

Milwaukee Water Works

LINNWOOD PURIFICATION PLANT

WP-316: OZONE BY-PASS VALVES

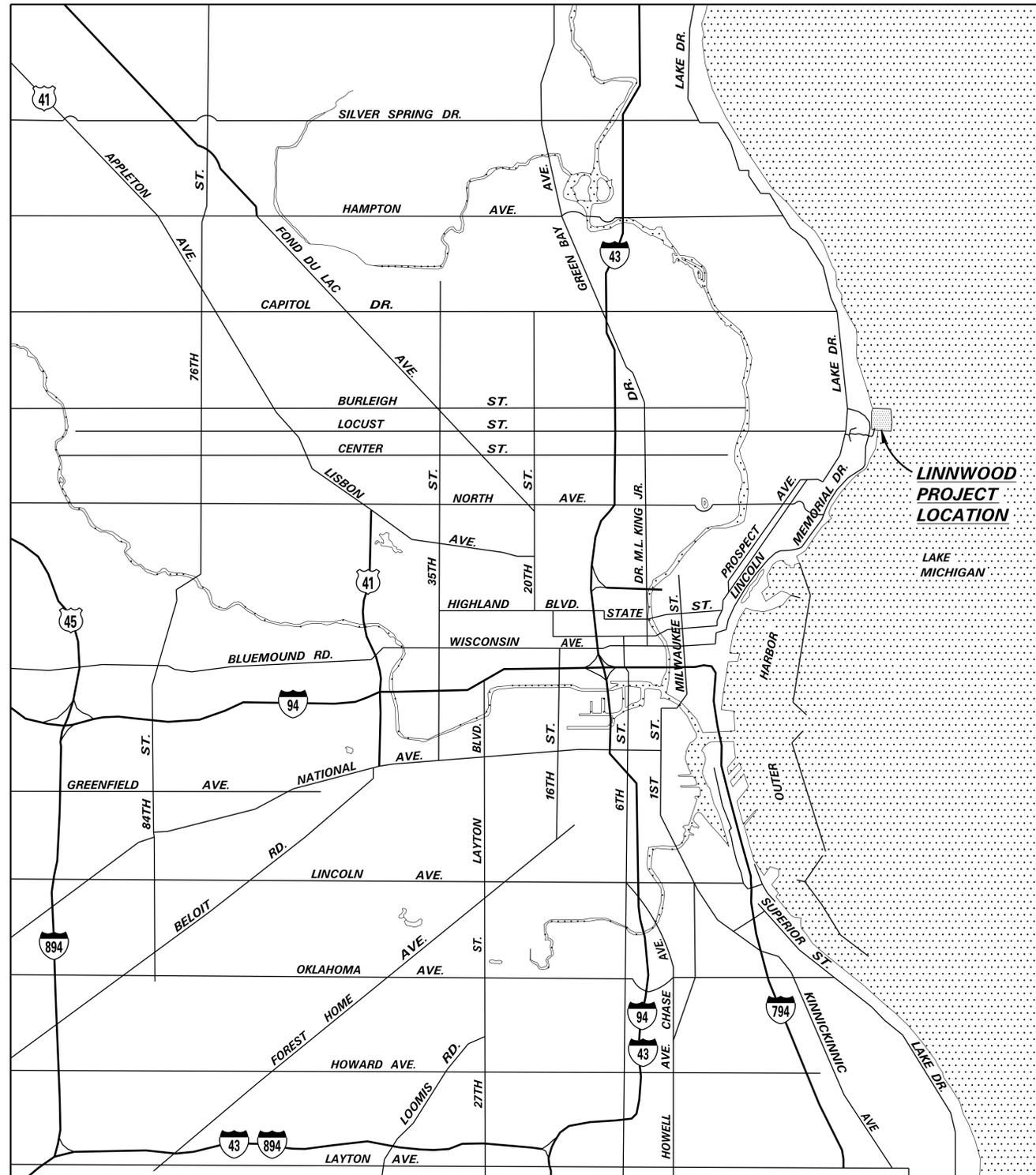
DRAWING INDEX

<u>DRAWING NO.</u>	<u>TITLE</u>
WP-316-01	LOCATION MAP - DRAWING INDEX
WP-316-02	PUMP ROOM PLAN AND PIPING
WP-316-03	VALVE PIT #1 - PLAN AND SECTIONS
WP-316-04	VALVE PIT #2 - PLAN AND SECTIONS
WP-136-05	VALVE LOCATION PLAN
WP-136-06	VALVE #3 - PLAN AND SECTIONS
WP-136-07	VALVE #4 - PLAN AND SECTIONS
WP-136-08	VALVE #5 - PLAN AND SECTIONS
WP-136-09	ELECTRICAL WORK - PLAN AND ELEVATION

REFERENCE DRAWING NO. TITLE

WP 18-02	FRONT BUILDING SUBSTRUCTURE LAYOUT & DIMENSIONS
WP 18-03	FRONT BUILDING SUBSTRUCTURE EXCAVATION PLAN
WP 18-04	PUMP BUILDING GENERAL PLAN AND SECTIONS
WP 18-05	PUMP BUILDING SUBSTATION FOUNDATIONS
WP 18-18	PIPE ENCASEMENT PUMP HOUSE WALLS & MANHOLES
WP 18-20	PIPE ENCASEMENT WEST WALL OF CLEARWELL
WP 27-01	PUMP PIPING LOW LEVEL DISCHARGE
WP 27-04	PUMP PIPING, RUNS UNDER CHEMICAL BUILDING
WP 27-05	PUMP PIPING DISCHARGE HEADER, EAST HALF
WP 27-06	PUMP PIPING DISCHARGE HEADER, WEST HALF
WP 140-1	PUMP ROOM CONTROL WIRING TO LOAD CENTER
WP 140-2	MAIN AISLE EAST ENTRANCE
WP-235-10	OZONE FACILITIES SITE WORK
WP-235-11	OZONE FACILITIES JUNCTION STRUCTURES *A* & *B*
SB-97-18-D18	CRETEX PRESSURE PIPE YARD LAYOUT

