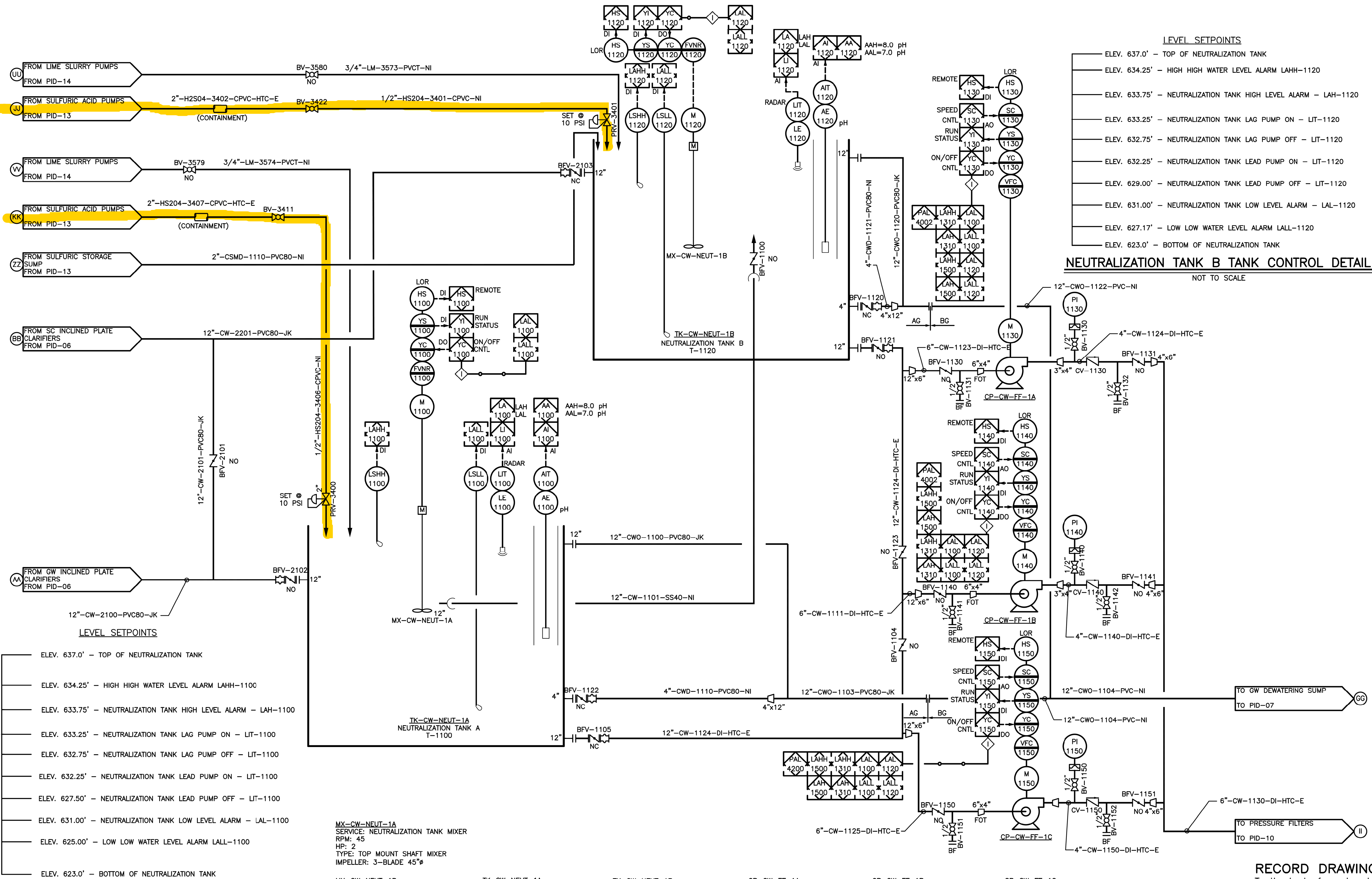


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FILENAME: I:\O&G-CROWDER\1426142988-ANNISTON-ARMY-DDOCUMENTS\DRAWINGS\SHETS\PID REVISION AS-BUILT\TS42988PID031.DWG



NEUTRALIZATION TANK A TANK CONTROL DETAIL
NOT TO SCALE

NEUTRALIZATION TANK B TANK CONTROL DETAIL
NOT TO SCALE

- LEVEL SETPOINTS**
- ELEV. 637.0' - TOP OF NEUTRALIZATION TANK
 - ELEV. 634.25' - HIGH HIGH WATER LEVEL ALARM LAHH-1120
 - ELEV. 633.75' - NEUTRALIZATION TANK HIGH LEVEL ALARM - LAH-1120
 - ELEV. 633.25' - NEUTRALIZATION TANK LAG PUMP ON - LIT-1120
 - ELEV. 632.75' - NEUTRALIZATION TANK LAG PUMP OFF - LIT-1120
 - ELEV. 632.25' - NEUTRALIZATION TANK LEAD PUMP ON - LIT-1120
 - ELEV. 629.00' - NEUTRALIZATION TANK LEAD PUMP OFF - LIT-1120
 - ELEV. 631.00' - NEUTRALIZATION TANK LOW LEVEL ALARM - LAL-1120
 - ELEV. 627.17' - LOW LOW WATER LEVEL ALARM LALL-1120
 - ELEV. 623.0' - BOTTOM OF NEUTRALIZATION TANK

MX-CW-NEUT-1A
SERVICE: NEUTRALIZATION TANK MIXER
RPM: 45
HP: 2
TYPE: TOP MOUNT SHAFT MIXER
IMPELLER: 3-BLADE 45°

MX-CW-NEUT-1B
SERVICE: NEUTRALIZATION TANK MIXER
RPM: 45
HP: 2
TYPE: TOP MOUNT SHAFT MIXER
IMPELLER: 3-BLADE 45°

TK-CW-NEUT-1A
SERVICE: CW NEUTRALIZATION
OD: 14.5'
LENGTH: 14.5'
MATERIAL: COATED CONCRETE
CAPACITY: 14,700 GAL

TK-CW-NEUT-1B
SERVICE: CW NEUTRALIZATION
OD: 14.5'
LENGTH: 14.5'
MATERIAL: COATED CONCRETE
CAPACITY: 14,700 GAL

CP-CW-FF-1A
SERVICE: CW FILTER FEED PUMP
CAPACITY: 320 GPM
DISCHARGE: 78 FT
RPM: 1770
HP: 15
TYPE: CENTRIFUGAL

CP-CW-FF-1B
SERVICE: CW FILTER FEED PUMP
CAPACITY: 320 GPM
DISCHARGE: 78 FT
RPM: 1770
HP: 15
TYPE: CENTRIFUGAL

CP-CW-FF-1C
SERVICE: CW FILTER FEED PUMP
CAPACITY: 320 GPM
DISCHARGE: 78 FT
RPM: 1770
HP: 15
TYPE: CENTRIFUGAL

RECORD DRAWINGS
To the best of our knowledge, information and belief, based on information provided by others, these record drawings substantially represent the project as constructed.
O'BRIEN & GERE ENGINEERS, INC.
By: *[Signature]* 1/20/2012

US Army Corps of Engineers
MOBILE DISTRICT

RECORD DRAWING	DATE	DESCRIPTION	MARK
4	1/13/12	ITEM	
3	8/26/11	ITEM	
2	2/12/10	ITEM	
1	12/4/09	ITEM	
0	5/20/09	ITEM	
0	4/30/09	ITEM	

DATE: 1/10/09
SOLICITATION NO.: 00170001
CONTRACT NO.: W91278-08-C-0007
FILE NUMBER: 42988PID031.dwg
FILE NAME: 42988PID031.dwg

DESIGNED BY: GMB
OWN BY: GMB
QUANTIFIED BY: GMB
PLOT SCALE: 1"=10'-0"

