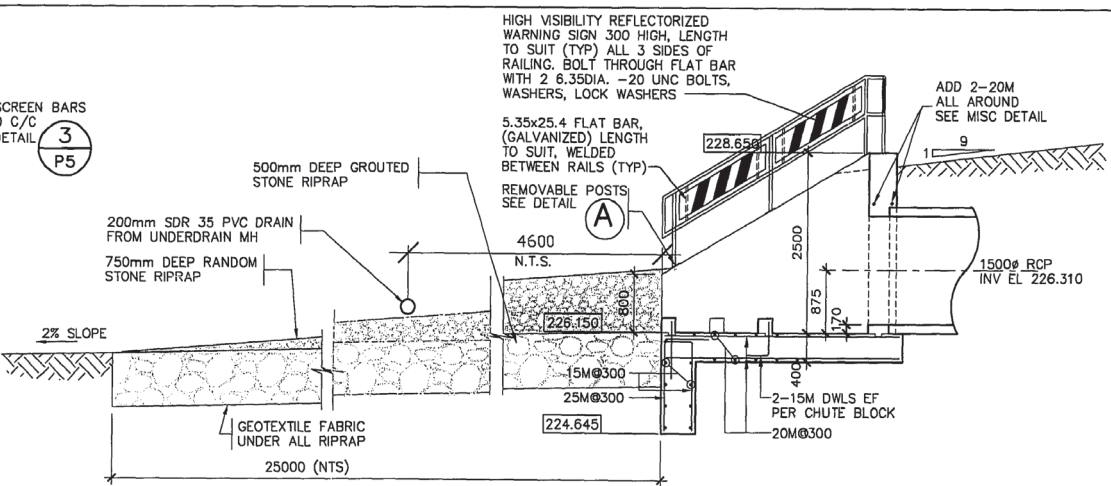
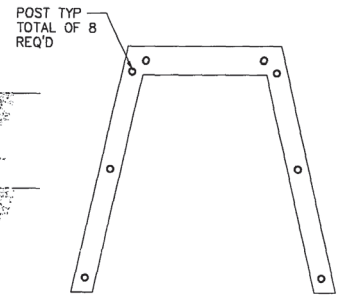


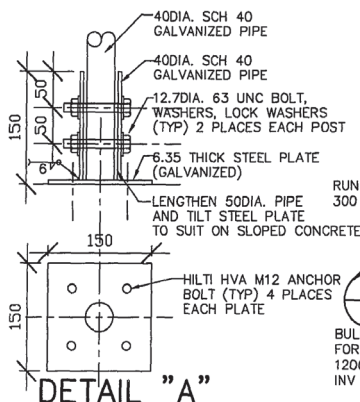
OUTFALL PLAN
SCALE 1:50



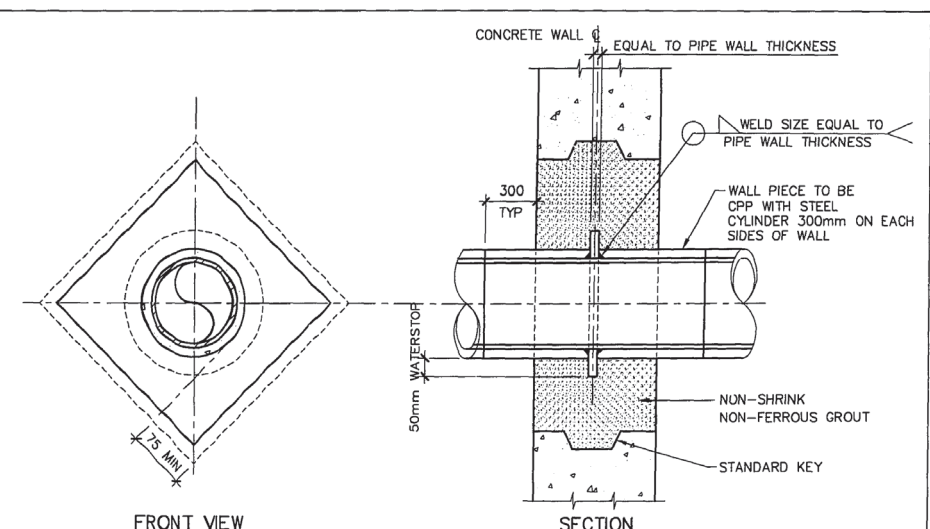
SECTION 1
SCALE 1:50



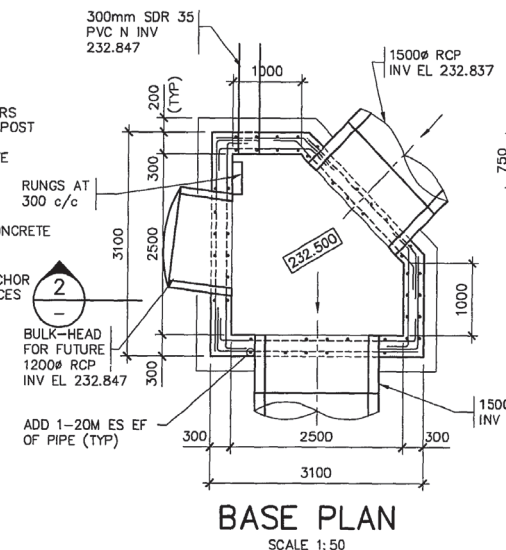
TOP VIEW
SCALE 1:50



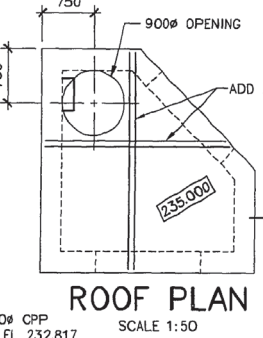
DETAIL "A"



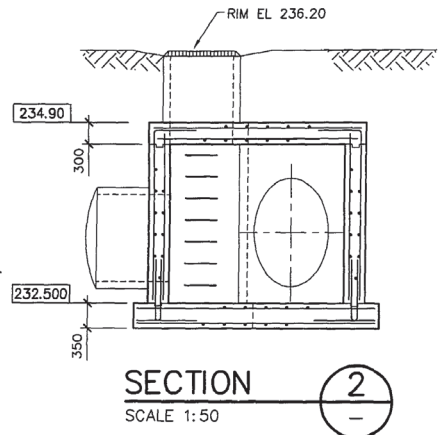
DETAIL OF WATER STOP FOR PIPE
SCALE NTS



BASE PLAN
SCALE 1:50



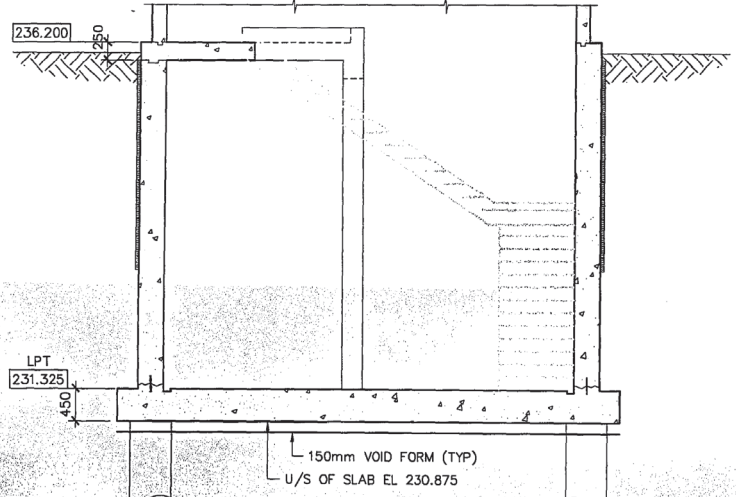
ROOF PLAN
SCALE 1:50



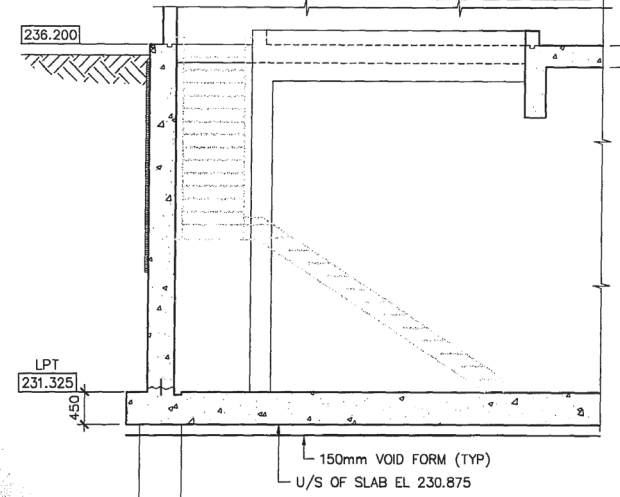
SECTION 2
SCALE 1:50

ALL REINFORCING 15M@300 UNLESS NOTED OTHERWISE

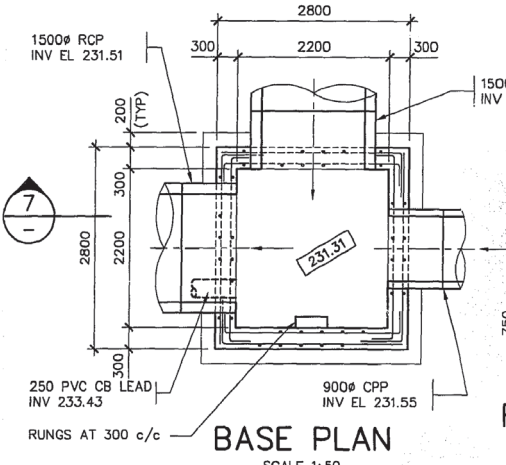
MANHOLE No 1



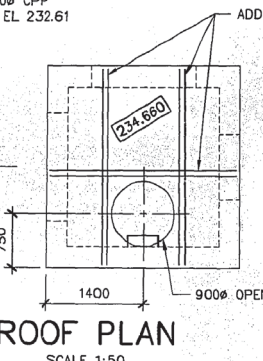
SECTION 3
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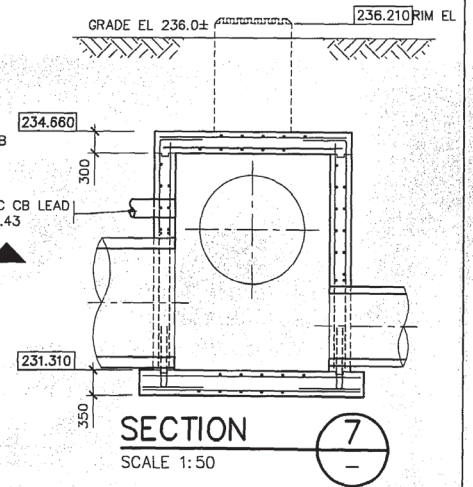
SECTION 4
SCALE 1:50