0 0.5 1.0 1.5
APPROX SCALE IN MILES



MILWAUKEE, WISCONSIN

LOCATION MAP



Milwaukee Water Works Water Engineering
Department of Public Works

LINNWOOD PURIFICATION PLANT
WP-316 OZONE BY-PASS VALVES

LOCATION MAP & DRAWING INDEX

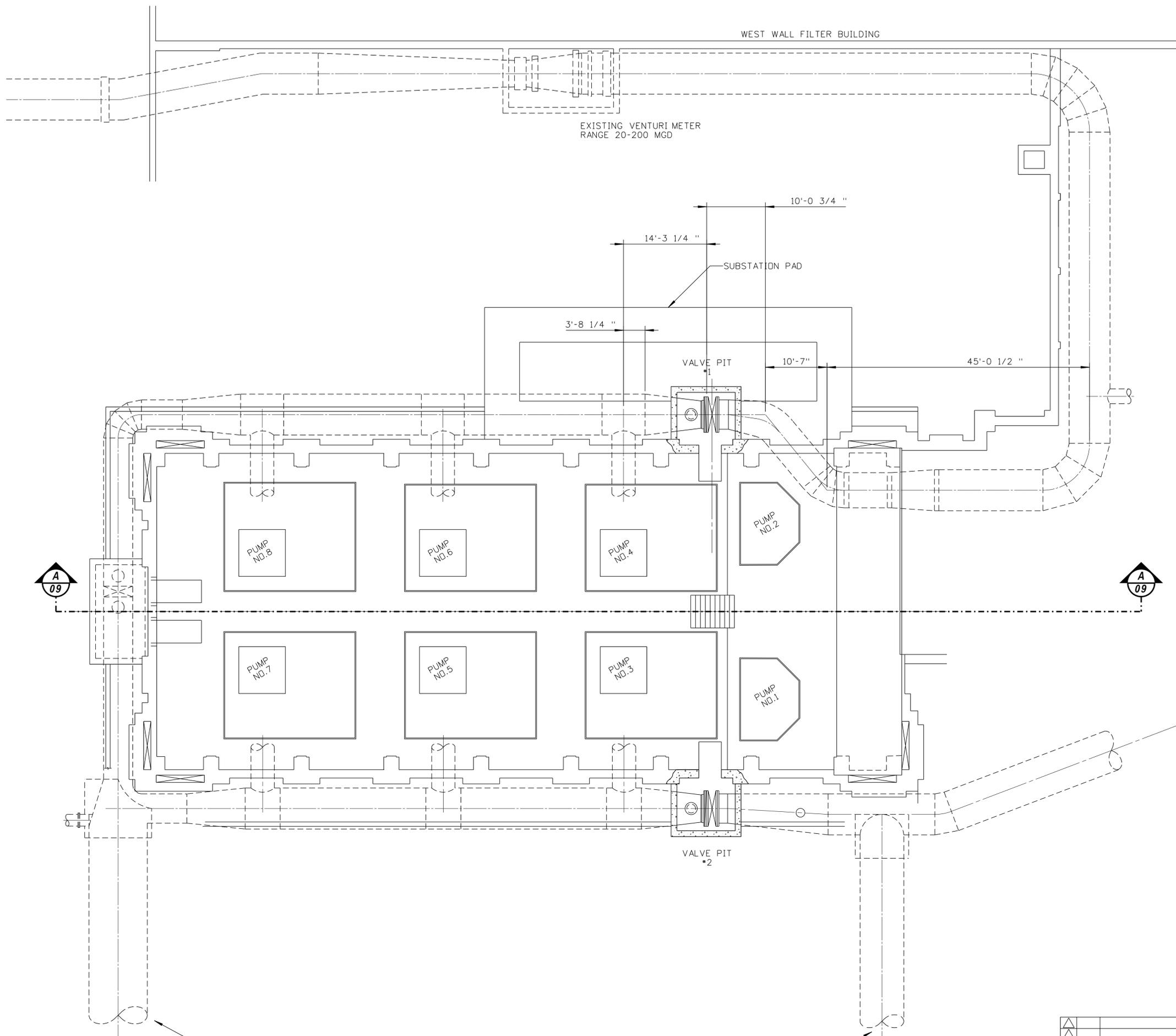
DESIGNED BY	AJF	APPROVED	DATE
DRAWN BY	S. MILLER	<i>Dinah G. Gant</i>	2-11-13
CHECKED BY	AJF	<i>Daniel J. Hart</i>	PLANT'S PROJECT ENGINEER
DATE	9-28-12	<i>William J. Cullen</i>	2-11-13
SCALE	SEE DRAWING		CHIEF DESIGN ENGINEER
WORK ORDER	WT450122100		2-11-13
OFFICIAL NOTICE	2013-014		SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS
FILE NO.	B-12-1		

NO.	BY	REVISION	DATE

DRAWING NO. **WP-316-01**

WEST WALL FILTER BUILDING

EXISTING VENTURI METER
RANGE 20-200 MGD

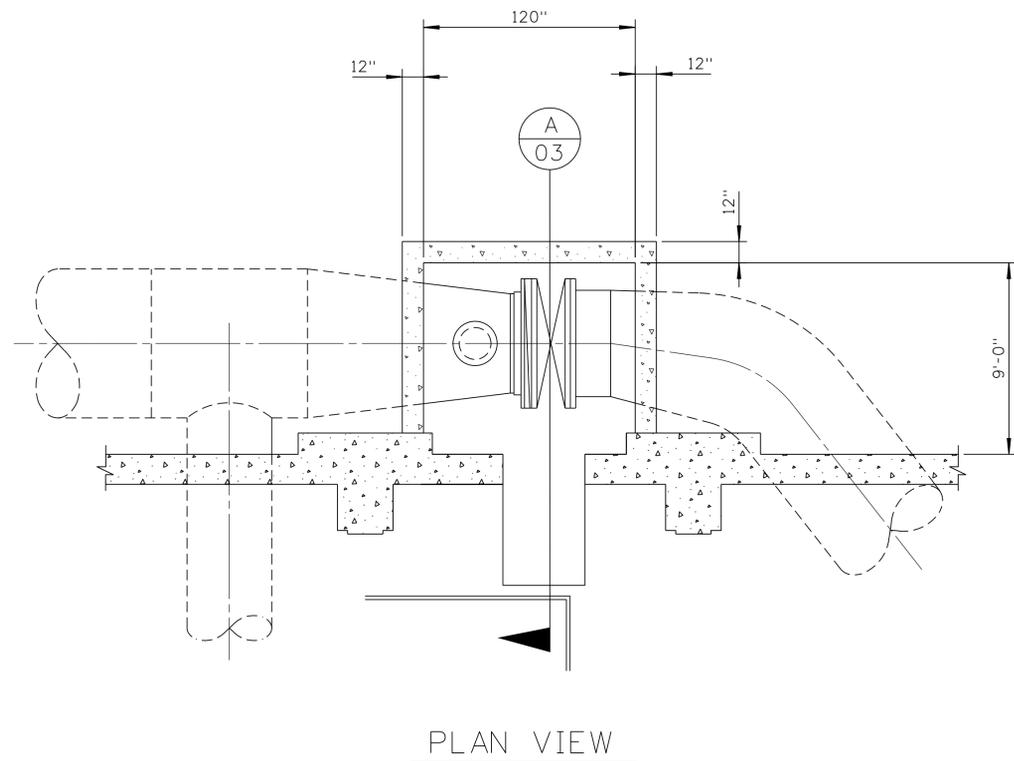


CONTINUED ON WP-316-05

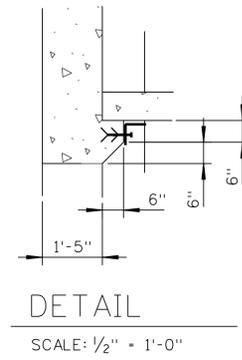
CONTINUED ON WP-316-05

Milwaukee Water Works		Water Engineering Department of Public Works	
LINWOOD PURIFICATION PLANT			
WP-316 OZONE BY-PASS VALVES			
PUMP ROOM PLAN AND PIPING			
DESIGNED BY	AJF	PROVED	DATE
DRAWN BY	S. MILLER	<i>Andrew Reynolds</i>	2-11-13 PLANT'S PROJECT ENGINEER
CHECKED BY	AJF	<i>Daniel S. Hart</i>	2-11-13 CHIEF DESIGN ENGINEER
DATE	9-28-12	<i>W. Lewis</i>	2-11-13 SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS
SCALE	1/8" = 1' - 0"		
WORK ORDER	WT450122100		
OFFICIAL NOTICE	2013-014		
FILE NO.	B-12-1		
DRAWING NO. WP-316-02			

