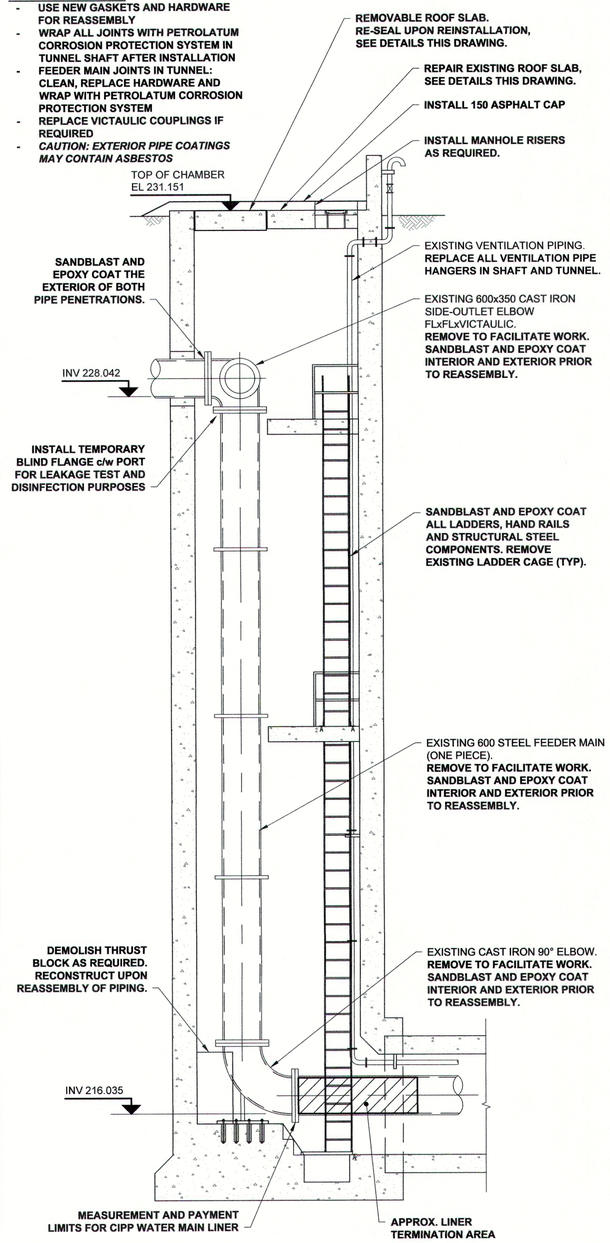
WEST TUNNEL SHAFT:

- USE NEW GASKETS AND HARDWARE FOR REASSEMBLY
- WRAP ALL JOINTS WITH PETROLATUM CORROSION PROTECTION SYSTEM IN TUNNEL SHAFT AFTER INSTALLATION
- FEEDER MAIN JOINTS IN TUNNEL: CLEAN, REPLACE HARDWARE AND WRAP WITH PETROLATUM CORROSION PROTECTION SYSTEM
- REPLACE VICTAULIC COUPLINGS IF REQUIRED
- *CAUTION: EXTERIOR PIPE COATINGS MAY CONTAIN ASBESTOS*

