

## **APPENDIX D**

### **WATER FOR COMMISSIONING PLAN**



COMMISSIONING PLAN FOR CONTRACT 1A LIFT STATION (TENDER NO. 301-2024)

WATER USED FOR COMMISSIONING SHALL BE DRAWN THROUGH THE 750mm FEEDER MAIN AND DISCHARGED INTO THE LIFT STATION'S UPSTREAM GRAVITY SEWER SYSTEM AT MH-04 VIA THE 150mm FORCE LINE CONSTRUCTED AS PART OF CONTRACT 4A FEEDER MAIN (TENDER 220-2024). DESCRIBED HEREIN ARE THE MINIMUM REQUIREMENTS AND EXPECTATIONS FOR THE PURPOSE OF SUPPLYING WATER TO THE CENTERPORT SOUTH - PHASE 1A LIFT STATION. ALL WATER USED FROM CITY SOURCES WILL BE CHARGED TO CONTRACTOR AS PER SPECIFICATION E40. ANY CHANGE OR ALTERATION TO THIS PLAN WILL REQUIRE REVIEW AND APPROVAL BY THE CONTRACT ADMINISTRATOR AS PER B7 OF THE SPECIFICATIONS.

STAGE 1: COMMISSIONING FOR CONTRACT 4A FEEDER MAIN

HYDROSTATIC PRESSURE TESTING OF THE 750mm FEEDER MAIN AND THE 150mm FORCE MAIN WERE COMPLETED UNDER TENDER 220-2024. 1. TENDER 220-2024 CONCLUDED BY REPLACING A SPOOL PIECE IN OFFTAKE STRUCTURE 2 (OS 2) BETWEEN THE WYE AND BUTTERFLY VALVE WITH A BLIND FLANGE TO FULLY SEPARATE THE NEW 750mm FEEDER MAIN SYSTEM FROM THE EXISTING SYSTEM UNTIL THE LIFT STATION IS READY TO BE FULLY COMMISSIONED. THIS IS SHOWN ON SHEET 2 OF THIS APPENDIX. 2. DISINFECTION OF THE FEEDER MAIN WAS NOT COMPLETED UNDER TENDER 220-2024. DISINFECTION OF THE ENTIRE 750mm FEEDER MAIN IS TO BE COMPLETED UNDER THIS TENDER.

