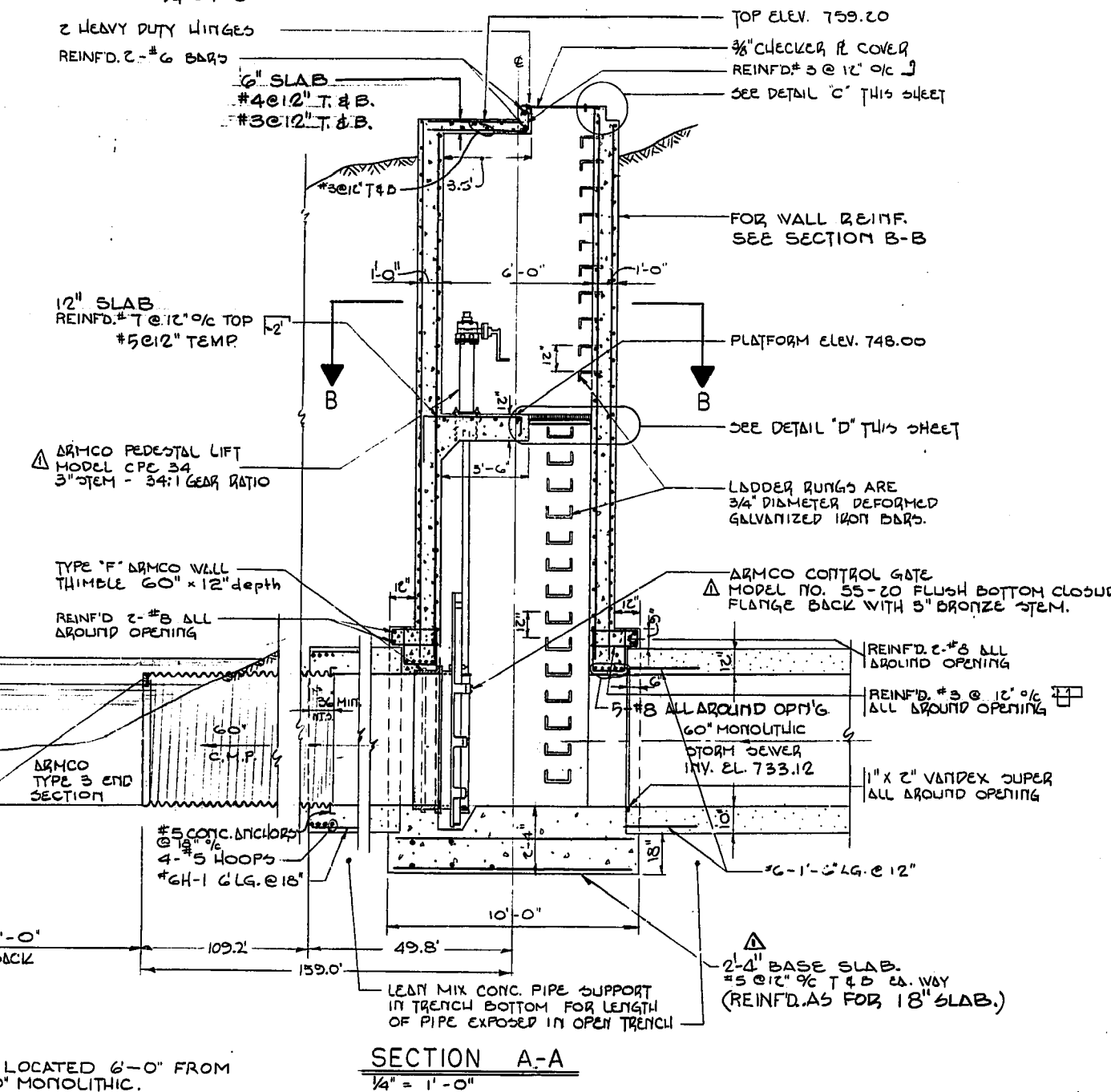


Volume of Water in Part-full Pipe

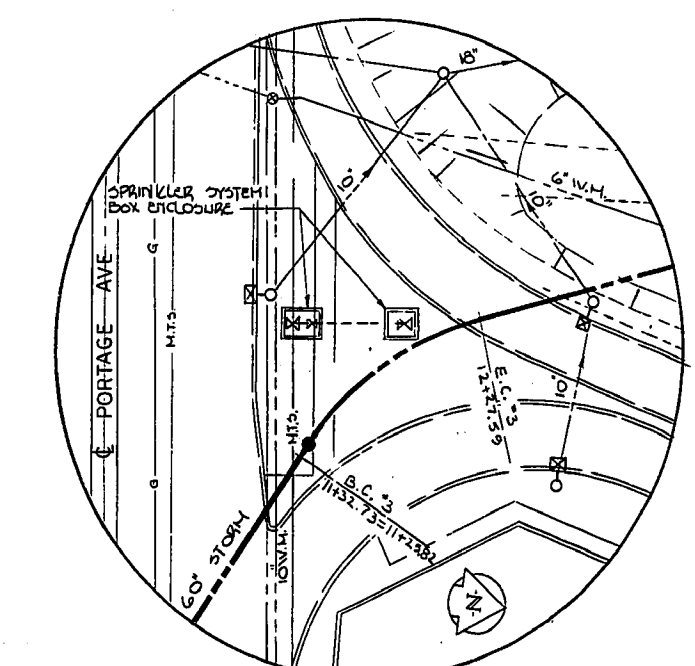
Location	Model ID	US Invert (m)	DS Invert (m)	Length (m)	Diameter (m)	Volume (cu m)	US Obvert (m)	DS Obvert (m)	Ground (m)
Weir / Park Lane	RT0090	225.28	225.23	248.0	2.738	0.0	228.018	227.970	235.0
	RT0100	225.23	225.21	280.0	2.738	0.0	227.970	227.943	235.0
	RT0110	225.21	225.02	285.0	2.738	0.0	227.943	227.759	234.2
	RT0120	225.02	225.00	257.0	2.738	0.0	227.759	227.735	235.0
	RT0130	225.00	224.92	245.0	2.738	5.0	227.735	227.658	233.8
Notre Dame	RT0140	224.92	224.92	35.0	2.438	1.6	227.358	227.357	233.7
	RT0150	224.92	224.85	183.0	1.676	12.4	226.595	226.524	235.0
	RT0160	224.85	224.62	270.0	1.676	61.6	226.524	226.298	234.8
	RT0170	224.62	224.75	154.0	1.524	42.2	226.146	226.271	234.0
	RT0180	224.75	224.56	125.0	1.524	39.2	226.271	226.084	235.0
	RT0190	224.56	224.46	357.0	1.524	180.9	226.084	225.984	235.1
	RT0200	224.46	224.45	140.0	1.524	82.5	225.984	225.969	235.0
	RT0210	224.45	224.43	143.0	1.524	87.5	225.969	225.954	234.8
Saskatchewan	RT0220	224.43	224.40	65.5	1.524	42.0	225.954	225.928	234.1
	RT0230	224.40	224.38	72.1	1.524	49.2	225.928	225.900	234.0
	RT0240	224.38	224.34	104.1	1.524	76.4	225.900	225.859	234.0
	RT0250	224.34	224.32	37.7	1.524	29.3	225.859	225.844	234.0
	RT0260	224.32	224.31	57.9	1.524	46.1	225.844	225.832	234.3
Wellington	RT0270	224.31	224.29	109.1	1.524	89.8	225.832	225.809	234.3
	RT0280	224.29	224.26	117.8	1.524	101.3	225.809	225.784	234.5
	RT0290	224.26	224.27	56.9	1.524	49.7	225.784	225.790	234.7
	RT0300	224.27	224.28	95.6	1.524	82.3	225.790	225.801	234.5
Sargent	RT0310	224.28	224.28	36.9	1.524	31.4	225.801	225.805	234.8
