

WASHWATER PUMP No. 3 DISCHARGE PIPING – EXISTING

SCALE : 1" = 1'-0"

REMOVAL LEGEND

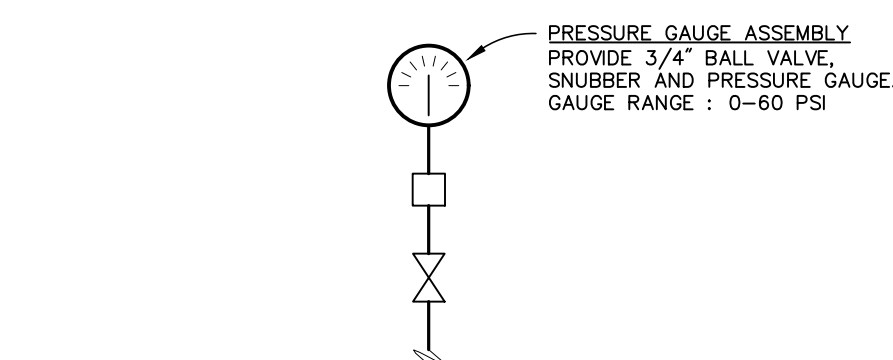


SUGGESTED CONSTRUCTION SEQUENCING

- COORDINATE WITH OWNER TO BEGIN WORK DURING LOW FLOW PERIODS.
- COORDINATE WITH OWNER TO HAVE VALVE B-23-2 CLOSED, ISOLATING W.P. No. 2 AND W.P. No. 3 FROM W.P. No. 1. W.P. No. 1 WILL BE UTILIZED FOR WASHING THE NORTH FILTERS. SOUTH FILTERS WILL BE OFFLINE.
- COORDINATE WITH OWNER TO DRAIN WASHWATER HEADER VIA AVAILABLE TAPS AND/OR LOOSENING FITTINGS ON W.P. No. 3 DISCHARGE PIPING.
- INSTALL PROP. BUTTERFLY VALVE, SWABBED WITH CHLORINE SOLUTION PRIOR TO INSTALLATION. COORDINATE WITH OWNER TO RETURN WASHWATER HEADER TO SERVICE WITH PROPOSED VALVE CLOSED.
- COMPLETE REMAINING DEMOLITION, CONSTRUCTION, AND PAINTING WORK ON W.P. No. 3 DISCHARGE PIPING AS SHOWN. ALL PIPING AND FITTINGS INSTALLED SHALL BE SWABBED WITH CHLORINE SOLUTION PRIOR TO INSTALLATION.
- COMPLETE DISINFECTION AND SAMPLING PER SPECIFICATIONS.
- COORDINATE WITH OWNER TO OPERATE W.P. No. 3 ON A BACKWASH CYCLE, PERFORM VISUAL HYDROSTATIC TEST ON INSTALLED PIPING.

VALVE SCHEDULE

No.	QTY.	SIZE (INCHES)	TYPE	FUNCTION	CONTROL	REMARKS
101	1	16	WAFER CHECK	W.P. DISCHARGE CHECK	-	-
102	1	20	BFLY	W.P. DISCHARGE ISOLATION	HANDWHEEL	-
103	2	18	FOOT VALVE	W.P. SUCTION PIPING FOOT VALVE	-	IMMERSION SERVICE, PROVIDE IF SUCTION PIPING ALTERNATE No. 2 IS TAKEN