STAGE 2: COMMISSIONING FOR CONTRACT 2A FORCE MAIN

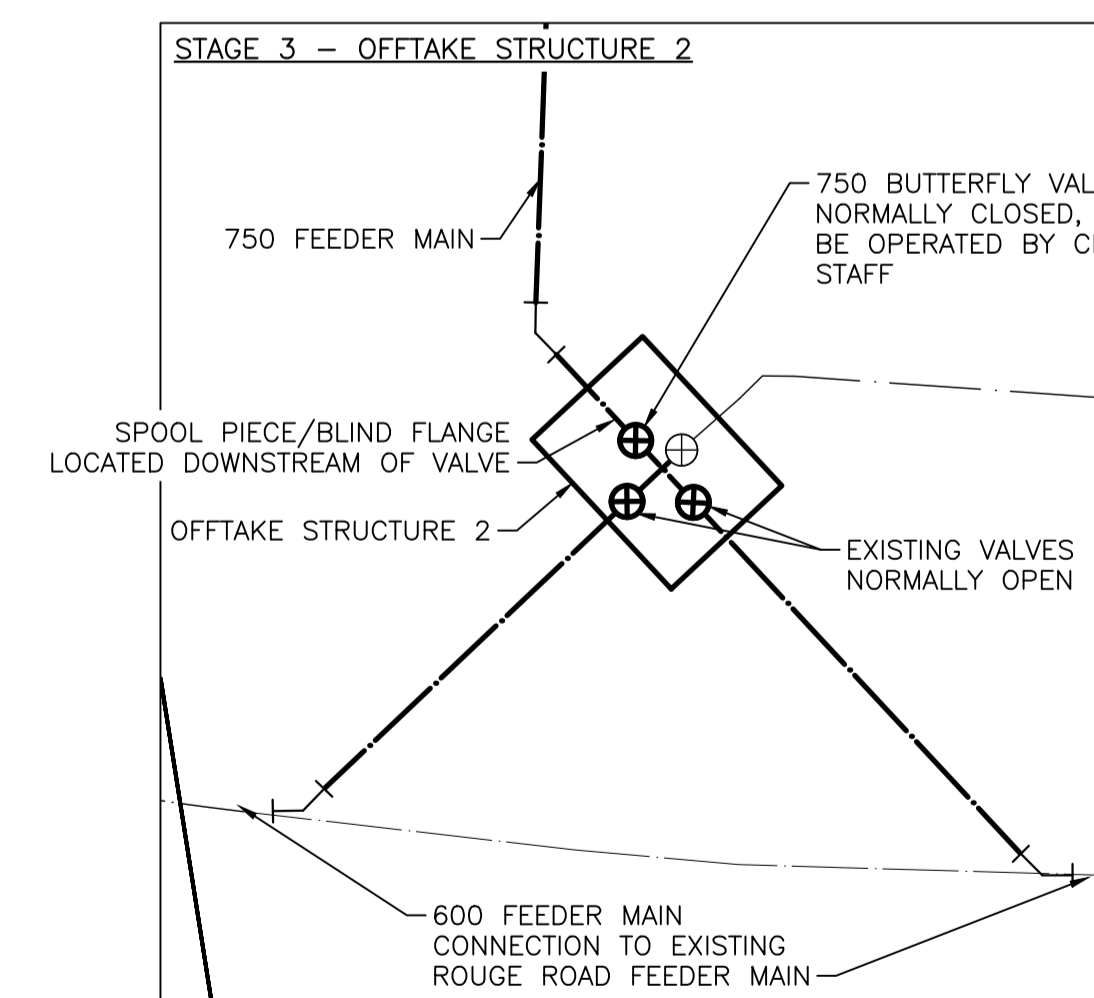
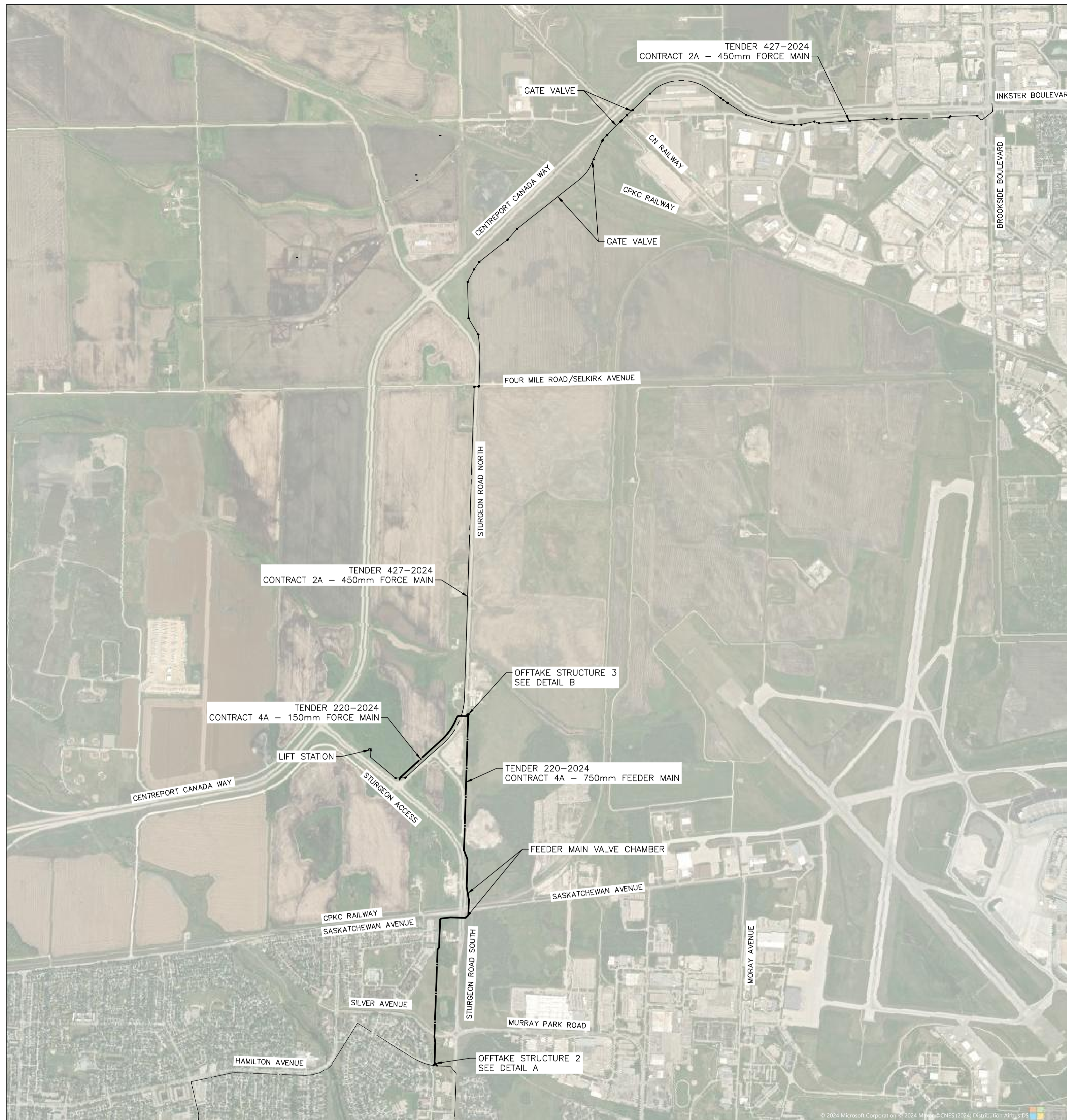
THE PORTION OF THE 450mm FORCE MAIN INSTALLED UNDER TENDER 427-2024 WAS ALSO HYDROSTATICALLY TESTED AND PIGGED UNDER THE SAME TENDER.

