SACRAMENTO AREA
SEWER DISTRICT

SERVING YOU **24/7**

MARCH 2026

CONTRACT DOCUMENTS FOR THE CONSTRUCTION OF

ECHOWATER RESOURCE RECOVERY FACILITY

SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

Version: 2026.1.0

BID DOCUMENTS

PART B - DRAWINGS
VOLUME 2 OF 2

REGISTERED PROFESSIONAL ENGINEER
GERARDO AGUIRRE
NO. C 68362
EXP: 09/30/27
CIVIL
STATE OF CALIFORNIA

RFB 8529
CONTRACT NUMBER

SACRAMENTO AREA
SEWER DISTRICT

SERVING YOU **24/7**

MARCH 2026

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CONTRACT DOCUMENTS FOR THE CONSTRUCTION OF

ECHOWATER RESOURCE RECOVERY FACILITY

SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

BID DOCUMENTS

Version: 2026.1.0

GENERAL, CIVIL AND STRUCTURAL

PART B - DRAWINGS

VOLUME 2 OF 2

APPROVALS

REGISTERED PROFESSIONAL ENGINEER
GERARDO AGUIRRE
NO. C 68362
EXP: 09/30/27
CIVIL
STATE OF CALIFORNIA

Gerardo Aguirre	3/11/2026	Thomas Ullensvang	3/11/2026		
SUBMITTED:	DATE	SUBMITTAL APPROVED:	DATE		
GERARDO AGUIRRE, PE		***THOMAS ULLENSVANG***			
PROJECT ENGINEER		**PROJECT MANAGER**			
William Yu	3/11/2026	C.N. Lunde	3/11/2026	Christoph Dobson	3/12/2026
SUBMITTAL APPROVED:	DATE	SUBMITTAL APPROVED:	DATE	APPROVED:	DATE
WILLIAM YU, PE		***SONNY LUNDE, PE***		***CHRISTOPH DOBSON, PE***	
ENGINEERING MANAGER, ECHOWATER OPERATIONS DEPARTMENT		**DIRECTOR, ECHOWATER OPERATIONS DEPARTMENT**		**DISTRICT ENGINEER**	

RFB 8529
CONTRACT NUMBER

INDEX

SHEET #	DRAWING #	TITLE
03	INDEX	INDEX OF DRAWINGS AND GENERAL SYMBOLS
04	94G01	LOCATION AND VICINITY MAP
05	94G02	VEHICLE ACCESS AND TANK LOCATIONS
06	94G03	SURVEY MONUMENT DATA

STRUCTURAL

SHEET #	DRAWING #	TITLE
07	94S01	SST 10 STEEL COATINGS
08	94S02	SST 10 CONCRETE REPAIR AND AVERAGE MIL SAMPLES
09	94S03	SST 16 STEEL COATING BELOW SUPER STRUCTURE SCOPE
10	94S04	SST 16 SUPER STRUCTURE STEEL COATINGS
11	94S05	SST's 10 & 16 LAUNDER & SLUDGE COLLECTOR REPAIR CONSTRUCTION NOTES
12	94S06	SST's 10 & 16 EFFLUENT LAUNDER VERTICAL SUPPORT REPAIR
13	94S07	SST's 10 & 16 SLUDGE COLLECTOR PIPE SUPPORT REPAIR
14	94S08	SST's 10 & 16 EFFLUENT LAUNDER REPAIR

MECHANICAL

SHEET #	DRAWING #	TITLE
15	94M01	SST 10 STANDARD PIPE HANGERS
16	94M02	SST's 10 & 16 SLIDE GATE & WEIR PLATE MODIFICATIONS
17	94M03	SST's 10 & 16 DEMOLITION AND DISTRIBUTION WELL SEAL REPAIRS
18	94M04	SST's 10 & 16 NEW EQUIPMENT

GENERAL SYMBOLS

DENOTES WORK TO BE DONE UNDER THIS PROJECT
DENOTES EXISTING PIPING, EQUIPMENT, OR STRUCTURES
EQUIPMENT TO BE REMOVED UNDER THIS CONTRACT

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER
GERARDO AGUIRRE
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STATE OF CALIFORNIA

REVISIONS

ZONE	REV.	DESCRIPTION	BY	DATE	APP.

LINE IS 2 INCHES AT FULL SIZE
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SACRAMENTO AREA SEWER DISTRICT
OF SACRAMENTO COUNTY, CALIFORNIA

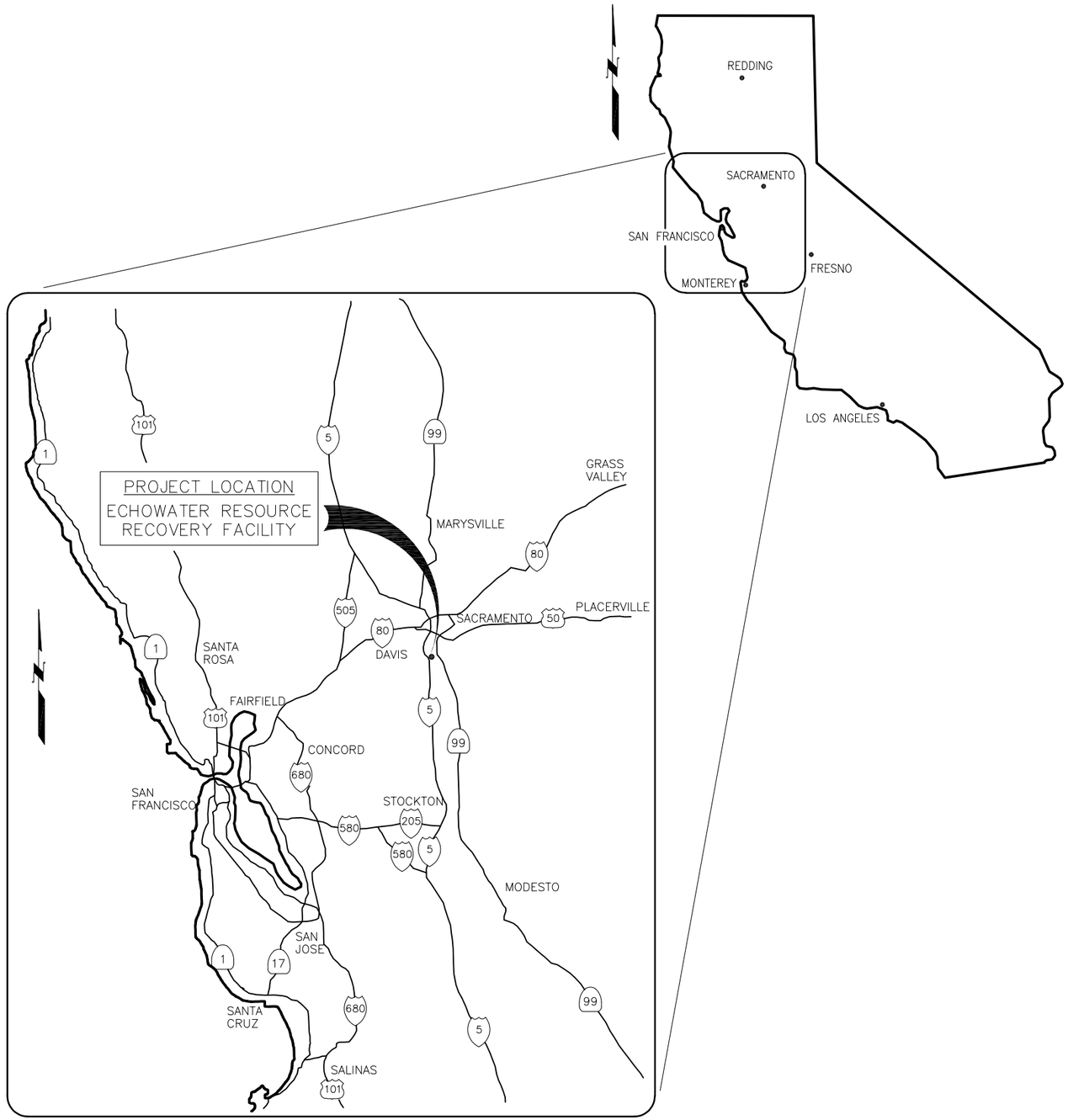
ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS
10 & 16 REHABILITATION PROJECT

