CENTRAL ARKANSAS WATER
JACK H WILSON WATER TREATMENT PLANT
WILSON RENEWAL AND RESLIENCY PROJECT
ADDENDUM NO. 4
JANUARY 23, 2025

This Addendum forms part of the Contract Documents and modifies the Specifications and Drawings as noted below. Acknowledge receipt of the Addendum in the space provided on the Bid Proposal. Failure to acknowledge receipt of the Addendum may subject the Bidder to disqualification.

This Addendum consists of 121 pages, including attachments.

A. SPECIFICATIONS

1. Section 40 05 59.23 – FABRICATED STAINLESS-STEEL SLIDE GATES

    a. Modify Paragraph 1.03.A.3 to the following:

        i. “Design calculations demonstrating anchor bolt sizing and spacing in compliance with AWWA C561, gate structural design calculations, and stem design calculations. All calculations shall be sealed by a Professional Engineer registered in the state of gate manufacture.”

    b. Modify Paragraph 2.01.A with following addition:

        i. Add “RW Gate” to the list of acceptable manufacturers.

    c. Add Paragraph 1.03.A.4 as follows:

        i. “Finite element analysis (FEA):

            a. Shall be performed on any gate where the gate width × design head exceeds 80 ft^2.

            b. Shall be performed on the gate, including the slide, frame, and yoke to verify the slide gate members are within the design limits set forth by the latest version of AWWA C561, or as modified herein.”

2. Section 40 06 20 – PROCESS PIPE, VALVE, AND GATE SCHEDULE

a. Remove 14” FILTER GALLERY – WASHWATER SUPPLY PUMP SUCTION butterfly valve from this specification.

b. Stop Plate Schedule:

i. Modify “No. of Plate Guide Assemblies” to “1”.

3. Section 40 61 96 – PROCESS CONTROL DESCRIPTIONS

a. Modify Paragraph 3.08.A.2.a to the following:

i. “Plant PLC: CP-WIL-BLWR in the Blower Building”

b. Modify Paragraph 3.08.D.1 to the following:

i. “The existing and new blower include an inlet throttling valve for controlling blower output. The inlet throttling valves are motor actuated to control intake to the blowers. Inlet throttling valves shall be provided and installed by the Contractor.”

c. Modify Paragraph 3.08.D.2.k to the following:

i. “Blower flow rate shall be measured in SCFM by thermal mass flow meter and displayed as a digital readout.”

d. Add Paragraph 3.08.D.2.l:

i. “Discharge pressure indications with impending warning and trip functions and levels displayed as digital readouts.”

e. Modify Paragraph 3.08.D.3.h to the following:

i. “Blower flow rate shall be measured in SCFM by thermal mass flow meter and displayed as a digital readout.”

f. Add Paragraph 3.08.D.3.i:

i. “Discharge pressure indications with impending warning and trip functions and levels displayed as digital readouts.”

4. Section 40 61 91 – PROCESS CONTROL SYSTEM INSTRUMENT LIST

a. Replace specification 40 61 91 – PROCESS CONTROL SYSTEM INSTRUMENT LIST in its entirety with the one attached to this addendum.

5. Section 40 61 93 – PROCESS CONTROL SYSTEM INPUT-OUTPUT LIST
    a. Replace specification 40 61 91 – PROCESS CONTROL SYSTEM INPUT-OUTPUT LIST in its entirety with the one attached to this addendum.
6. Section 43 11 18 – MULTISTAGE CENTRIFUGAL BLOWERS
    a. Replace specification 43 11 18 – MULTISTAGE CENTRIFUGAL BLOWERS in its entirety with the one attached to this addendum.

B. DRAWINGS

1. Drawing M3004 FILTER BUILDING MECHANICAL ENLARGED BOTTOM PLAN - CROSS GALLERY DEMOLITION
    a. Replace Drawing M3004 FILTER BUILDING MECHANICAL ENLARGED BOTTOM PLAN - CROSS GALLERY DEMOLITION in its entirety with the one attached to this addendum.
2. Drawing M3020 FILTER BUILDING MECHANICAL ENLARGED BOTTOM PLAN AND SAMPLE PUMP DETAIL – CROSS GALLERY
    a. Replace Drawing M3020 FILTER BUILDING MECHANICAL ENLARGED BOTTOM PLAN AND SAMPLE PUMP DETAIL – CROSS GALLERY in its entirety with the one attached to this addendum.
3. Drawing M3201 AIR SCOUR BLOWER BUILDING MECHANICAL PLAN AND SECTIONS

a. Replace drawing M3201 AIR SCOUR BLOWER BUILDING MECHANICAL PLAN AND SECTIONS in its entirety with the one attached to this addendum.

4. Drawing A0004 ARCHITECTURAL – ENLARGED SITE PLAN - ENTRY & TOUR ACCESSIBLITY
    a. Replace drawing A0004 ARCHITECTURAL – ENLARGED SITE PLAN - ENTRY & TOUR ACCESSIBLITY in its entirety with the one attached to this addendum.
5. Drawing A0007 ARCHITECTURAL CODE SUMMARY AND LIFE SAFETY PLAN - FILTER CROSS GALLERY
    a. Replace drawing A0007 ARCHITECTURAL CODE SUMMARY AND LIFE SAFETY PLAN - FILTER CROSS GALLERY in its entirety with the one attached to this addendum.
6. Drawing A0012 ARCHITECTURAL SCHEDULE – ROOM FINISHES AND APPLIANCE SCHEDULE
    a. Replace drawing A0012 ARCHITECTURAL SCHEDULE – ROOM FINISHES AND APPLIANCE SCHEDULE in its entirety with the one attached to this addendum.
7. Drawing A0013 ARCHITECTURAL SCHEDULE - DOORS
    a. Replace drawing A0013 ARCHITECTURAL SCHEDULE - DOORS in its entirety with the one attached to this addendum.
8. Drawing A3006 FILTER BUILDING ARCHITECTURAL ENLARGED GROUND FLOOR PLAN – CHEMICALS FEED / CROSS GALLERY NEW CONSTRUCTION
    a. Replace drawing A3006 FILTER BUILDING ARCHITECTURAL ENLARGED GROUND FLOOR PLAN – CHEMICALS FEED /

CROSS GALLERY NEW CONSTRUCTION in its entirety with the one attached to this addendum.

9. Drawing A3020 FILTER BUILDING ARCHITECTURAL INTERIOR ELEVATIONS – CROSS GALLERY
    a. Replace drawing A3020 FILTER BUILDING ARCHITECTURAL INTERIOR ELEVATIONS – CROSS GALLERY in its entirety with the one attached to this addendum.
10. Drawing A8003 ADMINISTRATION BUILDING ARCHITECTURAL FIRST FLOOR PLAN – NEW CONSTRUCTION
    a. Replace drawing A8003 ADMINISTRATION BUILDING ARCHITECTURAL FIRST FLOOR PLAN – NEW CONSTRUCTION in its entirety with the one attached to this addendum.
11. Drawing E3000 FILTER BUILDING ELECTRICAL ENLARGED BOTTOM PLAN – CROSS GALLERY DEMOLITION
    a. Replace Drawing E3000 FILTER BUILDING ELECTRICAL ENLARGED BOTTOM PLAN – CROSS GALLERY DEMOLITION in its entirety with the one attached to this addendum.
12. Drawing E3010 FILTER BUILDING ELECTRICAL ENLARGED BOTTOM PLAN - CROSS GALLERY
    a. Replace drawing E3010 FILTER BUILDING ELECTRICAL ENLARGED BOTTOM PLAN - CROSS GALLERY in its entirety with the one attached to this addendum.
13. Drawing E3201 AIR SCOUR BLOWER BUILDING ELECTRICAL POWER PLAN

a. Replace drawing E3201 AIR SCOUR BLOWER BUILDING ELECTRICAL POWER PLAN in its entirety with the one attached to this addendum.

14. Drawing E3203 AIR SCOUR BLOWER BUILDING ELECTRICAL PANEL SCHEDULE RISER DIAGRAM AND CONTROL BLOCK DIAGRAM
    a. Replace drawing E3203 AIR SCOUR BLOWER BUILDING ELECTRICAL PANEL SCHEDULE RISER DIAGRAM AND CONTROL BLOCK DIAGRAM in its entirety with the one attached to this addendum.
15. Drawing E3205 AIR SCOUR BLOWER BUILDING ELECTRICAL CONDUIT AND WIRE SCHEDULE
    a. Replace drawing E3205 AIR SCOUR BLOWER BUILDING ELECTRICAL CONDUIT AND WIRE SCHEDULE in its entirety with the one attached to this addendum.
16. Drawing I1008 INSTRUMENTATION CONTROL SYSTEM BLOCK DIAGRAM SHEET 4
    a. Replace drawing I1008 INSTRUMENTATION CONTROL SYSTEM BLOCK DIAGRAM SHEET 4 in its entirety with the one attached to this addendum.
17. Drawing I3003 INSTRUMENTATION WASHWATER SUPPLY AND BACKWASH P&ID
    a. Modify as follows:
        i. Washwater supply pump suction valves (typ. of 2) to be shown as existing instead of proposed.
18. Drawing I3200 INSTRUMENTATION AIR SCOUR BLOWERS P&ID

a. Replace drawing I3200 INSTRUMENTATION AIR SCOUR BLOWERS P&ID in its entirety with the one attached to this addendum.

C. ATTACHMENTS

1. Section 40 61 91 – PROCESS CONTROL SYSTEM INSTRUMENT LIST
2. Section 40 61 93 – PROCESS CONTROL SYSTEM INPUT-OUTPUT LIST
3. Section 43 11 18 – MULTISTAGE CENTRIFUGAL BLOWERS
4. Drawing M3004 FILTER BUILDING MECHANICAL ENLARGED BOTTOM PLAN - CROSS GALLERY DEMOLITION
5. Drawing M3020 FILTER BUILDING MECHANICAL ENLARGED BOTTOM PLAN AND SAMPLE PUMP DETAIL - CROSS GALLERY
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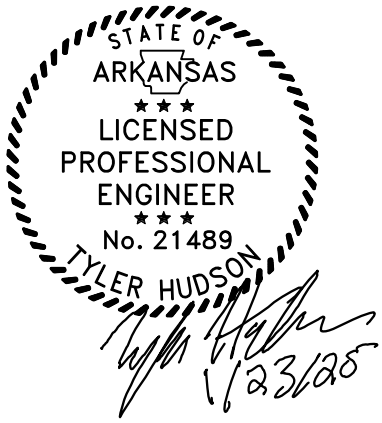
14. Drawing E3000 FILTER BUILDING ELECTRICAL ENLARGED BOTTOM PLAN – CROSS GALLERY DEMOLITION
15. Drawing E3010 FILTER BUILDING ELECTRICAL ENLARGED BOTTOM PLAN-CROSS GALLERY
16. Drawing E3201 AIR SCOUR BLOWER BUILDING ELECTRICAL POWER PLAN
17. Drawing E3203 AIR SCOUR BLOWER BUILDING ELECTRICAL PANEL SCHEDULE RISER DIAGRAM AND CONTROL BLOCK DIAGRAM
18. Drawing E3205 AIR SCOUR BLOWER BUILDING ELECTRICAL CONDUIT AND WIRE SCHEDULE
19. Drawing I1008 INSTRUMENTATION CONTROL SYSTEM BLOCK DIAGRAM SHEET 4
20. Drawing I3200 INSTRUMENTATION AIR SCOUR BLOWERS P&ID
21. Bidder Questions and Responses



HAZEN AND SAWYER

Inline Magnetic Flow Meters - Section 40 71 13.13				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE	P&ID
FE/FIT-1502	Raw Water Meter Vault No. 1 Flow Meter No. 1	RW	30 to 150 MGD	I1500
FE/FIT-1503	Raw Water Meter Vault No. 1 Flow Meter No. 2	RW	30 to 150 MGD	I1500
FE/FIT-3001	Filter 1 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3002	Filter 2 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3003	Filter 3 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3004	Filter 4 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3005	Filter 5 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3006	Filter 6 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3007	Filter 7 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3008	Filter 8 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3009	Filter 9 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3010	Filter 10 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3011	Filter 11 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3012	Filter 12 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3013	Filter 13 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3014	Filter 14 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3015	Filter 15 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-3016	Filter 16 Discharge Flow	FLW/FTW	0-10.1 MGD	I3001
FE/FIT-4020	Backwash Treatment Tanks to Rapid Mix Flow	BWR	0-5,210 GPM	I4000
FE/FIT-4030	Backwash Treatment Tanks to Manhole Flow	SL	0-450 GPM	I4000
FE/FIT-6002	SH Transfer Pump Discharge Flow	SH	40-55 GPM	I6000
FE/FIT-6003	Potable Water Flow			I6000
FE/FIT-6021	SH Metering Pump No. 1 Discharge Flow	SH	0-2 GPM	I6002
FE/FIT-6022	SH Metering Pump No. 2 Discharge Flow	SH	0-2 GPM	I6002
FE/FIT-6023	SH Metering Pump No. 3 Discharge Flow	SH	0-2 GPM	I6003
FE/FIT-6024	SH Metering Pump No. 4 Discharge Flow	SH	0-2 GPM	I6003
FE/FIT-6025	SH Metering Pump No. 5 Discharge Flow	SH	0-2 GPM	I6003
FE/FIT-6026	SH Metering Pump No. 6 Discharge Flow	SH	0-2 GPM	I6002
FE/FIT-6111	Alum Metering Pump No. 1 Discharge Flow	AL	0-3.75 GPM	I6101
FE/FIT-6112	Alum Metering Pump No. 2 Discharge Flow	AL	0-3.75 GPM	I6101
FE/FIT-6113	Alum Metering Pump No. 3 Discharge Flow	AL	0-3.75 GPM	I6101
FE/FIT-6120	Plant Water To Liquid Lime Tank No. 1 Flow	PLW	0-75 GPM	I6103
FE/FIT-6130	Plant Water To Liquid Lime Tank No. 2 Flow	PLW	0-75 GPM	I6104
FE/FIT-6140	Plant Water To Liquid Lime Tank No. 3 Flow	PLW	0-75 GPM	I6105
FE/FIT-6161	ZOP Metering Pump No. 1 Discharge Flow	ZOP	0-1.0 GPM	I6107
FE/FIT-6162	ZOP Metering Pump No. 2 Discharge Flow	ZOP	0-1.0 GPM	I6107

High Precision Inline Thermal Mass Flow Meters - Section 40 71 76, 2.02				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE	P&ID
FIT-3203	Air Scour Blowers Discharge Thermal Flow Meter	AIR	0 to 6,000 SCFM	I3200
Radar Level Meters - Two Wire - Section 40 72 23.01				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE	P&ID
LE/LIT-3001	Filter 1 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3002	Filter 2 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3003	Filter 3 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3004	Filter 4 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3005	Filter 5 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3006	Filter 6 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3007	Filter 7 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3008	Filter 8 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3009	Filter 9 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3010	Filter 10 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3011	Filter 11 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3012	Filter 12 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3013	Filter 13 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3014	Filter 14 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3015	Filter 15 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3016	Filter 16 Level Transmitter	FI	0-10 FT	I3001
LE/LIT-3300	Waste Pit Wet Well Level Transmitter	BW	18.5' - 24.1'	I3300
LE/LIT-3400	Sludge Pump Station Wet Well Level Transmitter			I3400
LE/LIT-4000	Backwash North Tank Level Transmitter	BW	0-30 FT	I4000
LE/LIT-4010	Backwash South Tank Level Transmitter	BW	0-30 FT	I4000
LE/LIT-6000	Sodium Hypo Storage Tank Level Transitter	SH	0-16 ft	I6000
LE/LIT-6101	Alum Bulk Storage Tank No. 1 Level Transitter	AL	0-25 ft	I6100
LE/LIT-6102	Alum Bulk Storage Tank No. 2 Level Transitter	AL	0-25 ft	I6100
LE/LIT-6103	Alum Bulk Storage Tank No. 3 Level Transitter	AL	0-25 ft	I6100
LE/LIT-6104	Alum Day Tank Level Transmitter	AL	0-10 ft	I6100
LE/LIT-6120	Liquid Lime Feed Tank No. 1 Level Transmitter	N/A	N/A	I6103
LE/LIT-6130	Liquid Lime Feed Tank No. 2 Level Transmitter	N/A	N/A	I6104
LE/LIT-6140	Liquid Lime Feed Tank No. 3 Level Transmitter	N/A	N/A	I6105
LE/LIT-6151	ZOP Bulk Storage Tank No. 1 Level Transmitter	ZOP	0-15ft	I6106
LE/LIT-6152	ZOP Bulk Storage Tank No. 2 Level Transmitter	ZOP	0-15ft	I6106
LE/LIT-6160	ZOP Day Tank Level Transmitter	ZOP	0-6 ft	I6107
LE/LIT-6201	Fluoride Bulk Storage Tank No. 1 Level Transmitter	F	0-15ft	I6200
LE/LIT-6202	Fluoride Bulk Storage Tank No. 2 Level Transmitter	F	0-15ft	I6200
LE/LIT-6210	Fluoride Day Tank Level Transmitter	F	0-6 ft	I6201

Level Switches (Floats) - Section 40 72 76.26				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	SET POINT	P&ID
LSHH-1500	Raw Meter Vault No. 1 High-High Level Switch	RW		I1500
LSL-1500	Raw Meter Vault No. 1 Low Level Switch	RW		I1500
LSH-1500	Raw Meter Vault No. 1 High Level Switch	RW		I1500
LSH-6100	Alum Containment Area High Level Switch	AL	1 FT	I6101
LSH-6119	Lime Containment Area High Level Switch	LS	1.5 FT	I6103
LSH-6154	ZOP Containment Area High Level Switch	ZOP	1 FT	I6106
LSH-6155	Bulk Chemical Truck Containment High Level Switch	ALUM/ZOP/LS	1 FT	I6106
LSH-6163	ZOP Day Tank and Metering Pump Containment	ZOP	2 IN	I6107
LSH-6203	Fluoride Containment Area High Level Switch	F	1 FT	I6200
LSH-6204	Fluoride Containment Area High Level Switch	F	1 FT	I6200
LSH-6205	Fluoride Day Tank and Metering Pump Containment	F	2 IN	I6201
Capacitance Level Switch - Section 40 72 76.38				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	SET POINT	P&ID
LSHH-6000	Sodium Hypo Level Switch	SHS	15.5 FT	I6000
LSHH-6101	Alum Bulk Storage Tank No. 1 Level Switch	AL	19.5 FT	I6100
LSHH-6102	Alum Bulk Storage Tank No. 2 Level Switch	AL	19.5 FT	I6100
LSHH-6103	Alum Bulk Storage Tank No. 3 Level Switch	AL	19.5 FT	I6100
LSHH-6104	Alum Day Tank Level Switch	AL	6.5 FT	I6100
LSHH-6151	ZOP Bulk Storage Tank No. 1 Level Switch	ZOP	10 FT	I6106
LSHH-6152	ZOP Bulk Storage Tank No. 2 Level Switch	ZOP	10 FT	I6106
Pressure and Differential Pressure Gauges - Section 40 73 13				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE	P&ID
PI-2061A	Raw Water Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I2000
PI-2061B	Raw Water Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I2000
PI-2062A	Coagulated Water Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I2000
PI-2062B	Coagulated Water Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I2000
PI-2143A	Basin 1A Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I2100
PI-2143B	Basin 1A Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I2100
PI-2153A	Basin 1B Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I2100
PI-2153B	Basin 1B Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I2100
PI-2243A	Basin 2A Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I2200
PI-2243B	Basin 2A Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I2200
PI-2253A	Basin 2B Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I2200
PI-2253B	Basin 2B Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I2200

PI-2343A	Basin 3A Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I2300
PI-2343B	Basin 3A Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I2100
PI-2353A	Basin 3B Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I2100
PI-2353B	Basin 3B Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I2100
PI-2443A	Basin 4A Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I2400
PI-2443B	Basin 4A Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I2400
PI-2453A	Basin 4B Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I2400
PI-2453B	Basin 4B Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I2400
PI-3001	Filter 1 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3002	Filter 2 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3003	Filter 3 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3004	Filter 4 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3005	Filter 5 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3006	Filter 6 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3007	Filter 7 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3008	Filter 8 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3009	Filter 9 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3010	Filter 10 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3011	Filter 11 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3012	Filter 12 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3013	Filter 13 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3014	Filter 14 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3015	Filter 15 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3016	Filter 16 Turbidity Analyzer Inlet Pressure Gauge	FLW	0 - 15 PSIG	I3001
PI-3030	Washwater Supply Pump Discharge Pressure Gauge			I3003
PI-2051	Raw Water Sample Inlet Pressure Gauge		0 - 50 PSIG	I3004
PI-2120	Sed Basin 1A Inlet Pressure Gauge		0 - 50 PSIG	I3004
PI-2130	Sed Basin 1B Inlet Pressure Gauge		0 - 50 PSIG	I3004
PI-2220	Sed Basin 2A Inlet Pressure Gauge		0 - 50 PSIG	I3004
PI-2230	Sed Basin 2B Inlet Pressure Gauge		0 - 50 PSIG	I3004
PI-2320	Sed Basin 3A Inlet Pressure Gauge		0 - 50 PSIG	I3004
PI-2330	Sed Basin 3B Inlet Pressure Gauge		0 - 50 PSIG	I3004
PI-2420	Sed Basin 4A Inlet Pressure Gauge		0 - 50 PSIG	I3004
PI-2430	Sed Basin 4B Inlet Pressure Gauge		0 - 50 PSIG	I3004
PI-3071	CFE East Sample Inlet Pressure Gauge		0 - 50 PSIG	I3005
PI-3072	CFE West Sample Inlet Pressure Gauge		0 - 50 PSIG	I3005
PI-3073	Clearwell No. 1 Sample Inlet Pressure Gauge		0 - 50 PSIG	I3005
PI-3073A	Clearwell No. 1 Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I3005
PI-3073B	Clearwell No. 1 Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I3005
PI-3075	Clearwell No. 2 Sample Inlet Pressure Gauge		0 - 50 PSIG	I3005

PI-3075A	Clearwell No. 2 Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I3005
PI-3075B	Clearwell No. 2 Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I3005
PI-3077	Chlorine Contact Influent Sample Pressure Gauge		0 - 50 PSIG	I3005
PI-3077A	Chlorine Contact Influent Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I3005
PI-3077B	Chlorine Contact Influent Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I3005
PI-3079	Chlorine Contact Effluent Sample Pressure Gauge		0 - 50 PSIG	I3005
PI-3079A	Chlorine Contact Effluent Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I3005
PI-3079B	Chlorine Contact Effluent Sample Pump Outlet Pressure Gauge		0 - 100 PSIG	I3005
PI-6025B	Hypo Metering Pumps Discharge Pressure Gauge(Before regulator)	SHS	0-50 PSIG	I3006
PI-6025C	Hypo Metering Pumps Discharge Pressure Gauge(After regulator)	SHS	0-50 PSIG	I3006
PI-6161B	ZOP Metering Pumps Discharge Pressure Gauge(Before regulator)		0-50 PSIG	I3006
PI-6161C	ZOP Metering Pumps Discharge Pressure Gauge(After regulator)		0-50 PSIG	I3006
PI-6211B	Fluoride Metering Pumps Discharge Pressure Gauge(Before regulator)	F	0-50 PSIG	I3006
PI-6211C	Fluoride Metering Pumps Discharge Pressure Gauge(After regulator)	F	0-50 PSIG	I3006
PI-3071A	Finished Chamber East Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I3006
PI-3071B	Finished Chamber East Sample Pump Discharge Pressure Gauge		0 - 100 PSIG	I3006
PI-6026B	Hypo Metering Pumps Discharge Pressure Gauge(Before regulator)	SHS	0-50 PSIG	I3006
PI-6026C	Hypo Metering Pumps Discharge Pressure Gauge(After regulator)	SHS	0-50 PSIG	I3006
PI-6162B	ZOP Metering Pumps Discharge Pressure Gauge(Before regulator)	ZOP	0-50 PSIG	I3006
PI-6162C	ZOP Metering Pumps Discharge Pressure Gauge(After regulator)	ZOP	0-50 PSIG	I3006
PI-6212B	Fluoride Metering Pumps Discharge Pressure Gauge(Before regulator)	F	0-50 PSIG	I3006
PI-6212C	Fluoride Metering Pumps Discharge Pressure Gauge(After regulator)	F	0-50 PSIG	I3006
PI-3072A	Finished Chamber East Sample Pump Inlet Pressure Gauge		-15 - 15 PSIG	I3006
PI-3072B	Finished Chamber East Sample Pump Discharge Pressure Gauge		0 - 100 PSIG	I3006
PI-3201	Air Scour Blower No. 1 Inlet Pressure Gauge	AIR	0-15 WC	I3200
PI-3202	Air Scour Blower No. 2 Inlet Pressure Gauge	AIR	0-15 WC	I3200
PI-3301A	Waste Pit Pump No. 1 Inlet Pressure Gauge	BW		I3300
PI-3301B	Waste Pit Pump No. 1 Discharge Pressure Gauge	BW	30 PSIG	I3300
PI-3302A	Waste Pit Pump No. 2 Inlet Pressure Gauge	BW		I3300
PI-3302B	Waste Pit Pump No. 2 Discharge Pressure Gauge	BW	30 PSIG	I3300
PI-3303A	Waste Pit Pump No. 3 Inlet Pressure Gauge	BW		I3300
PI-3303B	Waste Pit Pump No. 3 Discharge Pressure Gauge	BW	30 PSIG	I3300
PI-6001	SH Transfer Pump No. 1 Discharge Pressure Gauge	SH	60 PSIG	I6000
PI-6003	Potable Water Pressure Gauge			I6000
PI-6017	SH Transfer Pump No. 2 Discharge Pressure Gauge	SH	60 PSIG	I6001
PI-6021	SH Metering Pump No. 1 Discharge Pressure Gauge	SH	60 PSIG	I6002
PI-6022	SH Metering Pump No. 2 Discharge Pressure Gauge	SH	60 PSIG	I6002
PI-6023	SH Metering Pump No. 3 Discharge Pressure Gauge	SH	60 PSIG	I6002
PI-6024	SH Metering Pump No. 4 Discharge Pressure Gauge	SH	60 PSIG	I6003
PI-6025	SH Metering Pump No. 5 Discharge Pressure Gauge	SH	60 PSIG	I6003

PI-6026	SH Metering Pump No. 6 Discharge Pressure Gauge	SH	60 PSIG	I6003
PI-6101A	Alum Transfer Pump No. 1 Inlet Pressure Gauge	AL	30-0 IMV	I6100
PI-6101B	Alum Transfer Pump No. 1 Outlet Pressure Gauge	AL	0-50 PSIG	I6100
PI-6102A	Alum Transfer Pump No. 2 Inlet Pressure Gauge	AL	30-0 IMV	I6100
PI-6102B	Alum Transfer Pump No. 2 Outlet Pressure Gauge	AL	0-50 PSIG	I6100
PI-6103A	Alum Transfer Pump No. 3 Inlet Pressure Gauge	AL	30-0 IMV	I6100
PI-6103B	Alum Transfer Pump No. 3 Outlet Pressure Gauge	AL	0-50 PSIG	I6100
PI-6111	Alum Metering Pump No. 1 Discharge Pressure Gauge	AL	0-100 PSIG	I6101
PI-6111A	Alum Metering Pump No. 1 Discharge Pressure Gauge(Before regulator)	AL	0-100 PSIG	I6101
PI-6111B	Alum Metering Pump No. 1 Discharge Pressure Gauge(After regulator)	AL	0-100 PSIG	I6101
PI-6112	Alum Metering Pump No. 2 Discharge Pressure Gauge	AL	0-100 PSIG	I6101
PI-6112A	Alum Metering Pump No. 1 Discharge Pressure Gauge(Before regulator)	AL	0-100 PSIG	I6101
PI-6112B	Alum Metering Pump No. 1 Discharge Pressure Gauge(After regulator)	AL	0-100 PSIG	I6101
PI-6113	Alum Metering Pump No. 3 Discharge Pressure Gauge	AL	0-100 PSIG	I6101
PI-6113A	Alum Metering Pump No. 1 Discharge Pressure Gauge(Before regulator)	AL	0-100 PSIG	I6101
PI-6113B	Alum Metering Pump No. 1 Discharge Pressure Gauge(After regulator)	AL	0-100 PSIG	I6101
PI-6114	Alum Metering Pump No. 4 Discharge Pressure Gauge	AL	0-100 PSIG	I6101
PI-6114A	Alum Metering Pump No. 1 Discharge Pressure Gauge(Before regulator)	AL	0-100 PSIG	I6101
PI-6114B	Alum Metering Pump No. 1 Discharge Pressure Gauge(After regulator)	AL	0-100 PSIG	I6101
PI-6121	Lime Metering Pump No. 1 Discharge Pressure Gauge	N/A	N/A	I6103
PI-6122	Lime Metering Pump No. 2 Discharge Pressure Gauge	N/A	N/A	I6103
PI-6123	Lime Metering Pump No. 3 Discharge Pressure Gauge	N/A	N/A	I6103
PI-6124	Lime Metering Pump No. 4 Discharge Pressure Gauge	N/A	N/A	I6103
PI-6131	Lime Metering Pump No. 5 Discharge Pressure Gauge	N/A	N/A	I6104
PI-6132	Lime Metering Pump No. 6 Discharge Pressure Gauge	N/A	N/A	I6104
PI-6133	Lime Metering Pump No. 7 Discharge Pressure Gauge	N/A	N/A	I6104
PI-6134	Lime Metering Pump No. 8 Discharge Pressure Gauge	N/A	N/A	I6104
PI-6141	Lime Metering Pump No. 9 Discharge Pressure Gauge	N/A	N/A	I6105
PI-6142	Lime Metering Pump No. 10 Discharge Pressure Gauge	N/A	N/A	I6105
PI-6143	Lime Metering Pump No. 11 Discharge Pressure Gauge	N/A	N/A	I6105
PI-6144	Lime Metering Pump No. 12 Discharge Pressure Gauge	N/A	N/A	I6105
PI-6151A	ZOP Transfer Pump No. 1 Inlet Pressure Gauge	ZOP	30-0 IMV	I6106
PI-6151B	ZOP Transfer Pump No. 1 Outlet Pressure Gauge	ZOP	0-50 PSIG	I6106
PI-6152A	ZOP Transfer Pump No. 2 Inlet Pressure Gauge	ZOP	30-0 IMV	I6106
PI-6152B	ZOP Transfer Pump No. 2 Outlet Pressure Gauge	ZOP	0-50 PSIG	I6106
PI-6161	ZOP Metering Pump No. 1 Discharge Pressure Gauge	ZOP	0-50 PSIG	I6107
PI-6162	ZOP Metering Pump No. 2 Discharge Pressure Gauge	ZOP	0-50 PSIG	I6107
PI-6211A	Fluoride Metering Pump No. 1 Discharge Pressure Gauge	F	0-50 PSIG	I6201
PI-6212A	Fluoride Metering Pump No. 2 Discharge Pressure Gauge	F	0-50 PSIG	I6201

Pressure Transmitter - Section 40 73 20				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE	P&ID
DPIT-3000A	Settled Water Channel Level Point A			I3000A
DPIT-3000B	Settled Water Channel Level Point B			I3000B
DPIT-3000C	Settled Water Channel Level Point C			I3000B
PIT-3001	Filter 1 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3002	Filter 2 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3003	Filter 3 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3004	Filter 4 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3005	Filter 5 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3006	Filter 6 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3007	Filter 7 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3008	Filter 8 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3009	Filter 9 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3010	Filter 10 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3011	Filter 11 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3012	Filter 12 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3013	Filter 13 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3014	Filter 14 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3015	Filter 15 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3016	Filter 16 Discharge Pressure Transmitter	FLW	0-50 PSIG	I3001
PIT-3201	Air Scour Blower No. 1 Outlet Pressure Transmitter	AIR	0-15 PSIG	I3200
DPT-3201	Air Scour Blower No. 1 Differential Pressure Transmitter	AIR	0-30 Inches WC	I3200
DPT-3202	Air Scour Blower No. 2 Differential Pressure Transmitter	AIR	0-30 Inches WC	I3200
PIT-3202	Air Scour Blower No. 2 Outlet Pressure Transmitter	AIR	0-15 PSIG	I3200
PIT-6121	Lime Metering Pump No. 1 Discharge Pressure Transmitter	N/A	N/A	I6103
PIT-6122	Lime Metering Pump No. 2 Discharge Pressure Transmitter	N/A	N/A	I6103
PIT-6123	Lime Metering Pump No. 3 Discharge Pressure Transmitter	N/A	N/A	I6103
PIT-6124	Lime Metering Pump No. 4 Discharge Pressure Transmitter	N/A	N/A	I6103
PIT-6131	Lime Metering Pump No. 5 Discharge Pressure Transmitter	N/A	N/A	I6104
PIT-6132	Lime Metering Pump No. 6 Discharge Pressure Transmitter	N/A	N/A	I6104
PIT-6133	Lime Metering Pump No. 7 Discharge Pressure Transmitter	N/A	N/A	I6104
PIT-6134	Lime Metering Pump No. 8 Discharge Pressure Transmitter	N/A	N/A	I6104
PIT-6141	Lime Metering Pump No. 9 Discharge Pressure Transmitter	N/A	N/A	I6105
PIT-6142	Lime Metering Pump No. 10 Discharge Pressure Transmitter	N/A	N/A	I6105
PIT-6143	Lime Metering Pump No. 11 Discharge Pressure Transmitter	N/A	N/A	I6105
PIT-6144	Lime Metering Pump No. 12 Discharge Pressure Transmitter	N/A	N/A	I6105
Pressure and Differential Pressure Switches - Section 40 73 36				

TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE / Setpoint	P&ID
PSH-3030	Washwater Supply Pump Discharge High Pressure Switch			I3003
PSH-3301	Waste Pit Pump No. 1 Discharge High Pressure Switch	BW	40 PSIG	I3300
PSH-3302	Waste Pit Pump No. 2 Discharge High Pressure Switch	BW	40 PSIG	I3300
PSH-3303	Waste Pit Pump No. 3 Discharge High Pressure Switch	BW	40 PSIG	I3300
PSH-6001	SH Transfer Pump No. 1 Discharge High Pressure Switch	SH	150 PSIG	I6000
PSH-6017	SH Transfer Pump No. 2 Discharge High Pressure Switch	SH	150 PSIG	I6001
PSH-6021	SH Metering Pump No. 1 Dicharge High Pressure Switch	SH	150 PSIG	I6002
PSH-6022	SH Metering Pump No. 2 Dicharge High Pressure Switch	SH	150 PSIG	I6002
PSH-6023	SH Metering Pump No. 3 Dicharge High Pressure Switch	SH	150 PSIG	I6002
PSH-6024	SH Metering Pump No. 4 Dicharge High Pressure Switch	SH	150 PSIG	I6003
PSH-6025	SH Metering Pump No. 5 Dicharge High Pressure Switch	SH	150 PSIG	I6003
PSH-6026	SH Metering Pump No. 6 Discharge High Pressure Switch	SH	150 PSIG	I6003
PSH-6101	Alum Transfer Pump No. 1 Discharge High Pressure Switch	AL	150 PSIG	I6100
PSH-6102	Alum Transfer Pump No. 2 Discharge High Pressure Switch	AL	150 PSIG	I6100
PSH-6103	Alum Transfer Pump No. 3 Discharge High Pressure Switch	AL	150 PSIG	I6100
PSH-6111	Alum Metering Pump No. 1 Discharge High Pressure Switch	AL	150 PSIG	I6101
PSH-6112	Alum Metering Pump No. 2 Discharge High Pressure Switch	AL	150 PSIG	I6101
PSH-6113	Alum Metering Pump No. 3 Discharge High Pressure Switch	AL	150 PSIG	I6101
PSH-6114	Alum Metering Pump No. 4 Discharge High Pressure Switch	AL	150 PSIG	I6101
PSH-6151	ZOP Transfer Pump No. 1 Discharge High Pressure Switch	ZOP	150 PSIG	I6106
PSH-6152	ZOP Transfer Pump No. 2 Discharge High Pressure Switch	ZOP	150 PSIG	I6106
PSH-6161	ZOP Metering Pump No. 1 Discharge High Pressure Switch	ZOP	150 PSIG	I6107
PSH-6162	ZOP Metering Pump No. 2 Discharge High Pressure Switch	ZOP	150 PSIG	I6107
PSH-6201	Fluoride Transfer Pump No. 2 Discharge High Pressure Switch	F	150 PSIG	I6200
PSH-6202	Fluoride Transfer Pump No. 3 Discharge High Pressure Switch	F	150 PSIG	I6200
PSH-6211	Fluoride Metering Pump No. 1 Discharge High Pressure Switch	F	150 PSIG	I6201
PSH-6212	Fluoride Metering Pump No. 2 Discharge High Pressure Switch	F	150 PSIG	I6201
Temperature Transmitter - Section 40 74 63				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE / Setpoint	P&ID
TIT-3201A	Air Scour Blower No. 1 Inlet Temperature	AIR	0-100 F	I3200
TIT-3201B	Air Scour Blower No. 1 Outlet Temperature	AIR	0-300 F	I3200
TIT-3202A	Air Scour Blower No. 2 Inlet Temperature	AIR	0-100 F	I3200
TIT-3202B	Air Scour Blower No. 2 Outlet Temperature	AIR	0-300 F	I3200
Temperature Switches - Section 40 74 66				

TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE / Setpoint	P&ID
TSL-2060	Sample Pump Enclosure Space Heater Low Temp Switch			I2000
pH - ORP Analyzer - Section 40 75 1				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE	P&ID
AE/AIT-2100	Floc Basin 1A Stage 2 pH+TEMP Analyzer	BI	pH: 5-10 Temp: 0-32 °C	I2100
AE/AIT-2110	Floc Basin 1B Stage 2 pH+TEMP Analyzer	BI	pH: 5-10 Temp: 0-32 °C	I2100
AE/AIT-2200	Floc Basin 2A Stage 2 pH+TEMP Analyzer	BI	pH: 5-10 Temp: 0-32 °C	I2200
AE/AIT-2210	Floc Basin 2B Stage 2 pH+TEMP Analyzer	BI	pH: 5-10 Temp: 0-32 °C	I2200
AE/AIT-2300	Floc Basin 3A Stage 2 pH+TEMP Analyzer	BI	pH: 5-10 Temp: 0-32 °C	I2300
AE/AIT-2310	Floc Basin 3B Stage 2 pH+TEMP Analyzer	BI	pH: 5-10 Temp: 0-32 °C	I2300
AE/AIT-2400	Floc Basin 4A Stage 2 pH+TEMP Analyzer	BI	pH: 5-10 Temp: 0-32 °C	I2400
AE/AIT-2410	Floc Basin 4B Stage 2 pH+TEMP Analyzer	BI	pH: 5-10 Temp: 0-32 °C	I2400
AE/AIT-2052	Raw Water pH+TEMP Analyzer		pH: 5-10 Temp: 0-32 °C	I3004
AE/AIT-2053	Rapid Mix Effluent pH+TEMP Analyzer		pH: 5-10 Temp: 0-32 °C	I3004
AE/AIT-3074	Clearwell No. 1 pH/TEMP Analyzer		pH: 5-10 Temp: 0-32 °C	I3005
AE/AIT-3076	Clearwell No. 2 pH/TEMP Analyzer		pH: 5-10 Temp: 0-32 °C	I3005
AE/AIT-3078	Chlorine Contact Influent pH/TEMP Analyzer		pH: 5-10 Temp: 0-32 °C	I3005
AE/AIT-3080	Chlorine Contact Effluent pH/TEMP Analyzer		pH: 5-10 Temp: 0-32 °C	I3005
Chlorine Gas Monitors- Section 40 76 26				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE	P&ID
AE/AIT-3073	Clearwell No. 1 CL2 Analyzer			I3005
AE/AIT-3075	Clearwell No. 2 CL2 Analyzer			I3005
AE/AIT-3077	Chlorine Contact Influent CL2 Analyzer			I3005
AE/AIT-3079	Chlorine Contact Effluent CL2 Analyzer			I3005

Turbidity Analyzer - Section 40 75 53				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE	P&ID
AE/AIT-3001	Filter 1 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3002	Filter 2 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3003	Filter 3 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3004	Filter 4 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3005	Filter 5 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3006	Filter 6 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3007	Filter 7 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3008	Filter 8 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3009	Filter 9 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3010	Filter 10 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3011	Filter 11 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3012	Filter 12 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3013	Filter 13 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3014	Filter 14 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3015	Filter 15 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-3016	Filter 16 Turbidity Analyzer	FLW	0-15 NTU	I3001
AE/AIT-2051	Raw Water Turbidity Analyzer		0-15 NTU	I3004
AE/AIT-2120	Sed Basin 1A Turbidity		0-15 NTU	I3004
AE/AIT-2130	Sed Basin 1B Turbidity		0-15 NTU	I3004
AE/AIT-2220	Sed Basin 2A Turbidity		0-15 NTU	I3004
AE/AIT-2230	Sed Basin 2B Turbidity		0-15 NTU	I3004
AE/AIT-2320	Sed Basin 3A Turbidity		0-15 NTU	I3004
AE/AIT-2330	Sed Basin 3B Turbidity		0-15 NTU	I3004
AE/AIT-2420	Sed Basin 4A Turbidity		0-15 NTU	I3004
AE/AIT-2430	Sed Basin 4B Turbidity		0-15 NTU	I3004
AE/AIT-3071	CFE East Turbidity	FLW	0-15 NTU	I3005
AE/AIT-3072	CFE West Turbidity	FLW	0-15 NTU	I3005
Bed Expansion - Section 40 75 53.1				
TAG NUMBER	SERVICE DESCRIPTION	PROCESS FLUID	MEASURING RANGE	P&ID
AE-3001A	Filter No. 1 FilterSmart Bed Expansion and Turbidity Sensor	FI	1-32 FT / 0-50 NTU	I3001
AE-3008A	Filter No. 8 FilterSmart Bed Expansion and Turbidity Sensor	FI	1-32 FT / 0-50 NTU	I3001
AE-3009A	Filter No. 9 FilterSmart Bed Expansion and Turbidity Sensor	FI	1-32 FT / 0-50 NTU	I3001
AE-3016A	Filter No. 16 FilterSmart Bed Expansion and Turbidity Sensor	FI	1-32 FT / 0-50 NTU	I3001
AIT-3000	FilterSmart Bed Expansion Analyzer Transmitter	FI	1-32 FT / 0-50 NTU	I3001

CP-WIL-SR
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
FI-1502	Raw Water Flow (Lake Maumelle Line 1)	FIT-1502	AI	I1500	CP-WIL-SR
FI-1503	Raw Water Flow (Lake Maumelle Line 2)	FIT-1503	AI	I1500	CP-WIL-SR
LAHH-1500	Raw Water Meter Vault 1 Sump Level High-High	VCP-1500	DI	I1500	CP-WIL-SR
YA-1500	Raw Water Meter Vault 1 Sump Pump Fault	VCP-1500	DI	I1500	CP-WIL-SR
YLR-3071	Finished Chamber East Sample Pump Running	DC-2B	DI	I3006	CP-WIL-SR
YA-3071	Finished Chamber East Sample Pump Fault	DC-2B	DI	I3006	CP-WIL-SR
YLR-3072	Finished Chamber West Sample Pump Running	DC-2B	DI	I3006	CP-WIL-SR
YA-3072	Finished Chamber West Sample Pump Fault	DC-2B	DI	I3006	CP-WIL-SR
FAH-6160	Eyewash In Use	FSH-6160	DI	I6107	CP-WIL-SR
LAH-6160	Wet Floor Alarm	LSH-6160	DI	I6107	CP-WIL-SR
LI-6160	ZOP Day Tank Level	LIT-6160	AI	I6107	CP-WIL-SR
YL-6161	ZOP Metering Pump 1 In Remote	PMP-6161	DI	I6107	CP-WIL-SR
YLR-6161	ZOP Metering Pump 1 Running	PMP-6161	DI	I6107	CP-WIL-SR
YA-6161	ZOP Metering Pump 1 Fault	PMP-6161	DI	I6107	CP-WIL-SR
PAH-6161	ZOP Metering Pump 1 High Press	PMP-6161	DI	I6107	CP-WIL-SR
YCR-6161	ZOP Metering Pump 1 Start/Stop	PMP-6161	DO	I6107	CP-WIL-SR
SI-6161	ZOP Metering Pump 1 Speed Feedback	PMP-6161	AI	I6107	CP-WIL-SR
SC-6161	ZOP Metering Pump 1 Speed Control	PMP-6161	AO	I6107	CP-WIL-SR
FI-6161	ZOP Metering Pump 1 Disch Flow	FIT-6161	AI	I6107	CP-WIL-SR
YL-6162	ZOP Metering Pump 2 In Remote	PMP-6162	DI	I6107	CP-WIL-SR
YLR-6162	ZOP Metering Pump 2 Running	PMP-6162	DI	I6107	CP-WIL-SR
YA-6162	ZOP Metering Pump 2 Fault	PMP-6162	DI	I6107	CP-WIL-SR
PAH-6162	ZOP Metering Pump 2 High Press	PMP-6162	DI	I6107	CP-WIL-SR
YCR-6162	ZOP Metering Pump 2 Start/Stop	PMP-6162	DO	I6107	CP-WIL-SR
SI-6162	ZOP Metering Pump 2 Speed Feedback	PMP-6162	AI	I6107	CP-WIL-SR

CP-WIL-SR
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
SC-6162	ZOP Metering Pump 2 Speed Control	PMP-6162	AO	I6107	CP-WIL-SR
FI-6162	ZOP Metering Pump 2 Disch Flow	FIT-6162	AI	I6107	CP-WIL-SR
FAH-6205	Eyewash In Use	FSH-6205	DI	I6201	CP-WIL-SR
LAH-6205	Wet Floor Alarm	LSH-6205	DI	I6201	CP-WIL-SR
WI-6210	Weight	AIT-6210	AI	I6201	CP-WIL-SR
YL-6211	Fluoride Metering Pump 1 In Remote	PMP-6211	DI	I6201	CP-WIL-SR
YLR-6211	Fluoride Metering Pump 1 Running	PMP-6211	DI	I6201	CP-WIL-SR
YA-6211	Fluoride Metering Pump 1 Fault	PMP-6211	DI	I6201	CP-WIL-SR
PAH-6211	Fluoride Metering Pump 1 High Press	PMP-6211	DI	I6201	CP-WIL-SR
YCR-6211	Fluoride Metering Pump 1 Start/Stop	PMP-6211	DO	I6201	CP-WIL-SR
SI-6211	Fluoride Metering Pump 1 Speed Feedback	PMP-6211	AI	I6201	CP-WIL-SR
SC-6211	Fluoride Metering Pump 1 Speed Control	PMP-6211	AO	I6201	CP-WIL-SR
FI-6211	Fluoride Metering Pump 1 Disch Flow	FIT-6211	AI	I6201	CP-WIL-SR
YL-6212	Fluoride Metering Pump 2 In Remote	PMP-6212	DI	I6201	CP-WIL-SR
YLR-6212	Fluoride Metering Pump 2 Running	PMP-6212	DI	I6201	CP-WIL-SR
YA-6212	Fluoride Metering Pump 2 Fault	PMP-6212	DI	I6201	CP-WIL-SR
PAH-6212	Fluoride Metering Pump 2 High Press	PMP-6212	DI	I6201	CP-WIL-SR
YCR-6212	Fluoride Metering Pump 2 Start/Stop	PMP-6212	DO	I6201	CP-WIL-SR
SI-6212	Fluoride Metering Pump 2 Speed Feedback	PMP-6212	AI	I6201	CP-WIL-SR
SC-6212	Fluoride Metering Pump 2 Speed Control	PMP-6212	AO	I6201	CP-WIL-SR
FI-6212	Fluoride Metering Pump 2 Disch Flow	FIT-6212	AI	I6201	CP-WIL-SR
ZA-3081	SCADA Room PLC Panel Intrusion Alarm	CP-WIl-SR	DI	-	CP-WIL-SR
UA-3081A	SCADA Room PLC Panel UPS Circuit Fail	CP-WIl-SR	DI	-	CP-WIL-SR
UA-3081B	SCADA Room PLC Panel DC Power Fail	CP-WIl-SR	DI	-	CP-WIL-SR
	INFLUENT VALVE #1 OPEN INTERPOSING RELAY	EX EX PLC-5 RIO	DO	-	CP-WIL-SR

