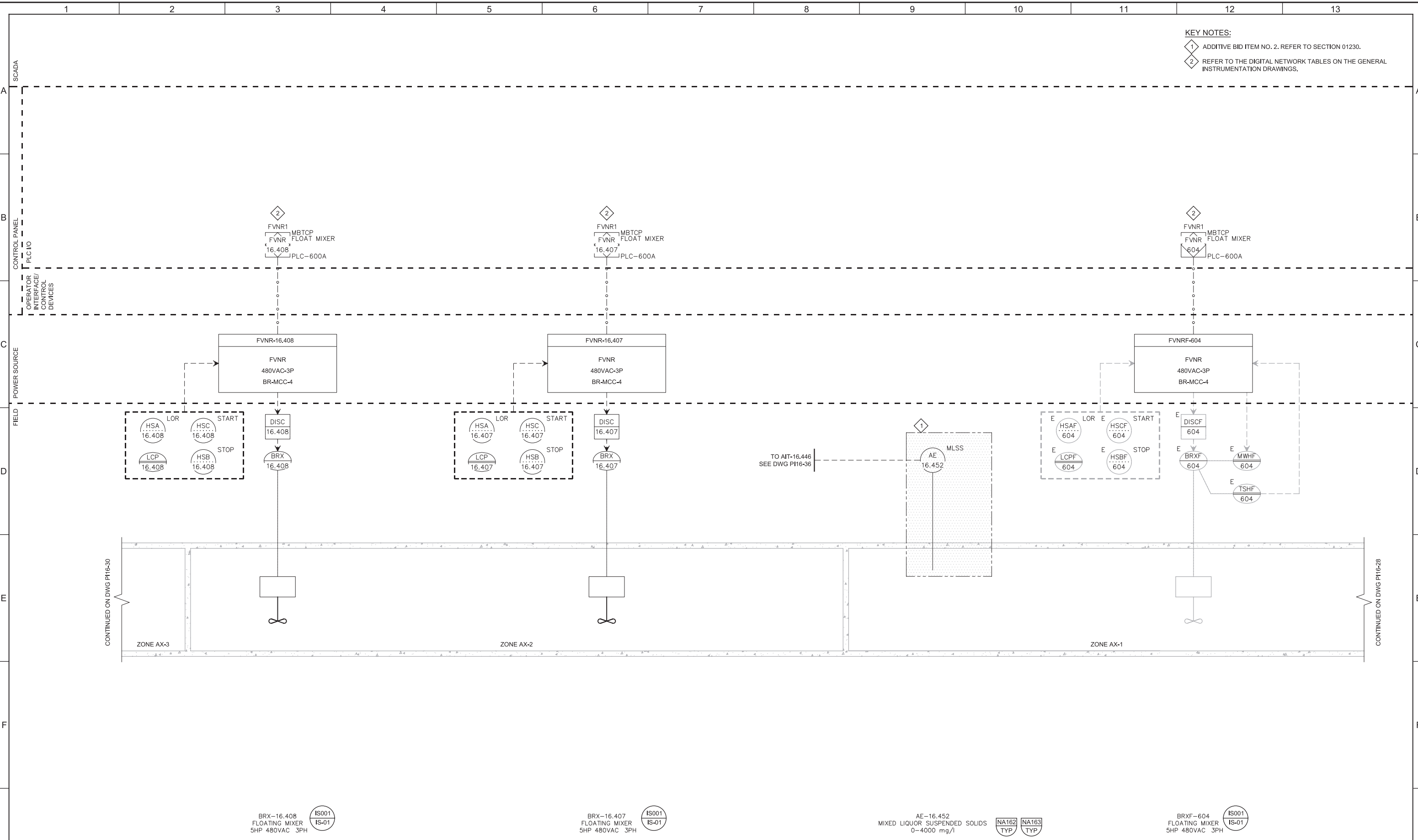


Plot Date: 28-FEB-2019 10:48:09 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1

LAST SAVED BY: CYoung



KEY NOTES:

1 ADDITIVE BID ITEM NO. 2. REFER TO SECTION 01230.

2 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.

CONTINUED ON DWG PI16-30

CONTINUED ON DWG PI16-28

TO AIT-16.446
SEE DWG PI16-36

BRX-16.408
FLOATING MIXER
5HP 480VAC 3PH



BRX-16.407
FLOATING MIXER
5HP 480VAC 3PH



AE-16.452
MIXED LIQUOR SUSPENDED SOLIDS
0-4000 mg/l



BRXF-604
FLOATING MIXER
5HP 480VAC 3PH



REV	DATE	BY	DESCRIPTION

DESIGNED
MGH

DRAWN
SGS

CHECKED
DJC

DATE
MARCH 2019



SV South Valley
WATER RECLAMATION FACILITY

7495 South 1300 West
West Jordan, Utah 84084

SOUTH VALLEY WATER RECLAMATION FACILITY

PROJECT 5

INSTRUMENTATION

BIOREACTOR NO. 4

ZONE AX-1 & AX-2 P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

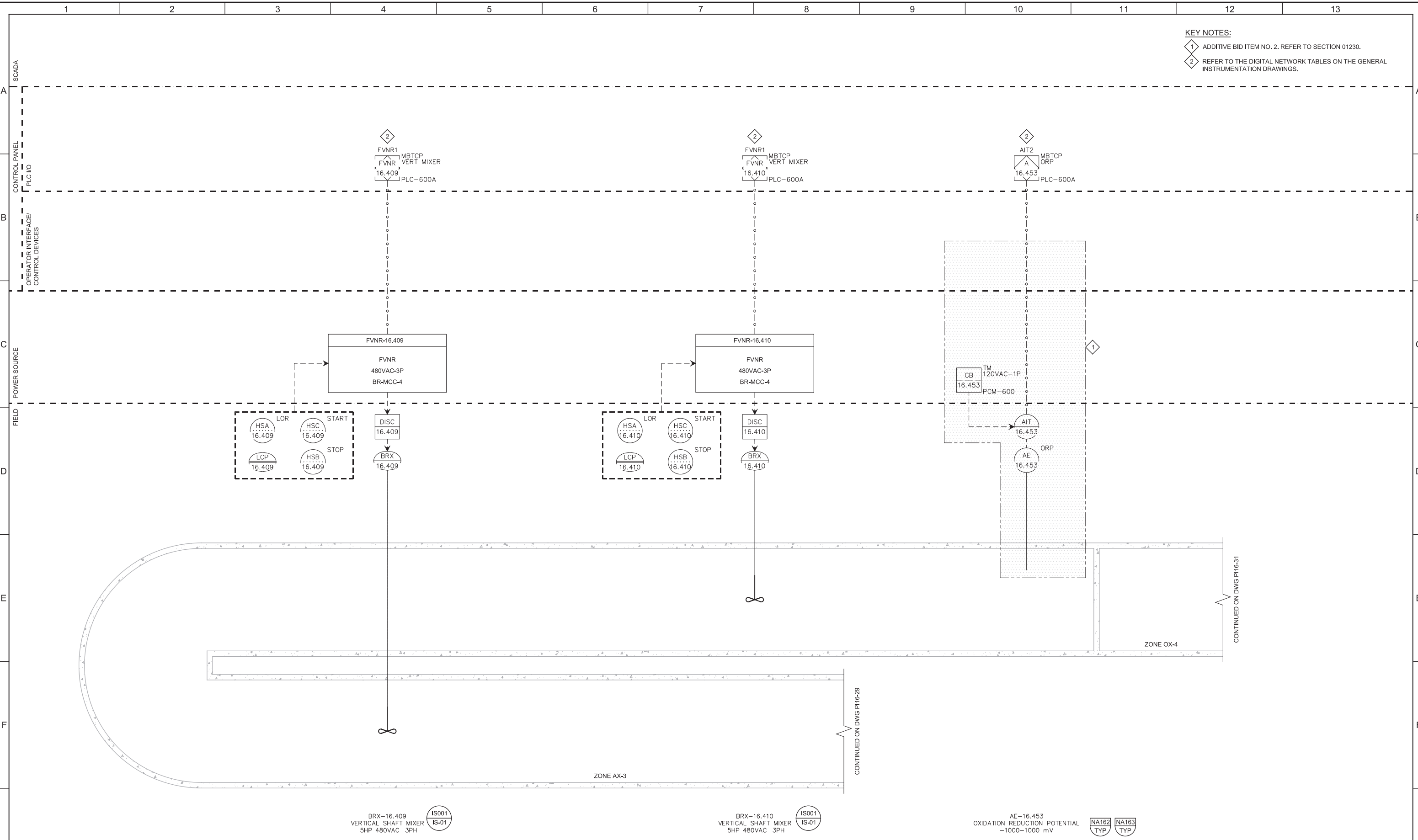
JOB NO.
10548A.10

DRAWING NO.
PI16-29

SHEET NO.
129 OF 159

Plot Date: 28-FEB-2019 10:48:22 AM
 User: svcPW
 Model: Layout1
 ColorTable: gshade.ctb
 DesignScript: Carollo_Std_Pen_v0905.pen
 PlotScale: 2:1
 LAST SAVED BY: CYoung

KEY NOTES:
 1 ADDITIVE BID ITEM NO. 2. REFER TO SECTION 01230.
 2 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



BRX-16.409
 VERTICAL SHAFT MIXER
 5HP 480VAC 3PH
 IS001
 IS-01

BRX-16.410
 VERTICAL SHAFT MIXER
 5HP 480VAC 3PH
 IS001
 IS-01

AE-16.453
 OXIDATION REDUCTION POTENTIAL
 -1000-1000 mV
 NA162
 TYP
 NA163
 TYP

REV	DATE	BY	DESCRIPTION
1			
2			
3			

DESIGNED
 MGH
 DRAWN
 SGS
 CHECKED
 DJC
 DATE
 MARCH 2019



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SOUTH VALLEY WATER RECLAMATION FACILITY
 PROJECT 5
 INSTRUMENTATION
BIOREACTOR NO. 4
ZONE AX-3 P&ID

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1"
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
 10548A.10
 DRAWING NO.
PI16-30
 SHEET NO.
 130 OF 159

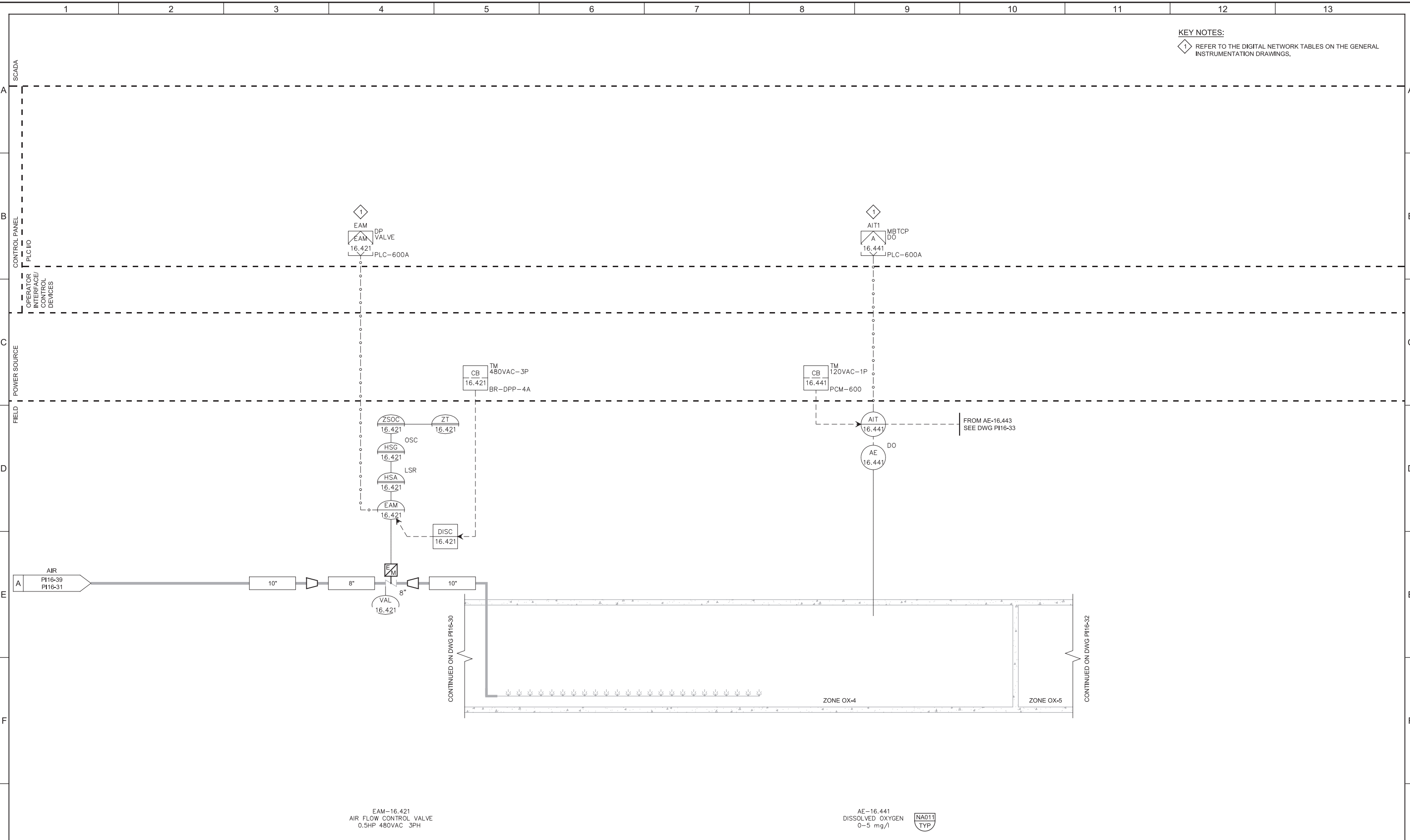
Plot Date: 28-FEB-2019 10:48:16 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Sld_Pen_v0905.pen PlotScale: 2:1

LAST SAVED BY: CYoung

KEY NOTES:
1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



EAM-16.421
AIR FLOW CONTROL VALVE
0.5HP 480VAC 3PH

AE-16.441
DISSOLVED OXYGEN
0-5 mg/l
NA011
TYP

REV	DATE	BY	DESCRIPTION
1			
2			
3			

DESIGNED
MGH

DRAWN
SGS

CHECKED
DJC

DATE
MARCH 2019



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7495 South 1300 West
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SOUTH VALLEY WATER RECLAMATION FACILITY

PROJECT 5
INSTRUMENTATION

BIOREACTOR NO. 4
ZONE OX-4 P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
10548A.10

DRAWING NO.
P116-31

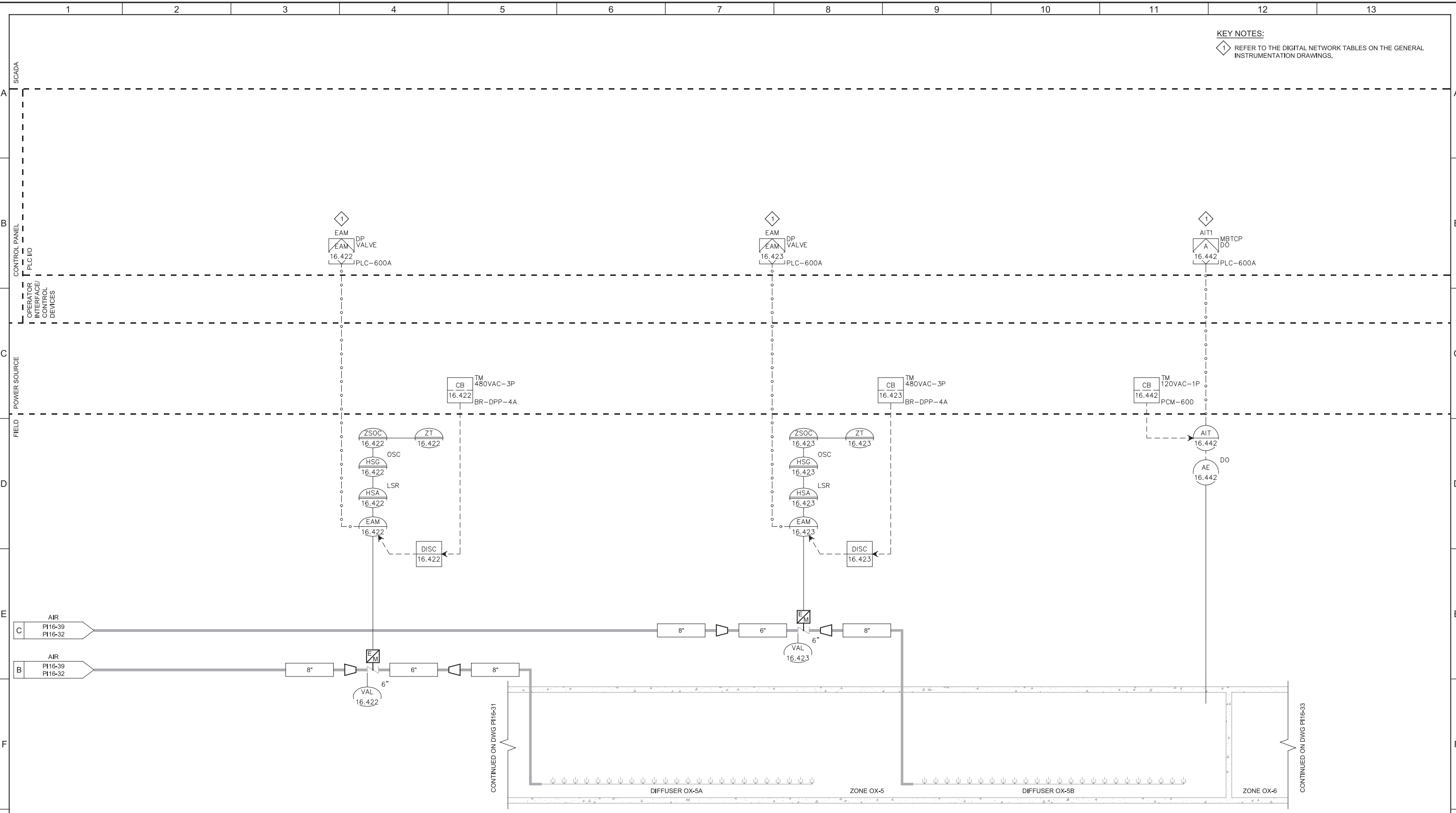
SHEET NO.
131 OF 159

Plot Date: 28-FEB-2019 10:48:24 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Sld_Pen_v0905.pen PlotScale: 2:1

LAST SAVED BY: CYoung



KEY NOTES:
 1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.