NO.	BY	REVISION	DATE

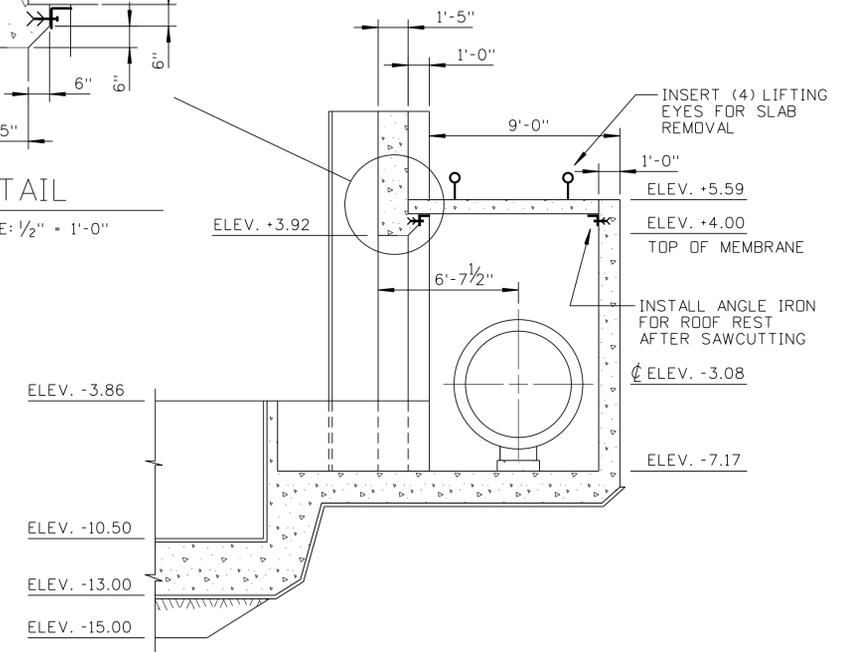


PLAN VIEW



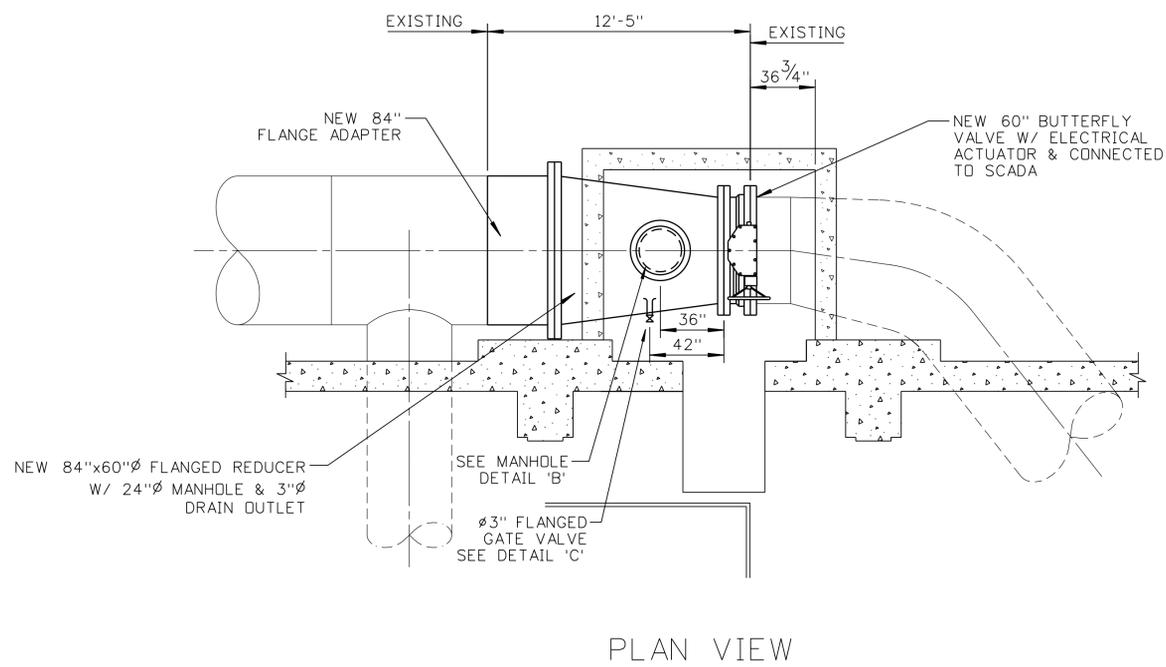
DETAIL

SCALE: 1/2" = 1'-0"

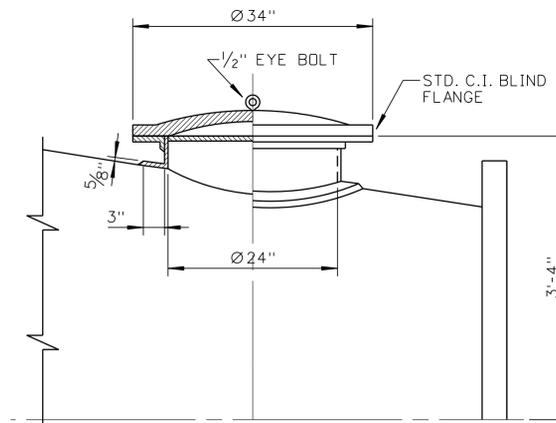


A SECTION

EXISTING

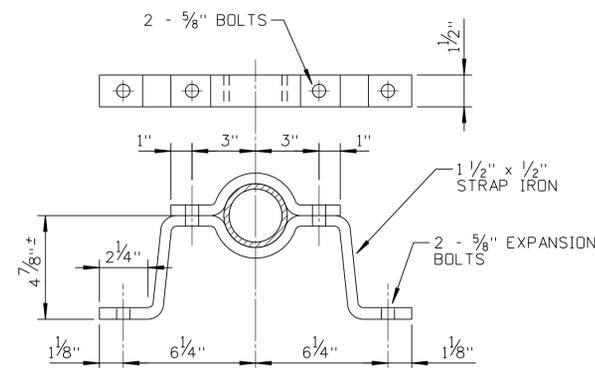


PLAN VIEW



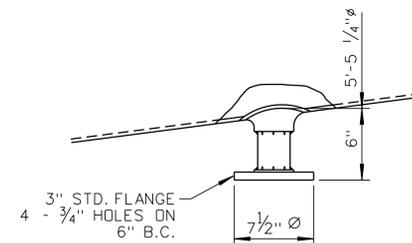
B 24" MANHOLE DETAIL

SCALE: 1" = 1'-0"



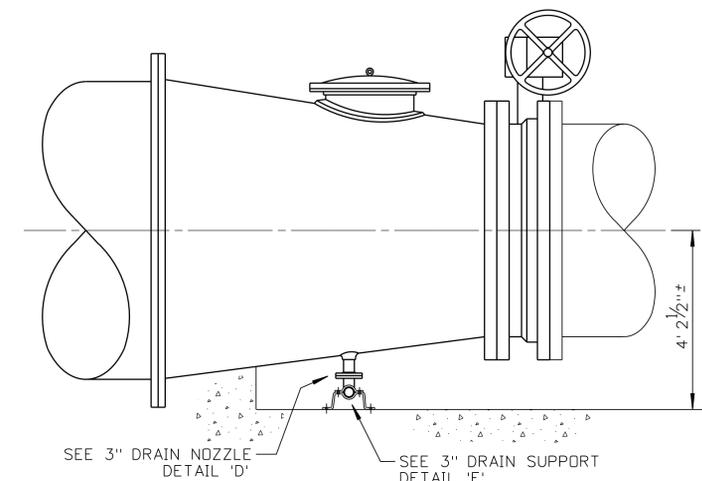
E 3" DRAIN SUPPORT

SCALE: 3" = 1'-0"



D 3" DRAIN NOZZLE

SCALE: 1/2" = 1'-0"



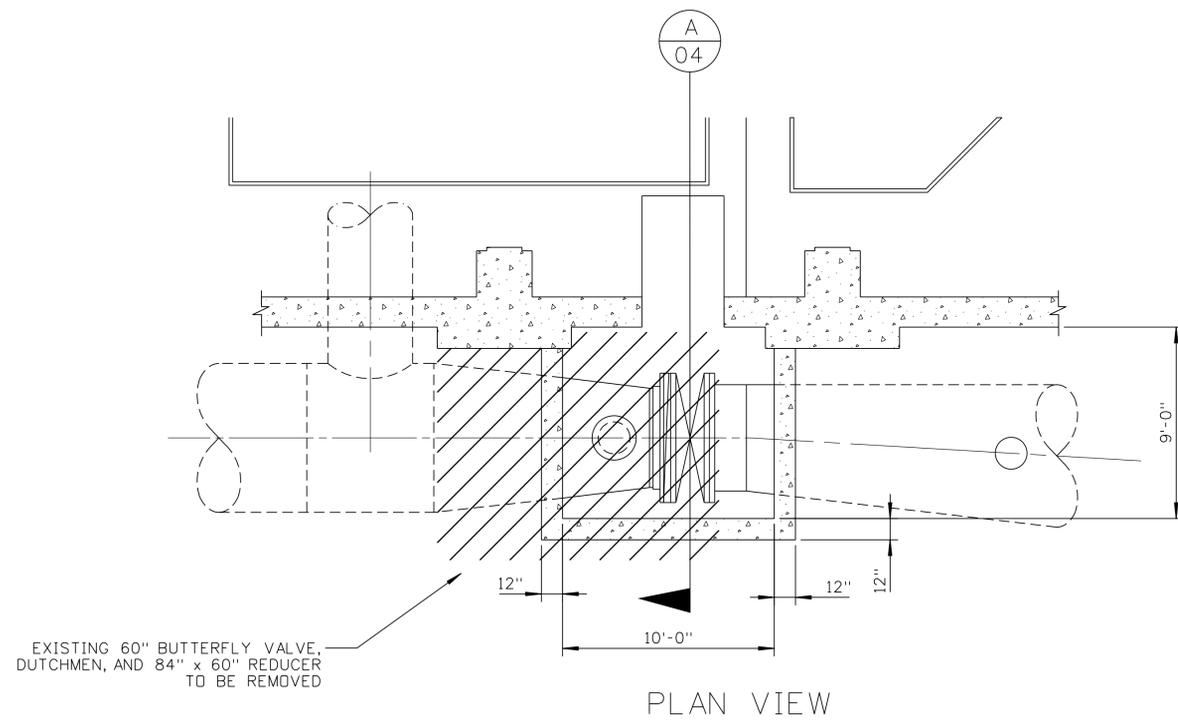
C 3" DRAIN DETAIL

SCALE: 1/2" = 1'-0"