CP-WIL-SR
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
	INFLUENT VALVE #1 CLOSE INTERPOSING RELAY	EX PLC-5 RIO	DO	-	CP-WIL-SR
	#2 INFLUENT VALVE OPEN	EX PLC-5 RIO	DO	-	CP-WIL-SR
	#2 INFLUENT VALVE CLOSE	EX PLC-5 RIO	DO	-	CP-WIL-SR
	PLANT INFLUENT #2 VALVE OPEN STATUS	EX PLC-5 RIO	DI	-	CP-WIL-SR
	PLANT INFLUENT #2 VALVE CLOSE STATUS	EX PLC-5 RIO	DI	-	CP-WIL-SR
	#3 INFLUENT VALVE OPEN	EX PLC-5 RIO	DO	-	CP-WIL-SR
	#3 INFLUENT VALVE CLOSE	EX PLC-5 RIO	DO	-	CP-WIL-SR
	PLANT INFLUENT #3 VALVE OPEN STATUS	EX PLC-5 RIO	DI	-	CP-WIL-SR
	PLANT INFLUENT #3 VALVE CLOSE STATUS	EX PLC-5 RIO	DI	-	CP-WIL-SR
	INFLUENT VALVE 3 FLOW	EX PLC-5 RIO	AI	-	CP-WIL-SR
				-	CP-WIL-SR
	VALVE #19 OPEN INTERPOSING RELAY	EX PLC-5 RIO	DO	-	CP-WIL-SR
	VALVE #19 CLOSE INTERPOSING RELAY	EX PLC-5 RIO	DO	-	CP-WIL-SR
	VALVE 19 OPEN	EX PLC-5 RIO	DI	-	CP-WIL-SR
	VALVE 19 CLOSED	EX PLC-5 RIO	DI	-	CP-WIL-SR
				-	CP-WIL-SR
	VALVE 20 #1 INFLUENT OPEN	EX PLC-5 RIO	DI	-	CP-WIL-SR
	VALVE 20 #1 INFLUENT CLOSED	EX PLC-5 RIO	DI	-	CP-WIL-SR
	VALVE 28 SOLENOID OUTPUT FOR CLOSING	EX PLC-5 RIO	DO	-	CP-WIL-SR
	VALVE 28 SOLENOID OUTPUT FOR OPENING	EX PLC-5 RIO	DO	-	CP-WIL-SR
	VALVE 28 CLOSE PROX SWITCH	EX PLC-5 RIO	DI	-	CP-WIL-SR
	VALVE 28 OPEN PROX SWITCH	EX PLC-5 RIO	DI	-	CP-WIL-SR
	VALVE 66 SOLENOID OUTPUT FOR CLOSING	EX PLC-5 RIO	DO	-	CP-WIL-SR
	VALVE 66 SOLENOID OUTPUT FOR OPENING	EX PLC-5 RIO	DO	-	CP-WIL-SR
	VALVE 66 CLOSE PROX SWITCH	EX PLC-5 RIO	DI	-	CP-WIL-SR
	VALVE 66 OPEN PROX SWITCH	EX PLC-5 RIO	DI	-	CP-WIL-SR

CP-WIL-SR
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
	VALVE #67 NLR VLV OPEN	EX PLC-5 RIO	DO	-	CP-WIL-SR
	VALVE #67 NLR VLV CLOSE	EX PLC-5 RIO	DO	-	CP-WIL-SR
	VALVE #67 SOUTH BANK VALVE OPEN STATUS	EX PLC-5 RIO	DI	-	CP-WIL-SR
	VALVE #67 SOUTH BANK VALVE CLOSE STATUS	EX PLC-5 RIO	DI	-	CP-WIL-SR
	INTERMEDIATE NORTH LOOP VALVE #246 OPEN	EX PLC-5 RIO	DO	-	CP-WIL-SR
	INTERMEDIATE NORTH LOOP VALVE #246 CLOSE	EX PLC-5 RIO	DO	-	CP-WIL-SR
	INTERMEDIATE PULASKI HEIGHTS BYPASS VALVE OPEN	EX PLC-5 RIO	DO	-	CP-WIL-SR
	INTERMEDIATE PULASKI HEIGHTS BYPASS VALVE CLOSE	EX PLC-5 RIO	DO	-	CP-WIL-SR
	INTERMEDIATE PULASKI HIGHTS VALVE POSITION	EX PLC-5 RIO	AI	-	CP-WIL-SR
	MAUMELLE VALVE OPEN	EX PLC-5 RIO	DO	-	CP-WIL-SR
	MAUMELLE VALVE CLOSE	EX PLC-5 RIO	DO	-	CP-WIL-SR
	MAMUELLE VALVE LINE PRESSURE	EX PLC-5 RIO	AI	-	CP-WIL-SR
	MAMUELLE VALVE POSITION	EX PLC-5 RIO	AI	-	CP-WIL-SR
				-	CP-WIL-SR
	DISTRIBUTION ALARM BUZZER	EX PLC-5 RIO	DO	-	CP-WIL-SR
	WILSON PLANT ALARM BELL ON	EX PLC-5 RIO	DO	-	CP-WIL-SR
	WASTE WATER PIT LEVEL	EX PLC-5 RIO	AI	-	CP-WIL-SR
	SLUDGE FLUME FLOW	EX PLC-5 RIO	AI	-	CP-WIL-SR
	SLUDGE PIT LEVEL	EX PLC-5 RIO	AI	-	CP-WIL-SR
	WASH TANK EMER FILL VALVE OPEN	EX PLC-5 RIO	DO	-	CP-WIL-SR
	WASH TANK EMER FILL VALVE CLOSE	EX PLC-5 RIO	DO	-	CP-WIL-SR

TAG	DESCRIPTION	I/O TYPE	Ex. Reg No. in PLC-5	PLC-5 RIO Panel /Rack	Comments
	INTERMEDIATE NORTH LOOP VALVE #246 OPEN	DO	O:037:0	WIL-1/R2	Move to CP-WIL-SR when it is ready
	INTERMEDIATE NORTH LOOP VALVE #246 CLOSE	DO	O:037:1		Move to CP-WIL-SR when it is ready
	FLOURIDE PUMP REMOTE START/ STOP	DO	O:037:2		Delete after installation of new Fluoride system
	VALVE 28 SOLENOID OUTPUT FOR CLOSING	DO	O:037:11		Move to CP-WIL-SR when it is ready
	VALVE 28 SOLENOID OUTPUT FOR OPENING	DO	O:037:12		Move to CP-WIL-SR when it is ready
	VALVE 66 SOLENOID OUTPUT FOR CLOSING	DO	O:037:13		Move to CP-WIL-SR when it is ready
	VALVE 66 SOLENOID OUTPUT FOR OPENING	DO	O:037:14		Move to CP-WIL-SR when it is ready
	VALVE #19 OPEN INTERPOSING RELAY	DO	O:040:0	WIL-1/R2	Move to CP-WIL-SR when it is ready
	VALVE #19 CLOSE INTERPOSING RELAY	DO	O:040:1		
	INFLUENT VALVE #1 OPEN INTERPOSING RELAY	DO	O:040:2		
	INFLUENT VALVE #1 CLOSE INTERPOSING RELAY	DO	O:040:3		
	WILSON PLANT ALARM BELL ON	DO	O:040:17		
	INTERMEDIATE PULASKI HEIGHTS BYPASS VALVE OPEN	DO	O:041:12	WIL-1/R2	Move to CP-WIL-SR when it is ready
	INTERMEDIATE PULASKI HEIGHTS BYPASS VALVE CLOSE	DO	O:041:13		
	VALVE #67 NLR VLV OPEN	DO	O:077:15	WIL-2/R2	Move to CP-WIL-SR when it is ready
	VALVE #67 NLR VLV CLOSE	DO	O:077:16		
	#2 INFLUENT VALVE OPEN	DO	O:100:6	WIL-2/R2	Move to CP-WIL-SR when it is ready
	#2 INFLUENT VALVE CLOSE	DO	O:100:7		
	#3 INFLUENT VALVE OPEN	DO	O:100:10		
	#3 INFLUENT VALVE CLOSE	DO	O:100:11		
	DISTRIBUTION ALARM BUZZER	DO	O:100:13		
	HFS TANK #1 TRANSFER PUMP RUN STATUS TO PANEL LIGHT	DO	O:100:15		Delete after installation of new Fluoride system
	HFS TANK #2 TRANSFER PUMP RUN STATUS TO PANEL LIGHT	DO	O:100:16		Delete after installation of new Fluoride system
	MAUMELLE VALVE OPEN	DO	O:101:6	WIL-2/R2	Move to CP-WIL-SR when it is ready
	MAUMELLE VALVE CLOSE	DO	O:101:7		
	WASH TANK EMER FILL VALVE OPEN	DO	O:101:10		Move to PLC-MSTR in CP-WIL-FLT1 when it is ready
	WASH TANK EMER FILL VALVE CLOSE	DO	O:101:11		Move to PLC-MSTR in CP-WIL-FLT1 when it is ready
	WASH WATER PUMP START	DO	O:101:12		Move to PLC-MSTR in CP-WIL-FLT1 when it is ready
	WASH WATER PUMP STOP	DO	O:101:13		Move to PLC-MSTR in CP-WIL-FLT1 when it is ready
	FLUORIDE TANK LEVEL	AI	I:011:2	WIL-1/R1	Delete after installation of new Fluoride system
	PHOSPHATE TANK LEVEL	AI	I:011:3		Delete after installation of new ZOP system
	INTERMEDIATE PULASKI HIGHTS VALVE POSITION	AI	I:012:7	WIL-1/R1	Move to CP-WIL-SR when it is ready

TAG	DESCRIPTION	I/O TYPE	Ex. Reg No. in PLC-5	PLC-5 RIO Panel /Rack	Comments
	WASTE WATER PIT LEVEL	AI	I:014:3		Move to CP-WIL-SR when it is ready
	VALVE 28 CLOSE PROX SWITCH	DI	I:034:2	WIL-1/R2	Move to CP-WIL-SR when it is ready
	VALVE 28 OPEN PROX SWITCH	DI	I:034:4		
	VALVE 66 CLOSE PROX SWITCH	DI	I:034:6		
	VALVE 66 OPEN PROX SWITCH	DI	I:034:10		
	VALVE 20 #1 INFLUENT OPEN	DI	I:035:0	WIL-1/R2	Move to CP-WIL-SR when it is ready
	VALVE 20 #1 INFLUENT CLOSED	DI	I:035:1		
	VALVE 19 OPEN	DI	I:035:2		
	VALVE 19 CLOSED	DI	I:035:3		
	MAMUELLE VALVE LINE PRESSURE	AI	I:051:6		Move to CP-WIL-SR when it is ready
	MAMUELLE VALVE POSITION	AI	I:051:7		
	INFLUENT VALVE 3 FLOW	AI	I:052:2	WIL-2/R1	
	SLUDGE FLUME FLOW	AI	I:053:5	WIL-2/R1	Move to CP-WIL-SR when it is ready
	SLUDGE PIT LEVEL	AI	I:053:6		
	PHOSPHATE FEEDER STATUS	DI	I:070:4	WIL-2/R2	Delete after installation of new ZOP system
	PLANT INFLUENT #2 VALVE OPEN STATUS	DI	I:074:10	WIL-2/R2	Move to CP-WIL-SR when it is ready
	PLANT INFLUENT #2 VALVE CLOSE STATUS	DI	I:074:11		
	VALVE #67 SOUTH BANK VALVE OPEN STATUS	DI	I:074:12		
	VALVE #67 SOUTH BANK VALVE CLOSE STATUS	DI	I:074:13		
	PLANT INFLUENT #3 VALVE OPEN STATUS	DI	I:074:14		
	PLANT INFLUENT #3 VALVE CLOSE STATUS	DI	I:074:15		
	HFS DAY TANK CONTAINMENT OVERFLOW INPUT	DI	I:075:1	WIL-2/R2	Delete after installation of new Fluoride system
	HFS DAY TANK LOW LEVEL INPUT	DI	I:075:2		Delete after installation of new Fluoride system
	HFS DAY TANK FILL LINE FLOW SWITCH INPUT	DI	I:075:3		Delete after installation of new Fluoride system
	HFS DAY TANK HIGH HIGH LEVEL INPUT	DI	I:075:4		Delete after installation of new Fluoride system
	HFS DAY TANK HIGH LEVEL INPUT	DI	I:075:5		Delete after installation of new Fluoride system
	HFS DAY TANK #1 TRANSFER PUMP MANUAL START	DI	I:075:6		Delete after installation of new Fluoride system
	HFS DAY TANK #1 TRANSFER PUMP HOA IN HAND	DI	I:075:7		Delete after installation of new Fluoride system
	HFS DAY TANK #1 TRANSFER PUMP HOA IN AUTO	DI	I:075:10		Delete after installation of new Fluoride system
	HFS DAY TANK #2 TRANSFER PUMP HOA IN HAND	DI	I:075:11		Delete after installation of new Fluoride system

TAG	DESCRIPTION	I/O TYPE	Ex. Reg No. in PLC-5	PLC-5 RIO Panel /Rack	Comments
	HFS DAY TANK #2 TRANSFER PUMP HOA IN AUTO	DI	I:075:12		Delete after installation of new Fluoride system
	HFS DAY TANK #2 TRANSFER PUMP MANUAL START	DI	I:075:13		Delete after installation of new Fluoride system

CP-WIL-AR
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
AI-2051	Raw Water Turbidity	AIT-2051	AI	I3004	CP-WIL-AR
YA-2051	Analyzer Common Fault	AIT-2051	DI	I3004	CP-WIL-AR
AI-2052	Raw Water pH	AIT-2052	AI	I3004	CP-WIL-AR
TI-2052	Raw Water Temp	AIT-2052	AI	I3004	CP-WIL-AR
AI-2053	Rapid Mix Effluent pH	AIT-2052	AI	I3004	CP-WIL-AR
TI-2053	Rapid Mix Effluent Temp	AIT-2052	AI	I3004	CP-WIL-AR
YA-2052	Analyzer Common Fault	AIT-2052	DI	I3004	CP-WIL-AR
AI-2120	Sed Basin 1A Turbidity	AIT-2120	AI	I3004	CP-WIL-AR
YA-2120	Analyzer Common Fault	AIT-2120	DI	I3004	CP-WIL-AR
AI-2130	Sed Basin 1B Turbidity	AIT-2130	AI	I3004	CP-WIL-AR
YA-2130	Analyzer Common Fault	AIT-2130	DI	I3004	CP-WIL-AR
AI-2220	Sed Basin 2A Turbidity	AIT-2220	AI	I3004	CP-WIL-AR
YA-2220	Analyzer Common Fault	AIT-2220	DI	I3004	CP-WIL-AR
AI-2230	Sed Basin 2B Turbidity	AIT-2230	AI	I3004	CP-WIL-AR
YA-2230	Analyzer Common Fault	AIT-2230	DI	I3004	CP-WIL-AR
AI-2320	Sed Basin 3A Turbidity	AIT-2320	AI	I3004	CP-WIL-AR
YA-2320	Analyzer Common Fault	AIT-2320	DI	I3004	CP-WIL-AR
AI-2330	Sed Basin 3B Turbidity	AIT-2330	AI	I3004	CP-WIL-AR
YA-2330	Analyzer Common Fault	AIT-2330	DI	I3004	CP-WIL-AR
AI-2420	Sed Basin 4A Turbidity	AIT-2420	AI	I3004	CP-WIL-AR
YA-2420	Analyzer Common Fault	AIT-2420	DI	I3004	CP-WIL-AR
AI-2430	Sed Basin 4B Turbidity	AIT-2430	AI	I3004	CP-WIL-AR
YA-2430	Analyzer Common Fault	AIT-2430	DI	I3004	CP-WIL-AR
AI-3071	CFE East Turbidity	AIT-3071	AI	I3005	CP-WIL-AR
YA-3071	Analyzer Common Fault	AIT-3071	DI	I3005	CP-WIL-AR

CP-WIL-AR
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
AI-3072	CFE West Turbidity	AIT-3072	AI	I3005	CP-WIL-AR
YA-3072	Analyzer Common Fault	AIT-3072	DI	I3005	CP-WIL-AR
AI-3074	Clearwell No.1 pH	AIT-3074	AI	I3005	CP-WIL-AR
TI-3074	Clearwell No.1 Temp	AIT-3074	AI	I3005	CP-WIL-AR
AI-3076	Clearwell No.2 pH	AIT-3074	AI	I3005	CP-WIL-AR
TI-3076	Clearwell No.2 Temp	AIT-3074	AI	I3005	CP-WIL-AR
AI-3078	Chlorine Contact Infl pH	AIT-3074	AI	I3005	CP-WIL-AR
TI-3078	Chlorine Contact Infl Temp	AIT-3074	AI	I3005	CP-WIL-AR
AI-3080	Chlorine Contact Effl pH	AIT-3074	AI	I3005	CP-WIL-AR
TI-3080	Chlorine Contact Effl Temp	AIT-3074	AI	I3005	CP-WIL-AR
YA-3074	Analyzer Common Fault	AIT-3074	DI	I3005	CP-WIL-AR
AI-3073	Clearwell No.1 Chlorine	AIT-3073	AI	I3005	CP-WIL-AR
YA-3073	Analyzer Common Fault	AIT-3073	DI	I3005	CP-WIL-AR
AI-3075	Clearwell No.2 Chlorine	AIT-3075	AI	I3005	CP-WIL-AR
YA-3075	Analyzer Common Fault	AIT-3075	DI	I3005	CP-WIL-AR
AI-3077	Chlorine Contact Influent Chlorine	AIT-3077	AI	I3005	CP-WIL-AR
YA-3077	Analyzer Common Fault	AIT-3077	DI	I3005	CP-WIL-AR
AI-3079	Chlorine Contact Effluent Chlorine	AIT-3079	AI	I3005	CP-WIL-AR
YA-3079	Analyzer Common Fault	AIT-3079	DI	I3005	CP-WIL-AR
ZA-3071	Analyzer Room PLC Panel Intrusion Alarm	CP-WIL-AR	DI	-	CP-WIL-AR
UA-3071A	Analyzer Room PLC Panel UPS Circuit Fail	CP-WIL-AR	DI	-	CP-WIL-AR
UA-3071B	Analyzer Room PLC Panel DC Power Fail	CP-WIL-AR	DI	-	CP-WIL-AR

CP-WIL-FLT1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZLC-3001A	Filter No.1 Influent Valve Closed	VAL-3001A	DI	I3001	CP-WIl-FLT1
ZLO-3001A	Filter No.1 Influent Valve Opened	VAL-3001A	DI	I3001	CP-WIl-FLT1
YL-3001A	Filter No.1 Influent Valve In Remote	VAL-3001A	DI	I3001	CP-WIl-FLT1
ZCC-3001A	Filter No.1 Influent Valve Close Command	VAL-3001A	DO	I3001	CP-WIl-FLT1
ZCO-3001A	Filter No.1 Influent Valve Open Command	VAL-3001A	DO	I3001	CP-WIl-FLT1
YA-3001A	Filter No.1 Influent Valve Fault	VAL-3001A	DI	I3001	CP-WIl-FLT1
YL-3001B	Filter No.1 Effluent Valve In Remote	VAL-3001B	DI	I3001	CP-WIl-FLT1
YA-3001B	Filter No.1 Effluent Valve Fault	VAL-3001B	DI	I3001	CP-WIl-FLT1
ZI-3001B	Filter No.1 Effluent Valve Position Feedback	VAL-3001B	AI	I3001	CP-WIl-FLT1
ZCC-3001B	Filter No.1 Effluent Valve Close Pulse Command	VAL-3001B	DO	I3001	CP-WIl-FLT1
ZCO-3001B	Filter No.1 Effluent Valve Open Pulse Command	VAL-3001B	DO	I3001	CP-WIl-FLT1
ZLC-3001C	Filter No.1 Air Scour Valve Closed	VAL-3001C	DI	I3001	CP-WIl-FLT1
ZLO-3001C	Filter No.1 Air Scour Valve Opened	VAL-3001C	DI	I3001	CP-WIl-FLT1
YL-3001C	Filter No.1 Air Scour Valve In Remote	VAL-3001C	DI	I3001	CP-WIl-FLT1
ZCC-3001C	Filter No.1 Air Scour Valve Close Command	VAL-3001C	DO	I3001	CP-WIl-FLT1
ZCO-3001C	Filter No.1 Air Scour Valve Open Command	VAL-3001C	DO	I3001	CP-WIl-FLT1
YA-3001C	Filter No.1 Air Scour Valve Fault	VAL-3001C	DI	I3001	CP-WIl-FLT1
ZLC-3001D	Filter No.1 Backwash Valve Closed	VAL-3001D	DI	I3001	CP-WIl-FLT1
ZLO-3001D	Filter No.1 Backwash Valve Opened	VAL-3001D	DI	I3001	CP-WIl-FLT1
YL-3001D	Filter No.1 Backwash Valve In Remote	VAL-3001D	DI	I3001	CP-WIl-FLT1
ZCC-3001D	Filter No.1 Backwash Valve Close Command	VAL-3001D	DO	I3001	CP-WIl-FLT1
ZCO-3001D	Filter No.1 Backwash Valve Open Command	VAL-3001D	DO	I3001	CP-WIl-FLT1
YA-3001D	Filter No.1 Backwash Valve Fault	VAL-3001D	DI	I3001	CP-WIl-FLT1
ZLC-3001E	Filter No.1 Waste Washwater Valve Closed	VAL-3001E	DI	I3001	CP-WIl-FLT1
ZLO-3001E	Filter No.1 Waste Washwater Valve Opened	VAL-3001E	DI	I3001	CP-WIl-FLT1
YL-3001E	Filter No.1 Waste Washwater Valve In Remote	VAL-3001E	DI	I3001	CP-WIl-FLT1
ZCC-3001E	Filter No.1 Waste Washwater Valve Close Command	VAL-3001E	DO	I3001	CP-WIl-FLT1

CP-WIL-FLT1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZCO-3001E	Filter No.1 Waste Washwater Valve Open Command	VAL-3001E	DO	I3001	CP-WIl-FLT1
YA-3001E	Filter No.1 Waste Washwater Valve Fault	VAL-3001E	DI	I3001	CP-WIl-FLT1
ZLC-3001F	Filter No.1 To Waste Valve 1 Closed	VAL-3001F	DI	I3001	CP-WIl-FLT1
ZLO-3001F	Filter No.1 To Waste Valve 1 Opened	VAL-3001F	DI	I3001	CP-WIl-FLT1
YL-3001F	Filter No.1 To Waste Valve 1 In Remote	VAL-3001F	DI	I3001	CP-WIl-FLT1
ZCC-3001F	Filter No.1 To Waste Valve 1 Close Command	VAL-3001F	DO	I3001	CP-WIl-FLT1
ZCO-3001F	Filter No.1 To Waste Valve 1 Open Command	VAL-3001F	DO	I3001	CP-WIl-FLT1
YA-3001F	Filter No.1 To Waste Valve 1 Fault	VAL-3001F	DI	I3001	CP-WIl-FLT1
ZLC-3001G	Filter No.1 To Waste Valve 2 Closed	VAL-3001G	DI	I3001	CP-WIl-FLT1
ZLO-3001G	Filter No.1 To Waste Valve 2 Opened	VAL-3001G	DI	I3001	CP-WIl-FLT1
YL-3001G	Filter No.1 To Waste Valve 2 In Remote	VAL-3001G	DI	I3001	CP-WIl-FLT1
ZCC-3001G	Filter No.1 To Waste Valve 2 Close Command	VAL-3001G	DO	I3001	CP-WIl-FLT1
ZCO-3001G	Filter No.1 To Waste Valve 2 Open Command	VAL-3001G	DO	I3001	CP-WIl-FLT1
YA-3001G	Filter No.1 To Waste Valve 2 Fault	VAL-3001G	DI	I3001	CP-WIl-FLT1
ZLC-3001H	Filter No.1 Filtered Water Valve Closed	VAL-3001H	DI	I3001	CP-WIl-FLT1
ZLO-3001H	Filter No.1 Filtered Water Valve Opened	VAL-3001H	DI	I3001	CP-WIl-FLT1
YL-3001H	Filter No.1 Filtered Water Valve In Remote	VAL-3001H	DI	I3001	CP-WIl-FLT1
ZCC-3001H	Filter No.1 Filtered Water Valve Close Command	VAL-3001H	DO	I3001	CP-WIl-FLT1
ZCO-3001H	Filter No.1 Filtered Water Valve Open Command	VAL-3001H	DO	I3001	CP-WIl-FLT1
YA-3001H	Filter No.1 Filtered Water Valve Fault	VAL-3001H	DI	I3001	CP-WIl-FLT1
LI-3001	Filter No.1 Level	LIT-3001	AI	I3001	CP-WIl-FLT1
FI-3001	Filter No.1 Effluent Flow	FIT-3001	AI	I3001	CP-WIl-FLT1
AI-3001	Filter No.1 Effluent Turbidity	AIT-3001	AI	I3001	CP-WIl-FLT1
PI-3001	Filter No.1 Effluent Pressure	PIT-3001	AI	I3001	CP-WIl-FLT1
ZA-3001	Filter No.1 Control Console Intrusion Alarm	CP-WIl-FLT1	DI	-	CP-WIl-FLT1
UA-3001A	Filter No.1 Control Console UPS Circuit Fail	CP-WIl-FLT1	DI	-	CP-WIl-FLT1
UA-3001B	Filter No.1 Control Console DC Power Fail	CP-WIl-FLT1	DI	-	CP-WIl-FLT1

CP-WIL-MSTR

Input-Output List (New Points)

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
LI-3050	Filter Back Wash Tank 1 Level	DPIT-3050	AI	I3003	CP-WIL-MSTR
LI-3060	Filter Back Wash Tank 2 Level	DPIT-3060	AI	I3003	CP-WIL-MSTR
YL-3040	High Service PS Valve In Remote	VAL-3040	DI	I3003	CP-WIL-MSTR
YA-3040	High Service PS Valve Fault	VAL-3040	DI	I3003	CP-WIL-MSTR
ZLO-3040	High Service PS Valve Opened	VAL-3040	DI	I3003	CP-WIL-MSTR
ZLC-3040	High Service PS Valve Closed	VAL-3040	DI	I3003	CP-WIL-MSTR
ZCO-3040	High Service PS Valve Open Command	VAL-3040	DO	I3003	CP-WIL-MSTR
ZCC-3040	High Service PS Valve Close Command	VAL-3040	DO	I3003	CP-WIL-MSTR
YL-3030	Washwater Supply Pump In Remote	DC2B	DI	I3003	CP-WIL-MSTR
YLR-3030	Washwater Supply Pump Running	DC2B	DI	I3003	CP-WIL-MSTR
YA-3030	Washwater Supply Pump Fault	DC2B	DI	I3003	CP-WIL-MSTR
PAH-3030	Washwater Supply Pump High Discharge Pressure	DC2B	DI	I3003	CP-WIL-MSTR
YCR-3030	Washwater Supply Pump Start/Stop Command	DC2B	DO	I3003	CP-WIL-MSTR
YL-3070	Master Backwash Valve In Remote	VAL-3070	DI	I3003	CP-WIL-MSTR
YA-3070	Master Backwash Valve Fault	VAL-3070	DI	I3003	CP-WIL-MSTR
ZI-3070	Master Backwash Valve Position Feedback	VAL-3070	AI	I3003	CP-WIL-MSTR
ZCC-3070	Master Backwash Valve Close Pulse Command	VAL-3070	DO	I3003	CP-WIL-MSTR
ZCO-3070	Master Backwash Valve Open Pulse Command	VAL-3070	DO	I3003	CP-WIL-MSTR
FI-3070	Backwash Flow	FIT-3070	AI	I3003	CP-WIL-MSTR
FI-3070	Backwash Flow to Panel Meter	FI-3070	AO	I3003	CP-WIL-MSTR
LI-3000A	Filter Influent Flume Level Point A	DPIT-3000A	AI	I3000A	CP-WIL-MSTR
LI-3000B	Filter Influent Flume Level Point B	DPIT-3000B	AI	I3000A	CP-WIL-MSTR
LI-3000C	Filter Influent Flume Level Point C	DPIT-3000C	AI	I3000B	CP-WIL-MSTR
AI-3001A	Filter No.1 Backwash Turbidity	AIT-3000	DAI	I3001	CP-WIL-MSTR
ZI-3001A	Filter No.1 Bed Expansion	AIT-3000	DAI	I3001	CP-WIL-MSTR
AI-3008A	Filter No.8 Backwash Turbidity	AIT-3000	DAI	I3001	CP-WIL-MSTR

CP-WIL-MSTR

Input-Output List (New Points)

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZI-3008A	Filter No.8 Bed Expansion	AIT-3000	DAI	I3001	CP-WIL-MSTR
AI-3009A	Filter No.8 Backwash Turbidity	AIT-3000	DAI	I3001	CP-WIL-MSTR
ZI-3009A	Filter No.8 Bed Expansion	AIT-3000	DAI	I3001	CP-WIL-MSTR
AI-3016A	Filter No.16 Backwash Turbidity	AIT-3000	DAI	I3001	CP-WIL-MSTR
ZI-3016A	Filter No.16 Bed Expansion	AIT-3000	DAI	I3001	CP-WIL-MSTR

CP-WIL-BLWR
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YLR-3201	Blower 1 Running	VCP-BLWR-1	DDI	I3200	CP-WIL-BLWR
YA-3201	Blower 1 Fault	VCP-BLWR-1	DDI	I3200	CP-WIL-BLWR
YA3-3201	BLDG Power Fail	VCP-BLWR-1	DDI	I3200	CP-WIL-BLWR
YL-3201	Blower 1 In Remote	VCP-BLWR-1	DDI	I3200	CP-WIL-BLWR
YCR-3201	Blower 1 Start Command	VCP-BLWR-1	DDO	I3200	CP-WIL-BLWR
YSR-3201	Blower 1 Stop Command	VCP-BLWR-1	DDO	I3200	CP-WIL-BLWR
YLR-3202	Blower 2 Running	VCP-BLWR-2	DDI	I3200	CP-WIL-BLWR
YA-3202	Blower 2 Fault	VCP-BLWR-2	DDI	I3200	CP-WIL-BLWR
YA2-3202	PLC Fail	VCP-BLWR-2	DDI	I3200	CP-WIL-BLWR
YL-3202	Blower 2 In Remote	VCP-BLWR-2	DDI	I3200	CP-WIL-BLWR
YCR-3202	Blower 2 Start Command	VCP-BLWR-2	DDO	I3200	CP-WIL-BLWR
YSR-3202	Blower 2 Stop Command	VCP-BLWR-2	DDO	I3200	CP-WIL-BLWR
YL-3201A	Blower 1 Inlet Valve In Remote	VAL-3201	DDI	I3200	CP-WIL-BLWR
YA-3201A	Blower 1 Inlet Valve Fault	VAL-3201	DDI	I3200	CP-WIL-BLWR
ZI-3201	Blower 1 Inlet Valve Position Feedback	VAL-3201	DAI	I3200	CP-WIL-BLWR
ZC-3201	Blower 1 Inlet Valve Position Control	VAL-3201	DAO	I3200	CP-WIL-BLWR
DPI-3201	Blower 1 Air Filter Head Loss	DPT-3201	DAI	I3200	CP-WIL-BLWR
YL-3202A	Blower 2 Inlet Valve In Remote	VAL-3202	DDI	I3200	CP-WIL-BLWR
YA-3202A	Blower 2 Inlet Valve Fault	VAL-3202	DDI	I3200	CP-WIL-BLWR
ZI-3202	Blower 2 Inlet Valve Position Feedback	VAL-3202	DAI	I3200	CP-WIL-BLWR
ZC-3202	Blower 2 Inlet Valve Position Control	VAL-3202	DAO	I3200	CP-WIL-BLWR
DPI-3202	Blower 2 Air Filter Head Loss	DPT-3202	DAI	I3200	CP-WIL-BLWR
YL-3203	Blow Off Valve In Remote	VAL-3203	DI	I3200	CP-WIL-BLWR
YA-3203	Blow Off Valve Fault	VAL-3203	DI	I3200	CP-WIL-BLWR
ZLO-3203	Blow Off Valve Open	VAL-3203	DI	I3200	CP-WIL-BLWR
ZLC-3203	Blow Off Valve Closed	VAL-3203	DI	I3200	CP-WIL-BLWR
ZCO-3203	Blow Off Valve Open Command	VAL-3203	DO	I3200	CP-WIL-BLWR

CP-WIL-BLWR

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZCC-3203	Blow Off Valve Close Command	VAL-3203	DO	I3200	CP-WIL-BLWR
FI-3203	Blowers Common Disch Air Flow	FIT-3203	AI	I3200	CP-WIL-BLWR
FI-3203	Blowers Common Disch Air Flow	FIT-3203	DAI	I3200	CP-WIL-BLWR
FI-3203	Blowers Common Disch Air Flow	FIT-3203	DAI	I3200	CP-WIL-BLWR
FI-1501	Raw Water Flow (Jackson Reservoir)	FIT-1501	AI	I1500	CP-WIL-BLWR
ZA-3200	Blower Building PLC Panel Intrusion Alarm	CP-WIL-BLWR	DI	-	CP-WIL-BLWR
UA-3200A	Blower Building PLC Panel UPS Circuit Fail	CP-WIL-BLWR	DI	-	CP-WIL-BLWR
UA-3200B	Blower Building PLC Panel DC Power Fail	CP-WIL-BLWR	DI	-	CP-WIL-BLWR

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YLR-2061	Raw Water Sample Pump Running	MCC-EB1-1	DI	I2000	CP-WIL-EB1
YA-2061	Raw Water Sample Pump Fault	MCC-EB1-1	DI	I2000	CP-WIL-EB1
YLR-2062	Rapid Mix Effluent Sample Pump Running	MCC-EB1-1	DI	I2000	CP-WIL-EB1
YA-2062	Rapid Mix Effluent Sample Pump Fault	MCC-EB1-1	DI	I2000	CP-WIL-EB1
YA-2001	Heat Trace No. 1 Trouble Alarm	HT-RM-1	DI	I2000	CP-WIL-EB1
YA-2002	Heat Trace No. 2 Trouble Alarm	HT-RM-2	DI	I2000	CP-WIL-EB1
TAH-2011	Basin 1-1 Rapid Mixer Motor High Temp	VFD-2011	DDI	I2000	CP-WIL-EB1
YL-2011	Basin 1-1 Rapid Mixer In Remote	VFD-2011	DDI	I2000	CP-WIL-EB1
YLR-2011	Basin 1-1 Rapid Mixer Running	VFD-2011	DDI	I2000	CP-WIL-EB1
YA-2011	Basin 1-1 Rapid Mixer Fault	VFD-2011	DDI	I2000	CP-WIL-EB1
YCR-2011	Basin 1-1 Rapid Mixer Start/Stop	VFD-2011	DDO	I2000	CP-WIL-EB1
SI-2011	Basin 1-1 Rapid Mixer Speed Feedback	VFD-2011	DAI	I2000	CP-WIL-EB1
SC-2011	Basin 1-1 Rapid Mixer Speed Control	VFD-2011	DAO	I2000	CP-WIL-EB1
TAH-2012	Basin 1-2 Rapid Mixer Motor High Temp	VFD-2012	DDI	I2000	CP-WIL-EB1
YL-2012	Basin 1-2 Rapid Mixer In Remote	VFD-2012	DDI	I2000	CP-WIL-EB1
YLR-2012	Basin 1-2 Rapid Mixer Running	VFD-2012	DDI	I2000	CP-WIL-EB1
YA-2012	Basin 1-2 Rapid Mixer Fault	VFD-2012	DDI	I2000	CP-WIL-EB1
YCR-2012	Basin 1-2 Rapid Mixer Start/Stop	VFD-2012	DDO	I2000	CP-WIL-EB1
SI-2012	Basin 1-2 Rapid Mixer Speed Feedback	VFD-2012	DAI	I2000	CP-WIL-EB1
SC-2012	Basin 1-2 Rapid Mixer Speed Control	VFD-2012	DAO	I2000	CP-WIL-EB1
TAH-2021	Basin 2-1 Rapid Mixer Motor High Temp	VFD-2021	DDI	I2000	CP-WIL-EB1
YL-2021	Basin 2-1 Rapid Mixer In Remote	VFD-2021	DDI	I2000	CP-WIL-EB1
YLR-2021	Basin 2-1 Rapid Mixer Running	VFD-2021	DDI	I2000	CP-WIL-EB1
YA-2021	Basin 2-1 Rapid Mixer Fault	VFD-2021	DDI	I2000	CP-WIL-EB1
YCR-2021	Basin 2-1 Rapid Mixer Start/Stop	VFD-2021	DDO	I2000	CP-WIL-EB1
SI-2021	Basin 2-1 Rapid Mixer Speed Feedback	VFD-2021	DAI	I2000	CP-WIL-EB1
SC-2021	Basin 2-1 Rapid Mixer Speed Control	VFD-2021	DAO	I2000	CP-WIL-EB1

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
TAH-2022	Basin 2-2 Rapid Mixer Motor High Temp	VFD-2022	DDI	I2000	CP-WIL-EB1
YL-2022	Basin 2-2 Rapid Mixer In Remote	VFD-2022	DDI	I2000	CP-WIL-EB1
YLR-2022	Basin 2-2 Rapid Mixer Running	VFD-2022	DDI	I2000	CP-WIL-EB1
YA-2022	Basin 2-2 Rapid Mixer Fault	VFD-2022	DDI	I2000	CP-WIL-EB1
YCR-2022	Basin 2-2 Rapid Mixer Start/Stop	VFD-2022	DDO	I2000	CP-WIL-EB1
SI-2022	Basin 2-2 Rapid Mixer Speed Feedback	VFD-2022	DAI	I2000	CP-WIL-EB1
SC-2022	Basin 2-2 Rapid Mixer Speed Control	VFD-2022	DAO	I2000	CP-WIL-EB1
TAH-2031	Basin 3-1 Rapid Mixer Motor High Temp	VFD-2031	DDI	I2000	CP-WIL-EB1
YL-2031	Basin 3-1 Rapid Mixer In Remote	VFD-2031	DDI	I2000	CP-WIL-EB1
YLR-2031	Basin 3-1 Rapid Mixer Running	VFD-2031	DDI	I2000	CP-WIL-EB1
YA-2031	Basin 3-1 Rapid Mixer Fault	VFD-2031	DDI	I2000	CP-WIL-EB1
YCR-2031	Basin 3-1 Rapid Mixer Start/Stop	VFD-2031	DDO	I2000	CP-WIL-EB1
SI-2031	Basin 3-1 Rapid Mixer Speed Feedback	VFD-2031	DAI	I2000	CP-WIL-EB1
SC-2031	Basin 3-1 Rapid Mixer Speed Control	VFD-2031	DAO	I2000	CP-WIL-EB1
TAH-2032	Basin 3-2 Rapid Mixer Motor High Temp	VFD-2032	DDI	I2000	CP-WIL-EB1
YL-2032	Basin 3-2 Rapid Mixer In Remote	VFD-2032	DDI	I2000	CP-WIL-EB1
YLR-2032	Basin 3-2 Rapid Mixer Running	VFD-2032	DDI	I2000	CP-WIL-EB1
YA-2032	Basin 3-2 Rapid Mixer Fault	VFD-2032	DDI	I2000	CP-WIL-EB1
YCR-2032	Basin 3-2 Rapid Mixer Start/Stop	VFD-2032	DDO	I2000	CP-WIL-EB1
SI-2032	Basin 3-2 Rapid Mixer Speed Feedback	VFD-2032	DAI	I2000	CP-WIL-EB1
SC-2032	Basin 3-2 Rapid Mixer Speed Control	VFD-2032	DAO	I2000	CP-WIL-EB1
YLR-2143	Basin 1A Sample Pump Running	LCP-2143	DI	I2100	CP-WIL-EB1
YA-2143	Basin 1A Sample Pump Fault	LCP-2143	DI	I2100	CP-WIL-EB1
YLR-2153	Basin 1B Sample Pump Running	LCP-2153	DI	I2100	CP-WIL-EB1
YA-2153	Basin 1B Sample Pump Fault	LCP-2153	DI	I2100	CP-WIL-EB1
AI-2100	FLOC Basin 1A Stage 2 Ph	AIT-2100	AI	I2100	CP-WIL-EB1

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
TI-2100	FLOC Basin 1A Stage 2 Temp	AIT-2100	AI	I2100	CP-WIL-EB1
AI-2110	FLOC Basin 1B Stage 2 Ph	AIT-2110	AI	I2100	CP-WIL-EB1
TI-2110	FLOC Basin 1B Stage 2 Temp	AIT-2110	AI	I2100	CP-WIL-EB1
TAH-2101	Mixer 1A-1 Motor High Temp	VFD-2101	DDI	I2100	CP-WIL-EB1
YL-2101	Mixer 1A-1 In Remote	VFD-2101	DDI	I2100	CP-WIL-EB1
YA-2101	Mixer 1A-1 Fault	VFD-2101	DDI	I2100	CP-WIL-EB1
YLR-2101	Mixer 1A-1 Running	VFD-2101	DDI	I2100	CP-WIL-EB1
YCR-2101	Mixer 1A-1 Start/Stop	VFD-2101	DDO	I2100	CP-WIL-EB1
SI-2101	Mixer 1A-1 Speed Feedback	VFD-2101	DAI	I2100	CP-WIL-EB1
SC-2101	Mixer 1A-1 Speed Control	VFD-2101	DAO	I2100	CP-WIL-EB1
TAH-2102	Mixer 1A-2 Motor High Temp	VFD-2102	DDI	I2100	CP-WIL-EB1
YL-2102	Mixer 1A-2 In Remote	VFD-2102	DDI	I2100	CP-WIL-EB1
YA-2102	Mixer 1A-2 Fault	VFD-2102	DDI	I2100	CP-WIL-EB1
YLR-2102	Mixer 1A-2 Running	VFD-2102	DDI	I2100	CP-WIL-EB1
YCR-2102	Mixer 1A-2 Start/Stop	VFD-2102	DDO	I2100	CP-WIL-EB1
SI-2102	Mixer 1A-2 Speed Feedback	VFD-2102	DAI	I2100	CP-WIL-EB1
SC-2102	Mixer 1A-2 Speed Control	VFD-2102	DAO	I2100	CP-WIL-EB1
TAH-2103	Mixer 1A-3 Motor High Temp	VFD-2103	DDI	I2100	CP-WIL-EB1
YL-2103	Mixer 1A-3 In Remote	VFD-2103	DDI	I2100	CP-WIL-EB1
YA-2103	Mixer 1A-3 Fault	VFD-2103	DDI	I2100	CP-WIL-EB1
YLR-2103	Mixer 1A-3 Running	VFD-2103	DDI	I2100	CP-WIL-EB1
YCR-2103	Mixer 1A-3 Start/Stop	VFD-2103	DDO	I2100	CP-WIL-EB1
SI-2103	Mixer 1A-3 Speed Feedback	VFD-2103	DAI	I2100	CP-WIL-EB1
SC-2103	Mixer 1A-3 Speed Control	VFD-2103	DAO	I2100	CP-WIL-EB1
TAH-2104	Mixer 1A-4 Motor High Temp	VFD-2104	DDI	I2100	CP-WIL-EB1
YL-2104	Mixer 1A-4 In Remote	VFD-2104	DDI	I2100	CP-WIL-EB1

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YA-2104	Mixer 1A-4 Fault	VFD-2104	DDI	I2100	CP-WIL-EB1
YLR-2104	Mixer 1A-4 Running	VFD-2104	DDI	I2100	CP-WIL-EB1
YCR-2104	Mixer 1A-4 Start/Stop	VFD-2104	DDO	I2100	CP-WIL-EB1
SI-2104	Mixer 1A-4 Speed Feedback	VFD-2104	DAI	I2100	CP-WIL-EB1
SC-2104	Mixer 1A-4 Speed Control	VFD-2104	DAO	I2100	CP-WIL-EB1
TAH-2111	Mixer 1B-1 Motor High Temp	VFD-2111	DDI	I2100	CP-WIL-EB1
YL-2111	Mixer 1B-1 In Remote	VFD-2111	DDI	I2100	CP-WIL-EB1
YA-2111	Mixer 1B-1 Fault	VFD-2111	DDI	I2100	CP-WIL-EB1
YLR-2111	Mixer 1B-1 Running	VFD-2111	DDI	I2100	CP-WIL-EB1
YCR-2111	Mixer 1B-1 Start/Stop	VFD-2111	DDO	I2100	CP-WIL-EB1
SI-2111	Mixer 1B-1 Speed Feedback	VFD-2111	DAI	I2100	CP-WIL-EB1
SC-2111	Mixer 1B-1 Speed Control	VFD-2111	DAO	I2100	CP-WIL-EB1
TAH-2112	Mixer 1B-2 Motor High Temp	VFD-2112	DDI	I2100	CP-WIL-EB1
YL-2112	Mixer 1B-2 In Remote	VFD-2112	DDI	I2100	CP-WIL-EB1
YA-2112	Mixer 1B-2 Fault	VFD-2112	DDI	I2100	CP-WIL-EB1
YLR-2112	Mixer 1B-2 Running	VFD-2112	DDI	I2100	CP-WIL-EB1
YCR-2112	Mixer 1B-2 Start/Stop	VFD-2112	DDO	I2100	CP-WIL-EB1
SI-2112	Mixer 1B-2 Speed Feedback	VFD-2112	DAI	I2100	CP-WIL-EB1
SC-2112	Mixer 1B-2 Speed Control	VFD-2112	DAO	I2100	CP-WIL-EB1
TAH-2113	Mixer 1B-3 Motor High Temp	VFD-2113	DDI	I2100	CP-WIL-EB1
YL-2113	Mixer 1B-3 In Remote	VFD-2113	DDI	I2100	CP-WIL-EB1
YA-2113	Mixer 1B-3 Fault	VFD-2113	DDI	I2100	CP-WIL-EB1
YLR-2113	Mixer 1B-3 Running	VFD-2113	DDI	I2100	CP-WIL-EB1
YCR-2113	Mixer 1B-3 Start/Stop	VFD-2113	DDO	I2100	CP-WIL-EB1
SI-2113	Mixer 1B-3 Speed Feedback	VFD-2113	DAI	I2100	CP-WIL-EB1
SC-2113	Mixer 1B-3 Speed Control	VFD-2113	DAO	I2100	CP-WIL-EB1
TAH-2114	Mixer 1B-4 Motor High Temp	VFD-2114	DDI	I2100	CP-WIL-EB1