	RT0320	224.28	224.29	87.4	1.524	73.4	225.805	225.814	234.8
	RT0330	224.29	224.17	157.9	1.524	146.2	225.814	225.692	234.8
	RT0340	224.17	224.12	61.8	1.524	65.2	225.692	225.644	233.9
	RT0350	224.12	224.10	51.8	1.524	57.3	225.644	225.625	233.9
Ellice	RT0360	224.10	224.09	18.7	1.524	21.0	225.625	225.618	234.2
	RT0370	224.09	224.08	28.4	1.524	32.3	225.618	225.607	234.1
	RT0380	224.08	224.05	93.0	1.524	109.1	225.607	225.571	234.0
	RT0390	224.05	224.03	44.9	1.524	54.4	225.571	225.554	233.4
	RT0400	224.03	223.96	94.2	1.524	120.2	225.554	225.484	233.9
	RT0410	223.96	223.92	54.3	1.524	73.5	225.484	225.444	234.3
	RT0420	223.92	223.92	31.8	1.524	44.0	225.444	225.444	234.7
Y bend in road St. Matthews	RT0430	223.92	223.92	109.8	1.524	151.8	225.444	225.444	234.2
	RT0440	223.92	223.92	66.5	1.524	91.9	225.444	225.444	233.8
	RT0450	223.92	223.81	198.8	1.524	289.5	225.444	225.334	233.9
S of Silver	RT0460	223.81	223.80	142.5	1.524	218.4	225.334	225.327	233.6
	RT0470	223.80	223.80	48.6	1.524	74.8	225.327	225.324	234.1
N of Ness New MH	RT0480	223.80	223.80	143.3	1.524	220.8	225.324	225.324	234.2
	RT0490	223.80	223.80	59.2	1.524	91.2	225.324	225.324	234.3
	RT0500	223.80	223.72	150.9	1.524	239.8	225.324	225.244	234.0
Madison Square inflow	RT0510	223.72	223.70	45.7	1.524	75.2	225.244	225.227	234.1
	RT0520	223.70	223.61	186.5	1.524	317.4	225.227	225.134	234.1
	RT0530	223.61	223.59	165.5	1.524	290.6	225.134	225.109	233.0
N side Portage	RT0540	223.59	223.58	34.3	1.524	60.6	225.109	225.104	234.3
	RT0550	223.58	223.56	76.8	1.524	136.6	225.104	225.080	233.9
	RT0560	223.56	223.54	50.9	1.524	91.3	225.080	225.064	233.8
Gate Chamber	RT0570	223.54	223.46	190.1	1.524	345.2	225.064	224.984	233.8
<b>Total</b>				<b>5,869.2</b>		<b>4,602.1</b>			