U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
MOBILE, ALABAMA

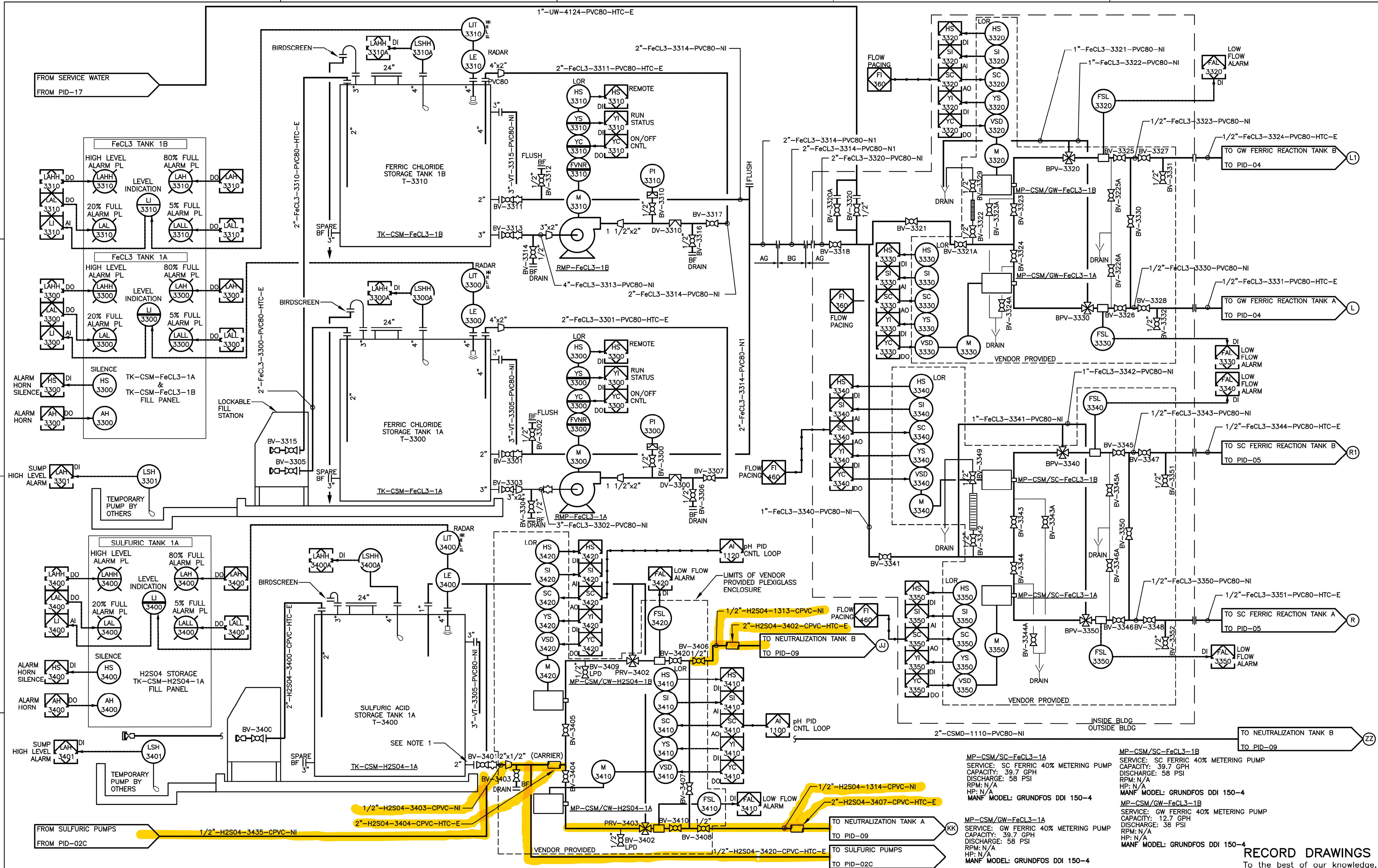
O'BRIEN & GERE
2010 U.S. ARMY CORPS OF ENGINEERS, INC.
ENGINEERS, ARCHITECTS, PLANNERS
CONSULTANTS

CROWDER
ENGINEERS, ARCHITECTS, PLANNERS
CONSULTANTS

ANNISTON ARMY DEPOT, ALABAMA
DESIGN AND CONSTRUCTION OF PN 27259
INDUSTRIAL WASTEWATER TREATMENT PLANT

P&ID
COMBINED WASTE
NEUTRALIZATION

SHEET IDENTIFICATION
PID-09
SHEET 0 OF 0



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RECORD DRAWINGS
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O'BRIEN & GERE ENGINEERS, INC.
By: *971/1/20/2002*

US Army Corps of Engineers
MOBILE DISTRICT

NO.	DATE	DESCRIPTION	APPROVED
1	01/20/2002	ISSUED FOR CONSTRUCTION	
2	01/20/2002	REVISION	
3	01/20/2002	REVISION	
4	01/20/2002	REVISION	
5	01/20/2002	REVISION	

DATE: 1/10/09
DESIGNED BY: GMB
DRAWN BY: GMB
CHECKED BY: GMB
APPROVED BY: GMB
PLOT SCALE: 1"=10'-0"
PLOT DATE: 01/20/2012
FILE NAME: 42688PID035.dwg
ANSI D

U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
INDUSTRIAL WASTEWATER TREATMENT PLANT

O'BRIEN & GERE
2000 O'BRIEN & GERE ENGINEERS, INC.
P&ID
FERRIC CHLORIDE AND SULFURIC ACID
STORAGE AND METERING

CROWDER
INDUSTRIAL ENGINEERING

ANNISTON ARMY DEPOT, ALABAMA
DESIGN AND CONSTRUCTION OF PN 27259
INDUSTRIAL WASTEWATER TREATMENT PLANT

PID-13
SHEET 0 OF 0

SAVED: 01/17/12 02:49 PM

FILENAME: \\OBG-CROWDER\1426142988-ANNISTON-ARMY-DDOCSDWG\SHSHEETS\42988M408.DWG

SEE CONTINUATION ON M-12

SEE CONTINUATION ON M-7

SEE CONTINUATION ON M-9

SEE CONTINUATION ON M-18

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1"=5'



US Army Corps of Engineers
MOBILE DISTRICT

DATE	DESCRIPTION	MARK	DATE	DESCRIPTION	MARK
1/20/12	1	TFM	12/4/09	1	TFM
4/3/2009	0	PROCESS MECHANICAL DP/FC			
	2	RECORD DRAWING			

DATE: 1/1/09	DESIGNED BY: GREGORY J. GREGORY	OWN BY: GREGORY J. GREGORY	FILE NUMBER: 42988M408.dwg
SOLICITATION NO: 1426142988	QUANTITIES BY: GREGORY J. GREGORY	PLANT SCALE: 1/16"=1'-0"	FILE NAME: 42988M408.dwg
DATE: 1/1/09	DESIGNED BY: GREGORY J. GREGORY	OWN BY: GREGORY J. GREGORY	FILE NUMBER: 42988M408.dwg
SOLICITATION NO: 1426142988	QUANTITIES BY: GREGORY J. GREGORY	PLANT SCALE: 1/16"=1'-0"	FILE NAME: 42988M408.dwg

ANNISTON ARMY DEPOT, ALABAMA
DESIGN AND CONSTRUCTION OF PN 27259
INDUSTRIAL WASTEWATER TREATMENT PLANT
MECHANICAL
"IPC, NEUTRALIZATION TANKS & FILTERS"
PARTIAL PROCESS PIPING PLAN

SHEET IDENTIFICATION
M-8
SHEET 0 OF 0

RECORD DRAWINGS

To the best of our knowledge, information and belief, based on information provided by others, these record drawings substantially represent the project as constructed.

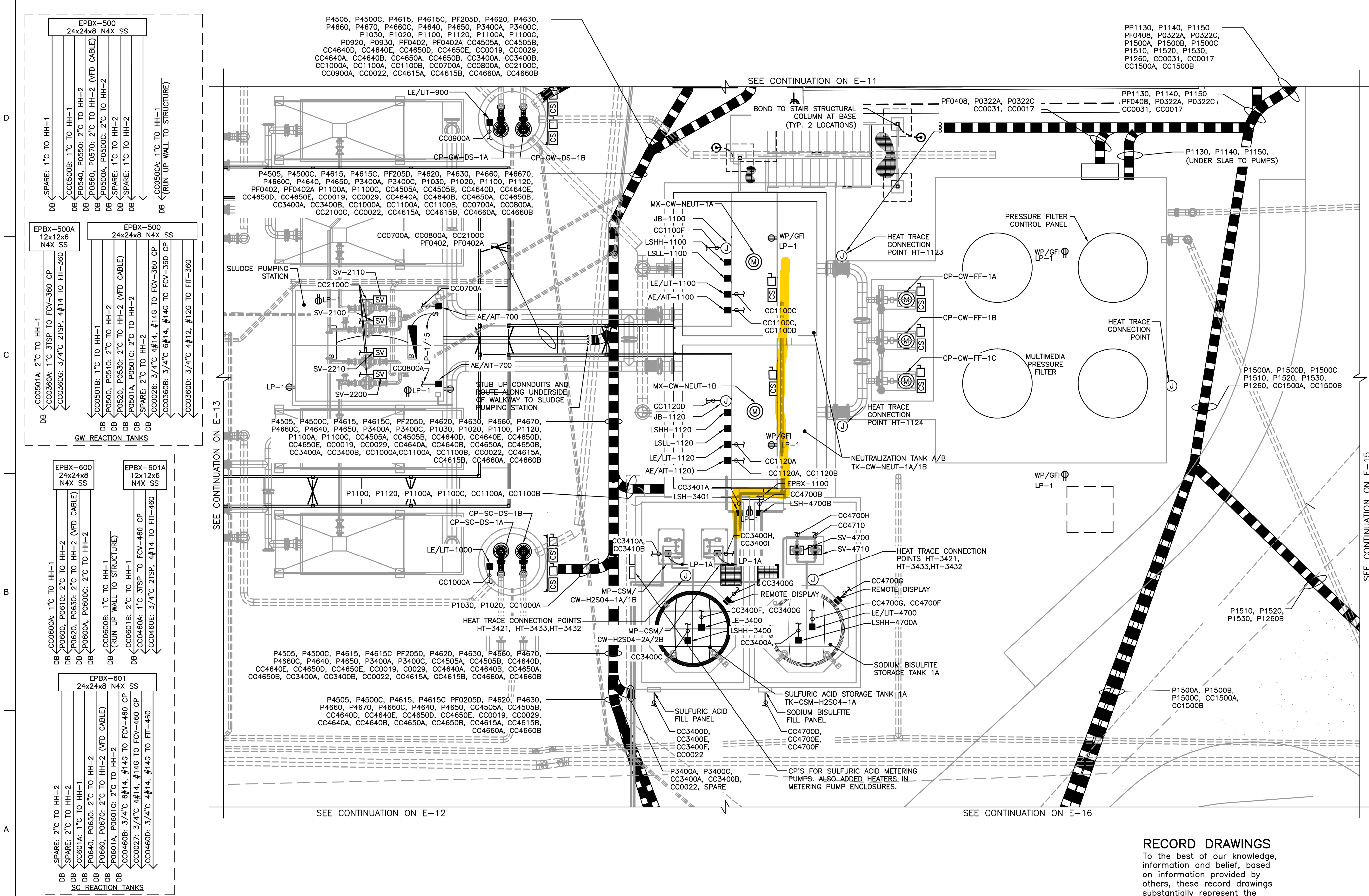
O'BRIEN & GERE ENGINEERS, INC.

