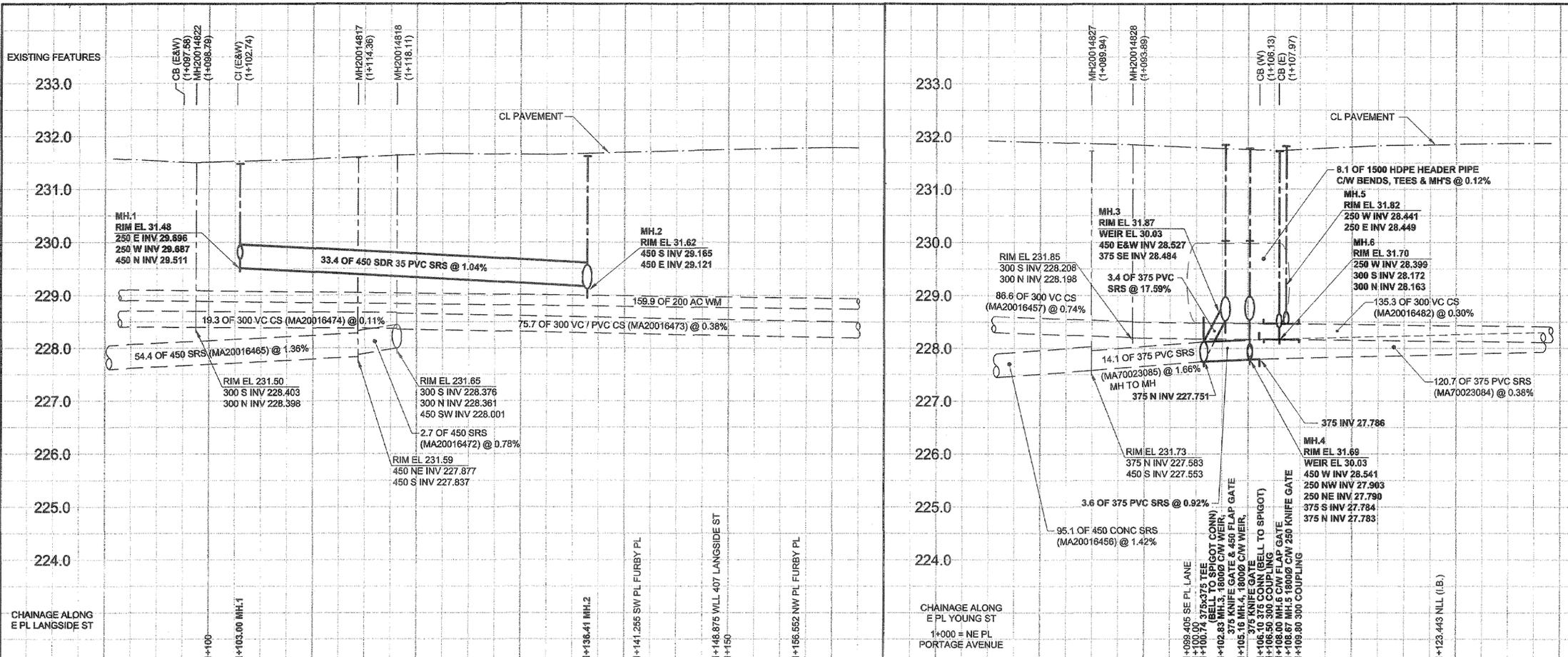


# **APPENDIX 'E'**

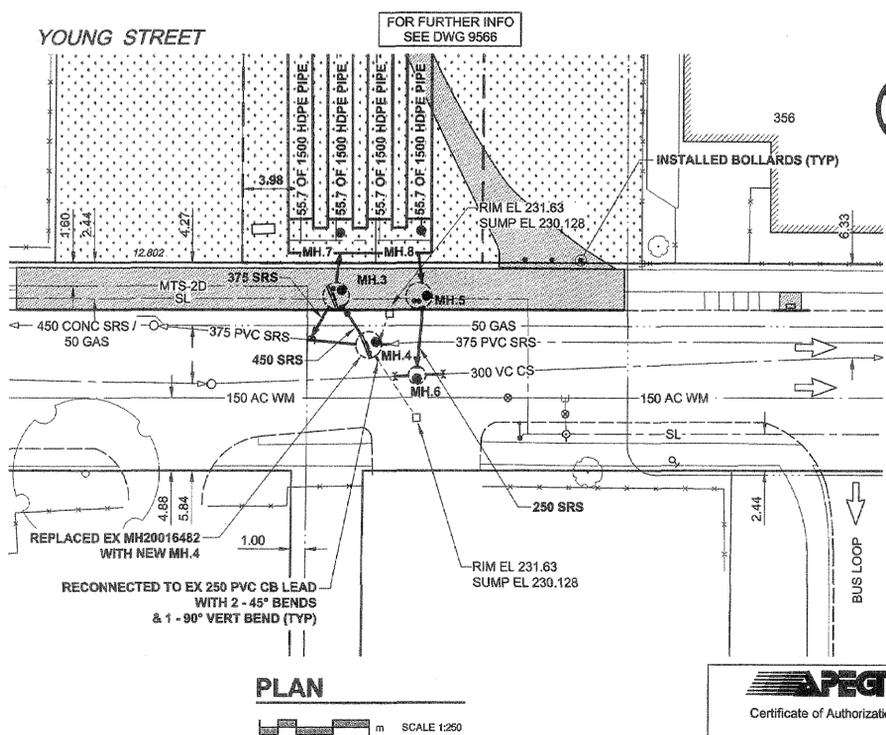