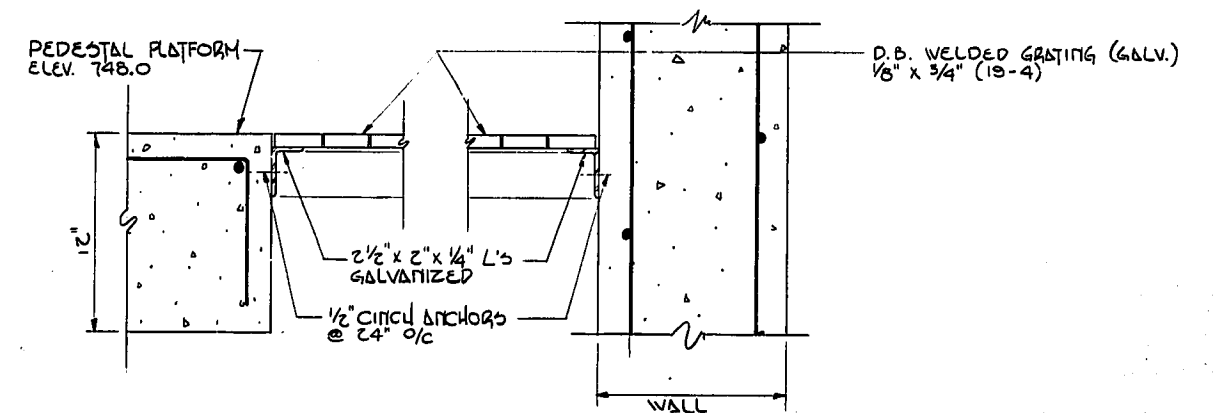
DETAIL "A" (SEE DWG 72002-01-1)  
1" = 40'