By: *gmg* 1/20/2012

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5

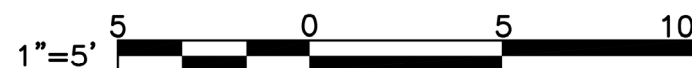
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FILENAME: I:\OBS-CROWDER\1426142988-ANNISTON-ARMY-DDOCUMENTS\DRAWINGS\142988E914.DWG



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RECORD DRAWINGS
To the best of our knowledge, information and belief, based on information provided by others, these record drawings substantially represent the project as constructed.
O'BRIEN & GERE ENGINEERS, INC.

By: 7/1/12 1/20/2012

US Army Corps of Engineers
MOBILE DISTRICT

DATE	DESCRIPTION	APPR
11/19/09	RECORD DRAWING	JWK
0	100% ELECTRICAL DP	

DATE: 11/19/09
SOLICITATION NO.: 42988E914
DRAWN BY: JWK
CHECKED BY: JWK
DESIGNED BY: JWK
PLOT SCALE: 1/16"=1'-0"
PLOT DATE: 01/20/2012
FILE NAME: 42988E914.dwg

ANNISTON ARMY DEPOT, ALABAMA
DESIGN AND CONSTRUCTION OF PN 27259
INDUSTRIAL WASTEWATER TREATMENT PLANT
ELECTRICAL
IPC & NEUTRALIZATION
TANKS AREA
POWER & CONTROL PLAN

SHEET IDENTIFICATION
E-14
SHEET 0 OF 0

1
2
3
4
5

SAVED: 10/21/11 12:22 PM

D

C

B

A

FILENAME: I:\OBC-CROWDER_1426142698_ANNISTON-ARMY-DRAWINGS\DRAWINGS\1426989836.DWG

HEAT TRACE SCHEDULE								
HEAT TRACE				PIPE	PIPE	INSULATION	PIPE	EST. LINEAL
TAG	LINE ID	LOCATION	SERVICE	QUANTITIES	MATERIAL	TYPE &	JACKET	FEET
NO.	NO.			AND MIN. SIZES		THICKNESS		OF PIPE
HT-0151	GW-151	GW EQUALIZATION TANK	GENERAL WASTE	8"	PVC80	1"- ELASTOMERIC FOAM	PVC	39'
HT-0151	GW-922	GW EQUALIZATION TANK	GENERAL WASTE	6"	PVC80	1"- ELASTOMERIC FOAM	PVC	41'
HT-0251	SC-251	SC EQUALIZATION TANK	STEAM CLEAN	8"	PVC80	1"- ELASTOMERIC FOAM	PVC	39'
HT-0251	SC-1032	SC EQUALIZATION TANK	STEAM CLEAN	6"	PVC80	1"- ELASTOMERIC FOAM	PVC	40'
HT-0300	GW-300	GW PROCESS FEED PUMPS	GENERAL WASTE	6"	SS10	1"- ELASTOMERIC FOAM	PVC	5'
HT-0300	GW-310	GW PROCESS FEED PUMPS	GENERAL WASTE	6"	SS10	1"- ELASTOMERIC FOAM	PVC	5'
HT-0300	GW-350	GW PROCESS FEED PUMPS	GENERAL WASTE	6"	SS10	1"- ELASTOMERIC FOAM	PVC	3'
HT-0300	GW-340	GW PROCESS FEED PUMPS	GENERAL WASTE	6"	SS10	1"- ELASTOMERIC FOAM	PVC	6'
HT-0300	GW-330	GW PROCESS FEED PUMPS	GENERAL WASTE	6"	SS10	1"- ELASTOMERIC FOAM	PVC	5'
HT-3911	FL-3941	CHEMICAL BUILDING	POLYMER	1/2"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	
HT-0300	GW-341	GW PROCESS FEED PUMPS	GENERAL WASTE	6"	SS10	1"- ELASTOMERIC FOAM	PVC	3'
HT-0300	GW-342	GW PROCESS FEED PUMPS	GENERAL WASTE	6"	SS10	1"- ELASTOMERIC FOAM	PVC	12'
HT-0361	GW-361	GW REACTION TANKS	GENERAL WASTE	4"	SS10	1"- ELASTOMERIC FOAM	PVC	2'
HT-0361	GW-362	GW REACTION TANKS	GENERAL WASTE	4"	SS10	1"- ELASTOMERIC FOAM	PVC	10'
HT-0361	GW-363	GW REACTION TANKS	GENERAL WASTE	4"	SS10	1"- ELASTOMERIC FOAM	PVC	15'
HT-0361	GW-364	GW REACTION TANKS	GENERAL WASTE	4"	SS10	1"- ELASTOMERIC FOAM	PVC	24'
HT-0400	SC-400	SC PROCESS FEED PUMPS	STEAM CLEAN	6"	SS10	1"- ELASTOMERIC FOAM	PVC	5'
HT-0400	SC-410	SC PROCESS FEED PUMPS	STEAM CLEAN	6"	SS10	1"- ELASTOMERIC FOAM	PVC	5'
HT-0400	SC-450	SC PROCESS FEED PUMPS	STEAM CLEAN	4"	SS10	1"- ELASTOMERIC FOAM	PVC	3'
HT-0400	SC-441	SC PROCESS FEED PUMPS	STEAM CLEAN	4"	SS10	1"- ELASTOMERIC FOAM	PVC	6'
HT-0400	SC-442	SC PROCESS FEED PUMPS	STEAM CLEAN	4"	SS10	1"- ELASTOMERIC FOAM	PVC	5'
HT-0400	SC-440	SC PROCESS FEED PUMPS	STEAM CLEAN	6"	SS10	1"- ELASTOMERIC FOAM	PVC	3'
HT-0400	SC-430	SC PROCESS FEED PUMPS	STEAM CLEAN	6"	SS10	1"- ELASTOMERIC FOAM	PVC	12'
HT-0460	SC-461	SC REACTION TANKS	STEAM CLEAN	4"	SS10	1"- ELASTOMERIC FOAM	PVC	10'
HT-0460	SC-462	SC REACTION TANKS	STEAM CLEAN	4"	SS10	1"- ELASTOMERIC FOAM	PVC	15'
HT-0460	SC-463	SC REACTION TANKS	STEAM CLEAN	4"	SS10	1"- ELASTOMERIC FOAM	PVC	24'
HT-1123	CW-1123	CW FILTER FEED PUMPS	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	3'
HT-1123	CW-1124 / 1127	CW FILTER FEED PUMPS	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	3'
HT-1123	CW-1201	CW FILTER FEED PUMPS	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	28'
HT-1124	CW-1111	CW FILTER FEED PUMPS	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	3'
HT-1124	CW-1124	CW FILTER FEED PUMPS	COMBINED WASTE	12"	DIP	1"- ELASTOMERIC FOAM	PVC	31'
HT-1124	CW-1125	CW FILTER FEED PUMPS	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	3'
HT-1124	CW-1130	CW FILTER FEED PUMPS	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	40'
HT-1124	CW-1140	CW FILTER FEED PUMPS	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	3'
HT-1124	CW-1150	CW FILTER FEED PUMPS	COMBINED WASTE	4"	DIP	1"- ELASTOMERIC FOAM	PVC	3'
HT-1205	CW-1203	TRICKLING FILTER	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	3'
HT-1205	CW-1204	TRICKLING FILTER	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	15'
HT-1205	CW-1205	TRICKLING FILTER	COMBINED WASTE	8"	DIP	1"- ELASTOMERIC FOAM	PVC	4'
HT-1206	CW-1206	EFFLUENT HOLDING TANK	COMBINED WASTE	8"	DIP	1"- ELASTOMERIC FOAM	PVC	19'
HT-1312	CW-1312	TRICKLING FILTER	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	13'
HT-1312	CW-1314	TRICKLING FILTER	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	36'
HT-1312	CW-1330	TRICKLING FILTER	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	50'
HT-1312	CW-1124	TRICKLING FILTER	COMBINED WASTE	8"	DIP	1"- ELASTOMERIC FOAM	PVC	50'
HT-1500	CW-1501	EFFLUENT HOLDING TANK	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	25'
HT-1500	CW-1503	EFFLUENT HOLDING TANK	COMBINED WASTE	8"	DIP	1"- ELASTOMERIC FOAM	PVC	20'
HT-1500	CW-1500	EFFLUENT HOLDING TANK	COMBINED WASTE	10"	DIP	1"- ELASTOMERIC FOAM	PVC	25'
HT-1500	CW-1510	EFFLUENT HOLDING TANK	COMBINED WASTE	8"	DIP	1"- ELASTOMERIC FOAM	PVC	5'
HT-1500	CW-1511	EFFLUENT HOLDING TANK	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	7'
HT-1500	CW-1520	EFFLUENT HOLDING TANK	COMBINED WASTE	8"	DIP	1"- ELASTOMERIC FOAM	PVC	5'
HT-1500	CW-1521	EFFLUENT HOLDING TANK	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	7'
HT-1500	CW-1522	EFFLUENT HOLDING TANK	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	15'
HT-1500	CW-1530	EFFLUENT HOLDING TANK	COMBINED WASTE	8"	DIP	1"- ELASTOMERIC FOAM	PVC	5'
HT-1500	CW-1531	EFFLUENT HOLDING TANK	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	7'
HT-1500	CW-1539	EFFLUENT HOLDING TANK	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	4'
HT-1500	CW-1550	EFFLUENT HOLDING TANK	COMBINED WASTE	3/4"	PVC7	1"- ELASTOMERIC FOAM	PVC	10'
HT-1500	CW-1560	EFFLUENT HOLDING TANK	COMBINED WASTE	8"	DIP	1"- ELASTOMERIC FOAM	PVC	7'
HT-1500	CW-1565	EFFLUENT HOLDING TANK	COMBINED WASTE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	17'
HT-2110	GWS-2110	GW INCLINE PLATE CLARIFIER	GENERAL WASTE SLUDGE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	6'
HT-2110	GWS-2105	GW INCLINE PLATE CLARIFIER	GENERAL WASTE SLUDGE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	18'
HT-2113	GWS-2113	GW SLUDGE STORAGE TANK	GENERAL WASTE SLUDGE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	29'
HT-2123	GWS-2123	GW SLUDGE STORAGE TANK	GENERAL WASTE SLUDGE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	8'
HT-2210	SCS-2210	SC INCLINE PLATE CLARIFIER	STEAM CLEAN WASTE SLUDGE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	4'
HT-2210	SCS-2204	SC INCLINE PLATE CLARIFIER	STEAM CLEAN WASTE SLUDGE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	16'
HT-2213	SCS-2213	SC SLUDGE STORAGE TANK	STEAM CLEAN WASTE SLUDGE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	29'
HT-2223	SCS-2223	SC SLUDGE STORAGE TANK	STEAM CLEAN WASTE SLUDGE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	8'
HT-2530	CWS-2530	CONVENTIONAL CLARIFIER	COMBINED WASTE SLUDGE	6"	DIP	1"- ELASTOMERIC FOAM	PVC	2'
HT-2530	CWS-2531	CONVENTIONAL CLARIFIER	COMBINED WASTE SLUDGE	4"	DIP	1"- ELASTOMERIC FOAM	PVC	32'
HT-2530	CWS-2532	CONVENTIONAL CLARIFIER	COMBINED WASTE SLUDGE	4"	DIP	1"- ELASTOMERIC FOAM	PVC	5'
HT-2530	CWS-2532 / 2533	CONVENTIONAL CLARIFIER	COMBINED WASTE SLUDGE	4"	DIP	1"- ELASTOMERIC FOAM	PVC	1'