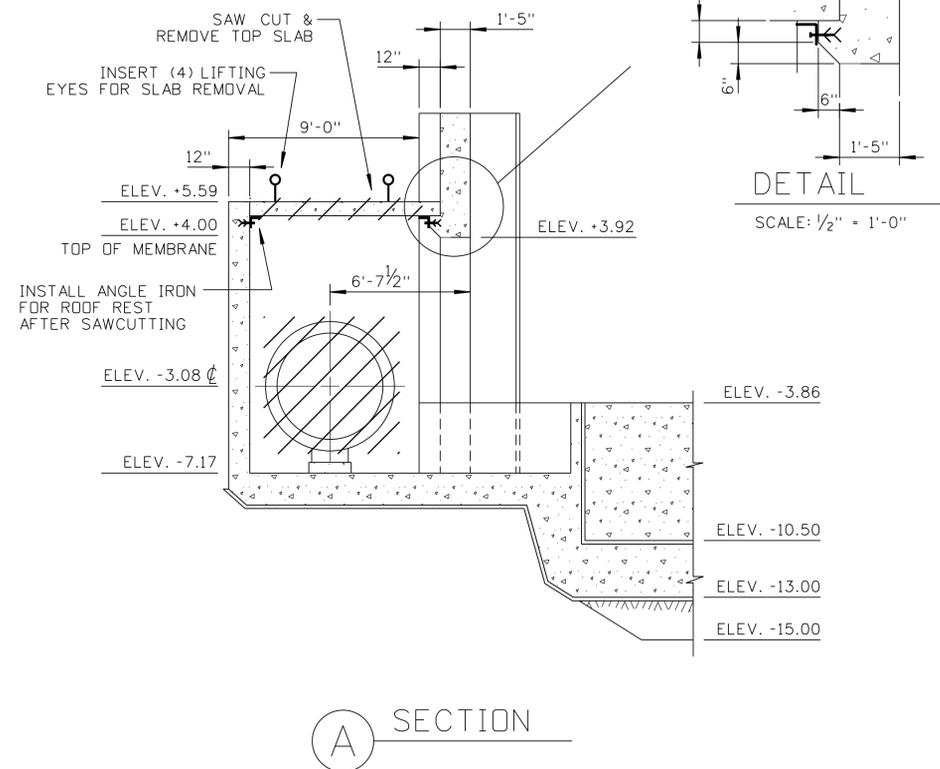
PROPOSED

NO.	BY	REVISION	DATE

Milwaukee Water Works Department of Public Works		Water Engineering Department of Public Works	
LINWOOD PURIFICATION PLANT WP-316 OZONE BY-PASS VALVES			
VALVE PIT #1 PLAN AND SECTIONS			
DESIGNED BY	AJF	PROVED	DATE
DRAWN BY	S. MILLER	<i>Andrew Reynolds</i>	2-11-13
CHECKED BY	AJF	<i>Daniel G. Hart</i>	PLANT PROJECT ENGINEER
DATE	9-28-12	<i>William</i>	2-11-13
SCALE	1/4" = 1'-0"		CHIEF DESIGN ENGINEER
WORK ORDER	WT4500122100		2-11-13
OFFICIAL NOTICE	2013-014		SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS
FILE NO.	B-12-1		
			DRAWING NO. WP-316-03