SECTION C-C  
3" = 1'-0"



DETAIL "B" (SEE DWG 72002-01-1)  
1" = 40'



DETAIL "D"  
1 1/2" = 1'-0"

**NOTE:**

- SLIP JOINT LOCATED 6'-0" FROM END OF 60" MONOLITHIC.
- JUTE OR HEMP ROPE PACKED SLIP JOINT 6' LONG SIMILAR TO ARMCO STD. #8 GUDGE.
- LENGTH OF MONOLITHIC PIPE (RIVER SIDE) WAS DETERMINED BY THE ENGINEER IN THE FIELD.

MICROFILMED MAR 31 1990

NO.	DESCRIPTION	DATE	BY
1	REVISION TO GATE CHAMBER & EQUIPMENT MAY 1978		
0	ISSUED FOR CONSTRUCTION	MAR 20, 1976	B.R.G.

CITY OF WINNIPEG  
COMMUNITY OF ST. JAMES - ASSINIBOIA

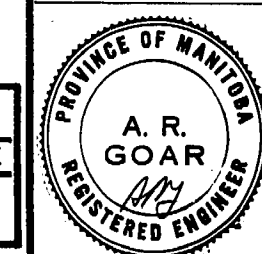
**W. L. WARDROP & ASSOCIATES LTD.**  
ENGINEERING CONSULTANTS  
WINNIPEG THUNDER BAY REGINA