EAM-16.422
 AIR FLOW CONTROL VALVE
 0.5HP 480VAC 3PH

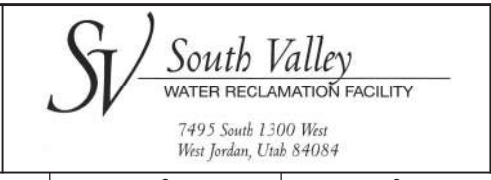
EAM-16.423
 AIR FLOW CONTROL VALVE
 0.5HP 480VAC 3PH

AE-16.442
 DISSOLVED OXYGEN
 0-5 mg/l



REV	DATE	BY	DESCRIPTION
1			
2			
3			

DESIGNED MGH	
DRAWN SGS	
CHECKED DJC	
DATE MARCH 2019	



SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
 INSTRUMENTATION
BIOREACTOR NO. 4
ZONE OX-5 P&ID

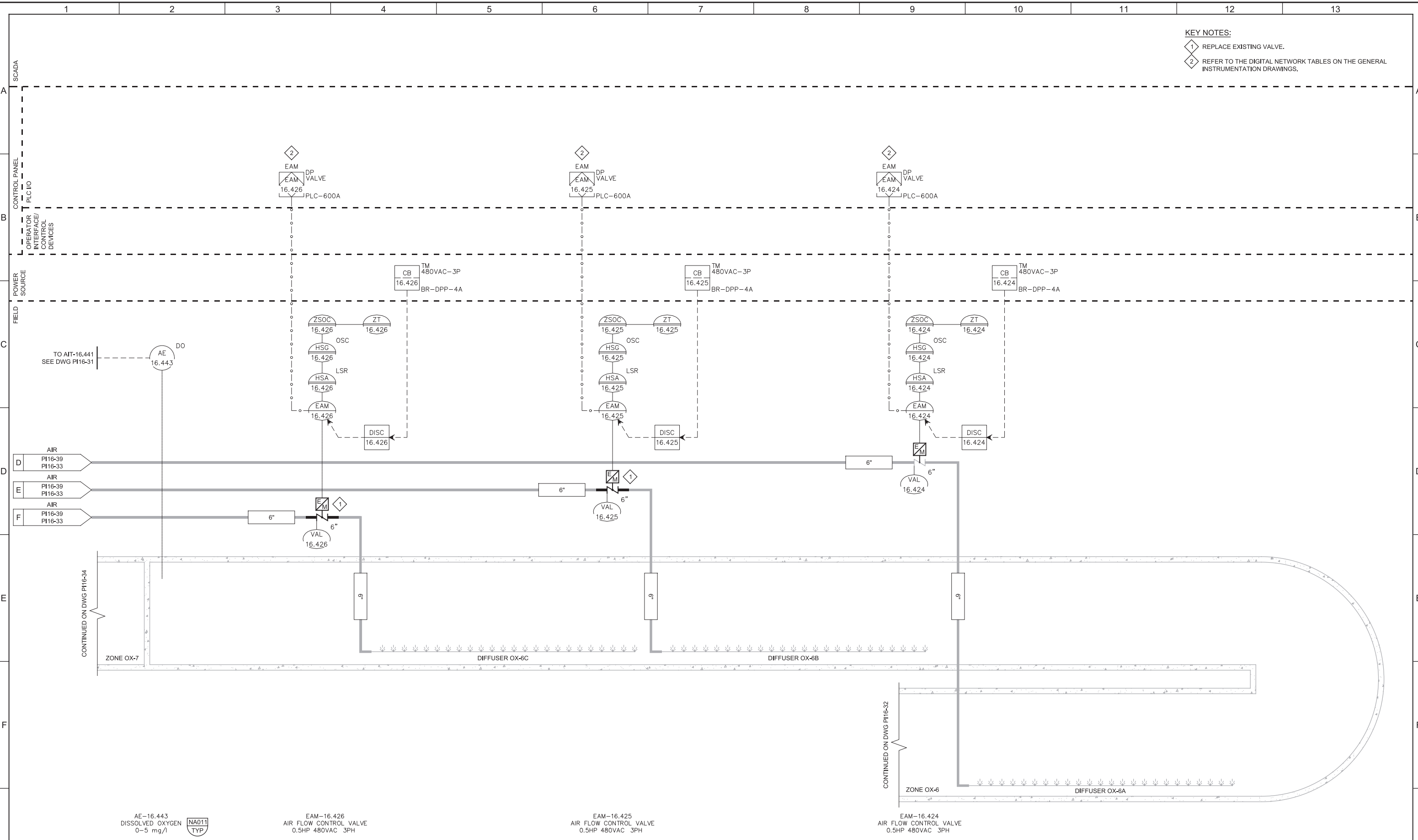
VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1"	JOB NO. 10548A.10
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. PI16-32
	SHEET NO. 132 OF 159

Plot Date: 28-FEB-2019 10:48:21 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Sld_Pen_v0905.pen PlotScale: 2:1

LAST SAVED BY: CYoung



KEY NOTES:

1 REPLACE EXISTING VALVE.

2 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.

AE-16.443
DISSOLVED OXYGEN
0-5 mg/l



EAM-16.426
AIR FLOW CONTROL VALVE
0.5HP 480VAC 3PH

EAM-16.425
AIR FLOW CONTROL VALVE
0.5HP 480VAC 3PH

EAM-16.424
AIR FLOW CONTROL VALVE
0.5HP 480VAC 3PH

REV	DATE	BY	DESCRIPTION

DESIGNED
MGH
DRAWN
SGS
CHECKED
DJC
DATE
MARCH 2019



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SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
INSTRUMENTATION
BIOREACTOR NO. 4
ZONE OX-6 P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
10548A.10
DRAWING NO.
PI16-33
SHEET NO.
133 OF 159

Plot Date: 28-FEB-2019 10:48:30 AM

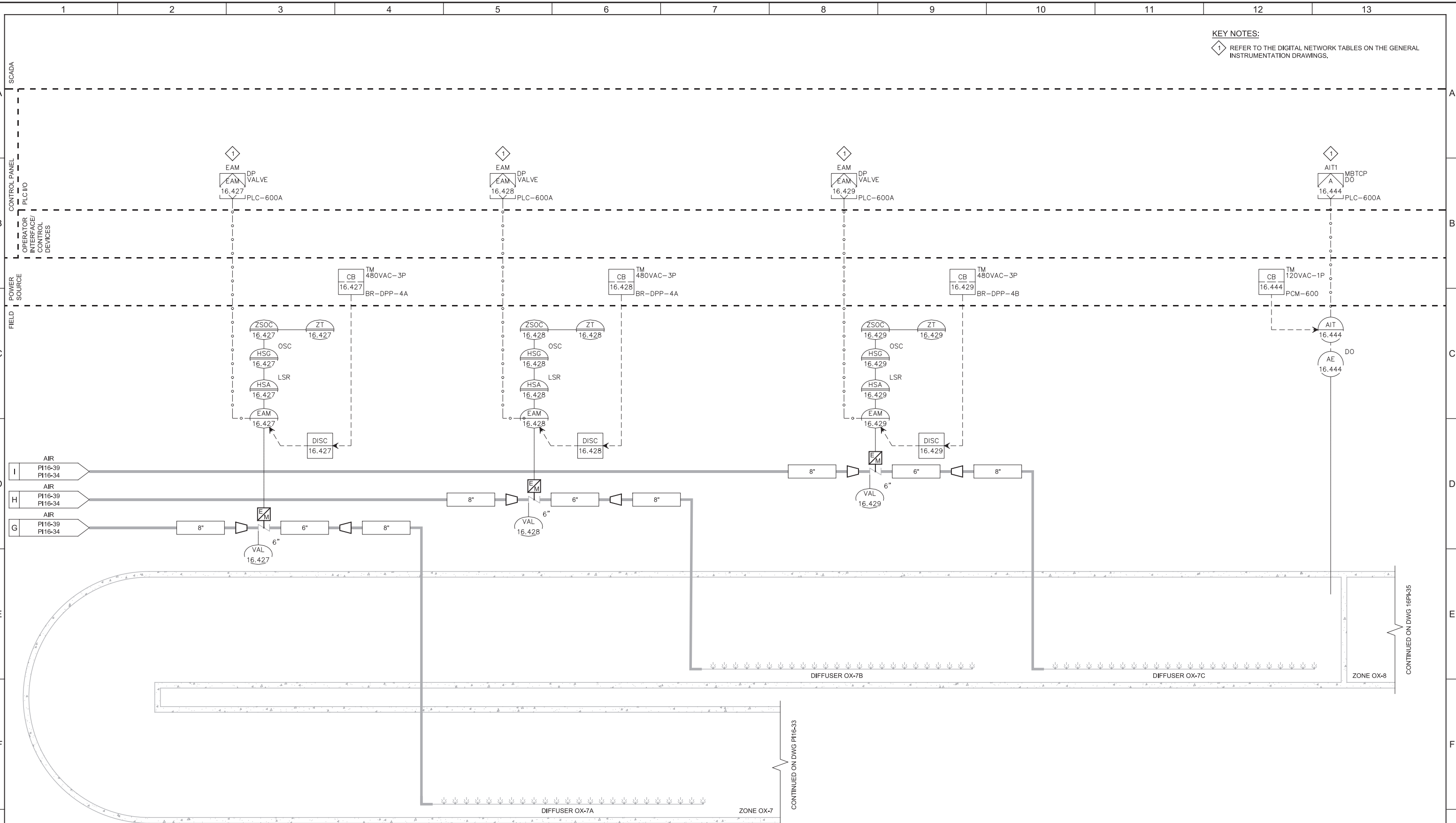
User: svcPW

Model: Layout1

ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1

LAST SAVED BY: CYoung

KEY NOTES:
1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



EAM-16.427
AIR FLOW CONTROL VALVE
0.5HP 480VAC 3PH

EAM-16.428
AIR FLOW CONTROL VALVE
0.5HP 480VAC 3PH

EAM-16.429
AIR FLOW CONTROL VALVE
0.5HP 480VAC 3PH

AE-16.444
DISSOLVED OXYGEN
0-5 mg/l



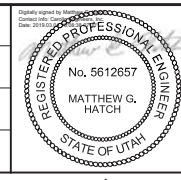
REV	DATE	BY	DESCRIPTION
1			
2			
3			

DESIGNED
MGH

DRAWN
SGS

CHECKED
DJC

DATE
MARCH 2019



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SOUTH VALLEY WATER RECLAMATION FACILITY

PROJECT 5

INSTRUMENTATION

BIOREACTOR NO. 4

ZONE OX-7 P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

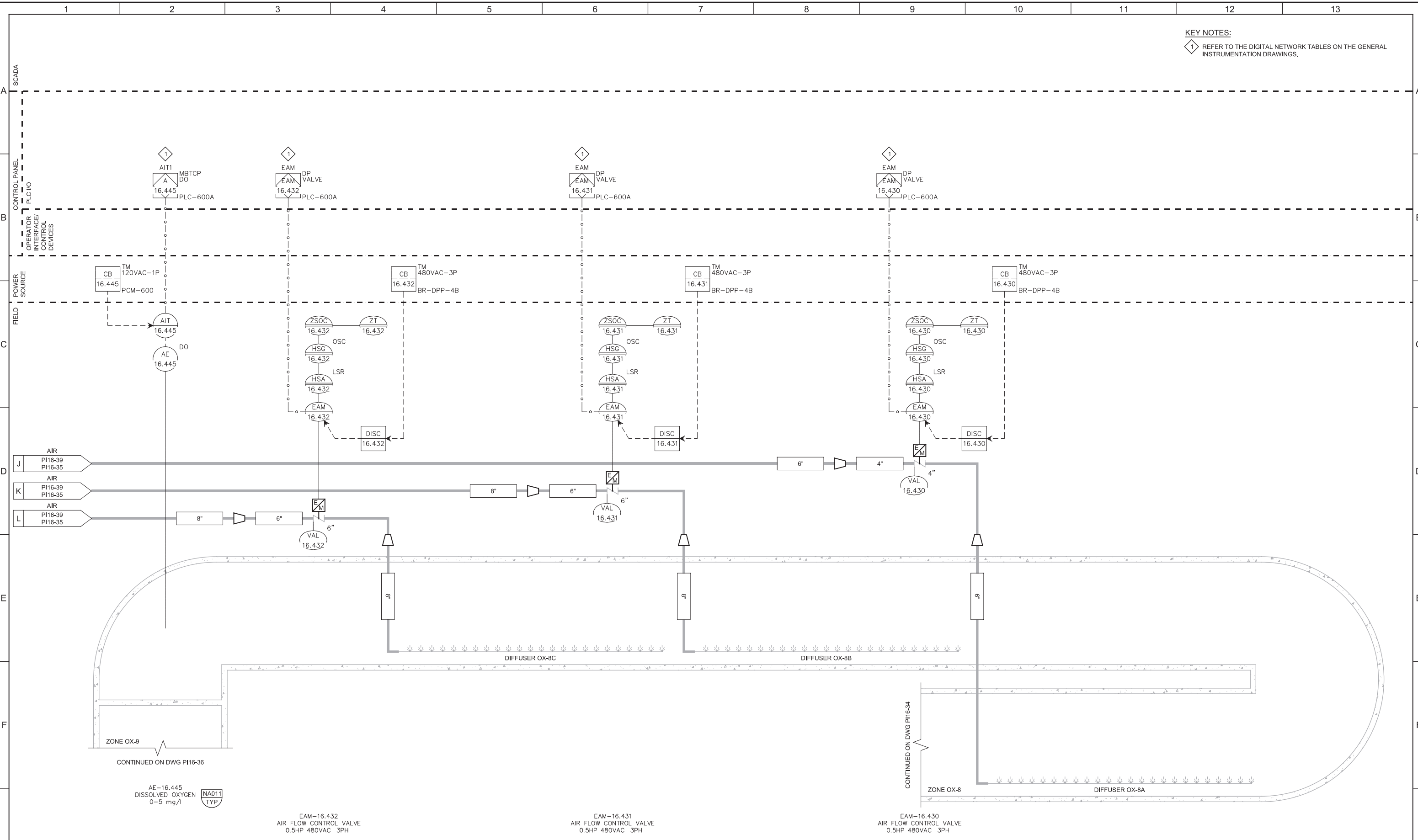
JOB NO.
10548A.10

DRAWING NO.
PI16-34

SHEET NO.
134 OF 159

Plot Date: 28-FEB-2019 10:48:25 AM
 User: svcPW
 Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
 LAST SAVED BY: CYoung

KEY NOTES:
 1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



CONTINUED ON DWG P116-36

AE-16.445
 DISSOLVED OXYGEN
 0-5 mg/l
 N/A011 TYP

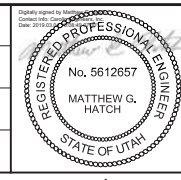
EAM-16.432
 AIR FLOW CONTROL VALVE
 0.5HP 480VAC 3PH

EAM-16.431
 AIR FLOW CONTROL VALVE
 0.5HP 480VAC 3PH

EAM-16.430
 AIR FLOW CONTROL VALVE
 0.5HP 480VAC 3PH

REV	DATE	BY	DESCRIPTION

DESIGNED MGH
 DRAWN SGS
 CHECKED DJC
 DATE MARCH 2019



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SOUTH VALLEY WATER RECLAMATION FACILITY
 PROJECT 5
 INSTRUMENTATION
BIOREACTOR NO. 4
ZONE OX-8 P&ID

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1"
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 10548A.10
 DRAWING NO. **P116-35**
 SHEET NO. 135 OF 159

Plot Date: 28-FEB-2019 10:48:35 AM

User: svcPW

Model: Layout1

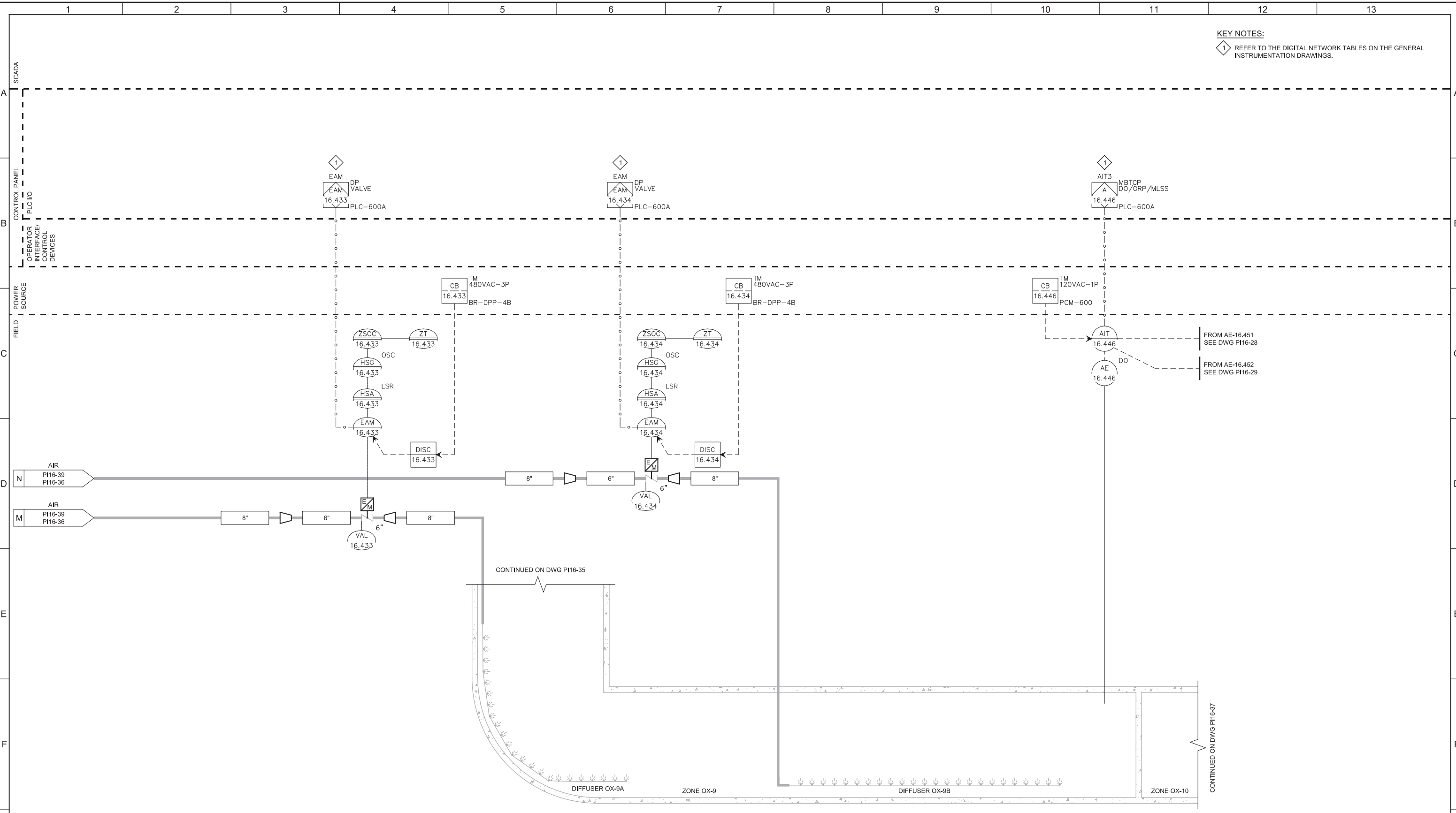
ColorTable: gshade.ctb

DesignScript: Carollo_Sld_Pen_v0905.pen

PlotScale: 2:1

LAST SAVED BY: CYoung

KEY NOTES:
1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



EAM-16.433
AIR FLOW CONTROL VALVE
0.5HP 480VAC 3PH

EAM-16.434
AIR FLOW CONTROL VALVE
0.5HP 480VAC 3PH

AE-16.446
DISSOLVED OXYGEN
0-5 mg/l



REV	DATE	BY	DESCRIPTION
1			
2			
3			

DESIGNED MGH	
DRAWN SGS	
CHECKED DJC	
DATE MARCH 2019	



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SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
INSTRUMENTATION
BIOREACTOR NO. 4
ZONE OX-9 P&ID

VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1"	JOB NO. 10548A.10
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. PI16-36
	SHEET NO. 136 OF 159

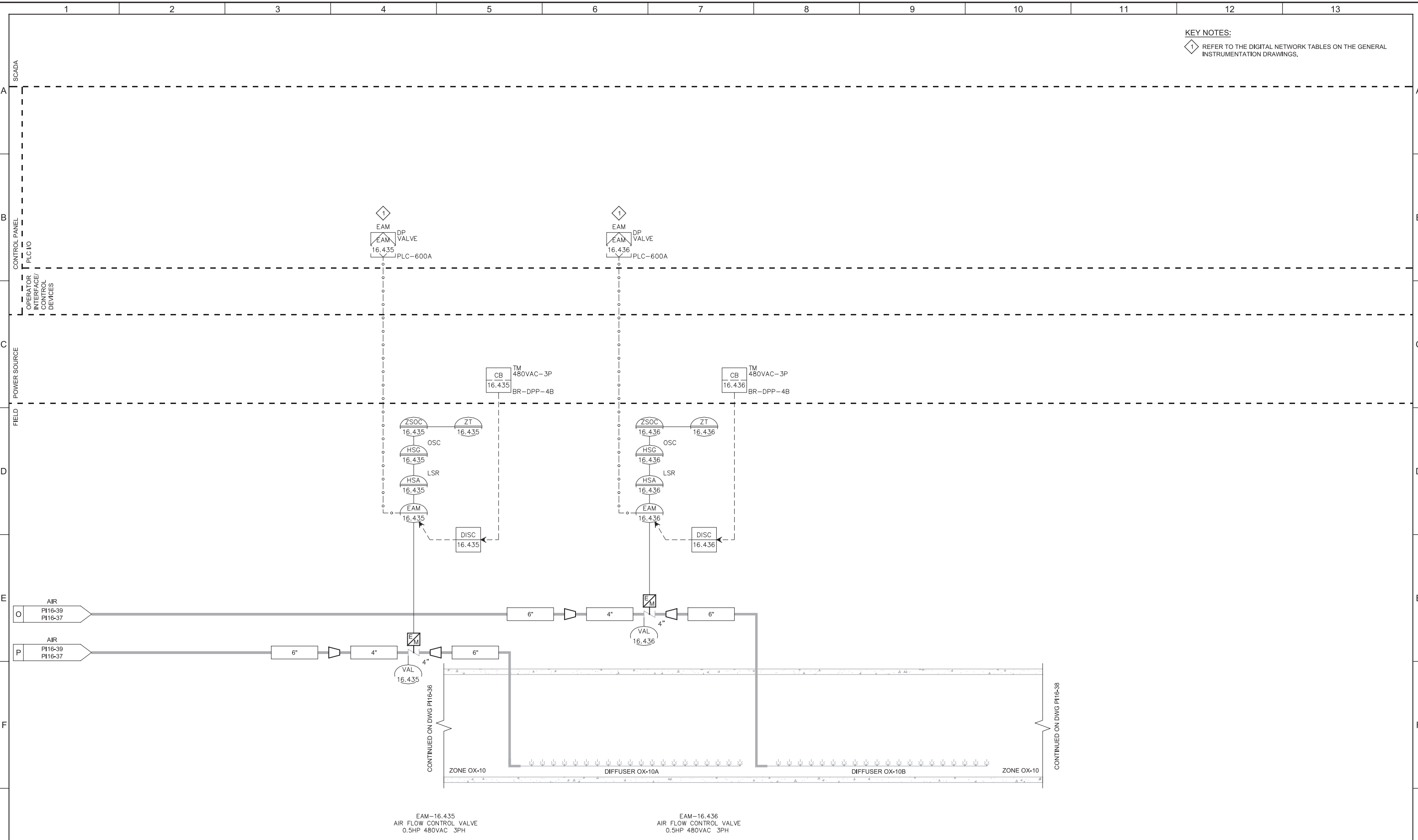
Plot Date: 28-FEB-2019 10:48:29 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Sld_Pen_v0905.pen PlotScale: 2:1

LAST SAVED BY: C Young

KEY NOTES:
1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



CONTINUED ON DWG PI16-36

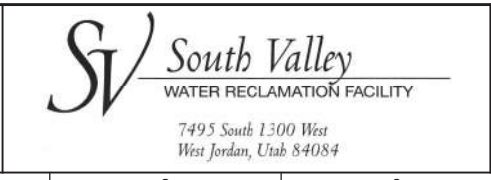
CONTINUED ON DWG PI16-38

EAM-16.435
AIR FLOW CONTROL VALVE
0.5HP 480VAC 3PH

EAM-16.436
AIR FLOW CONTROL VALVE
0.5HP 480VAC 3PH

REV	DATE	BY	DESCRIPTION
1			
2			
3			

DESIGNED MGH	
DRAWN SGS	
CHECKED DJC	
DATE MARCH 2019	



SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
INSTRUMENTATION
BIOREACTOR NO. 4
ZONE OX-10 PART 1 P&ID

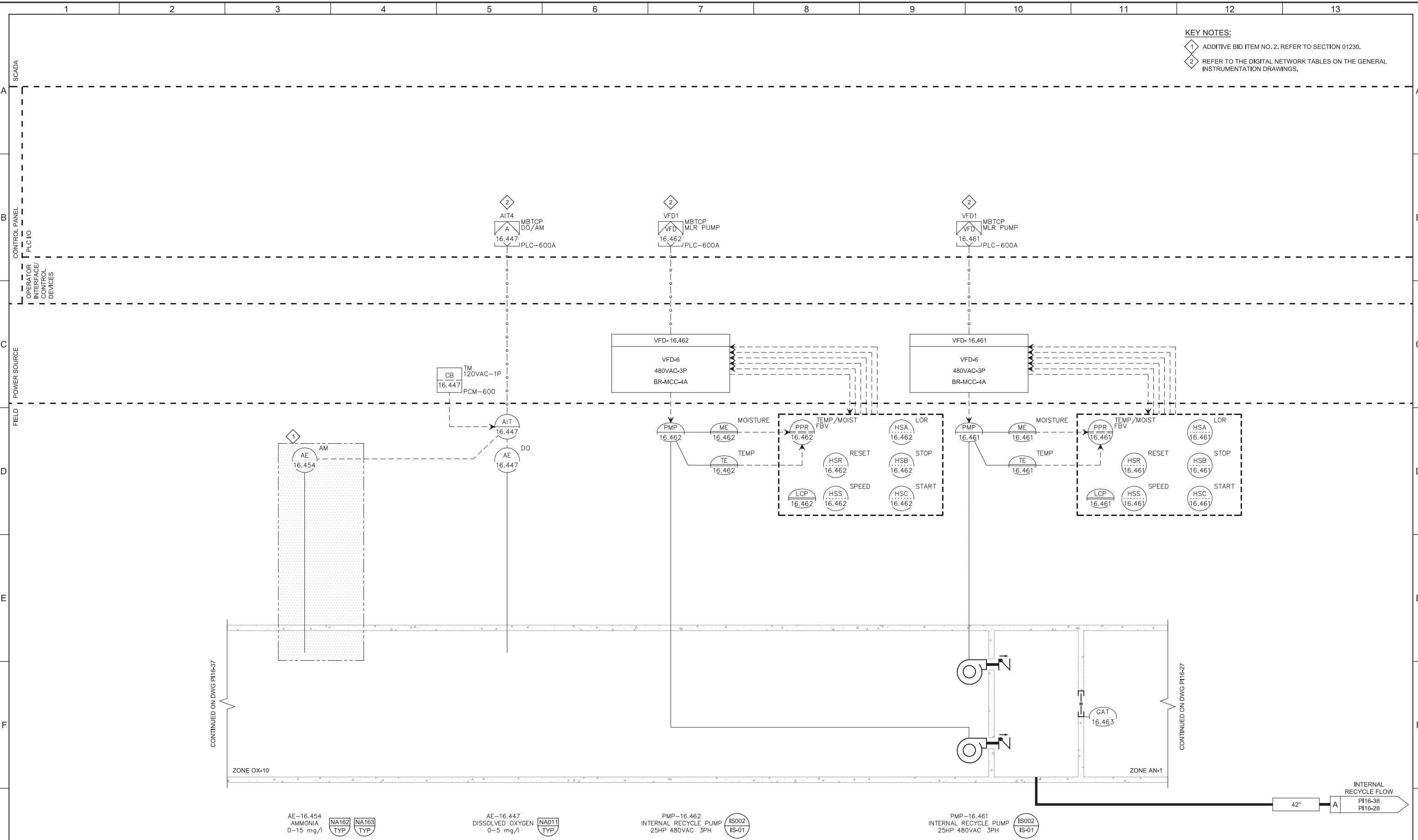
VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1"	JOB NO. 10548A.10
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. PI16-37
	SHEET NO. 137 OF 159

PLOT Date: 28-FEB-2019 10:48:39 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1

LAST SAVED BY: CYoung



KEY NOTES:

1 ADDITIVE BID ITEM NO. 2. REFER TO SECTION 01230.

2 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.

CONTINUED ON DWG P116-37

CONTINUED ON DWG P116-27

AE-16.454
AMMONIA
0-15 mg/l



AE-16.447
DISSOLVED OXYGEN
0-5 mg/l



PMP-16.462
INTERNAL RECYCLE PUMP
25HP 480VAC 3PH



PMP-16.461
INTERNAL RECYCLE PUMP
25HP 480VAC 3PH



REV	DATE	BY	DESCRIPTION

DESIGNED
MGH

DRAWN
SGS

CHECKED
DJC

DATE
MARCH 2019



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SOUTH VALLEY WATER RECLAMATION FACILITY

PROJECT 5

INSTRUMENTATION

BIOREACTOR NO. 4

ZONE OX-10 PART 2 P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
10548A.10

DRAWING NO.
P116-38

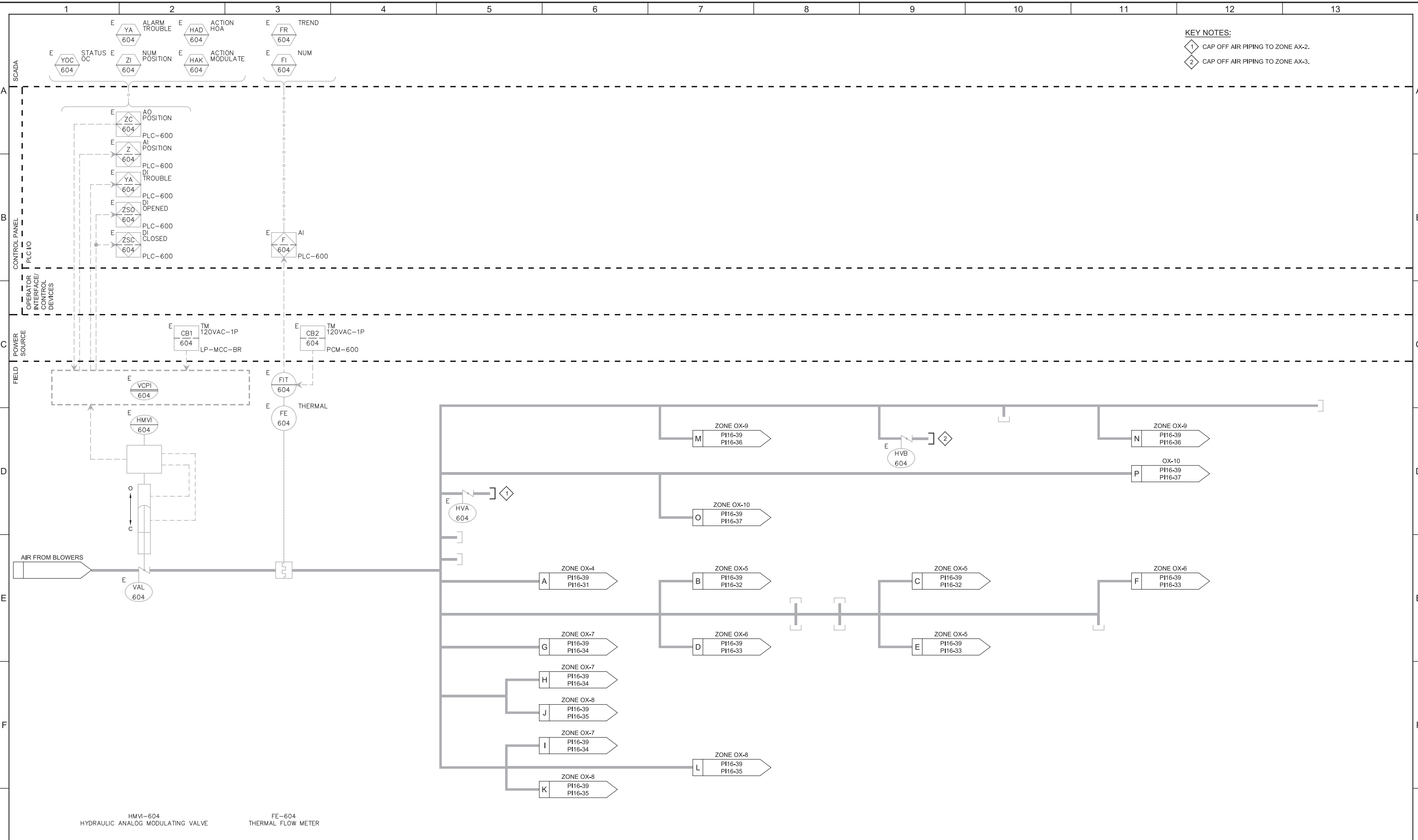
SHEET NO.
138 OF 159

Plot Date: 28-FEB-2019 10:48:34 AM

User: svcpw

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1

LAST SAVED BY: CYoung



KEY NOTES:
 1 CAP OFF AIR PIPING TO ZONE AX-2.
 2 CAP OFF AIR PIPING TO ZONE AX-3.

HMVI-604
HYDRAULIC ANALOG MODULATING VALVE

FE-604
THERMAL FLOW METER

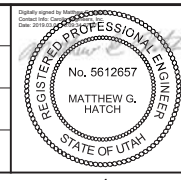
REV	DATE	BY	DESCRIPTION

DESIGNED
MGH

DRAWN
SGS

CHECKED
DJC

DATE
MARCH 2019



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7495 South 1300 West
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SOUTH VALLEY WATER RECLAMATION FACILITY		VERIFY SCALES	JOB NO. 10548A.10
PROJECT 5		BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO. PI16-39
INSTRUMENTATION		0 1"	SHEET NO. 139 OF 159
BIOREACTOR NO. 4 AIR DISTRIBUTION P&ID		IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	

Plot Date: 28-FEB-2019 10:49:17 AM

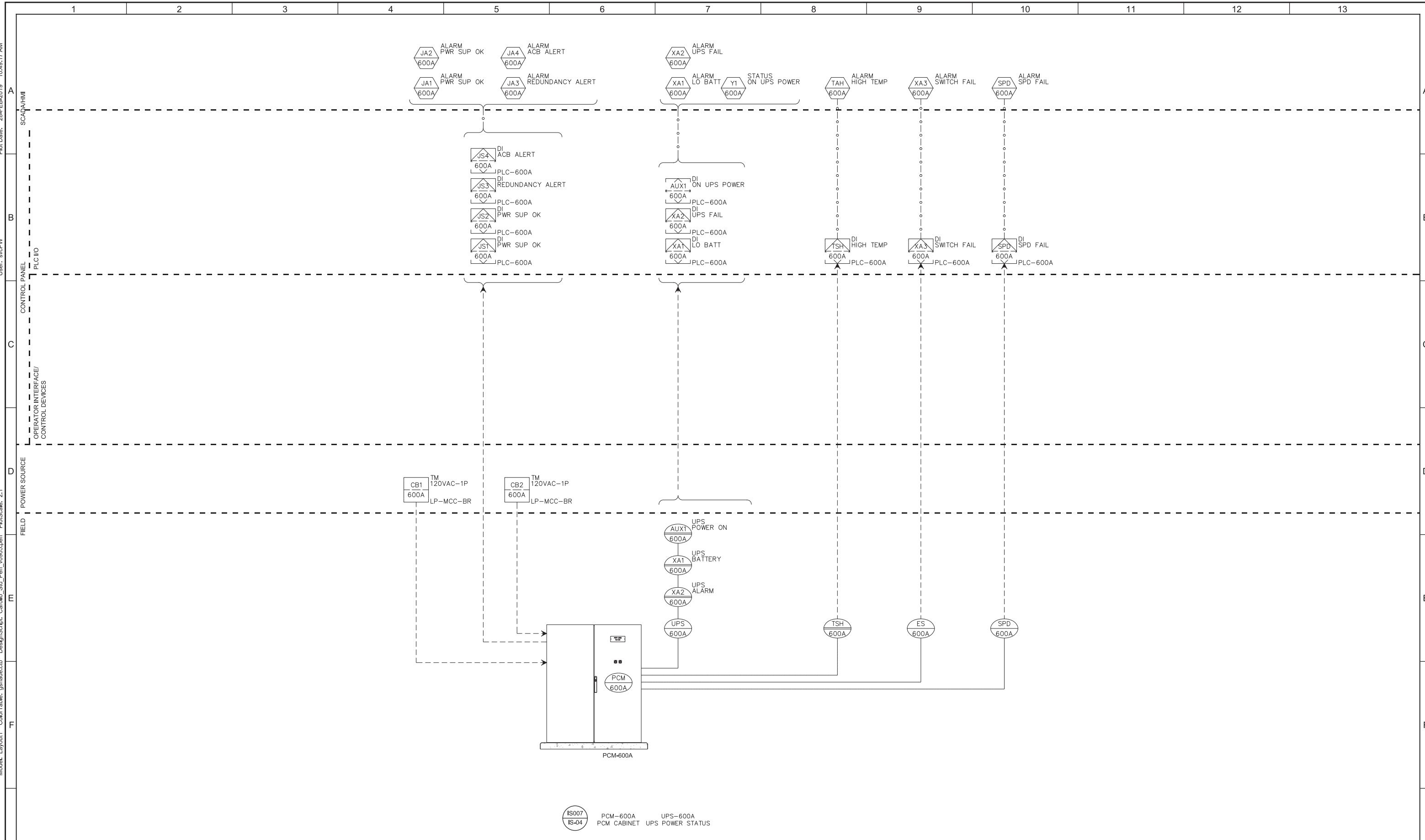
User: svcPW

Model: Layout1

ColorTable: gshade.ctb

DesignScript: Carollo_Sld_Pen_v0905.pen

PlotScale: 2:1



IS007 IS-04 PCM-600A UPS-600A
PCM CABINET UPS POWER STATUS

REV	DATE	BY	DESCRIPTION
1			
2			
3			

DESIGNED MGH
 DRAWN CGR
 CHECKED DJC
 DATE MARCH 2019

REGISTERED PROFESSIONAL ENGINEER
 No. 5612657
 MATTHEW G. HATCH
 STATE OF UTAH



South Valley
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SOUTH VALLEY WATER RECLAMATION FACILITY
 PROJECT 5
 INSTRUMENTATION
 BIOREACTORS MISCELLANEOUS
 SIGNALS P&ID