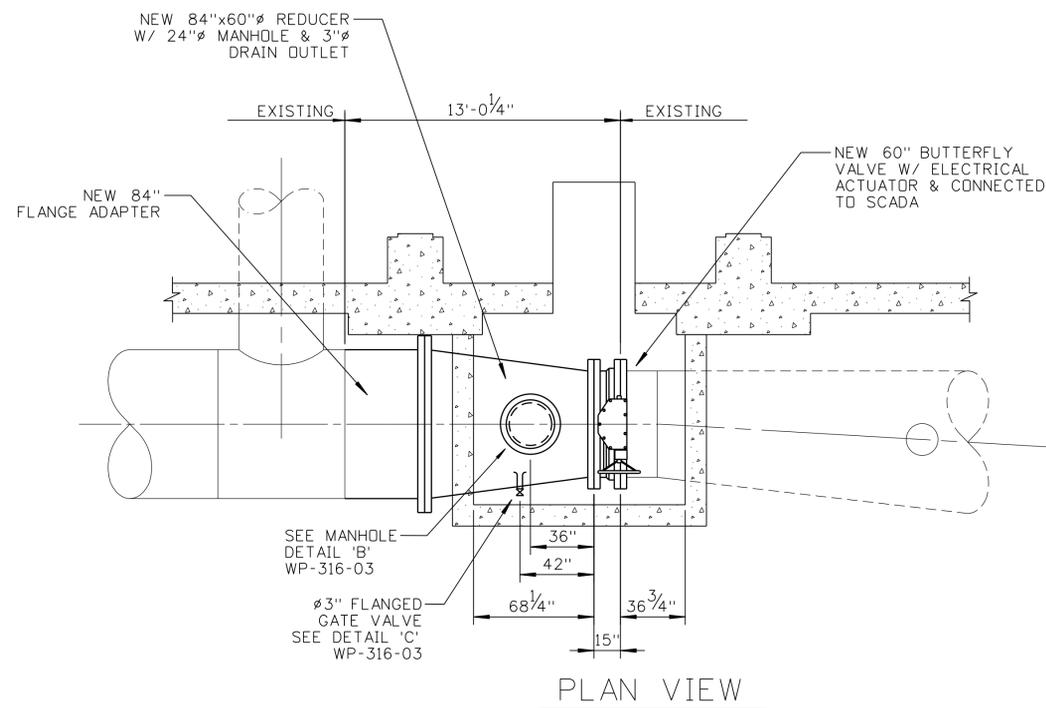


PLAN VIEW



A SECTION

EXISTING

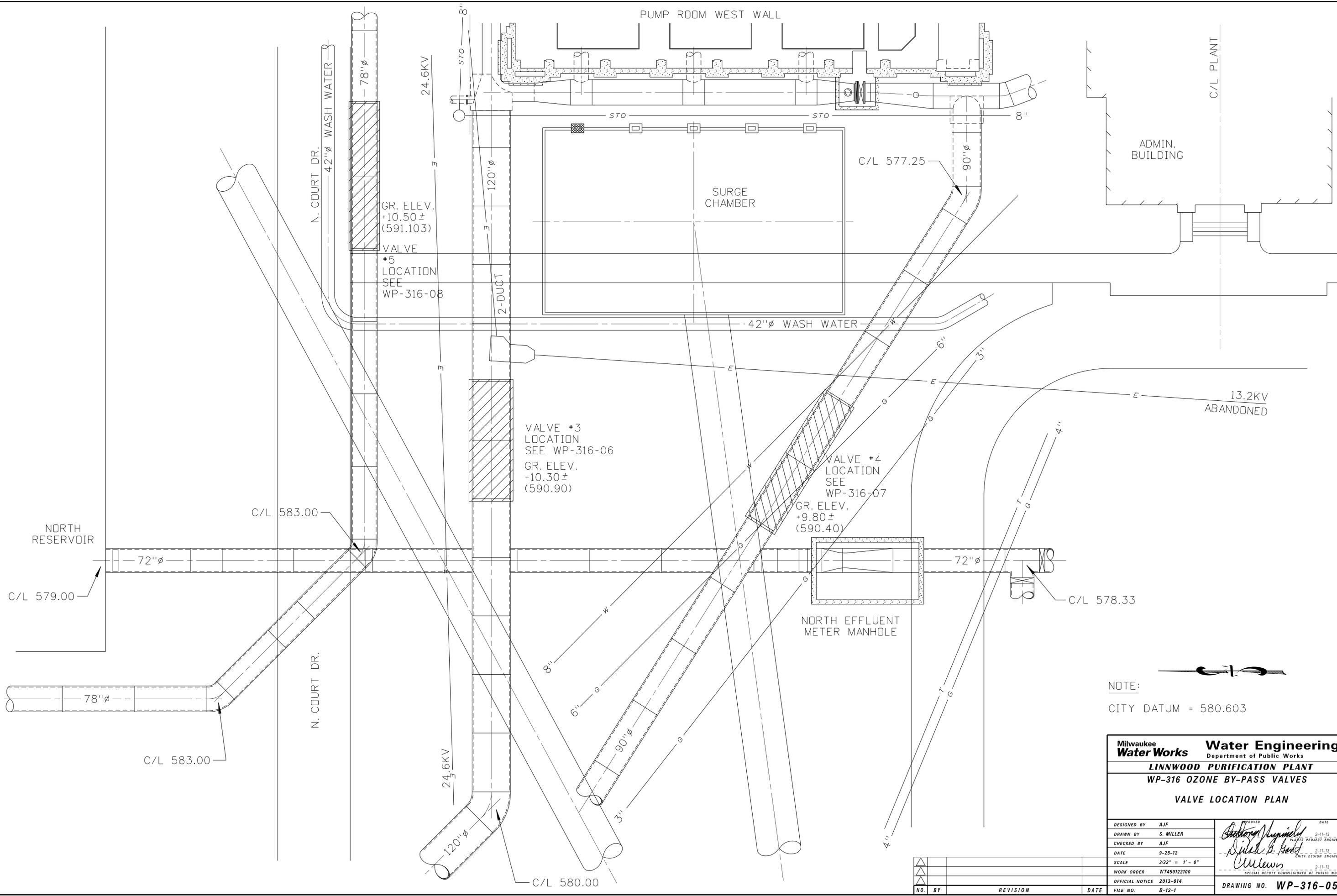


PLAN VIEW

PROPOSED

Milwaukee Water Works		Water Engineering	
Department of Public Works		Department of Public Works	
LINWOOD PURIFICATION PLANT			
WP-316 OZONE BY-PASS VALVES			
VALVE PIT #2			
PLAN AND SECTIONS			
DESIGNED BY	AJF	PROVED	DATE
DRAWN BY	S. MILLER	<i>[Signature]</i>	2-11-13
CHECKED BY	AJF	<i>[Signature]</i>	PLANT PROJECT ENGINEER
DATE	9-28-12	<i>[Signature]</i>	2-11-13
SCALE	1/4" = 1' - 0"	<i>[Signature]</i>	CHIEF DESIGN ENGINEER
WORK ORDER	WT4500122100	<i>[Signature]</i>	2-11-13
OFFICIAL NOTICE	2013-014	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
FILE NO.	B-12-1	DRAWING NO. WP-316-04	