BASE PLAN
SCALE 1:50



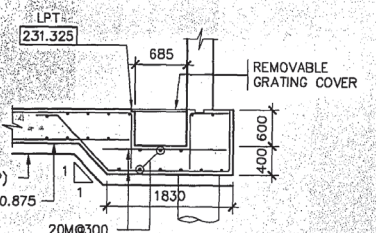
ROOF PLAN
SCALE 1:50



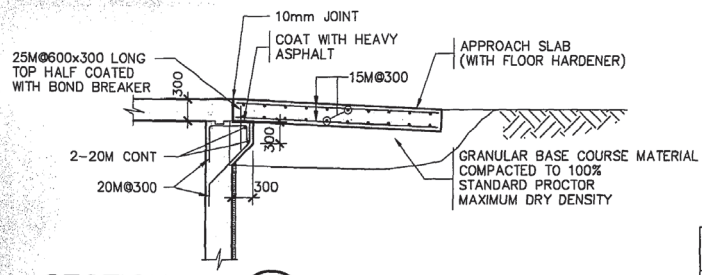
SECTION 7
SCALE 1:50

ALL REINFORCING 15M@300 UNLESS NOTED OTHERWISE

MANHOLE No 2



SECTION 5
SCALE 1:50

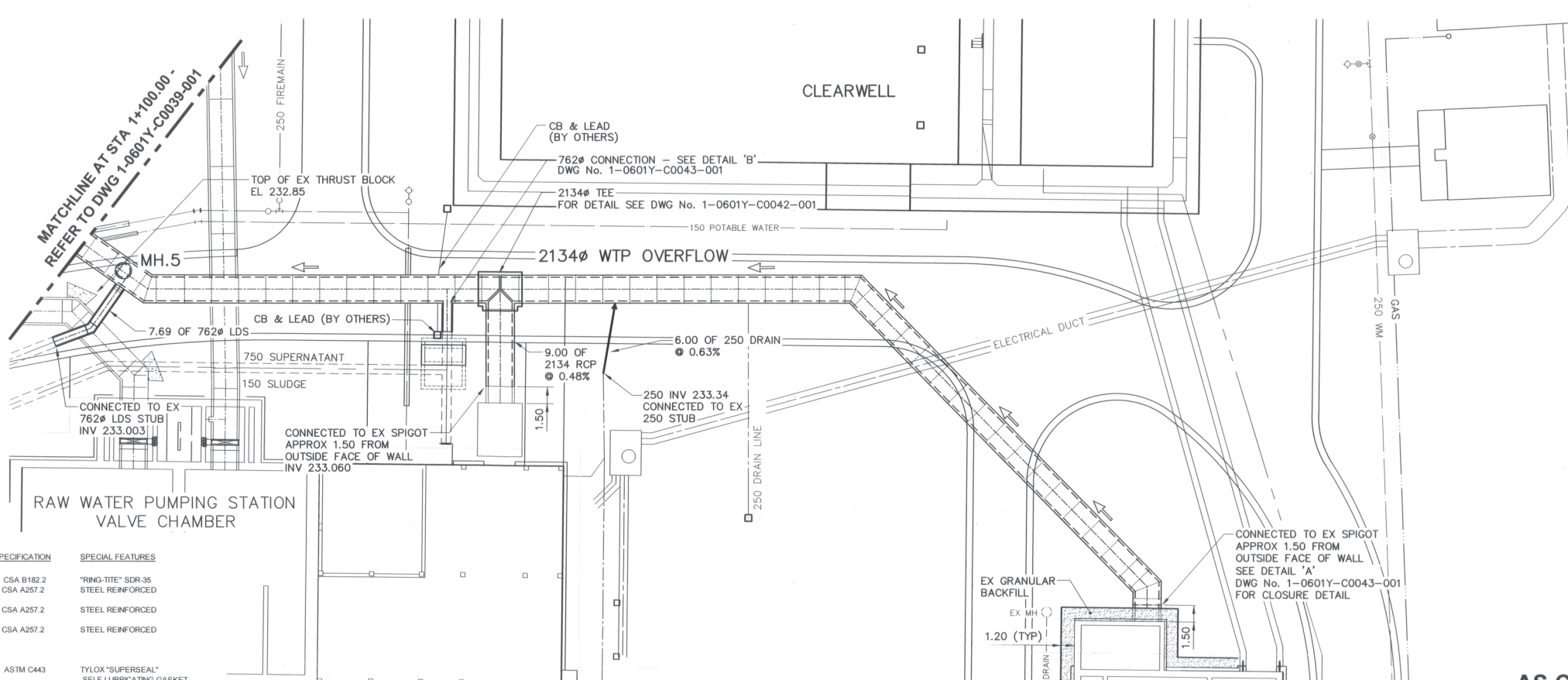
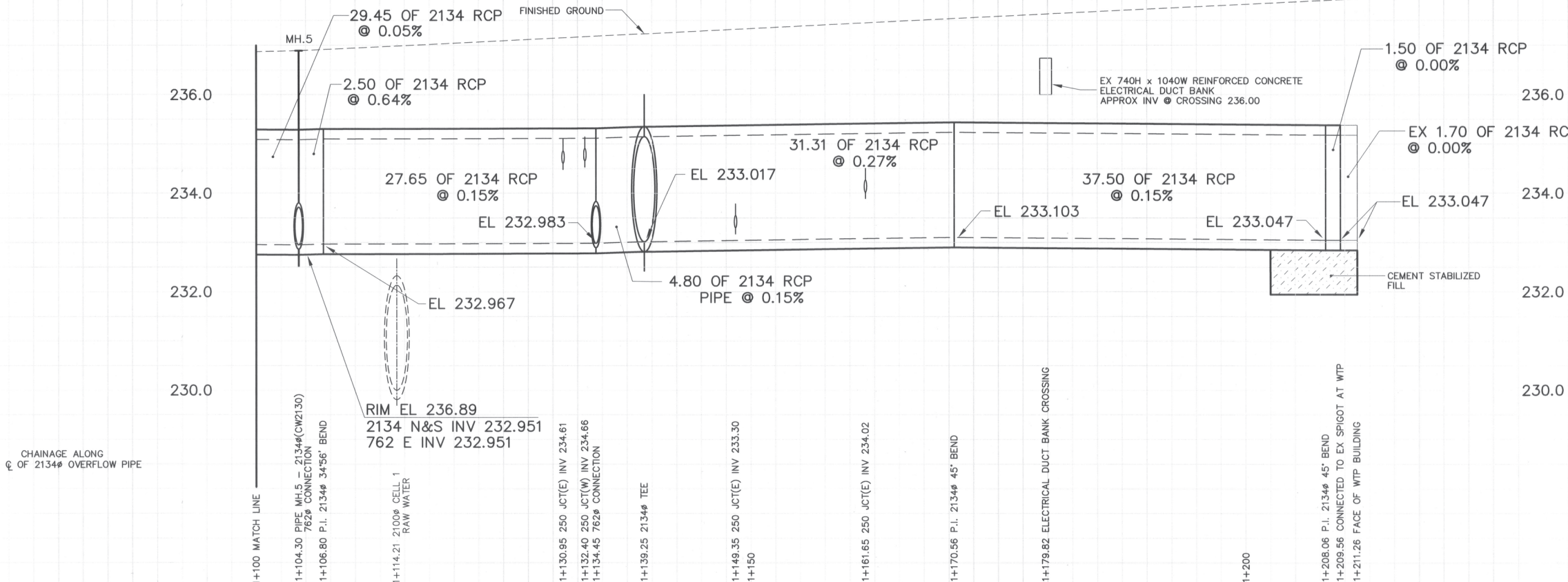


SECTION 6
SCALE 1:50

FOR ABBREVIATIONS SEE DWG A1

		ENGINEER'S SEAL ORIGINAL TENDER DRAWING SEALED		THE CITY OF WINNIPEG WORKS AND OPERATIONS DIVISION WATER AND WASTE DEPARTMENT
DESIGNED BY	YTC	CHECKED BY	ARP, RPP	
DRAWN BY	MKG	APPROVED BY		
NO. REVISIONS	DATE	DATE	DATE	
R2	RECORD DRAWING	99.04.27	DHG	CITY DRAWING NUMBER D-4355 SHEET 8 OF 23 S2 REV. R2
R1	RECORD DRAWING	98.05.29	DHG	
		1996.08.12		
		CONSULTANT DRAWING NO. 60010-53-A1-15508		SHOAL LAKE AQUEDUCT MILE 12.86 DRAIN CHAMBER AND OUTFALL OUTFALL STRUCTURE PLANS AND SECTIONS

These record documents have been prepared based on information provided by others. The design professional has not verified the accuracy and/or the completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result.