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1"
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

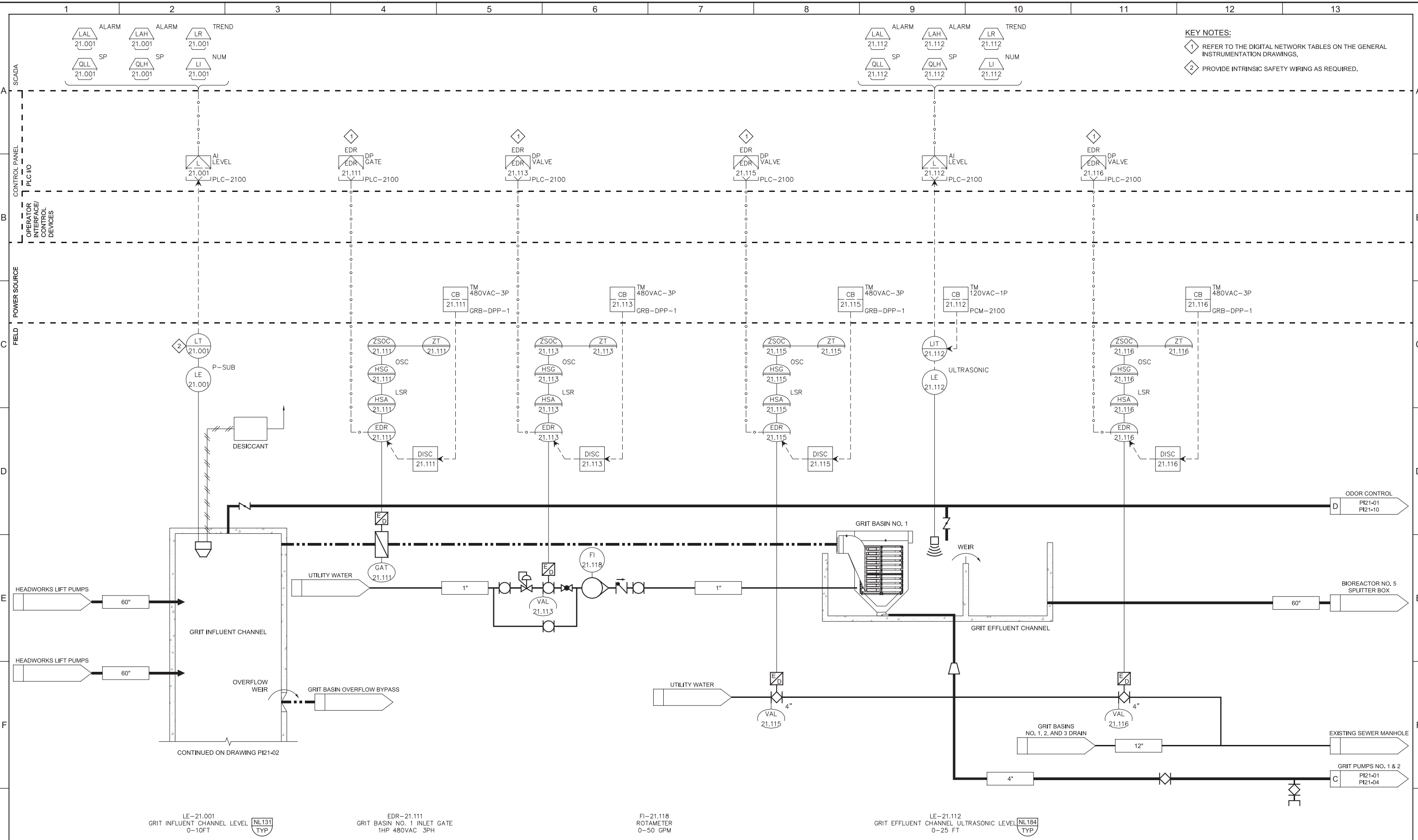
JOB NO. 10548A.10
 DRAWING NO. P116-40
 SHEET NO. 140 OF 159

Plot Date: 28-FEB-2019 10:49:00 AM

User: svcPW

Model: Layout1 ColorTable: gshade.cab DesignScript: Carollo_Sld_Pen_v0905.pen PlotScale: 2:1

LAST SAVED BY: CYoung



KEY NOTES:

- 1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.
- 2 PROVIDE INTRINSIC SAFETY WIRING AS REQUIRED.

LE-21.001
GRIT INFLUENT CHANNEL LEVEL
0-10FT
NL131
TYP

EDR-21.111
GRIT BASIN NO. 1 INLET GATE
1HP 480VAC 3PH

FI-21.118
ROTAMETER
0-50 GPM

LE-21.112
GRIT EFFLUENT CHANNEL ULTRASONIC LEVEL
0-25 FT
NL184
TYP

REV	DATE	BY	DESCRIPTION

DESIGNED
MGH

DRAWN
CEY

CHECKED
DJC

DATE
MARCH 2019

REGISTERED PROFESSIONAL ENGINEER
No. 5612657
MATTHEW G. HATCH
STATE OF UTAH



SV South Valley
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7495 South 1300 West
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SOUTH VALLEY WATER RECLAMATION FACILITY

PROJECT 5

INSTRUMENTATION

GRIT BASIN NO. 1 P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
10548A.10

DRAWING NO.
PI21-01

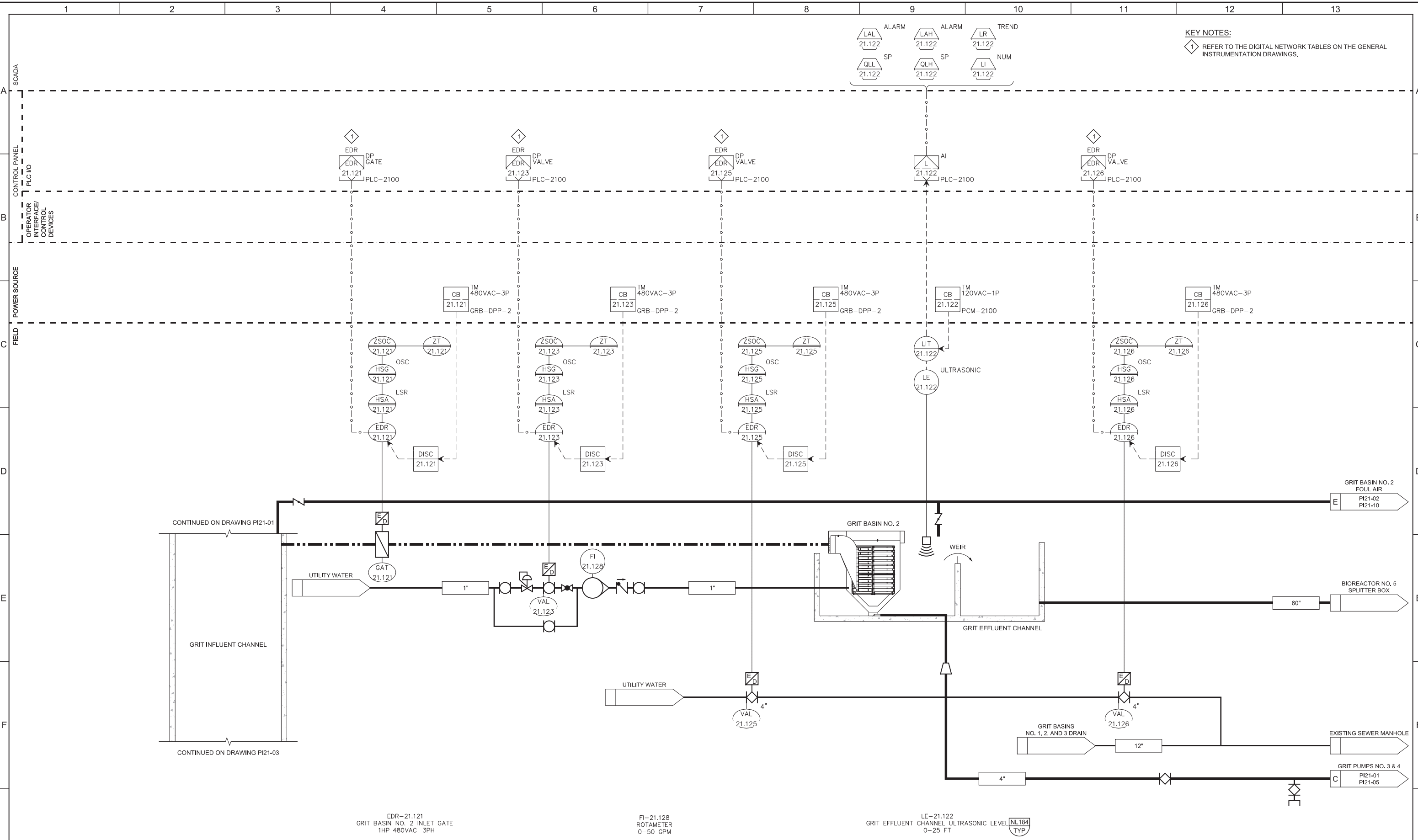
SHEET NO.
141 OF 159

Plot Date: 28-FEB-2019 10:49:34 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Sld_Pen_v0905.pen PlotScale: 2:1

LAST SAVED BY: CYoung



EDR-21.121
GRIT BASIN NO. 2 INLET GATE
1HP 480VAC 3PH

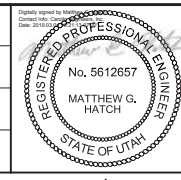
FI-21.128
ROTAMETER
0-50 GPM

LE-21.122
GRIT EFFLUENT CHANNEL ULTRASONIC LEVEL
0-25 FT

NL184
TYP

REV	DATE	BY	DESCRIPTION
1			
2			
3			

DESIGNED
MGH
DRAWN
AAW
CHECKED
DJC
DATE
MARCH 2019



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SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
INSTRUMENTATION
GRIT BASIN NO. 2 P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

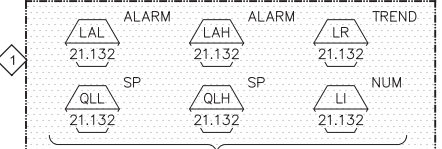
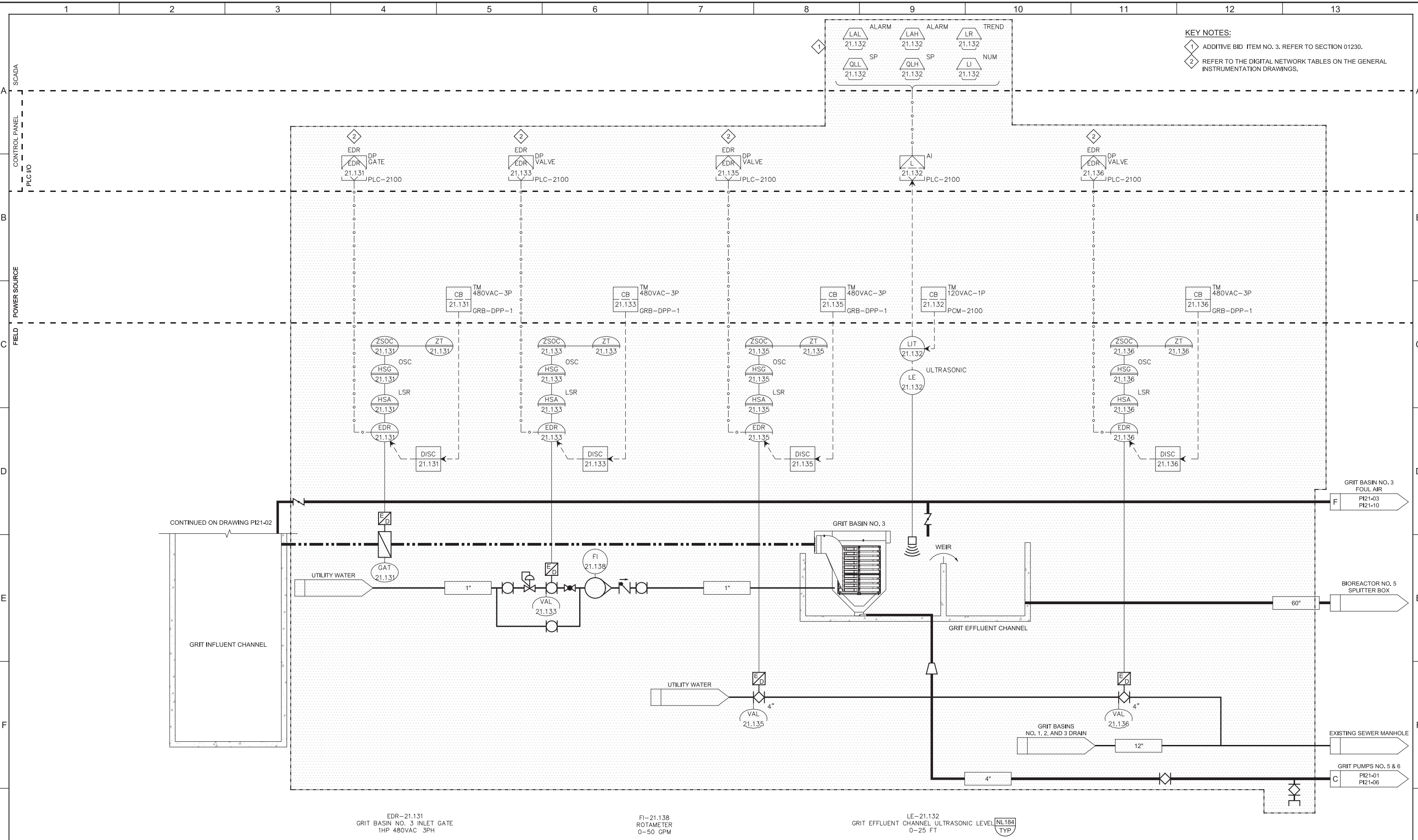
JOB NO.
10548A.10
DRAWING NO.
PI21-02
SHEET NO.
142 OF 159

Plot Date: 28-FEB-2019 10:49:37 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1

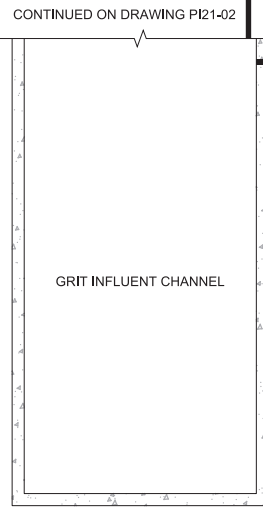
LAST SAVED BY: CYoung



KEY NOTES:

1 ADDITIVE BID ITEM NO. 3. REFER TO SECTION 01230.

2 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



EDR-21.131
GRIT BASIN NO. 3 INLET GATE
1HP 480VAC 3PH

FI-21.138
ROTAMETER
0-50 GPM

LE-21.132
GRIT EFFLUENT CHANNEL ULTRASONIC LEVEL
0-25 FT

REV	DATE	BY	DESCRIPTION
1			
2			
3			

DESIGNED
MGH

DRAWN
AAW

CHECKED
DJC

DATE
MARCH 2019

REGISTERED PROFESSIONAL ENGINEER
No. 5612657
MATTHEW G. HATCH
STATE OF UTAH



SV South Valley
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West Jordan, Utah 84084

SOUTH VALLEY WATER RECLAMATION FACILITY

PROJECT 5

INSTRUMENTATION

GRIT BASIN NO. 3 P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
10548A.10