PRESSURE GAUGE ASSEMBLY

SCALE : NONE

NOTE

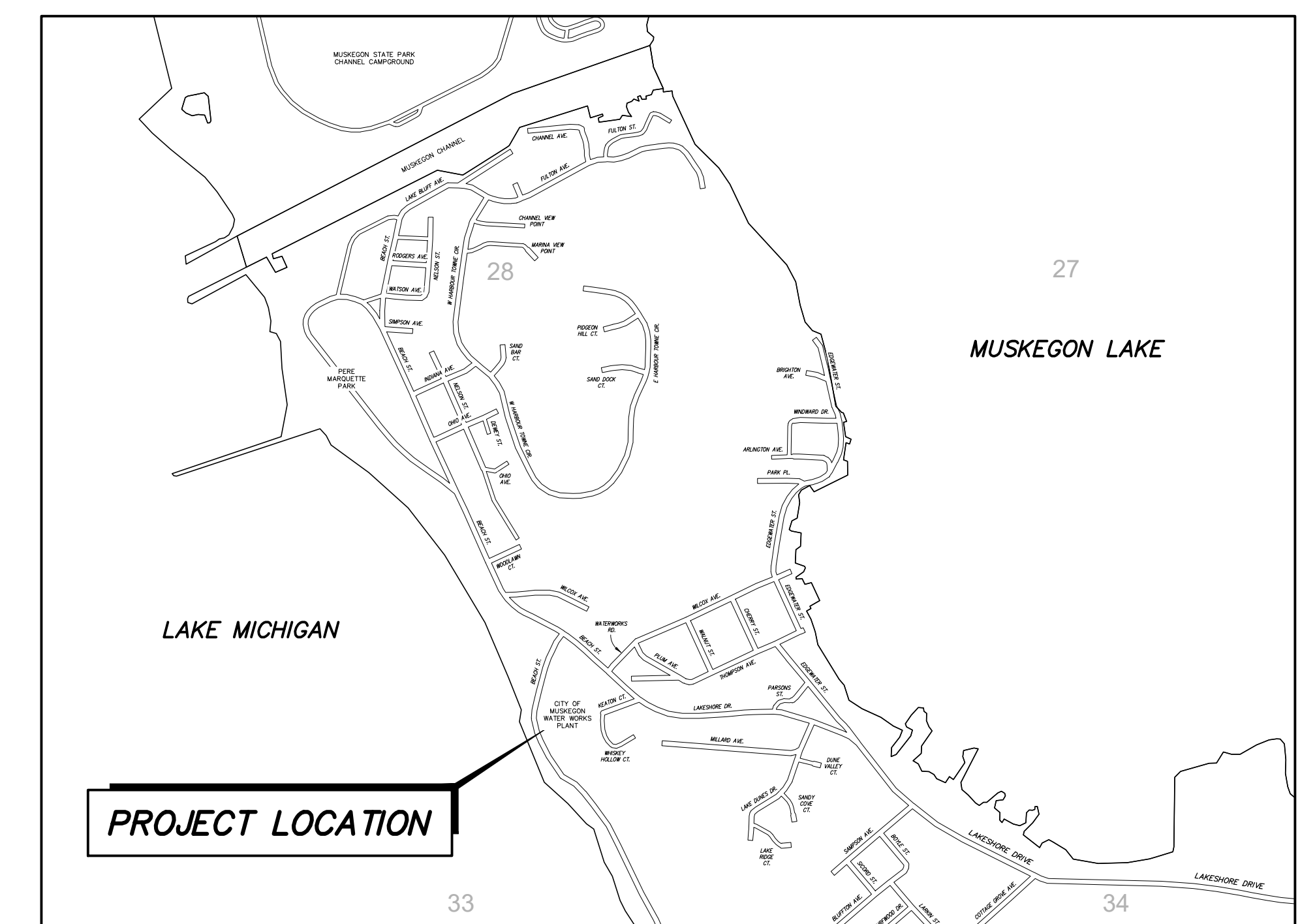
PROVIDE 3/4" TAP, STAINLESS STEEL (S.S.) PIPING AND 3/4" S.S. BALL VALVE FOR THE PRESSURE GAUGE ASSEMBLY CONNECTION. ALL WETTED MATERIALS SHALL BE NSF 61 CERTIFIED FOR USE WITH DRINKING WATER.

WASHWATER PUMP No. 3 DISCHARGE PIPING – PROPOSED

SCALE : 1" = 1'-0"

NOTES

- CONTRACTOR SHALL FIELD VERIFY SMALL DIAMETER PIPING DIMENSIONS AND PROVIDE PIPING AND FITTINGS TO MATCH EXISTING SIZE.
- CONTRACTOR SHALL FIELD VERIFY ALL INSTALLATION REQUIREMENTS PRIOR TO DEMOLITION.