INDEX OF DRAWINGS AND GENERAL SYMBOLS

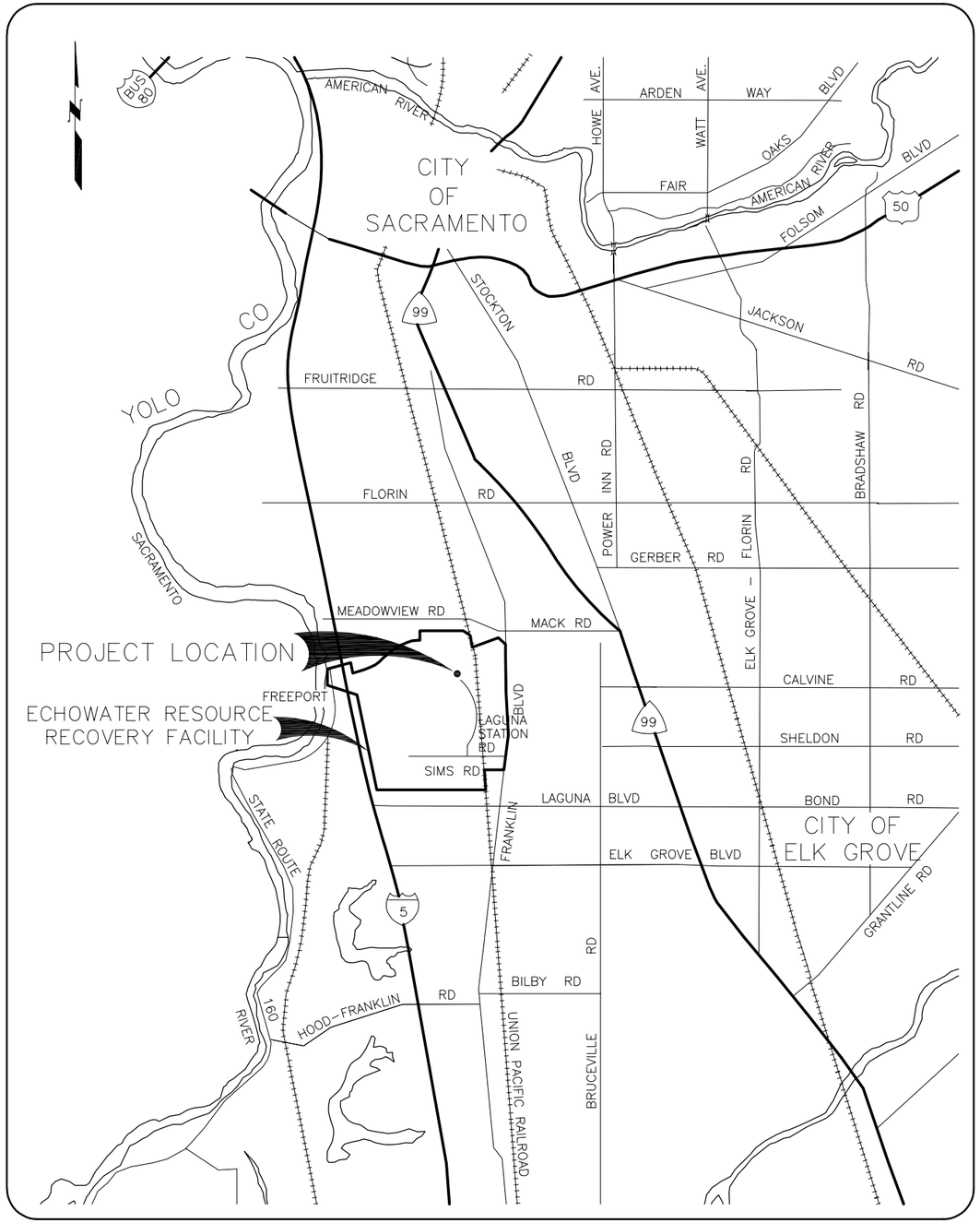
SCALE
NO SCALE

DRAWING NUMBER
INDEX

SHEET NUMBER
3 OF 18



VICINITY MAP



LOCATION MAP

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER
ALEJANDRO AGUIRRE
No. C 68362
EXP: 09/30/27
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STATE OF CALIFORNIA