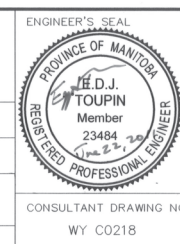


MATERIAL LIST

ITEM	MANUFACTURER	MATERIAL SPECIFICATION	SPECIAL FEATURES
SEWER WORKS			
250 PVC PIPE	IPEX INC.	ASTM D3034 CSA B182.2	"RING-TITE" SDR-35 STEEL REINFORCED
2134 CONCRETE PIPE	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C76M CSA A257.2 CLASS 5	STEEL REINFORCED
762 CONCRETE PIPE	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C76M CSA A257.2 CLASS 3	STEEL REINFORCED
762 SUPERNATANT PCC PIPE FROM WTP	LAFARGE CONSTRUCTION MATERIALS INC. SUPPLIED BY CITY OF WINNIPEG	ASTM C76M CSA A257.2 CLASS 3	STEEL REINFORCED
PIPE GASKETS FOR 762 PIPE	HAMILTON KENT OF CANADA LIMITED	ASTM C361 ASTM C443 CSA A257.3	TYLOX "SUPERSEAL" SELF-LUBRICATING GASKET WEDGE GASKET
PIPE GASKETS FOR 2134 PIPE	HAMILTON KENT OF CANADA LIMITED	ASTM C76-CL2 ASTM C-478 ASTM C-478	PRECAST, STEEL REINFORCED 750 I.D. x (50 TO 125) PRECAST CONCRETE ADJUSTING RINGS
MANHOLE COMPONENTS	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C478	ALUMINUM MANHOLE RINGS
MANHOLE ADJUSTING RINGS	MSU MISSISSAUGA LTD.	C.I. - ASTM A-48 CLASS 30B	TF-101.9 MH FRAME AND SOLID COVER
MANHOLE RINGS (LAFARGE)	TITAN FOUNDRY	AP-005 OR AP-006	D.I. SLEEVE AND END RINGS, TYPE C219 EPOXY COATED STRAIGHT
MANHOLE FRAMES & COVERS	ROBAR INDUSTRIES LTD.	PETROWRAP MASTIC	ANTI-CORROSION SYSTEM
IRON COUPLINGS (762 PIPE)			
PIPE WRAP	INSULMASTIC		
CONCRETE REINFORCING STEEL	LAFARGE CANADA INC. COWIN STEEL CO. LTD.		
CONTRACTOR:	NELSON RIVER CONSTRUCTION		
CONSTRUCTION PERIOD:	MARCH 2008 TO DECEMBER 2008		
FIELD BOOK NO.:	08-053		
	08-064		



NO.	REVISIONS	DATE	BY
03	681-2007 AS CONSTRUCTED	11/06/07	WJd
02	681-2007 ISSUED FOR CONST	08/01/21	WJd
01	681-2007 ADDENDUM 2	07/11/12	WJd
00	681-2007 ISSUED FOR TENDER	07/09/27	WJd
NO.	REVISIONS	DATE	BY



AS CONSTRUCTED DRAWING

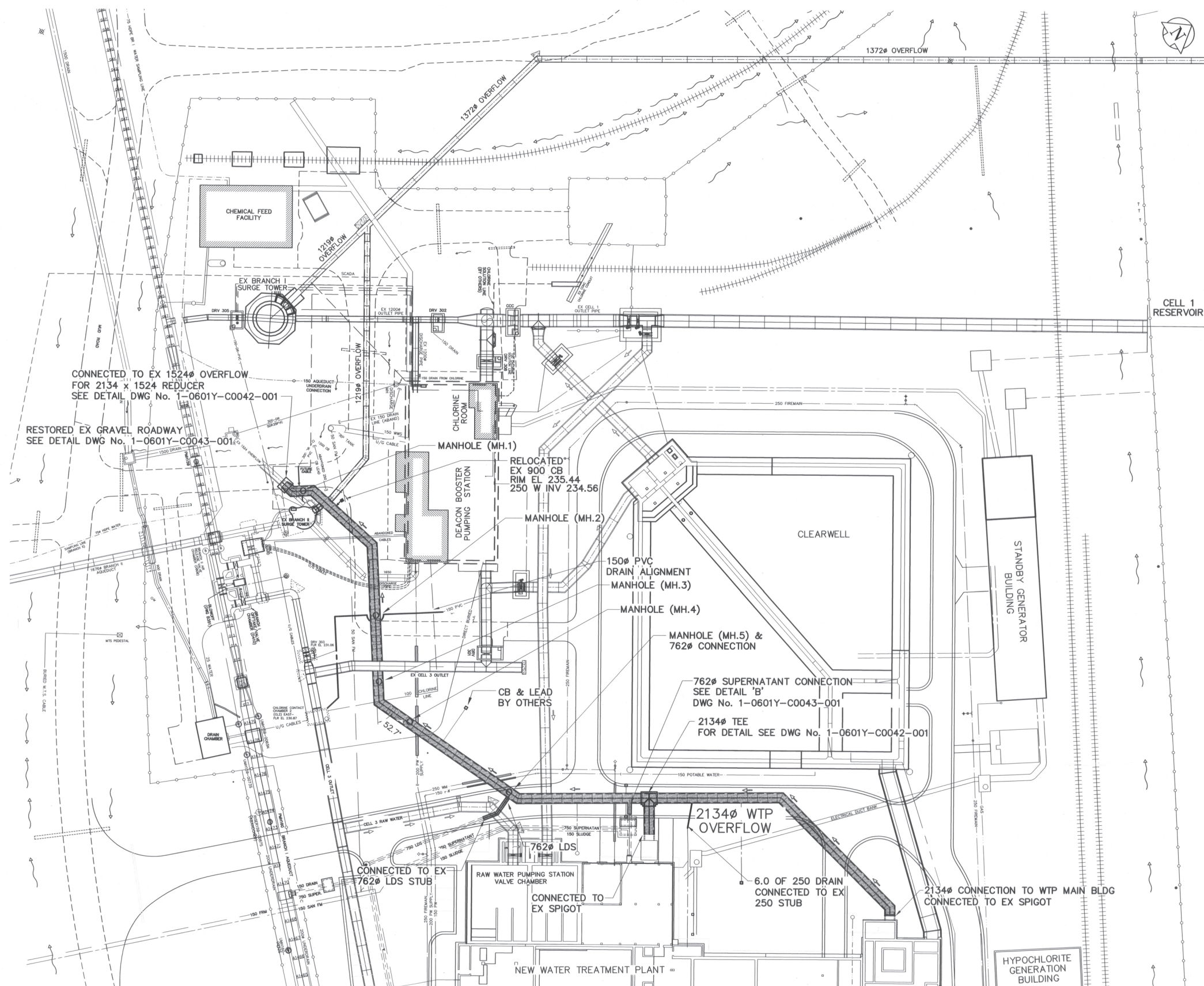
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WINNIPEG WATER TREATMENT PROGRAM
CONSTRUCTION OF WATER TREATMENT PLANT OVERFLOW

CIVIL
W.T.P. OVERFLOW PIPING - PLAN & PROFILE
MATCH LINE STA 1+100.00 TO WATER TREATMENT PLANT

CONSTRUCTION COMPLETION DATE
DEC 2008

CITY FILE NUMBER	
SHEET 1 OF 1	
CITY DRAWING NUMBER	1-0601Y-C0040-001



CONSTRUCTION COMPLETION DATE
DEC 2008

AS CONSTRUCTED DRAWING

BENCHMARK NOTES:
DRAWING COORDINATES ARE UTM NAD83 - SCALE FACTOR 0.99983

B.M. No.	NORTHING	EASTING	ELEVATION
PILE 136	5523873.734	647764.406	236.242
PILE 133	5523256.606	647782.387	236.056

AECOM
Certificate of Authorization
AECOM Canada Ltd.
No. 4671 Date: June 22, 2007

NO.	REVISIONS	DATE	BY
03	681-2007 AS CONSTRUCTED	11/06/16	WJd
02	681-2007 ISSUED FOR CONST	08/01/21	WJd
01	681-2007 ADDENDUM 2	07/11/12	WJd
00	681-2007 ISSUED FOR TENDER	07/09/27	WJd

DESIGNED BY	EDT	CHECKED BY	APPROVED BY
DRAWN BY	WJd	RELEASED FOR CONSTRUCTION BY:	
HOR. SCALE:	1:500	DATE	2007/09/27
VERTICAL SCALE:	-	DATE	23 June 2011