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YL-2114	Mixer 1B-4 In Remote	VFD-2114	DDI	I2100	CP-WIL-EB1
YA-2114	Mixer 1B-4 Fault	VFD-2114	DDI	I2100	CP-WIL-EB1
YLR-2114	Mixer 1B-4 Running	VFD-2114	DDI	I2100	CP-WIL-EB1
YCR-2114	Mixer 1B-4 Start/Stop	VFD-2114	DDO	I2100	CP-WIL-EB1
SI-2114	Mixer 1B-4 Speed Feedback	VFD-2114	DAI	I2100	CP-WIL-EB1
SC-2114	Mixer 1B-4 Speed Control	VFD-2114	DAO	I2100	CP-WIL-EB1
YL-2121	Basin 1A SCD 1 Running	VCP-2120	DDI	I2100	CP-WIL-EB1
YA-2121	Basin 1A SCD 1 In Remote	VCP-2120	DDI	I2100	CP-WIL-EB1
YLR-2121	Basin 1A SCD 1 Fault	VCP-2120	DDI	I2100	CP-WIL-EB1
YCR-2121	Basin 1A SCD 1 Start/Stop	VCP-2120	DDO	I2100	CP-WIL-EB1
YL-2122	Basin 1A SCD 2 Running	VCP-2120	DDI	I2100	CP-WIL-EB1
YA-2122	Basin 1A SCD 2 In Remote	VCP-2120	DDI	I2100	CP-WIL-EB1
YLR-2122	Basin 1A SCD 2 Fault	VCP-2120	DDI	I2100	CP-WIL-EB1
YCR-2122	Basin 1A SCD 2 Start/Stop	VCP-2120	DDO	I2100	CP-WIL-EB1
ZLO-2141	Basin 1A Sludge Valve 1 Opened	VCP-2120	DDI	I2100	CP-WIL-EB1
ZLC-2141	Basin 1A Sludge Valve 1 Closed	VCP-2120	DDI	I2100	CP-WIL-EB1
YL-2141	Basin 1A Sludge Valve 1 In Remote	VCP-2120	DDI	I2100	CP-WIL-EB1
YA-2141	Basin 1A Sludge Valve 1 Fault	VCP-2120	DDI	I2100	CP-WIL-EB1
ZCO-2141	Basin 1A Sludge Valve 1 Open Command	VCP-2120	DDO	I2100	CP-WIL-EB1
ZCC-2141	Basin 1A Sludge Valve 1 Close Command	VCP-2120	DDO	I2100	CP-WIL-EB1
ZLO-2142	Basin 1A Sludge Valve 2 Opened	VCP-2120	DDI	I2100	CP-WIL-EB1
ZLC-2142	Basin 1A Sludge Valve 2 Closed	VCP-2120	DDI	I2100	CP-WIL-EB1
YL-2142	Basin 1A Sludge Valve 2 In Remote	VCP-2120	DDI	I2100	CP-WIL-EB1
YA-2142	Basin 1A Sludge Valve 2 Fault	VCP-2120	DDI	I2100	CP-WIL-EB1
ZCO-2142	Basin 1A Sludge Valve 2 Open Command	VCP-2120	DDO	I2100	CP-WIL-EB1
ZCC-2142	Basin 1A Sludge Valve 2 Close Command	VCP-2120	DDO	I2100	CP-WIL-EB1

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YLR-2131	Basin 1B SCD 1 Running	VCP-2130	DDI	I2100	CP-WIL-EB1
YL-2131	Basin 1B SCD 1 In Remote	VCP-2130	DDI	I2100	CP-WIL-EB1
YA-2131	Basin 1B SCD 1 Fault	VCP-2130	DDI	I2100	CP-WIL-EB1
YCR-2131	Basin 1B SCD 1 Start/Stop	VCP-2130	DDO	I2100	CP-WIL-EB1
YLR-2132	Basin 1B SCD 2 Running	VCP-2130	DDI	I2100	CP-WIL-EB1
YL-2132	Basin 1B SCD 2 In Remote	VCP-2130	DDI	I2100	CP-WIL-EB1
YA-2132	Basin 1B SCD 2 Fault	VCP-2130	DDI	I2100	CP-WIL-EB1
YCR-2132	Basin 1B SCD 2 Start/Stop	VCP-2130	DDO	I2100	CP-WIL-EB1
ZLO-2151	Basin 1B Sludge Valve 1 Opened	VCP-2130	DDI	I2100	CP-WIL-EB1
ZLC-2151	Basin 1B Sludge Valve 1 Closed	VCP-2130	DDI	I2100	CP-WIL-EB1
YL-2151	Basin 1B Sludge Valve 1 In Remote	VCP-2130	DDI	I2100	CP-WIL-EB1
YA-2151	Basin 1B Sludge Valve 1 Fault	VCP-2130	DDI	I2100	CP-WIL-EB1
ZCO-2151	Basin 1B Sludge Valve 1 Open Command	VCP-2130	DDO	I2100	CP-WIL-EB1
ZCC-2151	Basin 1B Sludge Valve 1 Close Command	VCP-2130	DDO	I2100	CP-WIL-EB1
ZLO-2152	Basin 1B Sludge Valve 2 Opened	VCP-2130	DDI	I2100	CP-WIL-EB1
ZLC-2152	Basin 1B Sludge Valve 2 Closed	VCP-2130	DDI	I2100	CP-WIL-EB1
YL-2152	Basin 1B Sludge Valve 2 In Remote	VCP-2130	DDI	I2100	CP-WIL-EB1
YA-2152	Basin 1B Sludge Valve 2 Fault	VCP-2130	DDI	I2100	CP-WIL-EB1
ZCO-2152	Basin 1B Sludge Valve 2 Open Command	VCP-2130	DDO	I2100	CP-WIL-EB1
ZCC-2152	Basin 1B Sludge Valve 2 Close Command	VCP-2130	DDO	I2100	CP-WIL-EB1
YLR-2243	Basin 2A Sample Pump Running	LCP-2243	DI	I2200	CP-WIL-EB1
YA-2243	Basin 2A Sample Pump Fault	LCP-2243	DI	I2200	CP-WIL-EB1
YLR-2253	Basin 2B Sample Pump Running	LCP-2253	DI	I2200	CP-WIL-EB1
YA-2253	Basin 2B Sample Pump Fault	LCP-2253	DI	I2200	CP-WIL-EB1
AI-2200	FLOC Basin 2A Stage 2 pH	AIT-2200	AI	I2200	CP-WIL-EB1

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
TI-2200	FLOC Basin 2A Stage 2 Temp	AIT-2200	AI	I2200	CP-WIL-EB1
AI-2210	FLOC Basin 2B Stage 2 pH	AIT-2210	AI	I2200	CP-WIL-EB1
TI-2210	FLOC Basin 2B Stage 2 Temp	AIT-2210	AI	I2200	CP-WIL-EB1
TAH-2201	Mixer 2A-1 Motor High Temp	VFD-2201	DDI	I2200	CP-WIL-EB1
YL-2201	Mixer 2A-1 In Remote	VFD-2201	DDI	I2200	CP-WIL-EB1
YA-2201	Mixer 2A-1 Fault	VFD-2201	DDI	I2200	CP-WIL-EB1
YLR-2201	Mixer 2A-1 Running	VFD-2201	DDI	I2200	CP-WIL-EB1
YCR-2201	Mixer 2A-1 Start/Stop	VFD-2201	DDO	I2200	CP-WIL-EB1
SI-2201	Mixer 2A-1 Speed Feedback	VFD-2201	DAI	I2200	CP-WIL-EB1
SC-2201	Mixer 2A-1 Speed Control	VFD-2201	DAO	I2200	CP-WIL-EB1
TAH-2202	Mixer 2A-2 Motor High Temp	VFD-2202	DDI	I2200	CP-WIL-EB1
YL-2202	Mixer 2A-2 In Remote	VFD-2202	DDI	I2200	CP-WIL-EB1
YA-2202	Mixer 2A-2 Fault	VFD-2202	DDI	I2200	CP-WIL-EB1
YLR-2202	Mixer 2A-2 Running	VFD-2202	DDI	I2200	CP-WIL-EB1
YCR-2202	Mixer 2A-2 Start/Stop	VFD-2202	DDO	I2200	CP-WIL-EB1
SI-2202	Mixer 2A-2 Speed Feedback	VFD-2202	DAI	I2200	CP-WIL-EB1
SC-2202	Mixer 2A-2 Speed Control	VFD-2202	DAO	I2200	CP-WIL-EB1
TAH-2203	Mixer 2A-3 Motor High Temp	VFD-2203	DDI	I2200	CP-WIL-EB1
YL-2203	Mixer 2A-3 In Remote	VFD-2203	DDI	I2200	CP-WIL-EB1
YA-2203	Mixer 2A-3 Fault	VFD-2203	DDI	I2200	CP-WIL-EB1
YLR-2203	Mixer 2A-3 Running	VFD-2203	DDI	I2200	CP-WIL-EB1
YCR-2203	Mixer 2A-3 Start/Stop	VFD-2203	DDO	I2200	CP-WIL-EB1
SI-2203	Mixer 2A-3 Speed Feedback	VFD-2203	DAI	I2200	CP-WIL-EB1
SC-2203	Mixer 2A-3 Speed Control	VFD-2203	DAO	I2200	CP-WIL-EB1
TAH-2204	Mixer 2A-4 Motor High Temp	VFD-2204	DDI	I2200	CP-WIL-EB1
YL-2204	Mixer 2A-4 In Remote	VFD-2204	DDI	I2200	CP-WIL-EB1

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YA-2204	Mixer 2A-4 Fault	VFD-2204	DDI	I2200	CP-WIL-EB1
YLR-2204	Mixer 2A-4 Running	VFD-2204	DDI	I2200	CP-WIL-EB1
YCR-2204	Mixer 2A-4 Start/Stop	VFD-2204	DDO	I2200	CP-WIL-EB1
SI-2204	Mixer 2A-4 Speed Feedback	VFD-2204	DAI	I2200	CP-WIL-EB1
SC-2204	Mixer 2A-4 Speed Control	VFD-2204	DAO	I2200	CP-WIL-EB1
TAH-2205	Mixer 2A-5 Motor High Temp	VFD-2205	DDI	I2200	CP-WIL-EB1
YL-2205	Mixer 2A-5 In Remote	VFD-2205	DDI	I2200	CP-WIL-EB1
YA-2205	Mixer 2A-5 Fault	VFD-2205	DDI	I2200	CP-WIL-EB1
YLR-2205	Mixer 2A-5 Running	VFD-2205	DDI	I2200	CP-WIL-EB1
YCR-2205	Mixer 2A-5 Start/Stop	VFD-2205	DDO	I2200	CP-WIL-EB1
SI-2205	Mixer 2A-5 Speed Feedback	VFD-2205	DAI	I2200	CP-WIL-EB1
SC-2205	Mixer 2A-5 Speed Control	VFD-2205	DAO	I2200	CP-WIL-EB1
TAH-2211	Mixer 2B-1 Motor High Temp	VFD-2211	DDI	I2200	CP-WIL-EB1
YL-2211	Mixer 2B-1 In Remote	VFD-2211	DDI	I2200	CP-WIL-EB1
YA-2211	Mixer 2B-1 Fault	VFD-2211	DDI	I2200	CP-WIL-EB1
YLR-2211	Mixer 2B-1 Running	VFD-2211	DDI	I2200	CP-WIL-EB1
YCR-2211	Mixer 2B-1 Start/Stop	VFD-2211	DDO	I2200	CP-WIL-EB1
SI-2211	Mixer 2B-1 Speed Feedback	VFD-2211	DAI	I2200	CP-WIL-EB1
SC-2211	Mixer 2B-1 Speed Control	VFD-2211	DAO	I2200	CP-WIL-EB1
TAH-2212	Mixer 2B-2 Motor High Temp	VFD-2212	DDI	I2200	CP-WIL-EB1
YL-2212	Mixer 2B-2 In Remote	VFD-2212	DDI	I2200	CP-WIL-EB1
YA-2212	Mixer 2B-2 Fault	VFD-2212	DDI	I2200	CP-WIL-EB1
YLR-2212	Mixer 2B-2 Running	VFD-2212	DDI	I2200	CP-WIL-EB1
YCR-2212	Mixer 2B-2 Start/Stop	VFD-2212	DDO	I2200	CP-WIL-EB1
SI-2212	Mixer 2B-2 Speed Feedback	VFD-2212	DAI	I2200	CP-WIL-EB1
SC-2212	Mixer 2B-2 Speed Control	VFD-2212	DAO	I2200	CP-WIL-EB1
TAH-2213	Mixer 2B-3 Motor High Temp	VFD-2213	DDI	I2200	CP-WIL-EB1

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YL-2213	Mixer 2B-3 In Remote	VFD-2213	DDI	I2200	CP-WIL-EB1
YA-2213	Mixer 2B-3 Fault	VFD-2213	DDI	I2200	CP-WIL-EB1
YLR-2213	Mixer 2B-3 Running	VFD-2213	DDI	I2200	CP-WIL-EB1
YCR-2213	Mixer 2B-3 Start/Stop	VFD-2213	DDO	I2200	CP-WIL-EB1
SI-2213	Mixer 2B-3 Speed Feedback	VFD-2213	DAI	I2200	CP-WIL-EB1
SC-2213	Mixer 2B-3 Speed Control	VFD-2213	DAO	I2200	CP-WIL-EB1
TAH-2214	Mixer 2B-4 Motor High Temp	VFD-2214	DDI	I2200	CP-WIL-EB1
YL-2214	Mixer 2B-4 In Remote	VFD-2214	DDI	I2200	CP-WIL-EB1
YA-2214	Mixer 2B-4 Fault	VFD-2214	DDI	I2200	CP-WIL-EB1
YLR-2214	Mixer 2B-4 Running	VFD-2214	DDI	I2200	CP-WIL-EB1
YCR-2214	Mixer 2B-4 Start/Stop	VFD-2214	DDO	I2200	CP-WIL-EB1
SI-2214	Mixer 2B-4 Speed Feedback	VFD-2214	DAI	I2200	CP-WIL-EB1
SC-2214	Mixer 2B-4 Speed Control	VFD-2214	DAO	I2200	CP-WIL-EB1
TAH-2215	Waste Pit Pump 1 Motor High Temp	VFD-2215	DDI	I2200	CP-WIL-EB1
YL-2215	Waste Pit Pump 1 In Remote	VFD-2215	DDI	I2200	CP-WIL-EB1
YA-2215	Waste Pit Pump 1 Fault	VFD-2215	DDI	I2200	CP-WIL-EB1
YLR-2215	Waste Pit Pump 1 Running	VFD-2215	DDI	I2200	CP-WIL-EB1
YCR-2215	Waste Pit Pump 1 Start/Stop	VFD-2215	DDO	I2200	CP-WIL-EB1
SI-2215	Waste Pit Pump 1 Speed Feedback	VFD-2215	DAI	I2200	CP-WIL-EB1
SC-2215	Waste Pit Pump 1 Speed Control	VFD-2215	DAO	I2200	CP-WIL-EB1
YL-2221	Basin 2A SCD 1 Running	VCP-2220	DDI	I2200	CP-WIL-EB1
YA-2221	Basin 2A SCD 1 In Remote	VCP-2220	DDI	I2200	CP-WIL-EB1
YLR-2221	Basin 2A SCD 1 Fault	VCP-2220	DDI	I2200	CP-WIL-EB1
YCR-2221	Basin 2A SCD 1 Start/Stop	VCP-2220	DDO	I2200	CP-WIL-EB1
YL-2222	Basin 2A SCD 2 Running	VCP-2220	DDI	I2200	CP-WIL-EB1
YA-2222	Basin 2A SCD 2 In Remote	VCP-2220	DDI	I2200	CP-WIL-EB1
YLR-2222	Basin 2A SCD 2 Fault	VCP-2220	DDI	I2200	CP-WIL-EB1

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YCR-2222	Basin 2A SCD 2 Start/Stop	VCP-2220	DDO	I2200	CP-WIL-EB1
ZLO-2241	Basin 2A Sludge Valve 1 Opened	VCP-2220	DDI	I2200	CP-WIL-EB1
ZLC-2241	Basin 2A Sludge Valve 1 Closed	VCP-2220	DDI	I2200	CP-WIL-EB1
YL-2241	Basin 2A Sludge Valve 1 In Remote	VCP-2220	DDI	I2200	CP-WIL-EB1
YA-2241	Basin 2A Sludge Valve 1 Fault	VCP-2220	DDI	I2200	CP-WIL-EB1
ZCO-2241	Basin 2A Sludge Valve 1 Open Command	VCP-2220	DDO	I2200	CP-WIL-EB1
ZCC-2241	Basin 2A Sludge Valve 1 Close Command	VCP-2220	DDO	I2200	CP-WIL-EB1
ZLO-2242	Basin 2A Sludge Valve 2 Opened	VCP-2220	DDI	I2200	CP-WIL-EB1
ZLC-2242	Basin 2A Sludge Valve 2 Closed	VCP-2220	DDI	I2200	CP-WIL-EB1
YL-2242	Basin 2A Sludge Valve 2 In Remote	VCP-2220	DDI	I2200	CP-WIL-EB1
YA-2242	Basin 2A Sludge Valve 2 Fault	VCP-2220	DDI	I2200	CP-WIL-EB1
ZCO-2242	Basin 2A Sludge Valve 2 Open Command	VCP-2220	DDO	I2200	CP-WIL-EB1
ZCC-2242	Basin 2A Sludge Valve 2 Close Command	VCP-2220	DDO	I2200	CP-WIL-EB1
YLR-2231	Basin 2B SCD 1 Running	VCP-2230	DDI	I2200	CP-WIL-EB1
YL-2231	Basin 2B SCD 1 In Remote	VCP-2230	DDI	I2200	CP-WIL-EB1
YA-2231	Basin 2B SCD 1 Fault	VCP-2230	DDI	I2200	CP-WIL-EB1
YCR-2231	Basin 2B SCD 1 Start/Stop	VCP-2230	DDO	I2200	CP-WIL-EB1
YLR-2232	Basin 2B SCD 2 Running	VCP-2230	DDI	I2200	CP-WIL-EB1
YL-2232	Basin 2B SCD 2 In Remote	VCP-2230	DDI	I2200	CP-WIL-EB1
YA-2232	Basin 2B SCD 2 Fault	VCP-2230	DDI	I2200	CP-WIL-EB1
YCR-2232	Basin 2B SCD 2 Start/Stop	VCP-2230	DDO	I2200	CP-WIL-EB1
ZLO-2251	Basin 2B Sludge Valve 1 Opened	VCP-2230	DDI	I2200	CP-WIL-EB1
ZLC-2251	Basin 2B Sludge Valve 1 Closed	VCP-2230	DDI	I2200	CP-WIL-EB1
YL-2251	Basin 2B Sludge Valve 1 In Remote	VCP-2230	DDI	I2200	CP-WIL-EB1
YA-2251	Basin 2B Sludge Valve 1 Fault	VCP-2230	DDI	I2200	CP-WIL-EB1
ZCO-2251	Basin 2B Sludge Valve 1 Open Command	VCP-2230	DDO	I2200	CP-WIL-EB1

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZCC-2251	Basin 2B Sludge Valve 1 Close Command	VCP-2230	DDO	I2200	CP-WIL-EB1
ZLO-2252	Basin 2B Sludge Valve 2 Opened	VCP-2230	DDI	I2200	CP-WIL-EB1
ZLC-2252	Basin 2B Sludge Valve 2 Closed	VCP-2230	DDI	I2200	CP-WIL-EB1
YL-2252	Basin 2B Sludge Valve 2 In Remote	VCP-2230	DDI	I2200	CP-WIL-EB1
YA-2252	Basin 2B Sludge Valve 2 Fault	VCP-2230	DDI	I2200	CP-WIL-EB1
ZCO-2252	Basin 2B Sludge Valve 2 Open Command	VCP-2230	DDO	I2200	CP-WIL-EB1
ZCC-2252	Basin 2B Sludge Valve 2 Close Command	VCP-2230	DDO	I2200	CP-WIL-EB1
LI-3300	Waste Pit Wet Well Level	LIT-3300	AI	I3300	CP-WIL-EB1
ZCO-3300	Seal Water Line SOV Open/Close Command	VAL-3300	DO	I3300	CP-WIL-EB1
TAH-3301	Waste Pit Pump 1 Motor High Temp	VFD-3301	DDI	I3300	CP-WIL-EB1
YL-3301	Waste Pit Pump 1 In Remote	VFD-3301	DDI	I3300	CP-WIL-EB1
YA-3301	Waste Pit Pump 1 Fault	VFD-3301	DDI	I3300	CP-WIL-EB1
YLR-3301	Waste Pit Pump 1 Running	VFD-3301	DDI	I3300	CP-WIL-EB1
YCR-3301	Waste Pit Pump 1 Start/Stop	VFD-3301	DDO	I3300	CP-WIL-EB1
SI-3301	Waste Pit Pump 1 Speed Feedback	VFD-3301	DAI	I3300	CP-WIL-EB1
SC-3301	Waste Pit Pump 1 Speed Control	VFD-3301	DAO	I3300	CP-WIL-EB1
TAH-3302	Waste Pit Pump 2 Motor High Temp	VFD-3302	DDI	I3300	CP-WIL-EB1
YL-3302	Waste Pit Pump 2 In Remote	VFD-3302	DDI	I3300	CP-WIL-EB1
YA-3302	Waste Pit Pump 2 Fault	VFD-3302	DDI	I3300	CP-WIL-EB1
YLR-3302	Waste Pit Pump 2 Running	VFD-3302	DDI	I3300	CP-WIL-EB1
YCR-3302	Waste Pit Pump 2 Start/Stop	VFD-3302	DDO	I3300	CP-WIL-EB1
SI-3302	Waste Pit Pump 2 Speed Feedback	VFD-3302	DAI	I3300	CP-WIL-EB1
SC-3302	Waste Pit Pump 2 Speed Control	VFD-3302	DAO	I3300	CP-WIL-EB1
TAH-3303	Waste Pit Pump 3 Motor High Temp	VFD-3303	DDI	I3300	CP-WIL-EB1
YL-3303	Waste Pit Pump 3 In Remote	VFD-3303	DDI	I3300	CP-WIL-EB1

CP-WIL-EB1
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YA-3303	Waste Pit Pump 3 Fault	VFD-3303	DDI	I3300	CP-WIL-EB1
YLR-3303	Waste Pit Pump 3 Running	VFD-3303	DDI	I3300	CP-WIL-EB1
YCR-3303	Waste Pit Pump 3 Start/Stop	VFD-3303	DDO	I3300	CP-WIL-EB1
SI-3303	Waste Pit Pump 3 Speed Feedback	VFD-3303	DAI	I3300	CP-WIL-EB1
SC-3303	Waste Pit Pump 3 Speed Control	VFD-3303	DAO	I3300	CP-WIL-EB1
LI-3400	Sludge Pump Station Wet Well Level	LIT-3400	AI	I3400	CP-WIL-EB1
TAH-3401	Sludge Pump 1 Motor High Temp	MCC-EB1-1	DI	I3400	CP-WIL-EB1
MAH-3401	Sludge Pump 1 Motor Leak	MCC-EB1-1	DI	I3400	CP-WIL-EB1
YL-3401	Sludge Pump 1 In Remote	MCC-EB1-1	DI	I3400	CP-WIL-EB1
YA-3401	Sludge Pump 1 Fault	MCC-EB1-1	DI	I3400	CP-WIL-EB1
YLR-3401	Sludge Pump 1 Running	MCC-EB1-1	DI	I3400	CP-WIL-EB1
YCR-3401	Sludge Pump 1 Start/Stop	MCC-EB1-1	DO	I3400	CP-WIL-EB1
TAH-3402	Sludge Pump 2 Motor High Temp	MCC-EB1-2	DI	I3400	CP-WIL-EB1
MAH-3402	Sludge Pump 2 Motor Leak	MCC-EB1-2	DI	I3400	CP-WIL-EB1
YL-3402	Sludge Pump 2 In Remote	MCC-EB1-2	DI	I3400	CP-WIL-EB1
YA-3402	Sludge Pump 2 Fault	MCC-EB1-2	DI	I3400	CP-WIL-EB1
YLR-3402	Sludge Pump 2 Running	MCC-EB1-2	DI	I3400	CP-WIL-EB1
YCR-3402	Sludge Pump 2 Start/Stop	MCC-EB1-2	DO	I3400	CP-WIL-EB1
ZA-7000	Electrical Building 1 PLC Panel Intrusion Alarm	CP-WIL-EB1	DI	-	CP-WIL-EB1
UA-7000A	Electrical Building 1 PLC Panel UPS Circuit Fail	CP-WIL-EB1	DI	-	CP-WIL-EB1
UA-7000B	Electrical Building 1 PLC Panel DC Power Fail	CP-WIL-EB1	DI	-	CP-WIL-EB1

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YLR-2343	Basin 3A Sample Pump Running	LCP-2343	DI	I2300	CP-WIL-EB2
YA-2343	Basin 3A Sample Pump Fault	LCP-2343	DI	I2300	CP-WIL-EB2
YLR-2353	Basin 3B Sample Pump Running	LCP-2353	DI	I2300	CP-WIL-EB2
YA-2353	Basin 3B Sample Pump Fault	LCP-2353	DI	I2300	CP-WIL-EB2
AI-2300	FLOC Basin 3A Stage 2 pH	AIT-2300	AI	I2300	CP-WIL-EB2
TI-2300	FLOC Basin 3A Stage 2 Temp	AIT-2300	AI	I2300	CP-WIL-EB2
YA-2300	FLOC Basin 3A Stage 2 pH/Temp Analizer Fault	AIT-2300	DI	I2300	CP-WIL-EB2
AI-2310	FLOC Basin 3B Stage 2 pH	AIT-2310	AI	I2300	CP-WIL-EB2
TI-2310	FLOC Basin 3B Stage 2 Temp	AIT-2310	AI	I2300	CP-WIL-EB2
YA-2310	FLOC Basin 3B Stage 2 pH/Temp Analizer Fault	AIT-2310	DI	I2300	CP-WIL-EB2
TAH-2301	Mixer 3A-1 Motor High Temp	VFD-2301	DDI	I2300	CP-WIL-EB2
YL-2301	Mixer 3A-1 In Remote	VFD-2301	DDI	I2300	CP-WIL-EB2
YA-2301	Mixer 3A-1 Fault	VFD-2301	DDI	I2300	CP-WIL-EB2
YLR-2301	Mixer 3A-1 Running	VFD-2301	DDI	I2300	CP-WIL-EB2
YCR-2301	Mixer 3A-1 Start/Stop	VFD-2301	DDO	I2300	CP-WIL-EB2
SI-2301	Mixer 3A-1 Speed Feedback	VFD-2301	DAI	I2300	CP-WIL-EB2
SC-2301	Mixer 3A-1 Speed Control	VFD-2301	DAO	I2300	CP-WIL-EB2
TAH-2302	Mixer 3A-2 Motor High Temp	VFD-2302	DDI	I2300	CP-WIL-EB2
YL-2302	Mixer 3A-2 In Remote	VFD-2302	DDI	I2300	CP-WIL-EB2
YA-2302	Mixer 3A-2 Fault	VFD-2302	DDI	I2300	CP-WIL-EB2
YLR-2302	Mixer 3A-2 Running	VFD-2302	DDI	I2300	CP-WIL-EB2
YCR-2302	Mixer 3A-2 Start/Stop	VFD-2302	DDO	I2300	CP-WIL-EB2
SI-2302	Mixer 3A-2 Speed Feedback	VFD-2302	DAI	I2300	CP-WIL-EB2
SC-2302	Mixer 3A-2 Speed Control	VFD-2302	DAO	I2300	CP-WIL-EB2
TAH-2303	Mixer 3A-3 Motor High Temp	VFD-2303	DDI	I2300	CP-WIL-EB2
YL-2303	Mixer 3A-3 In Remote	VFD-2303	DDI	I2300	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YA-2303	Mixer 3A-3 Fault	VFD-2303	DDI	I2300	CP-WIL-EB2
YLR-2303	Mixer 3A-3 Running	VFD-2303	DDI	I2300	CP-WIL-EB2
YCR-2303	Mixer 3A-3 Start/Stop	VFD-2303	DDO	I2300	CP-WIL-EB2
SI-2303	Mixer 3A-3 Speed Feedback	VFD-2303	DAI	I2300	CP-WIL-EB2
SC-2303	Mixer 3A-3 Speed Control	VFD-2303	DAO	I2300	CP-WIL-EB2
TAH-2304	Mixer 3A-4 Motor High Temp	VFD-2304	DDI	I2300	CP-WIL-EB2
YL-2304	Mixer 3A-4 In Remote	VFD-2304	DDI	I2300	CP-WIL-EB2
YA-2304	Mixer 3A-4 Fault	VFD-2304	DDI	I2300	CP-WIL-EB2
YLR-2304	Mixer 3A-4 Running	VFD-2304	DDI	I2300	CP-WIL-EB2
YCR-2304	Mixer 3A-4 Start/Stop	VFD-2304	DDO	I2300	CP-WIL-EB2
SI-2304	Mixer 3A-4 Speed Feedback	VFD-2304	DAI	I2300	CP-WIL-EB2
SC-2304	Mixer 3A-4 Speed Control	VFD-2304	DAO	I2300	CP-WIL-EB2
TAH-2305	Mixer 3A-5 Motor High Temp	VFD-2304	DDI	I2300	CP-WIL-EB2
YL-2305	Mixer 3A-5 In Remote	VFD-2304	DDI	I2300	CP-WIL-EB2
YA-2305	Mixer 3A-5 Fault	VFD-2304	DDI	I2300	CP-WIL-EB2
YLR-2305	Mixer 3A-5 Running	VFD-2304	DDI	I2300	CP-WIL-EB2
YCR-2305	Mixer 3A-5 Start/Stop	VFD-2304	DDO	I2300	CP-WIL-EB2
SI-2305	Mixer 3A-5 Speed Feedback	VFD-2304	DAI	I2300	CP-WIL-EB2
SC-2305	Mixer 3A-5 Speed Control	VFD-2304	DAO	I2300	CP-WIL-EB2
TAH-2306	Mixer 3A-6 Motor High Temp	VFD-2304	DDI	I2300	CP-WIL-EB2
YL-2306	Mixer 3A-6 In Remote	VFD-2304	DDI	I2300	CP-WIL-EB2
YA-2306	Mixer 3A-6 Fault	VFD-2304	DDI	I2300	CP-WIL-EB2
YLR-2306	Mixer 3A-6 Running	VFD-2304	DDI	I2300	CP-WIL-EB2
YCR-2306	Mixer 3A-6 Start/Stop	VFD-2304	DDO	I2300	CP-WIL-EB2
SI-2306	Mixer 3A-6 Speed Feedback	VFD-2304	DAI	I2300	CP-WIL-EB2
SC-2306	Mixer 3A-6 Speed Control	VFD-2304	DAO	I2300	CP-WIL-EB2
TAH-2311	Mixer 3B-1 Motor High Temp	VFD-2311	DDI	I2300	CP-WIL-EB2
YL-2311	Mixer 3B-1 In Remote	VFD-2311	DDI	I2300	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YA-2311	Mixer 3B-1 Fault	VFD-2311	DDI	I2300	CP-WIL-EB2
YLR-2311	Mixer 3B-1 Running	VFD-2311	DDI	I2300	CP-WIL-EB2
YCR-2311	Mixer 3B-1 Start/Stop	VFD-2311	DDO	I2300	CP-WIL-EB2
SI-2311	Mixer 3B-1 Speed Feedback	VFD-2311	DAI	I2300	CP-WIL-EB2
SC-2311	Mixer 3B-1 Speed Control	VFD-2311	DAO	I2300	CP-WIL-EB2
TAH-2312	Mixer 3B-2 Motor High Temp	VFD-2312	DDI	I2300	CP-WIL-EB2
YL-2312	Mixer 3B-2 In Remote	VFD-2312	DDI	I2300	CP-WIL-EB2
YA-2312	Mixer 3B-2 Fault	VFD-2312	DDI	I2300	CP-WIL-EB2
YLR-2312	Mixer 3B-2 Running	VFD-2312	DDI	I2300	CP-WIL-EB2
YCR-2312	Mixer 3B-2 Start/Stop	VFD-2312	DDO	I2300	CP-WIL-EB2
SI-2312	Mixer 3B-2 Speed Feedback	VFD-2312	DAI	I2300	CP-WIL-EB2
SC-2312	Mixer 3B-2 Speed Control	VFD-2312	DAO	I2300	CP-WIL-EB2
TAH-2313	Mixer 3B-3 Motor High Temp	VFD-2313	DDI	I2300	CP-WIL-EB2
YL-2313	Mixer 3B-3 In Remote	VFD-2313	DDI	I2300	CP-WIL-EB2
YA-2313	Mixer 3B-3 Fault	VFD-2313	DDI	I2300	CP-WIL-EB2
YLR-2313	Mixer 3B-3 Running	VFD-2313	DDI	I2300	CP-WIL-EB2
YCR-2313	Mixer 3B-3 Start/Stop	VFD-2313	DDO	I2300	CP-WIL-EB2
SI-2313	Mixer 3B-3 Speed Feedback	VFD-2313	DAI	I2300	CP-WIL-EB2
SC-2313	Mixer 3B-3 Speed Control	VFD-2313	DAO	I2300	CP-WIL-EB2
TAH-2314	Mixer 3B-4 Motor High Temp	VFD-2314	DDI	I2300	CP-WIL-EB2
YL-2314	Mixer 3B-4 In Remote	VFD-2314	DDI	I2300	CP-WIL-EB2
YA-2314	Mixer 3B-4 Fault	VFD-2314	DDI	I2300	CP-WIL-EB2
YLR-2314	Mixer 3B-4 Running	VFD-2314	DDI	I2300	CP-WIL-EB2
YCR-2314	Mixer 3B-4 Start/Stop	VFD-2314	DDO	I2300	CP-WIL-EB2
SI-2314	Mixer 3B-4 Speed Feedback	VFD-2314	DAI	I2300	CP-WIL-EB2
SC-2314	Mixer 3B-4 Speed Control	VFD-2314	DAO	I2300	CP-WIL-EB2
TAH-2315	Mixer 3B-5 Motor High Temp	VFD-2315	DDI	I2300	CP-WIL-EB2
YL-2315	Mixer 3B-5 In Remote	VFD-2315	DDI	I2300	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YA-2315	Mixer 3B-5 Fault	VFD-2315	DDI	I2300	CP-WIL-EB2
YLR-2315	Mixer 3B-5 Running	VFD-2315	DDI	I2300	CP-WIL-EB2
YCR-2315	Mixer 3B-5 Start/Stop	VFD-2315	DDO	I2300	CP-WIL-EB2
SI-2315	Mixer 3B-5 Speed Feedback	VFD-2315	DAI	I2300	CP-WIL-EB2
SC-2315	Mixer 3B-5 Speed Control	VFD-2315	DAO	I2300	CP-WIL-EB2
TAH-2316	Mixer 3B-6 Motor High Temp	VFD-2316	DDI	I2300	CP-WIL-EB2
YL-2316	Mixer 3B-6 In Remote	VFD-2316	DDI	I2300	CP-WIL-EB2
YA-2316	Mixer 3B-6 Fault	VFD-2316	DDI	I2300	CP-WIL-EB2
YLR-2316	Mixer 3B-6 Running	VFD-2316	DDI	I2300	CP-WIL-EB2
YCR-2316	Mixer 3B-6 Start/Stop	VFD-2316	DDO	I2300	CP-WIL-EB2
SI-2316	Mixer 3B-6 Speed Feedback	VFD-2316	DAI	I2300	CP-WIL-EB2
SC-2316	Mixer 3B-6 Speed Control	VFD-2316	DAO	I2300	CP-WIL-EB2
YL-2321	Basin 3A SCD 1 Running	VCP-2320	DDI	I2300	CP-WIL-EB2
YA-2321	Basin 3A SCD 1 In Remote	VCP-2320	DDI	I2300	CP-WIL-EB2
YLR-2321	Basin 3A SCD 1 Fault	VCP-2320	DDI	I2300	CP-WIL-EB2
YCR-2321	Basin 3A SCD 1 Start/Stop	VCP-2320	DDO	I2300	CP-WIL-EB2
YL-2324	Basin 3A SCD 2 Running	VCP-2320	DDI	I2300	CP-WIL-EB2
YA-2324	Basin 3A SCD 2 In Remote	VCP-2320	DDI	I2300	CP-WIL-EB2
YLR-2324	Basin 3A SCD 2 Fault	VCP-2320	DDI	I2300	CP-WIL-EB2
YCR-2324	Basin 3A SCD 2 Start/Stop	VCP-2320	DDO	I2300	CP-WIL-EB2
ZLO-2341	Basin 3A Sludge Valve 1 Opened	VCP-2320	DDI	I2300	CP-WIL-EB2
ZLC-2341	Basin 3A Sludge Valve 1 Closed	VCP-2320	DDI	I2300	CP-WIL-EB2
YL-2341	Basin 3A Sludge Valve 1 In Remote	VCP-2320	DDI	I2300	CP-WIL-EB2
YA-2341	Basin 3A Sludge Valve 1 Fault	VCP-2320	DDI	I2300	CP-WIL-EB2
ZCO-2341	Basin 3A Sludge Valve 1 Open Command	VCP-2320	DDO	I2300	CP-WIL-EB2
ZCC-2341	Basin 3A Sludge Valve 1 Close Command	VCP-2320	DDO	I2300	CP-WIL-EB2
ZLO-2342	Basin 3A Sludge Valve 2 Opened	VCP-2320	DDI	I2300	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZLC-2342	Basin 3A Sludge Valve 2 Closed	VCP-2320	DDI	I2300	CP-WIL-EB2
YL-2342	Basin 3A Sludge Valve 2 In Remote	VCP-2320	DDI	I2300	CP-WIL-EB2
YA-2342	Basin 3A Sludge Valve 2 Fault	VCP-2320	DDI	I2300	CP-WIL-EB2
ZCO-2342	Basin 3A Sludge Valve 2 Open Command	VCP-2320	DDO	I2300	CP-WIL-EB2
ZCC-2342	Basin 3A Sludge Valve 2 Close Command	VCP-2320	DDO	I2300	CP-WIL-EB2
YLR-2331	Basin 3B SCD 1 Running	VCP-2330	DDI	I2300	CP-WIL-EB2
YL-2331	Basin 3B SCD 1 In Remote	VCP-2330	DDI	I2300	CP-WIL-EB2
YA-2331	Basin 3B SCD 1 Fault	VCP-2330	DDI	I2300	CP-WIL-EB2
YCR-2331	Basin 3B SCD 1 Start/Stop	VCP-2330	DDO	I2300	CP-WIL-EB2
YLR-2332	Basin 3B SCD 2 Running	VCP-2330	DDI	I2300	CP-WIL-EB2
YL-2332	Basin 3B SCD 2 In Remote	VCP-2330	DDI	I2300	CP-WIL-EB2
YA-2332	Basin 3B SCD 2 Fault	VCP-2330	DDI	I2300	CP-WIL-EB2
YCR-2332	Basin 3B SCD 2 Start/Stop	VCP-2330	DDO	I2300	CP-WIL-EB2
ZLO-2351	Basin 3B Sludge Valve 1 Opened	VCP-2330	DDI	I2300	CP-WIL-EB2
ZLC-2351	Basin 3B Sludge Valve 1 Closed	VCP-2330	DDI	I2300	CP-WIL-EB2
YL-2351	Basin 3B Sludge Valve 1 In Remote	VCP-2330	DDI	I2300	CP-WIL-EB2
YA-2351	Basin 3B Sludge Valve 1 Fault	VCP-2330	DDI	I2300	CP-WIL-EB2
ZCO-2351	Basin 3B Sludge Valve 1 Open Command	VCP-2330	DDO	I2300	CP-WIL-EB2
ZCC-2351	Basin 3B Sludge Valve 1 Close Command	VCP-2330	DDO	I2300	CP-WIL-EB2
ZLO-2352	Basin 3B Sludge Valve 2 Opened	VCP-2330	DDI	I2300	CP-WIL-EB2
ZLC-2352	Basin 3B Sludge Valve 2 Closed	VCP-2330	DDI	I2300	CP-WIL-EB2
YL-2352	Basin 3B Sludge Valve 2 In Remote	VCP-2330	DDI	I2300	CP-WIL-EB2
YA-2352	Basin 3B Sludge Valve 2 Fault	VCP-2330	DDI	I2300	CP-WIL-EB2
ZCO-2352	Basin 3B Sludge Valve 2 Open Command	VCP-2330	DDO	I2300	CP-WIL-EB2
ZCC-2352	Basin 3B Sludge Valve 2 Close Command	VCP-2330	DDO	I2300	CP-WIL-EB2
YLR-2443	Basin 4A Sample Pump Running	LCP-2443	DI	I2400	CP-WIL-EB2
YA-2443	Basin 4A Sample Pump Fault	LCP-2443	DI	I2400	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YLR-2453	Basin 4B Sample Pump Running	LCP-2453	DI	I2400	CP-WIL-EB2
YA-2453	Basin 4B Sample Pump Fault	LCP-2453	DI	I2400	CP-WIL-EB2
AI-2400	FLOC Basin 4A Stage 2 pH	AIT-2400	AI	I2400	CP-WIL-EB2
TI-2400	FLOC Basin 4A Stage 2 Temp	AIT-2400	AI	I2400	CP-WIL-EB2
YA-2400	FLOC Basin 4A Stage 2 pH/Temp Analizer Fault	AIT-2400	DI	I2400	CP-WIL-EB2
AI-2410	FLOC Basin 4B Stage 2 pH	AIT-2410	AI	I2400	CP-WIL-EB2
TI-2410	FLOC Basin 4B Stage 2 Temp	AIT-2410	AI	I2400	CP-WIL-EB2
YA-2410	FLOC Basin 4B Stage 2 pH/Temp Analizer Fault	AIT-2410	DI	I2400	CP-WIL-EB2
TAH-2401	Mixer 4A-1 Motor High Temp	VFD-2401	DDI	I2400	CP-WIL-EB2
YL-2401	Mixer 4A-1 In Remote	VFD-2401	DDI	I2400	CP-WIL-EB2
YA-2401	Mixer 4A-1 Fault	VFD-2401	DDI	I2400	CP-WIL-EB2
YLR-2401	Mixer 4A-1 Running	VFD-2401	DDI	I2400	CP-WIL-EB2
YCR-2401	Mixer 4A-1 Start/Stop	VFD-2401	DDO	I2400	CP-WIL-EB2
SI-2401	Mixer 4A-1 Speed Feedback	VFD-2401	DAI	I2400	CP-WIL-EB2
SC-2401	Mixer 4A-1 Speed Control	VFD-2401	DAO	I2400	CP-WIL-EB2
TAH-2402	Mixer 4A-2 Motor High Temp	VFD-2402	DDI	I2400	CP-WIL-EB2
YL-2402	Mixer 4A-2 In Remote	VFD-2402	DDI	I2400	CP-WIL-EB2
YA-2402	Mixer 4A-2 Fault	VFD-2402	DDI	I2400	CP-WIL-EB2
YLR-2402	Mixer 4A-2 Running	VFD-2402	DDI	I2400	CP-WIL-EB2
YCR-2402	Mixer 4A-2 Start/Stop	VFD-2402	DDO	I2400	CP-WIL-EB2
SI-2402	Mixer 4A-2 Speed Feedback	VFD-2402	DAI	I2400	CP-WIL-EB2
SC-2402	Mixer 4A-2 Speed Control	VFD-2402	DAO	I2400	CP-WIL-EB2
TAH-2403	Mixer 4A-3 Motor High Temp	VFD-2403	DDI	I2400	CP-WIL-EB2
YL-2403	Mixer 4A-3 In Remote	VFD-2403	DDI	I2400	CP-WIL-EB2
YA-2403	Mixer 4A-3 Fault	VFD-2403	DDI	I2400	CP-WIL-EB2
YLR-2403	Mixer 4A-3 Running	VFD-2403	DDI	I2400	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YCR-2403	Mixer 4A-3 Start/Stop	VFD-2403	DDO	I2400	CP-WIL-EB2
SI-2403	Mixer 4A-3 Speed Feedback	VFD-2403	DAI	I2400	CP-WIL-EB2
SC-2403	Mixer 4A-3 Speed Control	VFD-2403	DAO	I2400	CP-WIL-EB2
TAH-2404	Mixer 4A-4 Motor High Temp	VFD-2404	DDI	I2400	CP-WIL-EB2
YL-2404	Mixer 4A-4 In Remote	VFD-2404	DDI	I2400	CP-WIL-EB2
YA-2404	Mixer 4A-4 Fault	VFD-2404	DDI	I2400	CP-WIL-EB2
YLR-2404	Mixer 4A-4 Running	VFD-2404	DDI	I2400	CP-WIL-EB2
YCR-2404	Mixer 4A-4 Start/Stop	VFD-2404	DDO	I2400	CP-WIL-EB2
SI-2404	Mixer 4A-4 Speed Feedback	VFD-2404	DAI	I2400	CP-WIL-EB2
SC-2404	Mixer 4A-4 Speed Control	VFD-2404	DAO	I2400	CP-WIL-EB2
TAH-2405	Mixer 4A-5 Motor High Temp	VFD-2405	DDI	I2400	CP-WIL-EB2
YL-2405	Mixer 4A-5 In Remote	VFD-2405	DDI	I2400	CP-WIL-EB2
YA-2405	Mixer 4A-5 Fault	VFD-2405	DDI	I2400	CP-WIL-EB2
YLR-2405	Mixer 4A-5 Running	VFD-2405	DDI	I2400	CP-WIL-EB2
YCR-2405	Mixer 4A-5 Start/Stop	VFD-2405	DDO	I2400	CP-WIL-EB2
SI-2405	Mixer 4A-5 Speed Feedback	VFD-2405	DAI	I2400	CP-WIL-EB2
SC-2405	Mixer 4A-5 Speed Control	VFD-2405	DAO	I2400	CP-WIL-EB2
TAH-2406	Mixer 4A-6 Motor High Temp	VFD-2406	DDI	I2400	CP-WIL-EB2
YL-2406	Mixer 4A-6 In Remote	VFD-2406	DDI	I2400	CP-WIL-EB2
YA-2406	Mixer 4A-6 Fault	VFD-2406	DDI	I2400	CP-WIL-EB2
YLR-2406	Mixer 4A-6 Running	VFD-2406	DDI	I2400	CP-WIL-EB2
YCR-2406	Mixer 4A-6 Start/Stop	VFD-2406	DDO	I2400	CP-WIL-EB2
SI-2406	Mixer 4A-6 Speed Feedback	VFD-2406	DAI	I2400	CP-WIL-EB2
SC-2406	Mixer 4A-6 Speed Control	VFD-2406	DAO	I2400	CP-WIL-EB2
TAH-2411	Mixer 4B-1 Motor High Temp	VFD-2411	DDI	I2400	CP-WIL-EB2
YL-2411	Mixer 4B-1 In Remote	VFD-2411	DDI	I2400	CP-WIL-EB2
YA-2411	Mixer 4B-1 Fault	VFD-2411	DDI	I2400	CP-WIL-EB2
YLR-2411	Mixer 4B-1 Running	VFD-2411	DDI	I2400	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YCR-2411	Mixer 4B-1 Start/Stop	VFD-2411	DDO	I2400	CP-WIL-EB2
SI-2411	Mixer 4B-1 Speed Feedback	VFD-2411	DAI	I2400	CP-WIL-EB2
SC-2411	Mixer 4B-1 Speed Control	VFD-2411	DAO	I2400	CP-WIL-EB2
TAH-2412	Mixer 4B-2 Motor High Temp	VFD-2412	DDI	I2400	CP-WIL-EB2
YL-2412	Mixer 4B-2 In Remote	VFD-2412	DDI	I2400	CP-WIL-EB2
YA-2412	Mixer 4B-2 Fault	VFD-2412	DDI	I2400	CP-WIL-EB2
YLR-2412	Mixer 4B-2 Running	VFD-2412	DDI	I2400	CP-WIL-EB2
YCR-2412	Mixer 4B-2 Start/Stop	VFD-2412	DDO	I2400	CP-WIL-EB2
SI-2412	Mixer 4B-2 Speed Feedback	VFD-2412	DAI	I2400	CP-WIL-EB2
SC-2412	Mixer 4B-2 Speed Control	VFD-2412	DAO	I2400	CP-WIL-EB2
TAH-2413	Mixer 4B-3 Motor High Temp	VFD-2413	DDI	I2400	CP-WIL-EB2
YL-2413	Mixer 4B-3 In Remote	VFD-2413	DDI	I2400	CP-WIL-EB2
YA-2413	Mixer 4B-3 Fault	VFD-2413	DDI	I2400	CP-WIL-EB2
YLR-2413	Mixer 4B-3 Running	VFD-2413	DDI	I2400	CP-WIL-EB2
YCR-2413	Mixer 4B-3 Start/Stop	VFD-2413	DDO	I2400	CP-WIL-EB2
SI-2413	Mixer 4B-3 Speed Feedback	VFD-2413	DAI	I2400	CP-WIL-EB2
SC-2413	Mixer 4B-3 Speed Control	VFD-2413	DAO	I2400	CP-WIL-EB2
TAH-2414	Mixer 4B-4 Motor High Temp	VFD-2414	DDI	I2400	CP-WIL-EB2
YL-2414	Mixer 4B-4 In Remote	VFD-2414	DDI	I2400	CP-WIL-EB2
YA-2414	Mixer 4B-4 Fault	VFD-2414	DDI	I2400	CP-WIL-EB2
YLR-2414	Mixer 4B-4 Running	VFD-2414	DDI	I2400	CP-WIL-EB2
YCR-2414	Mixer 4B-4 Start/Stop	VFD-2414	DDO	I2400	CP-WIL-EB2
SI-2414	Mixer 4B-4 Speed Feedback	VFD-2414	DAI	I2400	CP-WIL-EB2
SC-2414	Mixer 4B-4 Speed Control	VFD-2414	DAO	I2400	CP-WIL-EB2
TAH-2415	Mixer 4B-5 Motor High Temp	VFD-2415	DDI	I2400	CP-WIL-EB2
YL-2415	Mixer 4B-5 In Remote	VFD-2415	DDI	I2400	CP-WIL-EB2
YA-2415	Mixer 4B-5 Fault	VFD-2415	DDI	I2400	CP-WIL-EB2
YLR-2415	Mixer 4B-5 Running	VFD-2415	DDI	I2400	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YCR-2415	Mixer 4B-5 Start/Stop	VFD-2415	DDO	I2400	CP-WIL-EB2
SI-2415	Mixer 4B-5 Speed Feedback	VFD-2415	DAI	I2400	CP-WIL-EB2
SC-2415	Mixer 4B-5 Speed Control	VFD-2415	DAO	I2400	CP-WIL-EB2
TAH-2416	Mixer 4B-6 Motor High Temp	VFD-2416	DDI	I2400	CP-WIL-EB2
YL-2416	Mixer 4B-6 In Remote	VFD-2416	DDI	I2400	CP-WIL-EB2
YA-2416	Mixer 4B-6 Fault	VFD-2416	DDI	I2400	CP-WIL-EB2
YLR-2416	Mixer 4B-6 Running	VFD-2416	DDI	I2400	CP-WIL-EB2
YCR-2416	Mixer 4B-6 Start/Stop	VFD-2416	DDO	I2400	CP-WIL-EB2
SI-2416	Mixer 4B-6 Speed Feedback	VFD-2416	DAI	I2400	CP-WIL-EB2
SC-2416	Mixer 4B-6 Speed Control	VFD-2416	DAO	I2400	CP-WIL-EB2
YL-2421	Basin 4A SCD 1 Running	VCP-2420	DDI	I2400	CP-WIL-EB2
YA-2421	Basin 4A SCD 1 In Remote	VCP-2420	DDI	I2400	CP-WIL-EB2
YLR-2421	Basin 4A SCD 1 Fault	VCP-2420	DDI	I2400	CP-WIL-EB2
YCR-2421	Basin 4A SCD 1 Start/Stop	VCP-2420	DDO	I2400	CP-WIL-EB2
YL-2422	Basin 4A SCD 2 Running	VCP-2420	DDI	I2400	CP-WIL-EB2
YA-2422	Basin 4A SCD 2 In Remote	VCP-2420	DDI	I2400	CP-WIL-EB2
YLR-2422	Basin 4A SCD 2 Fault	VCP-2420	DDI	I2400	CP-WIL-EB2
YCR-2422	Basin 4A SCD 2 Start/Stop	VCP-2420	DDO	I2400	CP-WIL-EB2
ZLO-2441	Basin 4A Sludge Valve 1 Opened	VCP-2420	DDI	I2400	CP-WIL-EB2
ZLC-2441	Basin 4A Sludge Valve 1 Closed	VCP-2420	DDI	I2400	CP-WIL-EB2
YL-2441	Basin 4A Sludge Valve 1 In Remote	VCP-2420	DDI	I2400	CP-WIL-EB2
YA-2441	Basin 4A Sludge Valve 1 Fault	VCP-2420	DDI	I2400	CP-WIL-EB2
ZCO-2441	Basin 4A Sludge Valve 1 Open Command	VCP-2420	DDO	I2400	CP-WIL-EB2
ZCC-2441	Basin 4A Sludge Valve 1 Close Command	VCP-2420	DDO	I2400	CP-WIL-EB2
ZLO-2442	Basin 4A Sludge Valve 2 Opened	VCP-2420	DDI	I2400	CP-WIL-EB2
ZLC-2442	Basin 4A Sludge Valve 2 Closed	VCP-2420	DDI	I2400	CP-WIL-EB2
YL-2442	Basin 4A Sludge Valve 2 In Remote	VCP-2420	DDI	I2400	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YA-2442	Basin 4A Sludge Valve 2 Fault	VCP-2420	DDI	I2400	CP-WIL-EB2
ZCO-2442	Basin 4A Sludge Valve 2 Open Command	VCP-2420	DDO	I2400	CP-WIL-EB2
ZCC-2442	Basin 4A Sludge Valve 2 Close Command	VCP-2420	DDO	I2400	CP-WIL-EB2
YLR-2431	Basin 4B SCD 1 Running	VCP-2430	DDI	I2400	CP-WIL-EB2
YL-2431	Basin 4B SCD 1 In Remote	VCP-2430	DDI	I2400	CP-WIL-EB2
YA-2431	Basin 4B SCD 1 Fault	VCP-2430	DDI	I2400	CP-WIL-EB2
YCR-2431	Basin 4B SCD 1 Start/Stop	VCP-2430	DDO	I2400	CP-WIL-EB2
YLR-2432	Basin 4B SCD 2 Running	VCP-2430	DDI	I2400	CP-WIL-EB2
YL-2432	Basin 4B SCD 2 In Remote	VCP-2430	DDI	I2400	CP-WIL-EB2
YA-2432	Basin 4B SCD 2 Fault	VCP-2430	DDI	I2400	CP-WIL-EB2
YCR-2432	Basin 4B SCD 2 Start/Stop	VCP-2430	DDO	I2400	CP-WIL-EB2
ZLO-2451	Basin 4B Sludge Valve 1 Opened	VCP-2430	DDI	I2400	CP-WIL-EB2
ZLC-2451	Basin 4B Sludge Valve 1 Closed	VCP-2430	DDI	I2400	CP-WIL-EB2
YL-2451	Basin 4B Sludge Valve 1 In Remote	VCP-2430	DDI	I2400	CP-WIL-EB2
YA-2451	Basin 4B Sludge Valve 1 Fault	VCP-2430	DDI	I2400	CP-WIL-EB2
ZCO-2451	Basin 4B Sludge Valve 1 Open Command	VCP-2430	DDO	I2400	CP-WIL-EB2
ZCC-2451	Basin 4B Sludge Valve 1 Close Command	VCP-2430	DDO	I2400	CP-WIL-EB2
ZLO-2452	Basin 4B Sludge Valve 2 Opened	VCP-2430	DDI	I2400	CP-WIL-EB2
ZLC-2452	Basin 4B Sludge Valve 2 Closed	VCP-2430	DDI	I2400	CP-WIL-EB2
YL-2452	Basin 4B Sludge Valve 2 In Remote	VCP-2430	DDI	I2400	CP-WIL-EB2
YA-2452	Basin 4B Sludge Valve 2 Fault	VCP-2430	DDI	I2400	CP-WIL-EB2
ZCO-2452	Basin 4B Sludge Valve 2 Open Command	VCP-2430	DDO	I2400	CP-WIL-EB2
ZCC-2452	Basin 4B Sludge Valve 2 Close Command	VCP-2430	DDO	I2400	CP-WIL-EB2
LI-4000	BWT North Tank Level	LIT-4000	AI	I4000	CP-WIL-EB2
LI-4010	BWT South Tank Level	LIT-4010	AI	I4000	CP-WIL-EB2
FI-4020	BWT Backwash Return Flow	FIT-4020	AI	I4000	CP-WIL-EB2
FI-4030	BWT Drain Flow	FIT-4030	AI	I4000	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZLO-4002	BWT North Tank Decanter Valve Opened	VAL-4002	DI	I4000	CP-WIL-EB2
ZLC-4002	BWT North Tank Decanter Valve Closed	VAL-4002	DI	I4000	CP-WIL-EB2
YL-4002	BWT North Tank Decanter Valve In Remote	VAL-4002	DI	I4000	CP-WIL-EB2
YA-4002	BWT North Tank Decanter Valve Fault	VAL-4002	DI	I4000	CP-WIL-EB2
ZCO-4002	BWT North Tank Decanter Valve Open Command	VAL-4002	DO	I4000	CP-WIL-EB2
ZCC-4002	BWT North Tank Decanter Valve Close Command	VAL-4002	DO	I4000	CP-WIL-EB2
ZLO-4012	BWT South Tank Decanter Valve Opened	VAL-4012	DI	I4000	CP-WIL-EB2
ZLC-4012	BWT South Tank Decanter Valve Closed	VAL-4012	DI	I4000	CP-WIL-EB2
YL-4012	BWT South Tank Decanter Valve In Remote	VAL-4012	DI	I4000	CP-WIL-EB2
YA-4012	BWT South Tank Decanter Valve Fault	VAL-4012	DI	I4000	CP-WIL-EB2
ZCO-4012	BWT South Tank Decanter Valve Open Command	VAL-4012	DO	I4000	CP-WIL-EB2
ZCC-4012	BWT South Tank Decanter Valve Close Command	VAL-4012	DO	I4000	CP-WIL-EB2
ZLO-4020	BWT Backwash Return Valve Opened	VAL-4020	DI	I4000	CP-WIL-EB2
ZLC-4020	BWT Backwash Return Valve Closed	VAL-4020	DI	I4000	CP-WIL-EB2
YL-4020	BWT Backwash Return Valve In Remote	VAL-4020	DI	I4000	CP-WIL-EB2
YA-4020	BWT Backwash Return Valve Fault	VAL-4020	DI	I4000	CP-WIL-EB2
ZCO-4020	BWT Backwash Return Valve Open Command	VAL-4020	DO	I4000	CP-WIL-EB2
ZCC-4020	BWT Backwash Return Valve Close Command	VAL-4020	DO	I4000	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZLO-4030	BWT Drain Valve Opened	VAL-4030	DI	I4000	CP-WIL-EB2
ZLC-4030	BWT Drain Valve Closed	VAL-4030	DI	I4000	CP-WIL-EB2
YL-4030	BWT Drain Valve In Remote	VAL-4030	DI	I4000	CP-WIL-EB2
YA-4030	BWT Drain Valve Fault	VAL-4030	DI	I4000	CP-WIL-EB2
ZCO-4030	BWT Drain Valve Open Command	VAL-4030	DO	I4000	CP-WIL-EB2
ZCC-4030	BWT Drain Valve Close Command	VAL-4030	DO	I4000	CP-WIL-EB2
YLR-4000	BWT North Tank SCD Running	VCP-4000	DDI	I4000	CP-WIL-EB2
YL-4000	BWT North Tank SCD In Remote	VCP-4000	DDI	I4000	CP-WIL-EB2
YA-4000	BWT North Tank SCD Fault	VCP-4000	DDI	I4000	CP-WIL-EB2
YCR-4000	BWT North Tank SCD Start/Stop	VCP-4000	DDO	I4000	CP-WIL-EB2
YLR-4010	BWT South Tank SCD Running	VCP-4000	DDI	I4000	CP-WIL-EB2
YL-4010	BWT South Tank SCD In Remote	VCP-4000	DDI	I4000	CP-WIL-EB2
YA-4010	BWT South Tank SCD Fault	VCP-4000	DDI	I4000	CP-WIL-EB2
YCR-4010	BWT South Tank SCD Start/Stop	VCP-4000	DDO	I4000	CP-WIL-EB2
ZLO-4003	BWT Sludge Valve 1 Opened	VCP-4000	DDI	I4000	CP-WIL-EB2
ZLC-4003	BWT Sludge Valve 1 Closed	VCP-4000	DDI	I4000	CP-WIL-EB2
YL-4003	BWT Sludge Valve 1 In Remote	VCP-4000	DDI	I4000	CP-WIL-EB2
YA-4003	BWT Sludge Valve 1 Fault	VCP-4000	DDI	I4000	CP-WIL-EB2
ZCO-4003	BWT Sludge Valve 1 Open Command	VCP-4000	DDO	I4000	CP-WIL-EB2
ZCC-4003	BWT Sludge Valve 1 Close Command	VCP-4000	DDO	I4000	CP-WIL-EB2
ZLO-4013	BWT Sludge Valve 2 Opened	VCP-4000	DDI	I4000	CP-WIL-EB2
ZLC-4013	BWT Sludge Valve 2 Closed	VCP-4000	DDI	I4000	CP-WIL-EB2
YL-4013	BWT Sludge Valve 2 In Remote	VCP-4000	DDI	I4000	CP-WIL-EB2
YA-4013	BWT Sludge Valve 2 Fault	VCP-4000	DDI	I4000	CP-WIL-EB2
ZCO-4013	BWT Sludge Valve 2 Open Command	VCP-4000	DDO	I4000	CP-WIL-EB2
ZCC-4013	BWT Sludge Valve 2 Close Command	VCP-4000	DDO	I4000	CP-WIL-EB2

