SACRAMENTO AREA SEWER DISTRICT

SERVING YOU 24/7

AUGUST 2025

CONTRACT DOCUMENTS FOR THE CONSTRUCTION OF

ECHOWATER RESOURCE RECOVERY FACILITY FOG STATION SYSTEM REPAIRS PROJECT

Version: 2024.1.0

BID SET

PART C - DRAWINGS

RFB# 8514
CONTRACT NUMBER

SACRAMENTO AREA SEWER DISTRICT

SERVING YOU 24/7

AUGUST 2025

BOARD OF DIRECTORS

R. Desmond
R. Dickinson
P. Hume
R. Jennings
L. Kaplan
J. Karpinski-Costa
P. Kennedy
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D. Sander
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D. Suen
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CONTRACT DOCUMENTS FOR THE CONSTRUCTION OF

ECHOWATER RESOURCE RECOVERY FACILITY

FOG STATION SYSTEM REPAIRS PROJECT

BID SET

Version: 2024.1.0

PART C - DRAWINGS

APPROVALS

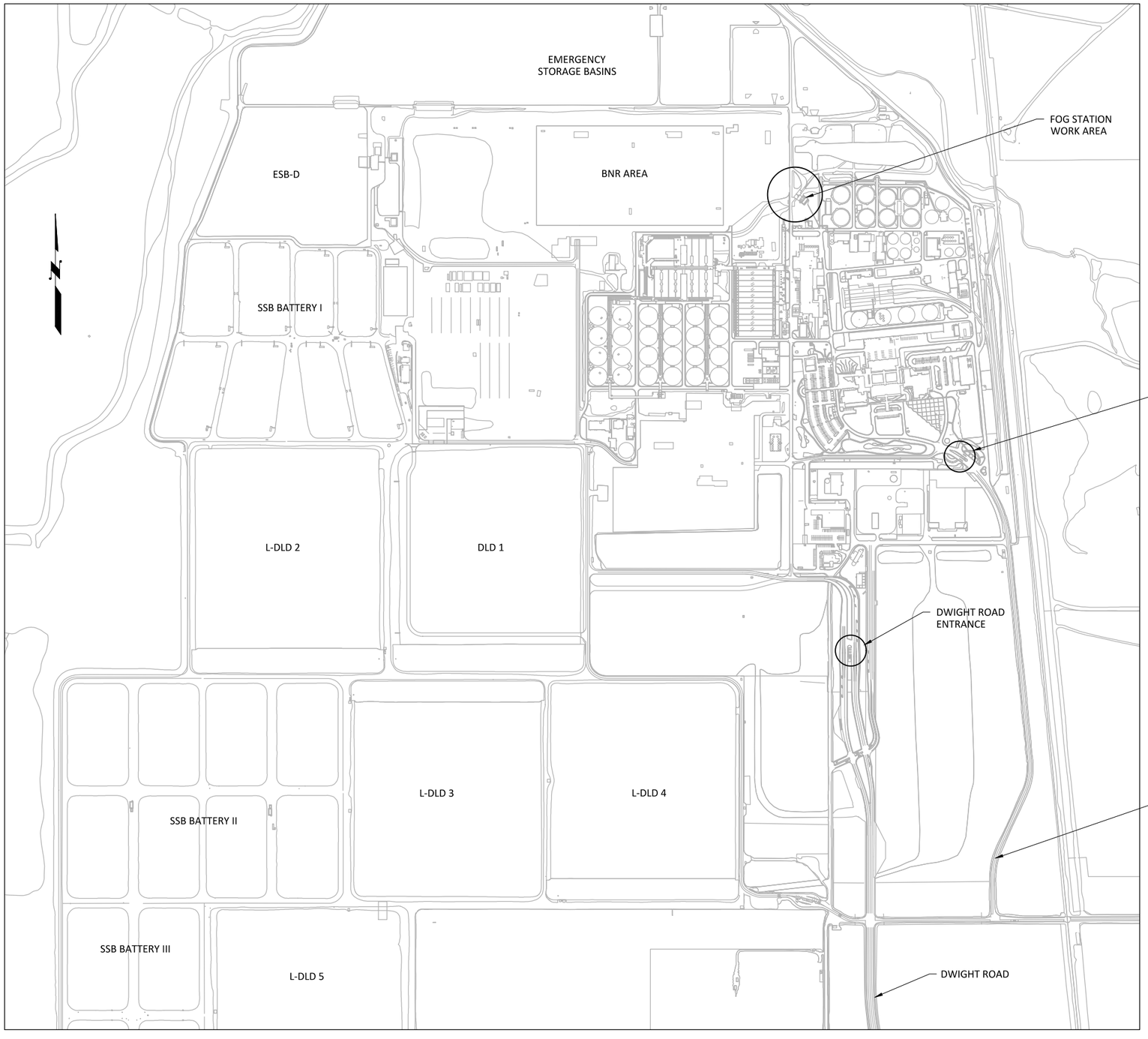
Signed by: Gerardo Aguirre 5E2BD9F0A4E644D...
8/18/2025
SUBMITTAL APPROVED: DATE
GERARDO AGUIRRE, PE
PROJECT MANAGER

Signed by: William Yu D432B6D55629454...
8/19/2025
SUBMITTAL APPROVED: DATE
W. YU, PE
ENGINEERING MANAGER, ECHOWATER OPERATIONS DEPARTMENT

Signed by: C33FE8AE2DC48E...
8/20/2025
SUBMITTAL APPROVED: DATE
S. LUNDE, PE
DIRECTOR, ECHOWATER OPERATIONS DEPARTMENT

DocuSigned by: Christopher Dobson ABF187D2508B41C...
8/20/2025
APPROVED: DATE
C. DOBSON, PE
DISTRICT ENGINEER

CONTRACT NUMBER
RFB# 8514



INDEX OF DRAWINGS

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER
GERARDO AGUILAR
NO. C 68362
EXP: 09/30/25
CIVIL
STATE OF CALIFORNIA

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

LINE IS 2 INCHES AT FULL SIZE
(IF NOT 2"-SCALE ACCORDINGLY)