STAGE 3 - DISINFECT THE 750mm FEEDER MAIN

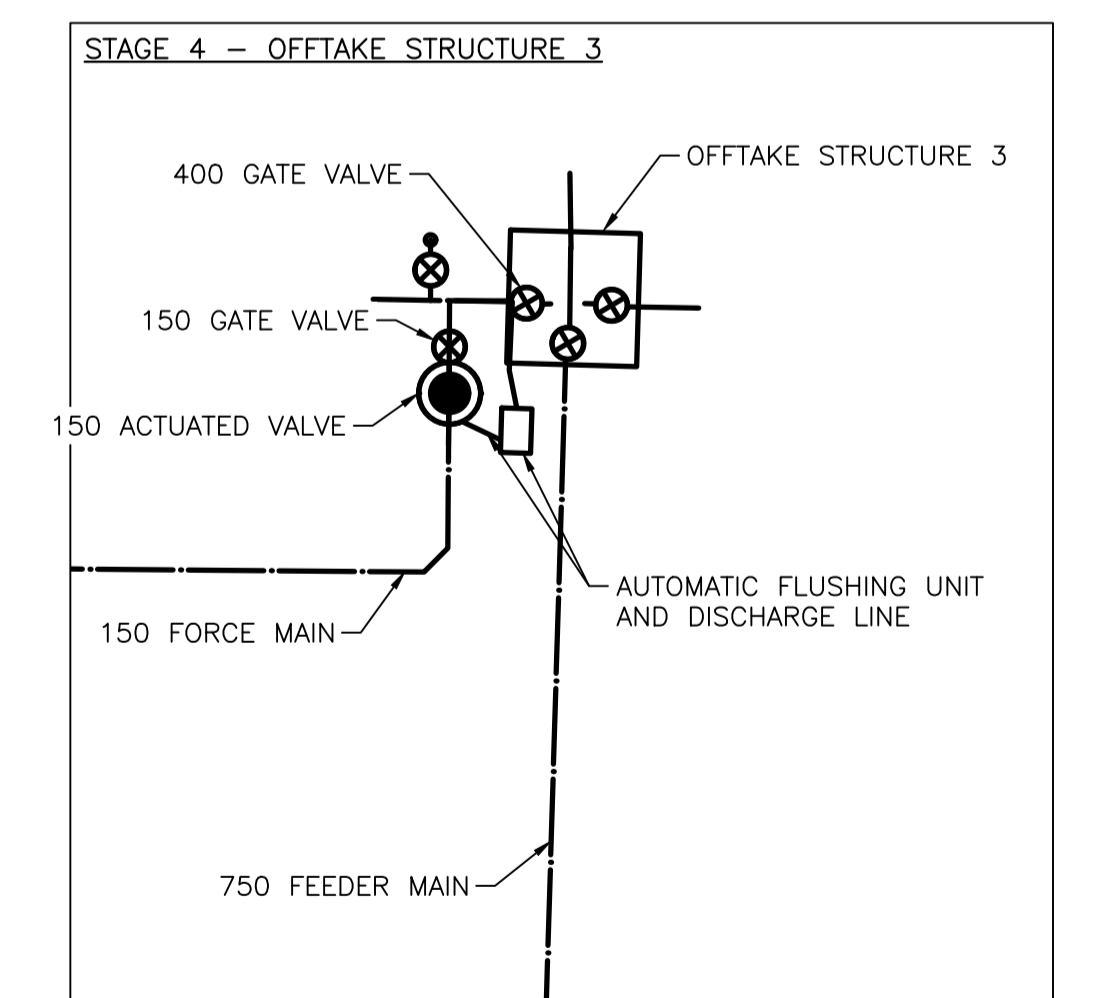
1. REMOVE BLIND FLANGE DOWNSTREAM OF 750 VALVE IN OS 2 AS SHOWN IN DETAIL A BELOW AND SHEET 2 OF THIS APPENDIX AND INSTALL CITY SUPPLIED SPOOL PIECE TO RECONNECT THE 750mm FEEDER MAIN SYSTEM TO THE EXISTING WATER DISTRIBUTION NETWORK.
2. COORDINATE WITH CITY STAFF TO OPERATE 750mm BUTTERFLY VALVE IN OS 2.
3. COMPLETE DISINFECTION OF THE FEEDER MAIN IN ACCORDANCE WITH CW 2125 AND AS AMENDED BELOW AND IN SPECIFICATION SECTION E41.
4. UTILIZE EXISTING BLOW OFF VALVES AT OS 3 AS REQUIRED TO RELEASE ANY ENTRAPPED AIR DURING THE PIPE FILLING OPERATION.
5. SLOWLY FILL THE FEEDER MAIN WHILE INJECTING CHLORINE SOLUTION INTO THE PIPING VIA ONE OF THE BLOW OFF VALVES IN OS 2 AT THE RATE SPECIFIED IN E41.
6. SAMPLE CHLORINE RESIDUALS AT BOTH VALVE CHAMBERS AND OS 3 TO ENSURE RESIDUALS ARE WITHIN THE ACCEPTABLE RANGE INDICATED IN CW 2125 THROUGHOUT THE ENTIRE FEEDER MAIN.
7. ONCE ACCEPTABLE RESIDUAL LEVELS ARE CONFIRMED, ISOLATE AND MAINTAIN FOR 24 HOURS.
8. AFTER 24 HOURS, DETERMINE THE CHLORINE RESIDUAL IN ACCORDANCE WITH CW 2125. ACCEPTABLE MINIMUM FREE CHLORINE RESIDUAL AFTER 24 HOURS IS 10 mg/L.
9. COMPLETE BACTERIOLOGICAL SAMPLING IN ACCORDANCE WITH CW 2125.
10. REPEAT STEPS 1 - 9 IF BACTERIOLOGICAL SAMPLES FAIL.

STAGE 4 - SUPPLY WATER FOR LIFT STATION COMMISSIONING

1. COORDINATE WITH CITY STAFF TO OPEN 400mm GATE VALVE IN OFFTAKE STRUCTURE 3 AND BOTH 150 CONTROL VALVES ON THE 150mm FORCE MAIN AS SHOWN ON SHEET 3 OF THIS APPENDIX.
2. SUPPLY WATER TO THE LIFT STATION AS REQUIRED FOR COMMISSIONING BY FLUSHING WATER THROUGH THE 150mm FORCE MAIN INTO THE DOWNSTREAM GRAVITY SEWER SYSTEM WHICH DRAINS TO THE LIFT STATION.