ENGINEER'S SEAL
PROVINCE OF MANITOBA
ED.J. TOUPIN
Member
23484
REGISTERED PROFESSIONAL ENGINEER

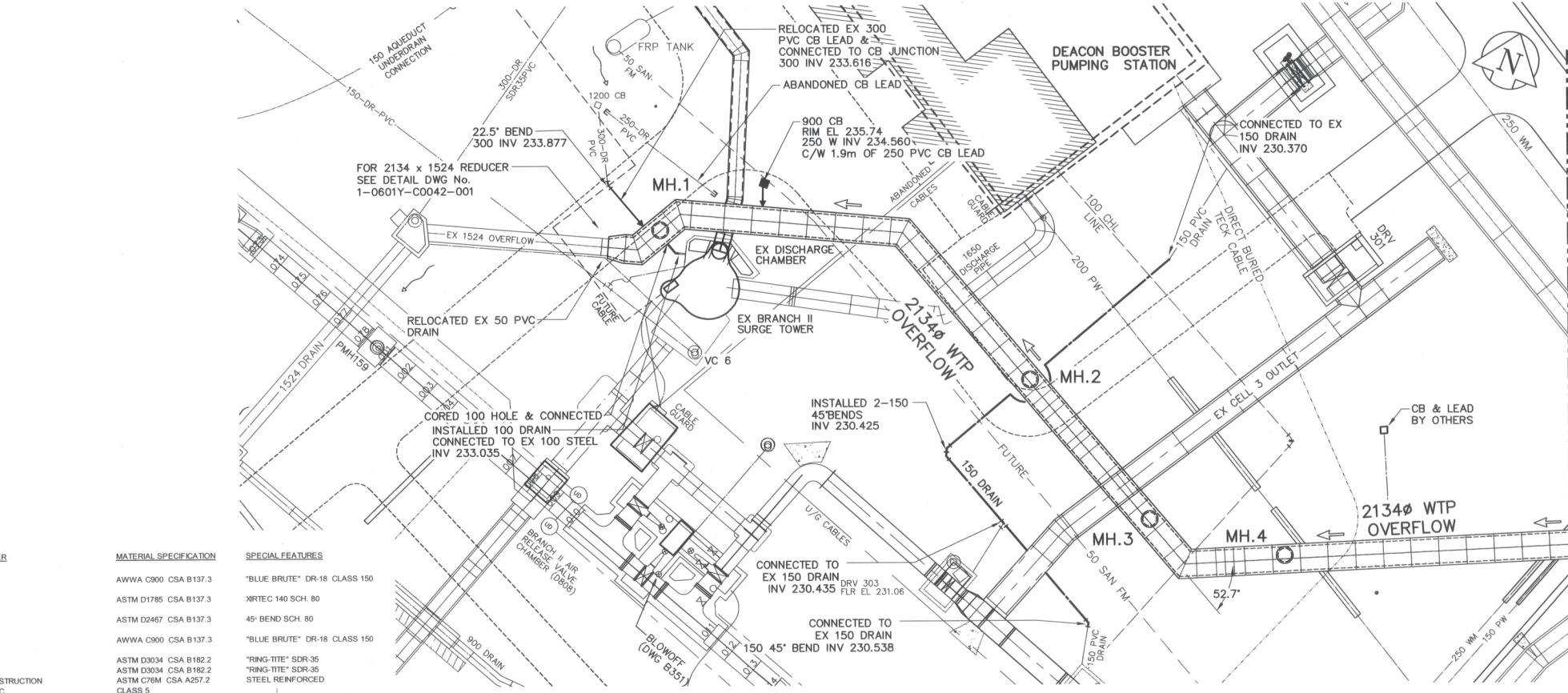
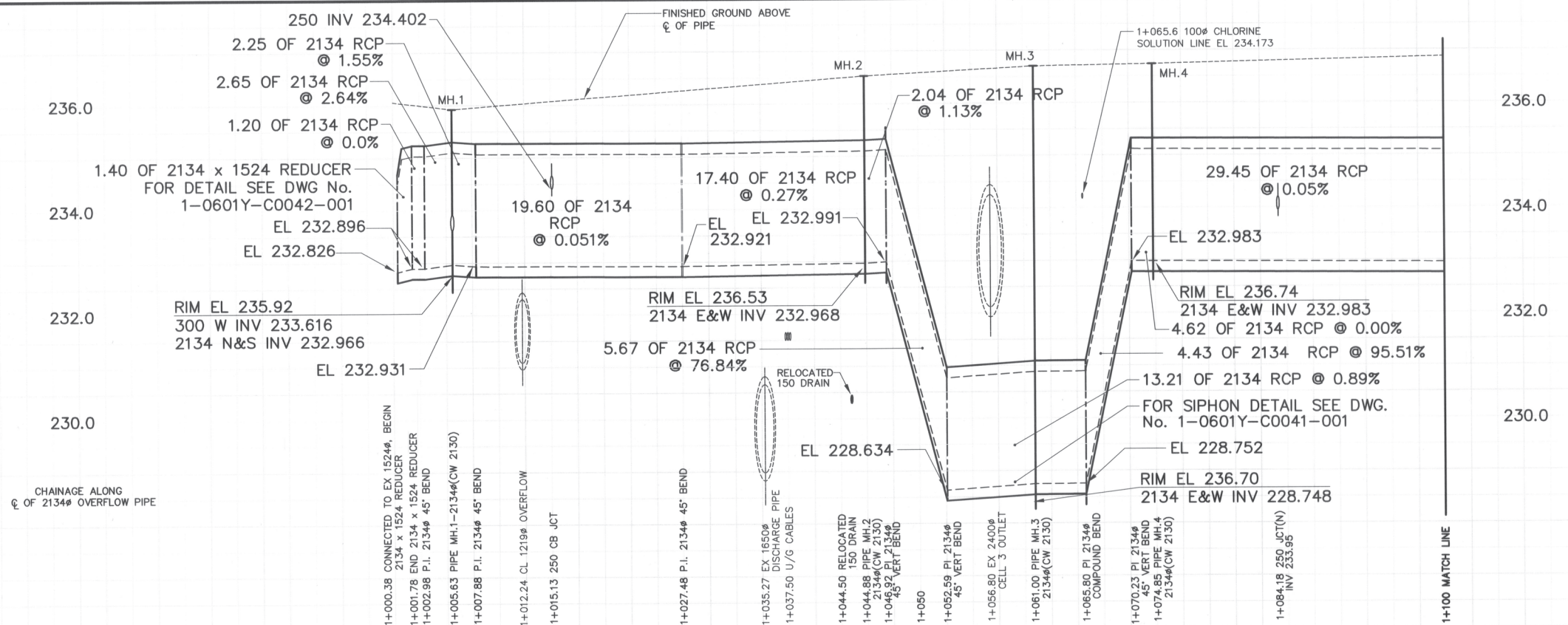
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WINNIPEG WATER TREATMENT PROGRAM
CONSTRUCTION OF WATER TREATMENT PLANT OVERFLOW

CIVIL
WATER TREATMENT PLANT OVERFLOW PIPING
GENERAL PLAN

CITY FILE NUMBER
SHEET 1 OF 1
CITY DRAWING NUMBER
1-0601Y-C0038-001

AECOM REVIEW DRAFT CHK



ITEM	MANUFACTURER	MATERIAL SPECIFICATION	SPECIAL FEATURES
SEWER WORKS			
100 PVC PIPE	IPEX INC.	AWWA C900 CSA B137.3	"BLUE BRUTE" DR-18 CLASS 150
100 PVC PIPE	IPEX INC.	ASTM D1785 CSA B137.3	XRTEC 140 SCH. 80
100 PVC PIPE	IPEX INC.	ASTM D2467 CSA B137.3	45° BEND SCH. 80
150 PVC PIPE	IPEX INC.	AWWA C900 CSA B137.3	"BLUE BRUTE" DR-18 CLASS 150
250 PVC PIPE	IPEX INC.	ASTM D3034 CSA B182.2	"RING-TITE" SDR-35
300 PVC PIPE	IPEX INC.	ASTM D3034 CSA B182.2	"RING-TITE" SDR-35
2134 CONCRETE PIPE	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C78M CSA A257.2 CLASS 5	STEEL REINFORCED
2134 CONCRETE PIPE	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C78M CSA A257.2 CLASS 3	STEEL REINFORCED
PIPE GASKETS FOR 2134 PIPE	HAMILTON KENT OF CANADA LIMITED	ASTM C76-CL2	WEDGE GASKET
MANHOLE COMPONENTS	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C-478	PRECAST, STEEL REINFORCED
MANHOLE ADJUSTING RINGS	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C-478	750 I.D. x (50 TO 125) PRECAST
MANHOLE FRINGS (LAFARGE)	MSU MISSISSAUGA LTD.	ASTM C478	CONCRETE ADJUSTING RINGS
MANHOLE FRAMES & COVERS	TITAN FOUNDRY	C1 - ASTM A-48 CLASS 30B CONFORMS TO AP-004 AND AP-005 OR AP-006	ALUMINUM MANHOLE FRINGS TE-101-9 MH FRAME AND SOLID COVER
PIPE WRAP	INSULMATIC	PETROWRAP MASTIC	ANTI-CORROSION SYSTEM
CONCRETE REINFORCING STEEL	LAFARGE CANADA INC. COWIN STEEL CO. LTD.		
CONTRACTOR:	NELSON RIVER CONSTRUCTION		
CONSTRUCTION PERIOD:	MARCH 2008 TO DECEMBER 2008		
FIELD BOOK NO.:	08-063 08-064		



NO.	REVISIONS	DATE	BY	DATE	BY
04	681-2007 AS CONSTRUCTED	11/06/07	Wjd		
03	681-2007 FI-0-001_UMA	08/02/07	Wjd		
02	681-2007 ISSUED FOR CONST	08/01/21	Wjd		
01	681-2007 ADDENDUM 2	07/11/12	Wjd		
00	681-2007 ISSUED FOR TENDER	07/09/27	Wjd		