FILE
DRAWN
DESIGNED
CHECKED

ECHOWATER RESOURCE RECOVERY FACILITY

RFB# 8514
CONTRACT NUMBER

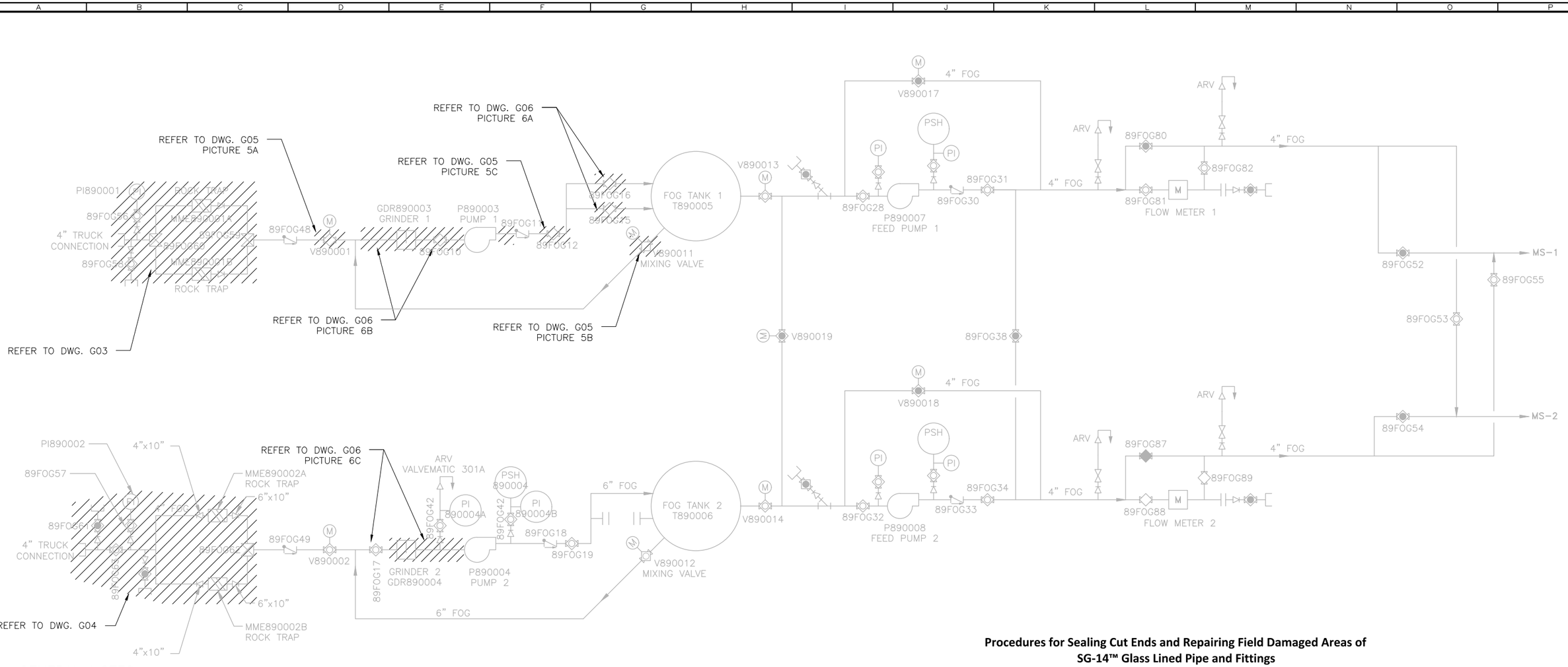
GENERAL

ECHOWATER FACILITY SITE PLAN WORK LOCATION

SCALE
NO SCALE

DRAWING NUMBER
G01

SHEET NUMBER
1 OF 10



GENERAL NOTES:

1. WORK INVOLVES THE REPLACEMENT OF FOUR (4) SIX INCH PLUG VALVES WITH DISTRICT PROVIDED BALL VALVES. THE NEW SIX INCH BALL VALVES ARE LONGER THAN THE EXISTING VALVES AND TWO EXISTING SPOOLS SHALL BE SHORTENED. OTHER WORK COMPONENTS INCLUDES:
   - DEMOLISH TRUCK OFFLOADING PIPING, ROCK TRAPS AND THREE–WAY VALVES UP TO EXISTING CHECK VALVES.
   - DEMOLISH THE TWO GRINDERS, PIPING AND VALVES IMMEDIATELY BEFORE AND AFTER THE GRINDERS.
   - OTHER WORK AS INDICATED IN THE DRAWINGS.
2. SUBMIT FOR REVIEW A COPY OF THE CONTRACTOR'S SAFETY PLAN AND ACCESS REQUEST (AR) FOR APPROVAL IN ORDER TO SCHEDULE THE WORK. REFER TO SPEC SECTIONS 00 73 19 AND 01 14 16.
3. SUBMIT FOR REVIEW AND APPROVAL COPIES OF PROPOSED PROJECT MATERIALS.
4. WORK SHALL BE COMPLETED NO LATER THAN 180 WORKING DAYS AFTER NOTICE TO PROCEED. LIQUIDATED DAMAGES SHALL BE $500/DAY IF WORK EXTENDS BEYOND THIS PERIOD. PROVIDE A PROJECT SCHEDULE IN ACCORDANCE WITH SAC COUNTY SPEC SECTION 7–5.
5. DISPOSE OF ALL DEMOLISHED MATERIALS OFF–SITE AT THE CONTRACTOR'S EXPENSE.
6. FOG PIPING HAS A HEAT TRACING SYSTEM. PROTECT THE WIRING WHILE PERFORMING WORK AND RE–ATTACH ONCE MECHANICAL WORK IS COMPLETE.

Procedures for Sealing Cut Ends and Repairing Field Damaged Areas of SG-14™ Glass Lined Pipe and Fittings

1. Remove burrs caused by field cutting of ends or handling damage and smooth out the edge of the lining if rough.
2. Remove all traces of oil, grease, asphalt, dust, dirt, etc. using a clean rag and cleaning solvent.
3. Remove any damaged lining caused by field cutting operations or handling and clean any exposed metal by sanding or scraping. Sandblasting or power tool cleaning or roughening is also acceptable although care should be used to not further damage the glass surface with blast media. Remove any loose lining.
4. With the area to be sealed or repaired absolutely clean and roughened, apply a coat of SG-14™ Glass Repair Epoxy using the following procedure:
   a. The repair kit contains two small cans of a two-component epoxy, marked as Par "A", and part "B".
   b. Mix thoroughly one part of the activator to 4 parts of the "base" material using the wooden paddle included in the kit.
   c. Only mix as much material as will be needed within 1 hour. Once mixed, the activator will limit the usable life of the material.
   d. Apply to surface to be repaired using the brush provided, overlapping onto the glass at least 1 inch onto sound SG-14™ Glass Lining.
5. Technical Data for SG-14™ Glass Repair Epoxy
   a. Description- A brush able polyamide epoxy designed for sealing ends and repairs when pipes are lined with SG-14™ Glass Lining.
   b. Limitation- Glass repair epoxy should be used over glass or bare metal for repairing cut ends of pipe or small damaged areas. The glass repair epoxy must be used over properly prepared ductile iron or steel surfaces or roughened glass surface.
   c. The surface preparation shall be equal to the specifications for the project or as outlined above. Do not apply glass repair over wet or frozen surfaces or glass surfaces that have not been roughened.
   d. Dry film thickness should be per specifications standards, usually 3.0-5.0 mils per coat in two coats, or 6.0-10.0 mils dry film thickness.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER — FERNANDO AGUIRRE — NO. C 68362 — EXP: 09/30/25 — CIVIL — STATE OF CALIFORNIA

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"–SCALE ACCORDINGLY)