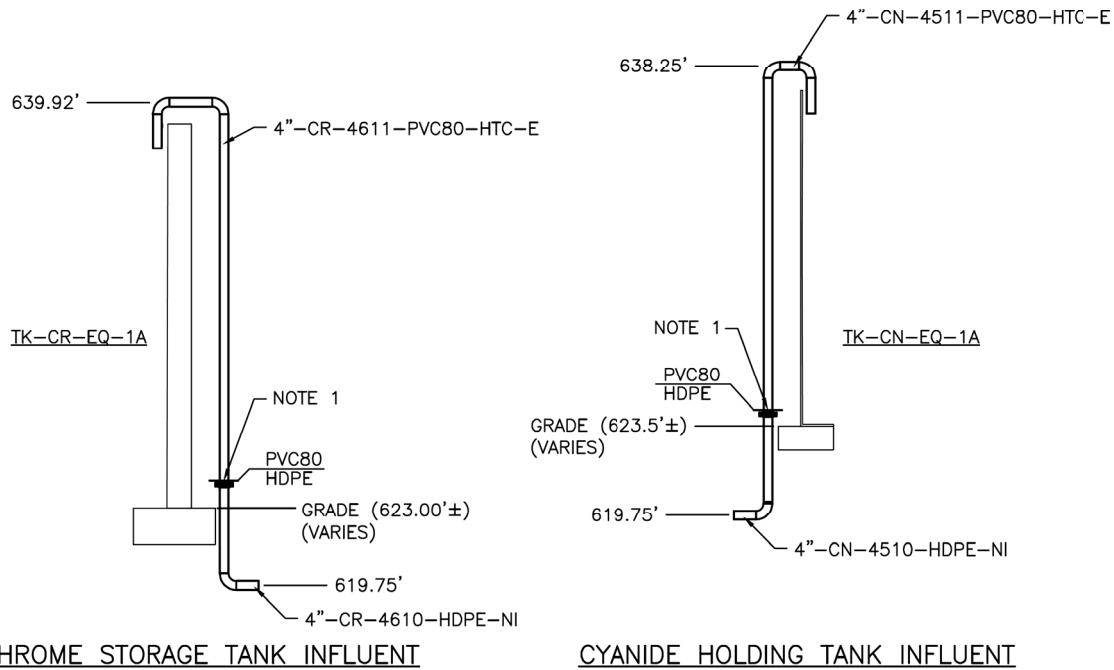
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HT-2530	CWS-2502	CONVENTIONAL CLARIFIER	COMBINED WASTE SLUDGE	4"	DIP	1"- ELASTOMERIC FOAM	PVC	2'
HT-2530	CWS-2521	CONVENTIONAL CLARIFIER	COMBINED WASTE SLUDGE	4"	DIP	1"- ELASTOMERIC FOAM	PVC	10'
HT-2530	CWS-2503	CONVENTIONAL CLARIFIER	COMBINED WASTE SLUDGE	4"	DIP	1"- ELASTOMERIC FOAM	PVC	12'
HT-2530	CWS-2510	CONVENTIONAL CLARIFIER	COMBINED WASTE SLUDGE	4"	DIP	1"- ELASTOMERIC FOAM	PVC	2'
HT-3105	AF-3105	CHEMICAL BUILDING	ANTIFOAM	1/2"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	6'
HT-3105	AF-3205	CHEMICAL BUILDING	ANTIFOAM	1/2"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	6'
HT-3105	AF-3105	GW EQUALIZATION TANK	ANTIFOAM	1/2"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	6'
HT-3205	AF-3205	SC EQUALIZATION TANK	ANTIFOAM	1/2"	PVC80	1" - RIGID GLASS FIBER	PVC	6'
HT-3300	FeCL3-3300	FERRIC CHLORIDE STORAGE TANKS	FERRIC CHLORIDE	2"	PVC80	1" - RIGID GLASS FIBER	PVC	18'
HT-3310	FeCL3-3310	FERRIC CHLORIDE STORAGE TANKS	FERRIC CHLORIDE	2"	PVC80	1" - RIGID GLASS FIBER	PVC	32'
HT-3311	FeCL3-3311	FERRIC CHLORIDE STORAGE TANKS	FERRIC CHLORIDE	2"	PVC80	1" - RIGID GLASS FIBER	PVC	18'
HT-3314	FeCL3-3314	FERRIC CHLORIDE STORAGE TANKS	FERRIC CHLORIDE	1"	PVC80	1" - RIGID GLASS FIBER	PVC	44'
HT-3314	FeCL3-3301	FERRIC CHLORIDE STORAGE TANKS	FERRIC CHLORIDE	2"	PVC80	1" - RIGID GLASS FIBER	PVC	18'
HT-3324	FeCL3-3324	CHEMICAL BUILDING	FERRIC CHLORIDE	1/2"	PVC80	1" - RIGID GLASS FIBER	PVC	65'
HT-3324	FeCL3-3331	CHEMICAL BUILDING	FERRIC CHLORIDE	1/2"	PVC80	1" - RIGID GLASS FIBER	PVC	80'
HT-3324	FeCL3-3344	CHEMICAL BUILDING	FERRIC CHLORIDE	1/2"	PVC80	1" - RIGID GLASS FIBER	PVC	100'
HT-3324	FeCL3-3351	CHEMICAL BUILDING	FERRIC CHLORIDE	1/2"	PVC80	1" - RIGID GLASS FIBER	PVC	115'
HT-3324	SW-XXX	CHEMICAL BUILDING	SERVICE WATER	1/2"	PVC80	1"- ELASTOMERIC FOAM	PVC	100'
HT-3400	H2S04-3400	SULFURIC ACID STORAGE TANK	SULFURIC ACID	2"	PVDF	1" - RIGID GLASS FIBER	PVC	12'
HT-3400	H2S04-3404	SULFURIC ACID STORAGE TANK	SULFURIC ACID	2"	PVDF	1" - RIGID GLASS FIBER	PVC	9'
HT-3400	H2S04-3420	SULFURIC ACID STORAGE TANK	SULFURIC ACID	2"	PVDF	1" - RIGID GLASS FIBER	PVC	6'
HT-3407	H2S04-3407	NEUTRALIZATION TANK A	H2S04	1/2"	PVDF	1" - RIGID GLASS FIBER	ALUMINUM	36'
HT-3407	H2S04-3402	NEUTRALIZATION TANK B	H2S04	1/2"	PVDF	1" - RIGID GLASS FIBER	ALUMINUM	51'
HT-3421	H2S04-3421	SULFURIC ACID STORAGE TANK	SULFURIC ACID	2"	PVDF	1" - RIGID GLASS FIBER	ALUMINUM	2'
HT-3421	H2S04-3423	SULFURIC ACID STORAGE TANK	SULFURIC ACID	2"	PVDF	1" - RIGID GLASS FIBER	ALUMINUM	2'
HT-3421	H2S04-3425	SULFURIC ACID STORAGE TANK	SULFURIC ACID	2"	PVDF	1" - RIGID GLASS FIBER	ALUMINUM	2'
HT-3421	H2S04-3429	SULFURIC ACID STORAGE TANK	SULFURIC ACID	2"	PVDF	1" - RIGID GLASS FIBER	ALUMINUM	2'
HT-3432	H2S04-3432	SULFURIC ACID STORAGE TANK	SULFURIC ACID	2"	PVDF	1" - RIGID GLASS FIBER	ALUMINUM	78'
HT-3433	H2S04-3433	SULFURIC ACID STORAGE TANK	SULFURIC ACID	2"	PVDF	1" - RIGID GLASS FIBER	ALUMINUM	66'
HT-3751	NT-3751	TRICKLING FILTER	NUTRIENTS	3/4"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	5'
HT-3911	FL-3911	CHEMICAL BUILDING	POLYMER	1/2"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	55'
HT-3911	FL-3912	CHEMICAL BUILDING	POLYMER	1/2"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	70'
HT-3911	FL-3931	CHEMICAL BUILDING	POLYMER	1/2"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	90'
HT-3911	FL-3932	CHEMICAL BUILDING	POLYMER	1/2"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	105'
HT-4511	CN-4511	CYANIDE STORAGE TANK	CYANIDE WASTE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	18'
HT-4520	CN-4520	CYANIDE STORAGE TANK	CYANIDE WASTE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	3'
HT-4520	CN-4540	CYANIDE STORAGE TANK	CYANIDE WASTE	1"	PVC80	1"- ELASTOMERIC FOAM	PVC	3'
HT-4520	CN-4521	CYANIDE STORAGE TANK	CYANIDE WASTE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	3'
HT-4520	CN-4522	CYANIDE STORAGE TANK	CYANIDE WASTE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	5'
HT-4520	CN-4527	CYANIDE STORAGE TANK	CYANIDE WASTE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	2'
HT-4520	CN-4528	CYANIDE STORAGE TANK	CYANIDE WASTE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	2'
HT-4520	CN-4529	CYANIDE STORAGE TANK	CYANIDE WASTE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	5'
HT-0460	SC-460	SC REACTION TANKS	STEAM CLEAN	4"	SS10	1"- ELASTOMERIC FOAM	PVC	2'
HT-4611	CR-4611	CHROME STORAGE TANK	CHROME WASTE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	30'
HT-4620	CR-4620	CHROME STORAGE TANK	CHROME WASTE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	3'
HT-4620	CR-4621	CHROME STORAGE TANK	CHROME WASTE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	8'
HT-4620	CR-4625	CHROME STORAGE TANK	CHROME WASTE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	70'
HT-4620	CR-4626	CHROME STORAGE TANK	CHROME WASTE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	3'
HT-4620	CR-4627	CHROME STORAGE TANK	CHROME WASTE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	26'
HT-4631	CR-4631	CHROME REACTION TANK	CHROME WASTE	1"	PVC80	1"- ELASTOMERIC FOAM	PVC	15'
HT-4631	CR-4632	CHROME REACTION TANK	CHROME WASTE	1"	PVC80	1"- ELASTOMERIC FOAM	PVC	15'
HT-4631	CR-4633	CHROME REACTION TANK	CHROME WASTE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	24'
HT-4660	CR-4660	CHROME REACTION TANK	CHROME WASTE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	2'
HT-4660	CR-4670	CHROME REACTION TANK	CHROME WASTE	4"	PVC80	1"- ELASTOMERIC FOAM	PVC	2'
HT-4660	CR-4661	CHROME REACTION TANK	CHROME WASTE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	4'
HT-4660	CR-4671	CHROME REACTION TANK	CHROME WASTE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	3'
HT-4662	CR-4662	CHROME REACTION TANK	CHROME WASTE	2"	PVC80	1"- ELASTOMERIC FOAM	PVC	10'
HT-4662	CR-4663	CHROME REACTION TANK	CHROME WASTE	3"	PVC80	1"- ELASTOMERIC FOAM	PVC	5'
HT-4720	SMB-4720	SODIUM METABISULFITE STORAGE TANK	SODIUM METABISULFITE	2"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	2'
HT-4720	SMB-4721	SODIUM METABISULFITE STORAGE TANK	SODIUM METABISULFITE	2"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	2'
HT-4720	SMB-4700	SODIUM METABISULFITE STORAGE TANK	SODIUM METABISULFITE	2"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	22'
HT-4730	SMB-4730	SODIUM METABISULFITE STORAGE TANK	SODIUM METABISULFITE	1"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	80'
HT-4730	SMB-4740	SODIUM METABISULFITE STORAGE TANK	SODIUM METABISULFITE	1"	PVC80	1" - RIGID GLASS FIBER	ALUMINUM	91'