DRAWING NO.
PI21-03

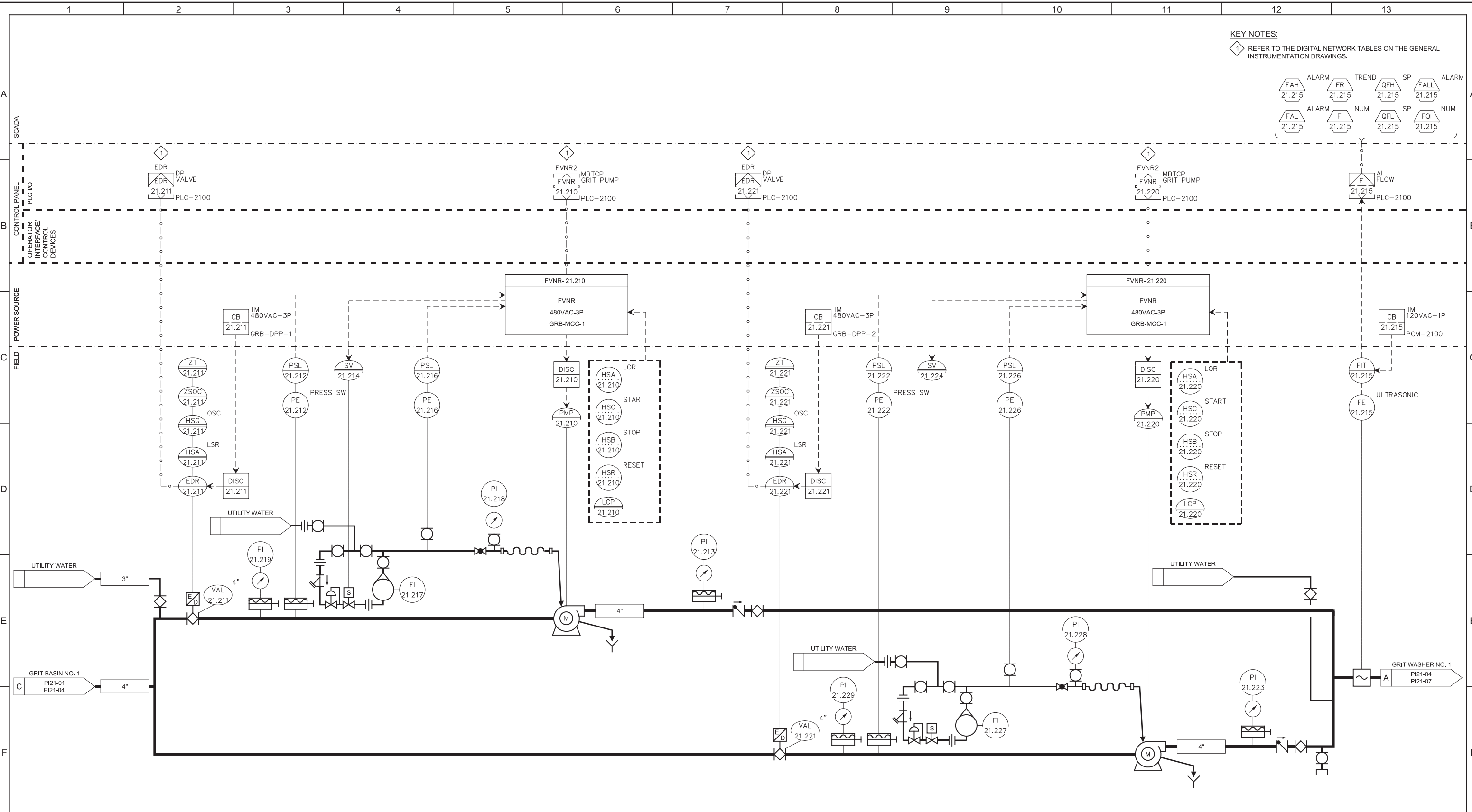
SHEET NO.
143 OF 159

Plot Date: 28-FEB-2019 10:49:06 AM

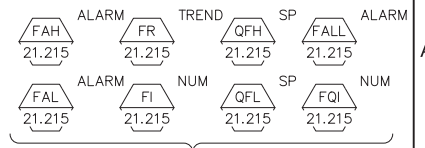
User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1

LAST SAVED BY: CYoung



KEY NOTES:
 1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



- PI-21.219 GRIT PUMP NO. 1 PRESSURE INDICATOR 0-60 PSIG
- PE-21.216 LOW PRESSURE SWITCH 40 PSIG
- PMP-21.210 GRIT PUMP NO. 1 7.5HP 480VAC 3PH
- EDR-21.221 GRIT PUMP NO. 2 SUCTION VALVE 0.25HP 480VAC 3PH
- PI-21.229 GRIT PUMP NO. 2 PRESSURE INDICATOR 0-60 PSIG
- PE-21.226 LOW PRESSURE SWITCH 40 PSIG
- PMP-21.220 GRIT PUMP NO. 2 7.5HP 480VAC 3PH
- FE-21.215 ULTRASONIC FLOW METER 0-400 GPM
- EDR-21.211 GRIT PUMP NO. 1 SUCTION VALVE 0.25HP 480VAC 3PH
- PE-21.212 LOW PRESSURE SWITCH 15 PSIG OPEN
- FI-21.217 ROTAMETER 0-10 GPM
- PI-21.218 PRESSURE INDICATOR 0-160 PSIG
- GRIT PUMP NO. 1 DISCHARGE PRESSURE INDICATOR 0-60 PSIG
- PE-21.222 LOW PRESSURE SWITCH 15 PSIG OPEN
- FI-21.227 ROTAMETER 0-10 GPM
- PI-21.228 PRESSURE INDICATOR 0-160 PSIG
- GRIT PUMP NO. 2 DISCHARGE PRESSURE INDICATOR 0-60 PSIG
- PI-21.223 GRIT PUMP NO. 2 PRESSURE INDICATOR 0-60 PSIG

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SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
 INSTRUMENTATION
GRIT PUMPS NO 1 & 2 P&ID

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1"
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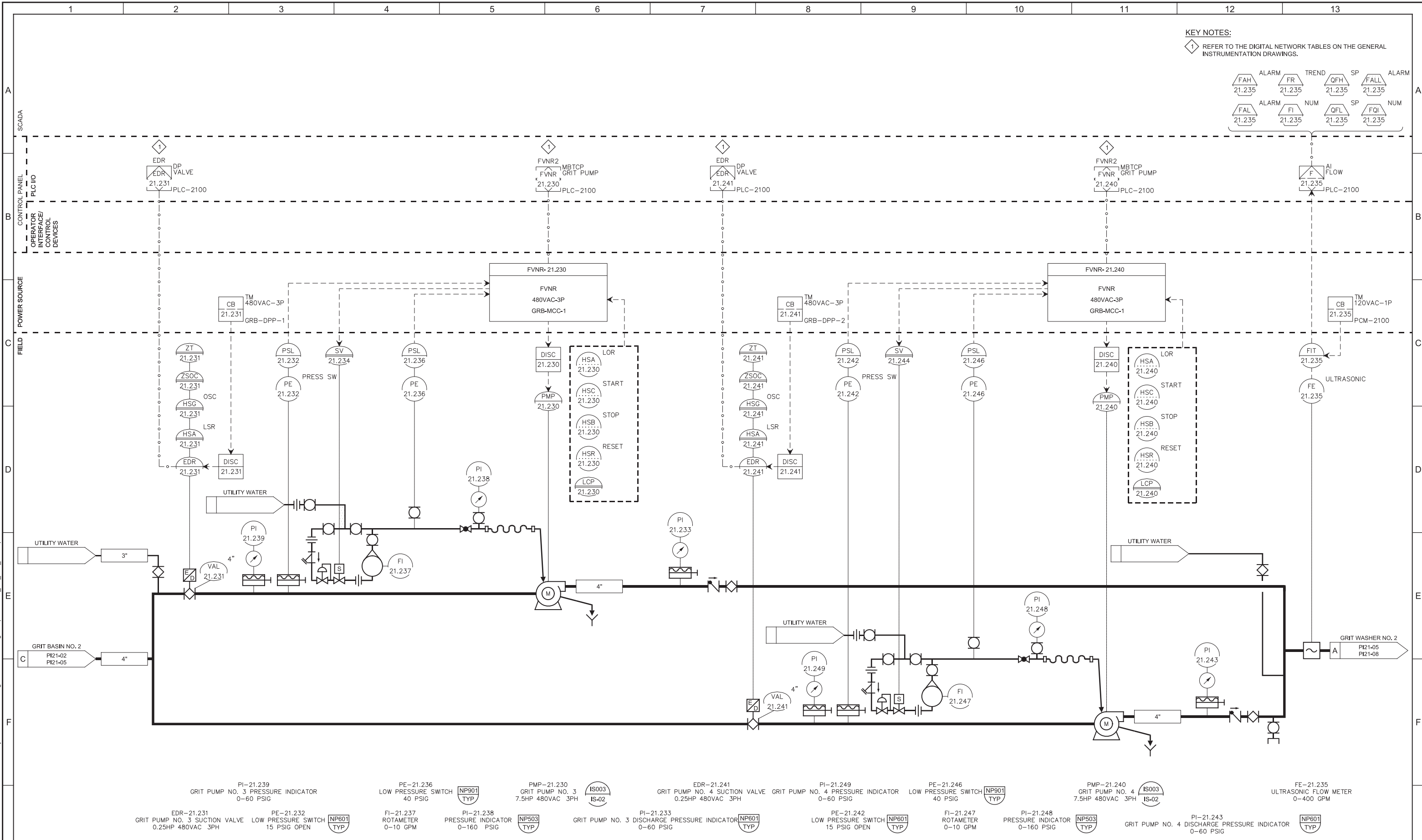
JOB NO.
10548A.10
DRAWING NO.
PI21-04
SHEET NO.
144 OF 159

Plot Date: 28-FEB-2019 10:49:59 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1

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- PI-21.239 GRIT PUMP NO. 3 PRESSURE INDICATOR 0-60 PSIG
- PE-21.236 LOW PRESSURE SWITCH 40 PSIG
- PMP-21.230 GRIT PUMP NO. 3 7.5HP 480VAC 3PH
- EDR-21.241 GRIT PUMP NO. 4 SUCTION VALVE 0.25HP 480VAC 3PH
- PI-21.249 GRIT PUMP NO. 4 PRESSURE INDICATOR 0-60 PSIG
- PE-21.246 LOW PRESSURE SWITCH 40 PSIG
- PMP-21.240 GRIT PUMP NO. 4 7.5HP 480VAC 3PH
- FE-21.235 ULTRASONIC FLOW METER 0-400 GPM
- EDR-21.231 GRIT PUMP NO. 3 SUCTION VALVE 0.25HP 480VAC 3PH
- PE-21.232 LOW PRESSURE SWITCH 15 PSIG OPEN
- FI-21.237 ROTAMETER 0-10 GPM
- PI-21.238 PRESSURE INDICATOR 0-160 PSIG
- PI-21.233 GRIT PUMP NO. 3 DISCHARGE PRESSURE INDICATOR 0-60 PSIG
- PE-21.242 LOW PRESSURE SWITCH 15 PSIG OPEN
- FI-21.247 ROTAMETER 0-10 GPM
- PI-21.248 PRESSURE INDICATOR 0-160 PSIG
- PI-21.243 GRIT PUMP NO. 4 DISCHARGE PRESSURE INDICATOR 0-60 PSIG

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PROJECT 5
INSTRUMENTATION
GRIT PUMPS NO 3 & 4 P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
10548A.10
DRAWING NO.
PI21-05
SHEET NO.
145 OF 159

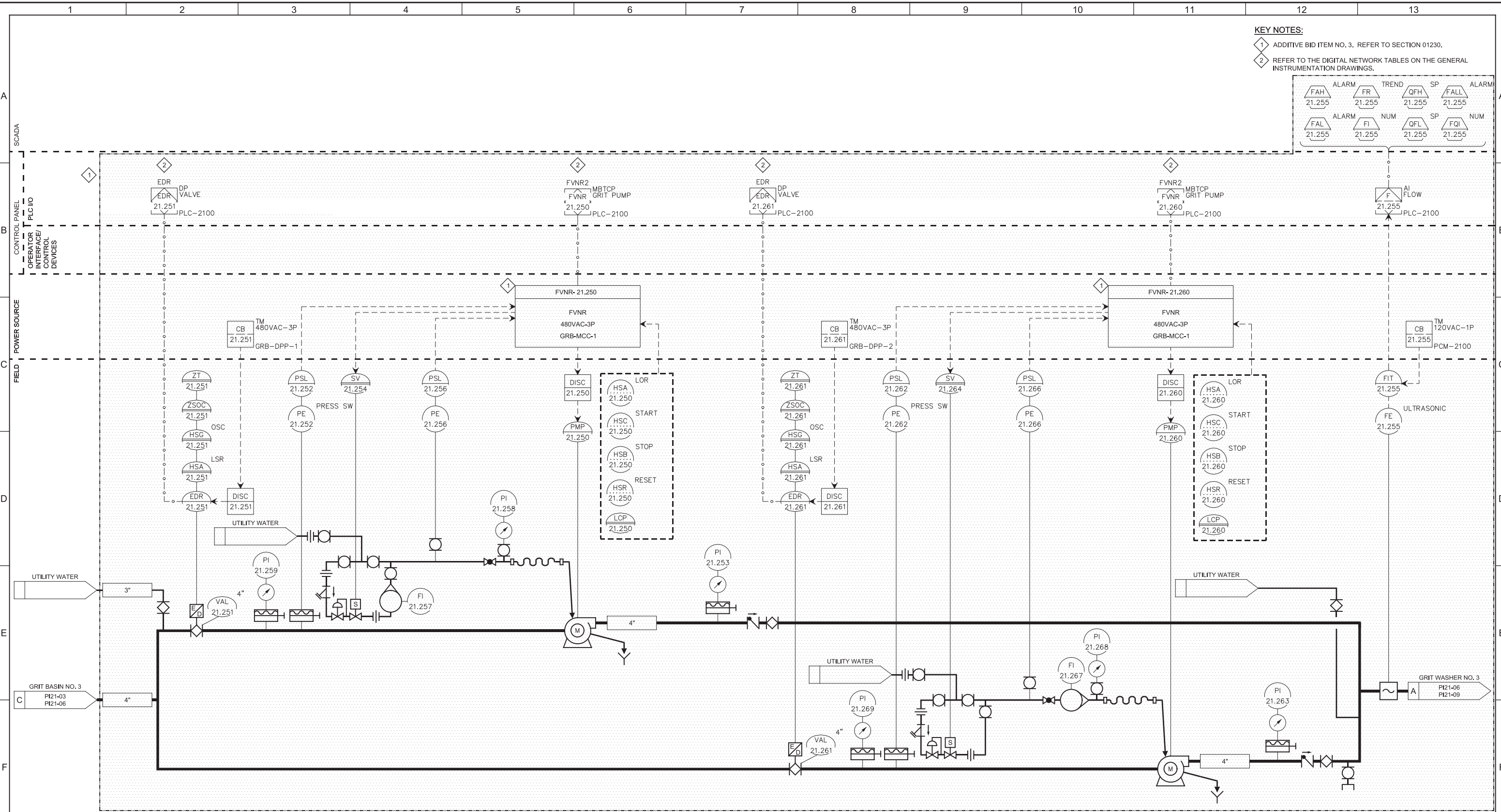
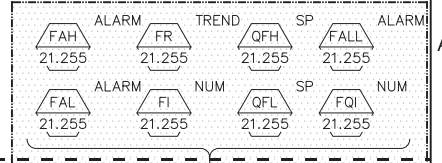
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- KEY NOTES:**
- 1 ADDITIVE BID ITEM NO. 3. REFER TO SECTION 01230.
 - 2 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



- PI-21.259
GRIT PUMP NO. 5 PRESSURE INDICATOR
0-60 PSIG
- PE-21.256
LOW PRESSURE SWITCH
40 PSIG
- PMP-21.250
GRIT PUMP NO. 5
7.5HP 480VAC 3PH
- EDR-21.261
GRIT PUMP NO. 6 SUCTION VALVE
0.25HP 480VAC 3PH
- PI-21.269
GRIT PUMP NO. 6 PRESSURE INDICATOR
0-60 PSIG
- PE-21.266
LOW PRESSURE SWITCH
40 PSIG
- FI-21.267
ROTAMETER
0-10 GPM
- PMP-21.260
GRIT PUMP NO. 6
7.5HP 480VAC 3PH
- FE-21.255
ULTRASONIC FLOW METER
0-400 GPM
- EDR-21.251
GRIT PUMP NO. 5 SUCTION VALVE
0.25HP 480VAC 3PH
- PE-21.252
LOW PRESSURE SWITCH
15 PSIG OPEN
- FI-21.257
ROTAMETER
0-10 GPM
- PI-21.258
PRESSURE INDICATOR
0-160 PSIG
- PI-21.253
GRIT PUMP NO. 5 DISCHARGE PRESSURE INDICATOR
0-60 PSIG
- PE-21.262
LOW PRESSURE SWITCH
15 PSIG OPEN
- PI-21.268
PRESSURE INDICATOR
0-160 PSIG
- PMP-21.260
GRIT PUMP NO. 6 DISCHARGE PRESSURE INDICATOR
0-60 PSIG

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PROJECT 5
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GRIT PUMPS NO 5 & 6 P&ID

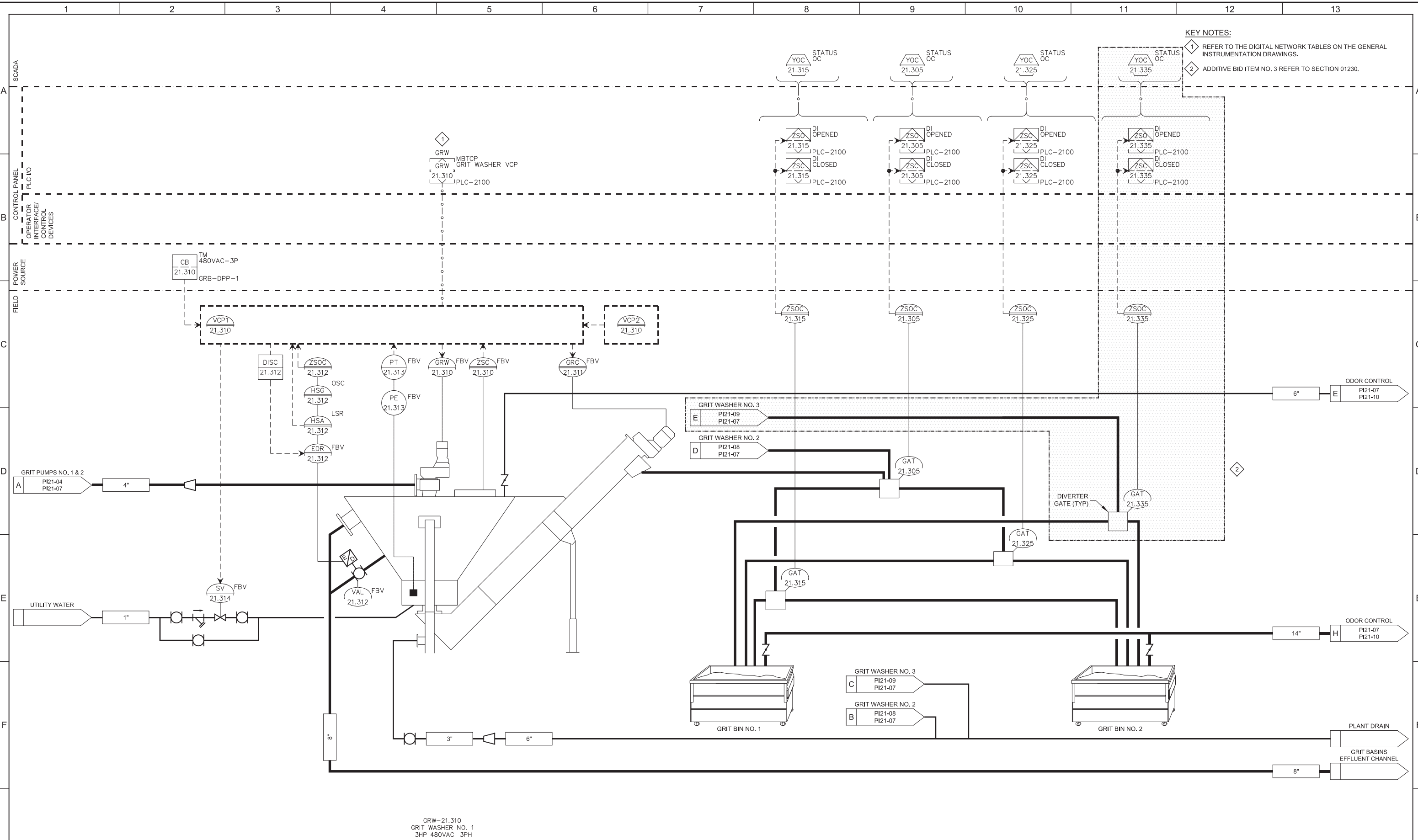
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JOB NO. 10548A.10
DRAWING NO. **PI21-06**
SHEET NO. 146 OF 159

Plot Date: 28-FEB-2019 10:49:08 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Sld_Pen_v0905.pen PlotScale: 2:1

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KEY NOTES:
 1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.
 2 ADDITIVE BID ITEM NO. 3 REFER TO SECTION 01230.