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SECONDARY SEDIMENTATION TANKS
10 & 16 REHABILITATION PROJECT

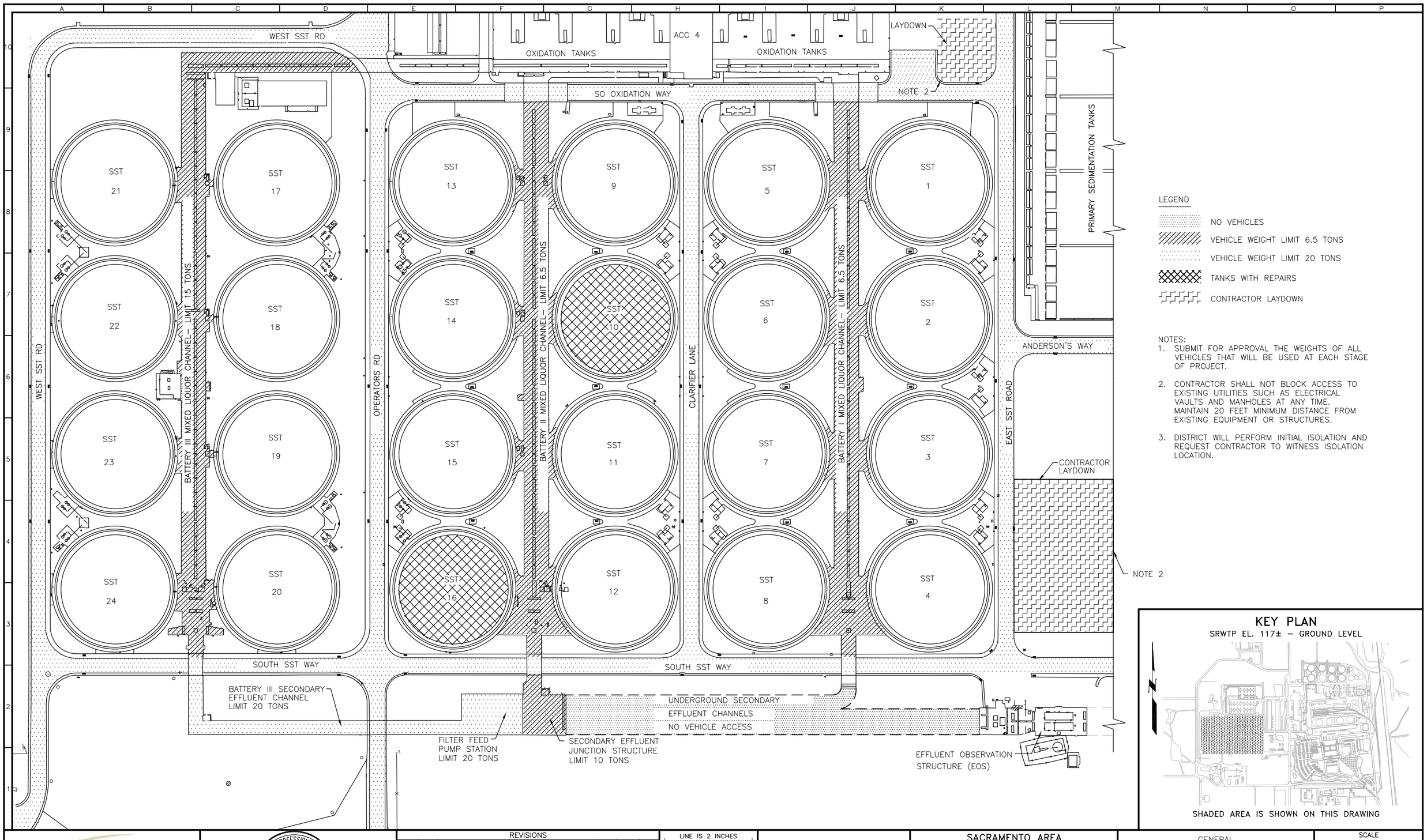
GENERAL

LOCATION AND VICINITY MAP

SCALE
NONE

DRAWING NUMBER
94G01

SHEET NUMBER
4 OF 18



LEGEND

- NO VEHICLES
- VEHICLE WEIGHT LIMIT 6.5 TONS
- VEHICLE WEIGHT LIMIT 20 TONS
- TANKS WITH REPAIRS
- CONTRACTOR LAYDOWN

NOTES:

1. SUBMIT FOR APPROVAL THE WEIGHTS OF ALL VEHICLES THAT WILL BE USED AT EACH STAGE OF PROJECT.
2. CONTRACTOR SHALL NOT BLOCK ACCESS TO EXISTING UTILITIES SUCH AS ELECTRICAL VAULTS AND MANHOLES AT ANY TIME. MAINTAIN 20 FEET MINIMUM DISTANCE FROM EXISTING EQUIPMENT OR STRUCTURES.
3. DISTRICT WILL PERFORM INITIAL ISOLATION AND REQUEST CONTRACTOR TO WITNESS ISOLATION LOCATION.

KEY PLAN

SRWTP EL. 117± – GROUND LEVEL

SHADED AREA IS SHOWN ON THIS DRAWING

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER GERARDO AGUIRRE NO. C 68362 EXP: 09/30/27 CIVIL STATE OF CALIFORNIA

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10 & 16 REHABILITATION PROJECT

GENERAL

VEHICLE ACCESS AND TANK LOCATIONS

SCALE
NONE

DRAWING NUMBER
94G02

SHEET NUMBER
5 OF 18

SURVEY GRID MONUMENT DATA

NUMBER	DESCRIPTION	COORDINATES	ELEVATION
2	SRWTP2	E 2,152,198.1560 N 283,795.6640	118.006
8	SRWTP8	E 2,153,558.6100 N 286,237.8450	120.785
9	SRWTP9	E 2,153,594.1320 N 285,625.7560	116.114
10	MONUMENT L-1	E 2,152,599.9280 N 287,025.3300	116.339
11	SIMS ROAD	E 2,151,701.7890 N 285,066.6580	116.749
12	MONUMENT 3	E 2,152,599.9170 N 285,050.9380	115.061
13	MONUMENT 4 @ RE TRAILER	E 2,153,799.9850 N 283,999.9820	116.130
14	MONUMENT D-5(DESTROYED)	E 2,153,249.5420 N 284,818.7560	113.728
15	SEC COR MONUMENT 6	E 2,153,849.4180 N 286,648.2240	111.910
20	MONUMENT 3F	E 2,153,593.4273 N 286,990.5363	116.253
21	PT GREG (REPL 7)	E 2,152,562.8710 N 285,998.3540	117.539
23	SRWTP10	E 2150745.4282 N 281,398.6040	117.427
24	SRWTP11	E 2,153,242.0683 N 281,509.5693	117.217
25	SRWTP12	2,153,983.7623 N 281,303.6092	115.809
26	SRWTP13	E 2,155,634.1248 N 281,333.2388	123.60
27	SRWTP14	E 2,149,519.5031 N 279,892.4928	117.011
28	SRWTP15	E 2,150,901.9228 N 279,901.4206	117.050
29	SRWTP16	E 2,149,414.5858 N 283,044.0587	117.315
30	SRWTP17	E 2,150,813.0067 N 283,002.7927	116.922
32	SRWTP19	E 2,155,261.4072 N 283,025.6317	120.542
35	SRWTP24	E 2,153,801.2965 N 286,867.7101	120.518
36	SRWTP25	E 2,155,040.8816 N 284,371.4608	115.722

LEGEND:

- NAIL AND SHINER
- BRASS DISC

GENERAL NOTES:

- MONUMENT NUMBERS 3, L-1, 3A, 3B, 3C, 3E, 3F AND 7 SHALL NOT BE USED.
- ESTABLISH ADDITIONAL MONUMENTS, AS NEEDED FOR CONTROL OF CONSTRUCTION.
- ELEVATIONS SHOWN REPRESENT MEAN SEA LEVEL PLUS 100.00.
- NOTIFY THE RESIDENT ENGINEER 48 HOURS IN ADVANCE OF REMOVING OR DESTROYING ANY SURVEY MONUMENT FOR THE PURPOSE OF REFERENCING MONUMENTS OR FOR RE-ESTABLISHING A POINT AFTER WORK IS COMPLETED.
- THIS DRAWING AND ALL OTHER SRWTP DRAWINGS USE THE NAD27 COORDINATE SYSTEM. IF YOU ARE USING NAD83 OR ANY OTHER COORDINATE SYSTEM, PLEASE CONVERT AS NEEDED.