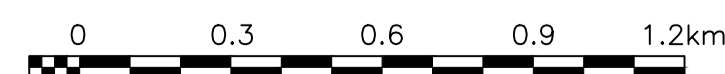


DETAIL A



DETAIL B

METRIC  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES



LOCATION APPROVED UNDERGROUND STRUCTURES	
SUPV. 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.	

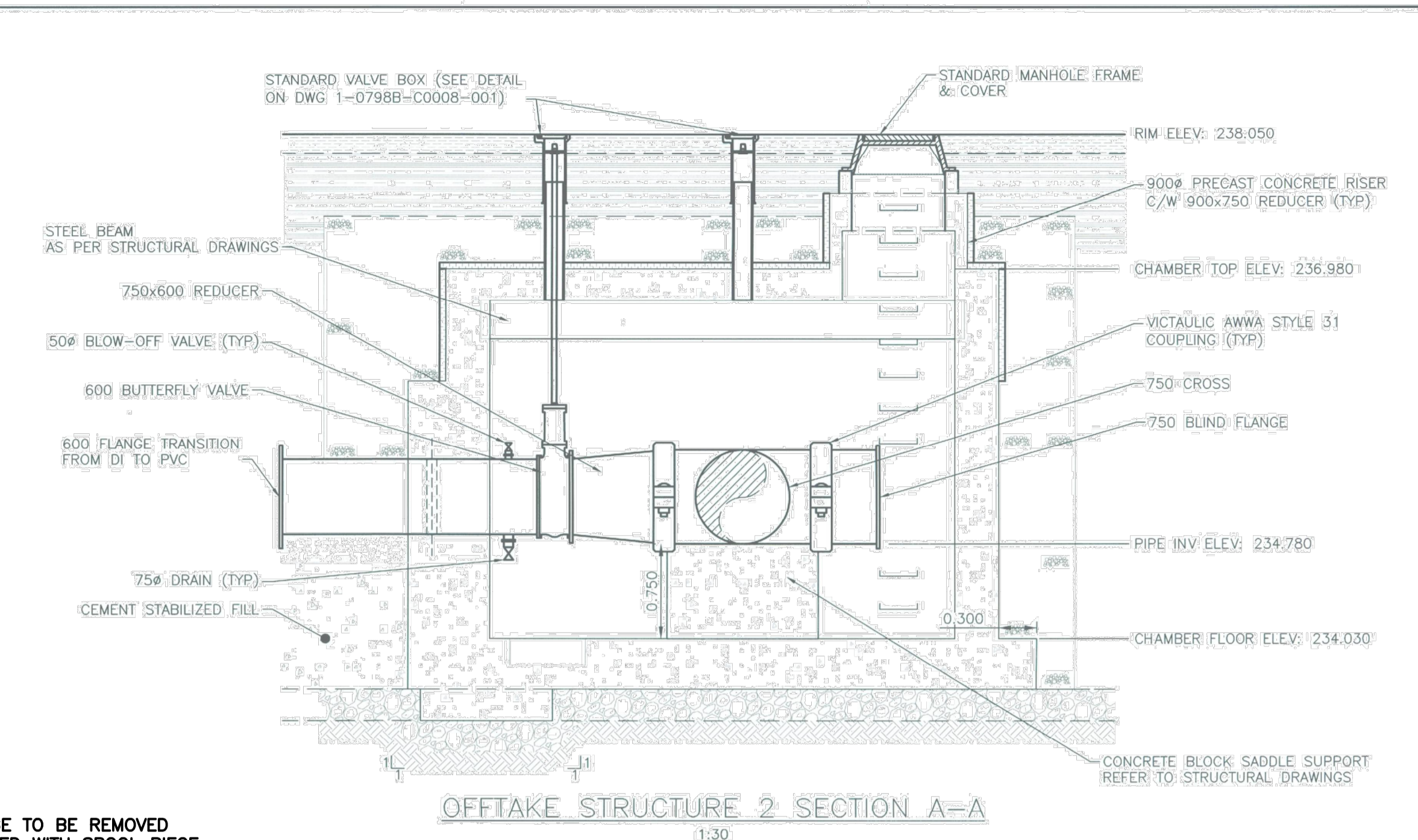
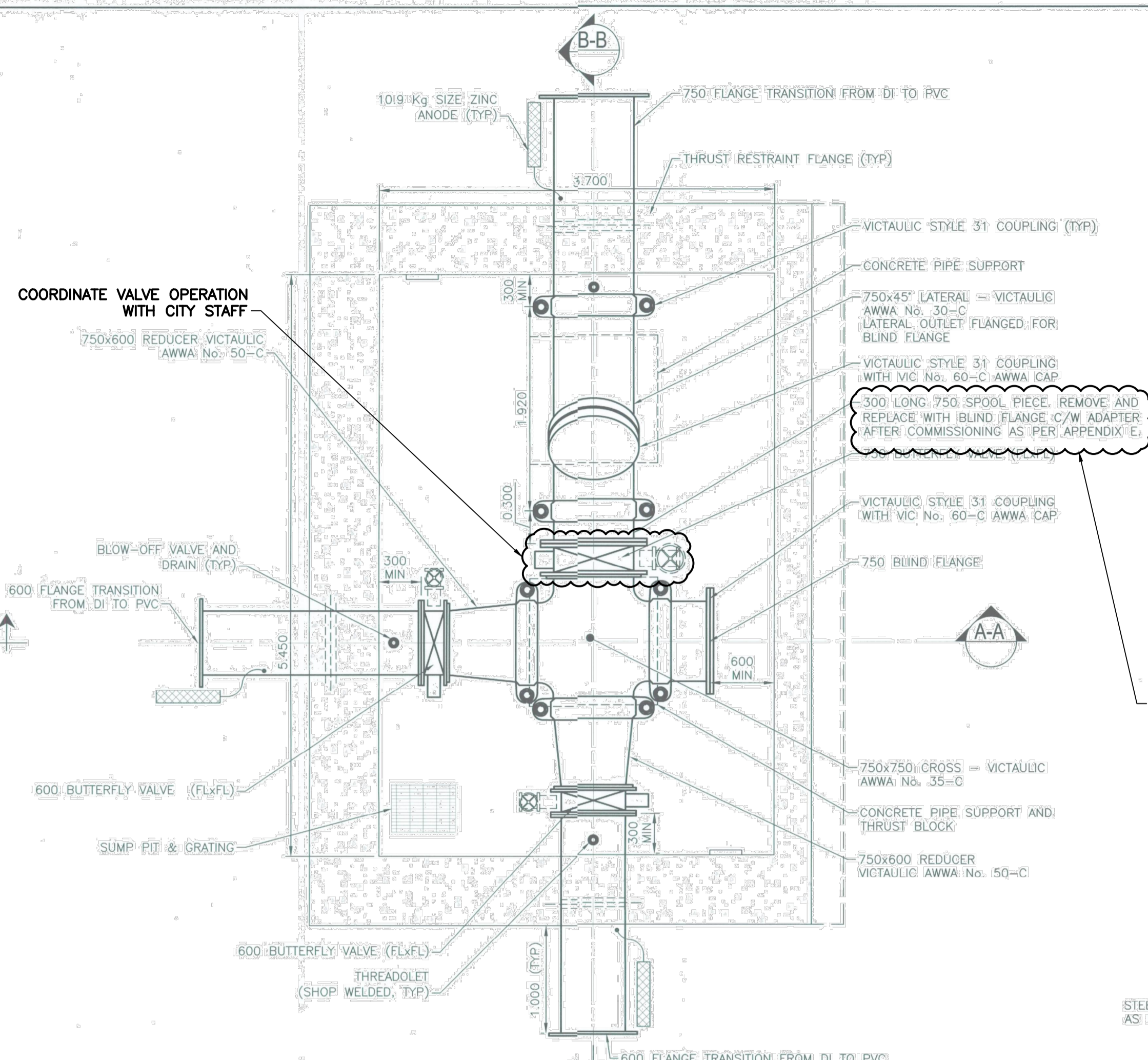
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HORIZONTAL DATUM: NAD83 (June 1990), Zone 14				
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CHECKED BY				
DRAWN BY	GTH			
APPROVED BY				
SCALE:	HORIZONTAL AS NOTED			
RELEASED FOR CONSTRUCTION				
NO.	ISSUED FOR TENDER	DATE	24/06/19	GTH
NO.	REVISIONS	DATE	(YYYY/MM/DD)	BY