GRW-21.310
 GRIT WASHER NO. 1
 3HP 480VAC 3PH

REV	DATE	BY	DESCRIPTION
1			
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PROJECT 5

INSTRUMENTATION

GRIT WASHER NO. 1 P&ID

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
10548A.10

DRAWING NO.
PI21-07

SHEET NO.
147 OF 159

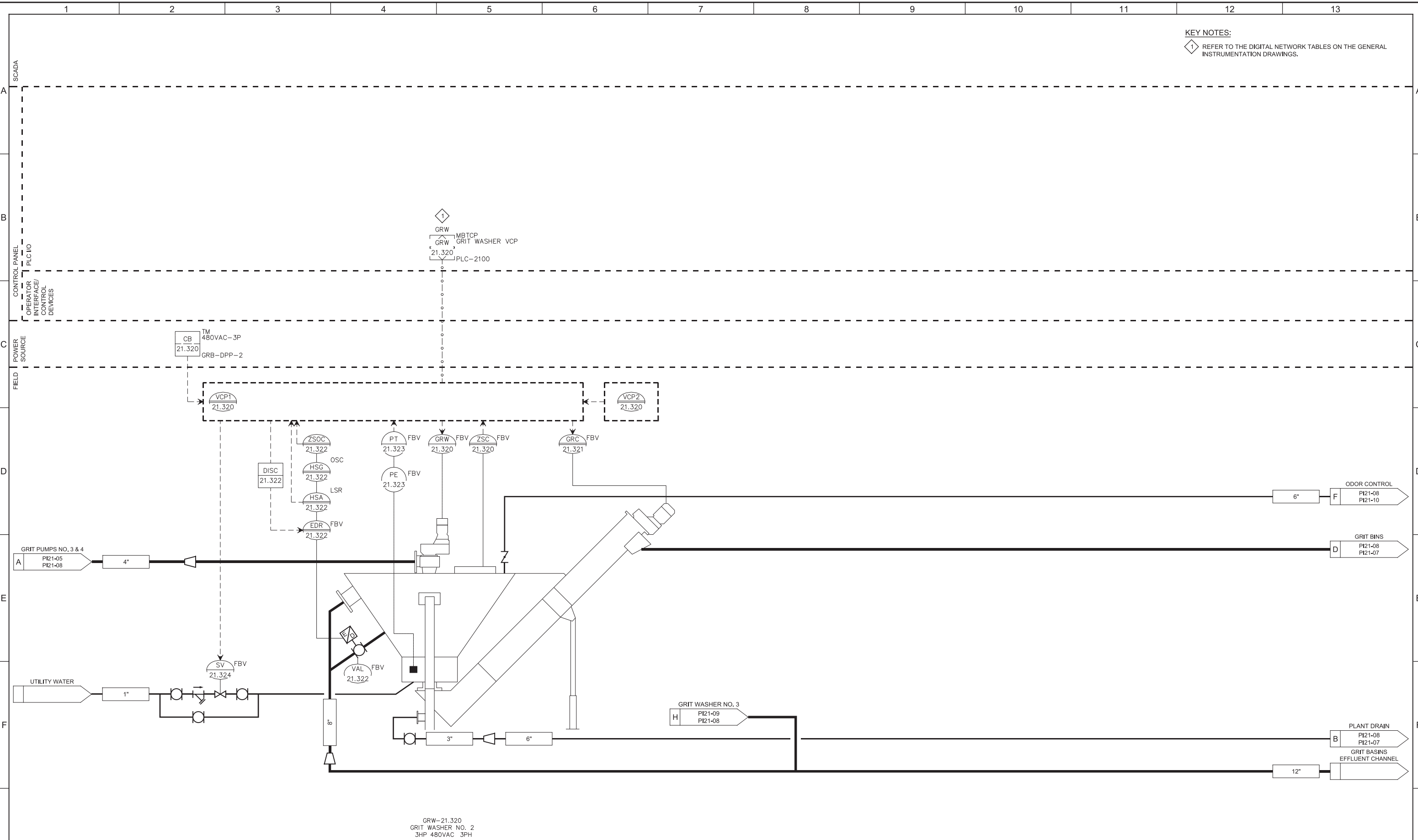
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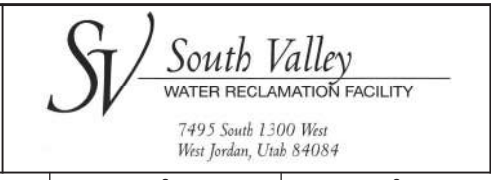
KEY NOTES:
1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



GRW-21.320
GRIT WASHER NO. 2
3HP 480VAC 3PH

REV	DATE	BY	DESCRIPTION
1			
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SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
INSTRUMENTATION
GRIT WASHER NO. 2 P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
10548A.10
DRAWING NO.
PI21-08
SHEET NO.
148 OF 159

Plot Date: 28-FEB-2019 10:49:25 AM

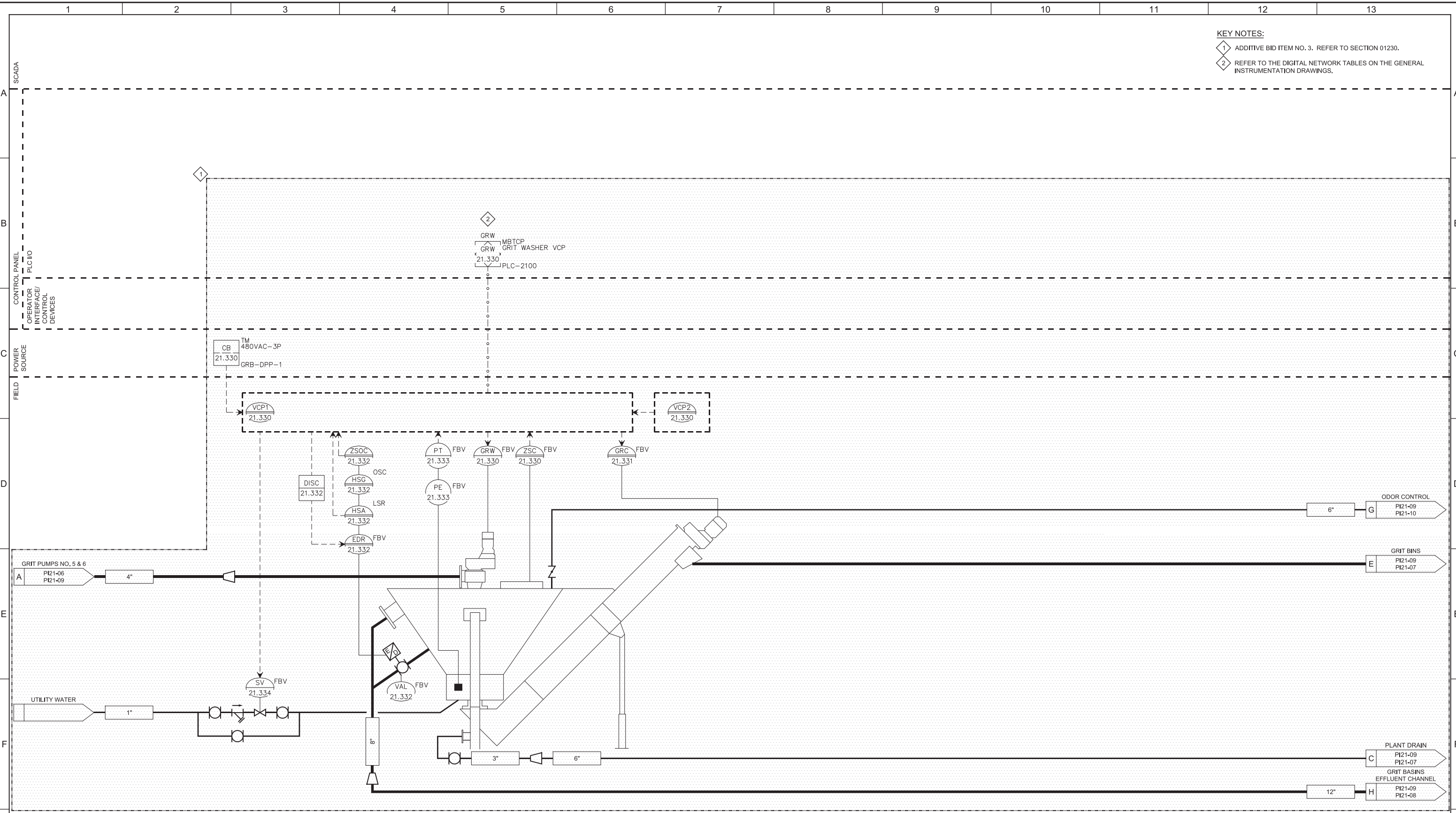
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LAST SAVED BY: CYoung

KEY NOTES:

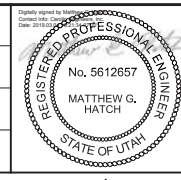
- 1 ADDITIVE BID ITEM NO. 3. REFER TO SECTION 01230.
- 2 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



GRW-21.330
GRIT WASHER NO. 3
3HP 480VAC 3PH

REV	DATE	BY	DESCRIPTION
1			
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PROJECT 5
INSTRUMENTATION
GRIT WASHER NO. 3 P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

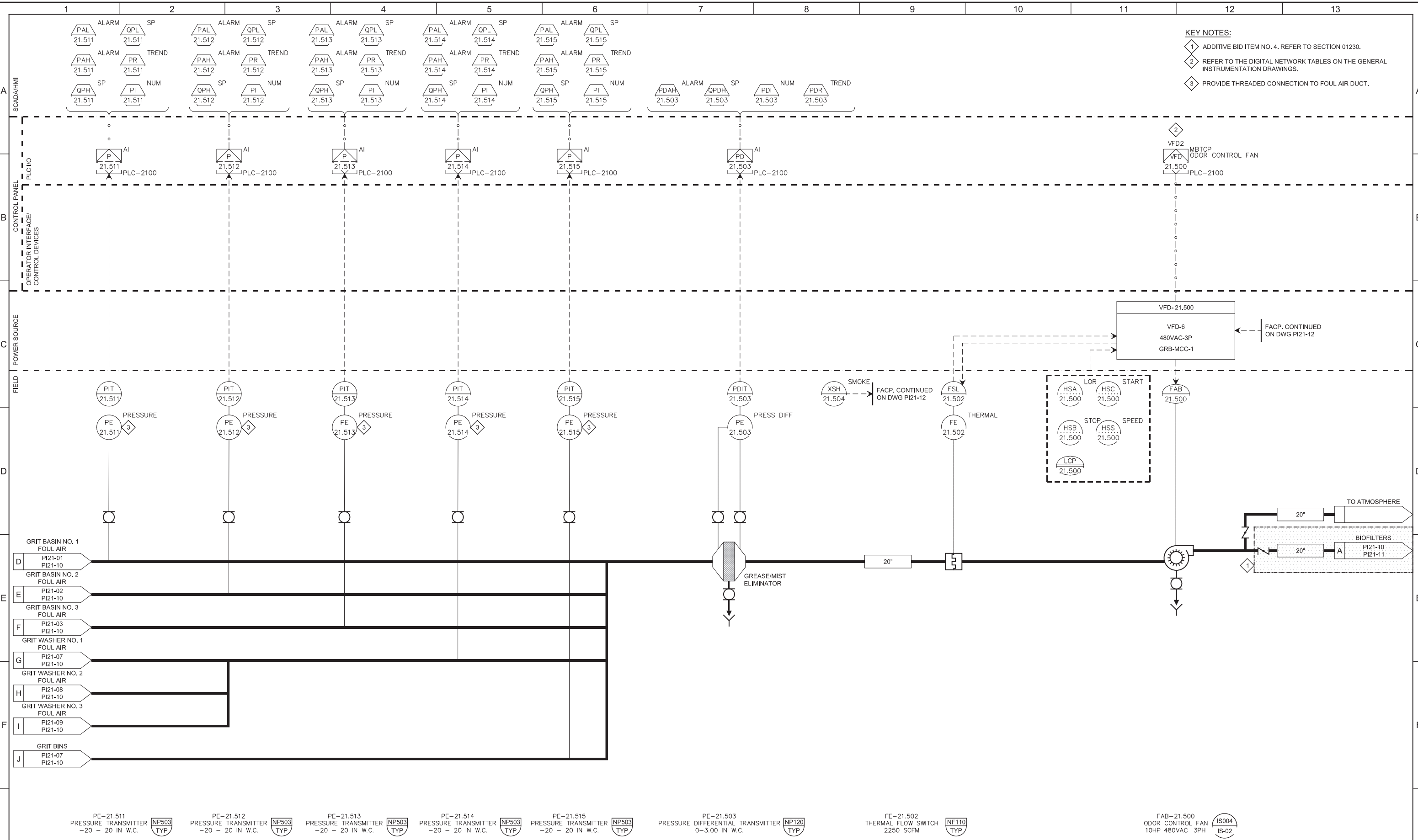
JOB NO.
10548A.10
DRAWING NO.
PI21-09
SHEET NO.
149 OF 159

Plot Date: 28-FEB-2019 10:49:14 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Sld_Pen_v0905.pen PlotScale: 2:1

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KEY NOTES:

- 1 ADDITIVE BID ITEM NO. 4. REFER TO SECTION 01230.
- 2 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.
- 3 PROVIDE THREADED CONNECTION TO FOUL AIR DUCT.

PE-21.511 PRESSURE TRANSMITTER -20 - 20 IN. W.C. NP503 TYP
 PE-21.512 PRESSURE TRANSMITTER -20 - 20 IN. W.C. NP503 TYP
 PE-21.513 PRESSURE TRANSMITTER -20 - 20 IN. W.C. NP503 TYP
 PE-21.514 PRESSURE TRANSMITTER -20 - 20 IN. W.C. NP503 TYP
 PE-21.515 PRESSURE TRANSMITTER -20 - 20 IN. W.C. NP503 TYP
 PE-21.503 PRESSURE DIFFERENTIAL TRANSMITTER 0-3.00 IN. W.C. NP120 TYP
 FE-21.502 THERMAL FLOW SWITCH 2250 SCFM NF110 TYP
 FAB-21.500 ODOR CONTROL FAN 10HP 480VAC 3PH IS004 IS-02

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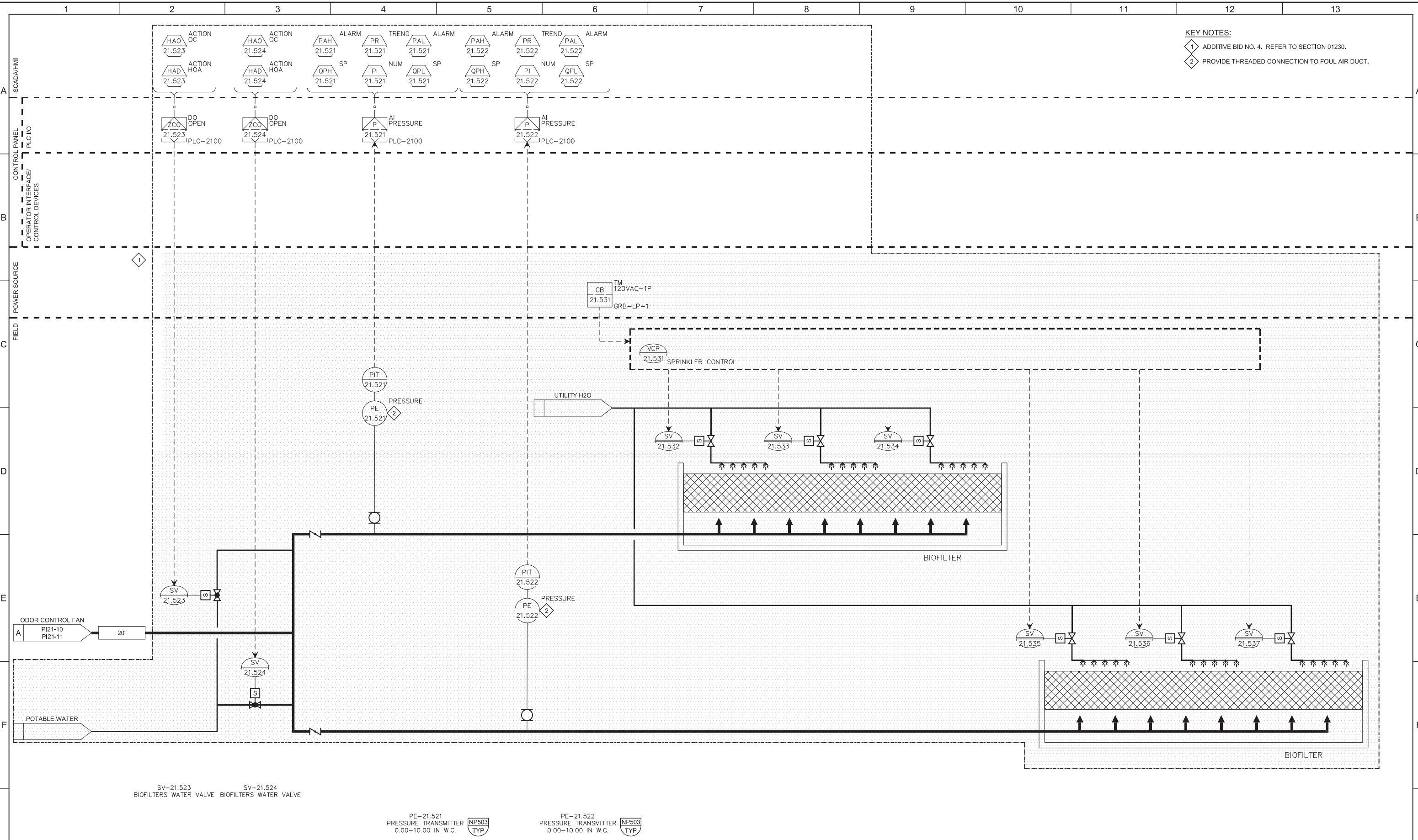
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PROJECT 5		BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO. PI21-10
INSTRUMENTATION		0 1"	SHEET NO. 150 OF 159
GRIT REMOVAL BUILDING ODOR CONTROL P&ID - 1		IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	

Plot Date: 28-FEB-2019 10:49:10 AM

User: svcPW

Plot Scale: 2:1

LAST SAVED BY: CYoung



KEY NOTES:

- 1 ADDITIVE BID NO. 4. REFER TO SECTION 01230.
- 2 PROVIDE THREADED CONNECTION TO FOUL AIR DUCT.