ENGINEER'S SEAL
PROVINCE OF MANITOBA
ED.J. TOUPIN
Member
23484
REGISTERED PROFESSIONAL ENGINEER

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

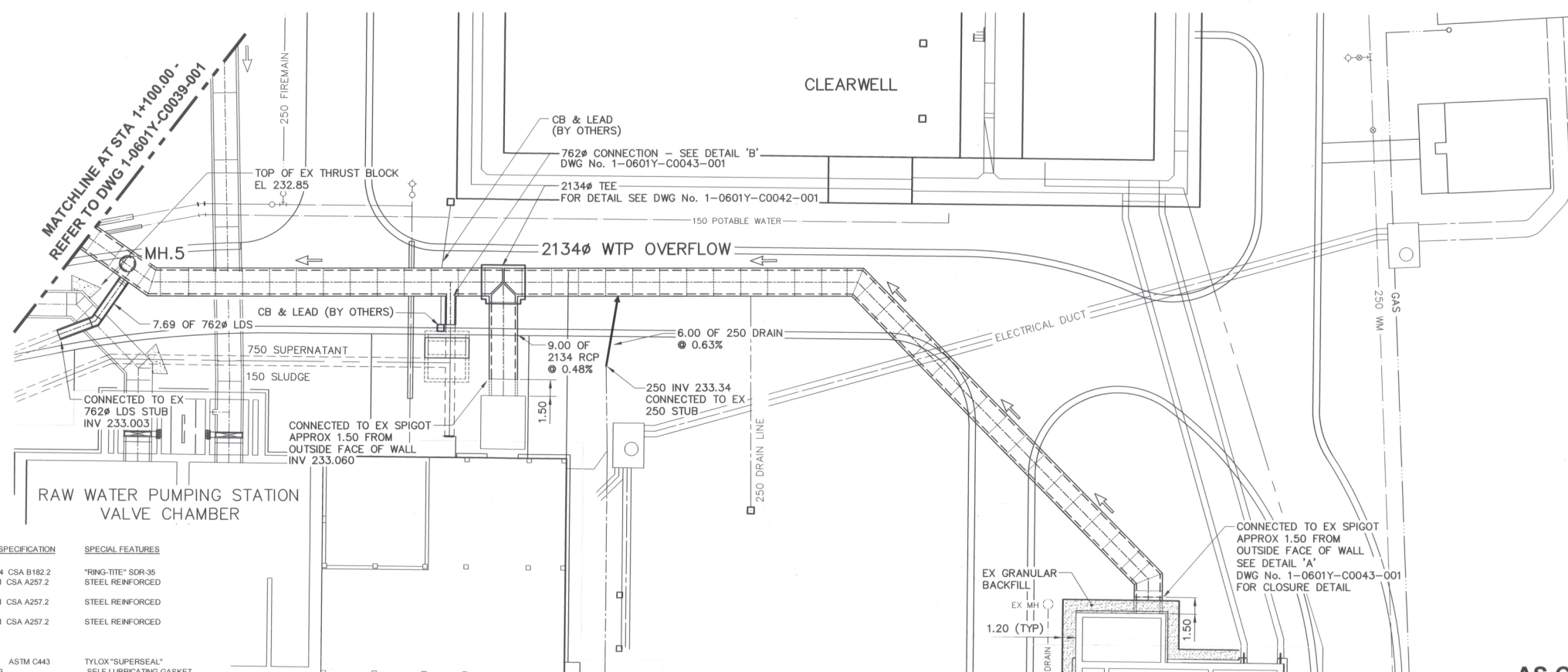
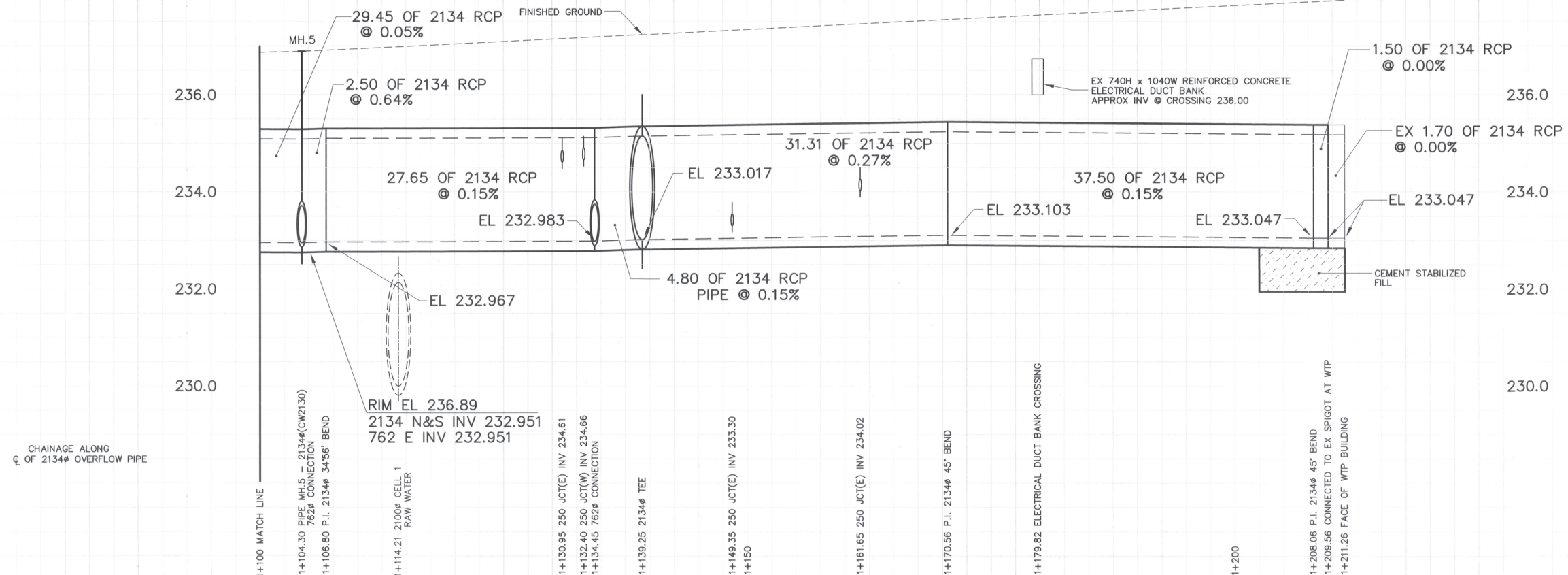
WINNIPEG WATER TREATMENT PROGRAM
CONSTRUCTION OF WATER TREATMENT
PLANT OVERFLOW

CIVIL
W.T.P. OVERFLOW PIPING - PLAN & PROFILE
EXISTING 1524Ø OVERFLOW CONN TO MATCH LINE 1+100.00

CITY FILE NUMBER
SHEET 1 OF 1
CITY DRAWING NUMBER
1-0601Y-C0039-001

AS CONSTRUCTED DRAWING

CONSTRUCTION COMPLETION DATE
DEC 2008



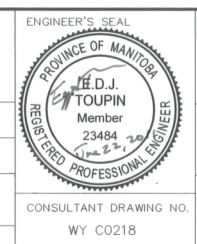
MATERIAL LIST

ITEM	MANUFACTURER	MATERIAL SPECIFICATION	SPECIAL FEATURES
SEWER WORKS			
250 PVC PIPE	IPEX INC.	ASTM D3034 CSA B182.2	"RING-TITE" SDR-35
2134 CONCRETE PIPE	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C76M CSA A257.2 CLASS 5	STEEL REINFORCED
2134 CONCRETE PIPE	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C76M CSA A257.2 CLASS 3	STEEL REINFORCED
762 CONCRETE PIPE	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C76M CSA A257.2 CLASS 3	STEEL REINFORCED
762 SUPERNATANT PCC PIPE FROM WTP	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C361 ASTM C443 CSA A257.3	TYLOX "SUPERSEAL" SELF-LUBRICATING GASKET WEDGE GASKET
PIPE GASKETS FOR 762 PIPE	HAMILTON KENT OF CANADA LIMITED	ASTM C76-CL2 ASTM C-478 ASTM C-478	PRECAST, STEEL REINFORCED 750 I.D. x (50 TO 125) PRECAST CONCRETE ADJUSTING RINGS ALUMINUM MANHOLE RINGS TF-101.9 MH FRAME AND SOLID COVER
PIPE GASKETS FOR 2134 PIPE	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C478 C.1 - ASTM A-48 CLASS 30B AP-005 OR AP-006	D.I. SLEEVE AND END RINGS, TYPE C219 EPOXY COATED STRAIGHT
MANHOLE COMPONENTS	MSU MISSISSAUGA LTD.	PETROWRAP MASTIC	ANTI-CORROSION SYSTEM
MANHOLE ADJUSTING RINGS	TITAN FOUNDRY		
MANHOLE RINGS (LAFARGE)	ROBAR INDUSTRIES LTD.		
MANHOLE FRAMES & COVERS	INSULMASTIC		
IRON COUPLINGS (762 PIPE)	LAFARGE CANADA INC. COWIN STEEL CO. LTD.		
PIPE WRAP	NELSON RIVER CONSTRUCTION		
CONCRETE REINFORCING STEEL			
CONTRACTOR: NELSON RIVER CONSTRUCTION			
CONSTRUCTION PERIOD: MARCH 2008 TO DECEMBER 2008			
FIELD BOOK NO.: 08-063			