CP-WIL-EB2

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZA-7100	Electrical Building 2 PLC Panel Intrusion Alarm	CP-WIL-EB2	DI	-	CP-WIL-EB2
UA-7100A	Electrical Building 2 PLC Panel UPS Circuit Fail	CP-WIL-EB2	DI	-	CP-WIL-EB2
UA-7100B	Electrical Building 2 PLC Panel DC Power Fail	CP-WIL-EB2	DI	-	CP-WIL-EB2

CP-WIL-BCB
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
LAHH-6101	Alum Tank 1 High-High Level	Alum Fill Panel	DI	I6100	CP-WIL-BCB
LAHH-6102	Alum Tank 2 High-High Level	Alum Fill Panel	DI	I6100	CP-WIL-BCB
LAHH-6103	Alum Tank 3 High-High Level	Alum Fill Panel	DI	I6100	CP-WIL-BCB
FAH-6100	Eyewash In Use	FSH-6100	DI	I6100	CP-WIL-BCB
YLR-6101	Alum Transfer Pump 1 Running	MCC-BCB	DI	I6100	CP-WIL-BCB
YA-6101	Alum Transfer Pump 1 Fault	MCC-BCB	DI	I6100	CP-WIL-BCB
YL-6101	Alum Transfer Pump 1 In Remote	MCC-BCB	DI	I6100	CP-WIL-BCB
PAH-6101	Alum Transfer Pump 1 High Press	MCC-BCB	DI	I6100	CP-WIL-BCB
YCR-6101	Alum Transfer Pump 1 Start/Stop	MCC-BCB	DO	I6100	CP-WIL-BCB
YLR-6102	Alum Transfer Pump 2 Running	MCC-BCB	DI	I6100	CP-WIL-BCB
YA-6102	Alum Transfer Pump 2 Fault	MCC-BCB	DI	I6100	CP-WIL-BCB
YL-6102	Alum Transfer Pump 2 In Remote	MCC-BCB	DI	I6100	CP-WIL-BCB
PAH-6102	Alum Transfer Pump 2 High Press	MCC-BCB	DI	I6100	CP-WIL-BCB
YCR-6102	Alum Transfer Pump 2 Start/Stop	MCC-BCB	DO	I6100	CP-WIL-BCB
YLR-6103	Alum Transfer Pump 3 Running	MCC-BCB	DI	I6100	CP-WIL-BCB
YA-6103	Alum Transfer Pump 3 Fault	MCC-BCB	DI	I6100	CP-WIL-BCB
YL-6103	Alum Transfer Pump 3 In Remote	MCC-BCB	DI	I6100	CP-WIL-BCB
PAH-6103	Alum Transfer Pump 3 High Press	MCC-BCB	DI	I6100	CP-WIL-BCB
YCR-6103	Alum Transfer Pump 3 Start/Stop	MCC-BCB	DO	I6100	CP-WIL-BCB
LALL-6101O	Alum Tank 1 Low-Low Level to MCC	MCC-BCB	DO	I6100	CP-WIL-BCB
LALL-6102O	Alum Tank 2 Low-Low Level to MCC	MCC-BCB	DO	I6100	CP-WIL-BCB
LALL-6103O	Alum Tank 3 Low-Low Level to MCC	MCC-BCB	DO	I6100	CP-WIL-BCB
LI-6101	Alum Bulk Tank 1 Level	LIT-6101	AI	I6100	CP-WIL-BCB
LI-6102	Alum Bulk Tank 2 Level	LIT-6102	AI	I6100	CP-WIL-BCB
LI-6103	Alum Bulk Tank 3 Level	LIT-6103	AI	I6100	CP-WIL-BCB

CP-WIL-BCB
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
LI-6104	Alum Day Tank Level	LIT-6104	AI	I6100	CP-WIL-BCB
LI-6101O	Alum Bulk Tank 1 Level to Fill Panel	Alum Fill Panel	AO	I6100	CP-WIL-BCB
LI-6102O	Alum Bulk Tank 2 Level to Fill Panel	Alum Fill Panel	AO	I6100	CP-WIL-BCB
LI-6103O	Alum Bulk Tank 3 Level to Fill Panel	Alum Fill Panel	AO	I6100	CP-WIL-BCB
FAH-6110	Eyewash In Use	FSH-6110	DI	I6101	CP-WIL-BCB
LAH-6100	Wet Floor		DI	I6101	CP-WIL-BCB
YL-6111	Alum Metering Pump 1 In Remote	PMP-6111	DI	I6101	CP-WIL-BCB
YLR-6111	Alum Metering Pump 1 Running	PMP-6111	DI	I6101	CP-WIL-BCB
YA-6111	Alum Metering Pump 1 Fault	PMP-6111	DI	I6101	CP-WIL-BCB
PAH-6111	Alum Metering Pump 1 High Press	PMP-6111	DI	I6101	CP-WIL-BCB
YCR-6111	Alum Metering Pump 1 Start/Stop	PMP-6111	DO	I6101	CP-WIL-BCB
SI-6111	Alum Metering Pump 1 Speed Feedback	PMP-6111	AI	I6101	CP-WIL-BCB
SC-6111	Alum Metering Pump 1 Speed Control	PMP-6111	AO	I6101	CP-WIL-BCB
FI-6111	Alum Metering Pump 1 Disch Flow	FIT-6111	AI	I6101	CP-WIL-BCB
YL-6112	Alum Metering Pump 2 In Remote	PMP-6112	DI	I6101	CP-WIL-BCB
YLR-6112	Alum Metering Pump 2 Running	PMP-6112	DI	I6101	CP-WIL-BCB
YA-6112	Alum Metering Pump 2 Fault	PMP-6112	DI	I6101	CP-WIL-BCB
PAH-6112	Alum Metering Pump 2 High Press	PMP-6112	DI	I6101	CP-WIL-BCB
YCR-6112	Alum Metering Pump 2 Start/Stop	PMP-6112	DO	I6101	CP-WIL-BCB
SI-6112	Alum Metering Pump 2 Speed Feedback	PMP-6112	AI	I6101	CP-WIL-BCB
SC-6112	Alum Metering Pump 2 Speed Control	PMP-6112	AO	I6101	CP-WIL-BCB
FI-6112	Alum Metering Pump 2 Disch Flow	FIT-6112	AI	I6101	CP-WIL-BCB
YL-6113	Alum Metering Pump 3 In Remote	PMP-6113	DI	I6101	CP-WIL-BCB
YLR-6113	Alum Metering Pump 3 Running	PMP-6113	DI	I6101	CP-WIL-BCB
YA-6113	Alum Metering Pump 3 Fault	PMP-6113	DI	I6101	CP-WIL-BCB
PAH-6113	Alum Metering Pump 3 High Press	PMP-6113	DI	I6101	CP-WIL-BCB

CP-WIL-BCB
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YCR-6113	Alum Metering Pump 3 Start/Stop	PMP-6113	DO	I6101	CP-WIL-BCB
SI-6113	Alum Metering Pump 3 Speed Feedback	PMP-6113	AI	I6101	CP-WIL-BCB
SC-6113	Alum Metering Pump 3 Speed Control	PMP-6113	AO	I6101	CP-WIL-BCB
FI-6113	Alum Metering Pump 3 Disch Flow	FIT-6113	AI	I6101	CP-WIL-BCB
YL-6114	Alum Metering Pump 4 In Remote	PMP-6114	DI	I6101	CP-WIL-BCB
YLR-6114	Alum Metering Pump 4 Running	PMP-6114	DI	I6101	CP-WIL-BCB
YA-6114	Alum Metering Pump 4 Fault	PMP-6114	DI	I6101	CP-WIL-BCB
PAH-6114	Alum Metering Pump 4 High Press	PMP-6114	DI	I6101	CP-WIL-BCB
YCR-6114	Alum Metering Pump 4 Start/Stop	PMP-6114	DO	I6101	CP-WIL-BCB
SI-6114	Alum Metering Pump 4 Speed Feedback	PMP-6114	AI	I6101	CP-WIL-BCB
SC-6114	Alum Metering Pump 4 Speed Control	PMP-6114	AO	I6101	CP-WIL-BCB
FI-6114	Alum Metering Pump 4 Disch Flow	FIT-6114	AI	I6101	CP-WIL-BCB
FAH-6118	Eyewash In Use	FSH-6118	DI	I6102	CP-WIL-BCB
FAH-6119	Eyewash In Use	FSH-6119	DI	I6103	CP-WIL-BCB
LAH-6119	Wet Floor	LSH-6119	DI	I6103	CP-WIL-BCB
FI-6120	Plant Water Flow	VCP-LIME-1	DAI	I6103	CP-WIL-BCB
LI-6120	Liquid Lime Feed Tank 1 Level	VCP-LIME-1	DAI	I6103	CP-WIL-BCB
YL-6120	Liquid Lime Feed Tank 1 Mixer In Remote	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YLR-6120	Liquid Lime Feed Tank 1 Mixer Running	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YA-6120	Liquid Lime Feed Tank 1 Mixer Fault	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YCR-6120	Liquid Lime Feed Tank 1 Mixer Start/Stop	VCP-LIME-1	DDO	I6103	CP-WIL-BCB
ZLO-6121	Lime Metering Pump 1 Inlet Manual Valve Open	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
ZLC-6121	Lime Metering Pump 1 Inlet Manual Valve Closed	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
ZLO-6121	Lime Metering Pump 1 3-Way Valve in Feed	VCP-LIME-1	DDI	I6103	CP-WIL-BCB

CP-WIL-BCB
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZLC-6121	Lime Metering Pump 1 3-Way Valve in Flush	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YL-6121	Lime Metering Pump 1 In Remote	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YLR-6121	Lime Metering Pump 1 Running	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YA-6121	Lime Metering Pump 1 Fault	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YCR-6121	Lime Metering Pump 1 Start/Stop	VCP-LIME-1	DDO	I6103	CP-WIL-BCB
SI-6121	Lime Metering Pump 1 Speed Feedback	VCP-LIME-1	DAI	I6103	CP-WIL-BCB
SC-6121	Lime Metering Pump 1 Speed Control	VCP-LIME-1	DAO	I6103	CP-WIL-BCB
PI-6121	Lime Metering Pump 1 Disch Pressure	VCP-LIME-1	DAI	I6103	CP-WIL-BCB
ZLO-6121	Lime Metering Pump 2 Inlet Manual Valve Open	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
ZLC-6121	Lime Metering Pump 2 Inlet Manual Valve Closed	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
ZLO-6121	Lime Metering Pump 2 3-Way Valve in Feed	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
ZLC-6121	Lime Metering Pump 2 3-Way Valve in Flush	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YL-6122	Lime Metering Pump 2 In Remote	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YLR-6122	Lime Metering Pump 2 Running	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YA-6122	Lime Metering Pump 2 Fault	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YCR-6122	Lime Metering Pump 2 Start/Stop	VCP-LIME-1	DDO	I6103	CP-WIL-BCB
SI-6122	Lime Metering Pump 2 Speed Feedback	VCP-LIME-1	DAI	I6103	CP-WIL-BCB
SC-6122	Lime Metering Pump 2 Speed Control	VCP-LIME-1	DAO	I6103	CP-WIL-BCB
PI-6122	Lime Metering Pump 2 Disch Pressure	VCP-LIME-1	DAI	I6103	CP-WIL-BCB
ZLO-6121	Lime Metering Pump 3 Inlet Manual Valve Open	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
ZLC-6121	Lime Metering Pump 3 Inlet Manual Valve Closed	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
ZLO-6121	Lime Metering Pump 3 3-Way Valve in Feed	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
ZLC-6121	Lime Metering Pump 3 3-Way Valve in Flush	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YL-6123	Lime Metering Pump 3 In Remote	VCP-LIME-1	DDI	I6103	CP-WIL-BCB

CP-WIL-BCB
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YLR-6123	Lime Metering Pump 3 Running	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YA-6123	Lime Metering Pump 3 Fault	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YCR-6123	Lime Metering Pump 3 Start/Stop	VCP-LIME-1	DDO	I6103	CP-WIL-BCB
SI-6123	Lime Metering Pump 3 Speed Feedback	VCP-LIME-1	DAI	I6103	CP-WIL-BCB
SC-6123	Lime Metering Pump 3 Speed Control	VCP-LIME-1	DAO	I6103	CP-WIL-BCB
PI-6123	Lime Metering Pump 3 Disch Pressure	VCP-LIME-1	DAI	I6103	CP-WIL-BCB
ZLO-6121	Lime Metering Pump 4 Inlet Manual Valve Open	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
ZLC-6121	Lime Metering Pump 4 Inlet Manual Valve Closed	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
ZLO-6121	Lime Metering Pump 4 3-Way Valve in Feed	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
ZLC-6121	Lime Metering Pump 4 3-Way Valve in Flush	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YL-6124	Lime Metering Pump 4 In Remote	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YLR-6124	Lime Metering Pump 4 Running	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YA-6124	Lime Metering Pump 4 Fault	VCP-LIME-1	DDI	I6103	CP-WIL-BCB
YCR-6124	Lime Metering Pump 4 Start/Stop	VCP-LIME-1	DDO	I6103	CP-WIL-BCB
SI-6124	Lime Metering Pump 4 Speed Feedback	VCP-LIME-1	DAI	I6103	CP-WIL-BCB
SC-6124	Lime Metering Pump 4 Speed Control	VCP-LIME-1	DAO	I6103	CP-WIL-BCB
PI-6124	Lime Metering Pump 4 Disch Pressure	VCP-LIME-1	DAI	I6103	CP-WIL-BCB
FI-6130	Plant Water Flow	VCP-LIME-2	DAI	I6104	CP-WIL-BCB
LI-6130	Liquid Lime Feed Tank 2 Level	VCP-LIME-2	DAI	I6104	CP-WIL-BCB
YL-6130	Liquid Lime Feed Tank 2 Mixer In Remote	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YLR-6130	Liquid Lime Feed Tank 2 Mixer Running	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YA-6130	Liquid Lime Feed Tank 2 Mixer Fault	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YCR-6130	Liquid Lime Feed Tank 2 Mixer Start/Stop	VCP-LIME-2	DDO	I6104	CP-WIL-BCB
ZLO-6131	Lime Metering Pump 5 Inlet Manual Valve Open	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
ZLC-6131	Lime Metering Pump 5 Inlet Manual Valve Closed	VCP-LIME-2	DDI	I6104	CP-WIL-BCB

CP-WIL-BCB
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZLO-6131	Lime Metering Pump 5 3-Way Valve in Feed	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
ZLC-6131	Lime Metering Pump 5 3-Way Valve in Flush	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YL-6131	Lime Metering Pump 5 In Remote	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YLR-6131	Lime Metering Pump 5 Running	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YA-6131	Lime Metering Pump 5 Fault	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YCR-6131	Lime Metering Pump 5 Start/Stop	VCP-LIME-2	DDO	I6104	CP-WIL-BCB
SI-6131	Lime Metering Pump 5 Speed Feedback	VCP-LIME-2	DAI	I6104	CP-WIL-BCB
SC-6131	Lime Metering Pump 5 Speed Control	VCP-LIME-2	DAO	I6104	CP-WIL-BCB
PI-6131	Lime Metering Pump 5 Disch Pressure	VCP-LIME-2	DAI	I6104	CP-WIL-BCB
ZLO-6131	Lime Metering Pump 6 Inlet Manual Valve Open	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
ZLC-6131	Lime Metering Pump 6 Inlet Manual Valve Closed	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
ZLO-6131	Lime Metering Pump 6 3-Way Valve in Feed	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
ZLC-6131	Lime Metering Pump 6 3-Way Valve in Flush	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YL-6132	Lime Metering Pump 6 In Remote	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YLR-6132	Lime Metering Pump 6 Running	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YA-6132	Lime Metering Pump 6 Fault	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YCR-6132	Lime Metering Pump 6 Start/Stop	VCP-LIME-2	DDO	I6104	CP-WIL-BCB
SI-6132	Lime Metering Pump 6 Speed Feedback	VCP-LIME-2	DAI	I6104	CP-WIL-BCB
SC-6132	Lime Metering Pump 6 Speed Control	VCP-LIME-2	DAO	I6104	CP-WIL-BCB
PI-6132	Lime Metering Pump 6 Disch Pressure	VCP-LIME-2	DAI	I6104	CP-WIL-BCB
ZLO-6131	Lime Metering Pump 7 Inlet Manual Valve Open	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
ZLC-6131	Lime Metering Pump 7 Inlet Manual Valve Closed	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
ZLO-6131	Lime Metering Pump 7 3-Way Valve in Feed	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
ZLC-6131	Lime Metering Pump 7 3-Way Valve in Flush	VCP-LIME-2	DDI	I6104	CP-WIL-BCB

CP-WIL-BCB
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YL-6133	Lime Metering Pump 7 In Remote	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YLR-6133	Lime Metering Pump 7 Running	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YA-6133	Lime Metering Pump 7 Fault	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YCR-6133	Lime Metering Pump 7 Start/Stop	VCP-LIME-2	DDO	I6104	CP-WIL-BCB
SI-6133	Lime Metering Pump 7 Speed Feedback	VCP-LIME-2	DAI	I6104	CP-WIL-BCB
SC-6133	Lime Metering Pump 7 Speed Control	VCP-LIME-2	DAO	I6104	CP-WIL-BCB
PI-6133	Lime Metering Pump 7 Disch Pressure	VCP-LIME-2	DAI	I6104	CP-WIL-BCB
ZLO-6134	Lime Metering Pump 8 Inlet Manual Valve Open	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
ZLC-6134	Lime Metering Pump 8 Inlet Manual Valve Closed	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
ZLO-6134	Lime Metering Pump 8 3-Way Valve in Feed	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
ZLC-6134	Lime Metering Pump 8 3-Way Valve in Flush	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YL-6134	Lime Metering Pump 8 In Remote	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YLR-6134	Lime Metering Pump 8 Running	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YA-6134	Lime Metering Pump 8 Fault	VCP-LIME-2	DDI	I6104	CP-WIL-BCB
YCR-6134	Lime Metering Pump 8 Start/Stop	VCP-LIME-2	DDO	I6104	CP-WIL-BCB
SI-6134	Lime Metering Pump 8 Speed Feedback	VCP-LIME-2	DAI	I6104	CP-WIL-BCB
SC-6134	Lime Metering Pump 8 Speed Control	VCP-LIME-2	DAO	I6104	CP-WIL-BCB
PI-6134	Lime Metering Pump 8 Disch Pressure	VCP-LIME-2	DAI	I6104	CP-WIL-BCB
FI-6140	Plant Water Flow	VCP-LIME-3	DAI	I6105	CP-WIL-BCB
LI-6140	Liquid Lime Feed Tank 3 Level	VCP-LIME-3	DAI	I6105	CP-WIL-BCB
YL-6140	Liquid Lime Feed Tank 3 Mixer In Remote	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YLR-6140	Liquid Lime Feed Tank 3 Mixer Running	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YA-6140	Liquid Lime Feed Tank 3 Mixer Fault	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YCR-6140	Liquid Lime Feed Tank 3 Mixer Start/Stop	VCP-LIME-3	DDO	I6105	CP-WIL-BCB

CP-WIL-BCB
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZLO-6141	Lime Metering Pump 9 Inlet Manual Valve Open	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
ZLC-6141	Lime Metering Pump 9 Inlet Manual Valve Closed	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
ZLO-6141	Lime Metering Pump 9 3-Way Valve in Feed	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
ZLC-6141	Lime Metering Pump 9 3-Way Valve in Flush	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YL-6141	Lime Metering Pump 9 In Remote	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YLR-6141	Lime Metering Pump 9 Running	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YA-6141	Lime Metering Pump 9 Fault	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YCR-6141	Lime Metering Pump 9 Start/Stop	VCP-LIME-3	DDO	I6105	CP-WIL-BCB
SI-6141	Lime Metering Pump 9 Speed Feedback	VCP-LIME-3	DAI	I6105	CP-WIL-BCB
SC-6141	Lime Metering Pump 9 Speed Control	VCP-LIME-3	DAO	I6105	CP-WIL-BCB
PI-6141	Lime Metering Pump 9 Disch Pressure	VCP-LIME-3	DAI	I6105	CP-WIL-BCB
ZLO-6141	Lime Metering Pump 10 Inlet Manual Valve Open	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
ZLC-6141	Lime Metering Pump 10 Inlet Manual Valve Closed	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
ZLO-6141	Lime Metering Pump 10 3-Way Valve in Feed	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
ZLC-6141	Lime Metering Pump 10 3-Way Valve in Flush	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YL-6142	Lime Metering Pump 10 In Remote	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YLR-6142	Lime Metering Pump 10 Running	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YA-6142	Lime Metering Pump 10 Fault	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YCR-6142	Lime Metering Pump 10 Start/Stop	VCP-LIME-3	DDO	I6105	CP-WIL-BCB
SI-6142	Lime Metering Pump 10 Speed Feedback	VCP-LIME-3	DAI	I6105	CP-WIL-BCB
SC-6142	Lime Metering Pump 10 Speed Control	VCP-LIME-3	DAO	I6105	CP-WIL-BCB
PI-6142	Lime Metering Pump 10 Disch Pressure	VCP-LIME-3	DAI	I6105	CP-WIL-BCB
ZLO-6141	Lime Metering Pump 11 Inlet Manual Valve Open	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
ZLC-6141	Lime Metering Pump 11 Inlet Manual Valve Closed	VCP-LIME-3	DDI	I6105	CP-WIL-BCB

CP-WIL-BCB
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZLO-6141	Lime Metering Pump 11 3-Way Valve in Feed	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
ZLC-6141	Lime Metering Pump 11 3-Way Valve in Flush	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YL-6143	Lime Metering Pump 11 In Remote	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YLR-6143	Lime Metering Pump 11 Running	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YA-6143	Lime Metering Pump 11 Fault	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YCR-6143	Lime Metering Pump 11 Start/Stop	VCP-LIME-3	DDO	I6105	CP-WIL-BCB
SI-6143	Lime Metering Pump 11 Speed Feedback	VCP-LIME-3	DAI	I6105	CP-WIL-BCB
SC-6143	Lime Metering Pump 11 Speed Control	VCP-LIME-3	DAO	I6105	CP-WIL-BCB
PI-6143	Lime Metering Pump 11 Disch Pressure	VCP-LIME-3	DAI	I6105	CP-WIL-BCB
ZLO-6141	Lime Metering Pump 12 Inlet Manual Valve Open	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
ZLC-6141	Lime Metering Pump 12 Inlet Manual Valve Closed	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
ZLO-6141	Lime Metering Pump 12 3-Way Valve in Feed	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
ZLC-6141	Lime Metering Pump 12 3-Way Valve in Flush	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YL-6144	Lime Metering Pump 12 In Remote	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YLR-6144	Lime Metering Pump 12 Running	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YA-6144	Lime Metering Pump 12 Fault	VCP-LIME-3	DDI	I6105	CP-WIL-BCB
YCR-6144	Lime Metering Pump 12 Start/Stop	VCP-LIME-3	DDO	I6105	CP-WIL-BCB
SI-6144	Lime Metering Pump 12 Speed Feedback	VCP-LIME-3	DAI	I6105	CP-WIL-BCB
SC-6144	Lime Metering Pump 12 Speed Control	VCP-LIME-3	DAO	I6105	CP-WIL-BCB
PI-6144	Lime Metering Pump 12 Disch Pressure	VCP-LIME-3	DAI	I6105	CP-WIL-BCB
LI-6151	ZOP Bulk Tank 1 Level	LIT-6151	AI	I6106	CP-WIL-BCB
LI-6152	ZOP Bulk Tank 2 Level	LIT-6152	AI	I6106	CP-WIL-BCB
LI-6152O	ZOP Bulk Tank 1 Level to Fill Panel	ZOP Fill Panel	AO	I6106	CP-WIL-BCB
LI-6151O	ZOP Bulk Tank 2 Level to Fill Panel	ZOP Fill Panel	AO	I6106	CP-WIL-BCB

CP-WIL-BCB
Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
LAHH-6151	ZOP Bulk Tank 1 High-High Level	ZOP Fill Panel	DI	I6106	CP-WIL-BCB
LAHH-6152	ZOP Bulk Tank 2 High-High Level	ZOP Fill Panel	DI	I6106	CP-WIL-BCB
LALL-6151O	ZOP Bulk Tank 1 Low-Low Level to MCC	MCC-BCB	DO	I6106	CP-WIL-BCB
LALL-6152O	ZOP Bulk Tank 2 Low-Low Level to MCC	MCC-BCB	DO	I6106	CP-WIL-BCB
FAH-6150	Eyewash In Use	FSH-6150	DI	I6106	CP-WIL-BCB
FAH-6153	Eyewash In Use	FSH-6153	DI	I6106	CP-WIL-BCB
LAH-6154	Sump High Level	LSH-6154	DI	I6106	CP-WIL-BCB
LAH-6155	Bulk Chemical Truck Containment High Level	LSH-6155	DI	I6106	CP-WIL-BCB
YL-6151	ZOP Transfer Pump 1 In Remote	MCC-BCB	DI	I6106	CP-WIL-BCB
YLR-6151	ZOP Transfer Pump 1 Running	MCC-BCB	DI	I6106	CP-WIL-BCB
YA-6151	ZOP Transfer Pump 1 Fault	MCC-BCB	DI	I6106	CP-WIL-BCB
PAH-6151	ZOP Transfer Pump 1 High press	MCC-BCB	DI	I6106	CP-WIL-BCB
YCR-6151	ZOP Transfer Pump 1 Start/Stop	MCC-BCB	DO	I6106	CP-WIL-BCB
YL-6152	ZOP Transfer Pump 2 In Remote	MCC-BCB	DI	I6106	CP-WIL-BCB
YLR-6152	ZOP Transfer Pump 2 Running	MCC-BCB	DI	I6106	CP-WIL-BCB
YA-6152	ZOP Transfer Pump 2 Fault	MCC-BCB	DI	I6106	CP-WIL-BCB
PAH-6152	ZOP Transfer Pump 2 High press	MCC-BCB	DI	I6106	CP-WIL-BCB
YCR-6152	ZOP Transfer Pump 2 Start/Stop	MCC-BCB	DO	I6106	CP-WIL-BCB
ZA-6000	Bulk Chem Building PLC Panel Intrusion Alarm	CP-WIL-BCB	DI	-	CP-WIL-BCB
UA-6000A	Bulk Chem Building PLC Panel UPS Circuit Fail	CP-WIL-BCB	DI	-	CP-WIL-BCB
UA-6000B	Bulk Chem Building PLC Panel DC Power Fail	CP-WIL-BCB	DI	-	CP-WIL-BCB

CP-WIL-SHCB

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
LI-6000	SH Delivery Tank Level	LIT-6000	AI	I6000	CP-WIL-SHCB
LAHH-6000	SH Delivery Tank Level High Level	CP-SH-FILL	DI	I6000	CP-WIL-SHCB
ZLO-6000	SH Delivery Tank Valve Open	VAL-6000	DI	I6000	CP-WIL-SHCB
ZLC-6000	SH Delivery Tank Valve Close	VAL-6000	DI	I6000	CP-WIL-SHCB
YL-6000	SH Delivery Tank Valve In Remote	VAL-6000	DI	I6000	CP-WIL-SHCB
YA-6000	SH Delivery Tank Valve Fault	VAL-6000	DI	I6000	CP-WIL-SHCB
ZCO-6000	SH Delivery Tank Valve Open Command	VAL-6000	DO	I6000	CP-WIL-SHCB
ZCC-6000	SH Delivery Tank Valve Close Command	VAL-6000	DO	I6000	CP-WIL-SHCB
YLR-6001	SH Transfer Pump 1 Running	VFD-6001	DI	I6000	CP-WIL-SHCB
YL-6001	SH Transfer Pump 1 In Remote	VFD-6001	DI	I6000	CP-WIL-SHCB
YA-6001	SH Transfer Pump 1 Fault	VFD-6001	DI	I6000	CP-WIL-SHCB
YCR-6001	SH Transfer Pump 1 Start/Stop	VFD-6001	DO	I6000	CP-WIL-SHCB
PSH-6001	SH Transfer Pump 1 High Disch Press	VFD-6001	DI	I6000	CP-WIL-SHCB
SI-6001	SH Transfer Pump 1Speed Feedback	VFD-6001	AI	I6000	CP-WIL-SHCB
SC-6001	SH Transfer Pump 1Speed Control	VFD-6001	AO	I6000	CP-WIL-SHCB
FI-6002	SH Transfer Pump 1 Disch Flow	FIT-6002	AI	I6000	CP-WIL-SHCB
FI-6003	Dilution Plant Water Flow	FIT-6003	AI	I6000	CP-WIL-SHCB
YL-6003	Dilution Plant Water Valve In Remote	VAL-6003	DI	I6000	CP-WIL-SHCB
YA-6003	Dilution Plant Water Valve Fault	VAL-6003	DI	I6000	CP-WIL-SHCB
ZLO-6003	Dilution Plant Water Valve Opened	VAL-6003	DI	I6000	CP-WIL-SHCB
ZLC-6003	Dilution Plant Water Valve Closed	VAL-6003	DI	I6000	CP-WIL-SHCB
ZCO-6003	Dilution Plant Water Valve Open Command	VAL-6003	DO	I6000	CP-WIL-SHCB
ZCC-6003	Dilution Plant Water Valve Close Command	VAL-6003	DO	I6000	CP-WIL-SHCB
YL-6000	Dilution Start from Dilution Panel	CP-HYPO-DIL	DI	I6000	CP-WIL-SHCB
UI-6000	Dilution Ratio from Dilution Panel	CP-HYPO-DIL	AI	I6000	CP-WIL-SHCB
LAL-6000	Delivery Tank Low Level to Dilution Panel	CP-HYPO-DIL	DO	I6000	CP-WIL-SHCB

CP-WIL-SHCB

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
LI-6011	SH Tank 1 Level	LIT-6011	AI	I6001	CP-WIL-SHCB
LI-6012	SH Tank 2 Level	LIT-6012	AI	I6001	CP-WIL-SHCB
LI-6013	SH Tank 3 Level	LIT-6013	AI	I6001	CP-WIL-SHCB
LI-6014	SH Tank 4 Level	LIT-6014	AI	I6001	CP-WIL-SHCB
					CP-WIL-SHCB
ZLO-6011	SH Tank #1 Valve Open	Val-6011	DI	I6001	CP-WIL-SHCB
ZLC-6011	SH Tank #1 Valve Closed	Val-6011	DI	I6001	CP-WIL-SHCB
ZCO-6011	SH Tank #1 Valve Open	Val-6011	DO	I6001	CP-WIL-SHCB
ZCC-6011	SH Tank #1 Valve Close	Val-6011	DO	I6001	CP-WIL-SHCB
					CP-WIL-SHCB
ZLO-6012	SH Tank #2 Valve Open	Val-6012	DI	I6001	CP-WIL-SHCB
ZLC-6012	SH Tank #2 Valve Closed	Val-6012	DI	I6001	CP-WIL-SHCB
ZCO-6012	SH Tank #2 Valve Open	Val-6012	DO	I6001	CP-WIL-SHCB
ZCC-6012	SH Tank #2 Valve Close	Val-6012	DO	I6001	CP-WIL-SHCB
					CP-WIL-SHCB
ZLO-6013	SH Tank #3 Valve Open	Val-6013	DI	I6001	CP-WIL-SHCB
ZLC-6013	SH Tank #3 Valve Closed	Val-6013	DI	I6001	CP-WIL-SHCB
ZCO-6013	SH Tank #3 Valve Open	Val-6013	DO	I6001	CP-WIL-SHCB
ZCC-6013	SH Tank #4 Valve Open	Val-6013	DO	I6001	CP-WIL-SHCB
					CP-WIL-SHCB
ZLO-6014	SH Tank #4 Valve Open	Val-6014	DI	I6001	CP-WIL-SHCB
ZLC-6014	SH Tank #4 Valve Closed	Val-6014	DI	I6001	CP-WIL-SHCB
ZCO-6014	SH Tank #3 Valve Close	Val-6014	DO	I6001	CP-WIL-SHCB
ZCC-6014	SH Tank #4 Valve Close	Val-6014	DO	I6001	CP-WIL-SHCB
YLR-6017	SH Tank Transfer Pump 2 Running	PMP-60107	DI	I6001	CP-WIL-SHCB
YL-6017	SH Tank Transfer Pump 2 In Remote	PMP-60107	DI	I6001	CP-WIL-SHCB
YA-6017	SH Tank Transfer Pump 2 Fault	PMP-60107	DI	I6001	CP-WIL-SHCB
YCR-6017	SH Tank Transfer Pump 2 Start/Stop	PMP-60107	DO	I6001	CP-WIL-SHCB
PAH-6017	SH Tank Transfer Pump 2 High Disch Press	PSH-6017	DI	I6001	CP-WIL-SHCB
LAH-6015	Sump Pump #1 Level High	CS-SUMP Pump-1	DI	I6001	CP-WIL-SHCB

CP-WIL-SHCB

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YLR-6015	Sump Pump #1 Running	CS-SUMP Pump-1	DI	I6001	CP-WIL-SHCB
LAH-6016	Sump Pump #2 Level High	CS-SUMP Pump-2	DI	I6001	CP-WIL-SHCB
YLR-6016	Sump Pump #2 Running	CS-SUMP Pump-2	DI	I6001	CP-WIL-SHCB
YLR-6021	Basin #1 SH Metering Pump Ready	PMP-6021	DI	I6002	CP-WIL-SHCB
YL-6021	Basin #1 SH Metering Pump In Auto	PMP-6021	DI	I6002	CP-WIL-SHCB
YA-6021A	Basin #1 SH Metering Pump Fault	PMP-6021	DI	I6002	CP-WIL-SHCB
YA-6021B	Basin #1 SH Metering Pump Tubing Fail	PMP-6021	DI	I6002	CP-WIL-SHCB
PAH-6021	Basin #1 SH Metering Pump High Discharge Pressure	PMP-6021	DI	I6002	CP-WIL-SHCB
YCR-6021A	Basin #1 SH Metering Pump Stop/Start	PMP-6021	DO	I6002	CP-WIL-SHCB
YCR-6021B	Basin #1 SH Metering Pump Auto/Manual	PMP-6021	DO	I6002	CP-WIL-SHCB
SI-6021	Basin #1 SH Metering Pump Speed Input	PMP-6021	AI	I6002	CP-WIL-SHCB
SC-6021	Basin #1 SH Metering Pump Speed Output	PMP-6021	AO	I6002	CP-WIL-SHCB
FI-6021	Basin #1 SH Flow Input	FIT-6021	AI	I6002	CP-WIL-SHCB
YLR-6022	Basin #2 SH Metering Pump Ready	PMP-6022	DI	I6002	CP-WIL-SHCB
YL-6022	Basin #2 SH Metering Pump In Auto	PMP-6022	DI	I6002	CP-WIL-SHCB
YA-6022A	Basin #2 SH Metering Pump Fault	PMP-6022	DI	I6002	CP-WIL-SHCB
YA-6022B	Basin #2 SH Metering Pump Tubing Fail	PMP-6022	DI	I6002	CP-WIL-SHCB
PAH-6022	Basin #2 SH Metering Pump High Discharge Pressure	PMP-6022	DI	I6002	CP-WIL-SHCB
YCR-6022A	Basin #2 SH Metering Pump Stop/Start	PMP-6022	DO	I6002	CP-WIL-SHCB
YCR-6022B	Basin #2 SH Metering Pump Auto/Manual	PMP-6022	DO	I6002	CP-WIL-SHCB
SI-6022	Basin #2 SH Metering Pump Speed Input	PMP-6022	AI	I6002	CP-WIL-SHCB
SC-6022	Basin #2 SH Metering Pump Speed Output	PMP-6022	AO	I6002	CP-WIL-SHCB
FI-6022	Basin #2 SH Flow	FIT-6022	AI	I6002	CP-WIL-SHCB
YLR-6023	Basin #3 SH Metering Pump Ready	PMP-6023	DI	I6002	CP-WIL-SHCB
YL-6023	Basin #3 SH Metering Pump In Auto	PMP-6023	DI	I6002	CP-WIL-SHCB
YA-6023A	Basin #3 SH Metering Pump Fault	PMP-6023	DI	I6002	CP-WIL-SHCB
YA-6023B	Basin #3 SH Metering Pump Tubing Fail	PMP-6023	DI	I6002	CP-WIL-SHCB
PAH-6023	Basin #3 SH Metering Pump High Discharge Pressure	PMP-6023	DI	I6002	CP-WIL-SHCB
YCR-6023A	Basin #3 SH Metering Pump Stop/Start	PMP-6023	DO	I6002	CP-WIL-SHCB