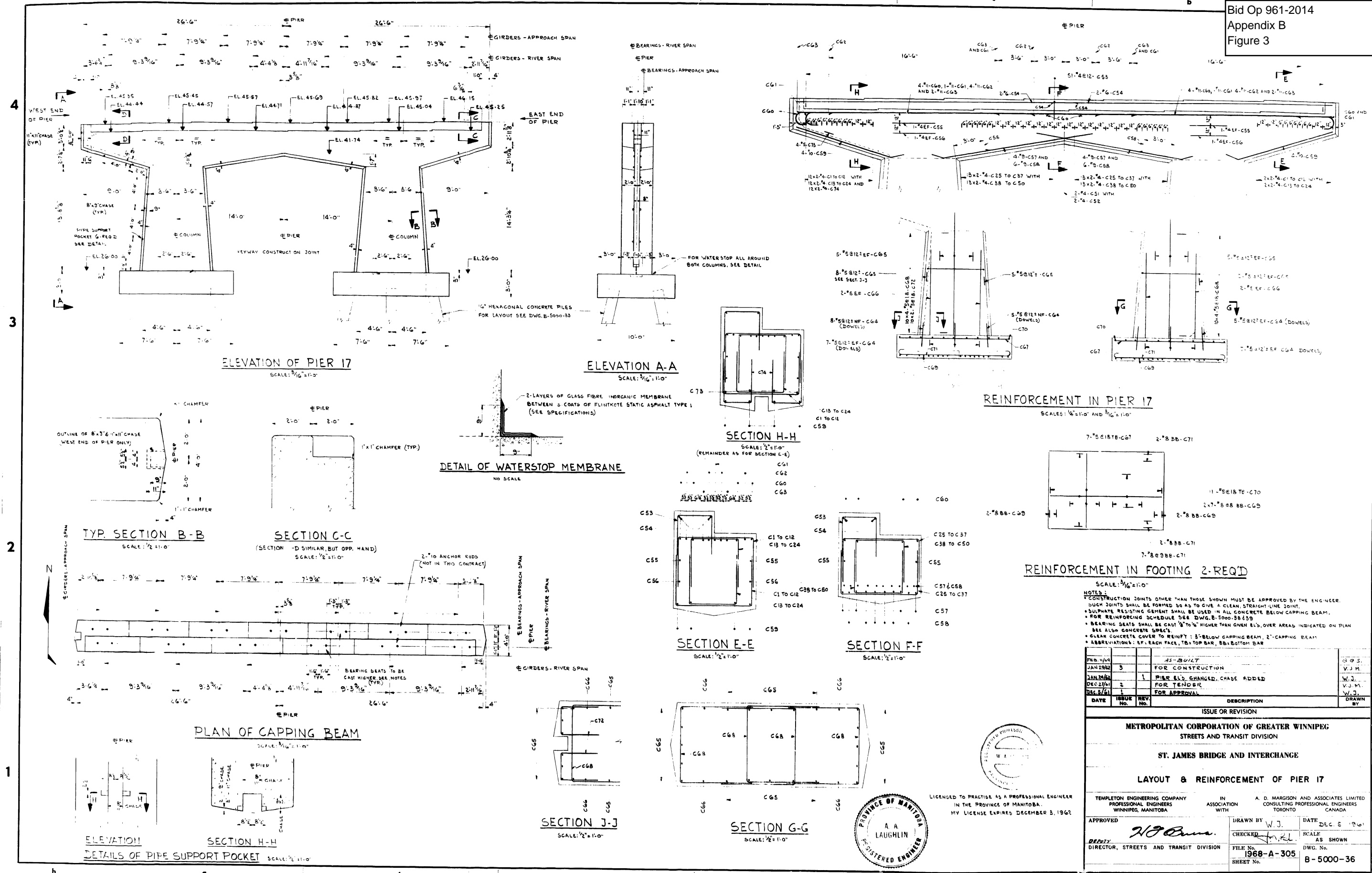
INDUSTRIAL TRUNK STORM SEWER  
SLIDE GATE STRUCTURE AND OUTFALL DETAILS.

Figure 2

<b>AS - BUILT</b>		
DATE	FB. NO.	PAGE
DEC/73	655	—

DESIGNED BY: C.E.P. #802	DRAWN BY: W.W.D.	CHECKED BY: M.J.
APPROVED BY: <i>[Signature]</i>		
SCALE: AS SHOWN	DATE: MAR. 37C	
DRAWING NO: LD-3	W. L. WARDROP DRAWING NO. 72002-01-3	





- NOTES:
- CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN MUST BE APPROVED BY THE ENGINEER. SUCH JOINTS SHALL BE FORMED SO AS TO GIVE A CLEAN, STRAIGHT-LINE JOINT.
  - SULPHATE RESISTING CEMENT SHALL BE USED IN ALL CONCRETE BELOW CAPPING BEAM.
  - FOR REINFORCING SCHEDULE SEE DWG. B-5000-38 & 39
  - BEARING SEATS SHALL BE CAST 1/8" TO 1/4" HIGHER THAN GIVEN ELS, OVER AREAS INDICATED ON PLAN. SEE ALSO CONCRETE SPICES.
  - CLEAR CONCRETE COVER TO REINFT: 3" BELOW CAPPING BEAM, 2" CAPPING BEAM.
  - ABBREVIATIONS: LF: EACH FACE, TB: TOP BAR, BB: BOTTOM BAR

DATE	ISSUE No.	REV. No.	DESCRIPTION	DRAWN BY
FEB. 11/69			AS-BUILT	G.S.
JAN 29/62	3		FOR CONSTRUCTION	V.J.M.
JAN 29/62	1		PIER ELS CHANGED, CHASE ADDED	W.J.
DEC 27/61	2		FOR TENDER	V.J.M.
DEC 3/61	1		FOR APPROVAL	W.J.