<b>KGS GROUP</b>			
DESIGNED BY	GTH	CHECKED BY	
DRAWN BY	GTH	APPROVED BY	
SCALE:	HORIZONTAL AS NOTED		
RELEASED FOR CONSTRUCTION		DATE	YYYY/MM/DD
DATE	2024 06 17	DATE	YYYY/MM/DD
PLOT DATE:	2024 06 17		

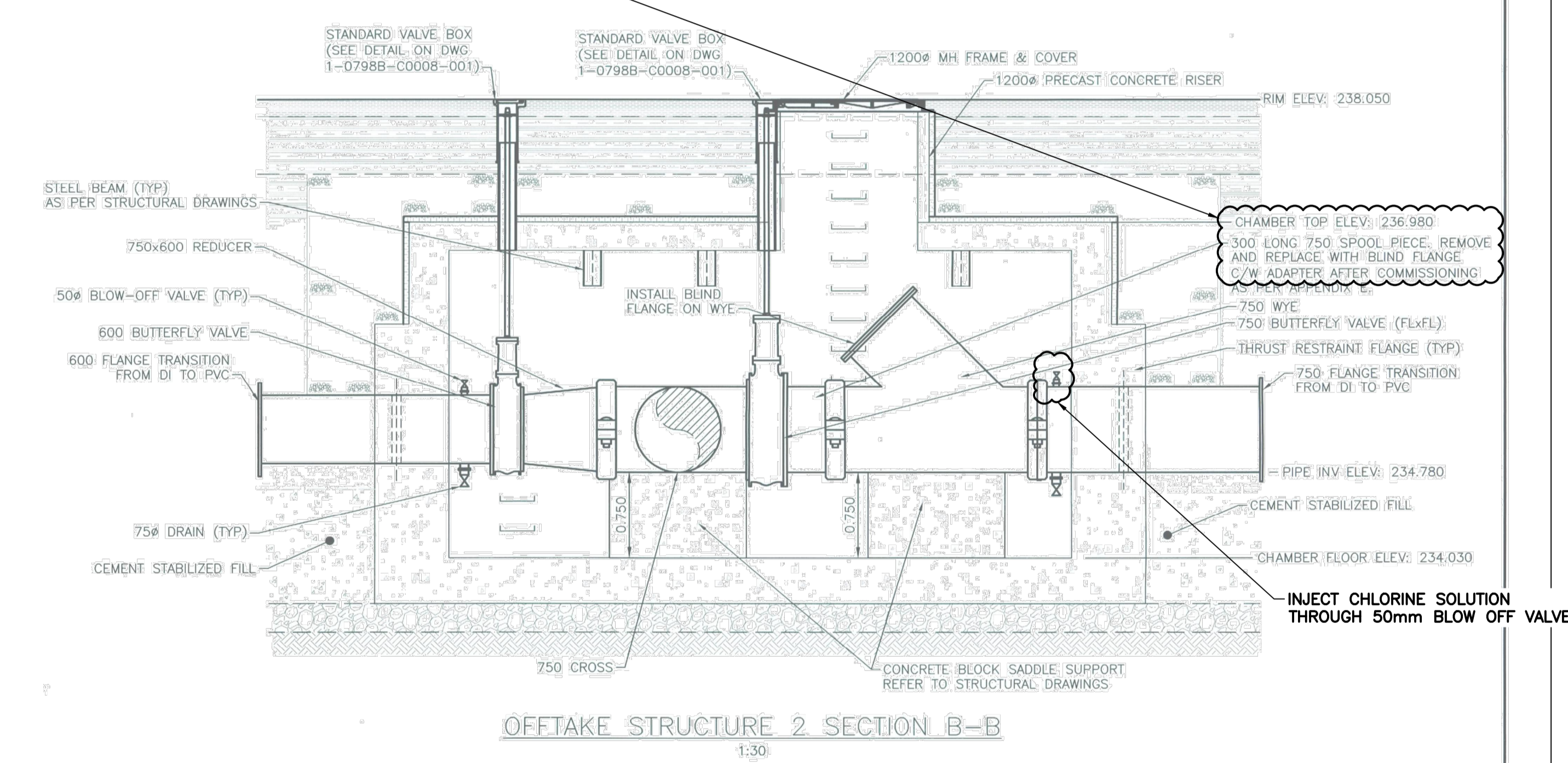
ENGINEER'S SEAL
CONSULTANT DRAWING NUMBER
APPENDIX D