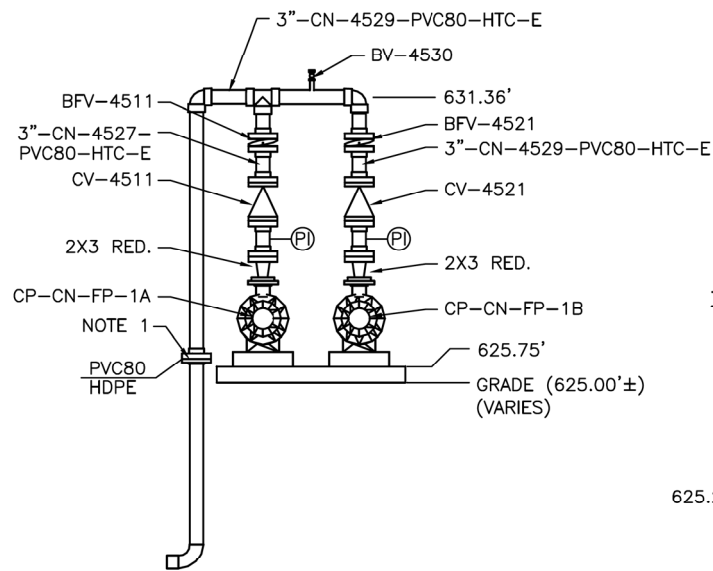
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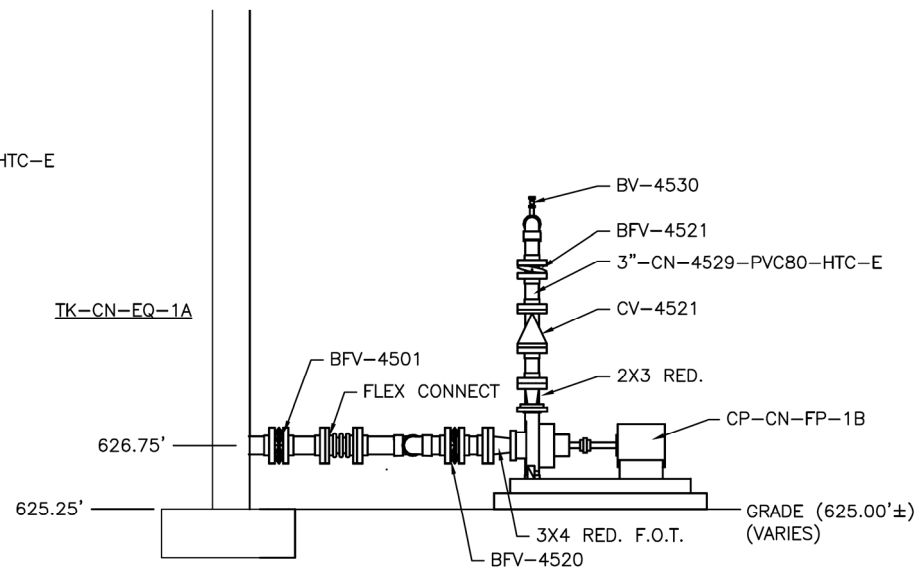


SECTION 1
1/4"=1'-0" M-18

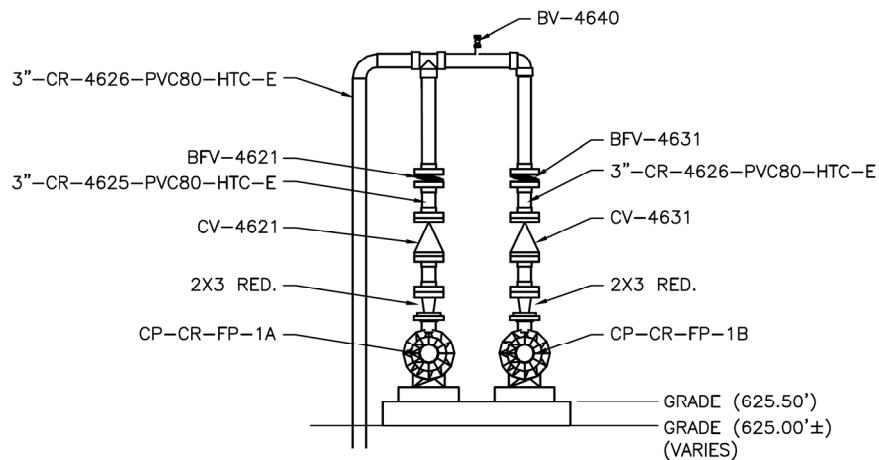
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1/4"=1'-0" M-18