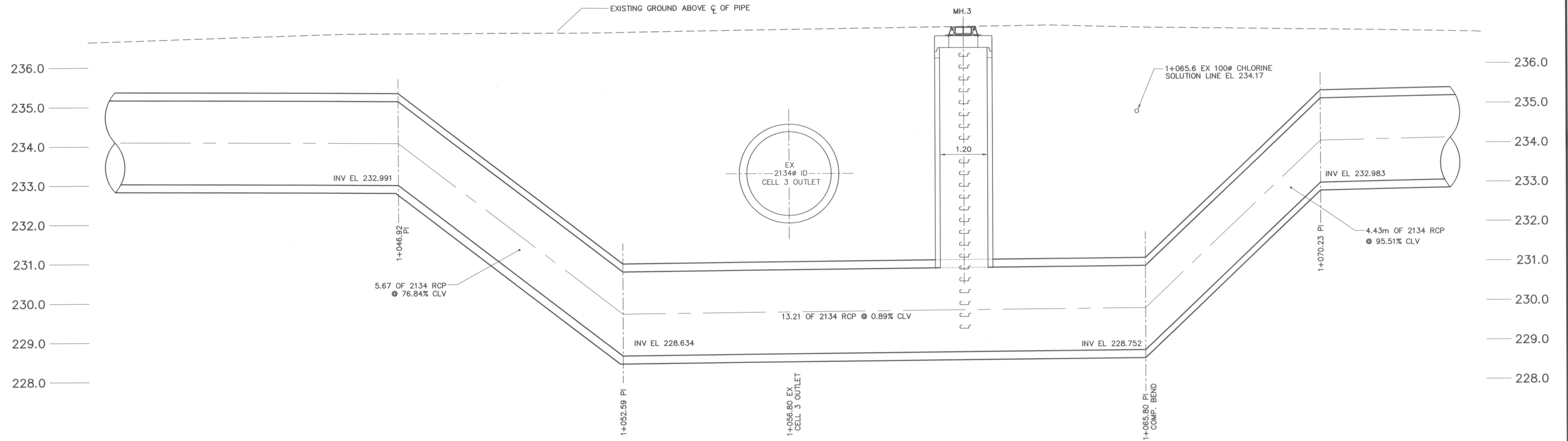


NO.	REVISIONS	DATE	BY
03	681-2007 AS CONSTRUCTED	11/06/07	WJd
02	681-2007 ISSUED FOR CONST	08/01/21	WJd
01	681-2007 ADDENDUM 2	07/11/12	WJd
00	681-2007 ISSUED FOR TENDER	07/09/27	WJd

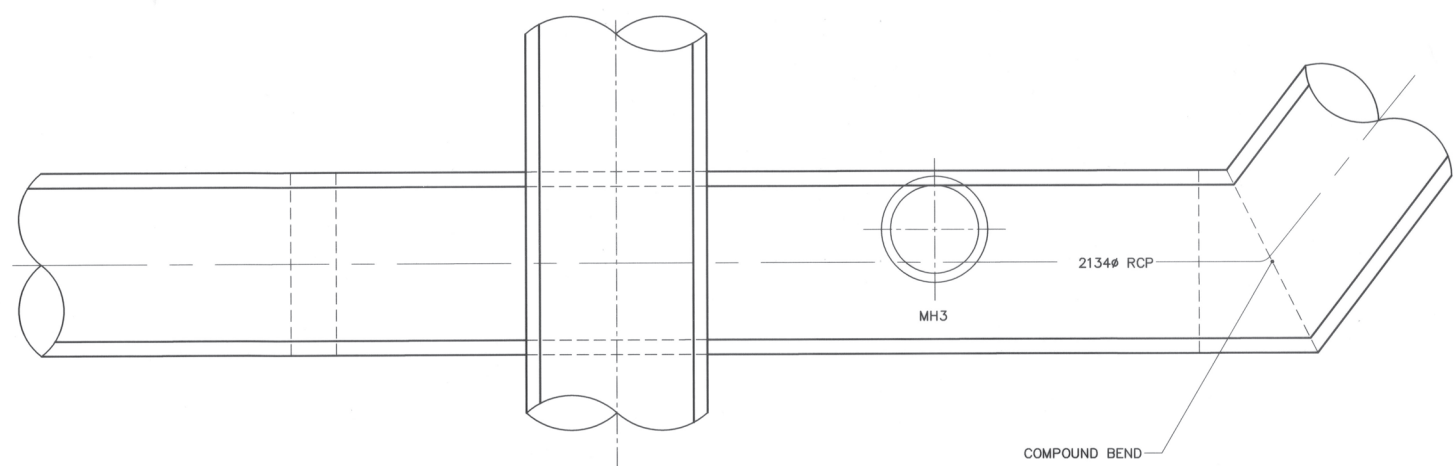
DESIGNED BY	CHECKED BY
EDT	
DRAWN BY	APPROVED BY
WJd	
HOR. SCALE:	RELEASED FOR CONSTRUCTION BY:
1:250	
VERTICAL SCALE:	DATE
1:50	2007/09/27



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 DESIGNED BY: EDT
 CHECKED BY: [Signature]
 DRAWN BY: WJd
 APPROVED BY: [Signature]
 HOR. SCALE: 1:250
 VERTICAL SCALE: 1:50
 RELEASED FOR CONSTRUCTION BY: [Signature]
 DATE: 2007/09/27
 DATE: 23 Jun 2011
 CONSULTANT DRAWING NO. WY C0218
THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 ENGINEERING DIVISION
 WINNIPEG WATER TREATMENT PROGRAM
 CONSTRUCTION OF WATER TREATMENT PLANT OVERFLOW
 CIVIL
 W.T.P. OVERFLOW PIPING - PLAN & PROFILE
 MATCH LINE STA 1+100.00 TO WATER TREATMENT PLANT
 CITY FILE NUMBER: 1-0601Y-C0040-001
 SHEET 1 OF 1
 CITY DRAWING NUMBER: 1-0601Y-C0040-001



SIPHON DETAIL AT EXISTING CELL 3 OUTLET CROSSING
 SCALE 1:50
 NOTE: RCP = REINFORCED CONCRETE PIPE



PLAN VIEW
 SCALE NTS

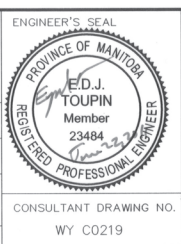
METRIC
 WHOLE NUMBERS INDICATE MILLIMETRES
 DECIMALIZED NUMBERS INDICATE METRES
 CONSTRUCTION COMPLETION DATE
 DEC 2008

AS CONSTRUCTED DRAWING



B.M. ELEV.	NO.	REVISIONS	DATE	BY
	03	681-2007 AS CONSTRUCTED	11/06/02	Wjd
	02	681-2007 FI-O-001_UMA	08/02/21	Wjd
	01	681-2007 ISSUED FOR CONST	08/01/21	Wjd
	00	681-2007 ISSUED FOR TENDER	07/09/21	Wjd

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<small>© 2005 UMA ENGINEERING LTD. ALL RIGHTS RESERVED.</small>	
DESIGNED BY: EDT	CHECKED BY: <i>[Signature]</i>
DRAWN BY: Wjd	APPROVED BY: <i>[Signature]</i>
HOR. SCALE: AS NOTED	RELEASED FOR CONSTRUCTION BY:
VERTICAL SCALE: AS NOTED	DATE 23 June 2011