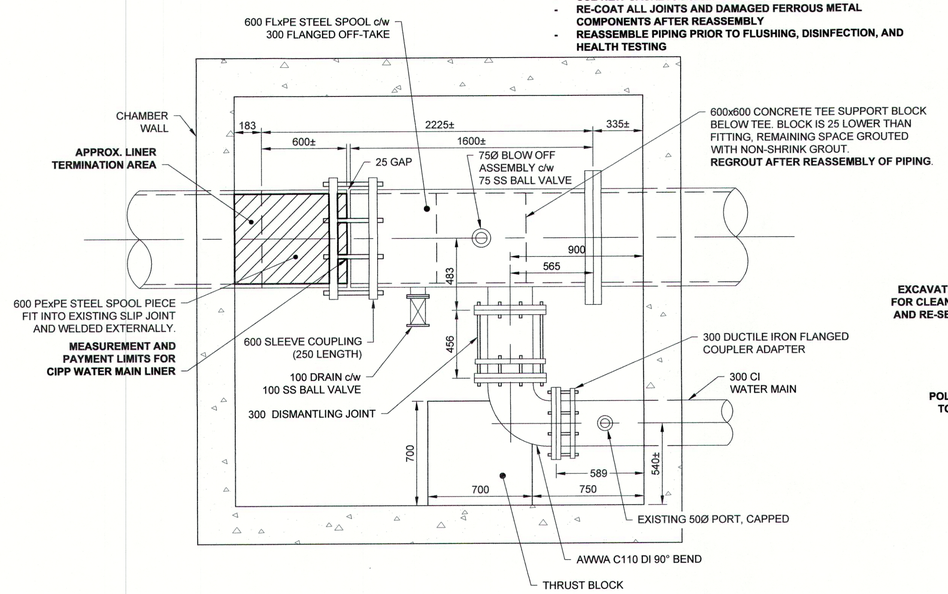


WEST TUNNEL SHAFT SECTION

Scale 1:50

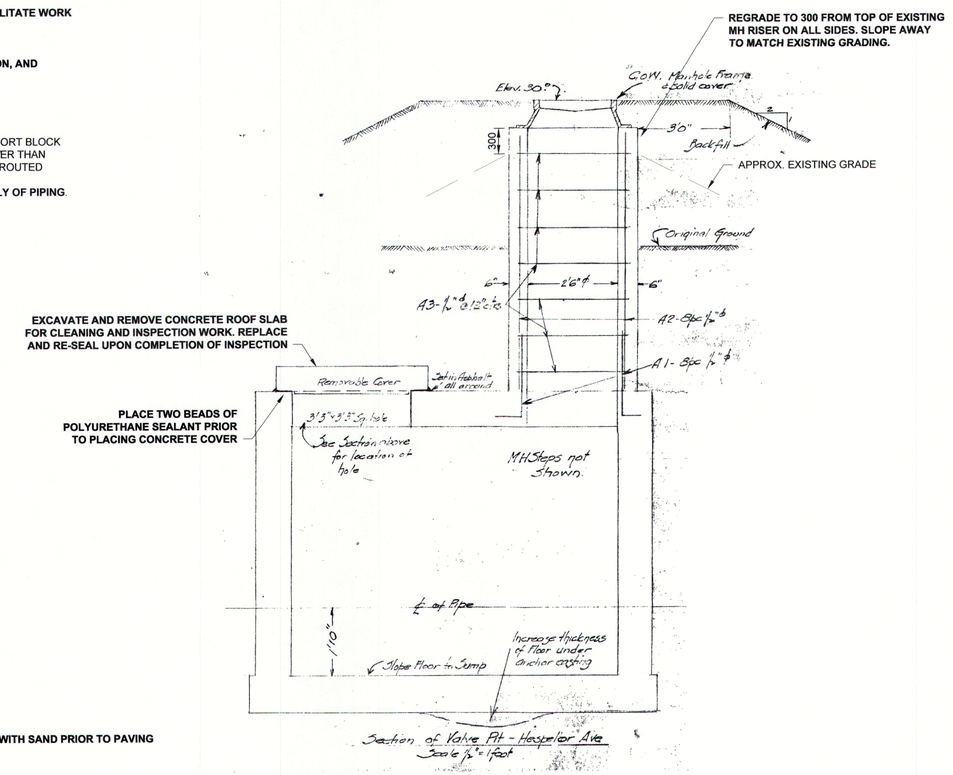
EAST VALVE CHAMBER:

- DISASSEMBLE CHAMBER PIPING AS REQUIRED TO FACILITATE WORK
- USE NEW GASKETS FOR REASSEMBLY
- RE-COAT ALL JOINTS AND DAMAGED FERROUS METAL COMPONENTS AFTER REASSEMBLY
- REASSEMBLE PIPING PRIOR TO FLUSHING, DISINFECTION, AND HEALTH TESTING



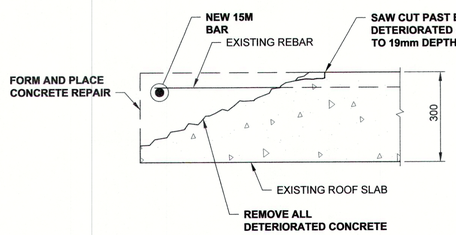
EAST VALVE CHAMBER PLAN

Scale 1:20

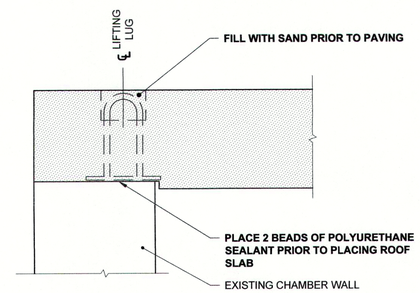


EAST VALVE CHAMBER SECTION

Scale 1:25



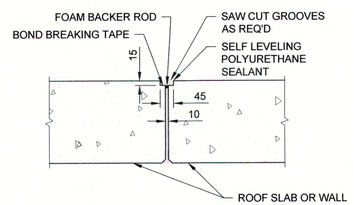
1 | DETAIL
- EXISTING ROOF SLAB REPAIR
SCALE 1:10