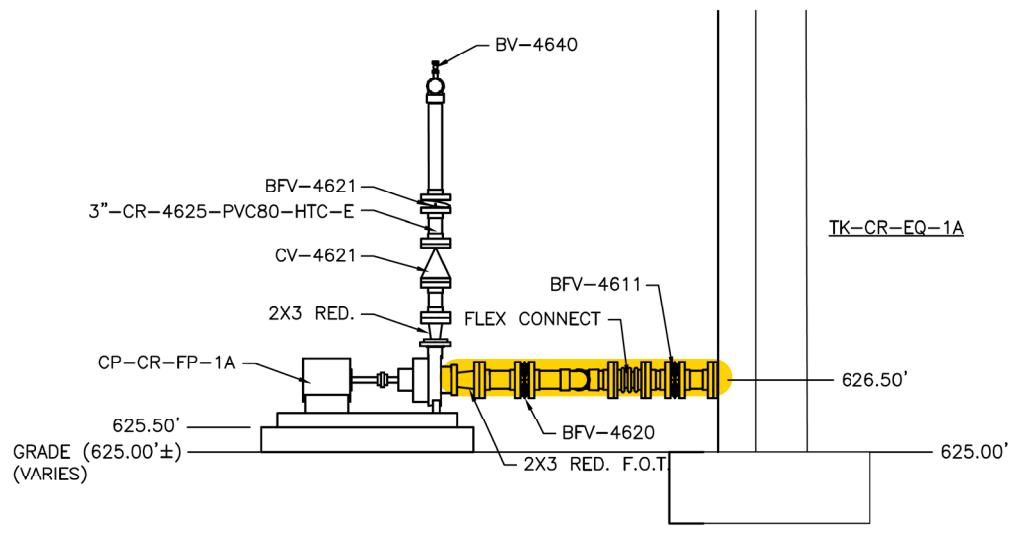
SECTION 3
1/2"=1'-0" M-18



SECTION 4
1/2"=1'-0" M-18



SECTION 5
1/2"=1'-0" M-18



SECTION 6
1/2"=1'-0" M-18

NOTES:

1. TRANSITION FROM HDPE BELOW GRADE TO PVC80 ABOVE GRADE AT FLANGES APPROX. 1'-0" ABOVE GRADE.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR IN THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.



RECORD DRAWINGS

To the best of our knowledge, information and belief, based on information provided by others, these record drawings substantially represent the project as constructed.

O'BRIEN & GERE ENGINEERS, INC.
By: *mjl 1/20/2012*

US Army Corps of Engineers
MOBILE DISTRICT

DATE	DESCRIPTION	MARK	DATE	DESCRIPTION	MARK
1/20/12	RECORD DRAWING	TFM	1/20/12	RECORD DRAWING	TFM
12/4/09	1	TFM	12/4/09	1	TFM
4/3/2009	0	TFM	4/3/2009	0	TFM

DATE: 1/10/09
SOLICITATION NO.: W-27259-004
SOLICITATION BY: W-27259-004
FILE NUMBER: 42988M-23A.dwg

DESIGNED BY: CPT
OWN BY: CPT
CHECKED BY: CPT
PLOT SCALE: 1/2"=1'-0"
PLOT DATE: 01/25/2012
FILE NAME: 42988M-23A.dwg

U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
MOBILE, ALABAMA

O'BRIEN & GERE
2000 S. BIRMINGHAM & LOUISIANA AVENUE, INC.
BIRMINGHAM, ALABAMA 35203

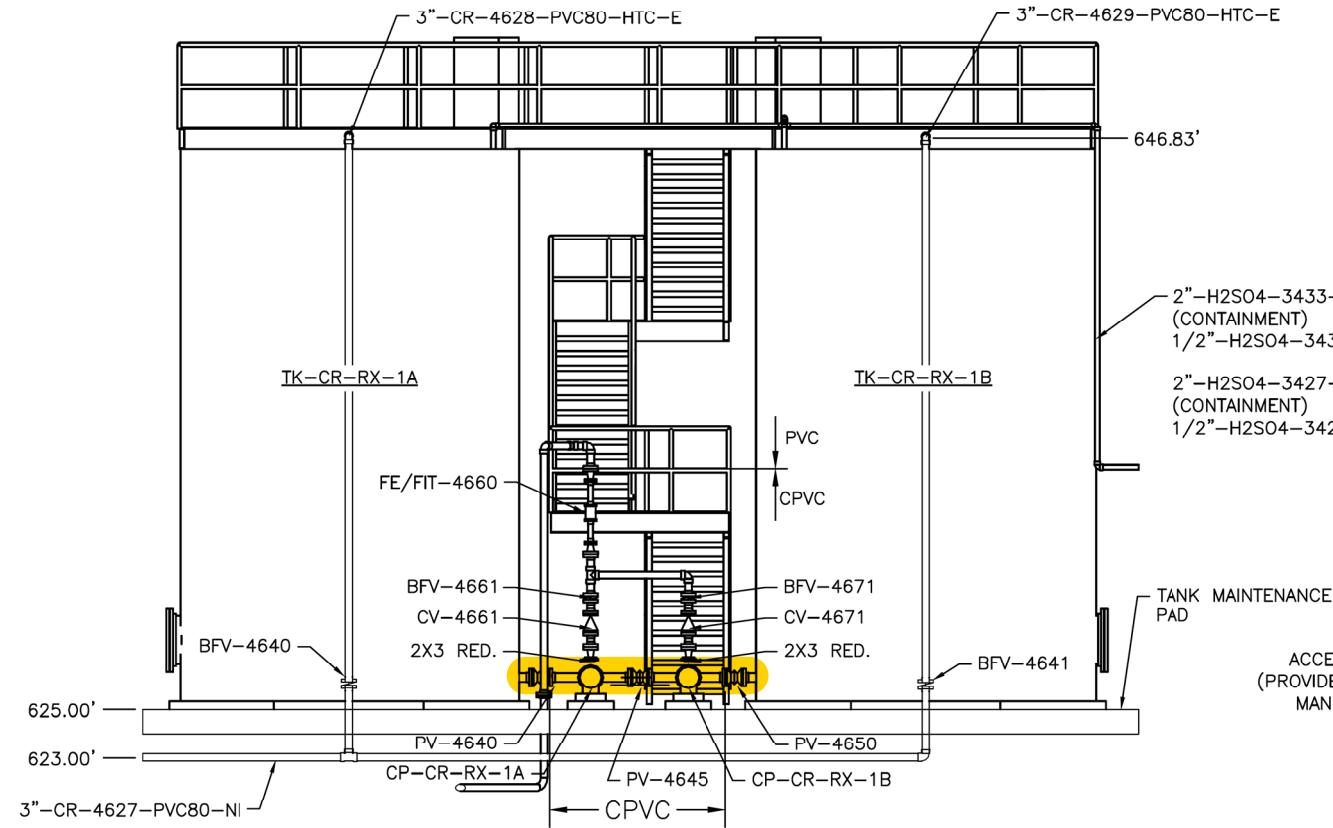
CROWDER
CIVIL ENGINEERING
2000 S. BIRMINGHAM & LOUISIANA AVENUE, INC.
BIRMINGHAM, ALABAMA 35203