CP-WIL-SHCB

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
YCR-6023B	Basin #3 SH Metering Pump Auto/Manual	PMP-6023	DO	I6002	CP-WIL-SHCB
SI-6023	Basin #3 SH Metering Pump Speed Input	PMP-6023	AI	I6002	CP-WIL-SHCB
SC-6023	Basin #3 SH Flow	PMP-6023	AI	I6002	CP-WIL-SHCB
FI-6023	Basin #3 SH Metering Pump Speed Output	FIT-6023	AO	I6002	CP-WIL-SHCB
YLR-6024	Basin #4 SH Metering Pump Ready	PMP-6024	DI	I6002	CP-WIL-SHCB
YL-6024	Basin #4 SH Metering Pump In Auto	PMP-6024	DI	I6002	CP-WIL-SHCB
YA-6024A	Basin #4 SH Metering Pump Fault	PMP-6024	DI	I6002	CP-WIL-SHCB
YA-6024B	Basin #4 SH Metering Pump Tubing Fail	PMP-6024	DI	I6002	CP-WIL-SHCB
PAH-6024	Basin #4 SH Metering Pump High Discharge Pressure	PMP-6024	DI	I6002	CP-WIL-SHCB
YCR-6024A	Basin #4 SH Metering Pump Stop/Start	PMP-6024	DO	I6002	CP-WIL-SHCB
YCR-6024B	Basin #4 SH Metering Pump Auto/Manual	PMP-6024	DO	I6002	CP-WIL-SHCB
SI-6024	Basin #4 SH Metering Pump Speed Input	PMP-6024	AI	I6002	CP-WIL-SHCB
SC-6024	Basin #4 SH Metering Pump Speed Output	PMP-6024	AO	I6002	CP-WIL-SHCB
FI-6024	Basin #4 SH Flow	FIT-6024	AI	I6002	CP-WIL-SHCB
FI-6020	Carrier Water Flow	FIT-6020	AI	I6002	CP-WIL-SHCB
YLR-6025	Sealing Weir East SH Metering Pump Running	PMP-6025	DI	I6003	CP-WIL-SHCB
YL-6025	Sealing Weir East SH Metering Pump In Remote	PMP-6025	DI	I6003	CP-WIL-SHCB
YA-6025A	Sealing Weir East SH Metering Pump Fault	PMP-6025	DI	I6003	CP-WIL-SHCB
YA-6025B	Sealing Weir East SH Metering Pump Tubing Fail	PMP-6025	DI	I6003	CP-WIL-SHCB
PAH-6025	Sealing Weir East SH Metering Pump High Discharge Pressure	PMP-6025	DI	I6003	CP-WIL-SHCB
YCR-6025	Sealing Weir East SH Metering Pump Stop/Start	PMP-6025	DO	I6003	CP-WIL-SHCB
SI-6025	Sealing Weir East SH Metering Pump Speed Input	PMP-6025	AI	I6003	CP-WIL-SHCB
SC-6025	Sealing Weir East SH Metering Pump Speed Output	PMP-6025	AO	I6003	CP-WIL-SHCB
FI-6025	Sealing Weir East SH Flow	FIT-6025	AI	I6003	CP-WIL-SHCB
YLR-6026	Sealing Weir West SH Metering Pump Running	PMP-6026	DI	I6003	CP-WIL-SHCB
YL-6026	Sealing Weir West SH Metering Pump In Remote	PMP-6026	DI	I6003	CP-WIL-SHCB
YA-6026A	Sealing Weir West SH Metering Pump Fault	PMP-6026	DI	I6003	CP-WIL-SHCB
YA-6026B	Sealing Weir West SH Metering Pump Tubing Fail	PMP-6026	DI	I6003	CP-WIL-SHCB

CP-WIL-SHCB

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
PAH-6026	Sealing Weir West SH Metering Pump High Discharge Pressure	PMP-6026	DI	I6003	CP-WIL-SHCB
YCR-6026	Sealing Weir West SH Metering Pump Stop/Start	PMP-6026	DO	I6003	CP-WIL-SHCB
SI-6026	Sealing Weir West SH Metering Pump Speed Input	PMP-6026	AI	I6003	CP-WIL-SHCB
SC-6026	Sealing Weir West SH Metering Pump Speed Output	PMP-6026	AO	I6003	CP-WIL-SHCB
FI-6026	Sealing Weir West SH Flow	FIT-6026	AI	I6003	CP-WIL-SHCB
	Basin Standby SH Metering Pump Ready		DI		CP-WIL-SHCB
	Basin Standby SH Metering Pump In Auto		DI		CP-WIL-SHCB
	Basin Standby SH Metering Pump Fault		DI		CP-WIL-SHCB
	Basin Standby SH Metering Pump Tubing Fail		DI		CP-WIL-SHCB
	Basin Standby SH Metering Pump High Discharge Pressure		DI		CP-WIL-SHCB
	Basin Standby SH Metering Pump Stop/Start		DO		CP-WIL-SHCB
	Basin Standby SH Metering Pump Auto/Manual		DO		CP-WIL-SHCB
	Basin Standby SH Metering Pump Speed Input		AI		CP-WIL-SHCB
	Basin Standby SH Metering Pump Speed Output		AO		CP-WIL-SHCB
	E. Filter Water Chamber SH Metering Pump Ready		DI		CP-WIL-SHCB
	E. Filter Water Chamber SH Metering Pump In Auto		DI		CP-WIL-SHCB
	E. Filter Water Chamber SH Metering Pump Fault		DI		CP-WIL-SHCB
	E. Filter Water Chamber SH Metering Pumptubing Fail		DI		CP-WIL-SHCB
	E. Filter Water SH Metering Pump High Discharge Pressure		DI		CP-WIL-SHCB
	E. Filter Water SH Meter- Ing Pump Stop/Start		DO		CP-WIL-SHCB
	E. Filter Water SH Meter- Ing Pump Auto/Manual		DO		CP-WIL-SHCB
	E. Filter Water SH Metering Pump Speed Input		AI		CP-WIL-SHCB
	E. Filter Water SH Metering Pump Speed Output		AO		CP-WIL-SHCB
	E. Filter Water Chamber SH Flow Input		AI		CP-WIL-SHCB
	W. Filter Water Chamber SH Metering Pump Ready		DI		CP-WIL-SHCB
	W. Filter Water Chamber SH Metering Pump In Auto		DI		CP-WIL-SHCB
	W. Filter Water Chamber SH Metering Pump Fault		DI		CP-WIL-SHCB
	W. Filter Water Chamber SH Metering Pumptubing Fail		DI		CP-WIL-SHCB
	W. Filter Water SH Metering Pump High Discharge Pressure		DI		CP-WIL-SHCB

CP-WIL-SHCB

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
	W. Filter Water SH Metering Pump Stop/Start		DO		CP-WIL-SHCB
	W. Filter Water SH Metering Pump Auto/Manual		DO		CP-WIL-SHCB
	W. Filter Water SH Metering Pump Speed Input		AI		CP-WIL-SHCB
	W. Filter Water SH Metering Pump Speed Output		AO		CP-WIL-SHCB
	W. Filter Water Chamber SH Flow Input		AI		CP-WIL-SHCB
	FWC Standby SH Metering Pump Ready		DI		CP-WIL-SHCB
	FWC Standby SH Metering Pump In Auto		DI		CP-WIL-SHCB
	FWC Standby SH Metering Pump Fault		DI		CP-WIL-SHCB
	FWC Standby SH Metering Pump Tubing Fail		DI		CP-WIL-SHCB
	FWC Standby SH Metering Pump Hi Disc. Press.		DI		CP-WIL-SHCB
	FWC Standby SH Metering Pump Stop/Start		DO		CP-WIL-SHCB
	FWC Standby SH Metering Pump Auto/Manual		DO		CP-WIL-SHCB
	FWC Standby SH Metering Pump Speed Input		AI		CP-WIL-SHCB
	FWC Standby SH Metering Pump Speed Output		AO		CP-WIL-SHCB
	Sump Pump #3 Level High		DI		CP-WIL-SHCB
	Sump Pump #3 Running		DI		CP-WIL-SHCB
FAH-6018	Emergency Eyewash In use (Hypo Area)	FSH-6018	DI	I6002	CP-WIL-SHCB
	Control Panel Power Fail		DI		CP-WIL-SHCB
					CP-WIL-SHCB
	SHCB Air Duct Flow Switch #1		DI		CP-WIL-SHCB
	SHCB Air Duct Flow Switch #2		DI		CP-WIL-SHCB
	SHCB Air Duct Flow Switch #3		DI		CP-WIL-SHCB
	SHCB Air Duct Flow Switch #4		DI		CP-WIL-SHCB

CP-WIL-SHCB

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
	Chlorine Detector #1 Alarm Input		DI		CP-WIL-SHCB
	Chlorine Detector #2 Alarm Input		DI		CP-WIL-SHCB
	Chlorine Detector #3 Alarm Input		DI		CP-WIL-SHCB
	Chlorine Detector #4 Alarm Input		DI		CP-WIL-SHCB
	SHCB Generator Run Status		DI		CP-WIL-SHCB
	SHCB Generator Fault Status		DI		CP-WIL-SHCB
LI-6201	Fluoride Bulk Storage Tank 1 Level	LIT-6201	AI	I6200	CP-WIL-SHCB
LI-6202	Fluoride Bulk Storage Tank 2 Level	LIT-6202	AI	I6200	CP-WIL-SHCB
LAHH-6201	Fluoride Bulk Storage Tank 1 Level High-High Level	CP-F-FILL	DI	I6200	CP-WIL-SHCB
LAHH-6202	Fluoride Bulk Storage Tank 2 Level High-High Level	CP-F-FILL	DI	I6200	CP-WIL-SHCB
YLR-6201	Fluoride Transfer Pump #1 Running	LCP-FTP-1	DI	I6200	CP-WIL-SHCB
YL-6201	Fluoride Transfer Pump #1 In Remote	LCP-FTP-1	DI	I6200	CP-WIL-SHCB
YA-6201	Fluoride Transfer Pump #1 Fault	LCP-FTP-1	DI	I6200	CP-WIL-SHCB
YCR-6201	Fluoride Transfer Pump #1 Stop/Start	LCP-FTP-1	DO	I6200	CP-WIL-SHCB
PAH-6201	Fluoride Transfer Pump #1 High Disch Press	LCP-FTP-1	DI	I6200	CP-WIL-SHCB
YLR-6202	Fluoride Transfer Pump #2 Running	LCP-FTP-2	DI	I6200	CP-WIL-SHCB
YL-6202	Fluoride Transfer Pump #2 In Remote	LCP-FTP-2	DI	I6200	CP-WIL-SHCB
YA-6202	Fluoride Transfer Pump #2 Fault	LCP-FTP-2	DI	I6200	CP-WIL-SHCB
YCR-6202	Fluoride Transfer Pump #2 Stop/Start	LCP-FTP-2	DO	I6200	CP-WIL-SHCB
PAH-6202	Fluoride Transfer Pump #2 High Disch Press	LCP-FTP-2	DI	I6200	CP-WIL-SHCB
LAH-6203	Fluoride Containment Area 1 Wet Floor	LSH-6203	DI	I6200	CP-WIL-SHCB
LAH-6204	Fluoride Containment Area 2 Wet Floor	LSH-6204	DI	I6200	CP-WIL-SHCB
FAH-6200	Eyewash In Use (Fluoride Fill Station)	FSH-6200	DI	I6200	CP-WIL-SHCB
FAH-6203	Eyewash In Use (Fluoride Area 1)	FSH-6203	DI	I6200	CP-WIL-SHCB
FAH-6204	Eyewash In Use (Fluoride Area 2)	FSH-6204	DI	I6200	CP-WIL-SHCB

CP-WIL-SHCB

Input-Output List

TAG	DESCRIPTION	I/O Source/ Destination	I/O TYPE	DWG Number	PLC Panel
ZA-6100	SH Building PLC Panel Intrusion Alarm	CP-WIL-SHCB	DI	-	CP-WIL-SHCB
UA-6100A	SH Building PLC Panel UPS Circuit Fail	CP-WIL-SHCB	DI	-	CP-WIL-SHCB
UA-6100B	SH Building PLC Panel DC Power Fail	CP-WIL-SHCB	DI	-	CP-WIL-SHCB

SECTION 43 11 18
MULTISTAGE CENTRIFUGAL BLOWERS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, install, test, and place in satisfactory operation one electric motor-driven multistage centrifugal blower unit including electric motors, steel bases, inlet filter, inlet throttling valves with electric motor operators, check valves, discharge butterfly valves, control panels, and all necessary auxiliary equipment as specified herein and shown on the Drawings or as required for a complete installation of the system.

B. Equipment shall be provided in accordance with the requirements of Section 46 00 00 – Equipment General Provisions.

C. The completed installation is to be free from excessive vibration, noise, or oil leaks.

D. All equipment specified in this Section shall be designed and furnished by the blower manufacturer, who shall be responsible for the suitability and compatibility of all included equipment.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Division 01 – General Requirements

B. Section 09 90 00 – Painting

C. Section 46 00 00 – Equipment General Provisions

D. Division 26 – Electrical

E. Section 26 05 61 – Medium Voltage Electric Motors

F. Division 40 – Process Interconnections

1.03 SUBMITTALS

A. The Contractor shall submit complete Shop Drawings, Operation and Maintenance Manual, Instructions, and other information for the blower systems and all equipment specified herein in accordance with Section 01 33 00 – Submittal Procedures.

B. Shop Drawings shall include full descriptive information of materials used, method of fabrication, sizes, enclosures, ratings and layout dimensions, etc. to demonstrate full compliance with the Contract Documents.

C. Shop Drawings shall include weights of all system components and total weight of the operating blowers.

D. The performance characteristic curves for the blower shall be submitted with the shop drawings. Performance curves shall be developed in terms of standard conditions of 14.7 psia, 68°F, and 36% relative humidity as well as the design criteria specified in Paragraph 2.02, and the curves shall show horsepower draw over the range of SCFM flow rates. Additional operational data for the blowers shall be submitted including recommended vibration alarm settings and operational limits.

E. A complete description of the protective coating system to be used for all components, prior to shipment and after installation, shall be submitted with the shop drawings.

F. A listing of spare parts furnished shall be submitted with the shop drawings.

G. Blower manufacturer shall submit installation instructions in accordance with Section 01 33 00 – Submittal Procedures. Installation instructions shall be complete including unloading, check-out following shipment, storage, handling, assembly, anchorage, and start-up instructions and shall be submitted prior to delivery of the blower.

H. Electronic certified test reports including all details of apparatus, procedure, and results and all required calculations shall be submitted for each shop test conducted. Reports for shop tests shall be approved by the Engineer prior to shipment.

I. A detailed shop test plan shall be submitted with the Shop Drawings. The shop test plan shall fully describe the manufacturer's test facilities and the test procedure to be used.

J. Motor literature, illustrations, specifications and engineering data.

K. Instruments including product data sheets, manufacturer’s catalog information, and performance/operation criteria and requirements.

L. Panel, console, and cabinet layout drawings, component product information, wiring diagrams, field wiring requirements, and operator interface graphic layouts specific to the project.

M. Blower control system block diagram, input/output information, hardware layout drawings, interconnection diagrams, and point-to-point interconnection wiring diagrams for field wiring.

1.04 SERVICES OF MANUFACTURER'S REPRESENTATIVE

A. The Contractor shall arrange for the manufacturer to furnish the services of a qualified service person with at least three years of experience, who is regularly involved in the inspection, operation, and maintenance of centrifugal blowers and blower systems of the size and type being furnished. The service persons shall:

1. Inspect the installed equipment to verify that installation is in accordance with the blower manufacturer's requirements

2. Witness and check final adjustments and alignments

3. Witness and check start-up of each blower system

4. Assist the Contractor in performing field testing and prepare a written report as specified below.

5. Troubleshoot and correct any mechanical problems with the system that are noted during initial operation.

6. Submit written certification signed by the service person that the system has been properly installed, tested, and adjusted; that the system operates as specified or as required, including date of field test, as well as a listing of all persons present during the tests.

7. Investigate and supervise correction of any operating problems that may arise during the guarantee period of the equipment.

8. Coordinate communications with plant control system via the PLC network connection.

B. The services of a qualified manufacturer's technical representative shall be furnished at no additional cost to the Owner and shall be provided in accordance with Section 46 00 00 – Equipment General Provisions. Field services shall include as a minimum the site visits listed below. Any additional time required to achieve successful installation and operation shall be at the expense of the Contractor.

Service	Number of Trips	Number of Days/Trip
Installation and Testing	**1**	**2**
Startup and Training	**1**	**1**
Services after Startup	**1**	**1**

C. The manufacturer's service person shall sign in and out every day on-site and shall comply with all Owner requirements for visiting the site.

1.05 QUALITY ASSURANCE

A. The materials covered by the Specifications are intended to be standard equipment of proven reliability and as manufactured by reputable manufacturers having experience in the production of such equipment. The equipment furnished shall be designed, constructed, and installed in accordance with the best practices and methods and shall

operate satisfactorily when installed as shown on the Drawings and operated per the manufacturer's recommendations.

B. All materials shall be new, and both workmanship and materials shall be of the very best quality, entirely suitable for the service to which the units are to be subjected and shall conform to all applicable Sections of these Specifications. All parts of duplicate machines shall be interchangeable without modification. The construction of the blowers shall be such that the blowers will not be damaged during continuous operation and will not have undue vibration above the blower's surge limit. The design and construction of the blowers shall not cause any unbalanced floor loadings.

C. The Contractor shall protect blower system components at the project site and during installation. Contractor shall be required to place blowers onto their pads within 24 hours after arrival of the blowers at the site. The Contractor shall be responsible for scheduling and coordinating deliveries of blowers with the manufacturer to minimize the time that blowers are on-site and not installed. The Contractor shall be responsible for any additional cost incurred for storage of blowers. The Contractor shall connect space/strip heaters and manually rotate shafts as recommended by the manufacturer.

1.06 WARRANTY

A. All blower system components specified herein, including but not limited to multistage centrifugal blowers, motors, control panels, valves, and accessories, are to be warranted to be free of defects in materials and quality for a period of not less than two years from the date of acceptance. Warranty and Guarantee shall be as specified in Section 46 00 00 – Equipment General Provisions.

PART 2 – PRODUCTS

2.01 GENERAL

A. The aeration blower shall be multistage, vertically-split, centrifugal type. The blower shall be driven at the inlet end by direct coupled electric motors with flexible couplings and guards as specified herein.

B. The blower shall be Model 1604-ADOI with 28" impellers as manufactured by Gardner Denver, Inc.; or Model ZM 8 04-412 with 29" impellers and 30" impellers as manufactured by Atlas Copco. No substitutions shall be permitted. The model, number and type of impellers shall be verified by the blower manufacturer. Any modifications of the requirements presented herein shall be at the expense of the Contractor and shall be submitted to the Engineer for review, comment and acceptance.

C. The Contractor shall make all alterations required to structures, equipment, piping, controls, or other work shown in the Contract Drawings that may be required for the blower systems ultimately furnished. Any kind of modification required for the installation

of the blower system shall be at the expense of the Contractor and shall be approved by the Engineer during shop drawing review.

2.02 PERFORMANCE REQUIREMENTS

A. The proposed blower shall satisfy the conditions of service and requirements listed below. Standard cubic feet per minute (SCFM) is defined as the delivered airflow rate at the blower discharge in terms of standard conditions (68°F, 14.7 psia and 36% relative humidity). The blower shall be capable of delivering the specified design flow rate per blower (in SCFM) at the specified discharge pressure at the minimum inlet pressure, design maximum air temperature and relative humidity at the design maximum temperature as specified for the blower primary design point below. The design air temperatures and inlet pressure listed shall be at the inlet to the blower and do not include the impacts of inlet throttling. Motor horsepower shall not exceed the maximum rated motor horsepower specified. The blower shall be capable of turndown to the minimum flow rate specified below at the minimum design temperature and humidity specified.

Ambient Conditions	
Site Elevation, ft	**543**
Ambient Barometric Pressure, psia	**14.58**
Ambient Temperature Range, °F	**0 - 100**
Ambient Relative Humidity Range, %	**40 - 100**
Design Inlet Conditions	
Minimum Inlet Pressure, psia	**14.28**
Design Maximum Air Temperature, °F	**100**
Relative Humidity at Design Max. Temperature, %	**50**
Design Minimum Air Temperature, °F	**0**
Relative Humidity at Design Min. Temperature, %	**85**
Capacity Requirements	
Number of Blowers	**One (1)**
Mass Flow Rate/Blower at Design Max Inlet, SCFM	**6,000**
Discharge Pressure, psig	**6.0**
Maximum Shaft Power at Design Point, HP	**250**
Motor Requirements	
Voltage, V	**2300**

Maximum Horsepower, HP	**250**
Enclosure Type	**TEFC**

B. Surge volume of the blower shall be less than the minimum flow rates indicated in the table above under the range of ambient temperature conditions shown. Surge volume is defined herein as the airflow rate at which the discharge throttled blower exhibits the first indication of pressure pulsations or flow reversal.

C. The blower shall not draw more than 250 horsepower at any flow rate for any temperature in the range of 0°F to 100°F and the inlet pressure specified. The blower shall have a "non-overloading" characteristic through the use of backward leaning impellers.

D. The blower system will be designed to deliver varying airflow rates by throttling at the blower suction. Control of minimum airflow delivery and inlet valve throttling shall be based on measurements from the thermal mass flow meter.

2.03 BLOWER MOTORS

A. The blower manufacturer shall be responsible for furnishing the electric motor for the blower. Maximum rated horsepower for each blower is specified in Paragraph 2.02. The manufacturer shall be responsible for the proper selection, testing, installation, and operation of the motors and for coordinating the motors with the compressor equipment. Motors shall be new and both materials and quality shall be of the very best quality. Motors shall be IEEE841 complaint, manufactured by ABB Baldor/Reliance Electric Company; Toshiba Industrial and Power Systems, Inc.; Siemens Energy & Automation, Inc.; Ideal Electric Company; or TECO Westinghouse.

B. Motors shall be horizontal squirrel cage induction motors designed in accordance with the latest ANSI, NEMA, and IEEE standards. Motors shall be 2300 volts, 3 phase, 60 Hz. Motors shall be designed and manufactured for continuous duty for operation under the following conditions:

1. Altitude below 3,300 ft.

2. Ambient temperature ranging from 0 F to 100F.

3. Voltage variations of plus or minus 10 percent.

4. Frequency variation of plus or minus 5 percent.

5. Combined voltage and frequency variation of plus or minus 10 percent with frequency variation not exceeding plus or minus 5 percent.

C. The motor shall provide a service factor of 1.15. Motor horsepower shall be equal to or greater than the load over the full range of operating conditions. Motor speed shall not exceed 3600 rpm.

D. Motor torque characteristics shall be at least 20 percent greater than the maximum full load torque requirements over the full range of operating conditions from start-up to full load.

E. Motor shall be in TEFC enclosures and shall be designed for quiet operation. Motor sound pressure shall not exceed nominal 87 dBA, measured 3 feet from the motor.

F. Motors shall provide premium efficiencies and power factors throughout their operating range. The power factors specified shall be achieved without the use of power factor correction capacitors.

G. Motor insulation and leads shall have Class H insulation; however, temperature rise shall be limited to that of Class B insulation. Manufacturer's premium grade insulation shall be used.

H. The stator shall be assembled from high grade electrical sheet steel laminations adequately secured together. Motor laminate stack shall be C5 grade. Stator windings and end turn connections shall be fully braced to withstand all mechanical, electrical, and thermal stresses. The shaft shall be made of high-grade machine steel or steel forging and of size and design adequate to withstand the load stresses. The rotor shall be constructed using copper rotor bars. Motor core shall be M-22 grade with losses no greater than 1.8 watts per pound at 60 Hz. The balance grade of the rotor shall be ISO 2.5 or better.

I. Bearings shall be grease lubricated ball bearings. The bearings should have a grease purge and a remote greasing capability.

J. Motor leads shall be suitably marked and identified. Each motor shall be provided with an oversized terminal box with space for full stress cone terminations and shall be constructed of cast iron or fabricated steel, neoprene gasketed and bolted. The three stator phase leads shall be provided with 2-hole pad connectors for the incoming cables.

K. Motors shall be designed and manufactured for operation in the direction required for the blowers. The phase sequence shall be marked permanently and plainly inside the stator lead junction box.

L. Motors shall have breather and drain plugs to allow for drainage of any moisture from inside.

M. Motor Winding Temperature Monitors: Each motor shall be provided with six (two per phase) platinum resistance temperature detectors (RTDs) embedded in the stator winding. RTDs shall be 100-ohm, platinum, 3 wire type having a stability of better than

0.2 percent of maximum exposed temperature for one year of service, or 0.25°C, whichever is greater. Two detectors per phase are required and shall be placed at locations determined by the manufacturer to give close approximation of the hottest spot temperatures.

N. Motor Bearing Temperature Monitoring: Each motor shall be furnished with two platinum motor bearing resistance temperature detectors (RTDs) for connection to the respective blower local control panel PLC input/output interface. Motor bearing RTDs shall be mounted in Type 316 stainless steel thermowells coordinated and furnished by the blower Supplier. Locations shall be coordinated with the blower manufacturer.

O. Motor Bearing Vibration Monitoring: Each blower shall be furnished with two motor bearing vibration sensors for connection to the respective blower local control panel PLC input/output interface. Locations shall be coordinated with the blower manufacturer. Each bearing drive end (DE) and opposite drive end (ODE) should be fitted with Horizontal and Vertical vibration detection.

P. The CONTRACTOR shall furnish, install and test all requisite conduit and wiring and terminations between all supplied instruments and each local blower control panel, as necessary.

Q. Motors shall be supplied with space heaters for 120V operation. Starters shall include circuitry and 120-volt power supply to automatically power the space heaters when the motors are not running and vice-versa.

R. Motor power supply shall be connected to an oversized junction box mounted on the motor housing.

S. Motors shall comply with Division 26 requirements, except where modified herein.

T. Glass fiber composite plastic or laminate fans are not allowed. A steel hub with an injection molded fan is not an acceptable alternate. Fan cover shall be steel or cast iron.

2.04 BASES

A. A welded steel fabricated base shall be provided for mounting the blower, electric drive and driver base. The base shall be of a rigid box section shape. The box section shall be properly ribbed for stiffness and present large bearing areas for carrying the load on the foundation and shall include lifting lugs. The base shall be rigid to prevent deflection during start-up and normal operation that would affect alignment. Rubber vibration isolation pads shall be provided between the concrete mounting and the base of the blower unit. The base shall have machined surfaces at blower and motor installation pads.

2.05 HOUSING AND HEADS

A. The housing, inlet and outlet heads shall be constructed of close-grained cast iron sections, ASTM A48, fitted with babbitt joints held securely by steel tierods and able to withstand the operating pressures. Heads shall be provided with mounting legs. Approved eye bolts or lugs shall be provided for lifting. Where the blower shaft passes through both the inlet and outlet heads, non-contact labyrinth seals with babbitt inserts or carbon ring seals shall be provided to prevent air leakage and to assure non-contamination of the bearing lubricant. Internal seals between stages shall be of the labyrinth type to restrict inter-stage leakage. Inlet and outlet flange connections shall be ANSI Standard 125-pound drilled through bolt pattern and will be an integral part of the heads.

B. Air passage shall be finished by hand or other means to obtain smooth surfaces and minimize friction losses. Casing shall be accurately machined to gauge, where necessary, to ensure interchangeability of all parts.

C. The compressors shall be built from parts cast in patterns from which previous units have been built and tested. The compressor shall be of the manufacturer's standard design.

2.06 IMPELLERS AND SHAFTS

A. Impellers shall be cast aluminum alloy, keyed to the shaft and held by a lock nut. Hubs of the impellers shall butt against each other directly or through one-piece metal spacers. Impellers shall be individually precisely machine balanced. Impellers shall be individually replaceable without requiring dynamic rebalancing of the entire rotating assembly to maintain factory vibration specifications. Vibration shall not exceed 1.25 mils in the vertical plane measured at the blower bearing housing.

B. Shaft shall be of sufficient diameter to operate below the first critical speed and be made of high grade hot-rolled steel. Shaft speed shall not exceed 3,600 rpm.

2.07 BEARINGS

A. The blower shall have two oil lubricated ball bearings which can be lubricated, inspected or replaced without disconnecting piping or disassembling the blower. The bearings shall be contained in outboard bearing housings designed to isolate the bearings from blower temperature.

B. A balance piston will be integrally shaft mounted on the discharge end of the blower. The balance piston will reduce the thrust load on the thrust bearing by 75 percent.

C. Lubrication shall be accomplished by means of an oil slinger that circulates lubrication oil from an inner reservoir through the bearing and returns the oil to the outer reservoir. Oil

recirculation shall be at the rate of at least 1.5 pints per minute. The oil level in the bearings housings shall be viewable through a sight glass.

D. Blower Bearing Temperature Monitoring: The blower shall be furnished with two platinum motor bearing resistance temperature detectors (RTDs) for connection to the respective blower local control panel PLC input/output interface. Blower bearing RTDs shall be mounted in Type 316 stainless steel thermowells coordinated and furnished by the blower manufacturer

E. Blower Bearing Vibration Monitoring: The blower shall be furnished with two motor bearing vibration sensors for connection to the respective blower local control panel PLC input/output interface. Locations shall be coordinated by the blower manufacturer.

F. The CONTRACTOR shall furnish, install and test all requisite conduit and wiring and terminations between all supplied instruments and each blower local control panel as necessary.

2.08 COUPLINGS

A. A flexible, disc spacer coupling of an approved type shall be furnished for connecting the blower and motor. The coupling design shall take care of inaccuracies of alignment and permit axial adjustment. The coupling shall have a minimum service factor of 1.35 over motor nameplate horsepower. Spacer coupling shall have a minimum length of seven inches. The construction of the couplings shall be such that either hub of a unit may be removed without disturbing adjustment of the blower or motor. A factory laser alignment shall be conducted prior to shipment to facilitate alignment in the field.

B. The manufacturer shall provide a suitable steel or “OrangePeel” aluminum coupling guard for the coupling between blower and motor. The guard shall have a sheet metal top covering and expanded metal front and be designed to meet current OSHA requirements.

C. The manufacturer shall provide a torsional critical speed analysis to ensure that the blower, motor, and coupling are properly designed and to ensure that there are no torsional critical speeds within the operating range of the unit.

2.09 PRESSURE, TEMPERATURE AND POWER MONITORING

A. Temperature Indicating Transmitters: Each new and existing blower shall be provided with inlet and discharge thermowells and temperature indicating transmitter assemblies on the suction and discharge sides as shown on the Contract Drawings and located as recommended by the blower manufacturer.

B. Temperature indicating transmitters shall be mounted in Type 316 stainless steel thermowells coordinated and furnished by the blower Supplier. Thermowell locations on piping shall be coordinated by the blower manufacturer.

C. Pressure Indicating Transmitter: Each new and existing blower shall be provided with a pressure indicating transmitter on the discharge side as shown on the Contract Drawings and located as recommended by the blower manufacturer.

D. Differential Pressure Transmitter: Shall be provided at the discharge of the filter/silencer unit, as shown on the Contract Drawings. Vacuum and pressure taps shall be provided by the Contractor at locations selected for stable measurement and accurate evaluation of pressure loss across the filter.

E. Instrumentation shall comply with the requirements of Division 40.

F. Instrumentation shall withstand temperatures up to 300ºF

G. The Contractor shall furnish and install all requisite conduit, wiring, testing and terminations from new field instruments to the blower local control panels as necessary.

H. The blower manufacturer shall provide current monitoring devices (CTs) to be installed in the RVSS starters by the electrical subcontractor and/or RVSS manufacturer. The blower control panel PLC shall receive motor current signals from the CTs for hardwired blower surge protection as shown on the drawings. Coordinate requirements with Division 26 – Electrical.

2.10 BLOWER CONTROL PANELS

A. The blower supplier shall furnish a NEMA 4X blower control panel for the new and existing blowers. Each blower control panel shall include a PLC for monitoring, displaying, and protecting the blowers, including a PLC operator interface panel with touchscreen. Blower control panel shall be suitable for wall-mounted installation by the Contractor within the blower electrical building. Each blower control panel shall contain controls for blower motor starting and stopping, surge and overload detection, alarm and emergency shutdown systems, and for the inlet throttling valve. The panel shall be supplied with a disconnect switch on the 120-volt power supply to the panel.

B. Each new blower control panel shall be furnished with a PLC. A PLC panel shall be provided for the existing blower. PLC shall be Allen Bradley CompactLogix (see Section 40 63 43 – Programmable Logic Controllers). The PLC shall be provided complete with rack, power supply, I/O cards, special function cards, instructions, memory, input/output capacity, operator interface unit (see Section 40 62 63 – Operator Interface Terminals) and appurtenances to provide all required features and functions.

1. Additional communication ports shall be provided for the Operator Interface and other devices as required.

2. Each blower control panel shall include a UPS to provide uninterruptible power to the PLCs for a minimum of 30 minutes in the event of an electrical power failure.

3. Each blower PLC system shall be provided with an Ethernet network switch for communications with the Plant SCADA System

C. The blower control panel for the new blower shall be furnished with a minimum 10-inch color touchscreen operator interface mounted on the front of the NEMA 12 enclosure. The operator interface shall be Allen Bradley PanelView Plus 7 series or equal. The operator interface shall provide the following functions at a minimum:

1. Surge and overload protection with impending warning and trip functions in amperage and horsepower (calculated) displayed as digital readouts.

2. Blower bearings vibration level indication with impending warning and trip functions and levels displayed as digital readouts. A warning shall be activated through the monitor when vibration exceeds 0.2 inches/sec. An alarm and shutdown shall be provided when vibration exceeds 0.4 inches/sec. Blower system manufacturer to confirm final settings.

3. Blower bearings temperature indication with impending warning and trip functions and levels displayed as digital readouts.

4. Blower “Run” Light (Red)

5. Common Warning Light (Amber)

6. Common Fault Alarm Light (Amber)

7. Motor windings temperature indications with impending warning and trip functions and levels displayed as digital readouts.

8. Inlet butterfly valve position indication with automatic/manual control functions, status monitoring (% open, fault status, available status (power on and in remote)) with % open and set-point displayed as digital readouts.

9. Inlet and discharge air temperature indications with impending warning and trip functions and levels displayed as digital readouts.

10. Discharge pressure indications with impending warning and trip functions and levels displayed as digital readouts.

11. Inlet filter differential pressure indications with impending warning and trip functions and level displayed as digital readouts.

12. Blower flow rate shall be measured in SCFM by thermal mass flow meter and displayed as digital readout.

D. The blower control panel for the existing blower shall be furnished with a minimum 10-inch color touchscreen operator interface mounted on the front of the NEMA 12

enclosure. The operator interface shall be Allen Bradley PanelView Plus 7 series or equal. The operator interface shall provide the following functions at a minimum:

1. Surge and overload protection with impending warning and trip functions in amperage and horsepower (calculated) displayed as digital readouts.

2. Blower “Run” Light (Red)

3. Common Warning Light (Amber)

4. Common Fault Alarm Light (Amber)

5. Inlet butterfly valve position indication with automatic/manual control functions, status monitoring (% open, fault status, available status (power on and in remote)) with % open and set-point displayed as digital readouts.

6. Inlet and discharge air temperature indications with impending warning and trip functions and levels displayed as digital readouts.

7. Discharge pressure indications with impending warning and trip functions and levels displayed as digital readouts.

8. Inlet filter differential pressure indications with impending warning and trip functions and level displayed as digital readouts.

9. Blower flow rate shall be measured in SCFM by thermal mass flow meter and displayed as digital readout.

E. Adjustable time delays shall be incorporated to allow uninterrupted motor starts and stops to prevent nuisance shutdowns.

F. All trip functions shall be frozen upon a shutdown so that shutdown status can be determined and the values at shutdown preserved. The PLC shall store and display the 50 most recent shutdown alarms including identification of alarms, time and date of occurrence, and value on trip.

G. The control panel shall be completely pre-wired and tested at the factory by the blower system manufacturer.

H. An as-built diagram of the completed panel shall be encased in plastic inside the panel.

I. Engraved plastic nameplates shall be securely mounted on the front and inside of each blower panel to designate the blower served and to identify the various devices, instruments, etc. Nameplates shall have white letters on a black background.

J. Panel layout and wiring diagrams shall be submitted with the submittal drawings.

K. Alarms shall not be annunciated under normal start-up and shut-down conditions.

L. Motor and blower bearing vibration and temperature warning and alarm/shutdown settings and blower inlet/discharge air temperature warning and alarm/shutdown settings shall be as recommended by the blower supplier (except for inlet air temperature, which will be for indication only).

M. The surge protection system shall prevent surge conditions by use of both motor horsepower and amperage. Adjustable time delays shall be incorporated to prevent nuisance shutdowns. Initial setting for the blower shall be XXX horsepower (or equivalent current) for overload shutdown and XXX horsepower (or equivalent current) for low horsepower (surge) shutdown. The Contractor shall coordinate the range and calibration information between the blower manufacturer and electrical subcontractor.

N. The PLC shall provide a common failure relay output activated by any of the shutdown conditions. Another relay output shall be wired into the motor control circuit in the blower motor starter to shut down the blower.

O. Panel shall be prewired with a master terminal strip to accommodate all inputs and outputs. A UL label is required. Each end of each wire shall be identified by a unique wire number printed on a heat shrunk sleeve marker.

P. All wiring external to control components within the panel shall be multi-strand copper no smaller than 14 gauge with each end properly numbered according to the manufacturer's drawings. Wiring will be done in a professional quality manner and run in covered trays. All wires that attach to door mounted components shall be neatly bundled and tied. All external connections shall terminate on a common terminal strip with at least 20% spare connection points.

2.11 REQUIREMENTS FOR INTERFACE WITH THE PLANT SCADA SYSTEM

A. The Blower Manufacturer shall provide the application program for all blower control and monitoring programs in native format to enable the Owner to reload all necessary programming onto a new blower PLC in the event of PLC failure.

B. The Contractor shall provide all coordination required for communication of information between the blower control panels and the Plant SCADA System. The blower manufacturer will make available in separate registers the required digital and analog information to the Plant SCADA System through network communication. The blower manufacturer shall submit copies of the graphic displays for approval. The Contractor shall coordinate with the control system Subcontractor under Division 40 to develop the graphic displays in the existing Plant SCADA System display format protocol. The Plant SCADA System (by the Owner under Division 40) is to receive all necessary information from each blower control panel PLC to be able to do the following:

1. Log all monitored points for trend analysis

2. View real time trends

3. View historical information

4. Display graphs and charts

5. Date/time history of alarms including surge

2.12 BLOWER START-UP AND SHUTDOWN SEQUENCE CONTROL PROGRAMS

A. The blower start-up and shutdown sequence control programs shall be provided by the blower manufacturer in each blower control panel PLC as follows:

1. A blower may be called to start or stop in either of the following ways:

a. Manually at the blower control panels through the operator interface panel.

b. Remotely through the Plant SCADA System (remote-manual)

2. When a blower is called to start, a "Blower #__ Start-up Sequence Initiated" message shall be shown on the blower local control panel display and on the Plant SCADA System display. All messages to be displayed on all blower PLC operator interfaces shall be provided by the Plant SCADA System through the communication network. Status of delay timers showing countdown time shall be displayed during a start-up and shutdown sequence.

3. Automatic control of the inlet throttling valves by the Plant SCADA System during a start-up sequence shall be discontinued until completion of the start-up sequence.

4. A "Blower #___ Start-up Sequence in Progress" message shall be shown on the blower local control panel display and on the Plant SCADA System display and shall remain on the screen in flashing mode until the start-up sequence is completed.

5. The Plant SCADA System or the operator through the operator interface at the blower control panel shall provide a command to the blower control panel to start its respective blower. The blower control panel PLC shall confirm that no alarm conditions exist and that the blower is available for starting. In the case of a blower failure or if a blower is locked out by a PLC-based "permissive", the Plant SCADA System shall prompt the operator to start the next available blower according to the control program in the Plant SCADA System. Indication of the next blower to be started and the next blower to be shut down through the strategy shall be provided on the Plant SCADA System graphic displays.

6. The blower control panel PLC shall move the inlet throttling valve on the blower to be started to the "Start-up" position. The Plant PLC System will provide a command to the PLCs of blowers already operating to move inlet butterfly valves

to their start-up position. The blower control panel PLC will use continuous 4-20 mA position set-point and position feedback information from the operators for the inlet throttling valves to monitor position for start-up. Indication that the PLC is "Positioning the Inlet Throttling Valves" shall be provided on the blower local control panel display and on the Plant PLC System display. Failure of any of the valves to move to their required positions within the time required shall initiate a "Start-up Sequence/Valve Failure" alarm through the blower control panel PLC, shall terminate the start-up sequence, and shall provide alarm indication on the blower local control panel display and on the Plant SCADA System display.

7. The blower control panel PLC shall provide a start (dry contact) signal to the Blower Motor Starter to energize the drive motor. The blower control panel PLC shall receive a feedback signal from the starter confirming that the main drive motor starter has been energized via the motor starter auxiliary contact. If the start verification is not received in 20 seconds, the start sequence is terminated on a “No Motor Feedback Alarm (Sequence Failure).” After the motor feedback signal is received, the inlet throttling valves shall be positioned by the Plant PLC System according (see Division 1740). A “Blower #____ Start-up Sequence Completed” message shall be displayed on the blower local control panel display and on the Plant SCADA System display.

8. When a blower is called to stop either through the Plant SCADA System or the local operator interface, a "Blower #___ Shutdown Sequence Initiated" message shall be shown on the blower local control panel display and on the Plant SCADA System display.

9. After the command is received from the Plant SCADA System to shut down the blower (or a blower shutdown is initiated manually through the touch screen), the blower control panel PLC shall stop the blower and shall move the inlet throttling valve to the start-up position. A "Blower # ____ Stopped" message shall be shown on the blower local control panel display and on the Plant SCADA System display.

10. Emergency Stop capability shall be provided at the blower, through the local blower control panel, at the motor starter and through the Plant SCADA System through a single-click function. Emergency Stop shall de-energize all equipment on the blower base. The blower will not be permitted to be reset or reactivated until the maintained Emergency Stop has been manually released.

11. The blower control panel for the new blower shall include protective shutdown interlocks to protect the blower from abnormal operating conditions including:

    a. Motor High Bearing/Winding Temperature

    b. High Discharge Air Temperature

    c. High Motor Horsepower

d. Surge

e. No Run Status Contact Feedback from Starter During Starting

f. Loss of Run Status Contact Feedback from Starter

g. Sequence Failure

h. Motor/Blower High Vibration

i. Pushing Emergency Stop Pushbutton

j. PLC Failure

k. Blower Bearing High Temperature

l. Inlet Throttling Valve Fault or “Not Available”

12. The blower control panel for the existing blower shall include protective shutdown interlocks to protect the blower from abnormal operating conditions including:

a. High Discharge Air Temperature

b. High Motor Horsepower

c. Surge

d. No Run Status Contact Feedback from Starter During Starting

e. Loss of Run Status Contact Feedback from Starter

f. Sequence Failure

g. Pushing Emergency Stop Pushbutton

h. PLC Failure

i. Inlet Throttling Valve Fault or “Not Available”

2.13 BLOWER MACHINE MONITORING PROGRAMS

A. The Blower monitoring programs shall be provided by the blower manufacturer in each blower control panel as follows:

1. Monitoring and protection of the blowers from abnormal operating conditions shall be provided through the PLC.

2. Current inputs to each PLC shall be from a current transformer provided in the motor starter.

3. Provide monitoring of all analog inputs. The PLC shall shut down the blower if inputs are not within the acceptable range. Hold-out circuitry shall be provided in the PLC programming to prevent shut-down on alarm condition while the blower is being started.

B. The following is a general listing of the minimum data link, analog, CT and RTD inputs to the PLC at the blower control panel for the new blower. Data link, analog, CT and RTD inputs shall be monitored/displayed at the local blower control panel and monitored/logged/displayed through the Plant Distributed PLC System via network communication.

1. Blower RTD Drive-End Bearing Temperature

2. Blower RTD Non-Drive-End Bearing Temperature

3. Blower Inlet Air Temperature

4. Blower Discharge Air Temperature

5. Blower Discharge Pressure

6. Blower Drive-End Bearing Vibration

7. Blower Non-Drive-End Bearing Vibration

8. Blower Amperage (from CTs)

9. Inlet Throttling Valve Position

10. Motor RTD Winding Temperatures

11. Motor RTD Drive-End Bearing Temperature

12. Motor RTD Non-Drive-End Bearing Temperature

13. Motor Drive-End Bearing Vibration

14. Motor Non-Drive-End Bearing Vibration

15. Inlet Filter Differential Pressure

C. The following is a general listing of the minimum data link, analog, CT and RTD inputs to the PLC at the blower control panel for the existing blower. Data link, analog, CT and RTD inputs shall be monitored/displayed at the local blower control panel and

monitored/logged/displayed through the Plant Distributed PLC System via network communication.

1. Blower Inlet Air Temperature
2. Blower Discharge Air Temperature
3. Blower Discharge Pressure
4. Blower Amperage (from CTs)
5. Inlet Throttling Valve Position
6. Inlet Filter Differential Pressure

D. The blower control panel PLC shall include programming to report the order in which alarm conditions are received, such that operators can determine the alarm that caused blower shut-down.

E. Discrete inputs to each blower PLC shall include:

1. Blower motor run status (from starters)
2. Electrical malfunction alarm (from starters)
3. Inlet throttling valve operator in local
4. Inlet throttling valve operator “available” (power on and in remote)
5. Inlet throttling valve operator fault
6. Surge Indication Alarm

F. Discrete outputs from the blower control panel PLC shall include:

1. Blower Start (to starter)
2. Blower Stop (to starter)
3. Impending surge indication (not a discrete output but displayed on OIT)

G. Analog outputs from the blower PLC shall include:

1. Inlet Throttling Valve Position Set-point (to valve)

H. Discrete and analog inputs to the blower control panel PLCs from the Plant Distributed PLC System shall be as shown on the Drawings and generally include, but are not limited to, the following:

1. Blower start command

2. Blower stop command

3. Inlet Throttling Valve Position Set-point

2.14 EQUIPMENT IDENTIFICATION

A. Each blower shall be provided with a substantial stainless steel nameplate, securely fastened in a conspicuous place and clearly inscribed with the manufacturer's name, year of manufacture, serial number, and principal rating data (flow in scfm, discharge pressure, speed and design inlet conditions).

2.15 PRESSURE GAUGES

A. Inlet pressure gauges shall be provided on the suction of each blower. Vacuum and pressure tap locations shall be selected for stable measurement and accurate evaluation of pressure rise across the blower.

B. The inlet vacuum gauge shall be located upstream of the inlet throttling valve and shall be a bellows gauge with a range of 0-15 inches water vacuum. Scale shall be a 270° arc. Dial size shall be 4-1/2 inches with black phenolic case. Gauge tap shall be 1/4 inch minimum.

C. Gauges shall have an accuracy of ±1 percent. All gauges shall be by the same manufacturer and meet the requirements of Section 40 73 13 – Pressure and Differential Pressure Gauges except where specified herein.