PROJECT LOCATION MAP

SCALE : 1" = 1000'±



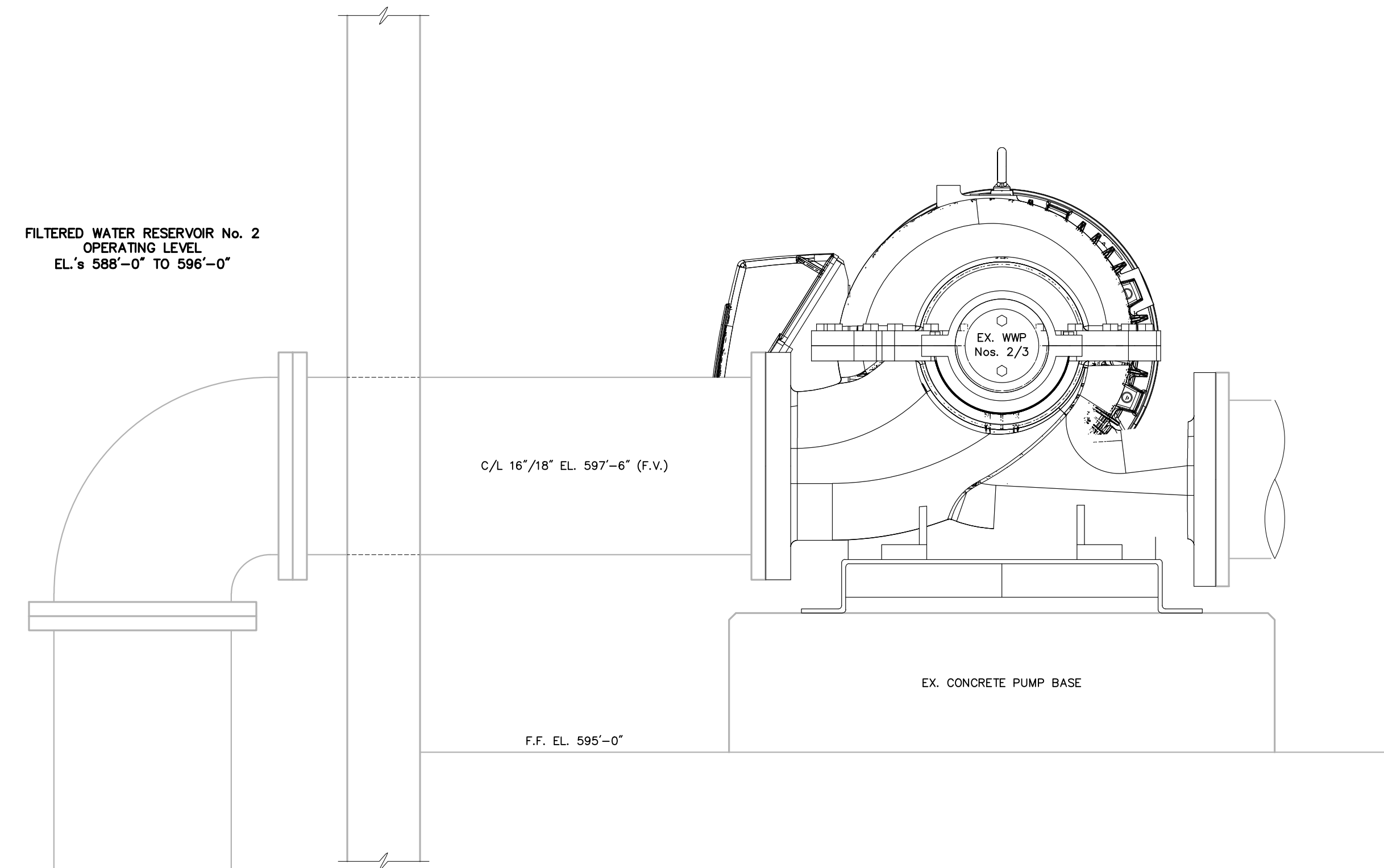
NO.	REVISIONS	BY	DATE	DRAWN
				SMYTH
				DATE: MAR. '23
				CHECKED: P.W.B.
				DATE: MAR. '24

Prein & Newhof
Engineers • Surveyors • Environmental • Laboratory

CITY OF MUSKEGON
MUSKEGON COUNTY, MICHIGAN
WATER FILTRATION PLANT IMPROVEMENTS
WASHWATER PUMP CHECK VALVE ADDITION

PROJECT NO.
2230492
SHEET NO.