ANNISTON ARMY DEPOT, ALABAMA
DESIGN AND CONSTRUCTION OF PN 27259
INDUSTRIAL WASTEWATER TREATMENT PLANT

MECHANICAL
NEW IWTP PRE-TREATMENT

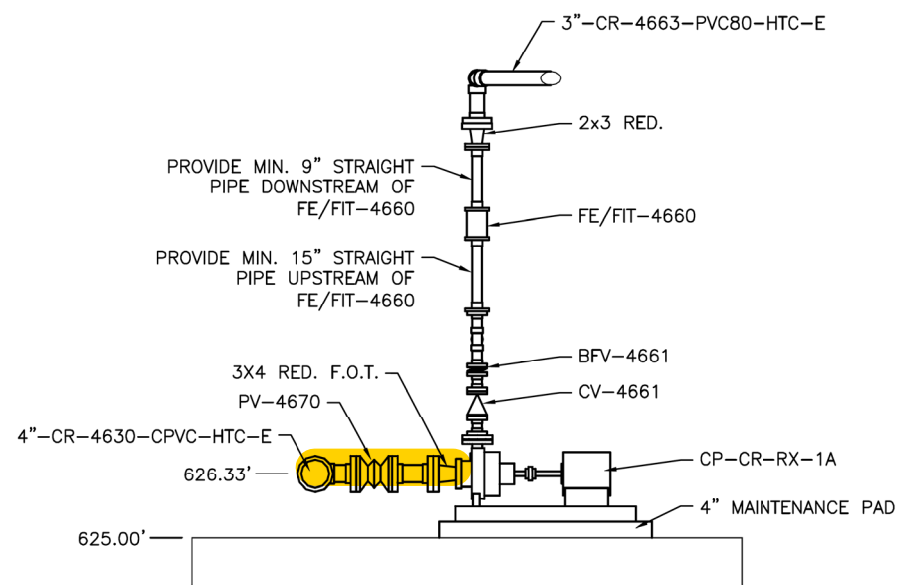
SECTIONS

SHEET IDENTIFICATION
M-23A
SHEET 0 OF



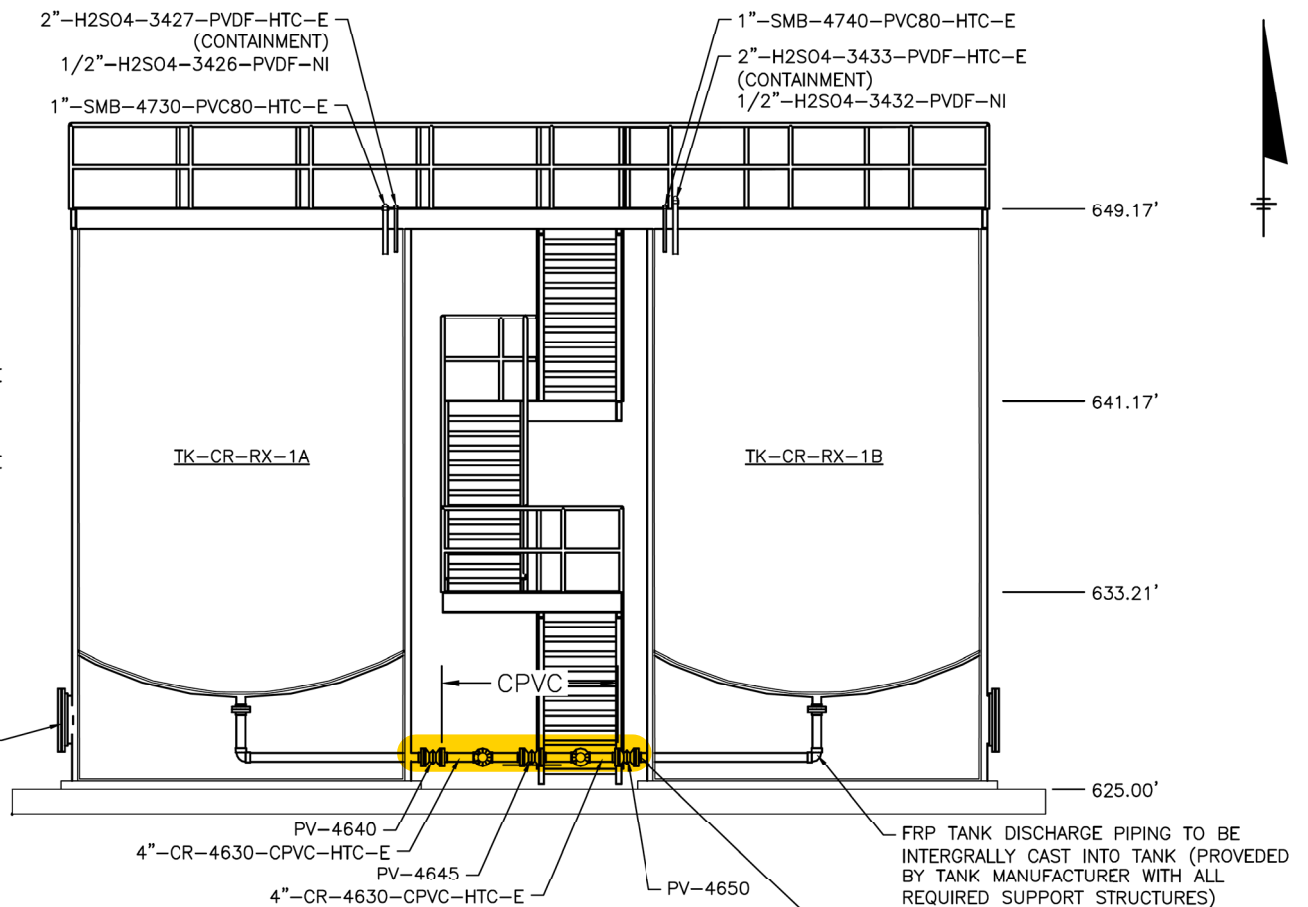
CHROME REACTION TANKS A & B

SECTION
1/4"-1'-0"



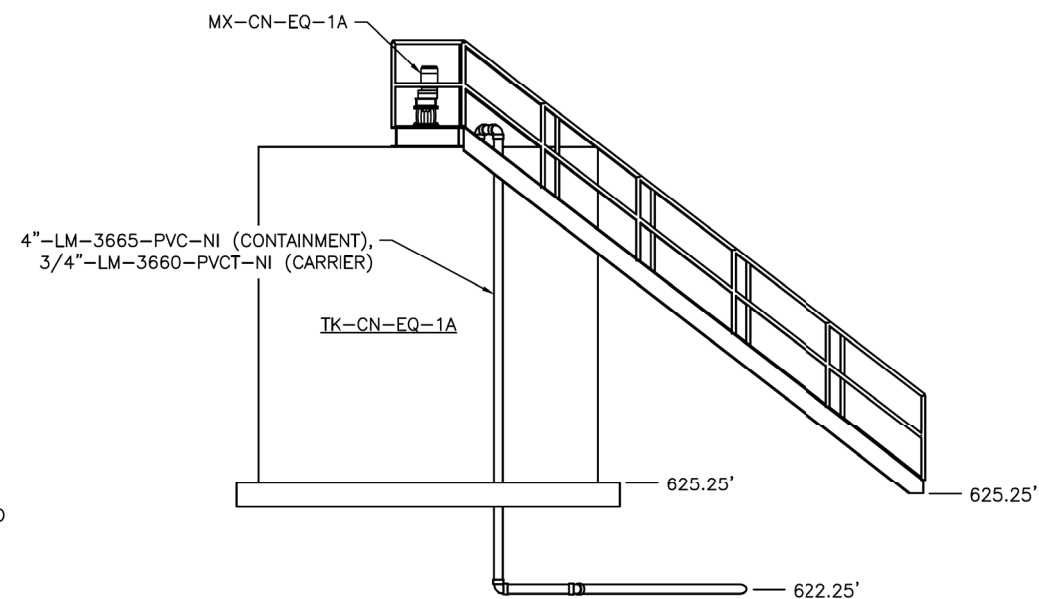
CHROME TRANSFER PUMP 1A

SECTION
1/2"-1'-0"



CHROME REACTION TANKS A & B

SECTION
1/4"-1'-0"



CYANIDE HOLDING TANK

SECTION
1/4"-1'-0"



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RECORD DRAWINGS
To the best of our knowledge,
information and belief, based
on information provided by
others, these record drawings
substantially represent the
project as constructed.
O'BRIEN & GERE ENGINEERS, INC.
By: 9/11/12 1/20/2012



U.S. Army Corps
Engineers
MOBILE DISTRICT

[illegible]

 OBRIEN 60ERE <small>CONSTRUCTION CO.</small>	 CROWDER <small>CONSTRUCTION CO.</small>	<small>2016 CROWN RD. SUITE 100, MOBILE, AL 36688-4400</small>	
		<small>DIVN BY:</small> <small>CONTRACT NO.:</small> <small>SUBMITTED BY:</small> <small>OBRIEN VJ:</small>	<small>CADD BY:</small> <small>QUANTITY/TAKING NO.:</small> <small>CONTRACT NC.:</small> <small>FILE NUMBER:</small>
<small>1-11</small>		<small>PLOT DATE:</small> <small>01/25/2012</small>	<small>PLOT SCALE:</small> <small>1"=40' 4888M=25B.4MG</small>