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SECONDARY SEDIMENTATION TANKS
10 & 16 REHABILITATION PROJECT

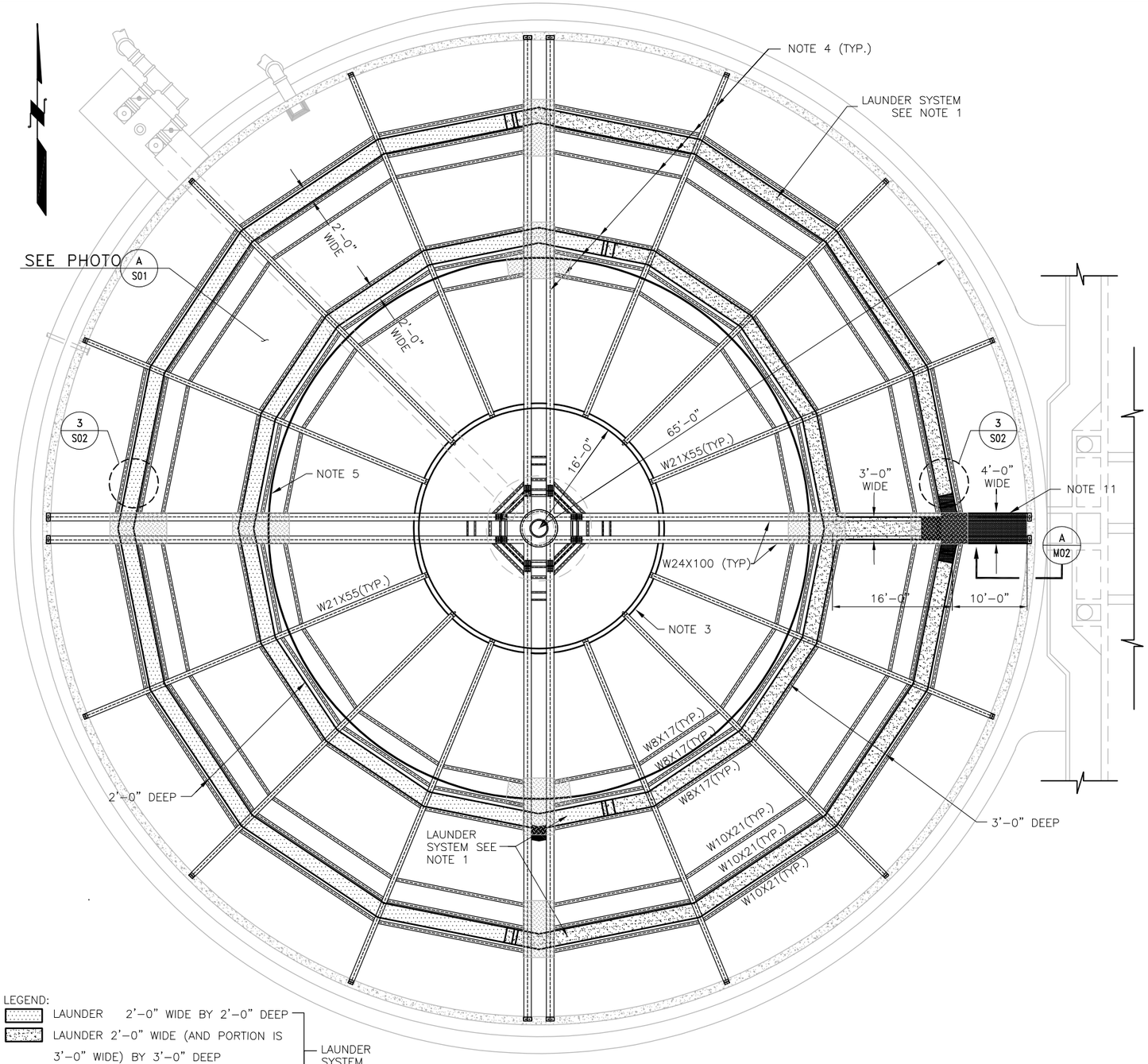
GENERAL

SURVEY MONUMENT DATA

SCALE
1"=500'

DRAWING NUMBER
94G03

SHEET NUMBER
6 OF 18



LEGEND:

- LAUNDER 2'-0" WIDE BY 2'-0" DEEP
- LAUNDER 2'-0" WIDE (AND PORTION IS 3'-0" WIDE) BY 3'-0" DEEP
- LAUNDER 4'-0" WIDE BY 4'-0" DEEP

(LAUNDER SYSTEM)

- EXISTING CHECKER PLATE (TYPICAL)

BEAM AND LAUNDER PLAN VIEW (TYPICAL OF 2)

Scale: 1/8"=1'

SST 10 COATING REPAIRS:

1. COAT ALL SIDES (INTERIOR AND EXTERIOR) OF EXISTING LAUNDER SYSTEM INCLUDING ANCHOR/SUPPORT MEMBERS PER SPECIFICATION 09 90 00. LAUNDER SYSTEM INCLUDES ALL LAUNDER SECTIONS MENTIONED ON THE LEGEND BELOW PLUS SUPPORT MEMBERS. REMOVE EXISTING WEIR PLATES PRIOR TO COATING THE LAUNDERS AND RE-INSTALL THEM AFTER COATING IS COMPLETE. ASSUME SOME LEAKAGE REQUIRING THE CONTRACTOR TO MAKE PROVISIONS TO ISOLATE AND DEWATER DURING COATING ACTIVITIES. CONTRACTOR WILL BE RESPONSIBLE FOR DEWATERING.
2. MODIFY EXISTING WEIR PLATES AS INDICATED ON C/M02 PRIOR TO RE-INSTALLATION. WEIR PLATES V-NOTCH SHALL BE SET TO EL. 112.40 +/- (1/8"). SEE PHOTO A/S01 FOR TYPICAL WEIR PLATE LOCATIONS.
3. BLAST AND COAT ALL SIDES OF EXISTING FEED WELL (APPROXIMATE 32'-0" DIA. BY 10'-0" DEEP) PER SPECIFICATION 09 90 00.
4. BLAST AND COAT EXISTING SUPERSTRUCTURE BEAMS PER SPECIFICATION 09 90 00. MAJOR COMPONENTS OF SUPERSTRUCTURE INCLUDE REMOVABLE BEAM EXTENSION, AND ALL W8X17, W10X21, W21X55, AND W24X100 MEMBERS IN THE TANK. REMOVE ALL EXISTING CHECKERED WALKWAY DECK PLATES TO PROPERLY COAT THE BEAMS. EXISTING ALUMINUM HAND RAILING MUST BE PROTECTED FROM DAMAGE OR OVERSPRAY. REINSTALL CHECKERED PLATES BACK TO THEIR ORIGINAL LOCATION AFTER ALL COATINGS ARE COMPLETE. REPLACE THE EXISTING NEOPRENE BETWEEN CHECKERED PLATES AND SUPPORT BEAMS PLUS REPLACE DAMAGED OR CORRODED ANCHOR WALKWAY PLATE HARDWARE. HARDWARE CONSISTS OF 1/4" DIA. GALVANIZED BOLTS, WASHERS, AND NUTS WITH 1/4" THICK SLOTTED PLATES TO HOLD DOWN WALKWAY. ESTIMATE 25 WILL BE MISSING OR DAMAGED NEEDING REPLACEMENT.
5. BLAST AND COAT ALL SIDES OF EXISTING SCUM BAFFLE (APPROXIMATELY 36'-0" RADIUS BY 1'-0" DEEP) PER SPECIFICATION 09 90 00.
6. ALL METALLIC MATERIALS INSIDE SST 10 SHALL BE COATED PER SPECIFICATIONS 09 90 00 WITH EXCEPTION OF STAINLESS STEEL, AND ALUMINUM MATERIALS, AND NEW EQUIPMENT WITH MANUFACTURER'S APPLIED COATINGS.
7. STAINLESS STEEL MATERIALS, EXISTING ELECTRICAL, AND MECHANICAL EQUIPMENT SHALL BE PROTECTED FROM COMING INTO CONTACT WITH BLAST MEDIA, BLAST DAMAGE OR DUST, AND COATING OVERSPRAY.
8. IN ADDITION TO THE COATING WORK MENTIONED ABOVE, ALL COMPONENTS OF TANK 10 NOT BEING REPLACED UNDER THIS CONTRACT SHALL BE COATED ACCORDING TO SPECIFICATION 09 90 00. EXAMPLES OF ITEMS NOT BEING REPLACED ARE THE DRIVE UNIT, CENTER COLUMN (COAT INTERIOR & EXTERIOR), DRIVE CAGE, UTILITY STANCHIONS, SLUDGE COLLECTOR MECHANISM, AND 48" DIA. INFLUENT PIPE. SEE SECTION 1/M04 FOR LOCATIONS OF COMPONENTS PREVIOUSLY MENTIONED. CAUTION TO CONTRACTORS: ACCESS TO THE INTERIOR OF CENTER COLUMN AND 48" DIA. INFLUENT PIPE IS LIMITED. EXISTING COLUMN HAS FOUR (4) INFLUENT PORTS AT 1'-0" X 3'-0" EACH. ALSO, THERE IS A 24" DIA. PRESSURE MANHOLE AT THE TANK FLOOR AS SHOWN ON 94S02 OPENING OF THE MANHOLE WILL REQUIRE THE SEAL TO BE RESTORED. INFLUENT AND EFFLUENT ISOLATION. ALLOW SOME LEAKAGE REQUIRING THE CONTRACTOR TO MAKE PROVISIONS TO ISOLATE AND DEWATER DURING COATING ACTIVITIES. CONTRACTOR WILL BE RESPONSIBLE TO DEWATER AND CLEAN INFLUENT PIPE PRIOR TO BLASTING OPERATION.
9. APPLY SIKAFLEX 1A SEALANT TO ALL ABUTTING METAL SURFACES AND BOLT HOLES TROUGH THE TANK EQUIPMENT AFTER COATINGS ARE APPLIED.
10. REMOVE/REINSTALL ALL APPURTENANCES THROUGHOUT THE TANK SUCH AS LAUNDER DRAIN VALVES, SPRAY WATER LINES, ETCETERA TO PROPERLY COAT ALL METAL SURFACES.
11. ON NORTH BEAM SUPPORTING THE EFFLUENT LAUNDER, STENCIL THE COMPANY, YEAR AND COATING MATERIAL APPLIED.