FILE
DRAWN
DESIGNED
CHECKED

ECHOWATER RESOURCE RECOVERY FACILITY

RFB# 8514
CONTRACT NUMBER

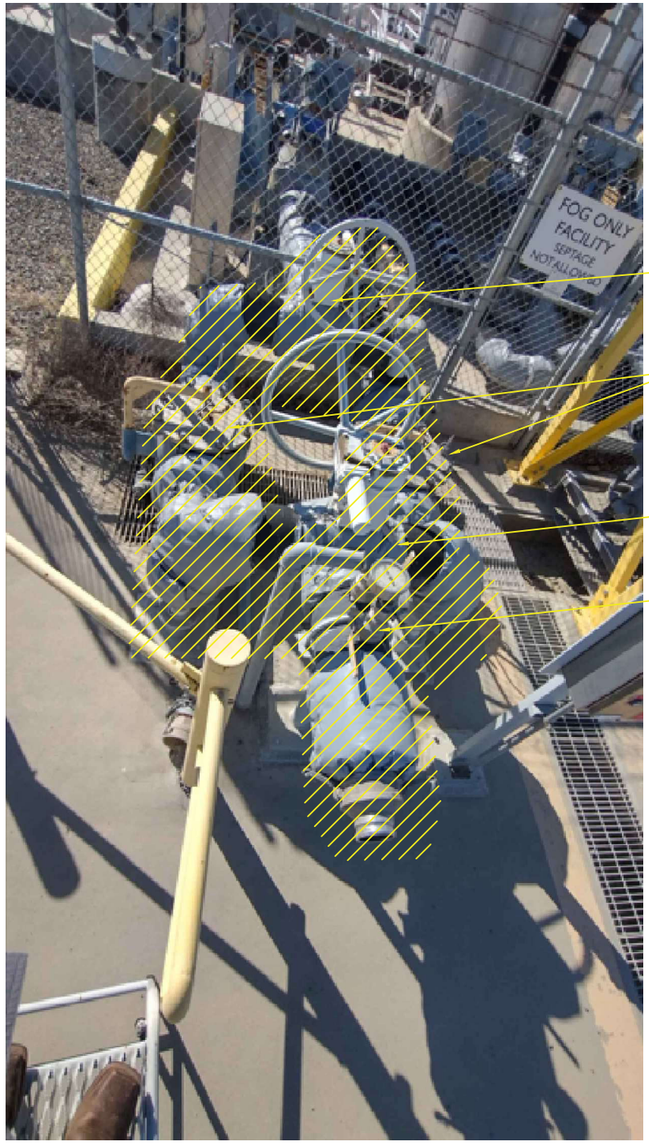
GENERAL

FOG STATION SCHEMATIC DEMOLITION WORK OVERVIEW

SCALE: NO SCALE

DRAWING NUMBER: G02

SHEET NUMBER: 2 OF 10

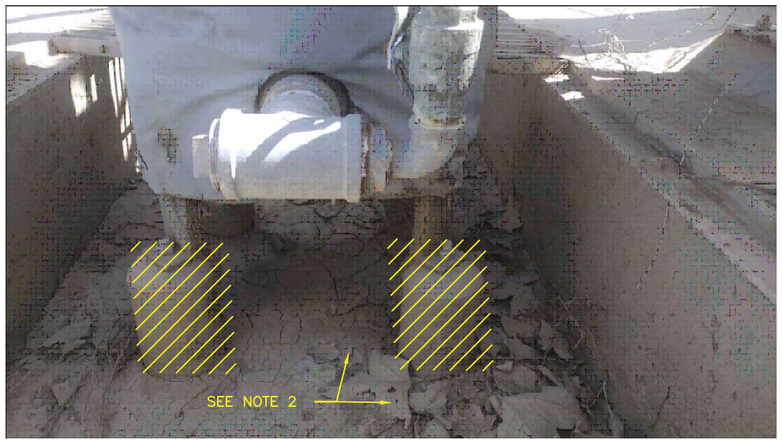


PICTURE 3A

1. DEMOLISH 6" PIPING AND PIPING SUPPORTS FROM TRUCK CONNECTION UP TO AND INCLUDING THREE WAY VALVES.
2. REMOVE THE TWO BASKET STRAINERS INCLUDING SUPPORTS.
3. PIPING HAS A HEAT TRACE WIRING WRAPPED AROUND IT. DO NOT DAMAGE IT AND RE-INSTALL ON NEW PIPING. THE DISTRICT WILL CUT EXCESS WIRING AND INSTALL SPLICE KIT IF NECESSARY.
4. SALVAGE 2" BALL VALVE W/ GAUGE, INSULATION BLANKETS AND PIPE SUPPORTS.

PICTURE 3B

1. DEMOLISH 6" PIPING SUPPORTS INCLUDING GROUT AND ANCHOR BOLTS, TYP. OF 4.
2. REMOVE PIPE SUPPORT AND SALVAGE FOR RE-USE. DEMO GROUT BASE AND CUTOFF ANCHORS.
3. DEMOLITION OF PIPING, BASKET STRAINERS AND VALVES SHOWN IN PICTURE 3A.
4. REMOVE TWO INCH LINE INCLUDING GROUND UNISTRUT.



PICTURE 3C

1. DEMOLISH BASKET STRAINER SUPPORTS, TYP. OF FOUR PER STRAINER, TOTAL OF 8. PROVIDE A SMOOTH CONCRETE SURFACE.
2. REMOVE DIRT AND DEBRIS IN CHANNEL (18'L x 3'W).

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER — ALEJANDRO AGUIRRE — NO. C 68362 — EXP: 09/30/25 — CIVIL — STATE OF CALIFORNIA

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"-SCALE ACCORDINGLY)

FILE
DRAWN
DESIGNED
CHECKED

ECHOWATER RESOURCE RECOVERY FACILITY

RFB# 8514
CONTRACT NUMBER

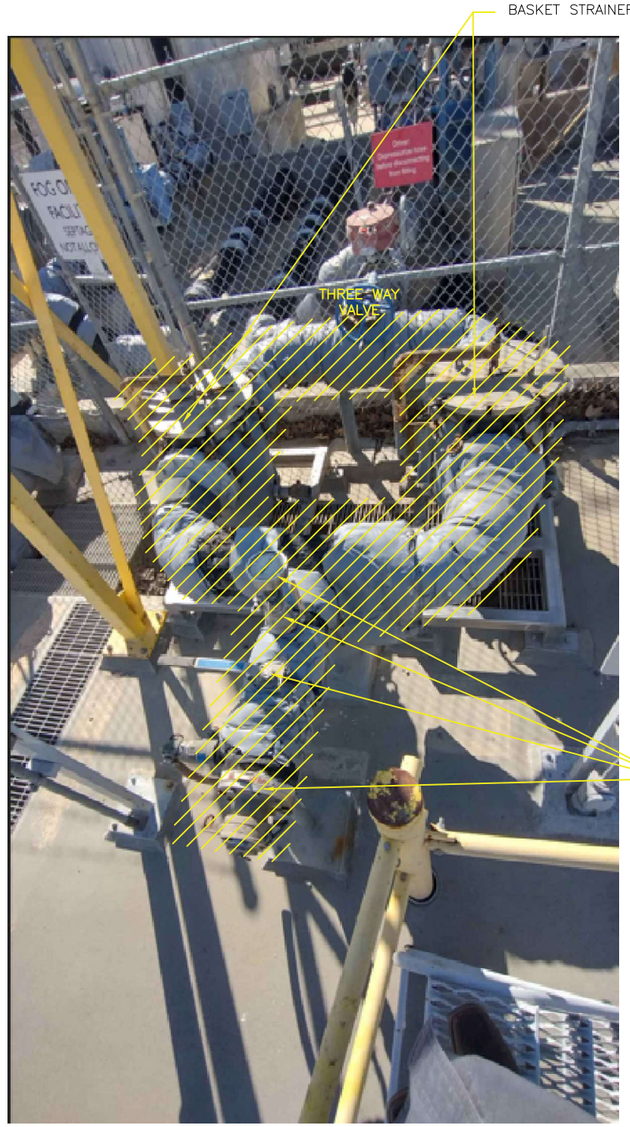
GENERAL

OFFLOADING STATION 1 DEMOLITION WORK

SCALE: NO SCALE

DRAWING NUMBER: G03

SHEET NUMBER: 3 OF 10



PICTURE 4A

1. DEMOLISH 6" PIPING AND PIPING SUPPORTS FROM TRUCK CONNECTION UP TO AND INCLUDING THREE WAY VALVE.
2. REMOVE THE TWO BASKET STRAINERS INCLUDING SUPPORTS.
3. PIPING HAS A HEAT TRACE WIRING WRAPPED AROUND IT. DO NOT DAMAGE IT AND RE-INSTALL ON NEW PIPING. DISTRICT STAFF WILL CUT EXCESS WIRING AND INSTALL SPLICE KIT IF NECESSARY.
4. SALVAGE 2" BALL VALVE W/PRESSURE GAGE, 4" BALL VALVE, 4" CAMLOCK FLANGE ADAPTER, INSULATION BLANKETS AND PIPE SUPPORTS.