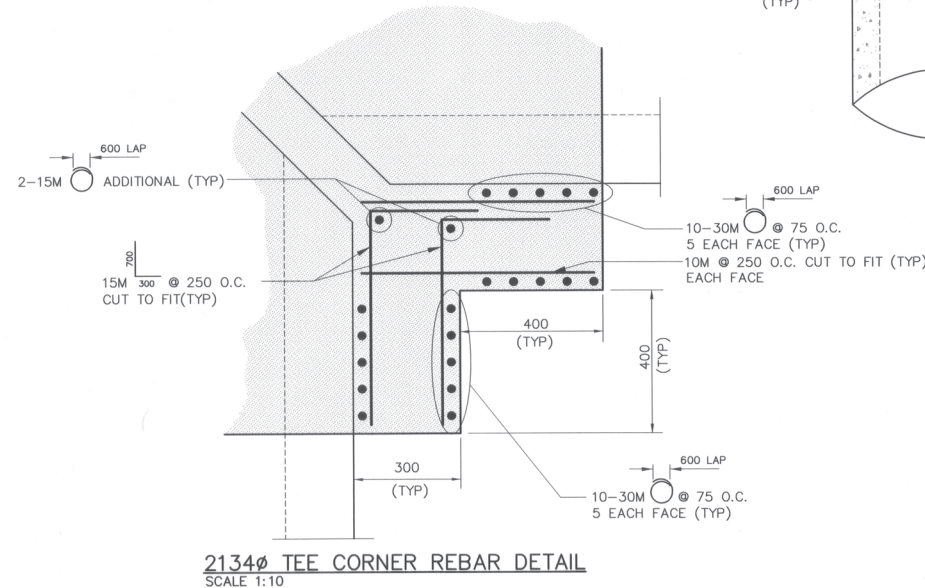
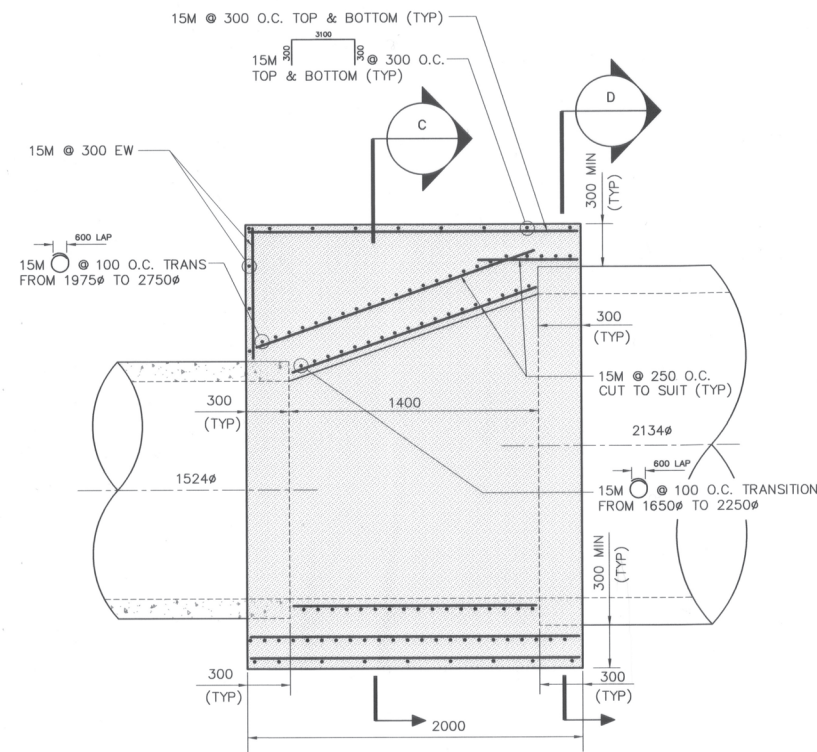
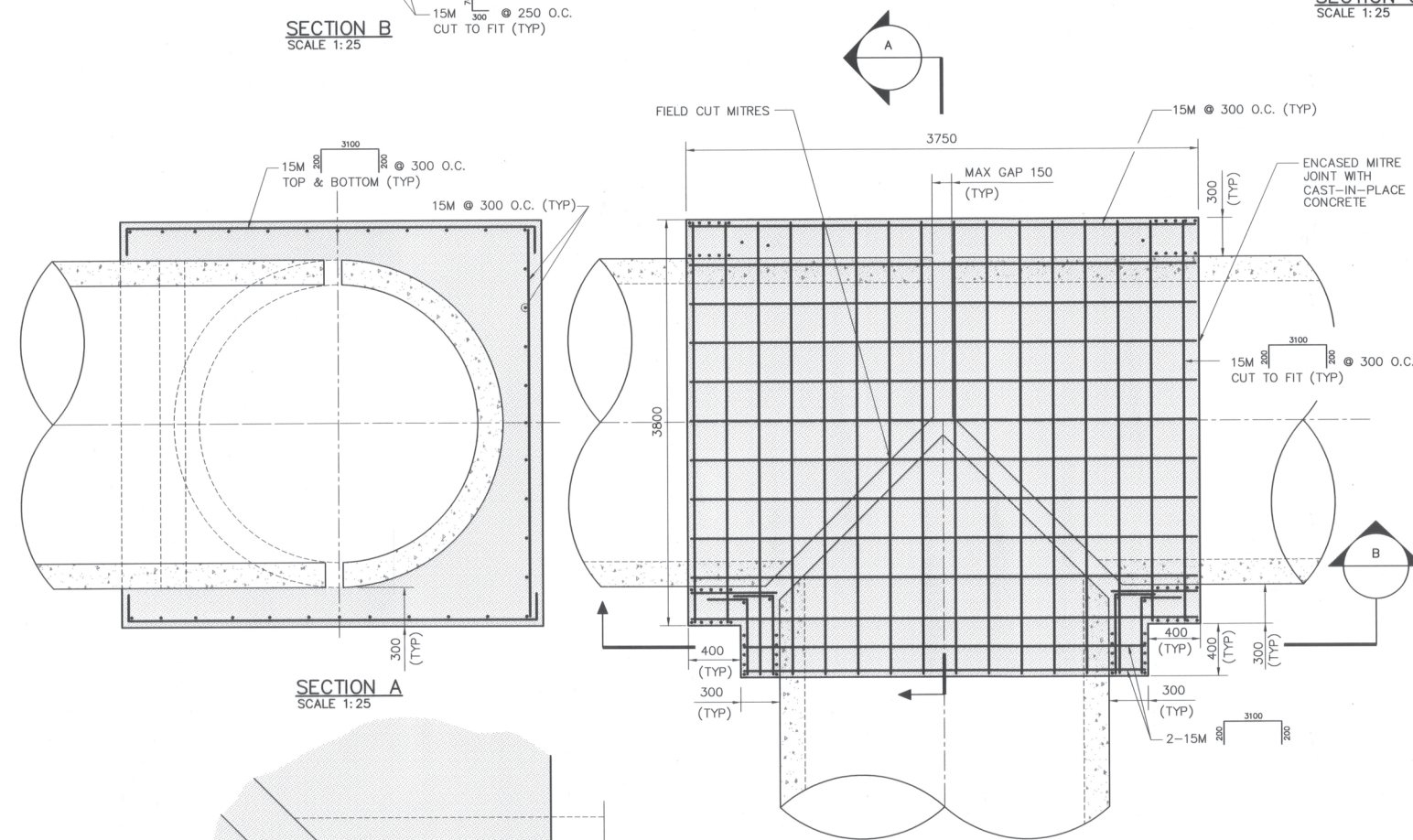
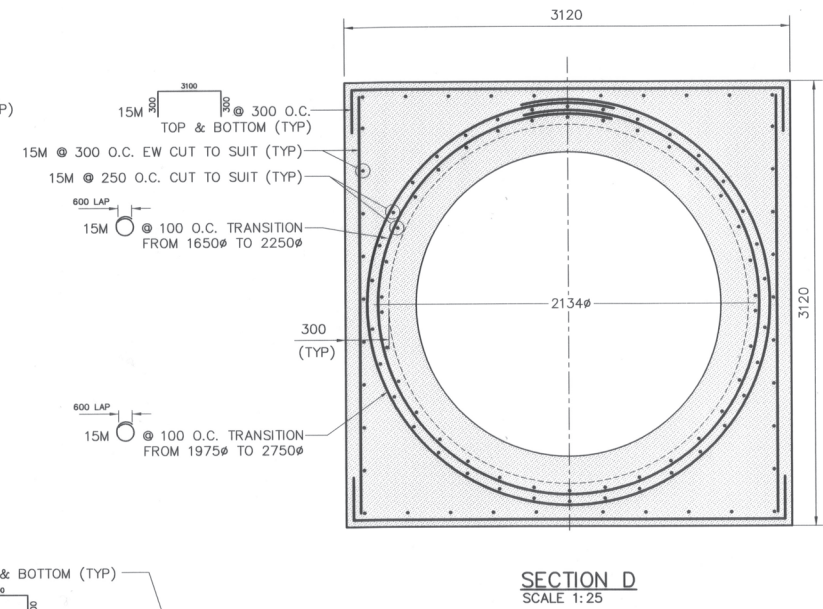
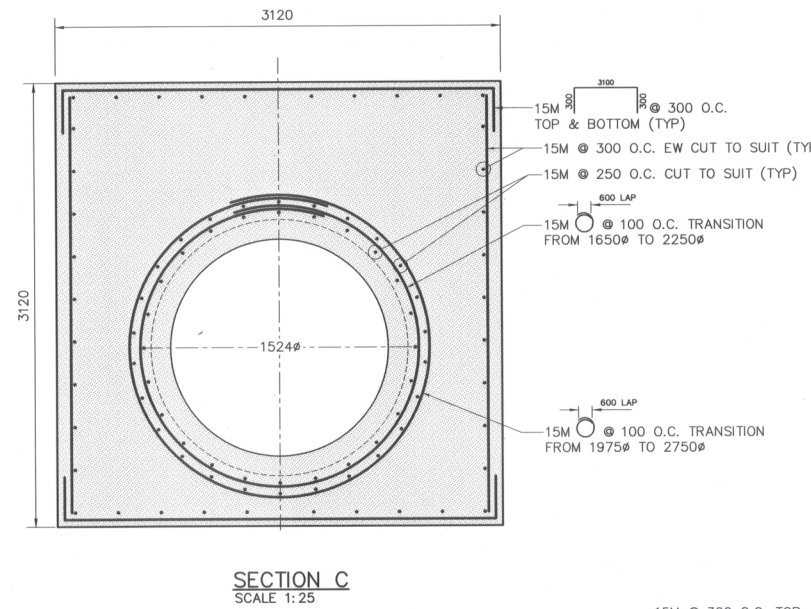
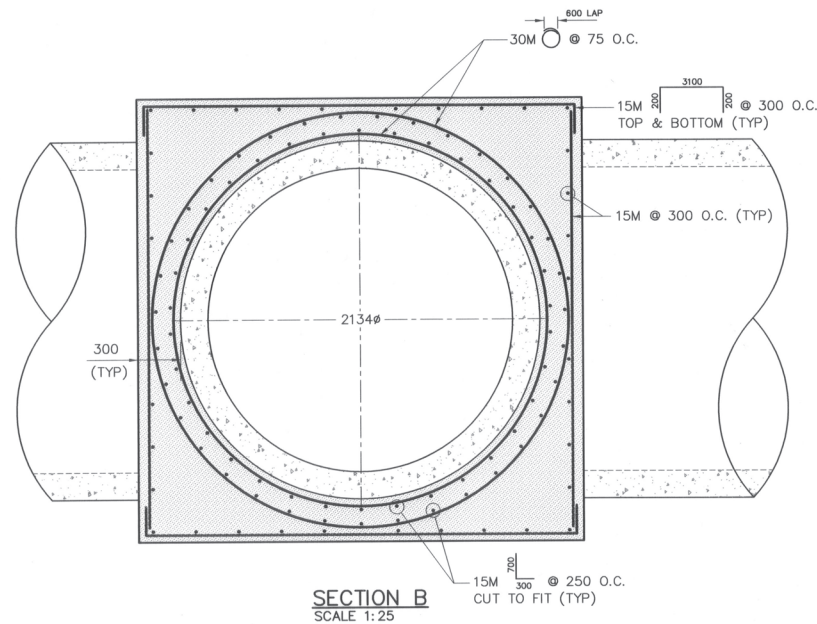
THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 ENGINEERING DIVISION