2.16 EXPANSION AND FLEXIBLE COUPLINGS

A. Inlet and discharge-filled, single arch expansion joints shall be provided for each new blower as shown on the Drawings. Each expansion joint shall be capable of withstanding the vacuum and pressure under all operating conditions and shall be rated for 300°F continuous service. Expansion joints shall provide a minimum of 2-1/4 inches of movement in compression, 1-1/2 inches of elongation, and 1-1/4 inches of lateral movement. Expansion joints shall be Maxi-Joint Style 1101 as manufactured by General Rubber Corporation or equal.

2.17 CHECK VALVES

A. The blower manufacturer shall furnish discharge check valves for the blower as shown on the drawings. Check valves shall be a wafer type discharge check valve of the dual, flat-plate type with center hinge, metallic center post, spring or non-spring closure, steel or cast iron body, Viton-B seal, aluminum-bronze plates, Inkonel 600 springs, and rated for temperatures up to 300°F. Check valve shall be Crane Duo Check II, Flexi-Hinge Type 518, or equal. The check valves shall be installed by the Contractor as shown on the Drawings. The Contractor shall perform any piping modifications necessary to

incorporate the check valve provided by the blower manufacturer at no cost to the Owner. Check valves shall be installed in the horizontal position.

2.18 INLET FILTER AND SILENCER

A. The manufacturer shall provide a combination inlet filter/silencer for the blower as shown on the drawings and specified herein. Inlet filter/silencers shall be of the free standing, flanged, removable cartridge filter type with attached silencing section capable of a minimum 20 dBA noise attenuation on the midrange octave band (500 to 1000 Hz). Filters shall be constructed of mild steel with polyester powder coated interior and exterior (no liquid or oil-based paint). The filter silencer housings shall be single-stage, cartridge-style, and suitable for outdoor service. Flanges shall be 125# ANSI flange, sized to match blower inlet piping as shown on the drawings.

B. Maximum clean filter pressure drop of the inlet filter/silencer with the elements installed shall not exceed 2-inches WG (0.07 psi) at the design airflow specified in Paragraph 2.02 when measured at the filter silencer outlet. Maximum pressure drop with dirty inlet filters shall be 12-inches WG (0.43 psig) at the design airflow specified in Paragraph 2.02 when measured at the filter silencer outlet. Filter silencer pressure loss rating shall include total restriction, including losses induced by filter housing and filter elements.

C. Filter element face velocity shall not exceed 75 fpm at rated flow, and allowable final differential pressure shall be rated not less than 12-inches WG.

D. Filter medium shall be synthetic, self-supporting, not require a support scrim, and shall not be affected by relative humidity. Filters shall have a minimum efficiency of 98% at 10-micron (nominal). Filter element changes shall not require hand tools and filter element weight shall not exceed 25 lbs. Filter elements shall be cleanable.

E. Filter silencer shall be Endustra Tri-Vent® P09 Series w/ Enduralast® Hi-Flow Synthetic Medium or approved equal.

2.19 SPARE PARTS

A. The blower manufacturer shall submit a list of recommended spare parts with long lead items clearly identified.

B. The blower manufacturer shall provide spare parts only for items that will be consumed during startup and testing including sufficient quantities of recommended lubricants.

C. One spare filter element shall be provided for each blower intake filter/silencer.

2.20 PAINTING

A. Blowers, base, and motor shall have prime and finish painting done at the factory using the manufacturer’s premium grade paint specifications. Paint system shall be submitted

for approval with the shop drawings. A color chart shall be submitted with the shop drawings for Owner selection of color for the blower and motor.

PART 3 – EXECUTION

3.01 INSTALLATION

A. All equipment specified herein shall be installed in accordance with the manufacturer's instructions and checked by the respective manufacturers' representative, in conformity with the applicable Sections of this Specification. After installation, the equipment shall be aligned and adjusted as required for proper operation.

3.02 SHOP TEST

A. Factory testing of the blowers and components prior to shop performance tests is required. Impellers shall be statically and dynamically balanced and over-sped to 115% of rated speed. Dimension checks shall be made throughout fabrication.

B. Shop running and performance tests for each blower shall be made by the manufacturer and certified curves and reports shall be submitted for approval.

C. After approval of preliminary performance tests, each blower shall be factory performance tested in accordance with the most recent edition of the ASME Power Test Code for Centrifugal Compressors and Exhausters (PTC-10) and as specified herein. Test results shall be reported in accordance with the same code and as specified herein and the results submitted prior to shipment.

D. Factory performance tests are to be conducted with the job specific motor where possible. Calibrated shop motors are acceptable for the witness test according to the most recent edition of the ASME Power Test.

E. The factory performance tests shall be conducted for each blower to demonstrate compliance with all performance requirements. Performance tests shall include a minimum of six (6) points to determine the blower flow-pressure-horsepower characteristic with inlet valve wide open over the full range of specified conditions. Test points shall include points to define the blower surge limit (with inlet modulating valve wide open). Tolerances allowable in testing shall be as approved by the Engineer.

F. A calibrated torque meter shall measure the shaft input horsepower as per Paragraph 4.35 of the Code to verify shaft power draw measurements. Compressor net delivered flow rate and discharge pressure shall be guaranteed with no negative tolerance. There shall be no other tolerances or measuring uncertainties used in reporting test results (i.e., the tests shall be reported with ±zero percent tolerance).

1. The capacity of the blower shall be defined as per Paragraph 4.26 of the ASME PTC-10 Power Test Code. Specifically, capacity is defined as, "the net rate of flow

compressed and delivered, expressed in terms of cubic feet per minute at the prevailing inlet temperature and pressure. It shall be measured in a suitable manner to exclude effectively all external leakage losses from sources such as shaft seals." That is, air flow shall be measured on the discharge side of the compressor at zero percent tolerance.

2. Complete instrumentation layout and manufacturer's information for all instrumentation used during testing shall be submitted including the arrangement and device for flow measurement, conversion tables/graphs, and accuracies over the specified flow range. All test equipment shall be calibrated and certified by an independent test agency no more than twelve (12) months prior to the test date. Certificates shall show the stability of calibration over a period of at least one year per ISO 9001, Paragraph 4.1.1.

3. Velocity vibration versus frequency levels shall be recorded within 10-1,000 and 10-10,000 Hz frequency range.

G. In case of failure of any unit to meet the test requirements, the manufacturer, at their own expense, shall make such alterations as are necessary and the tests shall be repeated without additional cost to OWNER until the equipment is satisfactory.

H. The Supplier shall prepare and submit test results, performance curves, and all calculations with a statement certifying that shop tests were successfully conducted in accordance with the test requirements and that all specified performance conditions were demonstrated for each blower system. Certified performance curves based on the results of the shop performance test shall be developed in terms of standard conditions of 14.7 psia, 68°F, and 36% relative humidity, as well as the design criteria specified in Paragraph 2.02, at the actual blower speed for each point. SCFM shall be plotted against pressure at both standard and design conditions, and the curve shall show standard horsepower draw over the range of SCFM flow rates.

I. The blower control panel shall be fully tested prior to shipment, including a test of all alarm and trip functions.

3.03 FIELD TESTS

A. Field running tests shall be conducted by the factory service people with assistance of the Contractor.

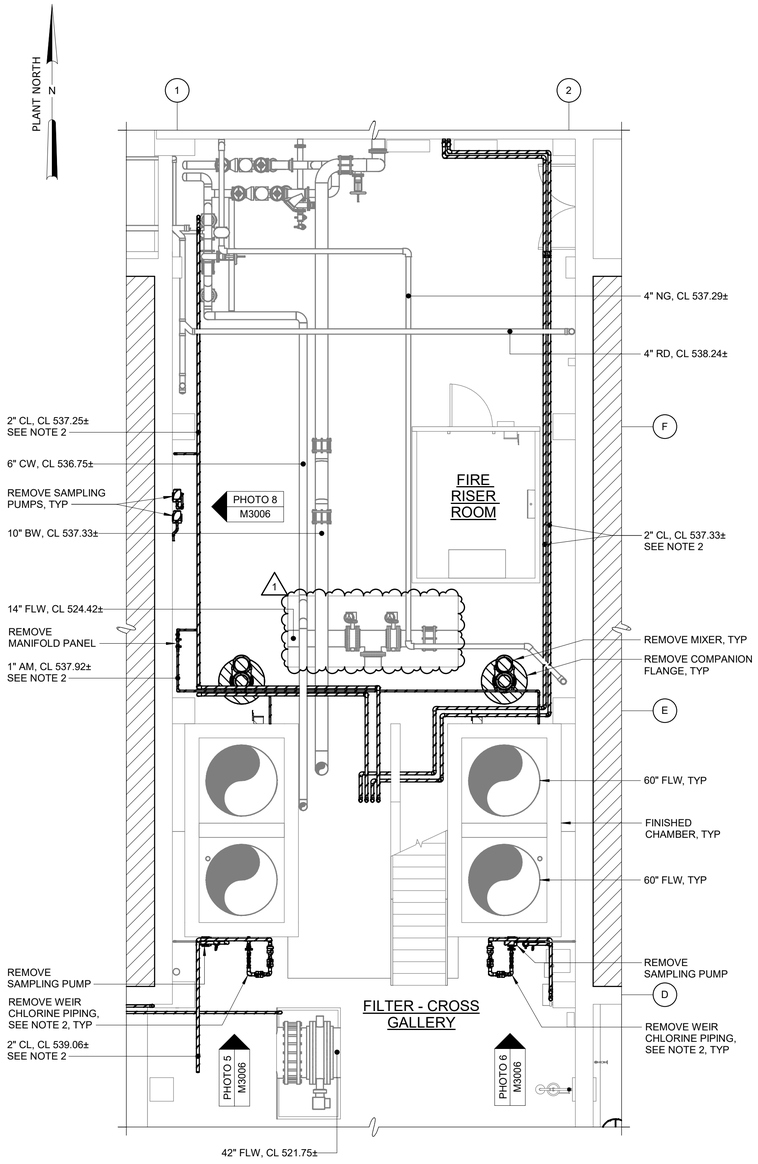
B. Running tests shall be conducted under actual operating conditions for a period of not less than 8 hours for each blower. Running tests shall demonstrate that the blower is free from all objectionable vibration and noise and overheating throughout the entire range of specified operation. Initial running tests shall demonstrate that all instruments, controls, and protective shutdown interlocks function properly.

C. Each blower shall be run for 4 hours at full load and for 4 hours just above surge. Temperature and vibration readings for all monitored points shall be recorded after 4 hours and at the conclusion of the 8-hour run period for the operating blower(s). Any shutdown of the blower(s) during the test periods shall be recorded and the cause noted. Any defects or operating problems found during running tests shall be promptly corrected.

END OF SECTION

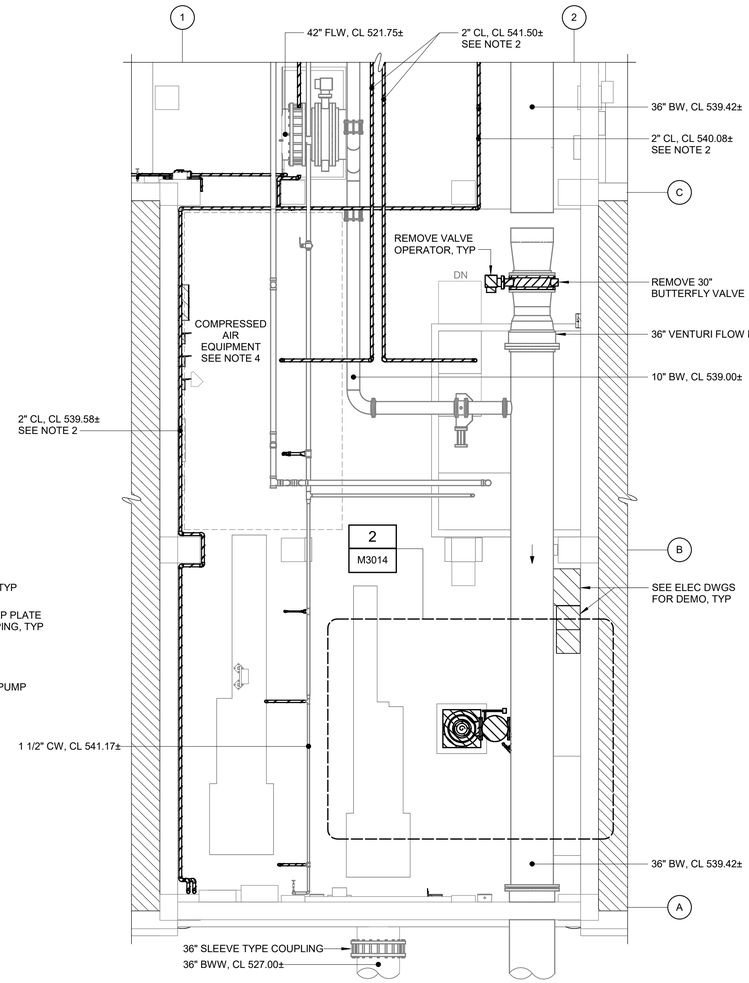
NOTES:

1. REFER TO SPECIFICATION SECTION 01 14 00 COORDINATION WITH OWNERS OPERATIONS FOR DEMOLITION SEQUENCING.
2. ALL EXISTING CHLORINE AND AMMONIA PIPING SHALL BE DEMOLISHED. CONTRACTOR TO FIELD VERIFY FULL EXTENTS OF CHLORINE AND AMMONIA PIPING WITHIN FILTER COMPLEX. CHLORINE PIPING PENETRATING FINISHED CHAMBER WALLS SHALL BE CUT AND CAPPED WITHIN 6" OF WALL EXTERIOR.
3. ALL EXISTING SAMPLE PUMPS & PIPING SHALL BE DEMOLISHED. CONTRACTOR TO FIELD COORDINATE EXTENT OF SAMPLE PIPING WITHIN PIPE GALLERY.
4. EXISTING COMPRESSOR DISCHARGE SHALL BE REROUTED TO THE BULK CHEMICAL BUILDING. SEE CIVIL DRAWINGS FOR PROPOSED ROUTING.



ENLARGED BOTTOM PLAN - NORTH - CROSS GALLERY DEMOLITION
3/16" = 1'-0"

ENLARGED MEZZANINE PLAN - CROSS GALLERY DEMOLITION
3/16" = 1'-0"



ENLARGED BOTTOM PLAN - SOUTH - CROSS GALLERY DEMOLITION
3/16" = 1'-0"

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM 4	01-23-25	TEH

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	H. DUBAN
DRAWN BY:	L. RIVERA
PROJECT ENGINEER:	S. HARDY

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE 0 1/2" 1"

Hazen
HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

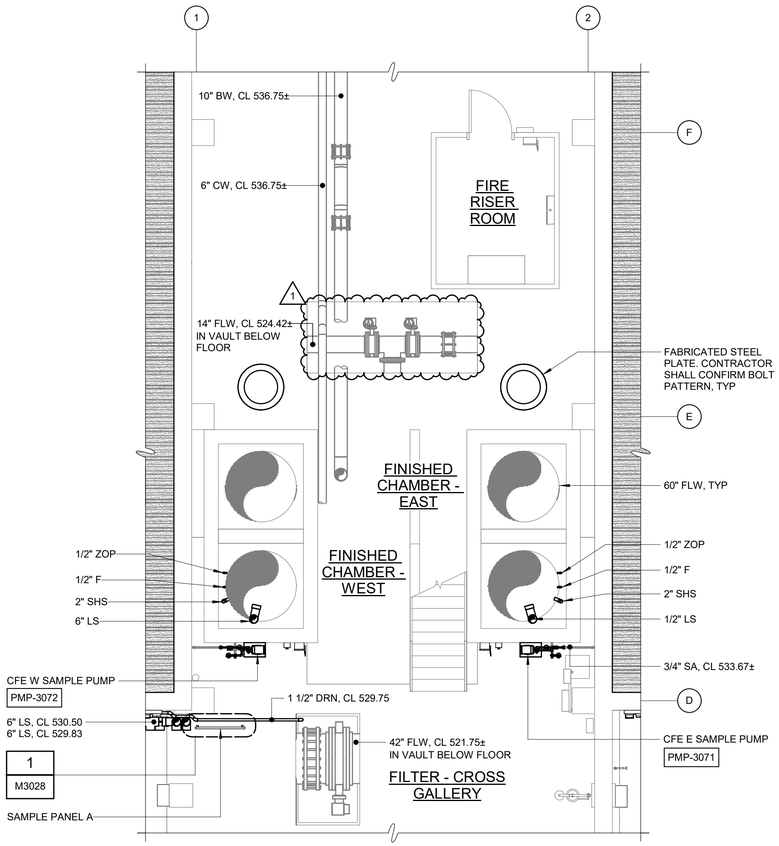
JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

FILTER BUILDING
MECHANICAL
ENLARGED BOTTOM PLAN - CROSS GALLERY DEMOLITION

DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	M3004

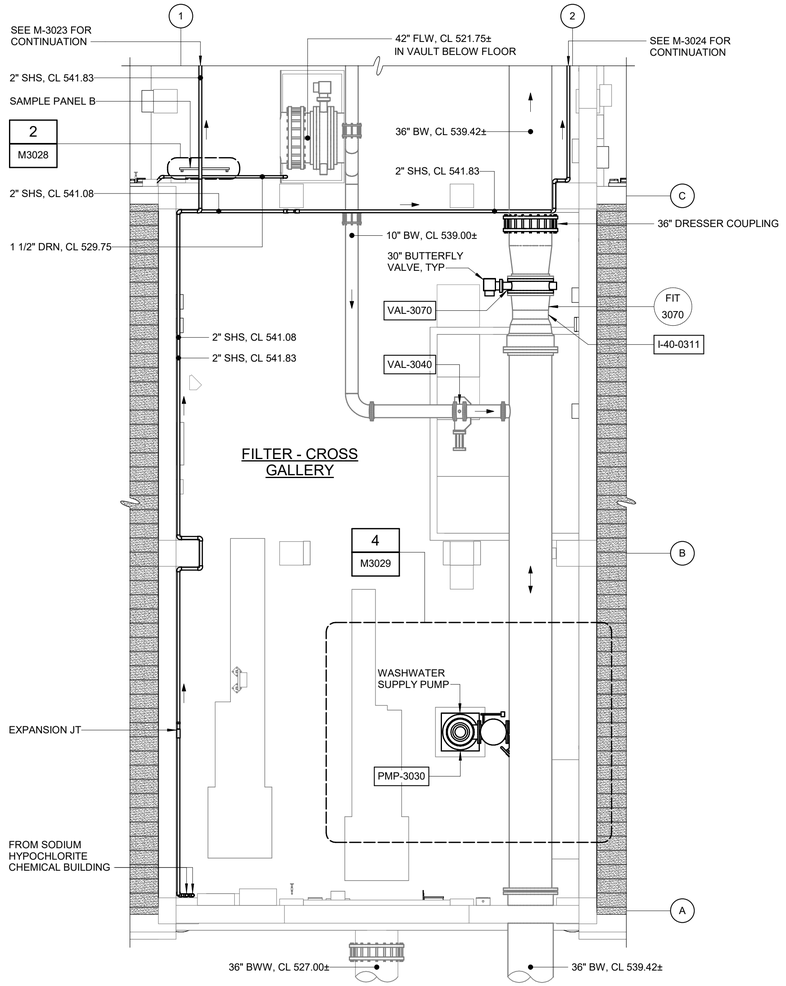
PLANT NORTH

N



ENLARGED BOTTOM PLAN - CROSS GALLERY - NORTH

3/16" = 1'-0"



ENLARGED BOTTOM PLAN - CROSS GALLERY - SOUTH

3/16" = 1'-0"

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM 4	01-23-25	TEH

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	H. DUBAN
DRAWN BY:	L. RIVERA
PROJECT ENGINEER:	S. HARDY

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE — 0 1/2" 1"

Hazen

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DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

FILTER BUILDING
MECHANICAL
ENLARGED BOTTOM PLAN AND SAMPLE PUMP DETAIL - CROSS GALLERY

DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	M3020

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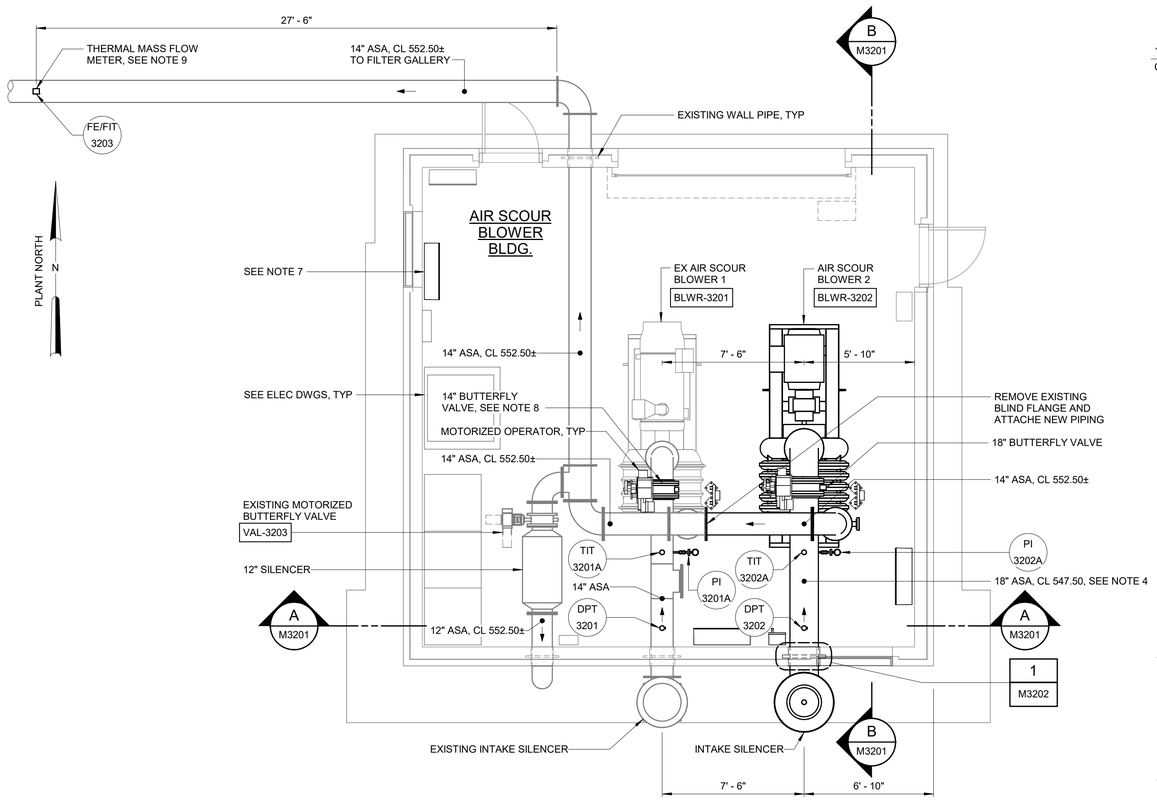
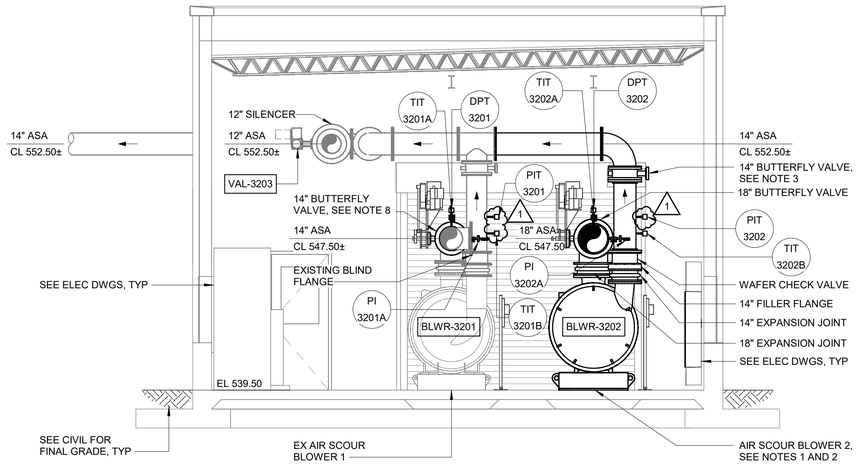
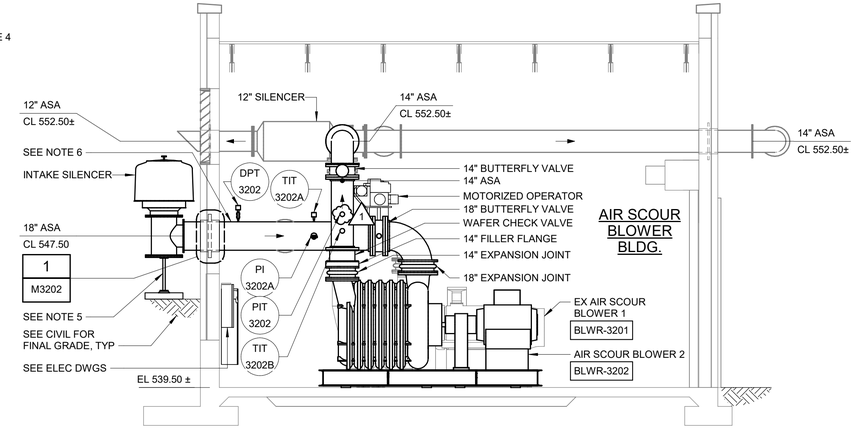


PLAN
1/4" = 1'-0"



SECTION A M3201
1/4" = 1'-0"



SECTION B M3201
1/4" = 1'-0"

NOTES:

1. SEE STRUCTURAL DRAWINGS TO LOCATE BLOWER OVER REINFORCED FLOOR.
2. CONTRACTOR TO ENSURE BLOWER FRAME CAN HANDLE VIBRATION. SEE SPECIFICATION 43 11 18.
3. FOR BUTTERFLY VALVES ABOVE 6 FEET FROM THE OPERATING FLOOR, SEE SPECIFICATION 40 05 64.2.
4. PIPE SIZE SHOWN FOR LARGEST BLOWER MANUFACTURER. PIPE SIZE SHALL BE ADJUSTED BASED ON SELECTED MANUFACTURER.
5. CONTRACTOR TO MATCH EXISTING INTAKE SILENCER SUPPORT FOR NEW INTAKE SILENCER SUPPORT.
6. MATCH EXISTING SUPPORT FOR NEW BLOWER SUCTION PIPING SUPPORT.
7. EXISTING PLC TO BE REPLACED. SEE ELECTRICAL DRAWINGS.
8. CONTRACTOR TO PROVIDE MOTORIZED BUTTERFLY VALVE TO REPLACE EXISTING, SEE SPECIFICATION 40 05 64.2 AND SPECIFICATION 40 05 57.
9. THERMAL MASS FLOW METER SHALL BE INSTALLED AT THE PIPE SUPPORT IN YARD FOR EASE OF ACCESS.

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM 4	01-23-25	TEH

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE (0, 1/2", 1")

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	H. DUBAN
DRAWN BY:	J. LUTHMAN II
PROJECT ENGINEER:	S. HARDY

Hazen
HAZEN AND SAWYER
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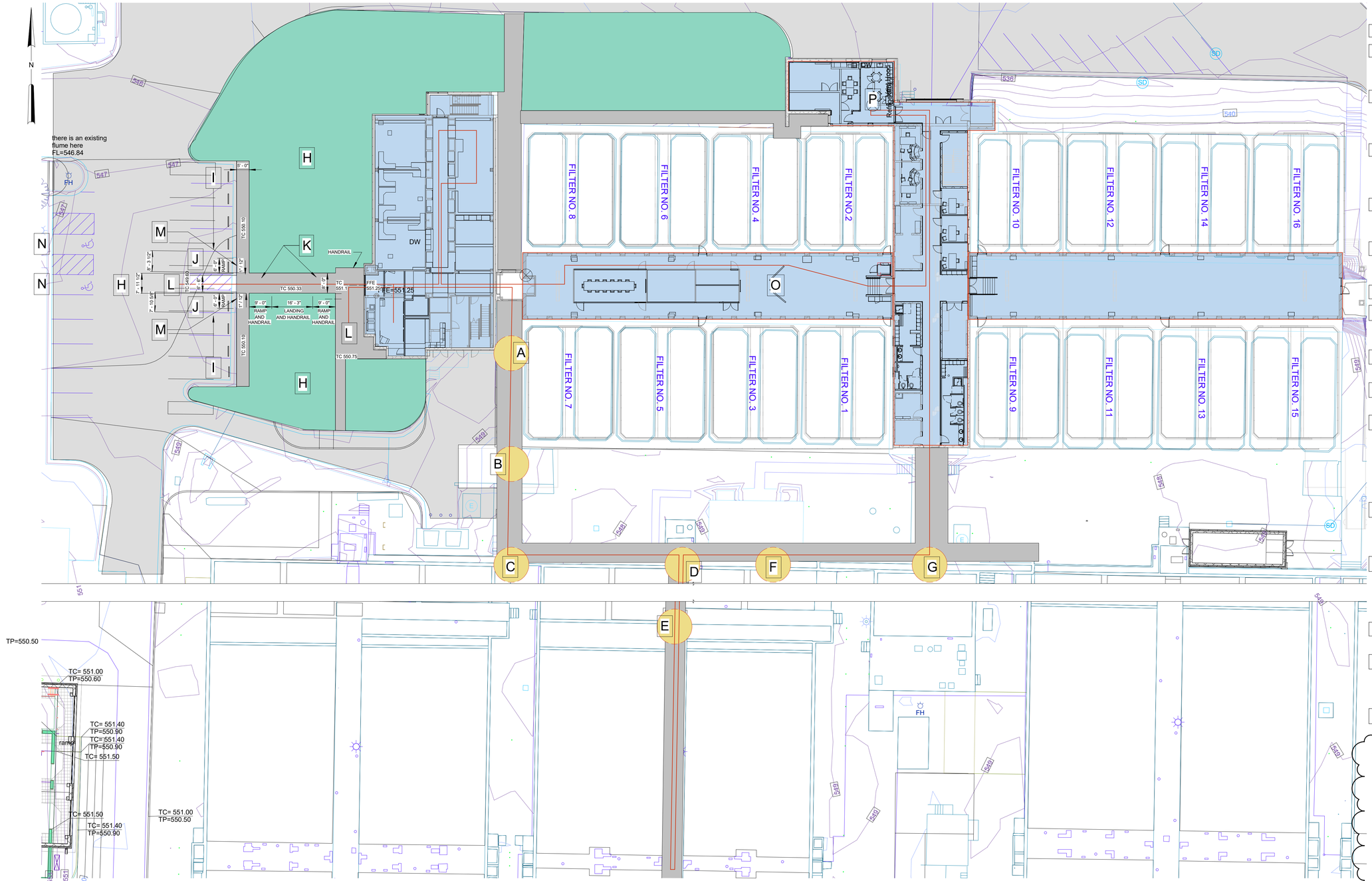
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

AIR SCOUR BLOWER BUILDING MECHANICAL PLAN AND SECTIONS

DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	M3201



ENTRY & TOUR ACCESSIBILITY

1" = 20'-0"

KEYED NOTES : SEE SHEET A005

A. UPGRADE GUARD RAILING.

B. REPLACE STEEL PLATES IN DRIVEWAY WITH NEW STRUCTURAL DRIVE COVER.

C. INSTALL CONCRETE RAMPS UP TO BASIN AREA. PROVIDE HANDRAIL AND A MAX SLOPE OF 1" RISE PER 12" RUN.

D. INSTALL RAMP TO PUMP AREA WITH STEEL GRATE FOORING TO BE REPLACED WITH ADA COMPLIANT GRATING.

E. STEEL FLOOR GRATING ALONG PATH TO BE REPLACED WTIH ADA COMPLIANT GRATING.

F. INSTALL RAMP, UPGRADE GUARDRAIL, AND ADDRESS GAP AT SLUICE GATES.

G. UPGRADE GUARDRAIL.

H. SEE CIVIL SHEETS FOR PARKING AND LANDSCAPING GRADE CHANGES

I. STANDARD PARKING SPACE WITH WHEEL STOP.

J. ACCESSIBLE PARKING SPACE WITH WHEEL STOP AND SIGNAGE

K. ACCESSIBLE PATH TO BUILDING TO HAVE RAMPS WITH MAXIMUM 1:12 SLOPE AND DETECTABLE TACTILE DOTS THAT EXTEND THE FULL WIDTH AND DEPTH OF RAMPS PER ADA

L. TOUR ROUTE SHOWN IN THICK RED LINE. AT MINIMUM, THIS AREA MUST BE MAINTAINED FOR AN ACCESSIBLE PATH.

M. TACTILE WARNING DOTS WITH DETECTABLE TACTILE DOTS THAT EXTEND THE FULL WIDTH AND DEPTH AT ALL RAMPS PER ADA

N. VAN ACCESSIBLE SPACE WITH SIGNAGE

O. SMALL ASSEMBLY SPACE FOR EDUCATIONAL PROGRAMS, MAXIMUM OF 49 OCCUPANTS ALLOWED.

P. CONTROL ROOM OBSERVATION FROM BREAK ROOM

NOTE : 1

1. SEE CIVIL AND STRUCTURAL SHEETS FOR ALL UPGRADES AND MODIFICATIONS IN THE AREAS NOTED, FOR COMPLIANCE WITH ADA REGULATIONS. ELEMENTS ON TOUR ROUTE INCLUDE BUT ARE NOT LIMITED TO RAMPS, GUARD AND HAND RAILS, FLOOR GATE, ETC.

2. SEE A0023 FOR RAILING DETAILS

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM 4	01-23-25	

PROJECT MANAGER: T. HUDSON
DESIGNED BY: W. RUSSELL
DRAWN BY: H. VINEY
PROJECT ENGINEER: W. RUSSELL

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE
0 1/2" 1"

Hazen

HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL
AND RESILIENCY PROJECT

ARCHITECTURAL
ENLARGED SITE PLAN - ENTRY & TOUR
ACCESSIBILITY

DATE: NOVEMBER 2024
HAZEN NO.: 60711-003
CONTRACT NO.: 1
DRAWING NUMBER: A0004

Autodesk Docs://60711-001_Wilson_WTP_Rehab_Filter_Basin/60711-003-A-GENERAL.rvt
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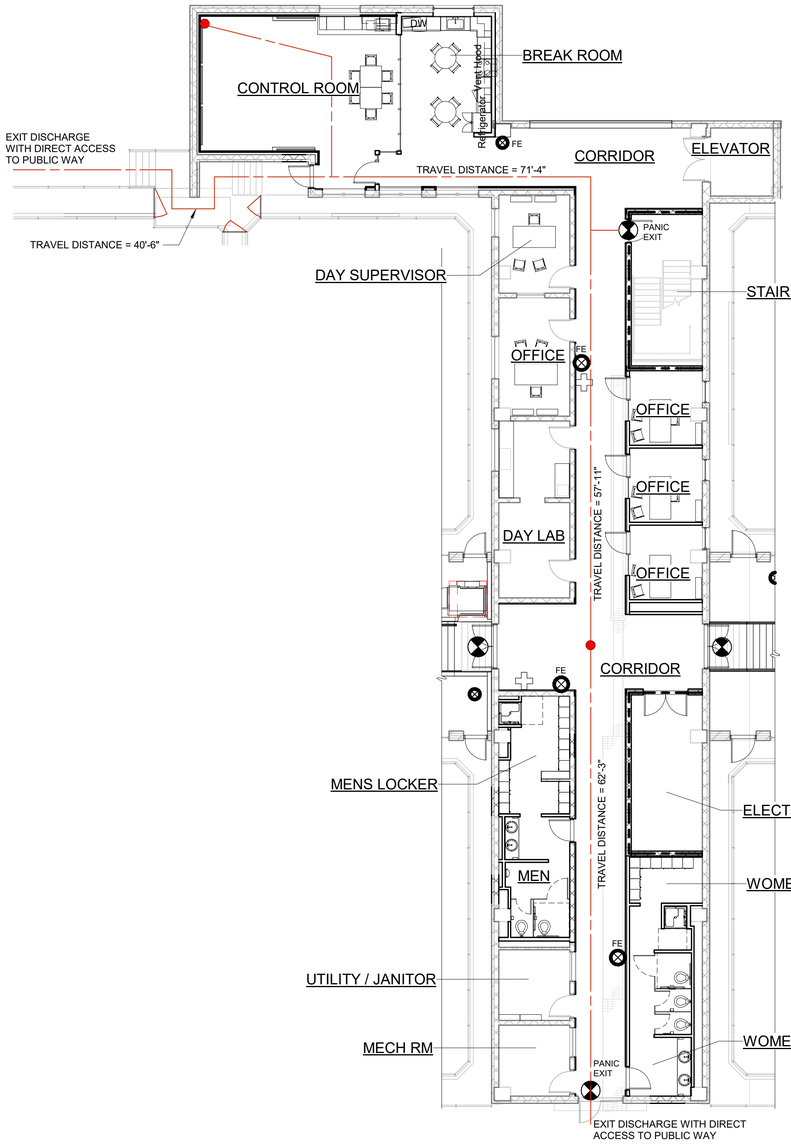
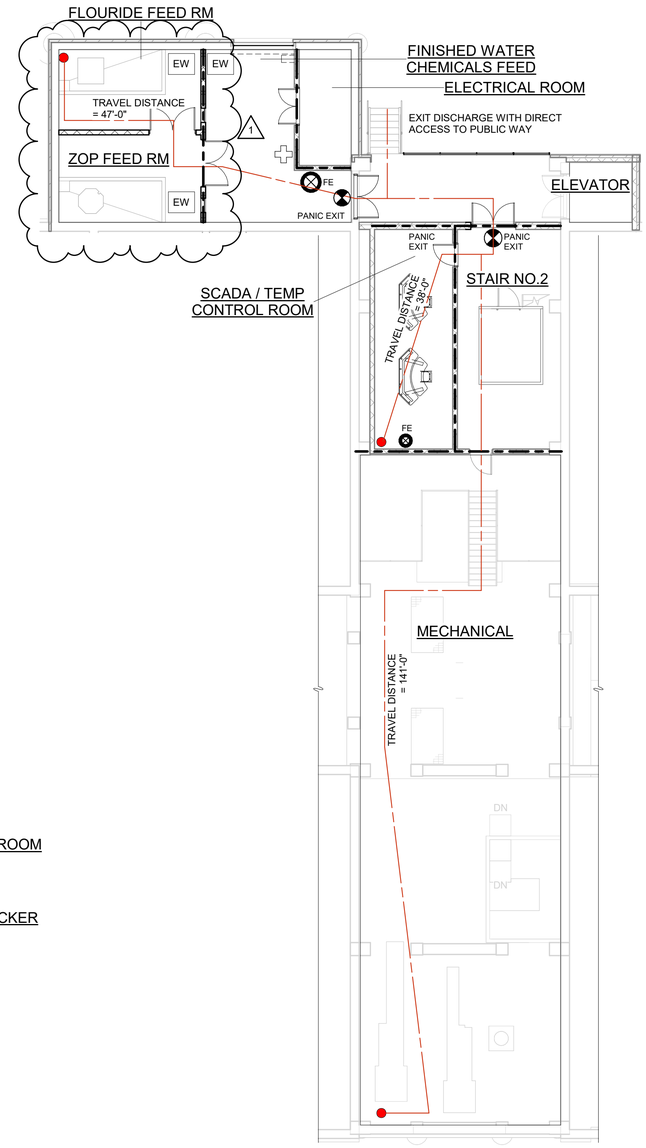


LIFE SAFETY PLAN - FILTER BLDG, CROSS GALLERY, 2ND FL

3/32" = 1'-0"



LIFE SAFETY PLAN - FILTER BLDG, CROSS GALLERY, 1ST FL

3/32" = 1'-0"

BUILDING CODE ANALYSIS- ARKANSAS
2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC)

SUMMARY OF WORK – 3000 FILTER BUILDING, CROSS GALLERY

- **CH 6 ALTERATION LEVEL 1**
  - BUILDING ELEMENT REPLACEMENT AT CROSS GALLERY
    - **First Floor: 15,951 SF**
      Chemical Storage Room
      Circulation
      Loading Dock
      SCADA – Computer Room
    - **Second Floor: 15,951 SF**
      Control Room
      Breakroom
      Circulation
      Offices
      Small monitor lab
      Restrooms/Showers
      Electrical Room
    - **Third Floor 15,951 SF**
      This space will NOT be occupied at this time.
      Existing storage tanks and machinery to be remove.
      No new use is planned for this area at this time.
  - FINISHES
    - INTERIOR CLEANING
    - NEW WALL PAINT
    - NEW CEILING TREATMENT
    - UPGRADE OF EXISTING LIGHTING
    - NEW FLOOR COATING

LEVEL OF ALTERATION/ REHABILITATION

	2021 INTERNATIONAL EXISTING BUILDING CODE		
CODE ITEM	Reference	Allowed	Provided *
ALTERATION TO EXISTING BUILDING	501.2.1	LEVEL 1	LEVEL 1

OCCUPANCY AND CONSTRUCTION CLASSIFICATION

	2021 ARKANSAS FIRE PREVENTION CODE, VOL-II International Building Code 2021 with amendments		
CODE ITEM	Reference	Allowed	Provided
OCCUPANCY CLASSIFICATION	306.3	EXISTING F-1	B Business
CONSTRUCTION CLASSIFICATION	TABLE 601	EXISTING UNCHANGED	TYPE II-B**

BUILDING REQUIREMENTS

BUILDING HEIGHT (FEET)	TABLE 504.3	NS 40 FT	NS 35'-0" FT
BUILDING HEIGHT (STORIES)	TABLE 504.4	3	3
BUILDING AREA	TABLE 506.2	NS 19,000 SF PER FLOOR	
CROSS GALLERY - First Floor			15,951 SF
CROSS GALLERY – Second Floor			15,951 SF
CROSS GALLERY – Third Floor		-	15,951 SF
		-	-

FIRE RESISTANCE RATING REQUIREMENTS

STRUCTURAL FRAME	FIRE RESISTANCE UNCHANGED	0 HR	0 HR
EXTERIOR NON-BEARING WALLS			
NORTH		0 HR	0 HR
EAST		0 HR	0 HR
SOUTH		0 HR	0 HR
WEST		0 HR	0 HR
INTERIOR NON-BEARING WALL	TABLES 601 & 602	0 HR	0 HR
FLOOR CONSTRUCTION		0 HR	0 HR
ROOF CONSTRUCTION		0 HR	0 HR
SHAFT ENCLOSURES	713		NONE
OPENING PROTECTIVES	716.1		NONE
INTERIOR FINISH	803.13		NONE

EGRESS REQUIREMENTS

EGRESS PATH AND LEVEL OF PROTECTION IS UNCHANGED PER VRC 602.2.
SIZES OF EXISTING EGRESS COMPONENTS, PER VCC, ARE PROVIDED FOR INFORMATION ONLY.

CALCULATED OCCUPANT LOAD

	(a)	(b)	(c= a/b)
USE GROUP OR SPACE DESCRIPTION	AREA SF	LOAD FACTOR TABLE 1004.5	OCCUPANT LOAD
B FIRST FLOOR - (cross gallery)	15,951 SF	150 GROSS	106
B SECOND FLOOR – (cross gallery)	15,951 SF	150 GROSS	106
B THIRD FLOOR – (cross gallery) NOT OCCUPIED	15,951 SF	NA	NA

EGRESS WIDTH PER OCCUPANT

	Capacity Factor		Calculated		Allowed		Provided	
USE GROUP OR SPACE DESCRIPTION	(d) STAIR 1005.3.1	(e) DOOR 1005.3.2	(c*d) STAIR CALC	(c*e) DOOR CALC	STAIR 1011	DOOR 1010	STAIR CLEAR WIDTH	DOOR CLEAR WIDTH
1ST FLOOR Office	0.3	0.2	9"	6"	36"	32"	NA	34"
2ND FLOOR Office	0.3	0.2	9"	6"	36"	32"	42"	40"
-2ND FLOOR Non Occupied	NA	NA	NA	NA	NA	NA	42"	40"

MINIMUM EGRESS WIDTH AND TRAVEL DISTANCE

	Reference	Allowed	Provided
MINIMUM CORRIDOR WIDTH	TABLE 1020.2	36"	40"
MINIMUM WIDTH - EXISTING BUILDINGS	VRC 602.2.2	MAINTAIN LEVEL OF PROTECTION	MAINTAINED
EXIT ACCESS TRAVEL DISTANCE	TABLE 1017.2	NS 200'	SEE LIFE SAFETY PLAN
COMMON PATH OF TRAVEL/ SPACE WITH ONE EXIT	TABLE 1006.2.1	NS 75'	SEE LIFE SAFETY PLAN
DEAD END CORRIDOR DISTANCE	1020.4	20'	NONE

* EXISTING BUILDING VALUES ARE LABELED # X
** NO CHANGE TO OCCUPANCY OR CONSTRUCTION CLASSIFICATION.