PICTURE 4B

1. DEMOLISH PIPING SUPPORTS INCLUDING GROUT AND ANCHOR BOLTS, TYP. OF 4. TWO SUPPORTS ARE IN THE BACK OF THE STRAINERS AND NOT SHOWN IN PICTURE.
2. DEMOLITION OF PIPING, BASKET STRAINERS AND VALVES SHOWN IN PICTURE 4A.

PICTURE 4C

1. DEMOLISH BASKET STRAINER SUPPORTS, TYP. OF 2 – ONE PER STRAINER, PROVIDE A SMOOTH CONCRETE SURFACE AT EACH BASE SUPPORT.

PICTURE 4D

1. REMOVE ANCHOR BOLTS (QTY. 16) AND GROUT BASES (QTY. 4) OF GANTRY SYSTEM AND PROVIDE A SMOOTH FINISHED SURFACE AT EACH LEG.
2. DISASSEMBLE GANTRY SYSTEM INTO THREE PIECES CONSISTING OF BRIDGE GIRDER WITH HOIST/TROLLEY, AND TWO GANTRY LEGS WITHOUT CAUSING DAMAGE TO GANTRY SYSTEM. SET THREE GANTRY SYSTEM COMPONENTS ASIDE TO BE PICKED AND RE-PURPOSED BY THE DISTRICT.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER — GERARDO AGUILERA — NO. C 68362 — EXP. 09/30/25 — CIVIL — STATE OF CALIFORNIA

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"–SCALE ACCORDINGLY)

FILE
DRAWN
DESIGNED
CHECKED

ECHOWATER RESOURCE RECOVERY FACILITY

RFB# 8514
CONTRACT NUMBER

GENERAL

OFFLOADING STATION 2 DEMOLITION WORK

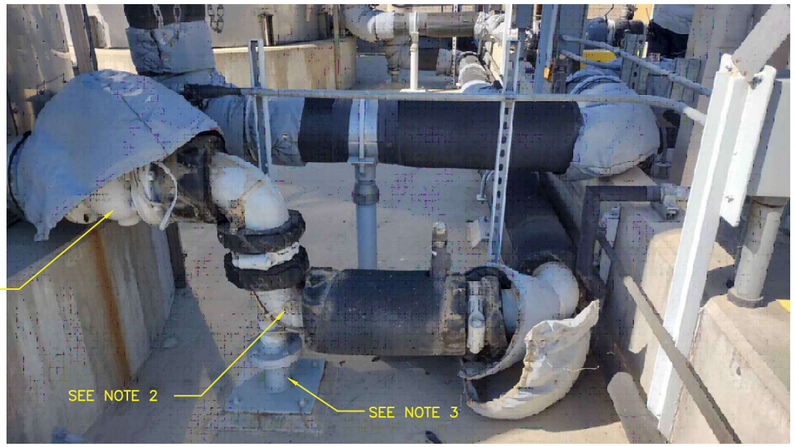
SCALE: NO SCALE

DRAWING NUMBER: G04

SHEET NUMBER: 4 OF 10

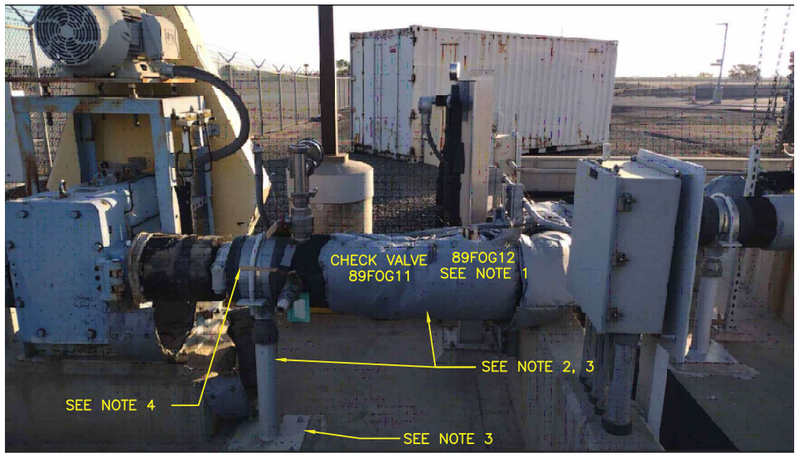
PICTURE 5A

1. REMOVE PLUG VALVE AND INSTALL 6" BALL VALVE. NEW BALL VALVE IS LONGER THAN EXISTING ONE AND WILL PUSH CHECK VALVE INTO THE FENCE.
2. MOUNT DISTRICT PROVIDED ACTUATOR ONTO NEW BALL VALVE.



PICTURE 5B

1. REMOVE PLUG VALVE AND INSTALL 6" BALL VALVE. MOUNT DISTRICT PROVIDED ACTUATOR.
2. SHORTEN SPOOL APPROXIMATELY 5", CUT-IN GROOVE FOR VICTAULIC CONNECTION AND REPAIR GLASS-LINING PER INSTRUCTIONS ON DWG. 02.
3. RELOCATE PIPE SUPPORT AS REQUIRED DUE TO SHIFT FROM LONGER BALL VALVE.



PICTURE 5C

1. REMOVE PLUG VALVE AND INSTALL 6" BALL VALVE. NEW VALVE IS LONGER,
2. RELOCATE PIPE SUPPORT IN BETWEEN BALL VALVE AND CHECK VALVE. REPLACE PIPE SUPPORT HEAD WITH DISTRICT PROVIDED PIPE SUPPORT FLANGE.
3. REMOVE GROUT PAD AND ANCHOR BOLTS. PROVIDE A SMOOTH SURFACE FINISH.
4. SHORTEN SPOOL APPROXIMATELY 5". CUT-IN GROOVE FOR VICTAULIC CONNECTION AND REPAIR GLASS LINING PER DWG. 02 INSTRUCTIONS.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER
EDUARDO AGUIRRE
NO. C 68362
EXP: 09/30/25
CIVIL
STATE OF CALIFORNIA

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

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FILE
DRAWN
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ECHOWATER RESOURCE RECOVERY FACILITY