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

CENTREPORT SOUTH REGIONAL WATER AND WASTEWATER SERVICING - PHASE 1A CONTRACT 1A - LIFT STATION COMMISSIONING PLAN	SHEET 1 OF 3 CITY DRAWING NUMBER
<b>APPENDIX D</b>	



BLIND FLANGE TO BE REMOVED AND REPLACED WITH SPOOL PIECE (SUPPLIED BY CITY)



OFFTAKE STRUCTURE 2 LAYOUT DETAIL  
1:30

OFFTAKE STRUCTURE 2 SECTION B-B  
1:30

- NOTES:**
- ALL CHAMBER PIPING TO BE CEMENT MORTAR LINED DUCTILE IRON IN ACCORDANCE WITH AWWA C151 AND AWWA C104.
  - ALL VALVES TO BE AWWA C210 EPOXY COATED.
  - REFER TO STRUCTURAL DRAWINGS FOR CHAMBER OPENINGS, CONCRETE STRUCTURES AND STEEL DESIGN.
  - DIMENSIONS AND LAYOUT IS APPROXIMATE ONLY. ALL DIMENSIONS AND LAYOUT MUST BE CONFIRMED BY THE CONTRACTOR BEFORE COMMENCING WORK.
  - SHOP DRAWINGS FOR CONCRETE STRUCTURES SHALL BE COORDINATED WITH ALL MECHANICAL SHOP DRAWINGS TO ENSURE PROPER FIT AND LOCATION.
  - SEE DRAWING 1-0798B-C0008-001 FOR BLOW OFF ASSEMBLY AND DRAIN ASSEMBLY DETAIL.

ISSUED FOR TENDER  
NOT TO BE USED FOR CONSTRUCTION

FOR INDEX SEE  
1-0798F-D002-001

METRIC  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

ENGINEERS  
MANITOBA  
Geoscientists  
Certificate of Authorization  
KGS Group  
No. 245

**WARNING**  
IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:  
1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.  
2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.  
SEE PROVINCIAL REGULATION 210/72 FOR DETAILS

**LOCATION APPROVED UNDERGROUND STRUCTURES**  
SUPV. U/G STRUCTURES COMMITTEE DATE:  
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HORIZONTAL DATUM: NAD83 (June 1990) (Zone 14)	
DESIGNED BY: GTH	CHECKED BY: RBO
DRAWN BY: GTH	APPROVED BY: RBO
SCALE: HORIZONTAL AS NOTED	RELEASED FOR CONSTRUCTION
DATE: 2024 05 16	DATE: YYYY/MM/DD
PLOT DATE: 2024 06 17	

**KGS GROUP**  
DESIGNED BY: GTH  
CHECKED BY: RBO  
DRAWN BY: GTH  
APPROVED BY: RBO  
SCALE: HORIZONTAL AS NOTED  
DATE: 2024 05 16  
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ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
AGT  
HEINRICH  
38162  
REGISTERED PROFESSIONAL ENGINEER  
CONSULTANT DRAWING NUMBER: C-4A-121

THE CITY OF WINNIPEG  
Winnipeg  
WATER AND WASTE DEPARTMENT  
ENGINEERING DIVISION  
CENTREPORT SOUTH REGIONAL WATER AND WASTEWATER SERVICING - PHASE 1A CONTRACT 4A - FEEDER MAIN  
OFFTAKE STRUCTURE 2 DETAILS  
SHEET 24 OF 34  
CITY DRAWING NUMBER: 1-0798F-C0018-001