1 OF **2**



WASHWATER PUMP SUCTION PIPING – ALTERNATES

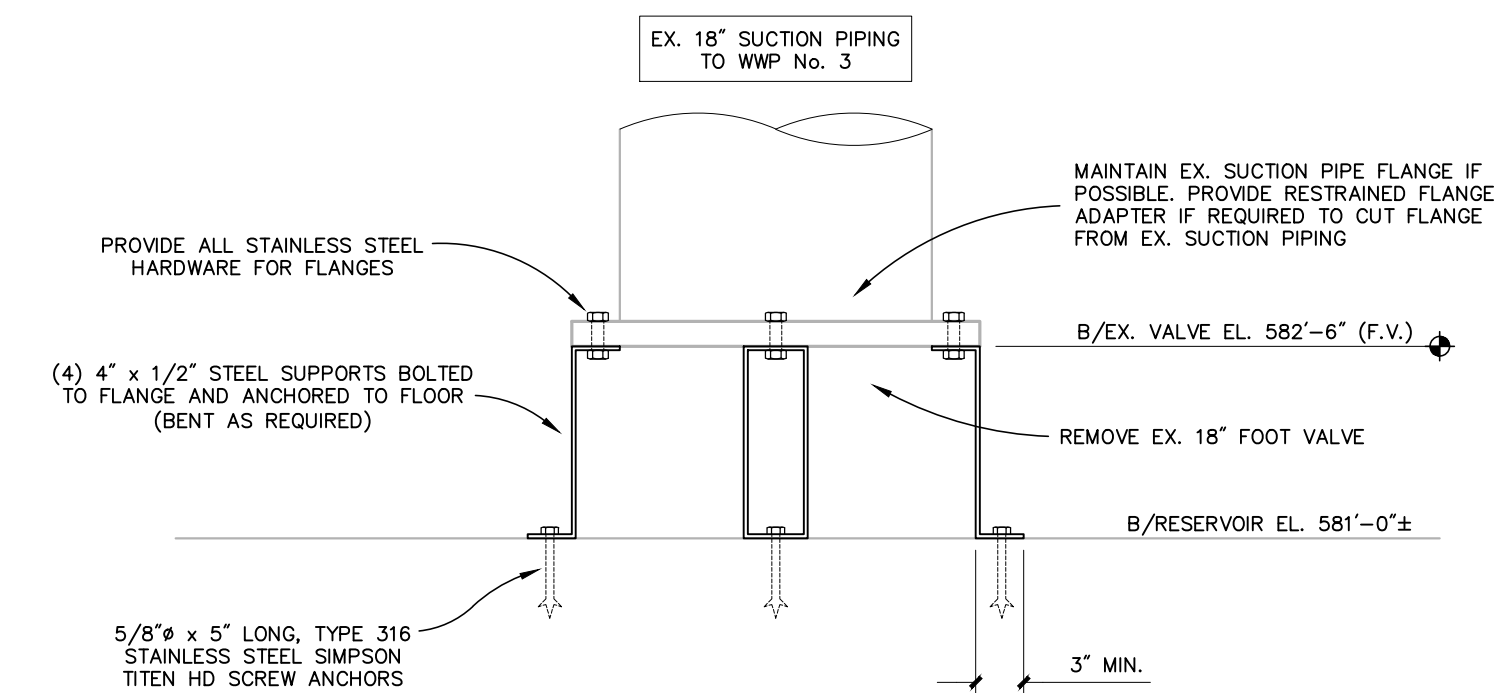
SCALE : 1" = 1'-0"

DESCRIPTION OF ALTERNATES

- ALTERNATE No. 1**
 REMOVE EX. 18" FOOT VALVE FROM SUCTION PIPING FOR WWP No. 3 ONLY. PROVIDE PERMANENT STRUCTURAL SUPPORTS TO THE SUCTION PIPING PER DETAIL. CONTRACTOR SHALL TEMPORARILY SUPPORT SUCTION PIPING DURING REMOVAL OF THE FOOT VALVES.
- ALTERNATE No. 2**
 REMOVE EX. 18" FOOT VALVE FROM SUCTION PIPING FOR WWP No. 2 AND WWP No. 3. CUT SUCTION PIPING AND INSTALL RESTRAINED FLANGE ADAPTER AND PROPOSED 18" FOOT VALVE ON EACH SUCTION PIPE. PROVIDE PERMANENT STRUCTURAL SUPPORT OF THE SUCTION PIPING PER DETAIL.