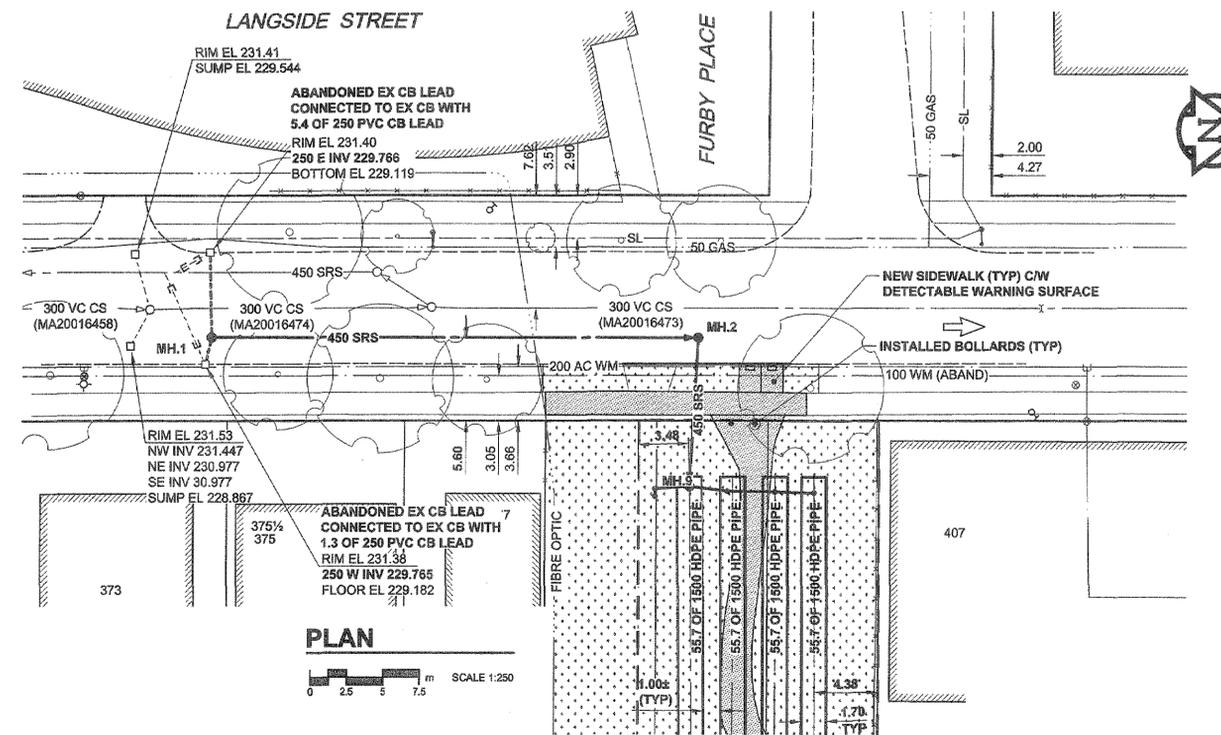
## **RECORD DRAWINGS**