**ISSUE OR REVISION**

**METROPOLITAN CORPORATION OF GREATER WINNIPEG**  
STREETS AND TRANSIT DIVISION

**ST. JAMES BRIDGE AND INTERCHANGE**

**LAYOUT & REINFORCEMENT OF PIER 17**

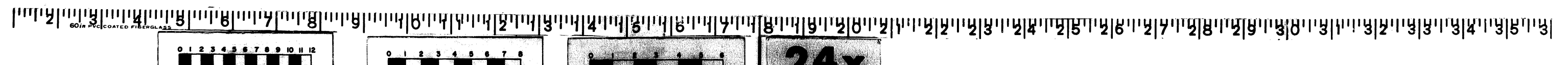
TEMPLETON ENGINEERING COMPANY  
PROFESSIONAL ENGINEERS  
WINNIPEG, MANITOBA

IN ASSOCIATION WITH  
A. D. MARGISON AND ASSOCIATES LIMITED  
CONSULTING PROFESSIONAL ENGINEERS  
TORONTO

APPROVED: *W.J. Laughtlin*  
DIRECTOR, STREETS AND TRANSIT DIVISION

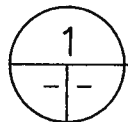
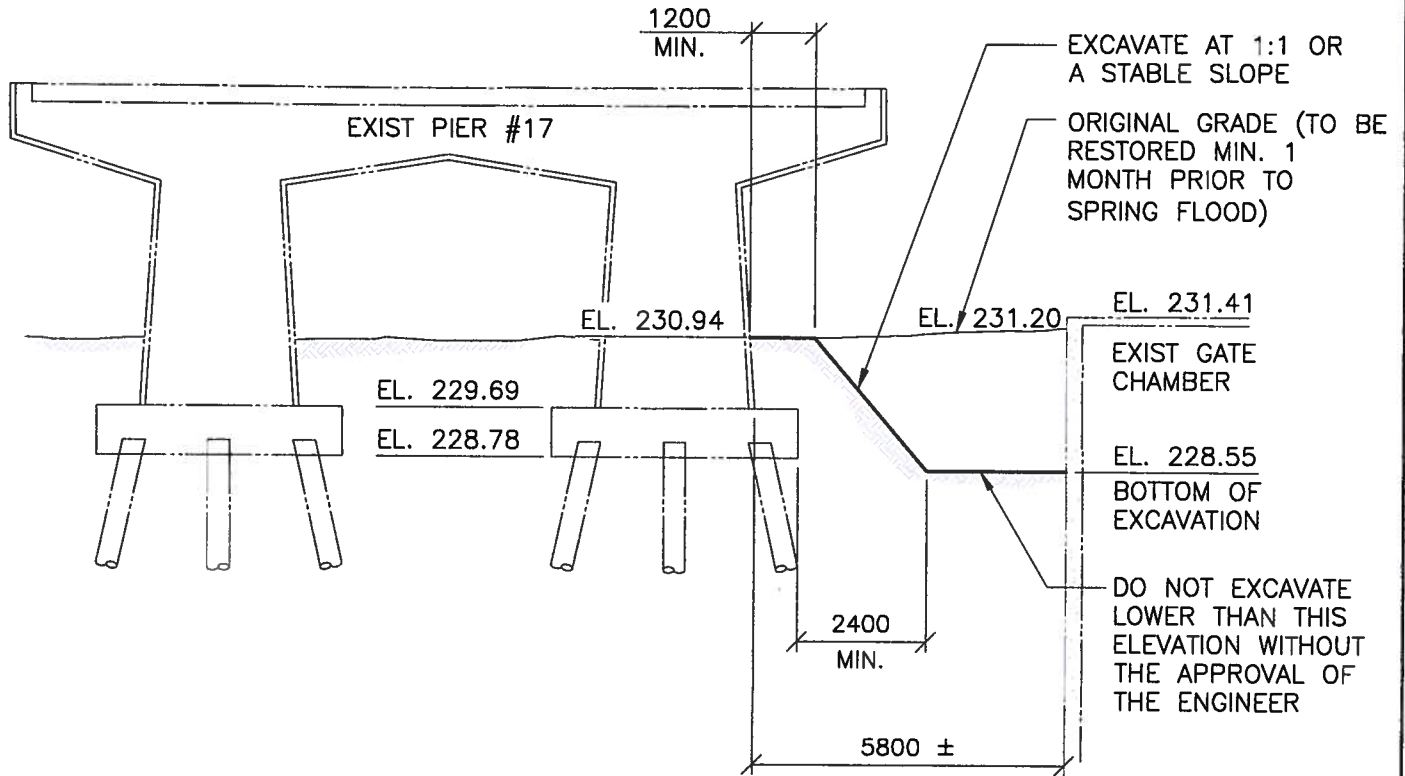
DRAWN BY: *W.J.*  
CHECKED: *J.R.L.*  
FILE No.: 1968-A-305  
SHEET No.:

DATE: DEC. 5 '68  
SCALE: AS SHOWN  
DWG. No.: B-5000-36



NOTE:  
FLOOD PROTECTION LEVEL EL. 230.76

Bid Op 961-2014  
Appendix B  
Figure 4



**EXCAVATION ELEVATION**

N.T.S.



REFERENCE DRAWINGS:

00	14.05.12	CONSTRUCTION DRAWING	C.M.
NO.	DATE	DESCRIPTION	ISSUED BY

REVISIONS/ISSUE

CLIENT	THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT
--------	--



AUTHORIZED BY:	C.M.	CLIENT DRAWING NO.
DATE:	14.05.12	

THE CONTENT OF THIS DOCUMENT IS NOT INTENDED FOR THE USE OF, NOR IS IT INTENDED TO BE RELIED UPON BY ANY PERSON, FIRM OR CORPORATION OTHER THAN THE CLIENT AND TETRA TECH WEI Inc. (Tetra Tech). TETRA TECH WEI Inc. (Tetra Tech) DENIES ANY LIABILITY WHATSOEVER TO OTHER PARTIES FOR DAMAGES OR INJURY SUFFERED BY SUCH THIRD PARTY ARISING FROM THE USE OF THIS DOCUMENT BY THEM, WITHOUT THE EXPRESSED WRITTEN AUTHORITY OF TETRA TECH WEI Inc. (Tetra Tech) AND OUR CLIENT. THIS DOCUMENT IS SUBJECT TO FURTHER RESTRICTIONS IMPOSED BY THE CONTRACT BETWEEN THE CLIENT AND TETRA TECH WEI Inc. (Tetra Tech) AND THESE PARTIES PERMISSION MUST BE SOUGHT REGARDING THIS DOCUMENT IN ALL OTHER CIRCUMSTANCES.

DRAWING DESCRIPTION			
FERRY ROAD AND RIVER BEND EXCAVATION LIMITS NEAR ST. JAMES BRIDGE PIER # 17			
DESIGNED BY:	C.M.	DRAWN BY:	H.A.
REVIEWED BY:	E.F.S.	SCALE:	AS NOTED
DRAWING NO.	100120300-SKT-S0004	REV.	00

A4 (216 x 279) A-C\ CITY OF WINNIPEG - WATER & WASTE DEPARTMENT - 0012\10001203.00 - FERRY ROAD AND RIVER BEND CSR WORKS DESIGN AND CA\CONTRACT 1\CAD\FERRY ROAD 2012 WORK CIVIL 3D DATA SHORTCUTS\PRODUCTION DRAWINGS\1000120300-SKT-S0004.DWG 14.05.12 1:25 PM ANTONIO HAROLD