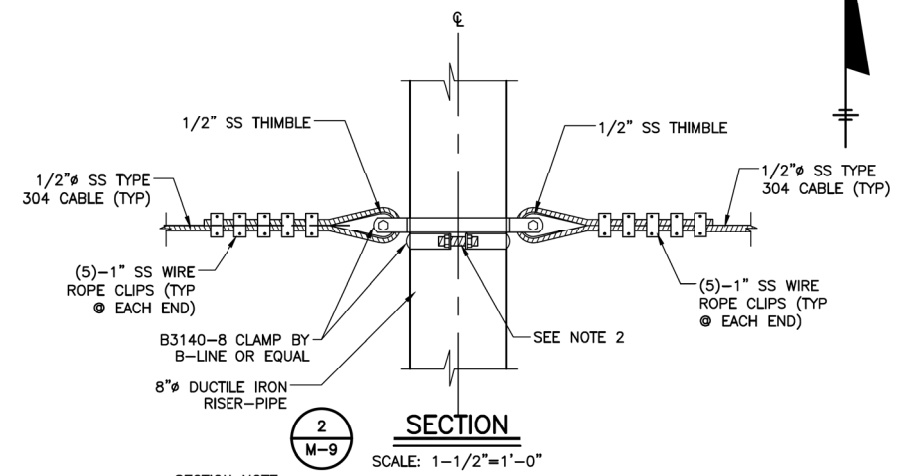
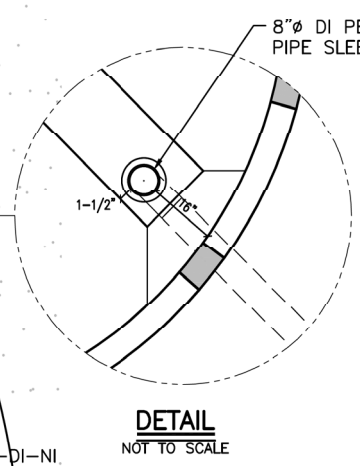
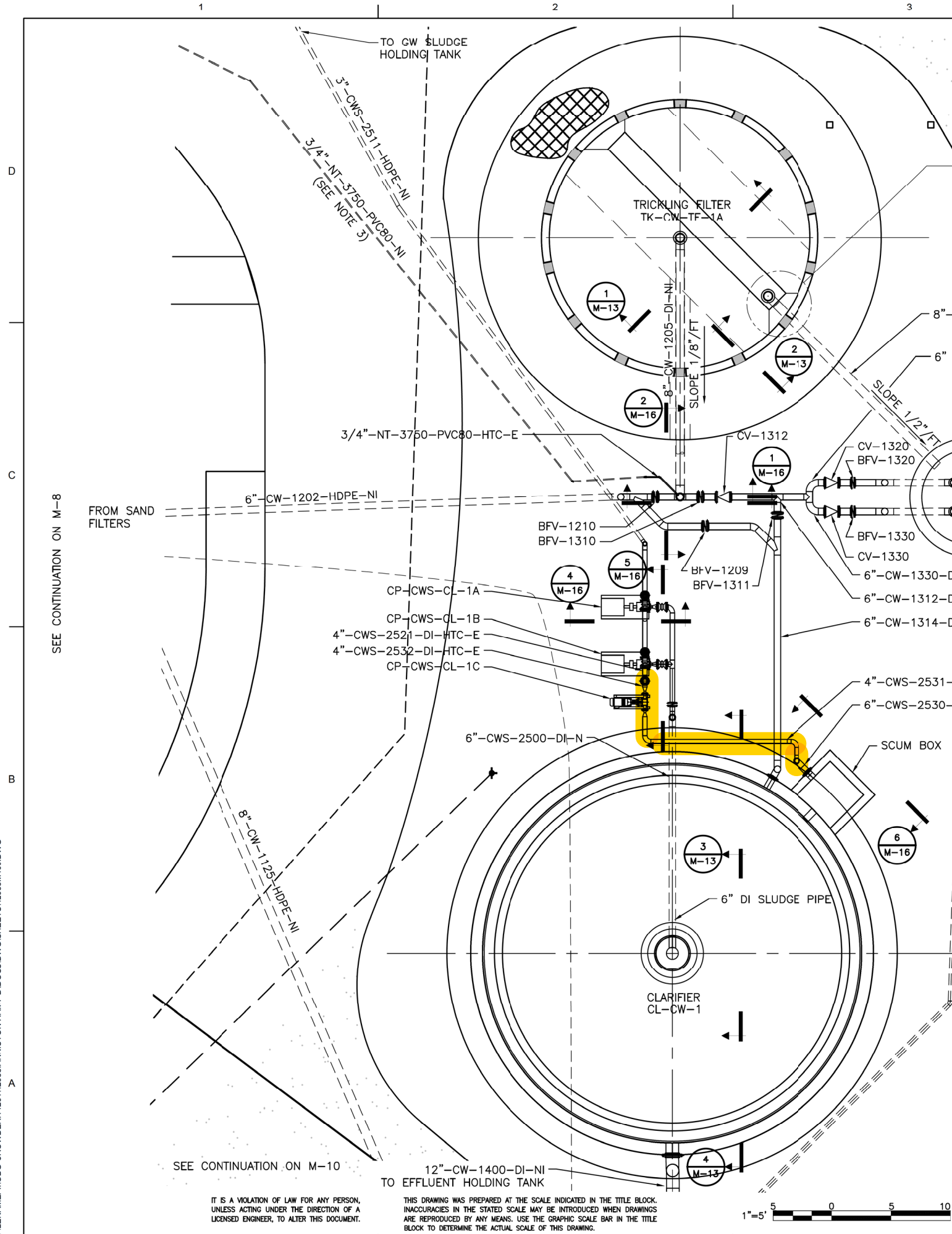
DESIGN AND CONSTRUCTION OF PN 27259
INDUSTRIAL WASTEWATER TREATMENT PLANT

MECHANICAL

NEW IWTP PRE-TREATMENT

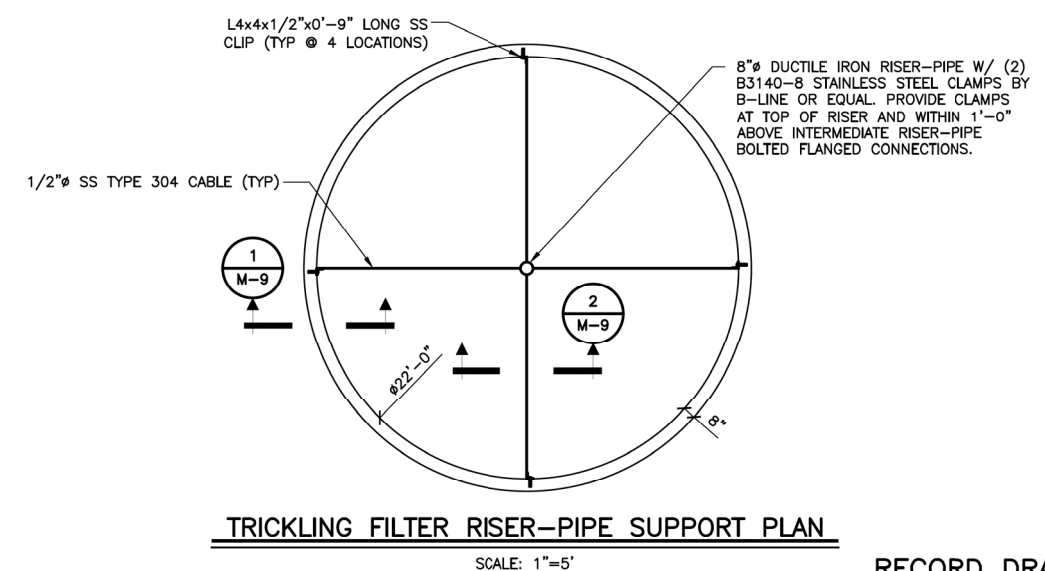
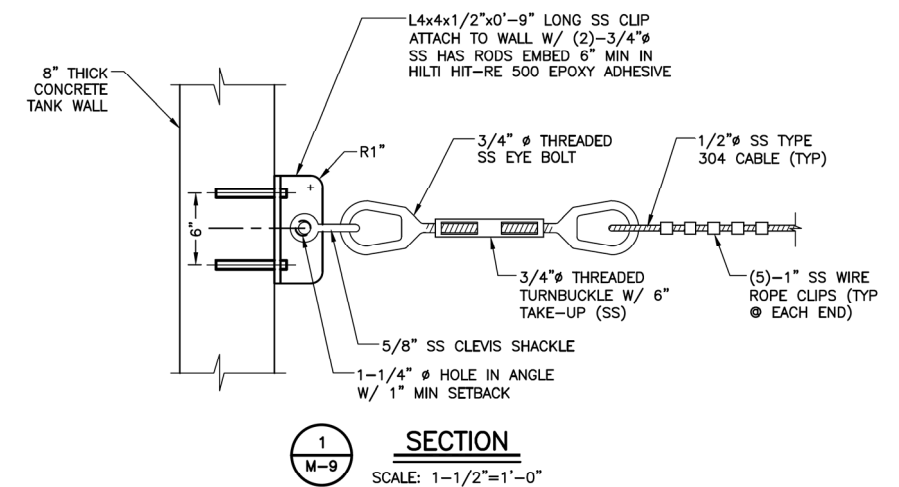
SECTIONS

SHEET
IDENTIFICATION
M-23B
SHEET 0 OF



SECTION NOTE:

- PIPE CLAMP SUPPORT CONNECTION TO BE WITHIN 1'-0" ABOVE INTERMEDIATE RISER-PIPE BOLTED CONNECTIONS AND JUST BELOW ROTARY DISTRIBUTOR CONNECTION.
- SUPPORT CABLE AND ASSOCIATED HARDWARE OMITTED FOR CLARITY.



- NOTES:**
- SEE STRUCTURAL SHEETS FOR TANK DIMENSIONAL INFORMATION.
 - CLARIFIER TOP PLAN VIEW REFER TO SHOP DRAWINGS.
 - INSTALL SPARE 3/4 inch NT LINE ADJACENT TO 3/4 inch NT-3750-PVC80-NI.

RECORD DRAWINGS
To the best of our knowledge, information and belief, based on information provided by others, these record drawings substantially represent the project as constructed.
O'BRIEN & GERE ENGINEERS, INC.
By: *971/1 1/20/2012*

<p>US Army Corps of Engineers MOBILE DISTRICT</p>		<p>DATE: 1/10/09</p> <p>SOLICITATION NO.: W-2550-004</p> <p>FILE NUMBER: 42988M409.dwg</p>	
<p>DESIGNED BY: DWN BY: 08/02/09</p> <p>QUANTITIES BY: 08/02/09</p> <p>PLANT SCALE: 1/8" = 1'-0"</p> <p>DATE: 01/25/2012</p> <p>FILE NAME: 42988M409.dwg</p>	<p>U.S. ARMY CORPS OF ENGINEERS MOBILE DISTRICT MOBILE, ALABAMA</p> <p>O'BRIEN & GERE ENGINEERS, INC. 2000 S. BIRMINGHAM & LANTANA ENGINEERING, INC.</p> <p>CROWDER ENGINEERS, INC.</p>	<p>ANNISTON ARMY DEPOT, ALABAMA DESIGN AND CONSTRUCTION OF PN 27259 INDUSTRIAL WASTEWATER TREATMENT PLANT</p> <p>MECHANICAL TRICKLING FILTER & CLARIFIER</p> <p>PARTIAL PROCESS PIPING PLAN</p>	<p>SHEET IDENTIFICATION M-9 SHEET 0 OF</p>