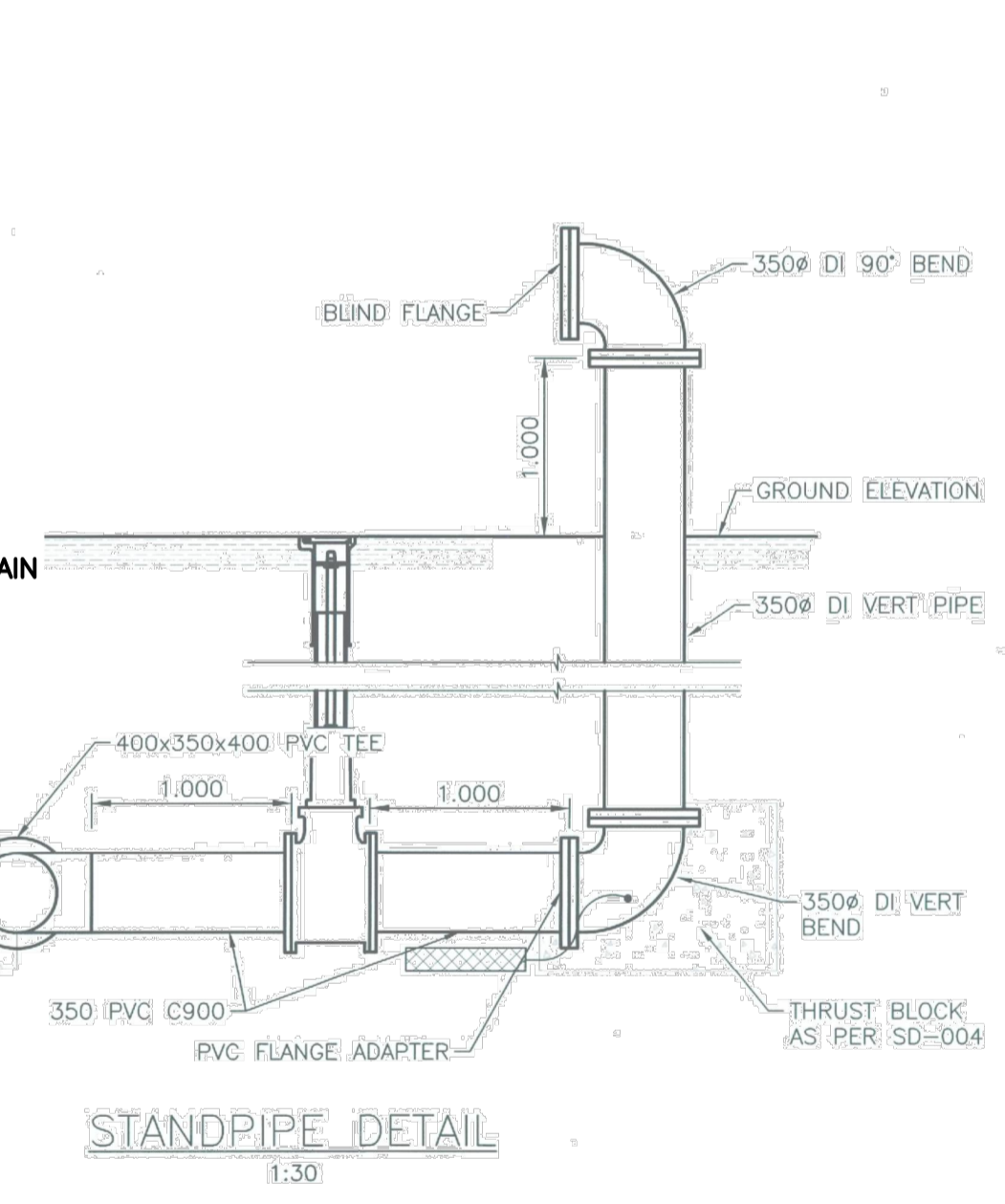
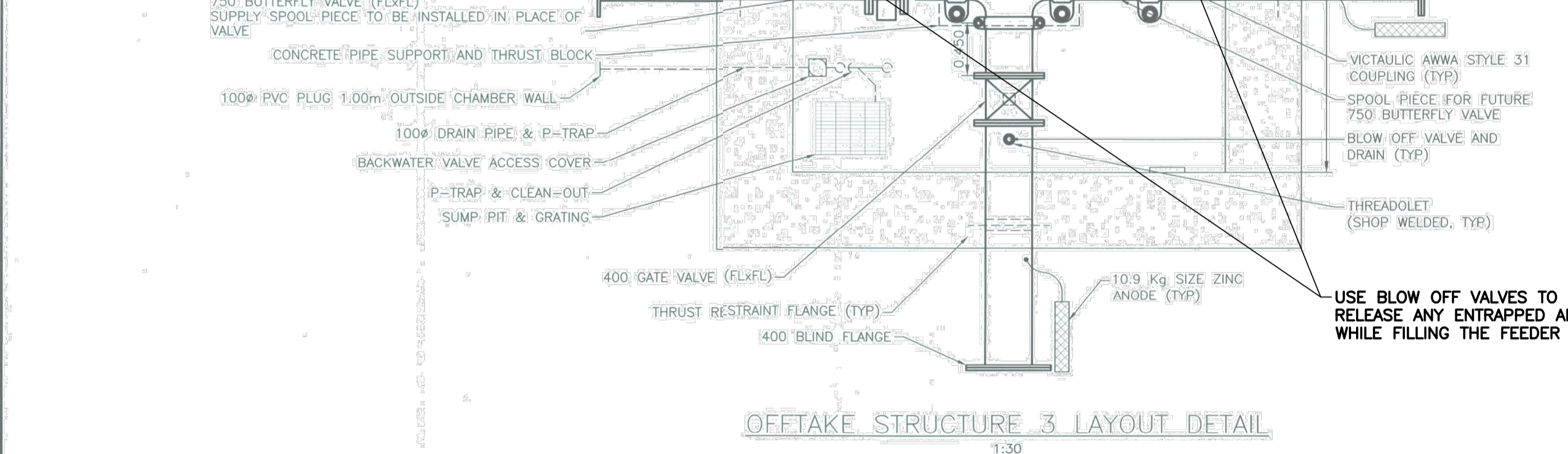
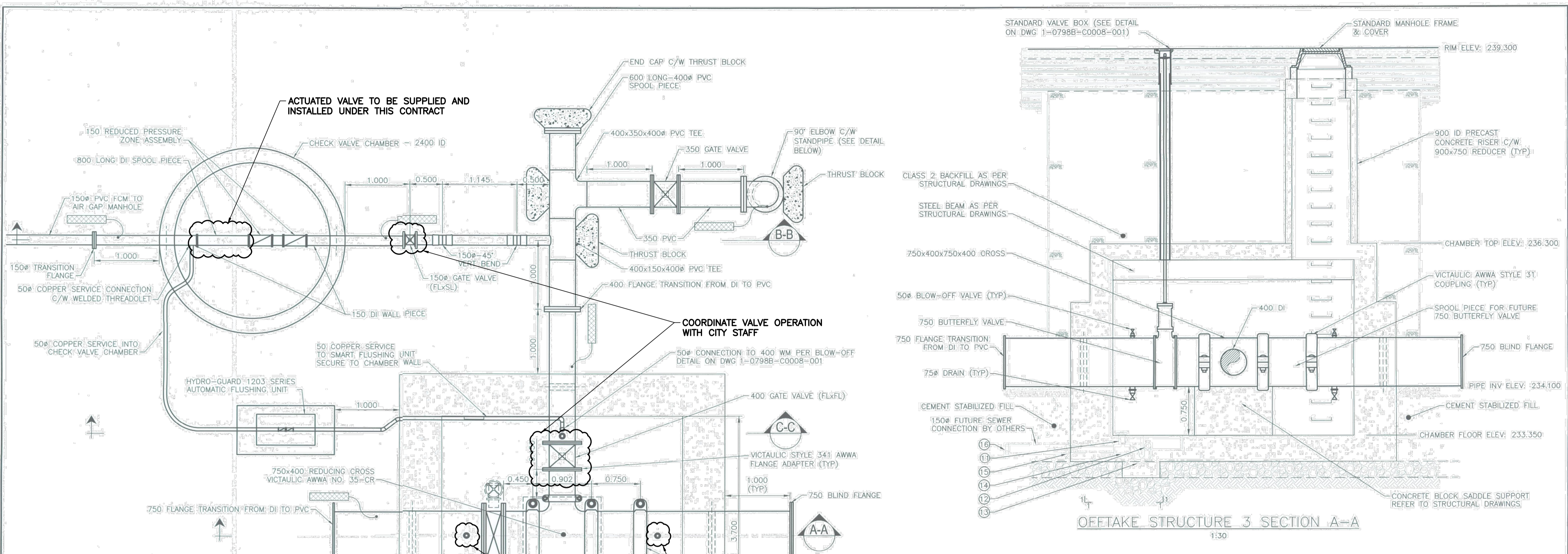
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ENGINEER'S SEAL  
CONSULTANT DRAWING NUMBER: APPENDIX D