PHOTO A S01 N.T.S.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER BERNARDO AGUILERA NO. C 68362 EXP: 09/30/27 CIVIL STATE OF CALIFORNIA

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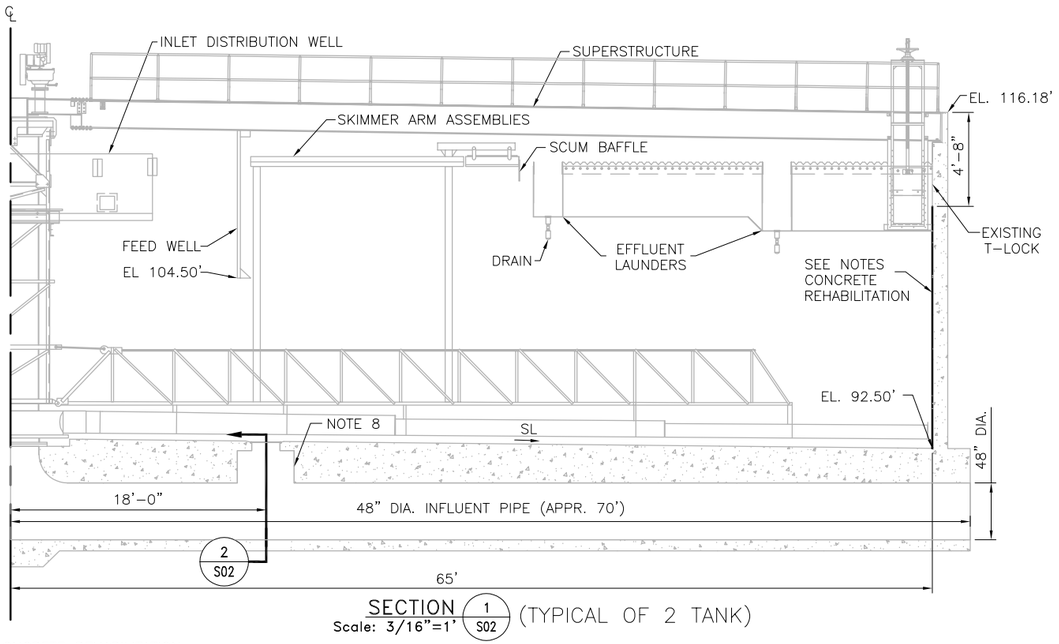
ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

STRUCTURAL

SST 10 STEEL COATINGS

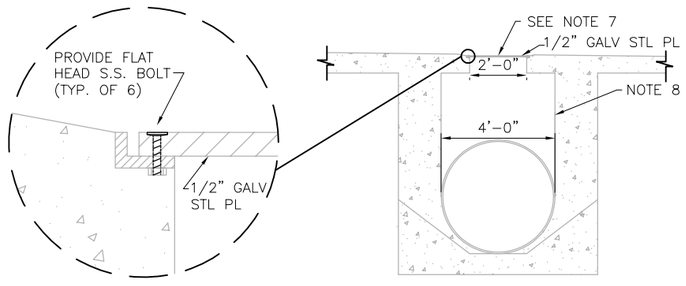
SCALE: AS NOTED
DRAWING NUMBER: 94S01
SHEET NUMBER: 7 OF 18



SECTION 1/S02 (TYPICAL OF 2 TANK)
Scale: 3/16"=1'

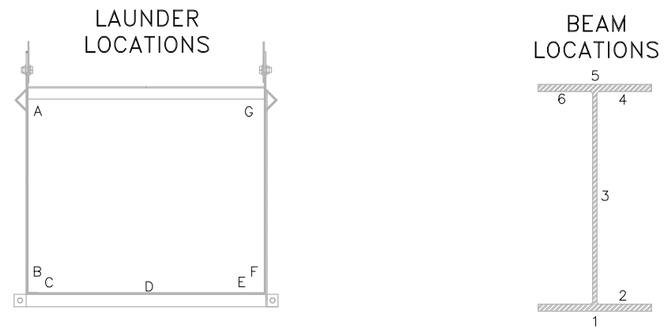
SST 10 CONCRETE REHABILITATION:

1. LIGHT SAND BLAST CONCRETE WALLS TO REMOVE UNSOUND CONCRETE PRIOR TO THE CONCRETE REHABILITATION PER SPECIFICATION 03 01 26.76.
2. REHABILITATE BLASTED CONCRETE WALLS PER SPECIFICATION 03 01 26.76.
3. SEAL COAT VERTICAL CONCRETE WALLS OF SST 10 PER SPECIFICATION 09 90 00.
4. CONCRETE BLAST PREPARATION, REHABILITATION, AND SEAL COAT IS FROM THE BOTTOM OF THE EXISTING T-LOCK DOWN TO THE TANK FLOOR AND AROUND THE TANK CIRCUMFERENCE (APPROXIMATELY 19FT HIGH x 410FT).
5. CONTRACTOR SHALL PROPERLY SEAL EFFLUENT SLIDE GATE AND INFLUENT BUTTERFLY VALVE AT EACH TANK TO PREVENT WATER INFILTRATION TO SST DURING CONSTRUCTION.
6. CONCRETE COATING IS BELOW-GRADE APPLICATION AND EXISTING VERTICAL EXPANSION JOINTS WILL NOT REQUIRE PATCHING.
7. CONTRACTOR SHALL RE-SEAL MANHOLE AND LIFTING HOLES AFTER CONSTRUCTION.
8. LIGHT SAND BLAST CONCRETE MH'S TO REMOVE UNSOUND CONCRETE PRIOR TO THE CONCRETE REHABILITATION.



SECTION 2/S02
Scale: N.T.S.

		LAUNDER LOCATIONS							BEAM LOCATIONS					
EX. OF BATTERY II READINGS (MIL)	WEST	49.1	31.0	37.6	30.1	10.7	29.3	8.9	2.2	5.6	4.3	4.9	3.9	6.4
		8.7	45.2	32.1	43.7	16.3	51.8	35.6	4.7	5.9	4.2	6.9	4.8	5.3
		33.1	19.0	16.8	20.7	42.6	22.4	33.2	9.3	15.2	3.9	6.7	7.1	6.1
	EAST	32.4	18.3	23.7	30.4	26.7	46.1	48.2	4.5	10.4	5.4	8.2	5.5	4.3
		21.2	19.8	20.7	36.3	25.4	25.9	38.0	1.7	6.7	7.7	6.1	4.0	2.3



EXISTING MIL READING SAMPLES 3/S06

NOTES:
1. THE ABOVE COATING THICKNESS SAMPLE READINGS WERE TAKEN FROM OTHER TANKS TO SHOW THE CONTRACTORS POSSIBLE VARIATIONS BETWEEN AREAS. CONTRACTORS ARE RESPONSIBLE TO ACCOUNT FOR THESE VARIATIONS AND PERFORM FIELD MEASUREMENTS DURING SITE VISITS IF NEEDED.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER — GERARDO AGUIRRE — NO. C 68362 — EXP. 09/30/27 — CIVIL — STATE OF CALIFORNIA

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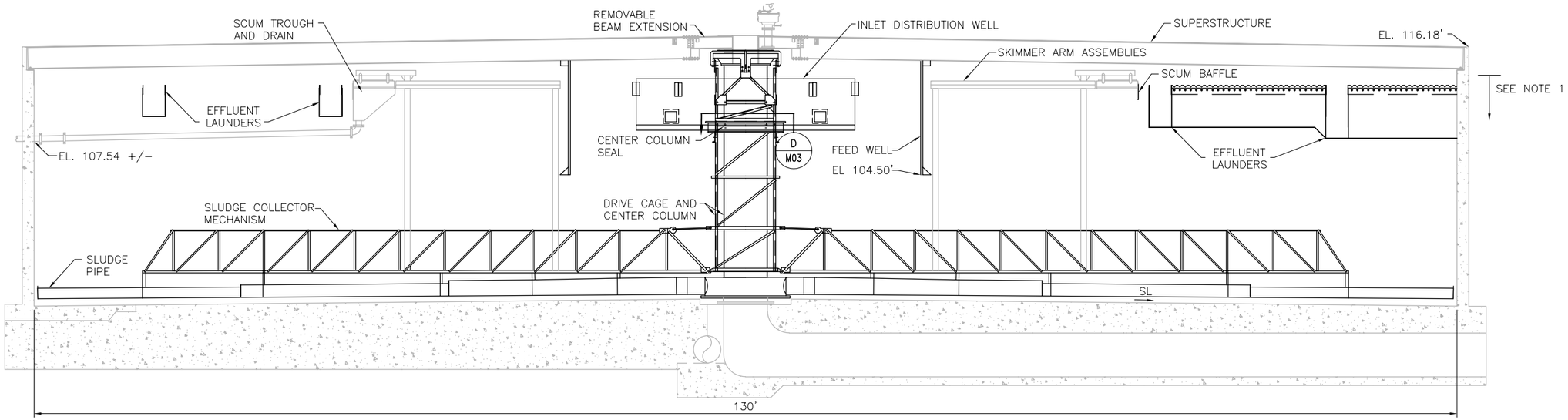
ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

STRUCTURAL

SST 10 CONCRETE REPAIR AND AVERAGE MIL SAMPLES

SCALE: AS NOTED
DRAWING NUMBER: 94S02
SHEET NUMBER: 8 OF 18



SECTION 1/S03
Scale: 3/16"=1'

PHOTO A/S03
N.T.S.

PHOTO B/S03
N.T.S.

SST 16 BELOW SUPER STRUCTURE COATING NOTES:

1. BLAST AND COAT EVERYTHING BELOW THE SUPER STRUCTURE BEAMS. THIS INCLUDES, THE SLUDGE COLLECTOR MECHANISM AND SLUDGE PIPE, FEED WELL, INLET DISTRIBUTION WELL, DRIVE CAGE, CENTER COLUMN, SCUM BAFFLE, EFFLUENT LAUNDERS AND SUPPORTS.
2. PROTECT ALL WALKWAY PLATES FROM BLAST MEDIA AND OVERSPRAY. KEEP PLATES CONNECTED TO SUPER STRUCTURE.
3. COAT ALL SIDES (INTERIOR AND EXTERIOR) OF EXISTING LAUNDER SYSTEM INCLUDING ANCHOR/SUPPORT MEMBERS PER SPECIFICATION 09 90 00. LAUNDER SYSTEM INCLUDES ALL LAUNDER SECTIONS MENTIONED ON THE LEGEND BELOW PLUS SUPPORT MEMBERS. REMOVE EXISTING WEIR PLATES PRIOR TO COATING THE LAUNDERS AND RE-INSTALL THEM AFTER COATING IS COMPLETE.
4. ALL STAINLESS STEEL MATERIAL, EXISTING ELECTRICAL, AND MECHANICAL EQUIPMENT SHALL BE PROTECTED FROM COMING INTO CONTACT WITH BLAST MEDIA, BLAST DAMAGE OR DUST, AND COATING OVERSPRAY.
5. REMOVE AND REPLACE ALL NEOPRENE, BOLTS AND WASHER FOR V-NOTCH WEIRS AND SQUEEGEES AS INDICATED ON C/94M02 AND B/94M04. WEIR PLATES V-NOTCH SHALL BE SET TO EL. 112.40 +/- (1/8").
6. REMOVE AND REINSTALL SEALS AT CENTER COLUMN AS SHOWN ON DRAWING 94M03.
7. REMOVE ALL APPURTENANCES THROUGHOUT THE TANK SUCH AS LAUNDER DRAIN VALVES, SPRAY WATER LINES, CATHODIC ANODES, ETCETERA TO PROPERLY COAT ALL METAL SURFACES AND PROTECT APPURTENANCES. DO NOT REMOVE WALKWAYS. RE-INSTALL REMOVED APPURTENANCES AFTER COATING.
8. ON NORTH BEAM SUPPORTING THE EFFLUENT LAUNDER, STENCIL THE COMPANY, YEAR AND COATING MATERIAL APPLIED. USING 4" HIGH LETTERING.
9. APPLY SIKAFLEX 1A SEALANT TO ALL ABUTTING METAL SURFACES AND BOLT HOLES THROUGH THE TANK EQUIPMENT WHERE THE NEW COATING IS APPLIED.
10. ONCE THE PROJECT IS COMPLETED, THE CONTRACTOR ALONG WITH AN INSPECTOR AND A DISTRICT REPRESENTATIVE WILL RUN THE SLUDGE ARM IN TWO FULL ROTATIONS WHILE DRY TO MAKE SURE THE ARM RUNS CORRECTLY. ONCE ACCEPTED, THE TANK WILL BE FILLED AND PUT INTO SERVICE SO THAT THE WEIRS ARE ADJUSTED.