NO.	BY	REVISION	DATE

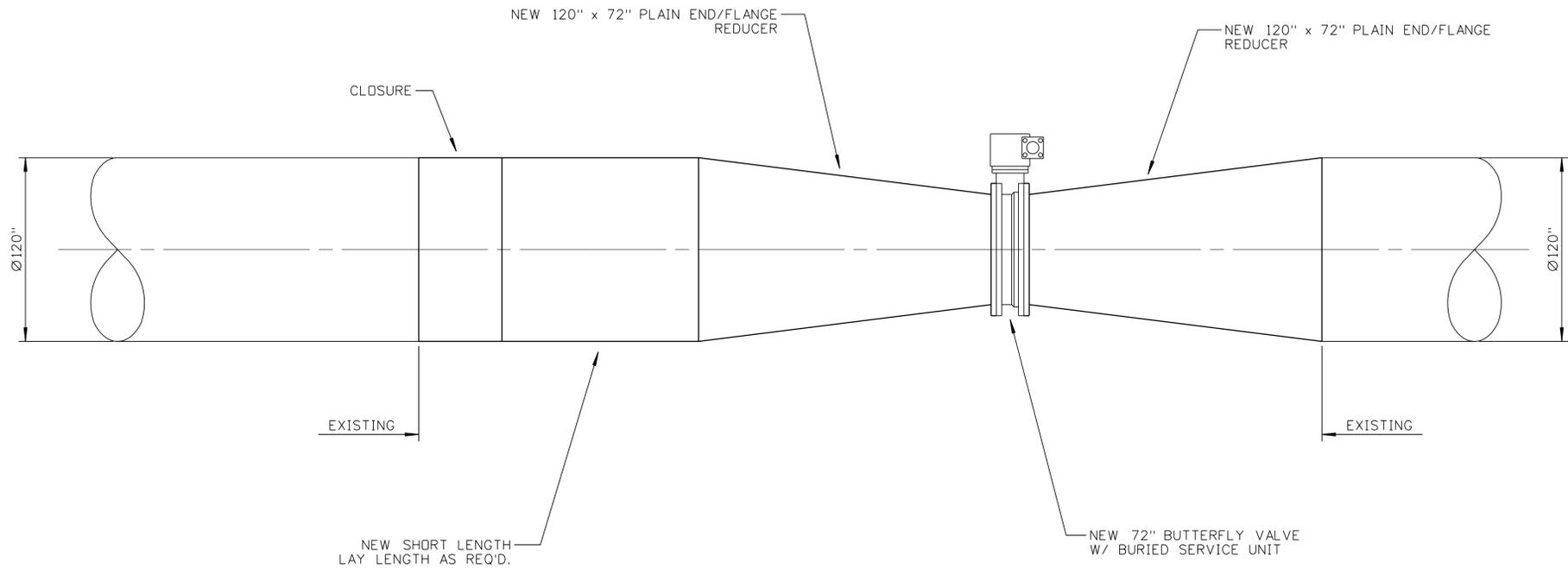


NOTE:
CITY DATUM = 580.603

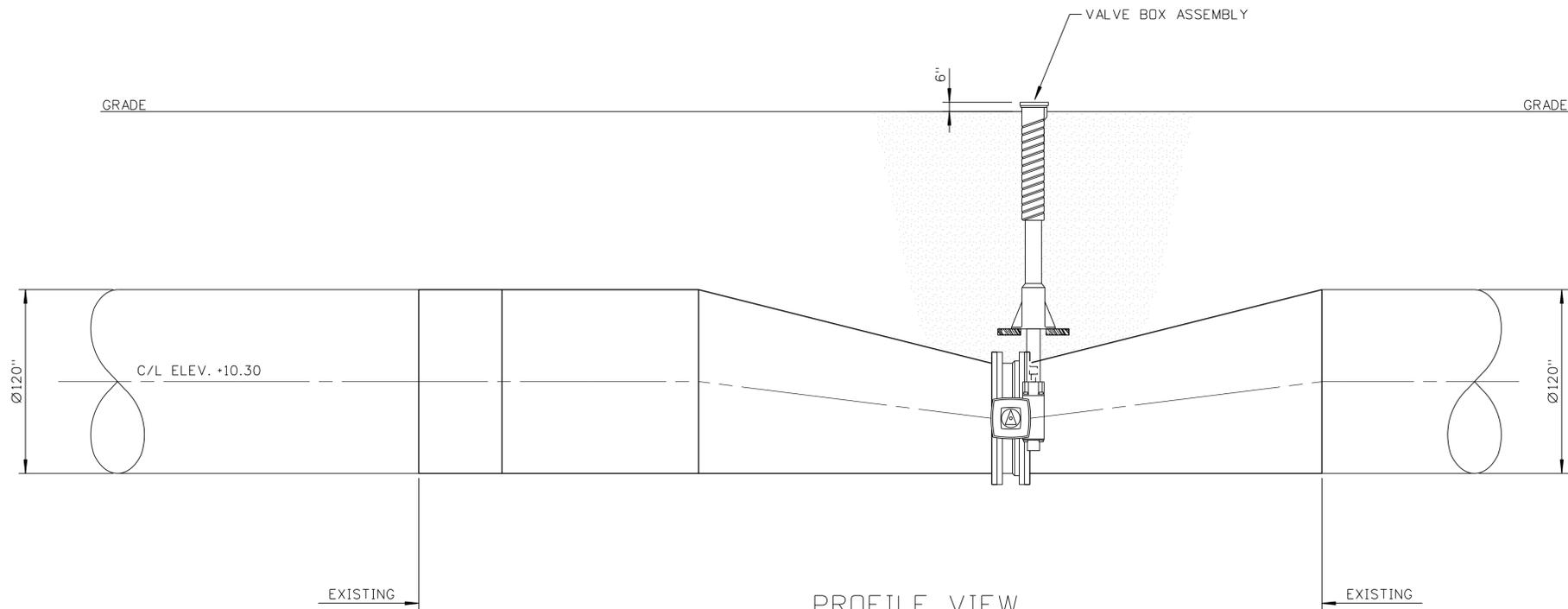
Milwaukee Water Works Department of Public Works		Water Engineering Department of Public Works	
LINNWOOD PURIFICATION PLANT			
WP-316 OZONE BY-PASS VALVES			
VALVE LOCATION PLAN			
DESIGNED BY	AJF	DATE	2-11-13
DRAWN BY	S. MILLER	PLANT'S PROJECT ENGINEER	
CHECKED BY	AJF	DATE	2-11-13
DATE	9-28-12	CHIEF DESIGN ENGINEER	
SCALE	3/32" = 1' - 0"	DATE	2-11-13
WORK ORDER	WT450122100	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
OFFICIAL NOTICE	2013-014		
FILE NO.	B-12-1		

NO.	BY	REVISION	DATE

DRAWING NO. **WP-316-05**



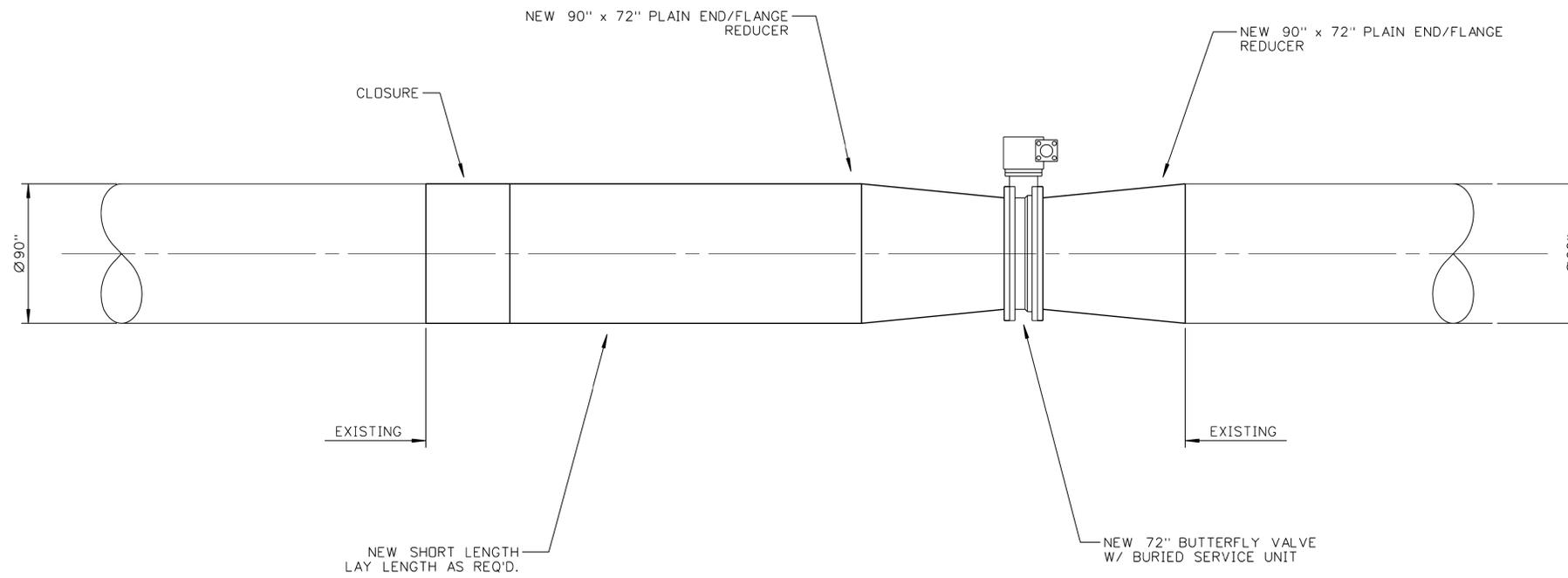
PLAN VIEW



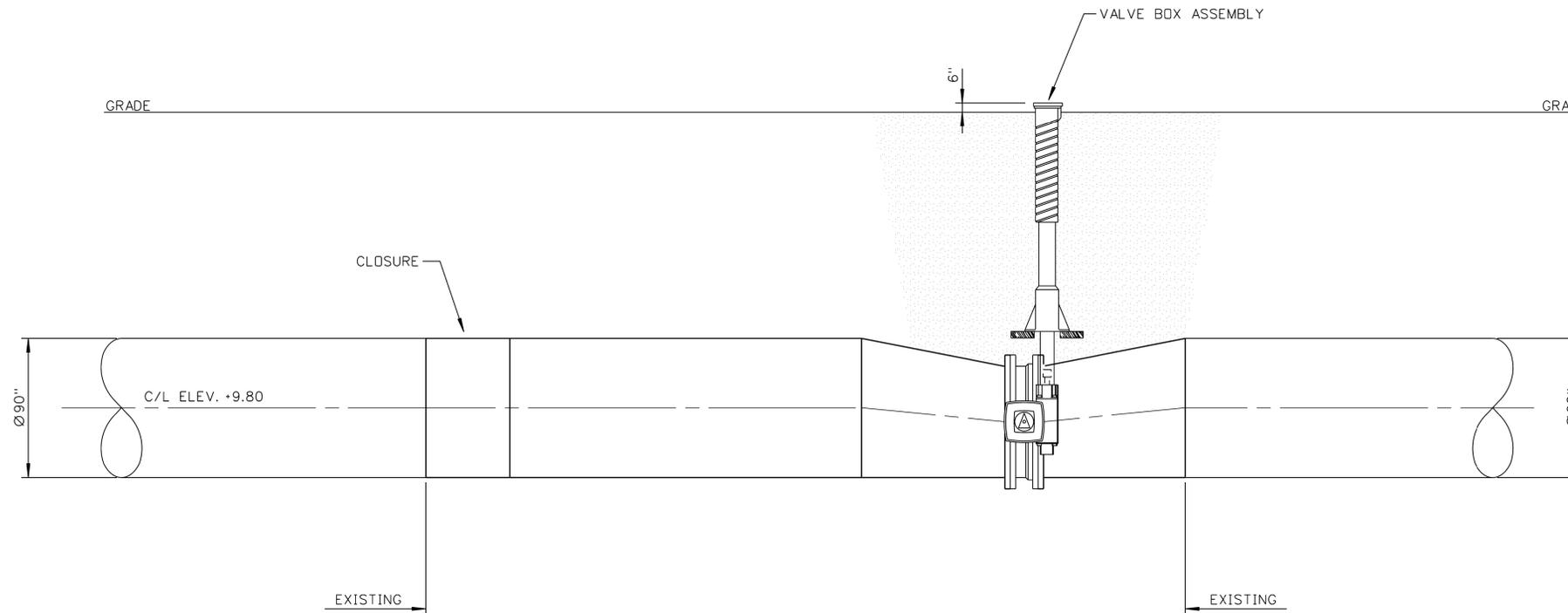
PROFILE VIEW

Milwaukee Water Works		Water Engineering Department of Public Works	
LINNWOOD PURIFICATION PLANT			
WP-316 OZONE BY-PASS VALVES			
VALVE #3			
PLAN AND SECTIONS			
DESIGNED BY	AJF	PROVED	DATE
DRAWN BY	S. MILLER	<i>Andrew Reynolds</i>	2-11-13 PLANTS PROJECT ENGINEER
CHECKED BY	AJF	<i>Daniel G. Hart</i>	2-11-13 CHIEF DESIGN ENGINEER
DATE	9-28-12	<i>Chilweus</i>	2-11-13 SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS
SCALE	1/4" = 1' - 0"		
WORK ORDER	WT4500122100		
OFFICIAL NOTICE	2013-014		
FILE NO.	B-12-1		
DRAWING NO. WP-316-06			