THE CITY OF WINNIPEG  
Winnipeg  
WATER AND WASTE DEPARTMENT  
ENGINEERING DIVISION  
CENTREPORT SOUTH REGIONAL WATER AND WASTEWATER SERVICING - PHASE 1A CONTRACT 1A - LIFT STATION  
COMMISSIONING PLAN  
OFFTAKE STRUCTURE 2 WORKS  
SHEET 2 OF 3  
CITY DRAWING NUMBER: APPENDIX D



DRAIN PIPING DETAIL	
ITEM	DESCRIPTION
11	100° PVC DWV THREADED CAP
12	100° PVC DWV STREET TEE
13	100° PVC DWV P-TRAP
14	100° PVC BACKWATER VALVE
15	100x150° PVC REDUCER
16	150° PVC PLUG

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1-0798F-D002-001

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12	ISSUED WITH ADDENDUM 4	24/05/16	GTH
13	ISSUED WITH ADDENDUM 2	24/05/13	GTH
10	ISSUED FOR TENDER	24/04/26	GTH

**KGS GROUP**  
DESIGNED BY: GTH  
CHECKED BY: RBO  
DRAWN BY: GTH  
APPROVED BY: RBO  
SCALE: HORIZONTAL AS NOTED  
VERTICAL: AS NOTED  
DATE: 2024 05 16  
DATE: YYYY/MM/DD  
PLOT DATE: 2024 05 16

**ENGINEER'S SEAL**  
PROVINCE OF MANITOBA  
H. G.T. HEINRICHS  
Member  
38162  
REGISTERED PROFESSIONAL ENGINEER  
CONSULTANT DRAWING NUMBER:  
C-4A-122

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT  
ENGINEERING DIVISION  
CENTREPORT SOUTH REGIONAL WATER AND WASTEWATER SERVICING - PHASE 1A CONTRACT 4A - FEEDER MAIN  
OFFTAKE STRUCTURE 3 DETAILS  
SHEET 25 OF 34  
CITY DRAWING NUMBER: 1-0798F-C0019-001

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APPENDIX D

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT  
ENGINEERING DIVISION  
CENTREPORT SOUTH REGIONAL WATER AND WASTEWATER SERVICING - PHASE 1A CONTRACT 1A - LIFT STATION  
COMMISSIONING PLAN  
OFFTAKE STRUCTURE 3 WORKS  
SHEET 3 OF 3  
CITY DRAWING NUMBER: APPENDIX D