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SECONDARY SEDIMENTATION TANKS
10 & 16 REHABILITATION PROJECT

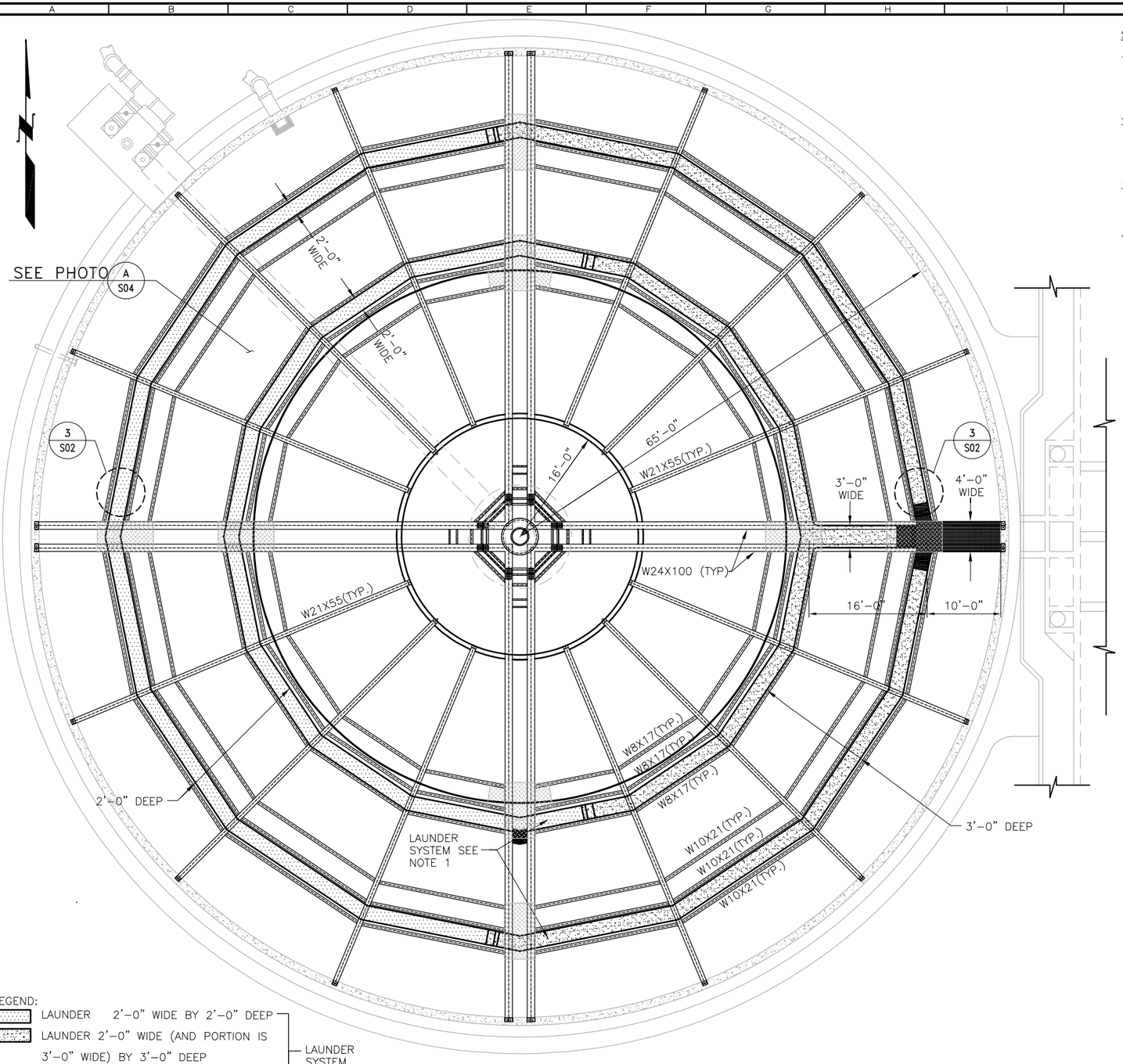
GENERAL

SST 16 STEEL COATING
BELOW SUPER STRUCTURE SCOPE

SCALE
NONE

DRAWING NUMBER
94S03

SHEET NUMBER
9 OF 18



LEGEND:

- LAUNDER 2'-0" WIDE BY 2'-0" DEEP
- LAUNDER 2'-0" WIDE (AND PORTION IS 3'-0" WIDE) BY 3'-0" DEEP
- LAUNDER 4'-0" WIDE BY 4'-0" DEEP

(LAUNDER SYSTEM)

- EXISTING CHECKER PLATE (TYPICAL)

BEAM AND LAUNDER PLAN VIEW (TYPICAL OF 2)

Scale: 1/8"=1'

SST 16 SUPER STRUCTURE COATING REPAIRS:

1. LIGHTLY SAND PER COATING MANUFACTURE AND COAT EXISTING SUPERSTRUCTURE BEAMS PER SPECIFICATION 09 90 00 WITH A FINISH COAT OF POLYURETHANE COATING. MAJOR COMPONENTS OF SUPERSTRUCTURE INCLUDE BEAM EXTENSION, AND ALL W8X17, W10X21, W21X55, AND W24X100 MEMBERS IN THE TANK. COAT ALL THAT IS ACCESSIBLE WITHOUT REMOVING CHECKERBOARD WALKWAY,
2. PROTECT ALL EXISTING CHECKERED WALKWAY DECK PLATES TO PROPERLY COAT THE BEAMS. EXISTING ALUMINUM HAND RAILING MUST BE PROTECTED FROM DAMAGE OR OVERSPRAY. PROTECT ALL HARDWARE CONSISTS OF 1/4" DIA. GALVANIZED BOLTS, WASHERS, AND NUTS WITH 1/4" THICK SLOTTED PLATES FROM OVER SPRAY. WRAP AND PROTECT ALL BEAM SUPPORTS FROM BLASTING AND OVERSPRAY.
3. ANY CORRODED METAL SHOWING ON THE SUPER STRUCTURE WILL NEED TO BE SANDED AND COATED PER THE SPECIFICATIONS. THIS INCLUDES THE CORRODED ENDS OF THE I-BEAMS. FOR BIDDING PURPOSES, ASSUME 12 SPOTS PER TANK WITH A SURFACE AREA OF 2 SQ. FT. EACH.
4. APPLY SIKAFLEX 1A SEALANT TO ALL ABUTTING METAL SURFACES AND BOLT HOLES TROUGH THE TANK EQUIPMENT WHERE THE NEW COATING IS APPLIED.