RFB# 8514
CONTRACT NUMBER

GENERAL

OFFLOADING STATION 1 PICTURES

SCALE
NO SCALE

DRAWING NUMBER
G05

SHEET NUMBER
5 OF 10

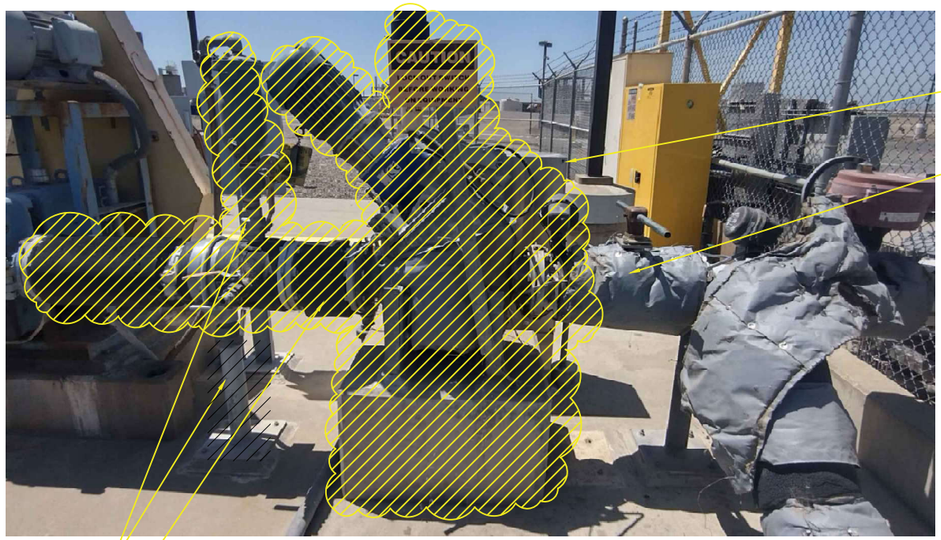
PICTURE 6A

1. REMOVE 6" PLUG VALVES. PROVIDE BLIND FLANGES ON BOTH SIDES OF 89FOG15.
2. PROVIDE FLANGED SPOOL IN PLACE OF 89FOG16. RE-USE SPOOL FROM GDR890002.

PICTURE 6B – GDR890001

PICTURE 6B NOTES:

1. DEMOLISH FLANGED COUPLING, SPOOL, GRINDER, GRINDER CONCRETE PAD, PLUG VALVE AND SPOOL SECTIONS CONNECTING TO PUMP.
2. REMOVE GRINDER CONTROL PANEL INCLUDING ANCHOR BOLTS AND GROUT PAD. SACSEWER STAFF WILL DISCONNECT, PULL NEW WIRING AND CONNECT TO NEW GRINDER PANEL. REFER TO WORK RESTRICTIONS SS 01 14 00.
3. DEMOLISH PIPE SUPPORTS, GROUT BASE AND ANCHOR BOLTS.
4. SAVE PIPE SUPPORTS, 2" BALL VALVE AND PRESSURE GAUGE FOR RE-USE.



PICTURE 6C – GDR890002

PICTURE 6B NOTES:

1. DEMOLISH SECTION OF PIPING BETWEEN BALL VALVE 89FOG17 AND OFF-LOADING PUMP INCLUDING, SHORT SPOOL, GRINDER, GRINDER CONCRETE PAD, AND SPOOL SECTIONS LEADING TO PUMP.
2. REMOVE GRINDER CONTROL PANEL INCLUDING ANCHOR BOLTS AND GROUT PAD. SACSEWER STAFF WILL DISCONNECT, PULL NEW WIRING AND CONNECT TO NEW GRINDER PANEL. REFER TO WORK RESTRICTIONS SS 01 14 00.
3. DEMOLISH PIPE SUPPORT, GROUT PAD AND ANCHOR BOLTS.
4. SAVE PIPE SUPPORT AND 2" MANIFOLD WITH BALL VALVE, TEE, AND AIR RELIEF VALVE FOR RE-USE.
5. SAVE SPOOL AND INSTALL AT 89FOG16.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER — GERARDO AGUIRRE — NO. C 68362 — EXP: 09/30/25 — CIVIL — STATE OF CALIFORNIA

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"-SCALE ACCORDINGLY)