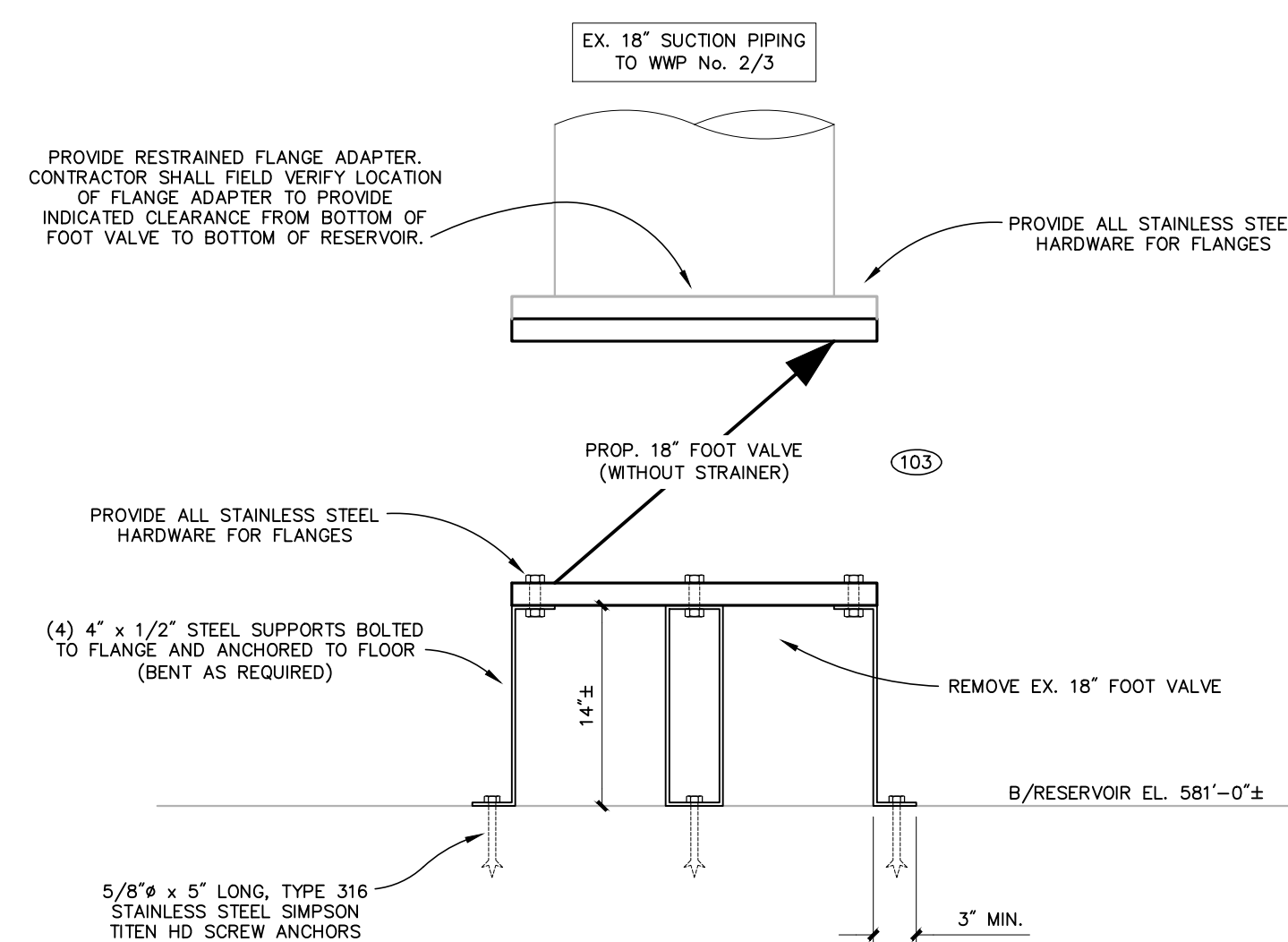
CONSTRUCTION NOTES

- ALL WETTED MATERIALS SHALL BE NSF 61 APPROVED FOR USE WITH DRINKING WATER. SEE SPECIFICATIONS FOR STEEL SUPPORT HIGH PERFORMANCE COATING REQUIREMENTS (TYP.)
- CONTRACTOR SHALL MAINTAIN PIPING SYSTEM INTEGRITY AND MAINTAIN APPROPRIATE PIPE SUPPORT DURING ALL ACTIVITY.



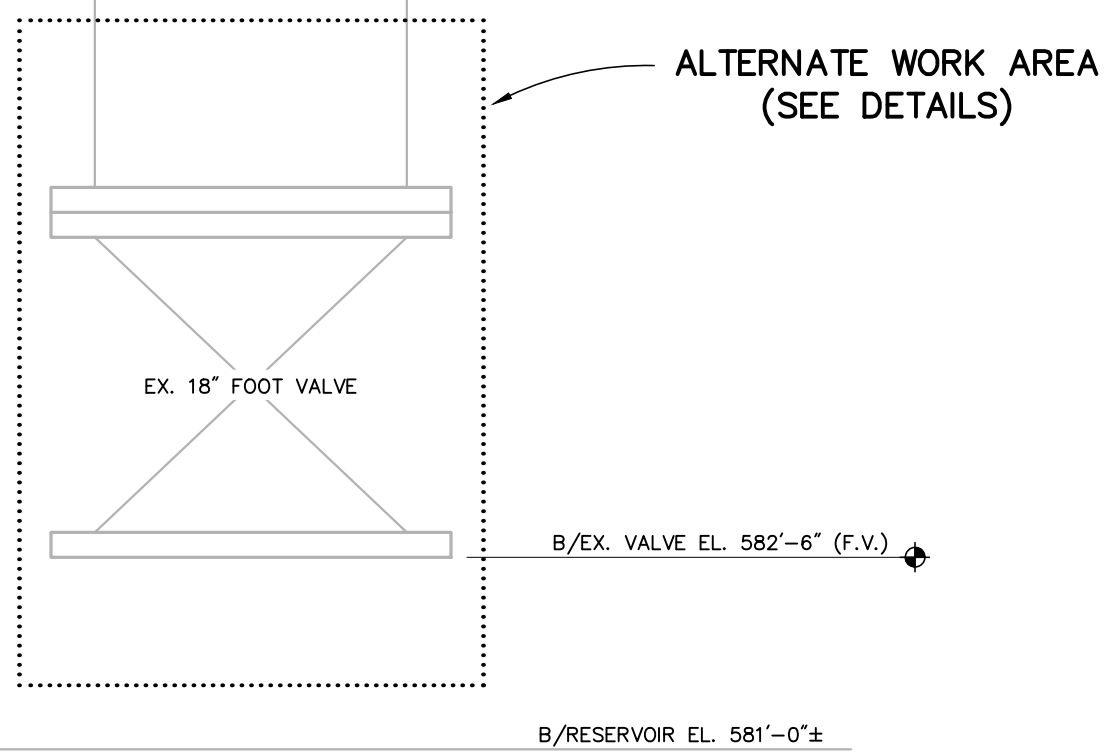
PIPE SUPPORT DETAIL

(ALTERNATE No. 1)
 SCALE : 1" = 1'-0"



PIPE SUPPORT DETAIL

(ALTERNATE No. 2)
 SCALE : 1" = 1'-0"



SUCTION PIPING ALTERNATES

NO.	REVISIONS	BY	DATE	DRAWN
				SMYTH
				DATE: MAR. '23
				CHECKED: P.W.B.
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 WATER FILTRATION PLANT IMPROVEMENTS
 WASHWATER PUMP CHECK VALVE ADDITION

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2 OF 2

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