D SIZE 22" x 34" (598mm x 864mm)  
 PLOT: 5142012 4:31:28 PM  
 AECOM FILE NAME: 60161484-01-C-102-R0X.dwg, Saved By:



MATERIAL LIST	MANUFACTURER	MATERIAL SPECIFICATION	SPECIAL FEATURES
<b>WATER WORKS</b>			
<b>SEWER WORKS</b>			
1500 HDPE STORAGE AND HEADER KWH PIPE (CANADA) LTD. PIPE	KWH PIPE (CANADA) LTD.	ASTM F694, ASTM D3350	WEHOLITE 60"ID 250RSC PE3508 SEWER AND DRAIN PIPE
1200 HDPE MANHOLE RISER	KWH PIPE (CANADA) LTD.	ASTM F694, ASTM D3350	WEHOLITE 48"ID 250RSC PE3508 SEWER AND DRAIN PIPE
200, 250, 450 HDPE PIPE STUBS	KWH PIPE (CANADA) LTD.	ASTM F714, AWWA C906	"SCLAIRPIPE" IPS DR 21 PE3408 "BLUE BRUTE" DR-18 CLASS 150
200 PVC (AIR VENT) PIPE	IPEX INC.	AWWA C900-97 CSA B137.3	CW SCRECH
200 AIR VENT	WOLSELEY	SCHEDULE 40 GAL. STEEL	"RING-TITE" SDR-35
250/300/375/450 PVC PIPE	IPEX INC.	ASTM D3034 CSA B182.2	SDR-35 SLIP COLLAR
450 FABRICATED PVC FITTINGS	ROYAL PIPE SYSTEMS (L.E.-RON PLASTICS INC.)	ASTM F679 CSA B182.2	SDR-35 TEE
375 FABRICATED PVC FITTINGS	ROYAL PIPE SYSTEMS (L.E.-RON PLASTICS INC.)	ASTM D3034 CSA B182.2	SDR-35 TEE
300/375 FLEXIBLE SEWER COUPLINGS	MISSION RUBBER CO.		"FLEX-SEAL"
300/375 FLEXIBLE SEWER COUPLINGS VALVE BOX UPPER CASING	W.D. VALVE BOXES LTD.		C.I. OR D.I. BODY CONFORMS TO AP-001
200/250/375/450 IRON COUPLINGS C/W SS STIFFENER INSERT FOR HDPE PIPE	ROBAR INDUSTRIES LTD.	AWWA C219 AWWA C213	D.I. SLEEVE & END RINGS. TYPE 304 STAINLESS STEEL BOLTS, NUTS & WASHERS. "BLUE BRUTE" DR-18
200 FABRICATED PVC FITTINGS, 200 CROSS	IPEX INC.	AWWA C907 CSA B137.3	"BLUE BRUTE" DR-18 CLASS 150
200 PVC FITTINGS	IPEX INC.	AWWA C907 CSA B137.3	"BLUE BRUTE" DR-18 CLASS 150
200/150 REDUCER	IPEX INC.	AWWA C907 CSA B137.3	"BLUE BRUTE" DR-18 CLASS 150
300 ADAPTERS	FERNCO DONUT	ASTM C78-CL2	CLAY TO PVC PRECAST, STEEL REINFORCED C/W CONSEAL JOINT GASKETS
MANHOLE COMPONENTS	LAFARGE CONSTRUCTION MATERIALS INC.	ASTM C78-CL2	CLAY TO PVC PRECAST, STEEL REINFORCED C/W CONSEAL JOINT GASKETS
MANHOLE FRAMES & COVERS	TITAN FOUNDRY	C.I. - ASTM A-48 CLASS 30B CONFORMS TO AP-004 AND AP-005	TF-101-9 MH FRAME AND TF-101-9 SOLID COVER
WEIR WALL JOINT SEALANT (MH 3 & 4)	CETCO	ASTM C920	VOLCLAY RX101T ADHESIVE WATER STOP
CIRCULAR FLAP GATES	FONTAINE INDUSTRIES LTD	SERIES 60 - 316L S.S.	MODEL 60-250-K-RMX (MH.6) MODEL 60-450-K-CWX (MH.3)
SLUICE GATES	FONTAINE INDUSTRIES LTD	SERIES 20 - 316L S.S.	MODEL 202 - 25x254-K-RMX (MH.5) MODEL 202 - 375x375-K-CW (MH.3&4) MODEL INCL 10312FA10A
ELECTRIC GATE ACTUATOR CONDUIT PIPE	ROTOROK CONTROLS COLUMBEX INC.	AWWA C540 CSA US 208321	GREEN GLARD SYNDICATE ELECTRICAL RIGID STEEL CONDUIT
<b>ROAD WORKS</b>			
CONCRETE	NORTHLAND READY MIX CONCRETE	CW3230	24HR & 72HR EARLY OPEN
CONCRETE	UNITED CONCRETE	CW3230	24HR EARLY OPEN
ASPHALT	BISON ROCK & ASPHALT PRODUCTS LTD	CW3410	STREET PATCHES
ASPHALT	MAPLE LEAF CONSTRUCTION LTD.	CW3410	PEDESTRIAN/BIKE PATH
GEOTEXTILE DRAINAGE FABRIC	ARMTEC LIMITED	ARMTEC 250W	NON-WOVEN GEOTEXTILE
CONTRACTOR: CONSTRUCTION PERIOD. FIELD BOOK NO.:	DARCO ENTERPRISES LTD. JUNE 20, 2011 - NOVEMBER 18, 2011 10-31		