FILE
DRAWN
DESIGNED
CHECKED

ECHOWATER RESOURCE RECOVERY FACILITY

RFB# 8514
CONTRACT NUMBER

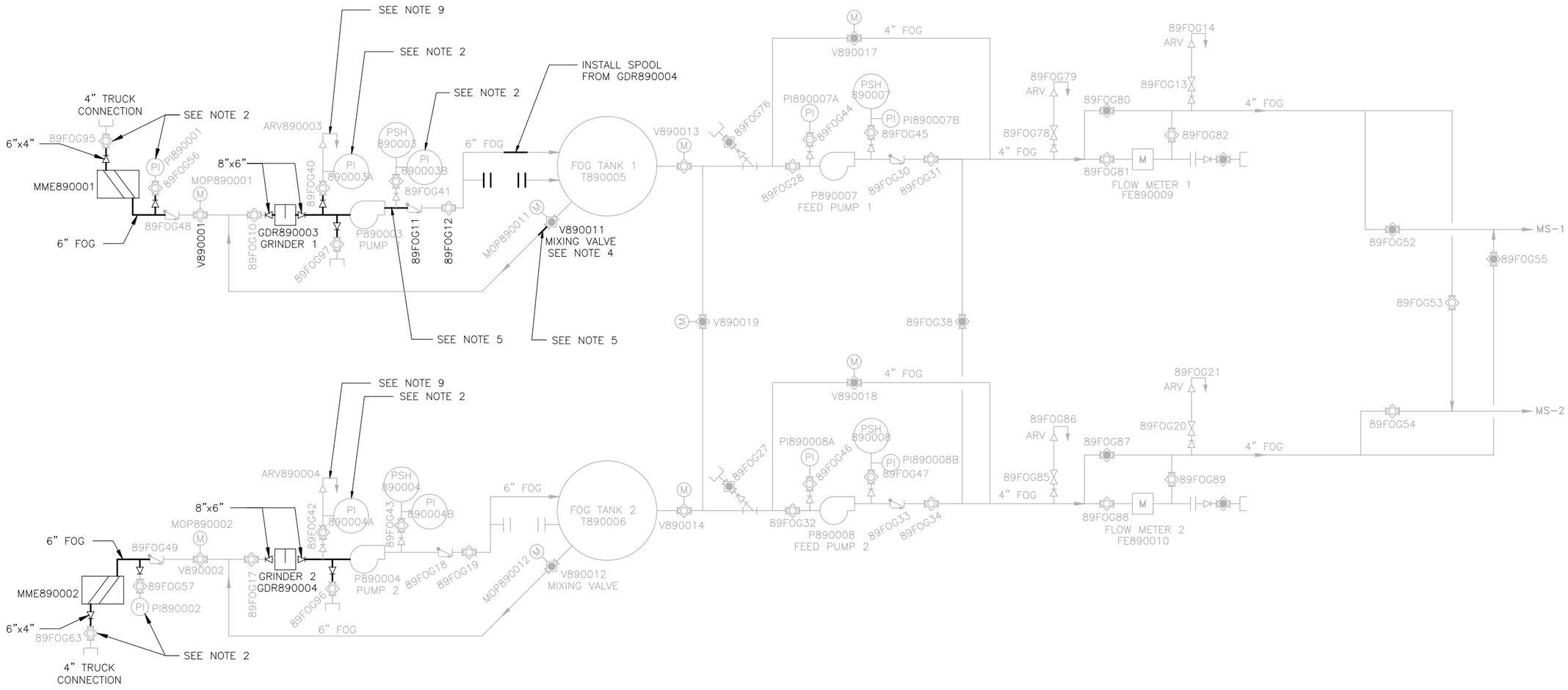
GENERAL

GRINDER DEMOLITION

SCALE: NO SCALE

DRAWING NUMBER: G06

SHEET NUMBER: 6 OF 10



GENERAL NOTES

1. GLASS LINING FOR THE TWO SHORTENED SPOOL FITTINGS SHALL BE REPAIRED PER INSTRUCTIONS ON DWG. G02. ENSURE TO COAT OVER EDGE OF PIPE.
2. 4" BALL VALVE, PRESSURE GAUGE, AND 2" BALL VALVE ARE SALVAGED FROM EXISTING INSTALLATION.
3. PROVIDE NEW VICTAULIC GASKETS OR FLANGED GASKETS AT ALL APPLICABLE PIPING LOCATIONS.
   - 3.1. VICTAULIC GASKETS SHALL BE TYPE O, FLUOROELASTOMER (FKM).
   - 3.2. FLANGED GASKETS SHALL BE PTFE BONDED EPDM, LOW TORQUE AV GASKETS, ASAHI/AMERICA OR EQUAL.
4. 6" BALL VALVES AND ACTUATORS ARE DISTRICT PROVIDED.

SHORTENED SPOOLS CUT IN THE FIELD

5. SHORTEN EXISTING SPOOL AS REQUIRED TO FIT NEW BALL VALVE. APPLICABLE AT V890011 AND 89FOG11.
6. ENSURE GROOVE AREA IS CLEAN, FREE OF OIL, GREASE AND DIRT.
7. APPLY TWO COATS OF MULTIPURPOSE EPOXY MASTIC, PITT-GUARD 97-948, DEVOE BAR-RUST 231 LOW VOC OR EQUAL. TOTAL OF 10-14 MILS DFT.

NEW PIPE SECTIONS / SPOOLS / FITTINGS

8. REFER TO SS 40 05 24. & SS 40 05 03
9. INSTALL DISTRICT PROVIDED AIR RELIEF VALVE AND RECONSTRUCT 2" SECTION WITH PRESSURE GAUGE AS SHOWN.
10. NEW SPOOLS AND FITTINGS SHALL COME FROM FABRICATION SHOP WITH A 5-7 MIL DFT PRIME COAT. CONTRACTOR SHALL APPLY A FINISH COAT TO NEW PIPE SEGMENTS AND FITTINGS. FINISH COAT SHALL BE 5-7 MIL DFT, PITT-GUARD 97-948 OR EQUAL.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER — ALVARDO AGUILERA — NO. C 68362 — EXP: 09/30/25 — CIVIL — STATE OF CALIFORNIA

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

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FILE
DRAWN
DESIGNED
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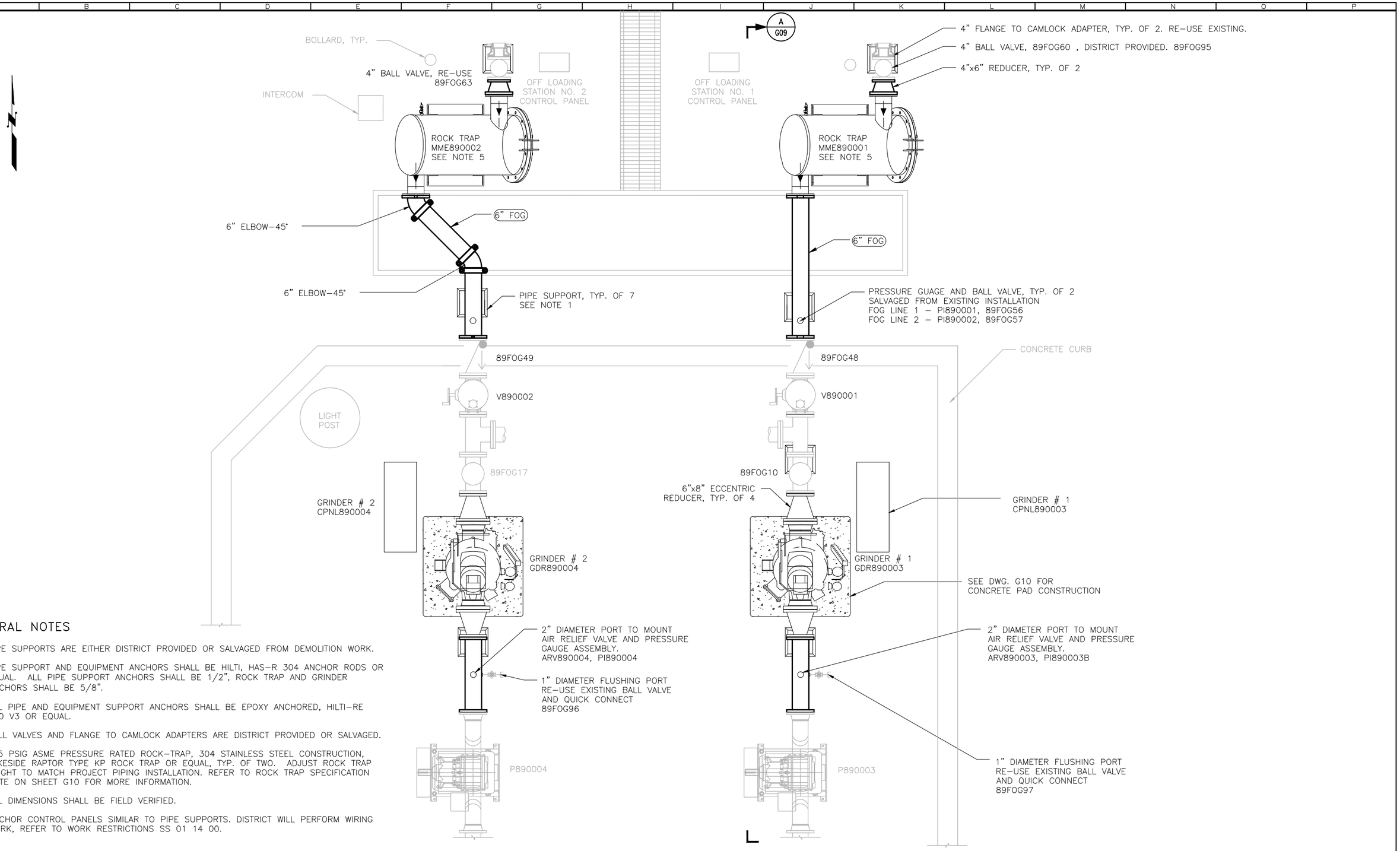
ECHOWATER RESOURCE RECOVERY FACILITY