LIFE SAFETY SYSTEMS

EMERGENCY LIGHTING	1008	MAINTAINED	MAINTAINED
EXIT SIGNS	1013	MAINTAINED	SEE LIFE SAFETY PLAN
AUTOMATIC SPRINKLERS	903	NOT REQUIRED	NONE
FIRE ALARM	907	NOT REQUIRED	NONE
SMOKE DETECTION	907	NOT REQUIRED	NONE
PANIC HARDWARE	1010.1.10	REQUIRED	YES
FIRE EXTINGUISHERS	906	REQUIRED	YES
HAZARD CLASSIFICATION	NONE	NONE	NONE
FIRE EXTINGUISHER- DRY CHEMICAL	906.3	10 LB 2A: 40BC	10 LB 4A: 60BC
TRAVEL DISTANCE		75 FT	70 FT
FLOOR AREA PER EXTINGUISHER		3,000 SF	1,750 SF
FIRE EXTINGUISHER- CARBON DIOXIDE		NOT REQUIRED	-
TRAVEL DISTANCE		-	-
FLOOR AREA PER EXTINGUISHER		-	-
LIFE SAFETY NOTES	-		

PLUMBING FIXTURES

PLUMBING FIXTURES ARE UNCHANGED. PLUMBING FIXTURES ARE NOT PROVIDED IN WEST GALLERY, BUT CAN BE ACCESSED IN ADJOINING ADMINISTRATION BUILDING OR CROSS GALLERY

STRUCTURAL AND SEISMIC DESIGN LOADS

STRUCTURAL, INCLUDING SEISMIC AND WIND LOADS - UNCHANGED

ENERGY CODE REQUIREMENTS
2021 ARKANSAS FIRE PREVENTION CODE, VOL. II- BUILDING, 2021 IECC

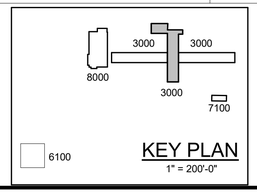
PRESCRIPTIVE COMPLIANCE PATH

CODE ITEM	Cont. R-Value	Max. U-Factor	Solar Heat Gain Coefficient SHGC*	NOTES
LITTLE ROCK, ARKANSAS (PULASKI COUNTY)	CLIMATE ZONE 3A			
TABLES C402.1.3 AND C402.1.4 OPAQUE THERMAL ENVELOPE ASSEMBLY REQUIREMENTS				
ROOF, INSULATION ENTIRELY ABOVE DECK	R-25ci	U-0.039	N/A	EXISTING ROOF STRUCTURE AND SYSTEM TO REMAIN IN PLACE. -
MASS WALLS – EXT. BLOCK WALLS 8" THICK, PARTIALLY GROUTED, CELLS INSULATED, NORMAL DENSITY, NO FURRING	R-7.6 ci	U-0.123	N/A	EXISTING EXTERIOR WALLS TO REMAIN NO NEW EXTERIOR CONSTRUCTION
SWINGING DOOR	N/A	U-0.37	N/A	TABLE C402.5.4 MAX AIR LEAKAGE: 0.20 CFM/SF
TABLE C402.4 BUILDING ENVELOPE FENESTRATION MAXIMUM U-FACTOR AND SHGC REQUIREMENTS				
WINDOW, METAL FRAME, FIXED	N/A	U-0.42	0.25	EXISTING WINDOWS AND FRAMES TO REMAIN AS INSTALLED, ONE NEW WINDOW INSTALLED
SKYLIGHTS, METAL FRAME	N/A	N/A	0.30	NO SKYLIGHTS IN PROJECT

THIS WORK IS A REMODEL OF AN EXISTING BUILDING

LEGEND:

- FIRST AID CABINET
- FE — FIRE EXTINGUISHER - DRY CHEMICAL
- CO_2 — FIRE EXTINGUISHER - CARBON DIOXIDE
- EXIT LIGHT SIGN
- PANIC — PROVIDE PANIC HARDWARE
- 1 HR RATED WALL
- EW — EYE WASH
- EXIT — EXIT / ENTRANCE
- DIRECTION OF TRAVEL / TRAVEL DISTANCE
- MOST REMOTE POINT



KEY PLAN

1" = 200'-0"

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM 4	01-23-25	

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE (0 1/2" 1")

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	H. VINEY
DRAWN BY:	H. VINEY
PROJECT ENGINEER:	W. RUSSELL

Hazen
HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

ARCHITECTURAL
CODE SUMMARY AND LIFE SAFETY PLAN - FILTER CROSS GALLERY

DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	A0007

Autodesk Docs://60711-001_Wilson_WTP_Rehab_Filter_Basin/60711-003-A-GENERAL.rvt
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ROOM FINISH SCHEDULE

NO.	DESCRIPTION	FLOOR		WALL BASE		WALL-NORTH		WALL-EAST		WALL-SOUTH		WALL-WEST		CEILING			REMARKS
		SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	HEIGHT	
3000 - FILTER BUILDING																	
3002	STAIR NO.2	CONC	FS	CMU	-	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	--	47' - 0"	
3003	ELEVATOR															47' - 0"	
3010	FINISHED WATER CHEMICALS FEED	CONC	EFC	CONC	EFC - 6"	CONC	PT	CONC	PT	CONC	PT	CONC	PT	ES	--	12' - 6"	
3011	ELECTRICAL ROOM	CONC	EFC	CONC	EFC - 6"	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	--	8' - 0"	
3012	DOCK	CONC	EX	CONC	-	-	-	CONC	QT	CONC	QT	CONC	QT	ES	-	8' - 0"	
3013	CORRIDOR	CONC	FS	CONC	RWB	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	-	8' - 0"	
3014	SCADA / TEMP CONTROL ROOM	CONC	FS	CONC	RWB	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	--	8' - 0"	
3016	MECHANICAL	CONC	EX	CONC	-	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	--	8' - 0"	
3017	FLOURIDE FEED RM		EFC	CMU	EFC - 6"	CMU	PT		PT		PT		PT	ES		8' - 0"	
3018	ZOP FEED RM		EFC	CMU	EFC - 6"	CMU	PT		PT		PT		PT	ES		8' - 0"	
3020	OFFICE	CONC	VCT	GWB	RWB	CMU	PT	CMU	PT	GWB	PT	GWB	PT	EX	ACT	9' - 0"	
3021	OFFICE	CONC	VCT	GWB	RWB	GWB	PT	CMU	PT	GWB	PT	GWB	PT	EX	ACT	9' - 0"	
3022	OFFICE	CONC	VCT	GWB	RWB	GWB	PT	CMU	PT	GWB	PT	GWB	PT	EX	ACT	9' - 0"	
3023	ELECTRICAL ROOM	CONC	EFC	CMU	EFC - 6"	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	PT	12' - 0"	
3024	WOMENS LOCKER	CONC	CT1	CMU	CT1	CMU	CT2	CMU	CT2	CMU	CT2	CMU	CT2	CGB	PT	9' - 0"	
3025	WOMEN	CONC	CT1	CMU	CT1	CMU	CT2	CMU	CT2	CMU	CT2	CMU	CT2	CGB	PT	9' - 0"	
3026	CORRIDOR	CONC	VCT	CMU	RWB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	ES	ACT	9' - 0"	
3027	MECH RM	CONC	EFC	CMU	EFC - 6"	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	PT	9' - 0"	
3028	UTILITY / JANITOR	CONC	EFC	CMU	EFC - 6"	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	PT	9' - 0"	
3029	MEN	CONC	CT1	CMU	CT1	CMU	CT2	CMU	CT2	CMU	CT2	CMU	CT2	CGB	PT	9' - 0"	
3030	MENS LOCKER	CONC	CT1	CMU	CT1	CMU	CT2	CMU	CT2	CMU	CT2	CMU	CT2	CGB	PT	9' - 0"	
3031	DAY LAB	CONC	EFC	CMU	EFC - 6"	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	ACT	9' - 0"	
3032	OFFICE	CONC	VCT		RWB	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	ACT	8' - 0"	
3033	DAY SUPERVISOR	CONC	VCT		RWB	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	ACT	8' - 0"	
3034	BREAK ROOM	CONC	VCT		RWB	CMU	PT	CMU	PT	CMU	PT	SF-GL	SF-GL		ACT	9' - 0"	
3035	CONTROL ROOM	CONC	LVT-MAF		RWB	CMU	PT	SF-GL	SF-GL	CMU	PT	CMU	PT	ES	ABP	8' - 0"	
3040	SMALL CONFERENCE	CONC	CPT	GWB	RWB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	ES	ACT	9' - 6"	
3041	OFFICE															8' - 0"	
3042	STORAGE / JAN	CONC	LVT-MAF	GWB	RWB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	ES	ACT	8' - 0"	
3043	MECH															8' - 0"	
3044	FILTER CONTROL ROOM WEST GALLERY	CONC	LVT-MAF		RWB	BRK	CS	BRK	CS	BRK	CS	BRK	CS	ES	ABP	8' - 0"	
3050	FILTER CONTROL ROOM EAST GALLERY	CONC	QT	-	RWB	BRK	CS	BRK	CS	BRK	CS	BRK	CS	ES	--	8' - 0"	
6100 - BULK CHEMICAL BUILDING																	
6140	LIME STORAGE	CONC	CS	CMU	--	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	--	33' - 0"	
6141	ALUM STORAGE	CONC	EFC	CMU	EFC - 6'	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	PT	29' - 0"	
6142	ELECTRICAL ROOM	CONC	EFC	CMU	EFC - 6'	CMU	PT	CMU	PT	CMU	PT	CMU	PT	CGB	PT	9' - 0"	
6143	ZOP STORAGE	CONC	EFC		EFC - 6'	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	PT	29' - 2 9/128"	
6144	LIME FEED PUMP AREA	CONC	EFC		EFC - 6'	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	PT	12' - 0"	
7100 - ELECTRICAL BUILDING NO. 2																	
X100	ELECTRICAL ROOM		EFC		EFC - 6'		PT		PT		PT		PT		PT	12' - 0"	
8000 - ADMIN BUILDING																	
8001	ENTRY VESTIBULE	CONC	ETT	EX	RWB		SF		SF		SF	CMU	PT	ES	ACT	26' - 8"	
8002	CORRIDOR 1	CONC	ETT	GWB	RWB	GWB	SF	CMU	PT	GWB	SF	CONC	PT	ES	ACT	29' - 4 1/4"	
8003	WAITING / LOBBY	ONC	ETT	GWB	RWB	CMU	PT	CMU	PT	GWB	SF	GL	SF	ES	TBD	9' - 0"	
8004	LIBRARY	CONC	VCT	GWB	RWB	CMU	PT	CMU	PT	CMU	PT	GWB	PT	ES	ACT	9' - 0"	
8005	RESTROOM	CONC	CT1	GWB	CT1	GWB	CT2	GWB	CT2	GWB	CT2	GWB	CT2	ES	CGB	<varies>	
8008	ELEVATOR		LVT-MAF	EX	RWB										TBD	30' - 0"	
8009	SERVICE AND STOCK ROOM	CONC	LVT-MAF	CONC	RWB	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ES	ACT	9' - 0"	
8010	STAIR 1						PT		PT		PT		PT			30' - 0"	PAINT HANDRAILS
8012	JANITOR	CONC	VCT	GWB	RWB											9' - 0"	
8013	CHEMIST OFFICE	CONC	CPT	GWB	RWB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	ES	ACT	9' - 0"	
8014	CLOSET	CONC	LVT-MAF		RWB											9' - 0"	
8015	CLOSET	CONC	LVT-MAF		RWB											9' - 0"	
8016	PREPARATION	CONC	LVT-MAF	GWB	RWB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	ES	ACT	9' - 0"	UPDATE COUNTERS/CABINETS
8017	REFRIGERATOR	CONC	LVT-MAF		RWB											9' - 0"	
8018	CLOSET	CONC	LVT-MAF		RWB											9' - 0"	
8019	STAIR 2		FS				SF						SF			30' - 0"	ENCLOSE LANDING
8020	CORRIDOR 2	CONC	LVT-MAF	GWB	RWB		SF	GWB	PT	GWB	PT	GWB	PT	ES	ACT	9' - 0"	
8021	ORGANIC LAB	CONC	LVT-MAF	GWB	RWB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	ES	ACT	9' - 0"	UPDATE COUNTERS/CABINETS
8022	CLOSET	CONC	LVT-MAF		RWB											9' - 0"	
8023	ORGANIC LAB	CONC	LVT-MAF	GWB	RWB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	ES	ACT	9' - 0"	UPDATE COUNTERS/CABINETS
8024	CLOSET	CONC	LVT-MAF		RWB											9' - 0"	
8025	INORGANIC LAB	CONC	LVT-MAF	GWB	RWB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	ES	ACT	9' - 0"	UPDATE COUNTERS/CABINETS
8026	CLOSET	CONC	LVT-MAF		RWB											9' - 0"	
8027	CLOSET	CONC	LVT-MAF		RWB											9' - 0"	
8028	MICRO LAB	CONC	LVT-MAF	GWB	RWB	GWB	PT	GWB	PT	GWB	PT	GWB	PT	CONC	ACT	9' - 0"	UPDATE COUNTERS/CABINETS
8029	CLOSET	CONC	LVT-MAF		RWB											9' - 0"	
8050	STORAGE / JAN	CONC	VCT	CONC	RWB	CMU	PT	CMU	PT	CMU	PT	GWB	PT	ES		9' - 0"	
8051	BREAK ROOM	CONC	ETT	CONC	RWB	CMU	PT	GWB	PT	CMU	PT		SF	ES		9' - 0"	
8052	MENS	CONC	CT1	CONC	CT1		CT2		CT2		CT2		CT2	ES	CGB	9' - 0"	
8053	WOMENS	CONC	CT1	CONC	CT1		CT2		CT2		CT2		CT2		CGB	9' - 0"	
8055	IT SRVR/EQUIP		VCT	GWB	RWB		PT		PT		PT		PT			9' - 0"	
8058	CORRIDOR 4		ETT				PT		PT		PT		PT			9' - 0"	
8059	CORRIDOR 3	CONC	ETT			GWB	PT		SF	GWB	PT		PT	ES	ACT	9' - 0"	
8060	SUPPLY / MOTHER		CPT		RWB		PT		PT		PT		PT		ACT	9' - 0"	
8064	CLERKS		CPT	GWB	RWB		PT		PT		PT		PT		ACT	0' - 0"	
8066	OFFICE		CPT	GWB	RWB		PT		PT		PT		PT			9' - 0"	
8067	CLOSET		CPT	GWB	RWB		PT		PT		PT		PT		ACT	0' - 0"	
8069	COPIER		CPT	GWB	RWB		PT		PT		PT		PT			0' - 0"	
8071	OFFICE		CPT	GWB	RWB		PT		PT		PT		PT		ACT	8' - 0"	
8072	CUBICLE		CPT	GWB	RWB		PT		PT		PT		PT			8' - 0"	
8073	CUBICLE		CPT	GWB	RWB		PT		PT		PT		PT			8' - 0"	
8074	CUBICLE		CPT	GWB	RWB		PT		PT		PT		PT			8' - 0"	
8075	CUBICLE		CPT	GWB	RWB		PT		PT		PT		PT			8' - 0"	
8076	CUBICLE		CPT	GWB	RWB		PT		PT		PT		PT			8' - 0"	
8077	CUBICLE		CPT	GWB	RWB		PT		PT		PT		PT			8' - 0"	
8078	CUBICLE		CPT	GWB	RWB		PT		PT		PT		PT			8' - 0"	
8079	WAITING AREA		CPT	GWB	RWB		PT		PT		PT		PT		ACT	8' - 0"	
8080	OFFICE		CPT	GWB	RWB		PT		PT		PT		PT		ACT	8' - 0"	

ROOM FINISH LEGEND

EX	EXISTING	CL	CONTAINMENT LINER	LVT - MAF	LUXURY VINYL TILE - MODULAR ACOUSTIC FLOORING
RWB	RUBBER WALL BASE	MB	METAL BUILDING	ES	EXPOSED STRUCTURE
CONC	CONCRETE	PT	PAINT	ACT	ACOUSTICAL CEILING TILE
VCT	VINYL FLOORING	GWB	GYPSUM WALLBOARD	MFR	MANUFACTURER DEFAULT
CT1	CERAMIC TILE FLOORING	CMU	EXISTING CONCRETE MASONRY UNITS	CGB	CEILING GYPSUM BOARD
QT	QUARRY TILE	SF	STOREFRONT	CS	CLEAR SEALANT
FS	FLOOR SEALER	CT2	CERAMIC TILE WALL	BRK	EXISTING BRICK
				EFC	EPOXY FLOOR COATING
				GL	GLASS
				ABP	ACOUSTIC BAFFLE PANELS
				CPT	CARPET TILE
				ETT	EPOXY TERRAZZO TILE

ROOM FINISH SCHEDULE NOTES:

1. SEAL ENTIRE FLOOR AREA IN LAB BEFORE INSTALLING BASE CABINETRY.
2. DO NOT PAINT CONCRETE COLUMNS OR CONCRETE BEAMS.

BUILDING NAME LABELS :

PROVIDE 8" HIGH DARK BRONZE CAST ALUMINUM LETTERS

ADMINISTRATION BUILDING (PLANT EAST FACE - 2 LINES OF LETTERS)
FILTER BUILDING (PLANT NORTH FACE - 2 LINES OF LETTERS)
BULK CHEMICAL BUILDING (PLANT WEST FACE - 2 LINES OF LETTERS)
ELECTRICAL BUILDING (PLANT NORTH FACE - 2 LINES OF LETTERS)

APPLIANCE SCHEDULE

CONTROL ROOM

1. **REFRIGERATOR** - FRIGIDAIRE GALLERY 25.6 CU.FT. 36" STANDARD DEPTH SIDE BY SIDE. GRSS2652AF – FIN: STAINLESS STEEL - HEIGHT 69 7/8", WIDTH 36 1/8", DEPTH 35 7/8"
2. **UNDER COUNTER ICE MACHINE:** MANITOWOC ICE CUBE MACHINE – UCP0050 MODEL UCP0050A. 52 LBS./24HRS, 25 LBS. STORAGE. HEIGHT 33.5", WIDTH 14.75", DEPTH 22.75", 115/60/1
3. **OVEN/STOVE:** WHIRLPOOL 30-IN GLASS TOP 5 BURNERS 5.3 CU.FT. STEAM CLEANING FREESTANDING ELECTRIC RANGE. FINGERPRINT RESISTANT STAINLESS STEEL
   MODEL #: WFES3330RZ HEIGHT 47.875", WIDTH 30", DEPTH 27.75"
4. **DISHWASHER:** WHIRLPOOL ECO SERIES LARGE CAPACITY 24" TOP CONTROL BUILT-IN DISHWASHER WITH THIRD RACK, FINGERPRINT RESISTANT STAINLESS STEEL, VERY QUIET SOUND LEVEL 47-DBA.
   MODEL #: WDT750SAKZ
5. **MICROWAVE – COUNTER TOP:** WHIRLPOOL, 25" WIDE 2.2 CU.FT. 1200 WATT FINGERPRINT RESISTANT COUNTERTOP MICROWAVE WITH SENSOR COOKING AND STEAM CLEAN.
   MODEL #: UMCS5022RZ HEIGHT 15", WIDTH 25", DEPTH 20"
6. **UNDER CABINET RANGE HOOD:** BROAN 30-IN CONVERTIBLE 375-CFM STAINLESS STEEL.
   MODEL #:BCSQ130SS DUCTED, 3 SPEED, LED LIGHTS, DISHWASHER SAFE FILTERS.

WEST GALLERY

1. **UNDER COUNTER REFRIGERATOR**: WHIRLPOOL 5.1 CU.FT. BUILT-IN MINI FRIDGE – STAINLESS STEEL. MODEL #: WUR35X24HZ HEIGHT 35", WIDTH 22 ¾", DEPTH 24"

ADMIN. BUILDING LOBBY

1. **PASS THROUGH- UNDER COUNTER REFRIGERATOR:** PERLICK 36" PASS THRU BACK BAR REFRIGERATOR, SELF CONTAINED, 1 DOOR ON EACH SIDE, SWINGING DOOR, STAINLESS STEEL, 2" FOAMED-IN-PLACE INSULATION.
   MODEL #: PTS36 TEMPERATURE 38 DEGREES F. FLAT SHELVING. 120VAC/60HZ/1 PH, 5 YEAR COMPRESSOR WARRANTY

ADMIN. BUILDING 2ND FLOOR BREAKROOM

1. REFRIGERATOR (SAME AS ABOVE)
2. UNDER COUNTER ICE MACHINE (SAME AS ABOVE)
3. MICROWAVE – COUNTER TOP (SAME AS ABOVE)

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM 4	01-23-25	

PROJECT MANAGER: T. HUDSON
DESIGNED BY: H. VINEY
DRAWN BY: A. BLAHA
PROJECT ENGINEER: W. RUSSELL

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE 0 1/2" 1"

Hazen
HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL
AND RESILIENCY PROJECT

ARCHITECTURAL
SCHEDULE - ROOM FINISHES
AND APPLIANCE SCHEDULE

DATE: NOVEMBER 2024
HAZEN NO.: 60711-003
CONTRACT NO.: 1
DRAWING NUMBER: A0012

DOOR SCHEDULE

NO.	FRAME TYPE	FRAME MATL	DOOR TYPE	DOOR MATL	DOOR ACTIVE WIDTH	DOOR INACTIVE WIDTH	DOOR HEIGHT	DOOR THICKNESS	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	FIRE RATING	GLAZING TYPE	GLAZING SIZE	FINISH	HARDWARE NO	HARDWARE NOTE	THRESHOLD	REMARKS
3000 - FILTER BUILDING																			
3001	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	AL	14	3	AL	NEW DOOR IN EXISTING FRAME
3002	F-1	HM	FRG	HM	3' - 0"	0' - 0"	7' - 2"	1 3/4"	01/A0015	01/A0015	01/A0015	1 HR	FRG	3"x33"	PT	11	10	--	
3003	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	AL	14	3	AL	NEW DOOR IN EXISTING FRAME
3004	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	AL	14	3	AL	NEW DOOR IN EXISTING FRAME
3005	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	AL	14	3	AL	NEW DOOR IN EXISTING FRAME
3010	MFR	STL	OH	AL	8' - 0"		7' - 0"	3/4"	08/A00015	08/A0015	08/A0015				MFR	1	MOTOR		PREFINISHED INSULATED OVERHEAD DOOR, MOTORIZED
3011	F-1	HM	NG&NG	HM	2' - 6"	2' - 6"	7' - 2"	1 3/4"				1 HR	IG	6"x36"	PT		--	AL	
3012	F-1	HM	HG&HG	HM	3' - 0"	3' - 0"	7' - 2"	1 3/4"	08/A00015	08/A0015	08/A0015	--	IG	24"x36"	PT		--	AL	NEW DOOR IN EXISTING FRAME
3013	F-1	HM	HG&HG	HM	3' - 0"	3' - 0"	7' - 2"	1 3/4"	05/A0015	05/A0015	05/A015	--	IG	24"x36"	PT	14	3	AL	
3014	F-1	HM	NG	HM	3' - 0"	0' - 0"	7' - 2"	1 3/4"				1 HR	IG	6"x36"	PT	5	5	AL	CARD READER ACCESS CONTROL SECURITY
3017	F-1	HM	HG&HG	HM	3' - 2"	3' - 2"	7' - 2"	1 3/4"	01/A0015	01/A0015	01/A0015	1 HR	--	24"x36"	PT	10	6	--	
3018	F-1	HM	HG&HG	HM	3' - 2"	3' - 2"	7' - 2"	1 3/4"	01/A0015	01/A0015	01/A0015	1 HR	--	24"x36"	PT	10	6	--	
3020	F-2	HM	HG	HM	3' - 0"	0' - 0"	7' - 2"	1 3/4"	03/A0015	03/A0015	03/A0015	1	IG	24"x36"	PT	5	5	AL	
3021	F-2	HM	HG	HM	3' - 0"	0' - 0"	7' - 2"	1 3/4"	03/A0015	03/A0015	03/A0015	--	IG	24"x36"	PT	5	5	AL	
3022	F-2	HM	HG	HM	3' - 0"	0' - 0"	7' - 2"	1 3/4"	03/A0015	03/A0015	03/A0015	--	IG	24"x36"	PT	5	5	AL	
3023	F-1	HM	F&F	HM	3' - 0"	3' - 0"	9' - 2"	1 3/4"	01/A0015	01/A0015	01/A0015	1 HR	--	--	PT	10	14	AL	
3025	F-1	HM	F	HM	3' - 0"	0' - 0"	7' - 2"	1 3/4"	03/A0015	03/A0015	03/A0015	--	--	--	PT	9	7	AL	
3029	F-1	HM	F	HM	3' - 0"	0' - 0"	7' - 2"	1 3/4"	01/A0015	01/A0015	01/A0015	--	--	--	PT	9	7	AL	
3034	F-1	HM	HG	HM	3' - 0"	0' - 0"	7' - 2"	1 3/4"	05/A0015	05/A0015	05/A0015	--	IG	24"x36"	PT	3	3	AL	
3035	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	PT	5	5	--	CARD READER ACCESS CONTROL SECURITY
3040	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	PT	5	5	--	
3042	F-1	AL	F&F	AL	3' - 0"	3' - 0"	7' - 2"	1 3/4"				--	--	--	AL	6	6	--	NEW DOOR IN EXISTING FRAME
3044	F-1	AL	FG&FG	AL	3' - 0"	3' - 0"	7' - 2"	1 3/4"	01/A0015	01/A0015	01/A0015	--	IG	24"x70"	AL	3	3	AL	
3050	F-1	AL	FG&FG	AL	3' - 0"	3' - 0"	7' - 2"	1 3/4"	01/A0015	01/A0015	01/A0015	--	IG	24"x70"	AL	3	3	AL	
3051	F-1	AL	FG	AL	3' - 4"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	AL	14	3	AL	NEW DOOR IN EXISTING FRAME
3052	F-1	AL	FG	AL	3' - 4"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	AL	14	3	AL	NEW DOOR IN EXISTING FRAME
3053	F-1	AL	FG	AL	3' - 4"	0' - 0"	7' - 0"	1 3/4"	01/A0015	01/A0015	01/A0015	--	IG	24"x70"	AL	14	3	AL	NEW DOOR IN EXISTING FRAME
3054	F-1	AL	FG	AL	3' - 4"	0' - 0"	7' - 0"	1 3/4"	01/A0015	01/A0015	01/A0015	--	IG	24"x70"	AL	14	3	AL	NEW DOOR IN EXISTING FRAME
3055	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"	01/A0015	01/A0015	01/A0015	--	IG	24"x70"	AL	14	3	AL	NEW DOOR IN EXISTING FRAME
6100 - ALUM AND LIME CHEMICAL BUILDING																			
6140	F-1	HM	NG&NG	HM	3' - 2"	3' - 2"	9' - 2"	1 3/4"	06/A0015	06/A0015	06/A0015	--	IG	6"x36"	PT	3	--	AL	
6141	F-1	HM	NG	HM	3' - 0"	0' - 0"	7' - 10"	1 3/4"	06/A0015	06/A0015	06/A0015	--	IG	6"x36"	PT	3	--	AL	
6142	F-1	HM	FRG	HM	3' - 0"	0' - 0"	7' - 2"	1 3/4"	01/A0015	01/A0015	01/A0015	--	FRG	3"x33"	PT	6		--	
6143	F-1	HM	NG&NG	HM	3' - 2"	3' - 2"	9' - 2"	1 3/4"	06/A0015	06/A0015	06/A0015	--	IG	6"x36"	PT	14	--	AL	
7100 - ELECTRICAL BUILDING NO. 2																			
7101	F-1	HM	NG&NG	HM	3' - 0"	3' - 0"	7' - 2"	1 3/4"	05/A0015	05/A0015	05/A0015	--	IG	6"x36"	PT	14	--	AL	
7102	F-1	HM	NG&NG	HM	3' - 0"	3' - 0"	9' - 2"	1 3/4"	05/A0015	05/A0015	05/A0015	--	IG	6"x36"	PT	14	--	AL	
8000 - ADMIN BUILDING																			
8000	-----	AL	----------	AL	3' - 0"	3' - 0"	7' - 0"	1 3/4"				--	--	----------	PT	15	--	AL	EXISTING DOORS TO REMAIN - NEW OPERATING HARDWARE. HANDS-FREE PUSH PANEL OPENER W/ CARD READER SECURITY
8001	F-1	AL	FG&FG	AL	3' - 0"	3' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	AL	9	--	AL	HANDS-FREE PUSH PANEL OPENER
8004	F-1	AL .	F	WD	3' - 0"	0' - 0"	7' - 2"	1 3/4"	03/A0015	03/A0015	03/A0015	--	--	--	PT	6	--	--	
8005	F-1	AL .	F	WD	3' - 0"	0' - 0"	7' - 2"	1 3/4"	03/A0015	03/A0015	03/A0015	--	--	--	PT	7	--	AL	
8019	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	PT	2	--	AL	
8020	F-1	AL	FG&FG	AL	3' - 0"	3' - 0"	7' - 10"	1 3/4"	03/A0015	03/A0015	03/A0015	1 HR	IG	24"x78"	PT	10	--	--	CARD READER AND HANDS-FREE PUSH PANEL OPENER
8051	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	PT	9	--	--	
8052	F-1	AL .	F	WD	3' - 0"	0' - 0"	7' - 0"	1 3/4"	03/A0015	03/A0015	03/A0015	1 HR	--	--	PT	7	--	--	
8053	F-1	AL .	F	WD	3' - 0"	0' - 0"	7' - 0"	1 3/4"	03/A0015	03/A0015	03/A0015	1 HR	--	--	PT	7	--	--	
8054	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"	03/A0015	03/A0015	03/A0015	1 HR	IG	24"x70"	PT	4	--	--	
8055	F-1	AL	F&F	AL	2' - 7"	2' - 7"	7' - 0"	1 3/4"	03/A0015	03/A0015	03/A0015	--	--	--	PT	6	--	--	
8058	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	PT	14	--	AL	
8059	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"	03/A0015	03/A0015	03/A0015	1 HR	IG	24"x70"	PT	4	--	--	
8060	F-1	AL	F	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"	03/A0015	03/A0015	03/A0015	--	--	--	PT	8	--	--	
8066	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"				--	IG	24"x70"	PT	8	--	--	
8071	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"	03/A0015	03/A0015	03/A0015	--	IG	24"x70"	PT	8		--	
8080	F-1	AL	FG	AL	3' - 0"	0' - 0"	7' - 0"	1 3/4"	03/A0015	03/A0015	03/A0015	--	IG	24"x70"	PT	8	--	--	

DOOR LEGEND

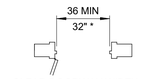
AL	ALUMINUM	MFR	MANUFACTURER
HM	HOLLOW METAL	PT	PAINT
IG	INSULATING GLAZING	STL	STEEL
FRG	FIRE GLASS	TG	TEMPERED GLASS
FRP	FIBERGLASS REINFORCED PLASTIC	WD	WOOD - STAIN GRADE

DOOR SCHEDULE NOTES:

1. WOOD DOOR COLOR TO BE DETERMINED
2. FRP DOOR AND DOOR FRAME COLOR TO BE DETERMINED
3. LOUVERS IN DOORS COLOR TO BE DETERMINED
4. HOLLOW METAL DOOR COLOR TO BE DETERMINED
5. ROLL UP DOOR COLOR TO BE DETERMINED
6. PROVIDE ELECTRIC DOO OPERATOR AT ALL ROLL-UP DOORS.
7. PAINT STEEL FRAME COLOR ___
8. PAINT DOOR AND DOOR FRAME COLOR ___ (EXTERIOR, INTERIOR, AND ALL JAMBS.
9. PROVIDE ELECTRONIC CARD READER WHERE NOTED

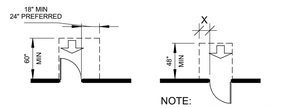
DOOR CLEARANCES

PER ICC A117.1 - 2017 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES



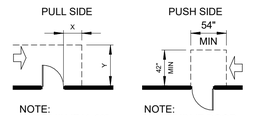
CLEAR DOORWAY WIDTH AND DEPTH
(*) 32" ALLOWED IN EXISTING BUILDINGS IF 48" MIN IN LENGTH CLEAR BEYOND DOORWAY. EXTERIOR ACCESSIBLE ROUTH SHALL BE 36" MIN.

FRONT APPROACHES - SWINGING DOOR



NOTE:
X=12" IF DOOR HAS BOTH A CLOSER AND A CATCH

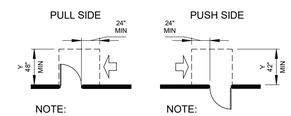
HINGE SIDE APPROACHES - SWINGING DOOR



NOTE:
X=36" MIN IF Y=60"
X=42" MIN IF Y=54"

NOTE:
Y=48" MIN IF DOOR HAS BOTH A CLOSER AND CATCH

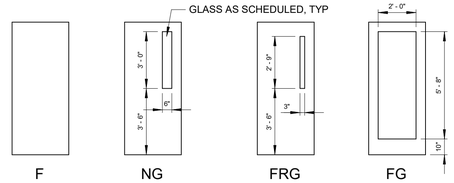
LATCH SIDE APPROACHES - SWINGING DOOR MANEUVERING CLEARANCES AT DOORS

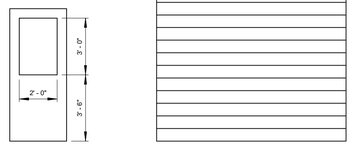


NOTE:
Y=54" MIN IF DOOR HAS A CLOSER

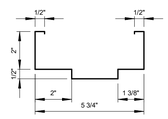
NOTE:
Y=48" MIN IF DOOR HAS A CLOSER

DOOR TYPES 1/4" = 1'-0"



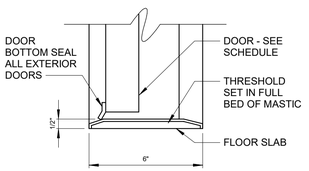


FRAME PROFILES 3" = 1'-0"

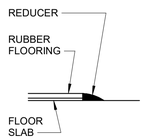


FP-1

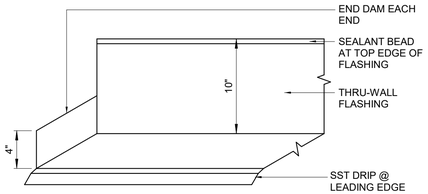
THRESHOLD TYPES 3" = 1'-0"



ALUMINUM (AL)



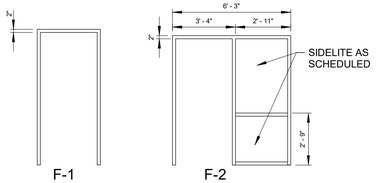
REDUCER (R)

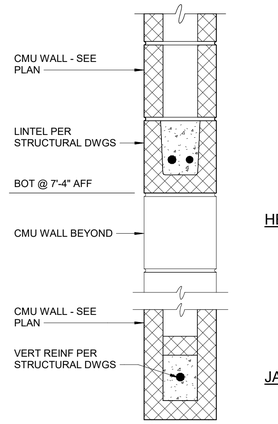


DOOR - END DAM AT ALL THRU-WALL FLASHINGS (SILL AND HEAD)

DETAIL 1 — 1 1/2" = 1'-0" — A0013

FRAME TYPES 1/4" = 1'-0"





DOOR - CASED OPENING IN CMU WALL1

DETAIL 2 — 1 1/2" = 1'-0" — A0013

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM 4	01-23-25	

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	H. VINEY
DRAWN BY:	A. BLAHA
PROJECT ENGINEER:	W. RUSSELL

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE — 0 1/2" 1"

Hazen

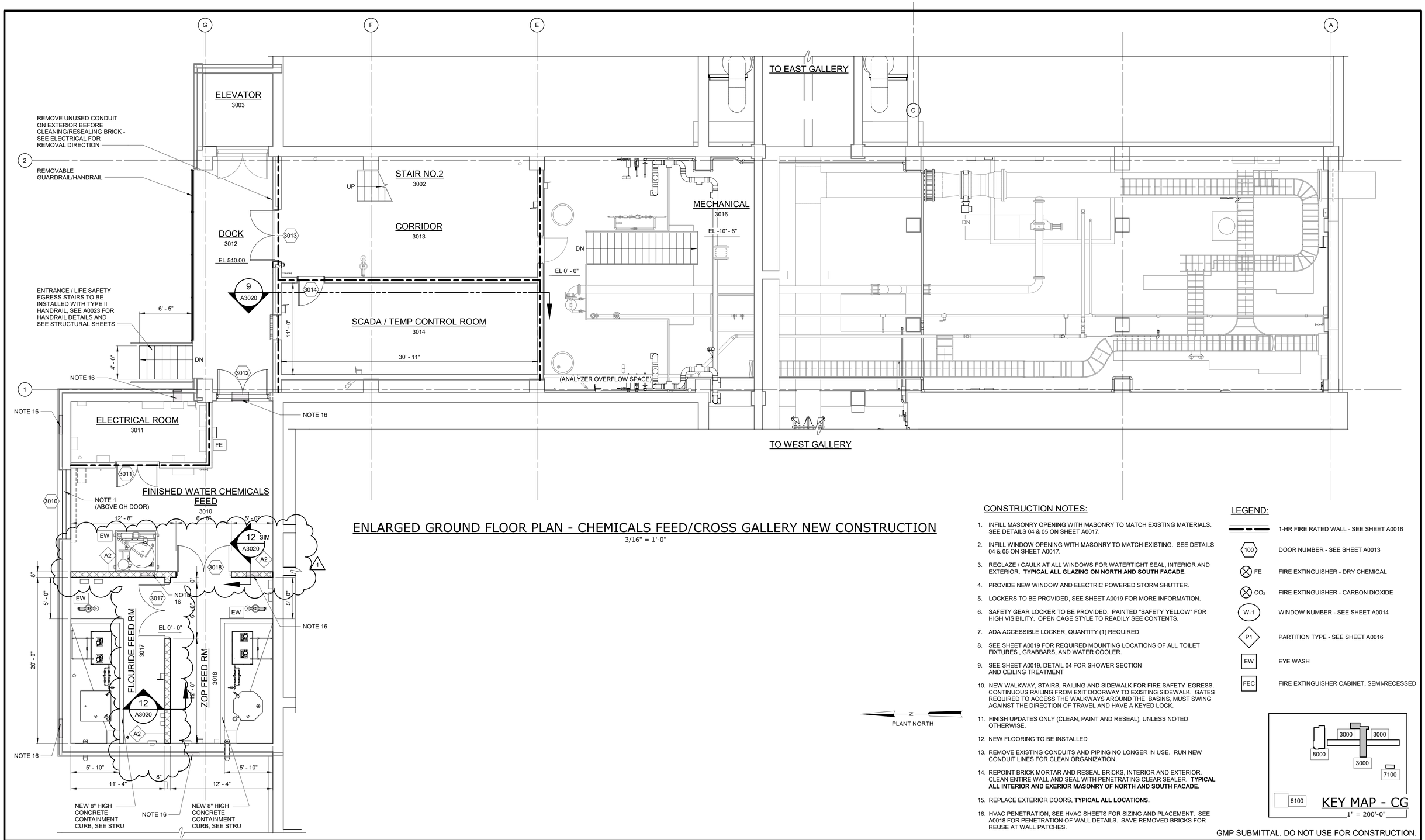
HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

ARCHITECTURAL
SCHEDULE - DOORS

DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	A0013



ENLARGED GROUND FLOOR PLAN - CHEMICALS FEED/CROSS GALLERY NEW CONSTRUCTION

3/16" = 1'-0"

PLANT NORTH

CONSTRUCTION NOTES:

1. INFILL MASONRY OPENING WITH MASONRY TO MATCH EXISTING MATERIALS. SEE DETAILS 04 & 05 ON SHEET A0017.
2. INFILL WINDOW OPENING WITH MASONRY TO MATCH EXISTING. SEE DETAILS 04 & 05 ON SHEET A0017.
3. REGLAZE / CAULK AT ALL WINDOWS FOR WATERTIGHT SEAL, INTERIOR AND EXTERIOR. **TYPICAL ALL GLAZING ON NORTH AND SOUTH FACADE.**
4. PROVIDE NEW WINDOW AND ELECTRIC POWERED STORM SHUTTER.
5. LOCKERS TO BE PROVIDED, SEE SHEET A0019 FOR MORE INFORMATION.
6. SAFETY GEAR LOCKER TO BE PROVIDED. PAINTED "SAFETY YELLOW" FOR HIGH VISIBILITY. OPEN CAGE STYLE TO READILY SEE CONTENTS.
7. ADA ACCESSIBLE LOCKER, QUANTITY (1) REQUIRED
8. SEE SHEET A0019 FOR REQUIRED MOUNTING LOCATIONS OF ALL TOILET FIXTURES , GRABBARS, AND WATER COOLER.
9. SEE SHEET A0019, DETAIL 04 FOR SHOWER SECTION AND CEILING TREATMENT
10. NEW WALKWAY, STAIRS, RAILING AND SIDEWALK FOR FIRE SAFETY EGRESS. CONTINUOUS RAILING FROM EXIT DOORWAY TO EXISTING SIDEWALK. GATES REQUIRED TO ACCESS THE WALKWAYS AROUND THE BASINS, MUST SWING AGAINST THE DIRECTION OF TRAVEL AND HAVE A KEYED LOCK.
11. FINISH UPDATES ONLY (CLEAN, PAINT AND RESEAL), UNLESS NOTED OTHERWISE.
12. NEW FLOORING TO BE INSTALLED
13. REMOVE EXISTING CONDUITS AND PIPING NO LONGER IN USE. RUN NEW CONDUIT LINES FOR CLEAN ORGANIZATION.
14. REPOINT BRICK MORTAR AND RESEAL BRICKS, INTERIOR AND EXTERIOR. CLEAN ENTIRE WALL AND SEAL WITH PENETRATING CLEAR SEALER. **TYPICAL ALL INTERIOR AND EXERIOR MASONRY OF NORTH AND SOUTH FACADE.**
15. REPLACE EXTERIOR DOORS, **TYPICAL ALL LOCATIONS.**
16. HVAC PENETRATION, SEE HVAC SHEETS FOR SIZING AND PLACEMENT. SEE A0018 FOR PENETRATION OF WALL DETAILS. SAVE REMOVED BRICKS FOR REUSE AT WALL PATCHES.

LEGEND:

1-HR	1-HR FIRE RATED WALL - SEE SHEET A0016
100	DOOR NUMBER - SEE SHEET A0013
FE	FIRE EXTINGUISHER - DRY CHEMICAL
CO_2	FIRE EXTINGUISHER - CARBON DIOXIDE
W-1	WINDOW NUMBER - SEE SHEET A0014
P1	PARTITION TYPE - SEE SHEET A0016
EW	EYE WASH
FEC	FIRE EXTINGUISHER CABINET, SEMI-RECESSED

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM 4	01-23-25	

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	H.VINEY
DRAWN BY:	A. BLAHA
PROJECT ENGINEER:	W. RUSSELL

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE (0 — 1/2" — 1")

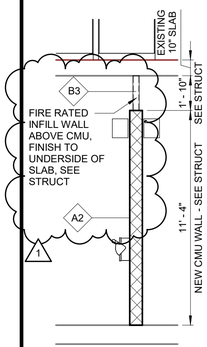
Hazen
HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

FILTER BUILDING
ARCHITECTURAL
ENLARGED GROUND FLOOR PLAN - CHEMICALS FEED / CROSS GALLERY NEW CONSTRUCTION

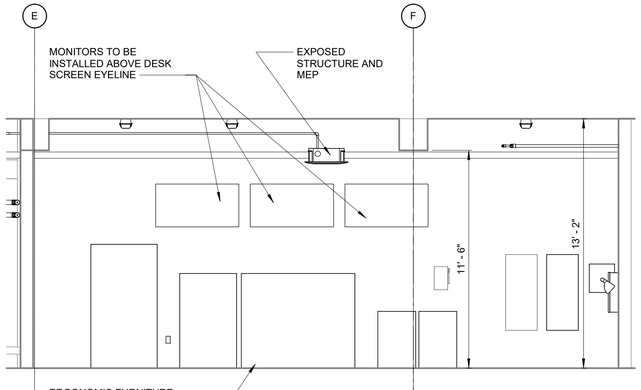
DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	A3006



CHEMICAL ROOM WALL - 1ST FL

SECTION 12 / A3006

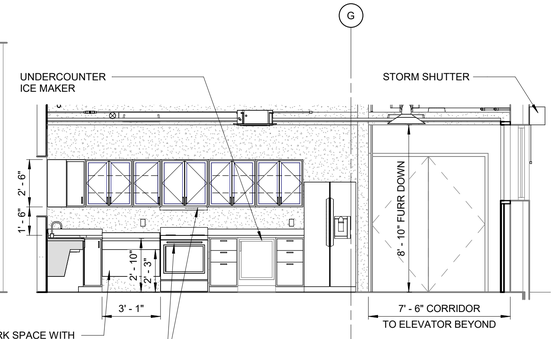
1/4" = 1'-0"



TEMP CONTROL ROOM - 1ST FL

SECTION 9 / A3006

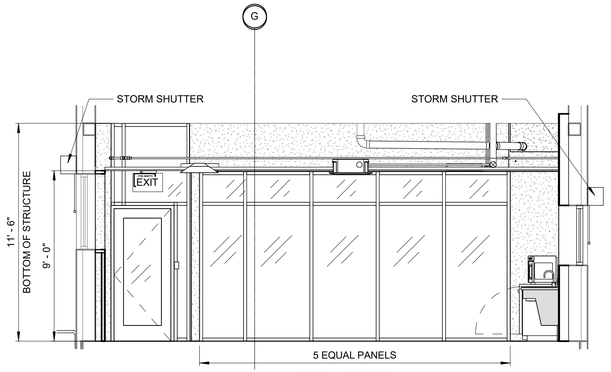
1/4" = 1'-0"



BREAKROOM

SECTION 6 / A3007

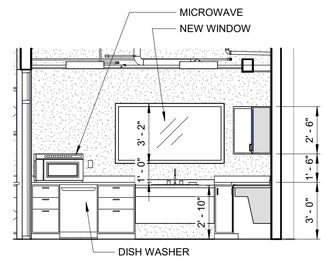
1/4" = 1'-0"



BREAKROOM - 2ND FL

SECTION 4 / A3007

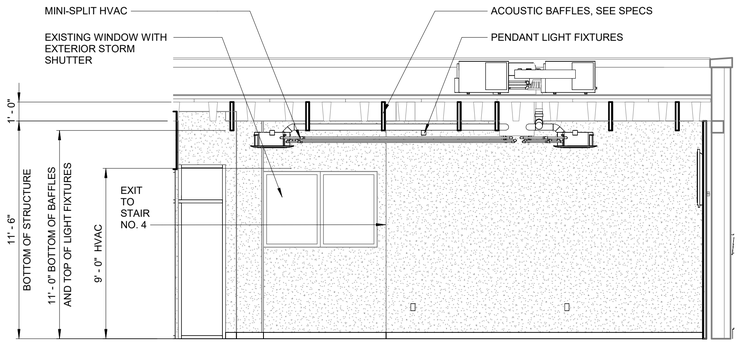
1/4" = 1'-0"



BREAK ROOM - 2ND FL CL STG

SECTION 1 / A3007

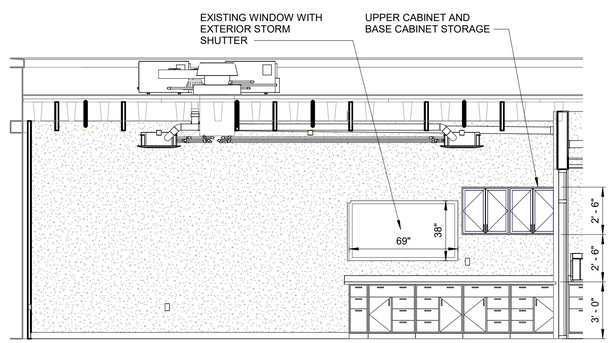
1/4" = 1'-0"

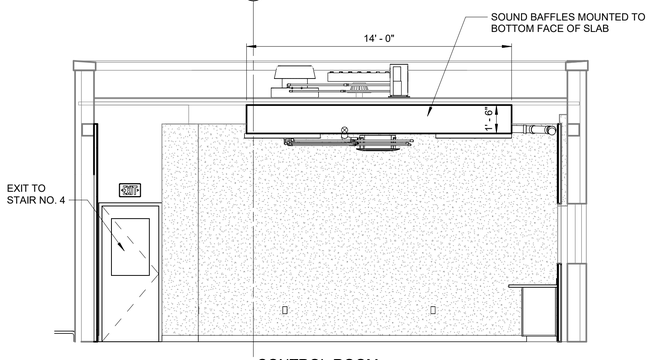


CONTROL ROOM EAST ELEVATION

SECTION 10 / A3007

1/4" = 1'-0"

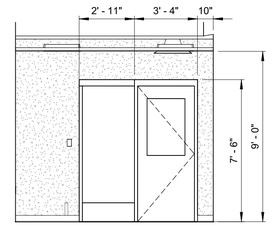




CONTROL ROOM SOUTH ELEVATION

SECTION 5 / A3007

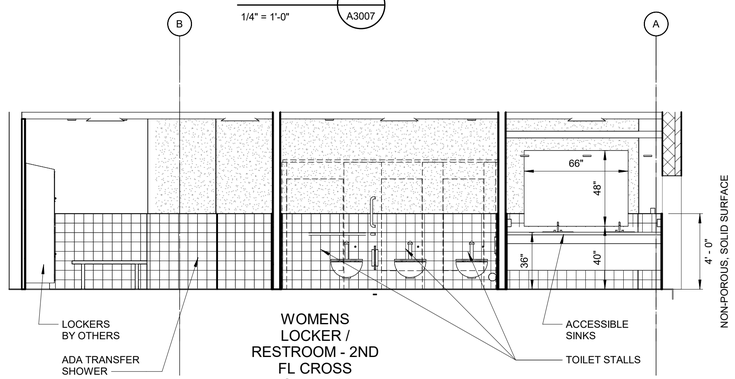
1/4" = 1'-0"



TYPICAL OFFICE - 2ND FL CROSS GALLERY

SECTION 2 / A3007

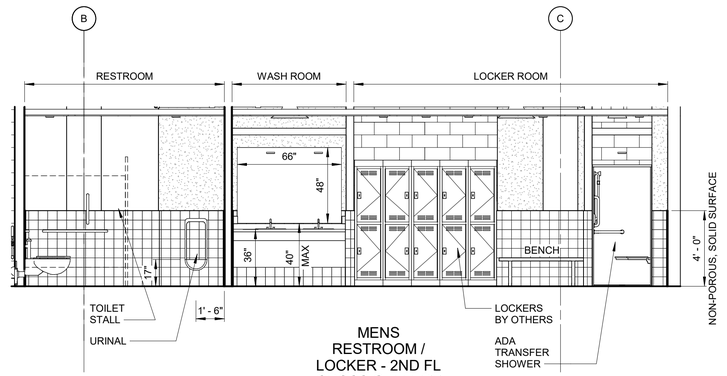
1/4" = 1'-0"