SV-21.523 BIOFILTERS WATER VALVE SV-21.524 BIOFILTERS WATER VALVE

PE-21.521 PRESSURE TRANSMITTER NP503 TYP 0.00-10.00 IN W.C.

PE-21.522 PRESSURE TRANSMITTER NP503 TYP 0.00-10.00 IN W.C.

REV	DATE	BY	DESCRIPTION
1			
2			
3			

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 DATE MARCH 2019

REGISTERED PROFESSIONAL ENGINEER
 No. 5612657
 MATTHEW G. HATCH
 STATE OF UTAH



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 7495 South 1300 West
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SOUTH VALLEY WATER RECLAMATION FACILITY

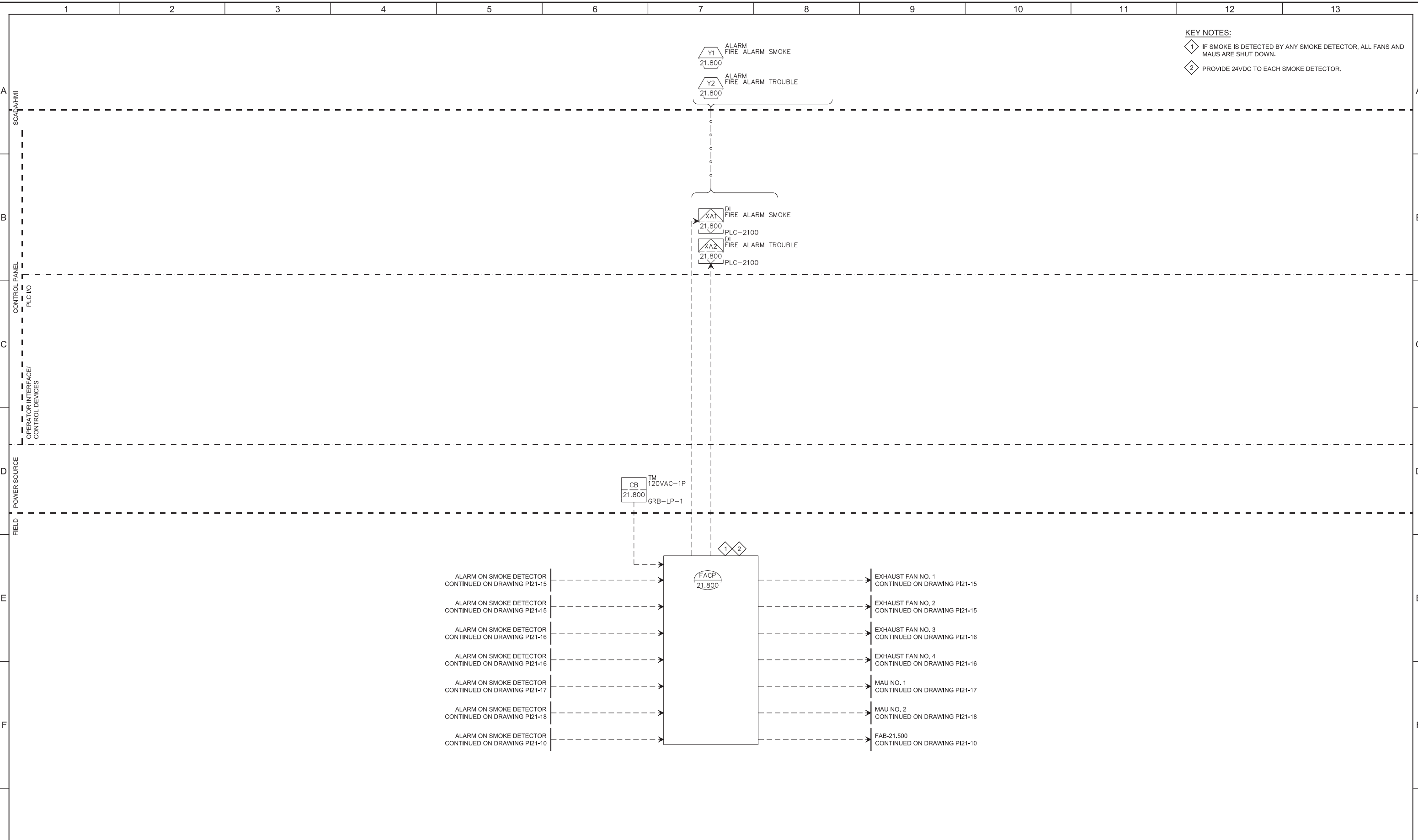
PROJECT 5
 INSTRUMENTATION

GRIT REMOVAL BUILDING ODOR CONTROL P&ID - 2

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 10548A.10
 DRAWING NO. **PI21-11**
 SHEET NO. 151 OF 159

Plot Date: 28-FEB-2019 10:49:41 AM
User: svcPW
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
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SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
INSTRUMENTATION
**GRIT REMOVAL BUILDING
FIRE ALARM SYSTEM P&ID**

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

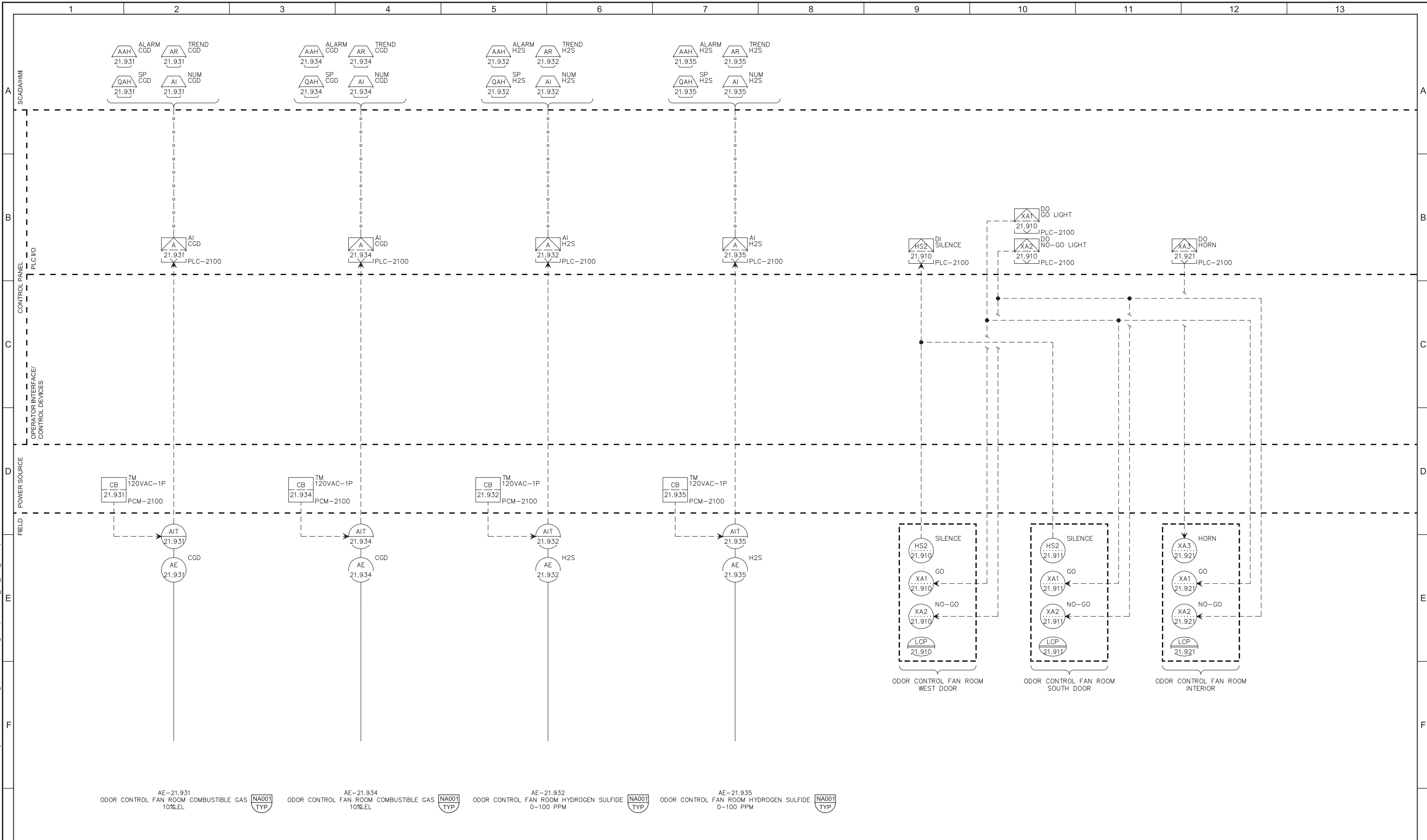
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10548A.10
DRAWING NO.
PI21-12
SHEET NO.
152 OF 159

Plot Date: 28-FEB-2019 10:49:19 AM

User: svcPW

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1

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AE-21.931 ODOR CONTROL FAN ROOM COMBUSTIBLE GAS 10%LEL NA001 TYP
 AE-21.934 ODOR CONTROL FAN ROOM COMBUSTIBLE GAS 10%LEL NA001 TYP
 AE-21.932 ODOR CONTROL FAN ROOM HYDROGEN SULFIDE 0-100 PPM NA001 TYP
 AE-21.935 ODOR CONTROL FAN ROOM HYDROGEN SULFIDE 0-100 PPM NA001 TYP

REV	DATE	BY	DESCRIPTION

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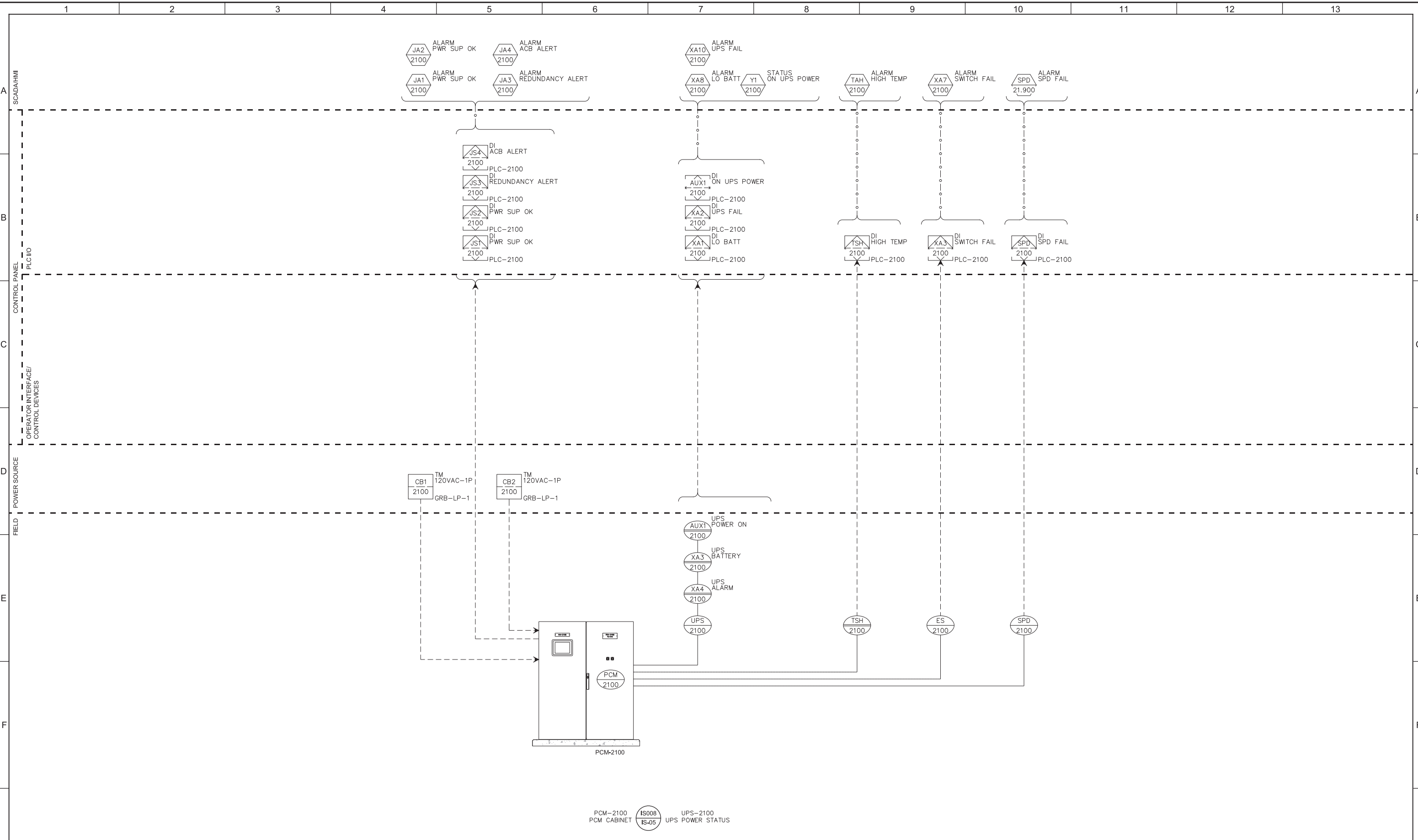
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SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
INSTRUMENTATION
GRIT REMOVAL BUILDING
GAS DETECTION P&ID

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
10548A.10
DRAWING NO.
PI21-13
SHEET NO.
153 OF 159

Pict Date: 28-FEB-2019 10:49:11 AM
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 Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Sld_Pen_v0905.pen PictScale: 2:1
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PCM-2100 IS008 UPS-2100
 PCM CABINET IS-05 UPS POWER STATUS

REV	DATE	BY	DESCRIPTION
1			
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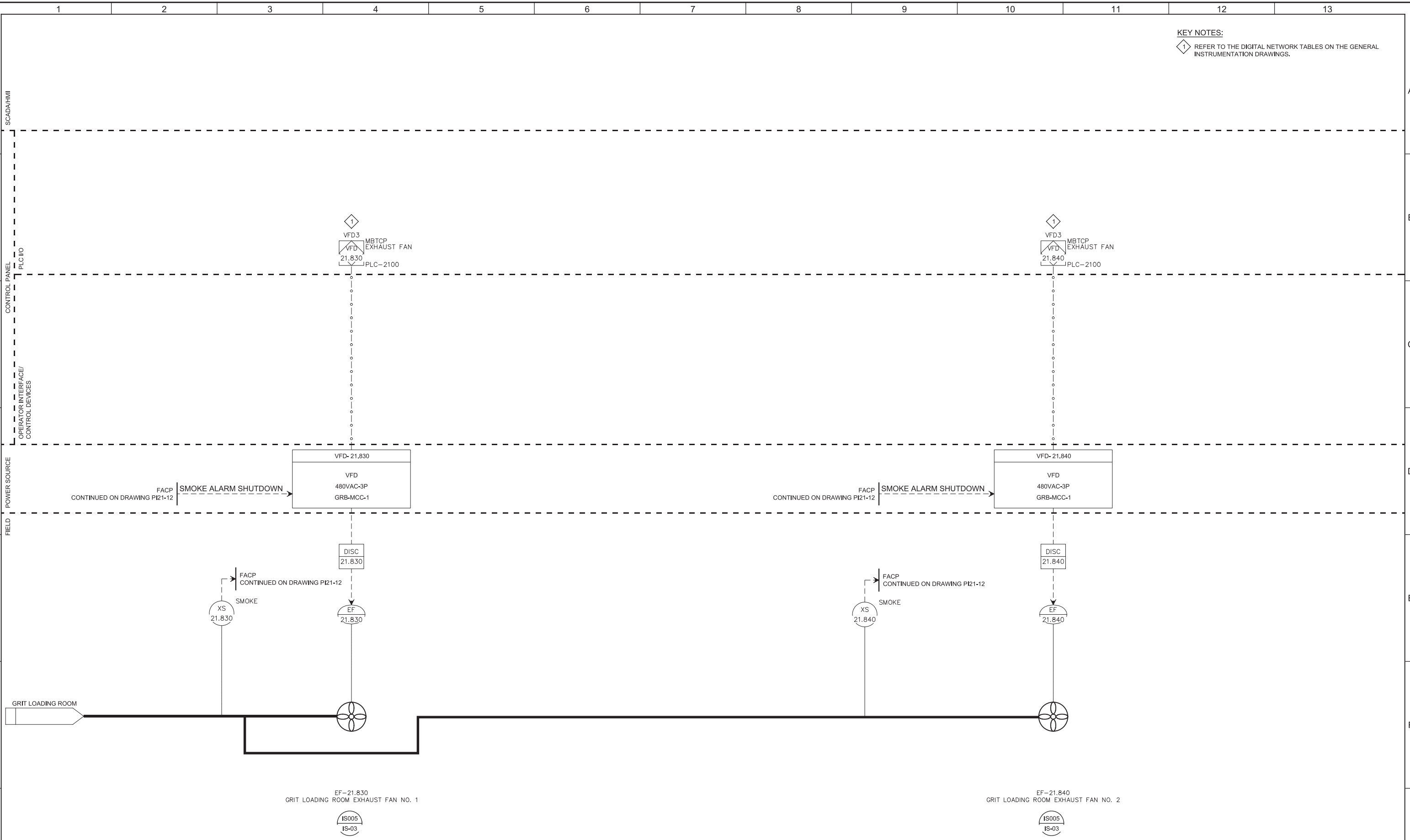
SOUTH VALLEY WATER RECLAMATION FACILITY
 PROJECT 5
 INSTRUMENTATION
GRIT REMOVAL BUILDING
MISCELLANEOUS SIGNALS P&ID