RFB# 8514
CONTRACT NUMBER

GENERAL

FOG STATION
REVISED PIPING SCHEMATIC

SCALE: NO SCALE
DRAWING NUMBER: G07
SHEET NUMBER: 7 OF 10



GENERAL NOTES

1. PIPE SUPPORTS ARE EITHER DISTRICT PROVIDED OR SALVAGED FROM DEMOLITION WORK.
2. PIPE SUPPORT AND EQUIPMENT ANCHORS SHALL BE HILTI, HAS-R 304 ANCHOR RODS OR EQUAL. ALL PIPE SUPPORT ANCHORS SHALL BE 1/2", ROCK TRAP AND GRINDER ANCHORS SHALL BE 5/8".
3. ALL PIPE AND EQUIPMENT SUPPORT ANCHORS SHALL BE EPOXY ANCHORED, HILTI-RE 500 V3 OR EQUAL.
4. BALL VALVES AND FLANGE TO CAMLOCK ADAPTERS ARE DISTRICT PROVIDED OR SALVAGED.
5. 125 PSIG ASME PRESSURE RATED ROCK-TRAP, 304 STAINLESS STEEL CONSTRUCTION, LAKESIDE RAPTOR TYPE KP ROCK TRAP OR EQUAL, TYP. OF TWO. ADJUST ROCK TRAP HEIGHT TO MATCH PROJECT PIPING INSTALLATION. REFER TO ROCK TRAP SPECIFICATION NOTE ON SHEET G10 FOR MORE INFORMATION.
6. ALL DIMENSIONS SHALL BE FIELD VERIFIED.
7. ANCHOR CONTROL PANELS SIMILAR TO PIPE SUPPORTS. DISTRICT WILL PERFORM WIRING WORK, REFER TO WORK RESTRICTIONS SS 01 14 00.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER GERARDO AGUIRRE NO. C 68362 EXP: 09/30/25 CIVIL STATE OF CALIFORNIA

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ECHOWATER RESOURCE RECOVERY FACILITY

RFB# 8514
CONTRACT NUMBER

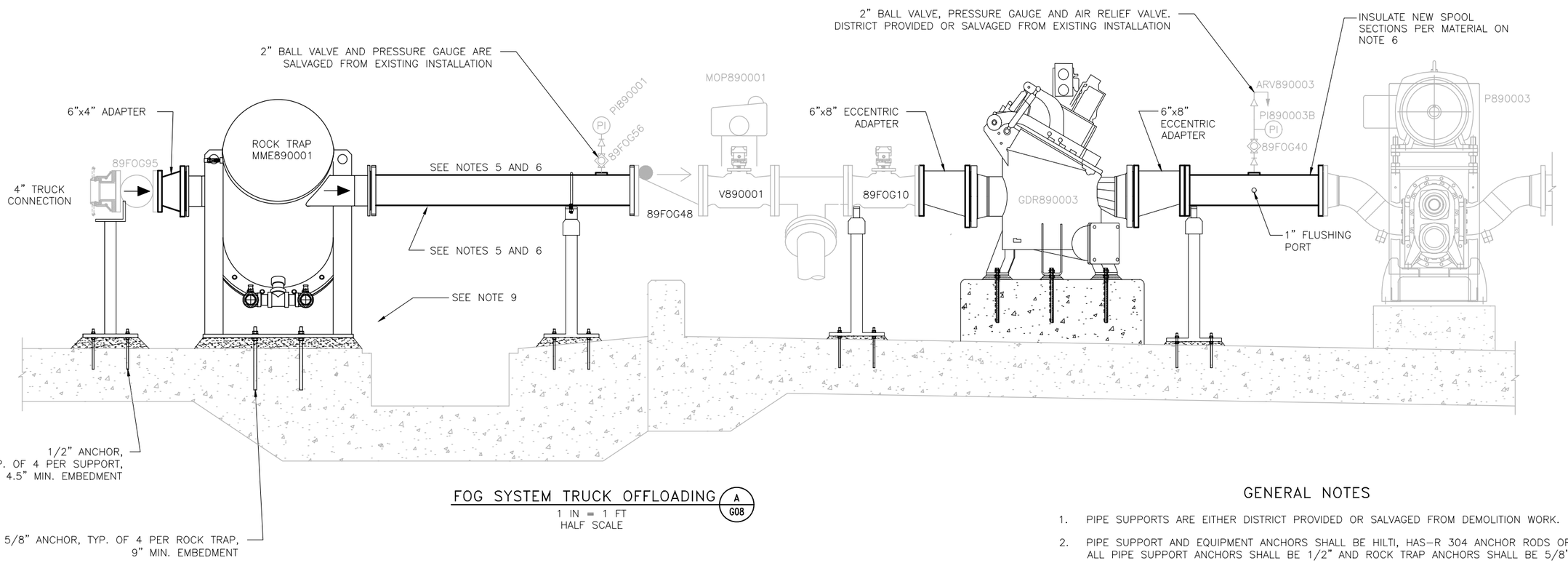
GENERAL

FOG STATION OFFLOADING PARTIAL PLAN

SCALE 1" = 1.5 FT

DRAWING NUMBER G08

SHEET NUMBER 8 OF 10



FOG SYSTEM TRUCK OFFLOADING (A / G08)

1 IN = 1 FT
HALF SCALE

GENERAL NOTES

1. PIPE SUPPORTS ARE EITHER DISTRICT PROVIDED OR SALVAGED FROM DEMOLITION WORK.
2. PIPE SUPPORT AND EQUIPMENT ANCHORS SHALL BE HILTI, HAS–R 304 ANCHOR RODS OR EQUAL. ALL PIPE SUPPORT ANCHORS SHALL BE 1/2" AND ROCK TRAP ANCHORS SHALL BE 5/8".
3. ALL PIPE SUPPORT AND ROCK TRAP ANCHORS SHALL BE EPOXY ANCHORED, HILTI–RE 500 V3 OR EQUAL.
4. BALL VALVES AND FLANGE TO CAMLOCK ADAPTERS ARE DISTRICT PROVIDED OR SALVAGED.
5. FOG PIPING HAS HEAT TRACE CABLES. PROTECT DURING DISASSEMBLY AND RE–ATTACH ONTO NEW PIPING LEADING TO ROCK TRAPS.
6. INSULATE NEW PIPING UP TO ROCK TRAPS USING 2" THICK, EPDM ELASTOMETRIC TUBE INSULATION, AEROCEL/AEROFLEX USA, INC. OR EQUAL.
7. RE–USE INSULATION BLANKETS AND INSTALL AT PIPING CONNECTION POINTS.
8. PROVIDE GROUT PADS UNDER ALL PIPE SUPPORTS AND EQUIPMENT SUPPORTS.
9. 125 PSIG ASME PRESSURE RATED ROCK–TRAP, 304 STAINLESS STEEL CONSTRUCTION, LAKESIDE RAPTOR TYPE KP ROCK TRAP OR EQUAL, TYP. OF TWO. ADJUST ROCK TRAP HEIGHT TO MATCH PROJECT PIPING INSTALLATION. REFER TO ROCK TRAP SPECIFICATION ON SHEET G10 FOR MORE INFORMATION.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER — GERARDO AGUIRRE — NO. C 68362 — EXP: 09/30/25 — CIVIL — STATE OF CALIFORNIA

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"–SCALE ACCORDINGLY)