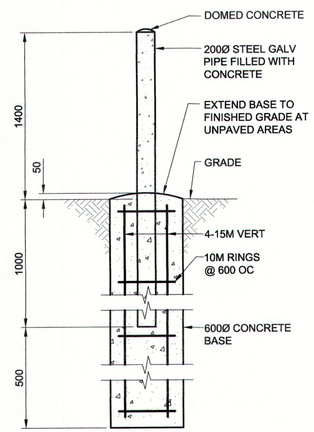
2 | DETAIL
- REMOVABLE ROOF PANEL CAULKING DETAIL 1
SCALE 1:10

CONCRETE REPAIR

- SAWCUT AROUND AREA TO BE REPAIRED TO A DEPTH OF 19mm.
- AREA TO BE REMOVED IS TO BE RECTANGULAR IF POSSIBLE. NO CORNER OF THE LIMITS OF THE CONCRETE PATCH SHALL HAVE AN INTERNAL ANGLE GREATER THAN 225°.
- ALL EXISTING CONCRETE SURFACES TO BE REPAIRED SHALL BE CLEANED AFTER REMOVAL OF DETERIORATED CONCRETE USING HIGH PRESSURE WASHING, MINIMUM PRESSURE OF 35 MPa (5000 PSI). RE-CLEAN SURFACE PRIOR TO PLACEMENT OF CONCRETE.
- ALL MATERIAL SHALL BE MIXED AND PLACED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
- CONCRETE REPAIR PRODUCT SHALL MEET THE FOLLOWING:
  - CW2160
  - TYPE HS CEMENT
  - MIN 28 DAY COMPRESSIVE STRENGTH: 35 MPa



3 | DETAIL
- REMOVABLE ROOF PANEL CAULKING DETAIL 2
SCALE 1:10



4 | DETAIL
- TYPICAL BOLLARD
SCALE 1:25

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
AECOM Canada Ltd.
No. 4671 Date: June 15/20

TENDER NO. 347-2020

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PROFILE	NEW
150 WM	WATERMAIN	150 WM		CURB STOP		150 WM	WATERMAIN	150 WM
	HYDRANT			REDUCER			HYDRANT	
	VALVE			COUPLING			VALVE	
300 LDS	LAND DRAINAGE SEWER	300 LDS		ANODE		300 LDS	LAND DRAINAGE SEWER	300 LDS
250 WWS	WASTE WATER SEWER	250 WWS		HYDRO		250 WWS	WASTE WATER SEWER	250 WWS
	MANHOLE			MTS			PAVEMENT CROWN	
	CATCH BASIN			GAS			N/W PROPERTY LINE	
	CURB INLET			TESTHOLE			S/E PROPERTY LINE	
	CULVERT			LAMP STANDARD			N/W GUTTER	
	PIPE ABANDONMENTS			TREE			S/E GUTTER	
	SURVEY BAR							

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPR. U/G STRUCTURES COMMITTEE DATE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE. BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

NO.	REVISIONS	YY/MM/DD	BY
0	ISSUED FOR CONSTRUCTION	20/06/15	KLC

AECOM

DESIGNED BY	ADB	CHECKED BY	
DRAWN BY	KLC	APPROVED BY	
HOR. SCALE	AS NOTED	RELEASED FOR CONSTRUCTION	
VERT. SCALE	N/A		
DATE		DATE	20/06/15

PROFESSIONAL'S SEAL
PROVINCE OF MANITOBA
A. D. BRAUN
Member
24453
June 15
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NO.
60622949-SHT-30-0000-C-1001

Winnipeg

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

KILDONAN - REDWOOD FEEDER MAIN CROSSING REHABILITATION

DETAILS

SHEET 2 OF 2

CITY DRAWING NUMBER
1-0798E-C0002-001

REV ----

D SIZE 22" x 34" (559mm x 864mm)

PLOT: 6/15/2020 11:18:05 AM

AECOM FILE NAME: 60622949-SHT-30-0000-C-1001.dwg Saved By: cooperkl

DRFT CHK

AECOM REVIEW