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING

 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
 JOB NO. 10548A.10
 DRAWING NO. **PI21-14**
 SHEET NO. 154 OF 159

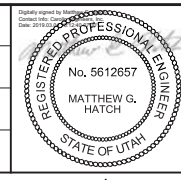
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 PlotScale: 2:1
 LAST SAVED BY: CYoung

KEY NOTES:
 1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



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SOUTH VALLEY WATER RECLAMATION FACILITY
 PROJECT 5
 INSTRUMENTATION
**GRIT REMOVAL BUILDING
 HVAC P&ID - I**

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1"
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
 JOB NO. 10548A.10
DRAWING NO. PI21-15
 SHEET NO. 155 OF 159

PLOT Date: 28-FEB-2019 10:48:07 AM

User: svcPW

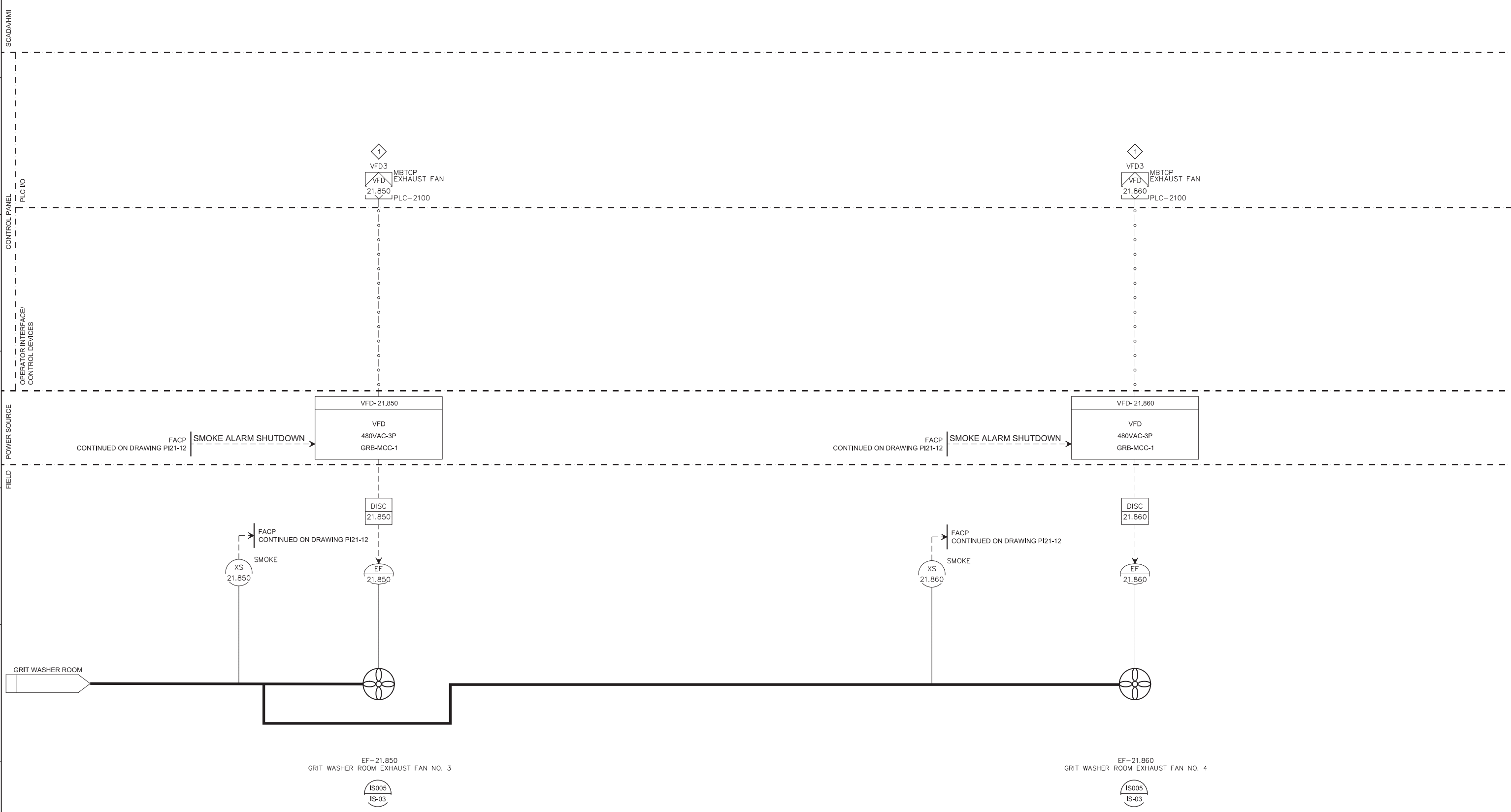
Model: Layout1

ColorTable: gshade.ctb

LAST SAVED BY: CYoung

1 2 3 4 5 6 7 8 9 10 11 12 13

KEY NOTES:
1 REFER TO THE DIGITAL NETWORK TABLES ON THE GENERAL INSTRUMENTATION DRAWINGS.



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SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
INSTRUMENTATION
GRIT REMOVAL BUILDING
HVAC P&ID - II

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO.
10548A.10
DRAWING NO.
PI21-16
SHEET NO.
156 OF 159

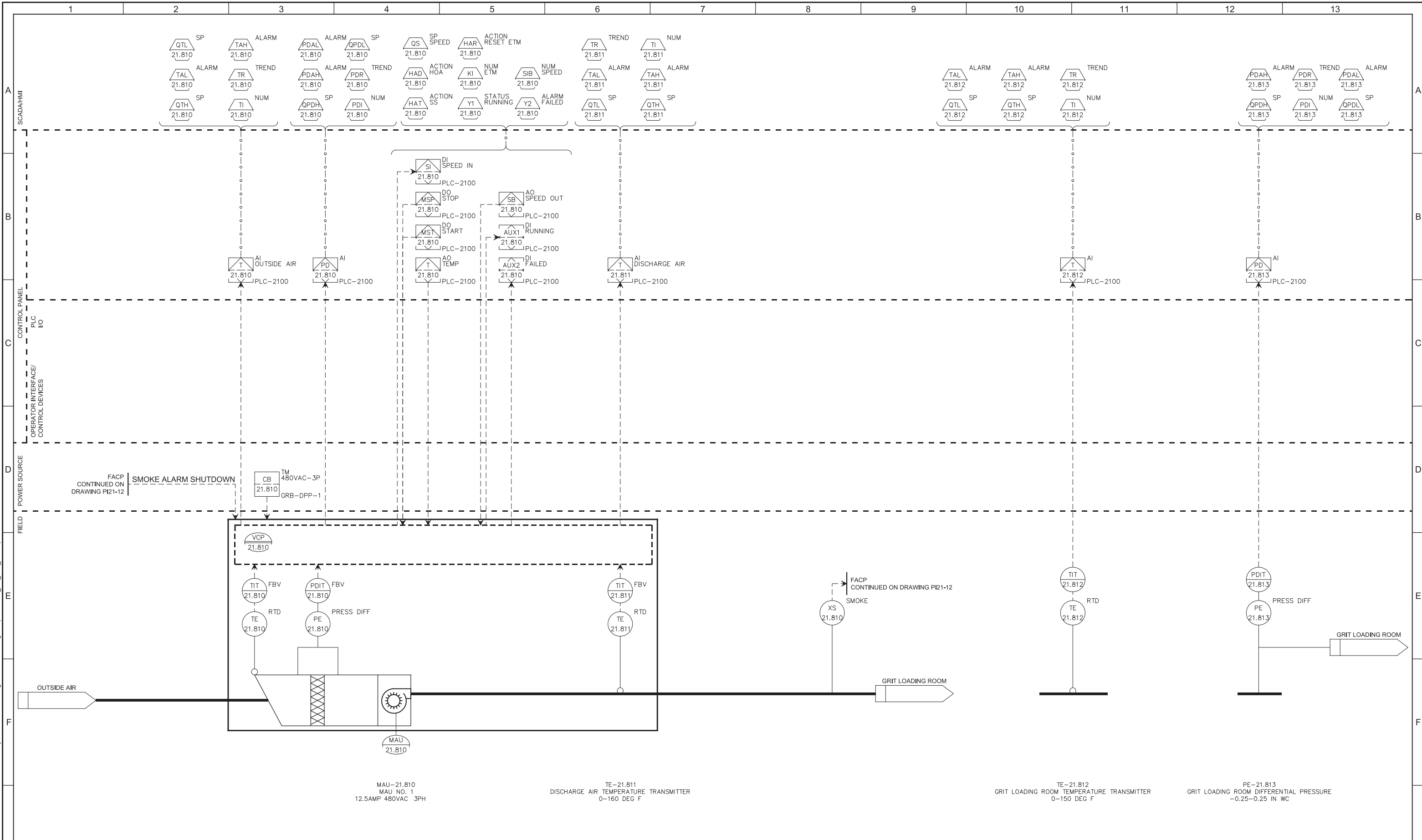
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User: svcPW

Model: Layout1

ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1

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MAU-21.810
MAU NO. 1
12.5AMP 480VAC 3PH

TE-21.811
DISCHARGE AIR TEMPERATURE TRANSMITTER
0-160 DEG F

TE-21.812
GRIT LOADING ROOM TEMPERATURE TRANSMITTER
0-150 DEG F

PE-21.813
GRIT LOADING ROOM DIFFERENTIAL PRESSURE
-0.25-0.25 IN WC

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DRAWN AAW	
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SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
INSTRUMENTATION
**GRIT REMOVAL BUILDING
HVAC P&ID - III**

VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	JOB NO. 10548A.10 DRAWING NO. PI21-17 SHEET NO. 157 OF 159
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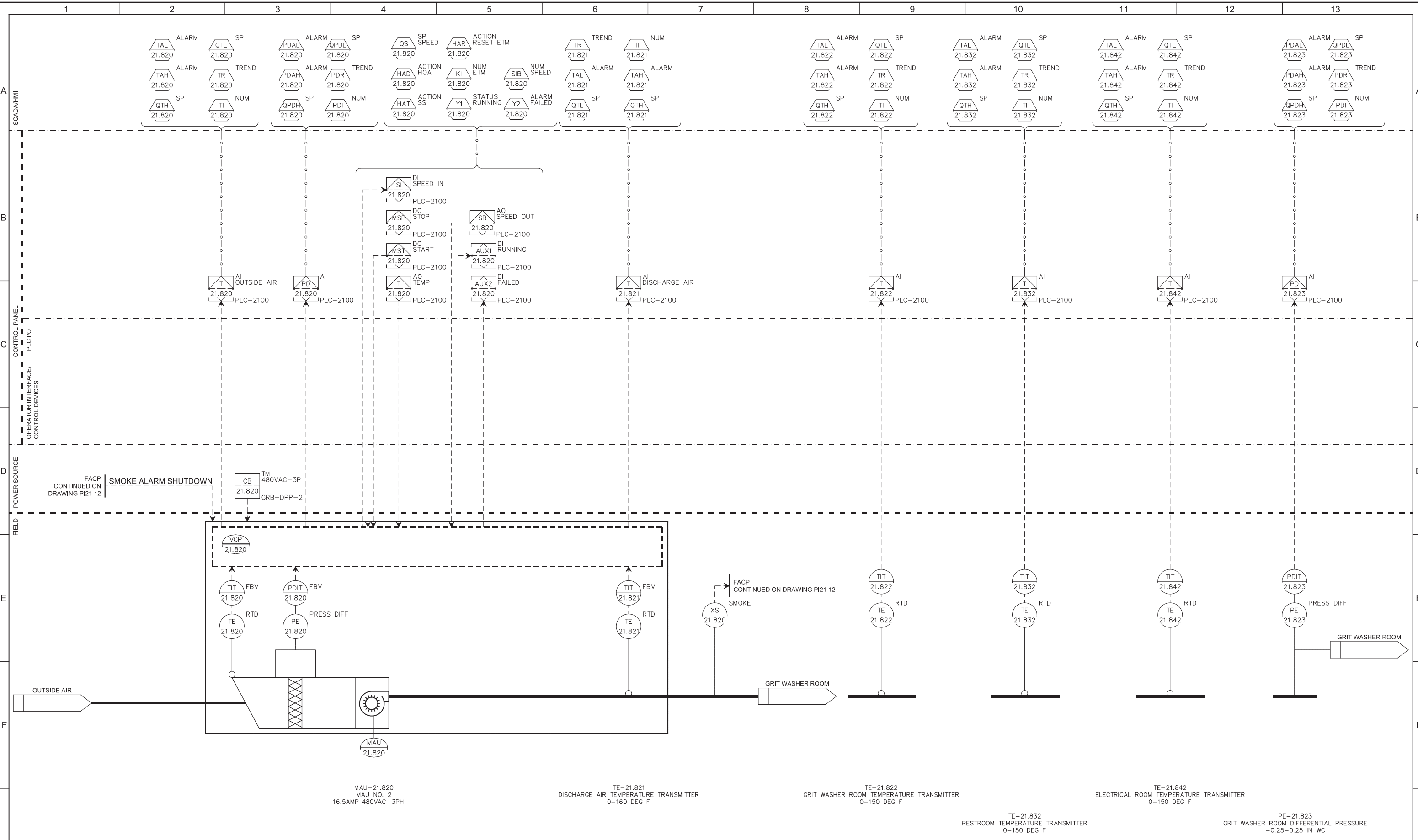
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User: svcPW

Plot Scale: 2:1

Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Sld_Pen_v0905.pen PlotScale: 2:1

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MAU-21.820
MAU NO. 2
16.5AMP 480VAC 3PH

TE-21.821
DISCHARGE AIR TEMPERATURE TRANSMITTER
0-160 DEG F

TE-21.822
GRIT WASHER ROOM TEMPERATURE TRANSMITTER
0-150 DEG F

TE-21.842
ELECTRICAL ROOM TEMPERATURE TRANSMITTER
0-150 DEG F

TE-21.832
RESTROOM TEMPERATURE TRANSMITTER
0-150 DEG F

PE-21.823
GRIT WASHER ROOM DIFFERENTIAL PRESSURE
-0.25-0.25 IN WC

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CHECKED DJC	
DATE MARCH 2019	



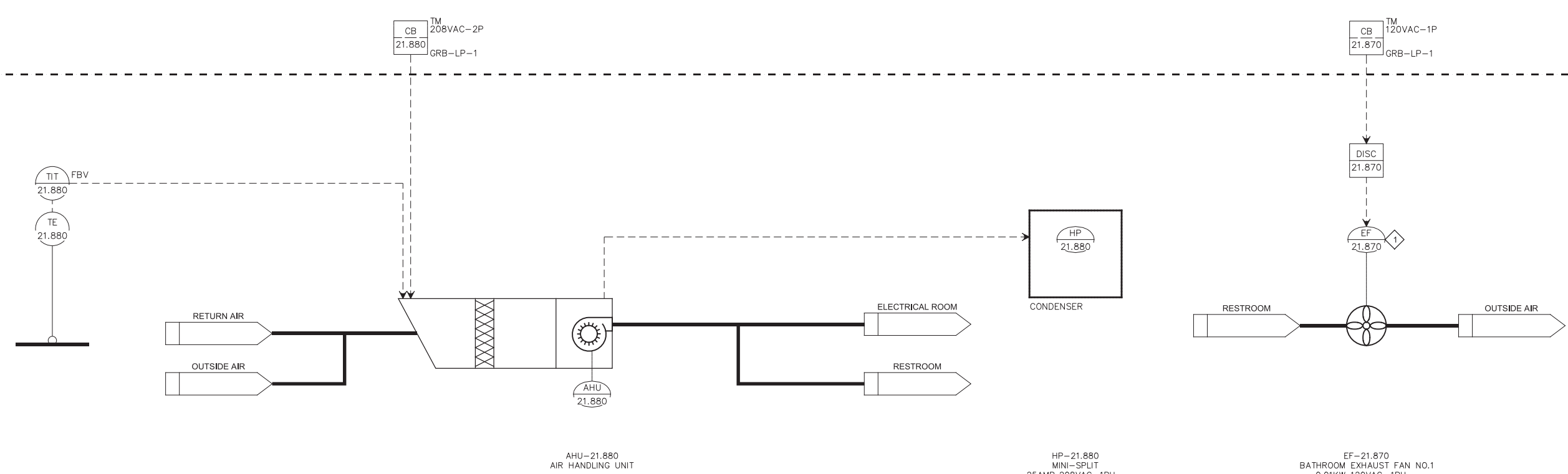
SV South Valley
WATER RECLAMATION FACILITY
7495 South 1300 West
West Jordan, Utah 84084

SOUTH VALLEY WATER RECLAMATION FACILITY
PROJECT 5
INSTRUMENTATION
GRIT REMOVAL BUILDING
HVAC P&ID - IV

VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1"	JOB NO. 10548A.10
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING NO. PI21-18
	SHEET NO. 158 OF 159

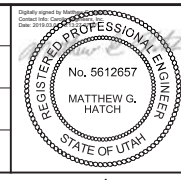
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 User: svcPW
 Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 2:1
 LAST SAVED BY: CYoung

KEY NOTES:
 1 RESTROOM EXHAUST FAN IS INTERLOCKED WITH RESTROOM LIGHT SWITCH.



REV	DATE	BY	DESCRIPTION

DESIGNED
 MGH
 DRAWN
 AAW
 CHECKED
 DJC
 DATE
 MARCH 2019



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SOUTH VALLEY WATER RECLAMATION FACILITY
 PROJECT 5
 INSTRUMENTATION
**GRIT REMOVAL BUILDING
 HVAC P&ID - V**

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1"
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
 JOB NO. 10548A.10
 DRAWING NO. **PI21-19**
 SHEET NO. 159 OF 159