FILE
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DESIGNED
CHECKED

ECHOWATER RESOURCE RECOVERY FACILITY

RFB# 8514
CONTRACT NUMBER

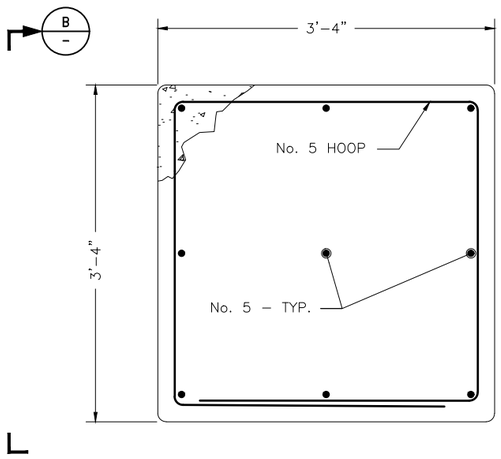
GENERAL

FOG STATION OFFLOADING PARTIAL CROSS SECTION

SCALE: 1 IN = 1 FT

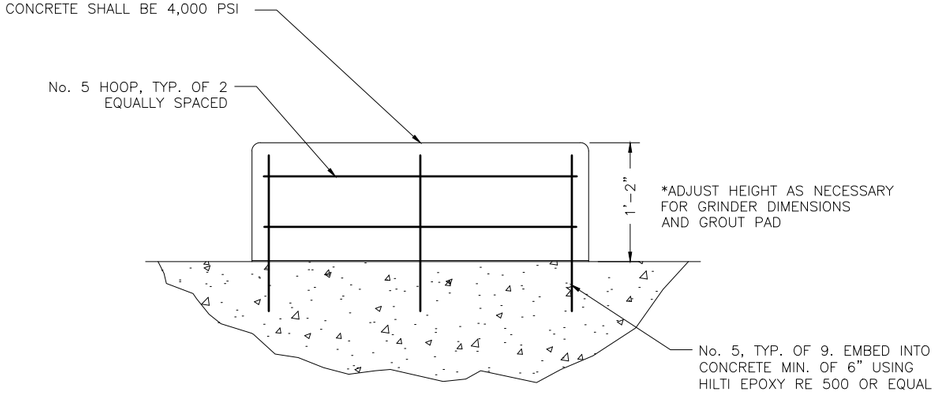
DRAWING NUMBER: G09

SHEET NUMBER: 9 OF 10



GRINDER BASE PLAN, TYP. OF 2

1 IN = 9 IN
HALF SCALE



GRINDER BASE SECTION (B / –)

1 IN = 9 IN
HALF SCALE

ROCK TRAP SPECIFICATIONS

1.01 ROCK TRAP SYSTEM DESCRIPTION

A. THE ROCK TRAP WILL CONSIST OF COLLECTION TUBE BODY, HINGED COVER, DRAIN AND BACK WASH. THE UNIT WILL BE COMPLETE WITH MOUNTING LEGS AND BASE PLATE.

B. RELATED SECTIONS:

1. THE FOLLOWING SECTIONS ARE RELATED TO THE WORK DESCRIBED IN THIS SECTION. THIS LIST OF RELATED SECTIONS IS PROVIDED FOR CONVENIENCE ONLY AND IS NOT INTENDED TO EXCUSE OR OTHERWISE DIMINISH THE DUTY OF THE CONTRACTOR TO SEE THAT THE COMPLETED WORK COMPLIES ACCURATELY WITH THE CONTRACT DOCUMENTS.

SECTION	TITLE
SECTION 01 33 00	SUBMITTAL PROCEDURES
SECTION 01 65 00	PRODUCT DELIVERY REQUIREMENTS
SECTION 01 78 23	OPERATION AND MAINTENANCE DATA

C. DESIGN SUMMARY:

1. NUMBER OF ROCK TRAPS... 2
2. INLET AND OUTLET CONNECTION... 6"–125# FLANGED
3. ASME PRESSURE VESSEL RATING – MAXIMUM OPERATING PRESSURE 125 PSIG

1.02 REFERENCES

A. AMERICAN IRON AND STEEL INSTITUTE (AISI):

1. 304 STAINLESS STEEL.

B. AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME).

1. FLANGED FITTINGS: CLASSES 125 PER SPEC SECTION 40 05 24–4
2. BOILER AND PRESSURE VESSEL CODE (BPVC) SECTION VIII, DIVISION 1

1.03 PERFORMANCE

A. THE UNIT WILL BE DESIGNED TO COLLECT INCOMING ROCKS WHICH CAN BE REMOVED BY OPENING THE HINGED COVER LOCATED AT THE LOWER END OF THE TUBE BODY.

1.04 ROCK TRAP

A. ROCK TRAP WILL BE FURNISHED COMPLETE WITH COLLECTION TUBE BODY, HINGED COVER, SUPPORTS, PRESSURE RELIEF VALVE AND BACK WASH SYSTEM. ALL FABRICATED COMPONENTS WILL BE 304 STAINLESS STEEL.

B. COLLECTION TUBE BODY WILL BE PROVIDED. ROCKS COLLECTED FROM INLET FLOW WILL GATHER AT THE LOWER END FABRICATED OF 24 INCH STAINLESS STEEL PIPE. THE INLET AND OUTLET WILL BE FURNISHED WITH 6" FLANGED CONNECTIONS AND THE BOTTOM OF THE TUBE WILL BE FURNISHED WITH A HINGED COVER.

C. HINGED COVER WILL BE PROVIDED. COVER WILL BE FABRICATED OF STAINLESS STEEL AND WILL BE COMPLETE WITH AN O–RING GASKET, STAINLESS STEEL LATCHES, AND (12) TWELVE 1 1/8" GRADE 8 CARBON STEEL ZINC COATED BOLTS TO SECURE THE COVER IN PLACE. BACK WASH NOZZLE WILL BE PROVIDED. ONE (1) 2" STAINLESS STEEL BALL VALVE WILL BE PROVIDED TO CONNECT TO THE PLANT WATER SUPPLY TO UTILIZE DURING WASH PERIOD PRIOR TO OPENING THE HINGED COVER. ONE (1) 2" STAINLESS STEEL BALL VALVE WILL BE PROVIDED FOR DRAINING DURING WASHING.

D. PRESSURE RELIEF VALVE WILL BE PROVIDED. ONE ASME–CODE BRONZE POP–SAFETY VALVE WITH ½" NPT INLET AND ¾" NPT OUTLET.

1.05 ANCHOR BOLTS

A. ADHESIVE TYPE 316 STAINLESS STEEL ANCHORS PER PLAN

1.06 SHOP SURFACE PREPARATION AND PAINTING

A. ALL STAINLESS STEEL SURFACES ARE PREPARED BY THE FOLLOWING PROCEDURES:

1. WIRE BRUSH ALL WELD AREAS TO REMOVE WELD SPATTER. BRUSHES ARE 304 STAINLESS STEEL AND ARE USED ONLY ON 304 OR 304L STAINLESS STEEL.
2. ALL EXTERNAL NON–WETTED STAINLESS STEEL IS TO BE BUFFED OUT, PRESSURE WASHED AND PASSIVATED.

1.07 FACTORY TESTING

A. EACH ASSEMBLY WILL BE FACTORY TESTED TO CONFIRM PERFORMANCE IN ACCORDANCE WITH ASME BPVC SECTION VIII, DIVISION 1.

1.08 MANUFACTURERS

A. MANUFACTURERS: THE FOLLOWING OR EQUAL:

1. LAKESIDE RAPTOR TYPE KP ROCK TRAP 125 PSI PRESSURE RATED, QUANTITY OF TWO.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER — GERARDO AGUIRRE — NO. C 68362 — EXP: 09/30/25 — CIVIL — STATE OF CALIFORNIA

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"–SCALE ACCORDINGLY)

FILE
DRAWN
DESIGNED
CHECKED

ECHOWATER RESOURCE RECOVERY FACILITY

RFB# 8514
CONTRACT NUMBER

GENERAL

FOG STATION
GRINDER PAD

SCALE: AS SHOWN
DRAWING NUMBER: G10
SHEET NUMBER: 10 OF 10