NO.	BY	REVISION	DATE



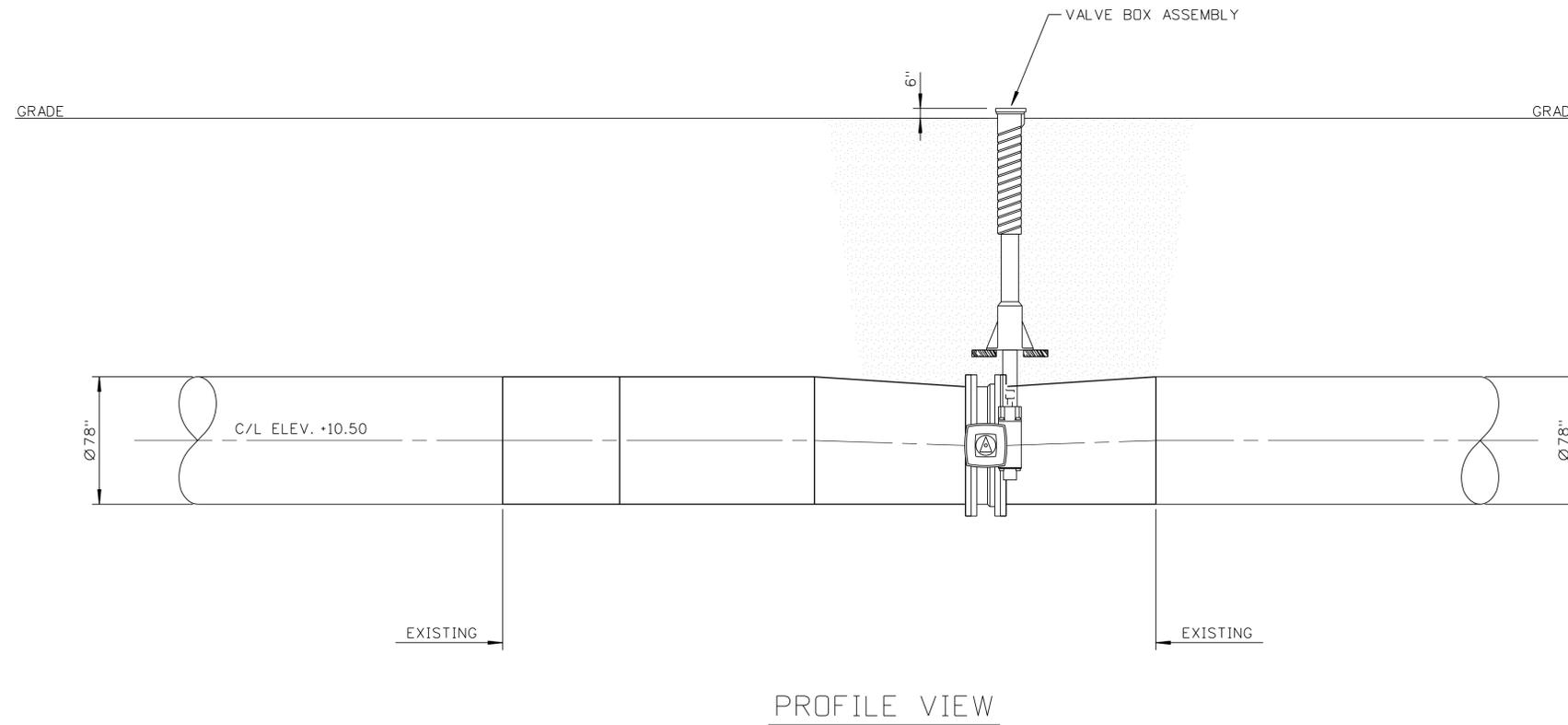
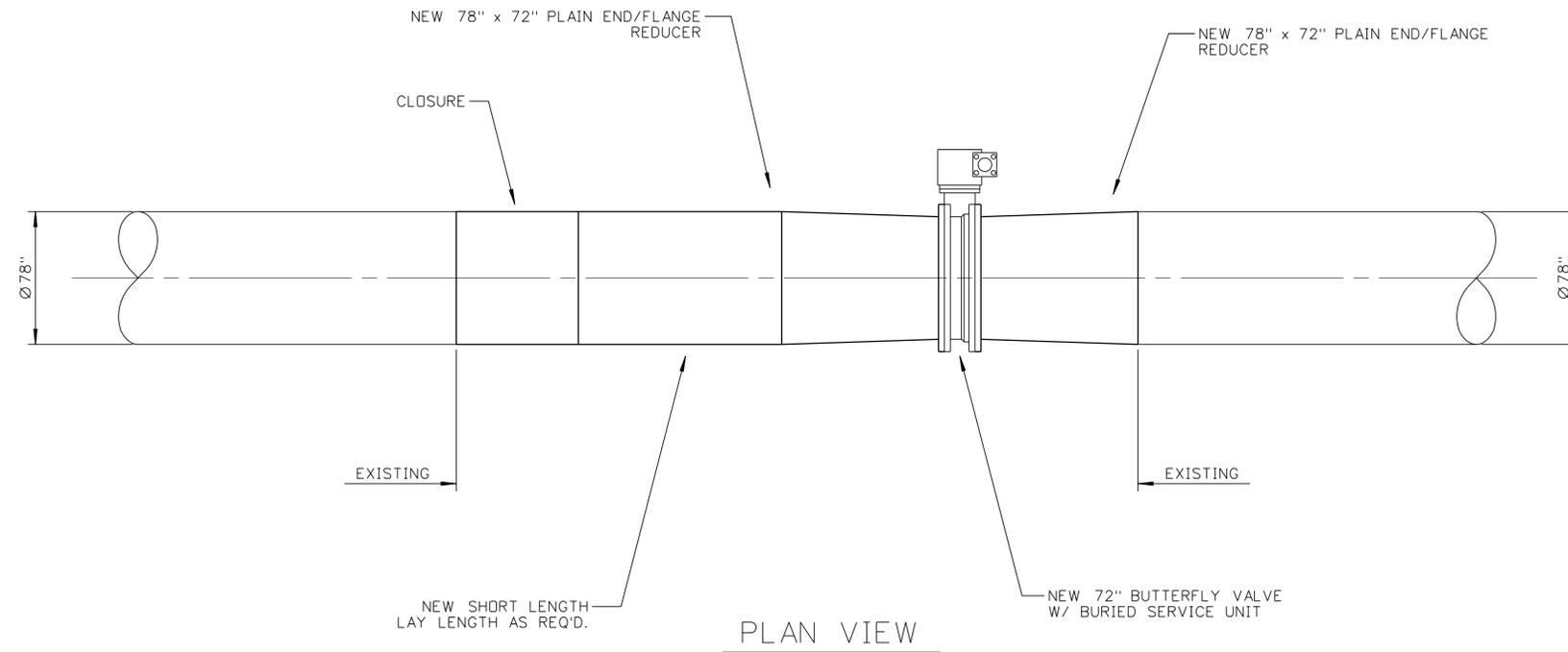
PLAN VIEW