WOMENS LOCKER / RESTROOM - 2ND FL CROSS GALLERY

SECTION 11 / A3011

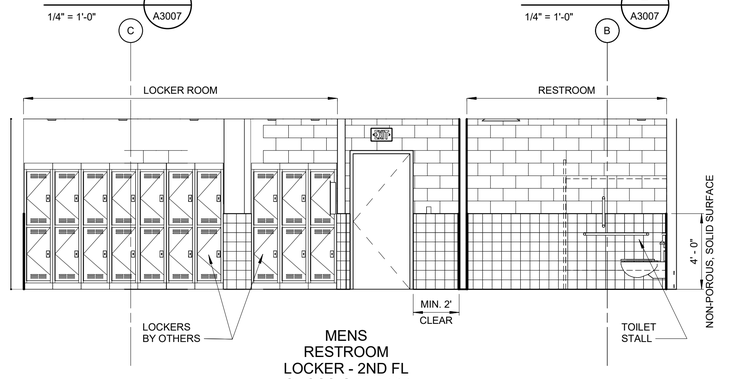
1/4" = 1'-0"



MENS RESTROOM / LOCKER - 2ND FL CROSS GALLERY

SECTION 8 / A3011

1/4" = 1'-0"



MENS RESTROOM LOCKER - 2ND FL CROSS GALLERY

SECTION 3 / A3011

1/4" = 1'-0"

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM 4	01-23-25	

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	H. VINEY
DRAWN BY:	A. BLAHA
PROJECT ENGINEER:	W. RUSSELL

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE 0 1/2" 1"

Hazen

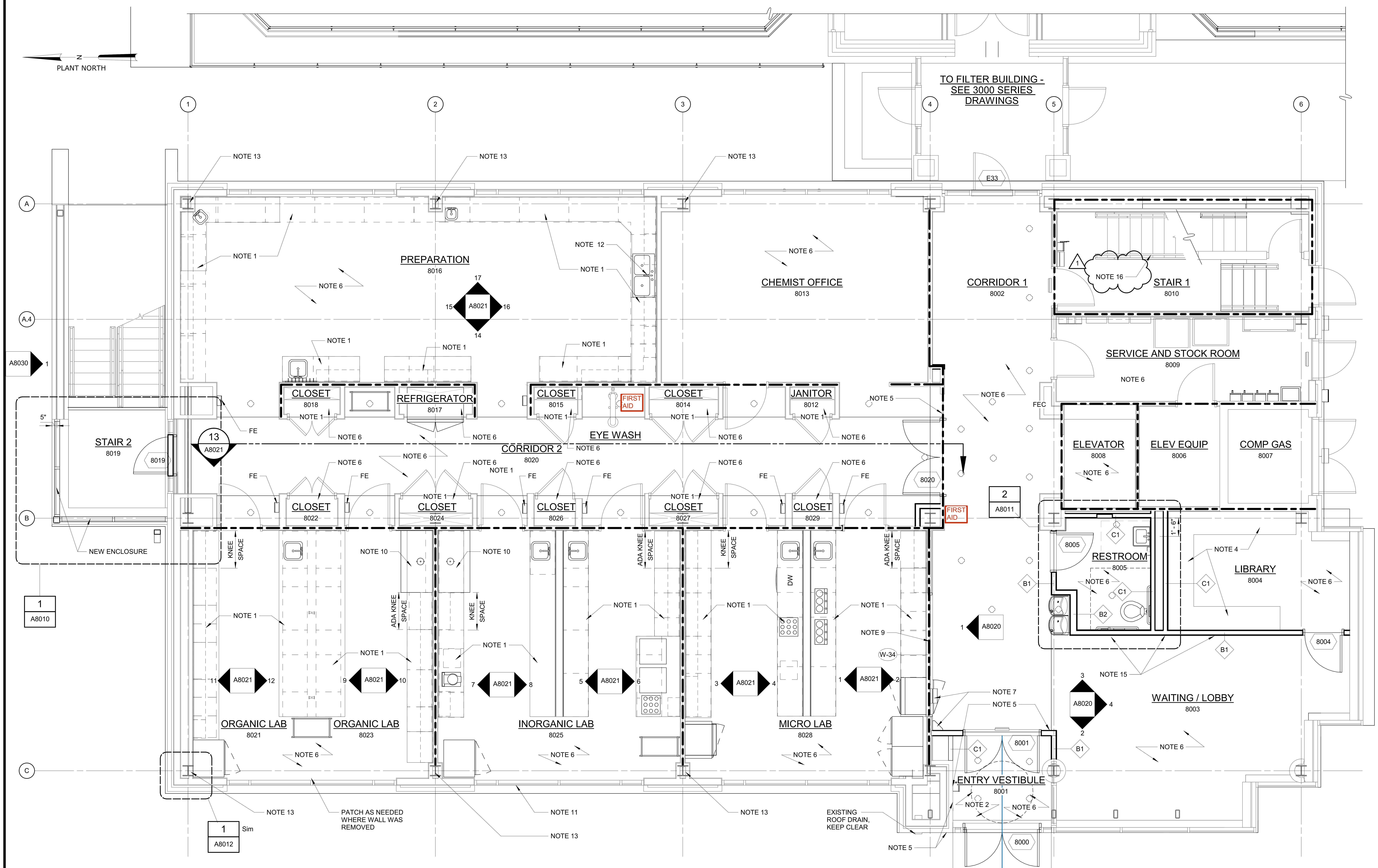
HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

FILTER BUILDING
ARCHITECTURAL
INTERIOR ELEVATIONS - CROSS GALLERY

DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	A3020



FIRST FLOOR PLAN - NEW CONSTRUCTION

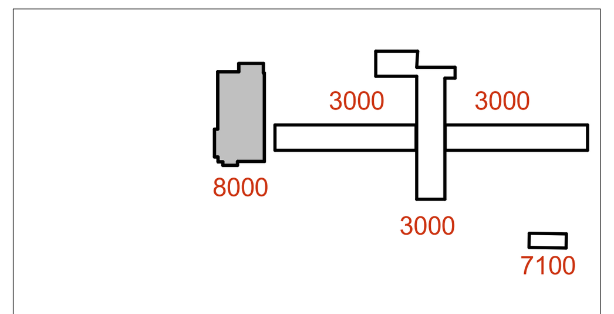
1/4" = 1'-0"

1ST FL CONSTRUCTION NOTES:

1. INSTALL LAB COUNTERTOPS AND LAB CASEWORK PER ELEVATIONS.
   SEE A0019 FOR CASEWORK SECTIONS
2. ENTRANCE VESTIBULE AND DOOR SHALL BE MODIFIED TO MEET ACCESSIBILITY REQUIREMENTS AND PROVIDE WIDER ENTRANCE.
3. EXTERIOR ENVELOPE TO BE EVALUATED FURTHER TO FIND POTENTIAL AIR LEAKAGE ISSUES WITH THE EXTERIOR WALLS AND WINDOWS. ADD INSULATION AND WEATHERPROOFING. APPLY SPRAY INSULATION IN CRAWL SPACE.
4. INSTALL SHELVING
5. ADD PUSH PANELS AT ENTRY AND NARTHEX FOR HANDS FREE ACCESSIBILITY.
6. FLOORING TO BE INSTALLED.
7. PROVIDE UNDERCABINET PASS THROUGH REFRIGERATOR FOR NIGHT DEPOSIT. SIGN IN SHELF ON VESTIBULE SIDE.
8. ADDRESS AIR FLOW INSIDE COLUMN BUILD OUT.
9. 4'x10' OBSERVATION WINDOW INTO LAB SPACE, SET 42" AFF
10. INSTALL ENERGY EFFICIENT FUME HOODS.
11. EXISTING WINDOWS SHALL BE REGLAZED OR REPLACED DEPENDING ON FURTHER INVESTIGATION, TYP
12. SAMPLE SINK TO BE REPLACED IN KIND, SEE MECHANICAL DRAWINGS FOR DETAILS.
13. EXISTING COLUMNS TO BE INSULATED TO PREVENT CONDENSATION - SEE A8012 FOR EXISTING CONDITIONS AND REMEDIATION MEASURES
14. WASH EXTERIOR OF BUILDING UPON COMPLETION OF WORK BEFORE TURN OVER TO CLIENT.
15. OUTLET AND BLOCKING FOR WALL MOUNTED TV, SEE ELECTRICAL AND STRUCTURAL SHEETS FOR DETAILS.
16. PAINT HANDRAILS (1)

LEGEND:

- 1-HR FIRE RATED WALL - SEE DRAWING A0014
- 1000 — DOOR NUMBER - SEE DRAWING A0012. EXISTING DOORS NOT NOTED, ONLY NEW
- FE — FIRE EXTINGUISHER - DRY CHEMICAL
- CO_2 — FIRE EXTINGUISHER - CARBON DIOXIDE
- W-1 — WINDOW NUMBER - SEE DRAWING A0013
- P1 — PARTITION TYPE - SEE DRAWING A0014. EXISTING PARTITIONS NOT NOTED, ONLY NEW



KEY PLAN

1" = 200'-0"

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM 4	01-23-25	

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	H. VINEY
DRAWN BY:	A. BLAHA
PROJECT ENGINEER:	W. RUSSELL

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE (0 — 1/2" — 1")

Hazen

HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

ADMINISTRATION BUILDING
ARCHITECTURAL
FIRST FLOOR PLAN - NEW CONSTRUCTION

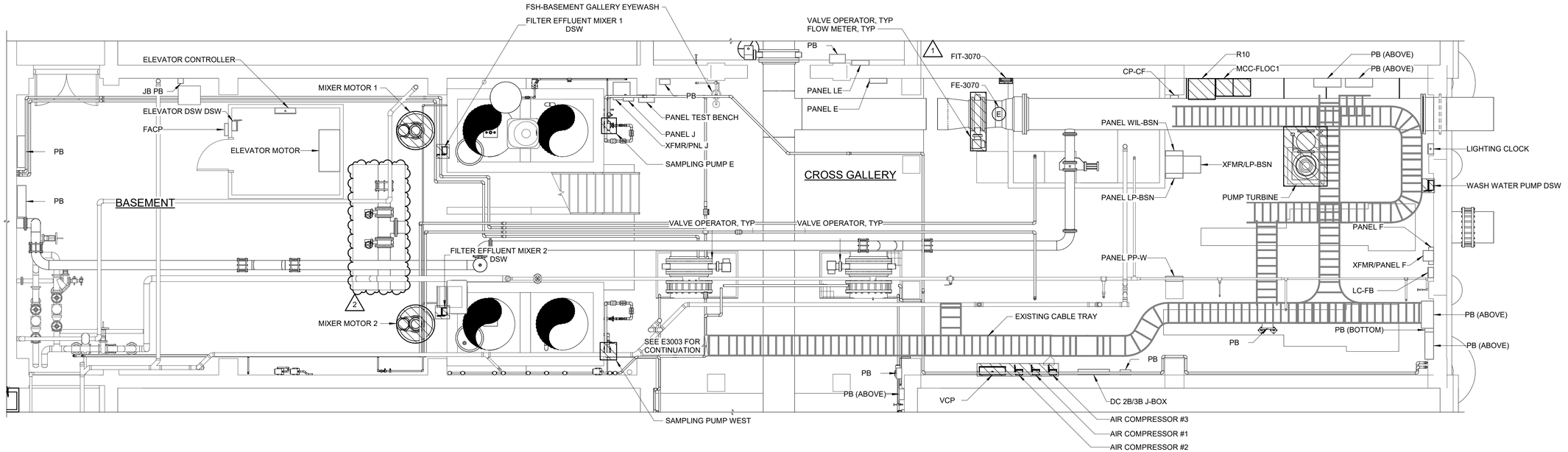
DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	A8003

Autodesk Docs://60711-001_Wilson_WTP_Rehab_Filter_Basin/60711-003-8000-AB-ARCH.rvt
1/22/2025 8:19:56 AM

NOTES:

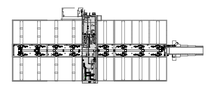
1. REMOVE CONDUCTORS, CONDUITS, AND SUPPORTS ASSOCIATED WITH DEMOLISHED ELECTRICAL AND INSTRUMENTATION EQUIPMENT.
2. REFERENCE OTHER DISCIPLINE DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.

N
PLANT NORTH



ENLARGED BOTTOM PLAN - CROSS GALLERY DEMOLITION - EL 529.50

3/16" = 1'-0"



KEY PLAN

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
2	ADDENDUM 4	1/21/25	BDB
1	ADDENDUM 2	1/7/25	BDB

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE (0, 1/2", 1")

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	S. REXHEPI
DRAWN BY:	S. REXHEPI
PROJECT ENGINEER:	B. BUELTEL

Hazen
HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

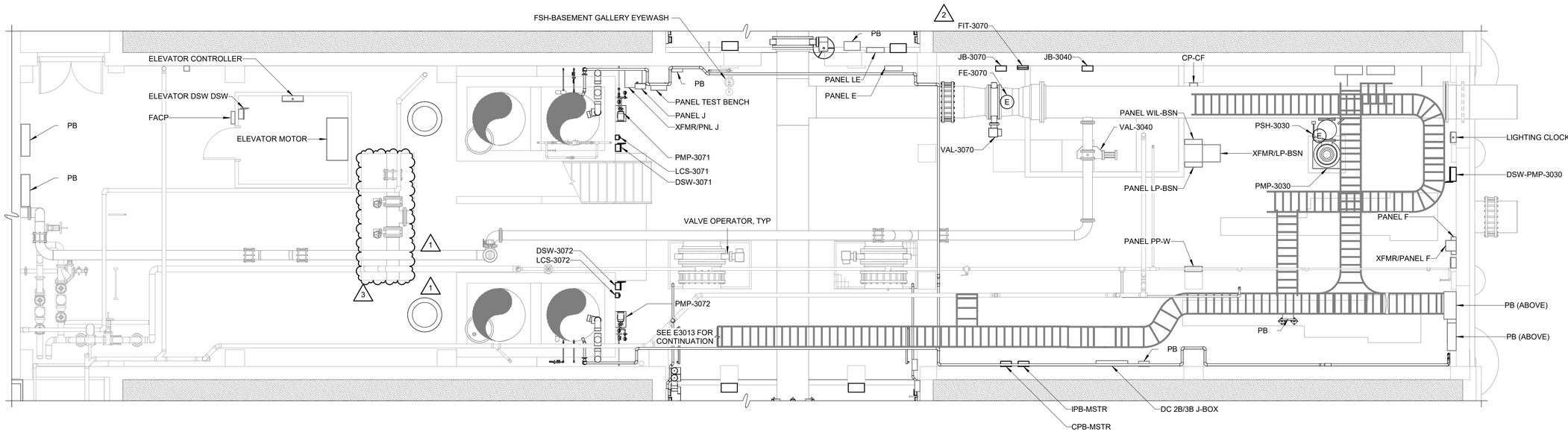
CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

FILTER BUILDING
ELECTRICAL
ENLARGED BOTTOM PLAN - CROSS GALLERY DEMOLITION

DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	E3000

PLANT NORTH



ENLARGED BOTTOM PLAN - CROSS GALLERY

3/16" = 1'-0"

KEY PLAN

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
3	ADDENDUM 4	1/21/25	BDB
2	ADDENDUM 2	1/7/25	BDB
1	ADDENDUM 1	12/12/24	BDB

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	S. REXHEPI
DRAWN BY:	S. REXHEPI
PROJECT ENGINEER:	B. BUELTEL

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE 0 1/2" 1"

Hazen

HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

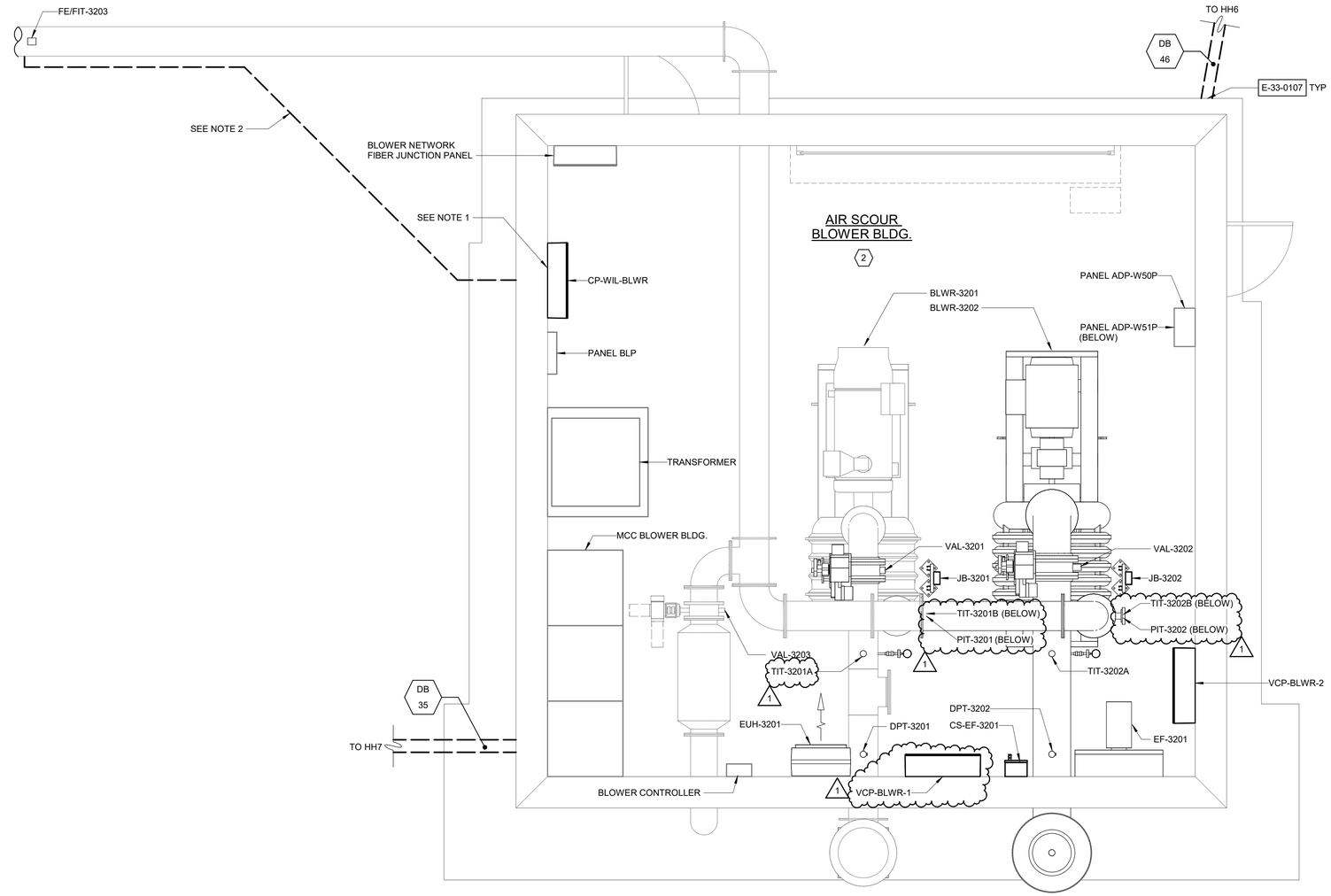
JACK H. WILSON WTP RENEWAL
AND RESILIENCY PROJECT

FILTER BUILDING
ELECTRICAL
ENLARGED BOTTOM PLAN - CROSS GALLERY

DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	E3010

PLANT NORTH

N



POWER PLAN

3/8" = 1'-0"

NOTES:

1. REPLACE PULLBOX IN-KIND AND LOCATE NEW CP-WIL-BLWR INSIDE OF NEW BOX. RECONNECT CP-WIL-BLWR TO EXISTING BLOWER RTU CIRCUIT USING EXISTING BLOWER RTU WIRE.
2. CONDUIT TO FLOW METER SHALL BE ROUTED DIRECT BURIED FROM THE BUILDING, OVER TO THE PIPE SUPPORT LEG NEAREST TO THE FLOW METER. CONDUIT SHALL THEN BE ROUTED UP THE SUPPORT LEG AND THEN OVER TO THE METER. APPROXIMATE CONDUIT ROUTE FROM BUILDING IS SHOWN, COORINATE WITH FIELD REQUIREMENTS.

1

AREA DESIGNATIONS:

1. INDOOR WET PROCESS AREA
2. INDOOR DRY PROCESS AREA
3. INDOOR DRY NON-PROCESS AREA

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
1	ADDENDUM 4	01/23/25	BDB

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	N. NELSON
DRAWN BY:	N. NELSON
PROJECT ENGINEER:	B. BUELTEL

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE 0 1/2" 1"

Hazen

HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL
AND RESILIENCY PROJECT

AIR SCOUR BLOWER BUILDING
ELECTRICAL
POWER PLAN

DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	E3201

208/120 VOLTS
3 PHASE, 4 WIRE

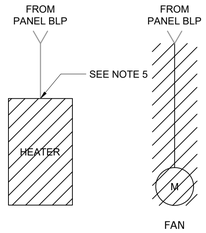
PANEL BLP
MAIN BREAKER
600A 3P

TYPE: NEMA 1
MOUNT: SURFACE

MODS	DESCRIPTION	WIRE	TRIP	POLE	CKT No.	VOLT-AMPERES A	VOLT-AMPERES B	VOLT-AMPERES C	VOLT-AMPERES A	VOLT-AMPERES B	VOLT-AMPERES C	CKT No.	POLE	TRIP	WIRE	DESCRIPTION	MODS
	HEATER (SEE NOTE 2)		50	3	1	-			-			2	1	20		ADP-W301	
					3		-			-		4	1	20		LIGHTS	
					5			-			-	6	1	20		RECEPTACLES	
	FAN		20	3	7	-			-			8	1	20		BLOWER PANEL	
					9		-			-		10	1	20		UNKNOWN	
					11			-			-	12	1	20		UNKNOWN	
	PRZ HEATER & RECEPT		20	1	13	-			-			14	1	20		AIR/WIL BLOWER CONTR. PNL	
	UNKNOWN		20	1	15		-			-		16	1	20		UNKNOWN	
	UNKNOWN		20	1	17			-			-	18	1	20		UNKNOWN	
	BACKWASH CONTROL PANEL		20	1	19	-			-			20	1	20		UNKNOWN	
	CLAY VALVE		20	3	21		-			-		22	1	20		UNKNOWN	
					23			-			-	24	1	20		UNKNOWN	
					25	-			-			26					
	UNKNOWN		60	3	27		-			-		28	3	60		UNKNOWN	
					29			-			-	30					
					31	-			-			32	1			SPACE	
	SPACE			1	33		-			-		34	1			SPACE	
	SPACE			1	35			-			-	36	1			SPACE	
	SPACE			1	37	-			-			38	1			SPACE	
	SPACE			1	39		-			-		40	1			SPACE	
	SPACE			1	41			-			-	42	1			SPACE	
	TOTAL	0	0	0												TOTAL	0	0	0
	PHASE TOTAL	0	0	0												TOTAL LOAD (VA)	0		
																TOTAL LOAD (A)	0		

MODIFICATION (MODS) LEGEND:
EPD - GROUND FAULT CIRCUIT INTERRUPTER (30mA)
GFCI - GROUND FAULT CIRCUIT INTERRUPTER (5mA)
LOD - LOCK-ON DEVICE
LFD - LOCK-OFF DEVICE

NOTES:
65kAIC



NOTES:

1. EXISTING PANEL BLP IS A GE A SERIES PANELBOARD; CAT. AQF3426JBX.
2. DISCONNECT AND DEMOLISH EXISTING BREAKERS. FURNISH AND INSTALL NEW BREAKERS BASED ON PROPOSED PANEL SCHEDULE ON THIS SHEET.
3. FURNISH AND INSTALL NEW CIRCUIT BREAKER IN EXISTING SPACE.
4. CONTRACTOR SHALL UPDATE EXISTING PANEL BLP SCHEDULE TO REFLECT CHANGES SHOWN.
5. DISCONNECT AND REMOVE CONDUCTORS. PRESERVE CONDUIT FOR REUSE.
6. REUSE CONDUIT FOR EQUIPMENT TO BE REPLACED IN-KIND. EXISTING CONDUIT HAS BEEN NUMBERED FOR CLARITY.
7. PROVIDE FLEXIBLE POWER PIGTAIL CORD AND PLUG AS SPECIFIED IN SECTION 26 05 19. TERMINATE CONDUCTORS IN JUNCTION BOX WITH TERMINAL STRIPS. INSTALL MINI CHANGE, A-SIZE 3 POLE, FEMALE RECEPTACLE INTO CONDUIT HUB ON MOTOR ACTUATOR FOR POWER CONNECTION.
8. PROVIDE FLEXIBLE CONTROLS PIGTAIL CORD AND PLUG AS SPECIFIED IN SECTION 26 05 19. TERMINATE CONDUCTORS IN JUNCTION BOX WITH TERMINAL STRIPS. INSTALL MINI CHANGE, C-SIZE 12 POLE, MALE RECEPTACLE INTO CONDUIT HUB ON MOTOR ACTUATOR FOR CONTROLS CONNECTION. (2)
9. POWER AND CONTROLS WIRING SHALL TERMINATE IN SAME JUNCTION BOX. PIGTAIL CORDS FOR BOTH POWER AND CONTROLS FROM JUNCTION BOX TO ACTUATOR SHALL BE RAN IN SAME CONDUIT. SEE SHEET E3205 FOR CONTROLS CONNECTION FROM CP-WIL-BLWR TO JUNCTION BOX.

208/120 VOLTS
3 PHASE, 4 WIRE

PANEL BLP
MAIN BREAKER
600A 3P

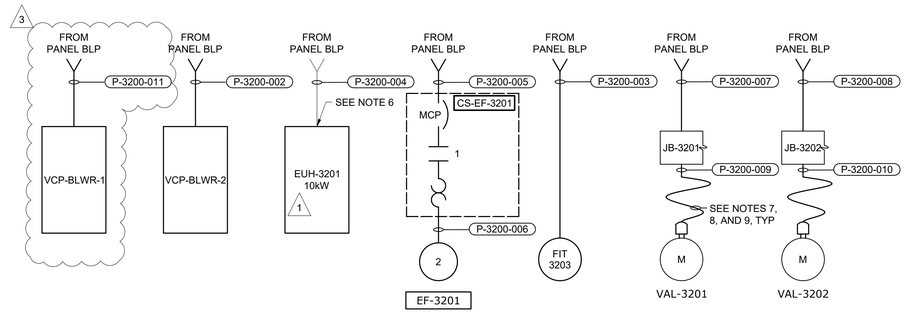
TYPE: NEMA 1
MOUNT: SURFACE

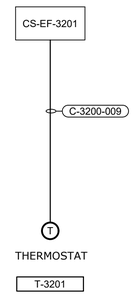
MODS	DESCRIPTION	WIRE	TRIP	POLE	CKT No.	VOLT-AMPERES A	VOLT-AMPERES B	VOLT-AMPERES C	VOLT-AMPERES A	VOLT-AMPERES B	VOLT-AMPERES C	CKT No.	POLE	TRIP	WIRE	DESCRIPTION	MODS
	EUH-3201	P-3200-004	20	3	1	3,330			-			2	1	20		ADP-W301	
					3		3,330			-		4	1	20		LIGHTS	
					5			3,330			-	6	1	20		RECEPTACLES	
	EF-3201	P-3200-005	20	3	7	810			-			8	1	20		BLOWER PANEL	
					9		810			-		10	1	20		UNKNOWN	
					11			810			-	12	1	20		UNKNOWN	
	PRZ HEATER & RECEPT		20	1	13	-			-			14	1	20		AIR/WIL BLOWER CONTR. PNL	
	UNKNOWN		20	1	15		-			-		16	1	20		UNKNOWN	
	UNKNOWN		20	1	17			-			-	18	1	20		UNKNOWN	
	BACKWASH CONTROL PANEL		20	1	19	-			-			20	1	20		UNKNOWN	
	CLAY VALVE		20	3	21		-			-		22	1	20		UNKNOWN	
					23			-			-	24	1	20		UNKNOWN	
					25	-			-			26					
	UNKNOWN		60	3	27		-			-		28	3	60		UNKNOWN	
					29			-			-	30					
					31	-			100			32	1	20	P-3200-002	VCP-BLWR-2	
	FIT-3203	P-3200-003	20	1	33		100			100		34	1	20	P-3200-011	VCP-BLWR-1	
	VAL-3201	P-3200-007	10	1	35			250				36	1			SPACE	
	VAL-3202	P-3200-008	10	1	37	250			-			38	1			SPACE	
	SPACE			1	39		-			-		40	1			SPACE	
	SPACE			1	41			-			-	42	1			SPACE	
	TOTAL	4,390	4,240	4,390					100	100	0					TOTAL	
	PHASE TOTAL	4,490	4,340	4,390												TOTAL LOAD (VA)	13,220
																TOTAL LOAD (A)	37

SEE NOTE 3, TYP.

MODIFICATION (MODS) LEGEND:
EPD - GROUND FAULT CIRCUIT INTERRUPTER (30mA)
GFCI - GROUND FAULT CIRCUIT INTERRUPTER (5mA)
LOD - LOCK-ON DEVICE
LFD - LOCK-OFF DEVICE

NOTES:
65kAIC





AIR SCOUR BLOWER BUILDING
CONTROL BLOCK DIAGRAM

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
3	ADDENDUM 4	01/23/25	BDB
2	ADDENDUM 2	01/09/25	BDB
1	ADDENDUM 1	12/17/24	BDB

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	N. NELSON
DRAWN BY:	N. NELSON
PROJECT ENGINEER:	B. BUELTEL
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"

Hazen
HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

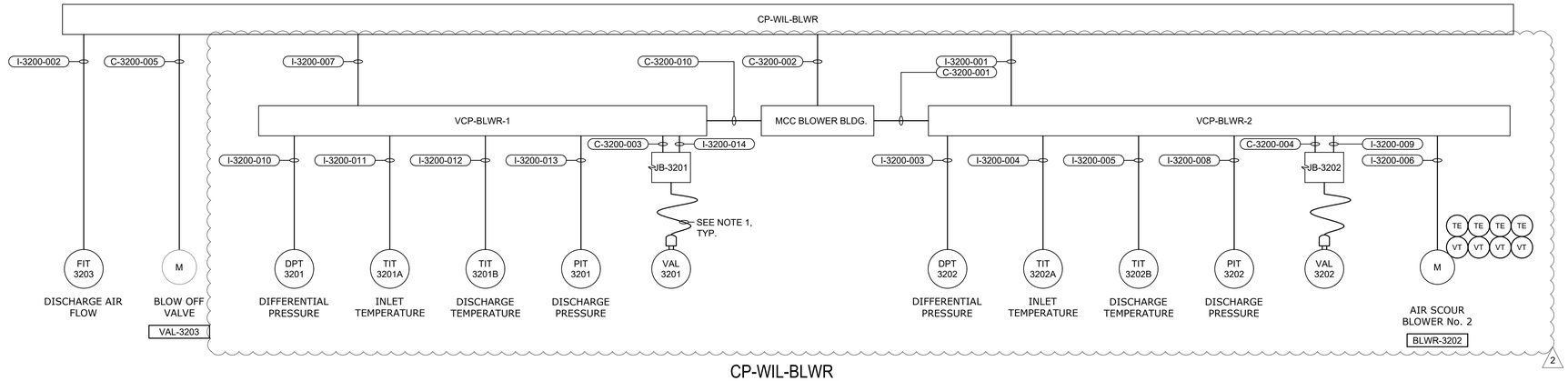
JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

AIR SCOUR BLOWER BUILDING
ELECTRICAL
PANEL SCHEDULE RISER DIAGRAM AND CONTROL BLOCK DIAGRAM

DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	E3203

NOTES:

1. POWER AND CONTROLS WIRING SHALL TERMINATE IN SAME JUNCTION BOX. PIGTAIL CORDS FOR BOTH POWER AND CONTROLS FROM JUNCTION BOX TO ACTUATOR SHALL BE RAN IN SAME CONDUIT. SEE SHEET E3203 FOR CONNECTION DETAILS AND CONDUIT NUMBER.



CP-WIL-BLWR
CONTROL BLOCK DIAGRAM

CONDUIT NO.	SIZE	FROM	TO	CONDUCTORS	REMARKS
P-3200-001	2"	MCC BLOWER BUILDING	BLWR-3202	3#4, #6GND	5kV RATED CABLE, EXISTING SPARE
P-3200-002	3/4"	PANEL-BLP	VCP-BLWR-2	2#12, #12GND	
P-3200-003	3/4"	PANEL-BLP	FIT-3203	2#12, #12GND	
P-3200-004	3/4"	PANEL-BLP	EUH-3201	3#8, #12GND	USE EXISTING CONDIUT TO HEATER
P-3200-005	3/4"	PANEL-BLP	CS-EF-3201	3#12, #12GND	
P-3200-006	3/4"	CS-EF-3201	EF-3201	3#12, #12GND	
P-3200-007	3/4"	PANEL-BLP	JB-3201	2#12, #12GND	
P-3200-008	3/4"	PANEL-BLP	JB-3202	2#12, #12GND	
P-3200-009	1-1/2"	JB-3201	VAL-3201	(2) PIGTAIL CORDSET	POWER AND CONTROLS
P-3200-010	1-1/2"	JB-3202	VAL-3202	(2) PIGTAIL CORDSET	POWER AND CONTROLS
P-3200-011	3/4"	PANEL-BLP	VCP-BLWR-1	2#12, #12GND	

CONDUIT NO.	SIZE	FROM	TO	CONDUCTORS	REMARKS
C-3200-001	3/4"	VCP-BLWR-2	MCC BLOWER BLDG	12#14, #14 GND	
C-3200-002	3/4"	CP-WIL-BLWR	MCC BLOWER BLDG	16#14, #14 GND	
C-3200-003	3/4"	VCP-BLWR-1	JB-3201	6#14, #14 GND	
C-3200-004	3/4"	VCP-BLWR-2	JB-3202	6#14, #14 GND	
C-3200-005	3/4"	CP-WIL-BLWR	VAL-3203	16#14, #14 GND	
C-3200-006	1"	FPP-WIL-ASB	FPP-WIL-PCR	FO CABLE	VIA HH6, MH10
C-3200-007	1"	FPP-WIL-PCR	FPP-WIL-PS1B	FO CABLE	VIA MH10, MH11, MH13
C-3200-008	1"	FPP-WIL-PS1B	FPP-WIL-PS1A	FO CABLE	VIA MH13, MH11, MH10, PS1A
C-3200-009	3/4"	CS-EF-3201	T-3201	4#14, #14 GND	
C-3200-010	3/4"	VCP-BLWR-1	MCC BLOWER BLDG	12#14, #14 GND	
C-3200-011	1"	FPP-WIL-ASB	MH10	EMPTY W/ PULLSTRING	
C-3200-012	1"	FPP-WIL-PS1A	FPP-WIL-FB	FO CABLE	

CONDUIT NO.	SIZE	FROM	TO	CONDUCTORS	REMARKS
I-3200-001	3/4"	CP-WIL-BLWR	VCP-BLWR-2	CAT-6 CABLE	
I-3200-002	3/4"	CP-WIL-BLWR	FIT-3203	2/C#16TSH, #14GND	
I-3200-003	3/4"	VCP-BLWR-2	DPT-3202	2/C#16TSH, #14GND	
I-3200-004	3/4"	VCP-BLWR-2	TIT-3202A	2/C#16TSH, #14GND	
I-3200-005	3/4"	VCP-BLWR-2	TIT-3202B	2/C#16TSH, #14GND	
I-3200-006	2"	VCP-BLWR-2	BLWR-3202	8(2/C#16TSH), #14GND	TE-3202A/B/C/D, VE-3202A/B/C/D
I-3200-007	3/4"	CP-WIL-BLWR	VCP-BLWR-1	CAT-6 CABLE	
I-3200-008	3/4"	VCP-BLWR-2	PIT-3202	2/C#16TSH, #14GND	
I-3200-009	3/4"	VCP-BLWR-1	JB-3202	2(2/C#16TSH), #14GND	
I-3200-010	3/4"	VCP-BLWR-1	DPT-3201	2/C#16TSH, #14GND	
I-3200-011	3/4"	VCP-BLWR-1	TIT-3201A	2/C#16TSH, #14GND	
I-3200-012	3/4"	VCP-BLWR-1	TIT-3201B	2/C#16TSH, #14GND	
I-3200-013	3/4"	VCP-BLWR-1	PIT-3201	2/C#16TSH, #14GND	
I-3200-014	3/4"	VCP-BLWR-1	JB-3201	2(2/C#16TSH), #14GND	

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
2	ADDENDUM 4	01/23/25	BDB
1	ADDENDUM 1	12/17/24	BDB

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE 0 1/2" 1"

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	S. CHAVEZ
DRAWN BY:	S. CHAVEZ
PROJECT ENGINEER:	B. BUELTEL

HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

AIR SCOUR BLOWER BUILDING
ELECTRICAL
CONDUIT AND WIRE SCHEDULE

DATE: NOVEMBER 2024
HAZEN NO.: 60711-003
CONTRACT NO.: 1
DRAWING NUMBER: E3205

MM FO
I1005
FROM FILTER BUILDING

12-ST MM FO

MM FO
I1009
TO ELECTRICAL BUILDING NO. 2

PS1A BUILDING

FPP-1 NC-WIL-PS1A FPP-2

ESC-PS1A

ESS-PS1A

TO EXISTING PLC

PS1B BUILDING

FPP-1 NC-WIL-PS1B FPP-2

ESC-PS1B

ESS-PS1B

TO EXISTING PLC

PCR BUILDING

FPP-1 NC-WIL-PCR FPP-2

ESC-PCR

ESS-PCR

TO EXISTING PLC

AIR SCOUR BLOWER BLDG

FPP-1 NC-WIL-ASB FPP-2

ESC-BLWR

ESS-BLWR

4

VCP-BLWR-1

OIT

ESF-BLWR1

0 1 2 3 4 5 6
5069-L310ER I/O I/O I/O I/O I/O I/O

PLC-BLWR1-CMX-001

BLOWER NO.1
VENDOR CONTROL PANEL

VCP-BLWR-2

OIT

ESF-BLWR2

0 1 2 3 4 5 6
5069-L310ER I/O I/O I/O I/O I/O I/O

PLC-BLWR2-CMX-001

BLOWER NO.2
VENDOR CONTROL PANEL

CP-WIL-BLWR

ESF-BLWR

0 1 2 3 4 5 6
5069-L320ER 5069-IB16 5069-IB16 5069-OW16 5069-IF8 5069-OF4 5069-SERIAL

PLC-BLWR-CMX-001

MODBUS I007 — RS-485
TO CP-WIL-FLT16

MODBUS I007 — RS-485
FROM CP-WIL-FLT15

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
4	ADDENDUM 4	1-23-25	DBE

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	S. ZOMORODI
DRAWN BY:	B. HARRIS
PROJECT ENGINEER:	S. ZOMORODI

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE 0 1/2" 1"

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HAZEN AND SAWYER
8150 N. CENTRAL EXPRESSWAY
TOWER II - SUITE 700
DALLAS, TEXAS 75206

CENTRAL ARKANSAS WATER
LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

INSTRUMENTATION
CONTROL SYSTEM BLOCK DIAGRAM
SHEET 4

DATE:	NOVEMBER 2024
HAZEN NO.:	60711-003
CONTRACT NO.:	1
DRAWING NUMBER:	I1008

SCADA HMI

CP-WIL-BLWR

POWER SOURCE

FIELD

DISCH AIR FLOW FI 3203 | POSITION CONTROL ZC 3201 | POSITION FEEDBACK ZI 3201 | FAULT YA 3201 | IN REMOTE YL 3201

START COMMAND YCR 3201 | STOP COMMAND YSR 3201 | RUNNING YLR 3201 | FAULT YA 3201 | IN REMOTE YL 3201 | BLDG POWER FAIL YA3 3201 | AIR FILTER HEAD LOSS DPI 3201

AIR FILTER HEAD LOSS DPI 3202 | START COMMAND YCR 3202 | STOP COMMAND YSR 3202 | RUNNING YLR 3202 | FAULT YA 3202 | PLC FAIL YA2 3202 | IN REMOTE YL 3202

POSITION CONTROL ZC 3202 | POSITION FEEDBACK ZI 3202 | FAULT YA 3202 | IN REMOTE YL 3202 | DISCH AIR FLOW FI 3203

CLOSE COMMAND ZCC 3203 | OPEN COMMAND ZCO 3203 | OPENED ZLO 3203 | CLOSED ZLC 3203 | FAULT YA 3203 | IN REMOTE YL 3203

DISCH AIR FLOW FI 3203

UIC 3201 | UIC 3201 | UIC 3202 | UIC 3202 | UIC 3203 | FT 3203 → I3000 FILTER BACKWASH CONTROL

ES 2300/3

MCC BLOWER BLDG

POWER JI 3201 | FAULT YA 3201 | ESTOP HS 3201 | HOA HS 3201 | RUNNING YLR 3201

POWER JI 3202 | FAULT YA 3202 | ESTOP HS 3202 | HOA HS 3202 | RUNNING YLR 3202

VCP-BWLR-1: ES 120/1 | OIT-3202 | PLC 3201 | 13 14 15 16

VCP-BWLR-2: ES 120/1 | OIT-3202 | PLC 3202 | 1 2 3 4 5 6 7 8 9 10 11 12 17

1 BLOWER BEARING VIBRATION | 2 BLOWER BEARING TEMP | 3 BLOWER MOTOR VIBRATION | 4 BLOWER MOTOR TEMP

AIR FILTER (TYP): S | DPT 3201 | PI 3201 | TIT 3201 A | ES 120/1 | M | VAL-3201

BLWR-3201 AIR SCOUR BLOWER NO. 1: M | TIT 3201 B | PIT 3201

AIR FILTER/SILENCER: S | DPT 3202 | PI 3202 | TIT 3202 A | ES 120/1 | M | VAL-3202

BLWR-3202 AIR SCOUR BLOWER NO. 2: VT 3202 C | TE 3202 C | VT 3202 D | TE 3202 D | VT 3202 A | TE 3202 A | VT 3202 B | TE 3202 B | BLOWER BEARING | TIT 3202 B | PIT 3202

S → TO ATMOSPHERE

ES 120/1 | VAL-3203 BLOW OFF VALVE | PI 3203

ES 120/1 | FIT 3203 | ΔT → AS I3000 TO INDIVIDUAL FILTERS

GMP SUBMITTAL. DO NOT USE FOR CONSTRUCTION.

REV	ISSUED FOR	DATE	BY
4	ADDENDUM 4	1-23-25	DBE

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE 0 1/2" 1"

PROJECT MANAGER:	T. HUDSON
DESIGNED BY:	S. ZOMORODI
DRAWN BY:	B. HARRIS
PROJECT ENGINEER:	S. ZOMORODI

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LITTLE ROCK, ARKANSAS

JACK H. WILSON WTP RENEWAL AND RESILIENCY PROJECT

INSTRUMENTATION
AIR SCOUR BLOWERS P&ID

DATE: NOVEMBER 2024
HAZEN NO.: 60711-003
CONTRACT NO.: 1
DRAWING NUMBER: I3200

Number	Question	Drawing/Specification Reference	Response
18	There are two sets of blower conditions listed. Are we doing two separate proposals, one for each option, or just for one or the other of the two options?	M3201 and M3202	The blower design criteria has been updated to keep the exsiting blower regardless of the underdrain selection. Only one proposal is required. Please see updated drawing M3201 and Specification 43 11 18.
	a. Set one is for ONE blower for a Plastic Dual-lateral underdrain system, 6000 SCFM at 6.0 PSIG, 250HP motor	M3201 and M3202	This is now the only blower design criteria, regardless of the underdrain selection.
	b. Set two is for TWO blowers for Folded SST plate underdrain system, 6000 SCFM at 6.75 PSIG, 300HP motor	M3201 and M3202	This option has been removed.

Number	Question	Drawing/Specification Reference	Response
153	[Poly-Processing/ETEC] Please review and provide comment to our value differentiations, exceptions, and keynotes.	43 41 43	See below.
	Value Differentiations		
	2.02 C – OR1000 (oxidation resistance) Tank TK-6000 (sodium hypochlorite delivery tank) will include OR1000 a medium density polyethylene resin system with 4x the antioxidant resistance of standard polyethylene resins. OR1000 was engineered by PPC specifically to address the aggressive oxidizing effects of sodium hypochlorite.	43 41 43 - 2.02.C	This is acceptable.
	2.03 C – Opening for pump suction line shall be integrally molded full drain outlet Each tank offered in our quote will feature an Integrally Molded Flanged Outlet (IMFO) capable of providing full drainage through the tank sidewall. Unlike similar “full drain” outlets, the IMFO is molded from the same material as the tank and located flush with the tank bottom to provide full drainage. Similar outlets use adapters or inserts which can never be installed low enough to provide full drainage.	43 41 43 - 2.03.C	This is acceptable.
	Exceptions and Key Notes		
	1.02 A – The tank offered in our quote follow.	43 41 43 - 1.02.A	
	TK-6104: 2050-Gallon IMFO Tank (7’-1” OD x 8’-6” Overall Height)		This is acceptable.
	TK-6151 / TK-6152: 6150-Gallon IMFO Tank (10’-2” OD x 12’-5” Overall Height)		This is acceptable.
	TK-6160 / TK-6210: 230-Gallon IMFO Tank (3’-2” OD x 4’-11” Overall Height)		This is acceptable.
	TK-6201 / TK-6000: 6115-Gallon IMFO Tanks (8’-6” OD x 16’-4” Overall Height)		This is acceptable.
154	[ISI] What is the last day to submit bid questions?		7 days prior to the bid opening. No questions will be accepted after 1/31 at 2 pm CT.
155	[Ideal Construction] Room #8008 calls for flooring but is not on the finish schedule.	A0012	Room 8008 added to finish schedule - will have LVT-MAF installed.
156	[Ideal Construction] 1st floor demo plans, room #8009 - NOTE 14 says to remove exiting floor & prep for new flooring, but it is not on the finish schedule.	A8000	Room 8009 added to finish schedule - will have LVT, RWB, PT, and ACT.
157	[Ideal Construction] #8060 Supply/Mother, plans call for new flooring but is not on the finish schedule.	A0012	Room 8060 added to finish schedule - will have CPT, RWB, PT, and ACT.

Number	Question	Drawing/Specification Reference	Response
158	[Mixtec] The Vertical Shaft Mixer package refers to a Payment Bond and a Performance Bond. It is our experience that these are not common requirements for equipment supply, versus construction activities. The document includes many other items on contractor licensing, trenching, trailer hookups, etc that do not apply to equipment supply. Please confirm that the bonds are required for this equipment supply or if they are a carryover from the construction packages.		The performance and payment bonds only apply to packages 1-7. A bid bond is also not required.
159	[Serv-a-tron] They are asking for a bunch of service days, please confirm if a factory tech is required or if I can take care of it.	40 05 59.23	As noted in the spec, the services must be provided by a qualified manufacturer's technical representative in accordance with Section 46 00 00 – Equipment General Provisions.
160	[Serv-a-tron] We had included the anchors in the budget quote, please confirm if they should be included.	40 05 59.23	Yes, include.
161	[Serv-a-tron] There is no reference to an Arkansas P.E. stamped design calculations (for submittals or anchors), can you verify this ?	40 05 59.23	P.E. seal requirements have been added. Please see the addendum for reference.
162	[Serv-a-tron] Quote item 11C, P & LD: There is a stop plate schedule, asking for 5 frames and 1 stop plate: I can see only 1 stop plate and 1 frame in the Coagulated Water Distribution (M2002).	40 05 59 / 40 06 20	The number of frames will be revised in the updated pipe schedule.
163	[Serv-a-tron] Also, they are asking for a lifting device for the stop plate: not sure if relevant since the plate is of the same height as the frame. The lifting device is normally slid in the frame to reach the stop plate (or stop log).	40 05 59	It is a large stop plate to be lifted by hand in terms of its size and weight. Anything larger than 24X24 requires a lifting device.
164	{Calgon Carbon] As it relates to scraping in 46 61 16 Para. 3.03 C 2 g : The spec states that the media will be installed in two lifts and each lift will be backwashed 3 times. The top 1/2" of media will be scraped after each "washing". Our interpretation of this would be that the top 1/2" of media would be scraped after backwashing each lift 3 times, so a total of 1" of additional GAC would be included, 1/2" for lift 1 and 1/2" for lift 2. Please confirm that this is correct. Each inch of media is several truckloads, so I want to make sure we are interpreting this correctly.	46 61 16 - 3.03.C.2.g	Top 1/2" of media will be scraped after every backwash of each lift. Total of 6 wash/scrape cycles.