150 WM		150 WM		CURB STOP		150 WM		150 WM	
○	HYDRANT	○	REDUCER	○	REDUCER	○	WATERMAIN	○	WATERMAIN
○	VALVE	○	COUPLING	○	COUPLING	○	LAND DRAINAGE SEWER	○	LAND DRAINAGE SEWER
○	LAND DRAINAGE SEWER	○	HYDRO	○	MTS	○	WASTE WATER SEWER	○	WASTE WATER SEWER
○	WASTE WATER SEWER	○	MTS	○	GAS	○	PAVEMENT CROWN	○	PAVEMENT CROWN
○	MANHOLE	○	ASPHALT	○	CONCRETE	○	GROUNDLINE	○	GROUNDLINE
○	CATCH BASIN	○	LIP CURB	○	MODIFIED BARRIER CURB	○		○	
○	CURB INLET	○	RAMP CURB	○	RAMP CURB	○		○	
○	CULVERT	○		○		○		○	
○	COMMUNITY MAILBOX	○		○		○		○	
○	SURVEY BAR	○		○		○		○	
○	EXISTING	○	NEW	○	EXISTING	○	LEGEND - PLAN	○	NEW

**METRIC**  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMAL NUMBERS INDICATE METRES

**LOCATION APPROVED**  
UNDERGROUND STRUCTURES

DATE: 12/05/15

**AECOM**  
Certificate of Authorization  
AECOM Canada Ltd.  
No. 4671 Date: May 31, 2012

**DESIGNED BY:** FMI  
**CHECKED BY:** [Signature]  
**DRAWN BY:** KMB  
**APPROVED BY:** [Signature]

**HOR. SCALE:** 1:250  
**VERT. SCALE:** 1:50

**1 ISSUED FOR RECORD** 12/05/14 AD  
**0 ISSUED FOR CONSTRUCTION** 11/03/18 KMB

**PROFESSIONAL'S SEAL**  
PROVINCE OF MANITOBA  
REGISTERED PROFESSIONAL ENGINEER  
D.J. GYTOUPIN  
Member 23484  
CONSULTANT DRAWING NO. 60161484-01-C-102-R0X.dwg

**RECORD DRAWING**  
10-3392

BID OPPORTUNITY NO. 218-2011

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

**CSO STORAGE FACILITY AT THE UNIVERSITY OF WINNIPEG CIVIL**

80m N OF PORTAGE AVENUE  
TO 260m S OF ELLICE AVENUE

SHEET 3 OF 19  
CITY DRAWING NUMBER  
**9567**