PROFILE VIEW

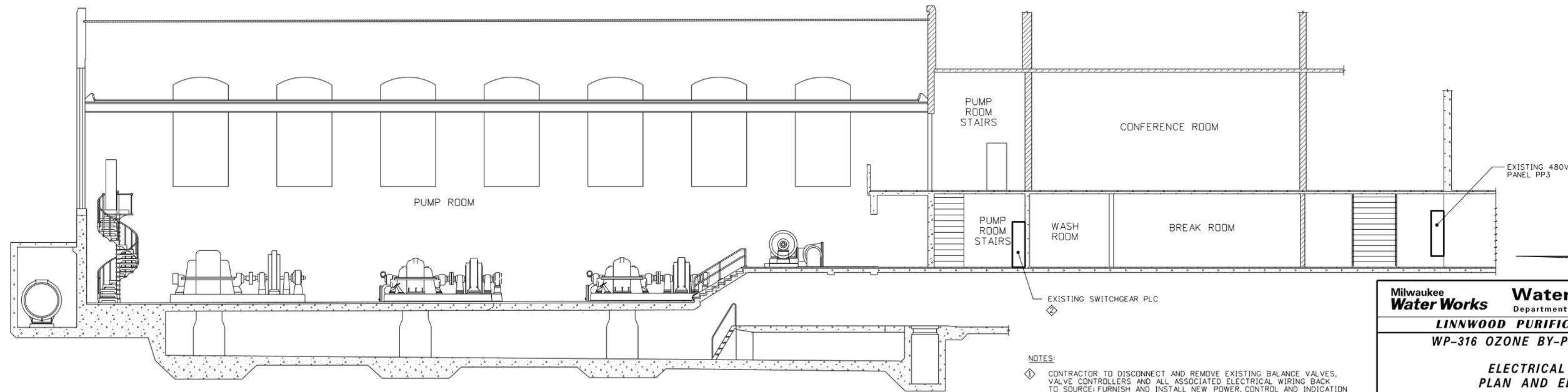
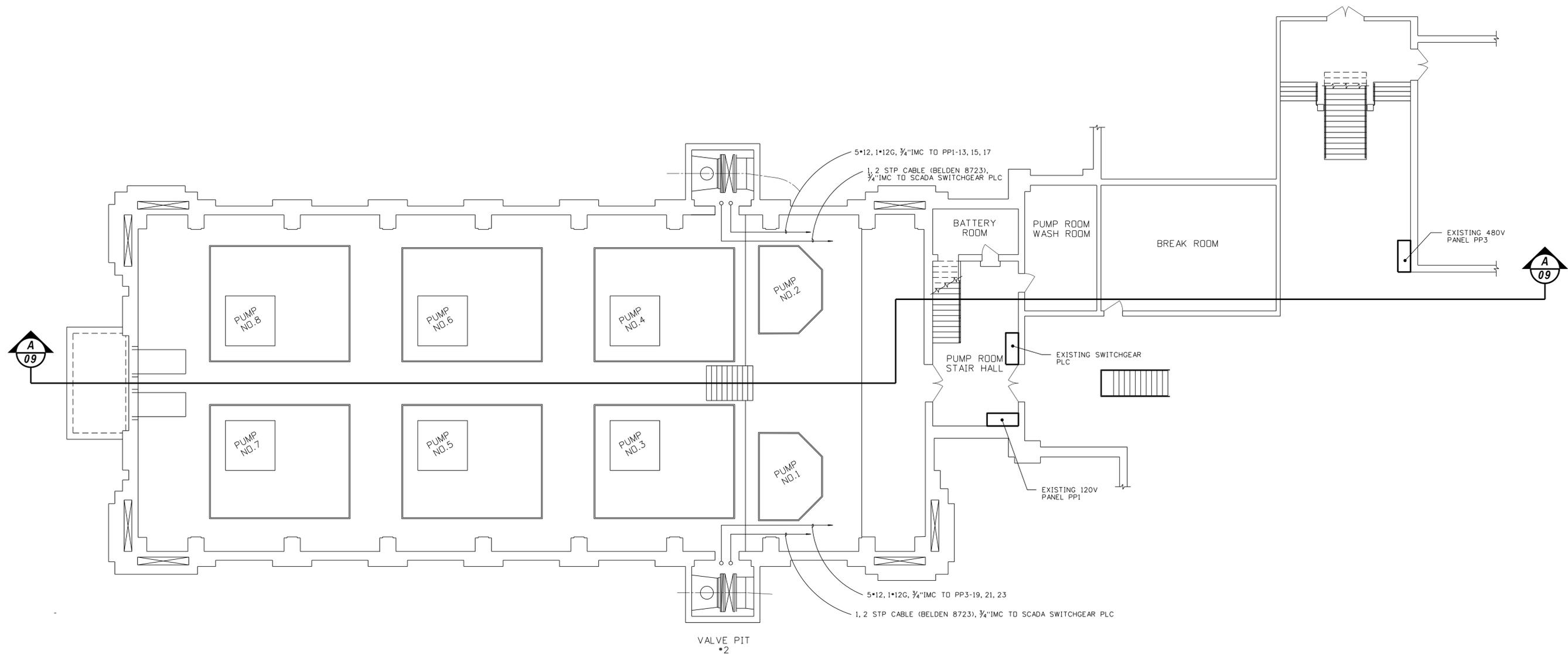
Milwaukee Water Works		Water Engineering Department of Public Works	
LINNWOOD PURIFICATION PLANT			
WP-316 OZONE BY-PASS VALVES			
VALVE #4			
PLAN AND SECTIONS			
DESIGNED BY	AJF	APPROVED	DATE
DRAWN BY	S. MILLER	<i>Andrew Reynolds</i>	2-11-13 PLANTS PROJECT ENGINEER
CHECKED BY	AJF	<i>Daniel G. Hart</i>	2-11-13 CHIEF DESIGN ENGINEER
DATE	10-30-2012	<i>W. Lewis</i>	2-11-13 SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS
SCALE	1/4" = 1' - 0"		
WORK ORDER	WT4500122100		
OFFICIAL NOTICE	2013-014		
FILE NO.	B-12-1		
DRAWING NO. WP-316-07			

NO.	BY	REVISION	DATE



Milwaukee Water Works		Water Engineering Department of Public Works	
LINNWOOD PURIFICATION PLANT			
WP-316 OZONE BY-PASS VALVES			
VALVE #5			
PLAN AND SECTIONS			
DESIGNED BY	AJF	APPROVED	DATE
DRAWN BY	S. MILLER	<i>Andrew Reynolds</i>	2-11-13 PLANTS PROJECT ENGINEER
CHECKED BY	AJF	<i>Daniel G. Hart</i>	2-11-13 CHIEF DESIGN ENGINEER
DATE	9-28-12	<i>W. Lewis</i>	2-11-13 SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS
SCALE	1/4" = 1' - 0"		
WORK ORDER	WT4500122100		
OFFICIAL NOTICE	2013-014		
FILE NO.	B-12-1		
DRAWING NO. WP-316-08			

NO.	BY	REVISION	DATE



(A) SECTION

NOTES:
 ◆ CONTRACTOR TO DISCONNECT AND REMOVE EXISTING BALANCE VALVES, VALVE CONTROLLERS AND ALL ASSOCIATED ELECTRICAL WIRING BACK TO SOURCE; FURNISH AND INSTALL NEW POWER, CONTROL AND INDICATION WIRING FOR NEW VALVE AND CONTROLLER AS INDICATED. CONTRACTOR MAY REUSE EXISTING CONDUIT WHERE APPLICABLE.
 ◆ SCADA WIRING TERMINATIONS INSIDE PLC CABINET AND ALL SCADA SYSTEM PROGRAMMING TO BE DONE BY CITY FORCES.

NO.	BY	REVISION	DATE

Milwaukee Water Works Water Engineering
 Department of Public Works
LINNWOOD PURIFICATION PLANT
WP-316 OZONE BY-PASS VALVES
ELECTRICAL WORK
PLAN AND ELEVATION

DESIGNED BY	BST	PROVED	DATE
DRAWN BY	S. MILLER	<i>Andrew Reynolds</i>	2-11-13
CHECKED BY	BST	<i>Daniel G. Smith</i>	PLANT'S PROJECT ENGINEER
DATE	9-28-12	<i>William</i>	2-11-13
SCALE	1/8" = 1' - 0"		CHIEF DESIGN ENGINEER
WORK ORDER	WT450122100		2-11-13
OFFICIAL NOTICE	2013-014		SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS
FILE NO.	B-12-1		

DRAWING NO. **WP-316-09**