WINNIPEG WATER TREATMENT PROGRAM
 CONSTRUCTION OF WATER TREATMENT
 PLANT OVERFLOW

CIVIL
 2134mm SIPHON
 MISCELLANEOUS SECTIONS AND DETAILS

CONSULTANT DRAWING NO. WY C0219

CITY FILE NUMBER	SHEET 1 OF 1
CITY DRAWING NUMBER	1-0601F-C004I-001



2134mm TEE DETAIL
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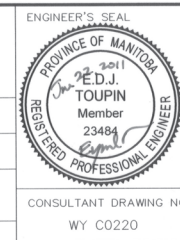
CONSTRUCTION COMPLETION DATE
DEC 2008

AS CONSTRUCTED DRAWING



NO.	REVISIONS	DATE	BY
02	681-2007 AS CONSTRUCTED	11/06/02	Wjd
01	681-2007 ISSUED FOR CONST	08/01/21	Wjd
00	681-2007 ISSUED FOR TENDER	07/09/21	Wjd

DESIGNED BY		CHECKED BY	
EDT / GEB			
DRAWN BY		APPROVED BY	
Wjd			
HOR. SCALE: AS NOTED		RELEASED FOR CONSTRUCTION BY:	
VERTICAL SCALE: AS NOTED			
DATE	2007/09/27	DATE	23 Jan 2011



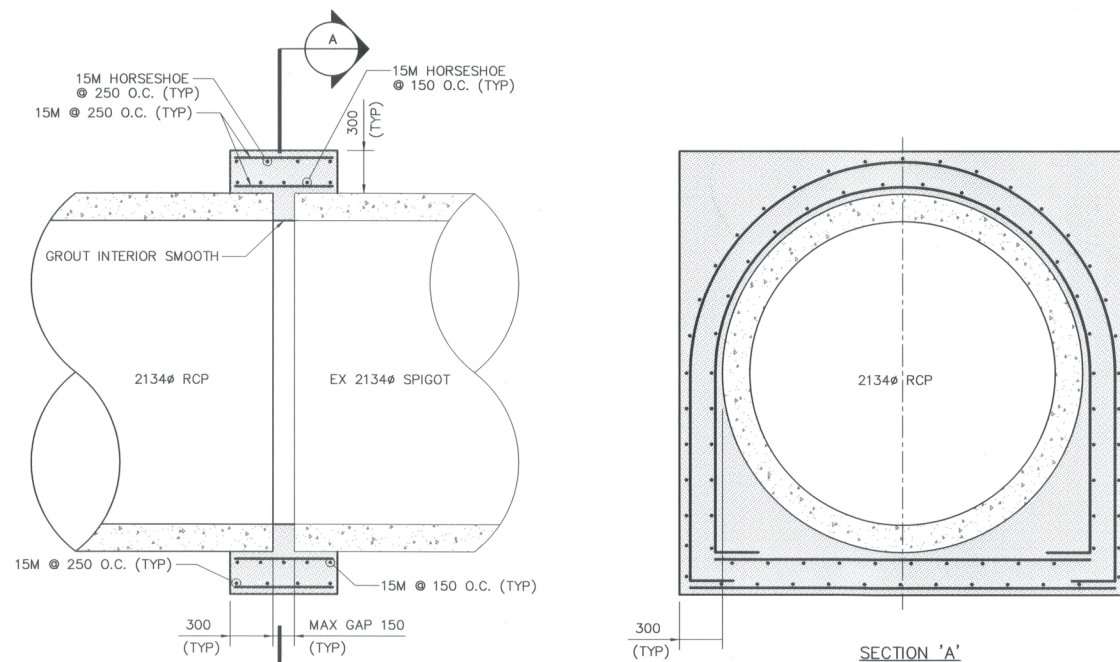
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WINNIPEG WATER TREATMENT PROGRAM
CONSTRUCTION OF WATER TREATMENT
PLANT OVERFLOW

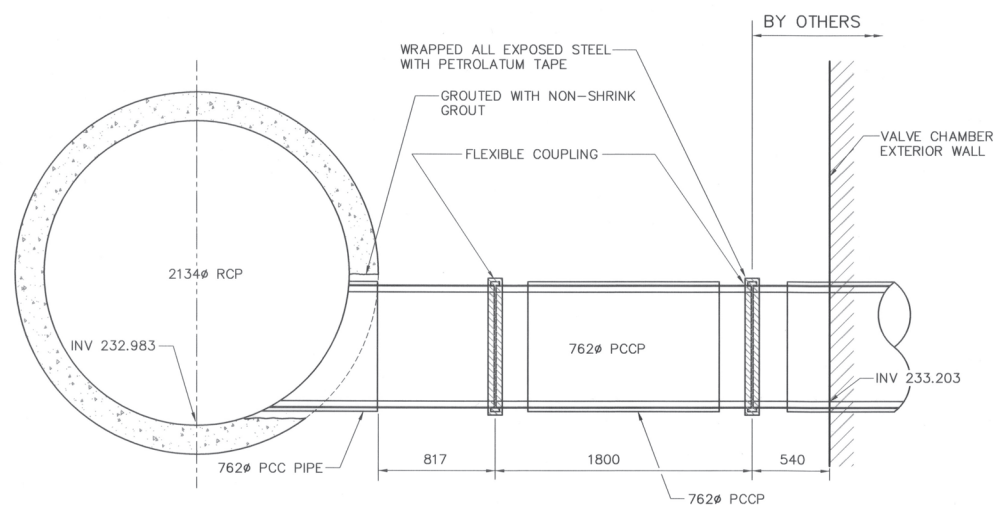
CIVIL
2134mm TEE & CONNECTION
MISCELLANEOUS SECTIONS AND DETAILS

CITY FILE NUMBER
SHEET 1 OF 1
CITY DRAWING NUMBER
1-0601Y-C0042-001

CONSULTANT DRAWING NO.
WY C0220

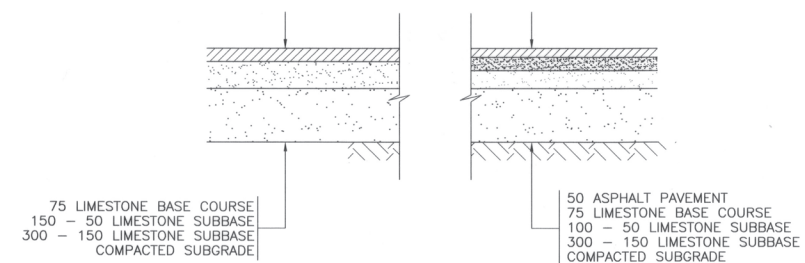


DETAIL 'A'
FIELD CLOSURE TO EXISTING SPIGOT AT THE W.T.P.
 SCALE 1:25
 STATION 1+209.56



DETAIL 'B'
762mm SUPERNATANT CONNECTION TO WTP OVERFLOW
 SCALE 1:25

LEGEND:
 RCP = REINFORCED CONCRETE PIPE
 PCCP = PRESTRESSED CONCRETE CYLINDER PIPE



GRAVEL ROADWAY **ASPHALT PAVEMENT**

TYPICAL SECTIONS THRU ROADWAY & PARKING AREAS
 N.T.S.

CONSTRUCTION COMPLETION DATE
 DEC 2008

AS CONSTRUCTED DRAWING



NO.	REVISIONS	DATE	BY
02	681-2007 AS CONSTRUCTED	11/06/02	WJd
01	681-2007 ISSUED FOR CONST	06/01/21	WJd1
00	681-2007 ISSUED FOR TENDER	07/09/27	WJd

B.M. ELEV.		UMA AECOM	
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DESIGNED BY	EDT	CHECKED BY	<i>[Signature]</i>
DRAWN BY	KMB	APPROVED BY	<i>[Signature]</i>
HOR. SCALE: AS NOTED VERTICAL SCALE: AS NOTED		RELEASED FOR CONSTRUCTION BY:	
DATE	2007/09/27	DATE	23 June 2011



THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 ENGINEERING DIVISION

WINNIPEG WATER TREATMENT PROGRAM CONSTRUCTION OF WATER TREATMENT PLANT OVERFLOW	CITY FILE NUMBER SHEET 1 OF 1 CITY DRAWING NUMBER 1-0601Y-C0043-001
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