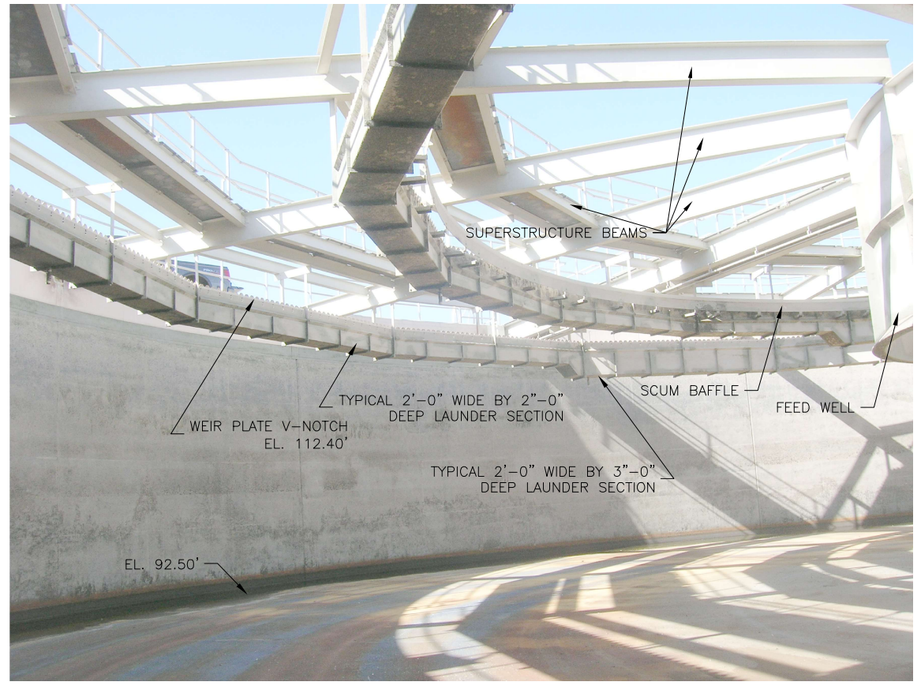


PHOTO A S04 N.T.S.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER ALEJANDRO AGUILERA NO. C 68362 EXP: 09/30/27 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 TU
DESIGNED TU
CHECKED

RFB #8529
CONTRACT NUMBER

SACRAMENTO AREA SEWER DISTRICT
OF SACRAMENTO COUNTY, CALIFORNIA

ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

STRUCTURAL

SST 16 SUPER STRUCTURE STEEL COATINGS

SCALE: AS NOTED
DRAWING NUMBER: 94S04
SHEET NUMBER: 10 OF 18

PHOTO A S05
N.T.S.

LAUNDER AND SLUDGE COLLECTOR REPAIRS

GENERAL NOTES:

1. THE LAUNDER SUPPORTS ON THESE DWGS ARE FOR REFERENCE ONLY.
2. ALL METAL REPAIRS SHALL USE STAINLESS STEEL CONFORMING TO ASTM A 276, GRADE A, TYPE 304L. METAL PLATES SHALL BE STAINLESS STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A 240, TYPE 304L.
3. TIG WELDING OF STRUCTURAL STAINLESS STEEL SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.6. WELDING OF STRUCTURAL STEEL TO STAINLESS STEEL. WELDING SHALL BE DONE BY WELDERS WHO HAVE BEEN QUALIFIED BY TESTS AS PRESCRIBED BY AWS D1.6. SUBMIT WELDERS TEST RECORDS/ CERTIFICATIONS.
4. THE SUPPORTS ARE A DIFFERENT STAGE OF DETERIORATION AND THEY ARE CLASSIFIED AS CASE 1 & 2 REPAIRS DWG 94S06.
5. MATERIALS AND METHODS OF CONSTRUCTION ARE DESCRIBED BELOW.

LAUNDER AND COLLECTOR PIPE SUPPORT REPAIR MATERIALS:

1. ALL NEW STEEL PLATES AND ANGLES TO BE STAINLESS STEEL TYPE 304L, CONFORMING TO ASTM A276 STANDARDS.
2. ALL NEW BOLTS, INCLUDING ALL-THREAD RODS FOR ADHESIVE ANCHORS, TO BE STAINLESS STEEL TYPE 304, CONFORMING TO ASTM F593, GROUP 1, CONDITION CW, STANDARD.
3. NEW WELD STUDS TO BE STAINLESS STEEL, TYPE 304L, CONFORMING TO ASME A276 OR A43 STANDARDS. NELSON WELD STUDS ARE ALSO AN ACCEPTABLE PRODUCT.
4. ADHESIVE FOR ADHESIVE ANCHORS TO BE SIMPSON STRONG-TIE, SET-3G, OR HILTI HIT-RE 500-V3.
5. ELECTRODES FOR CARBON STEEL WELDING TO BE E70XX.
6. FOR WELDING STAINLESS STEEL TO CARBON STEEL USE 309L FILL MATERIAL. SUBMIT WELDING PROCEDURE AND FILLER METAL MATERIAL FOR REVIEW AND APPROVAL.

LAUNDER AND COLLECTOR PIPE SUPPORT CONSTRUCTION NOTES:

1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND MEMBER SIZES.
2. REPAIR OF THE EFFLUENT LAUNDER VERTICAL SUPPORTS (REPAIR ON DRAWING 94S06) CAN BE DONE ON EVERY OTHER SUPPORT AT THE SAME TIME. REPAIRS ON TWO ADJACENT VERTICAL SUPPORTS IS NOT PERMITTED. A VERTICAL SUPPORT INCLUDES BOTH SUPPORT ANGLES ON EACH SIDE OF THE EFFLUENT LAUNDER.
3. FOR CASES 1 AND 2 OF THE REPAIRS OF THE EFFLUENT LAUNDER VERTICAL SUPPORTS THE WELDED STUDS CONNECTION IS THE PREFERRED METHOD. IF EFFLUENT LAUNDER PLATE IS LESS THAN $\frac{3}{16}$" THICK OR IF WELDED STUDS ARE POSSIBLE THEN USE THE WELDED CONNECTION DETAILS. METHODS ARE DESCRIBED IN DWG 94S06.
4. LOCATION OF WELDED STUDS CAN BE AT THE SAME LOCATIONS AS THE EXISTING STUDS IF THE EFFLUENT LAUNDER PLATE IS AT LEAST $\frac{3}{16}$" THICK. WELDED STUDS CAN BE LOCATED AT LEAST TWO INCHES, MEASURED CENTER T CENTER, ABOVE OR BELOW EXISTING STUDS.
5. NEW HOLES IN EXISTING SUPPORT ANGLES TO BE COATED IN ACCORDANCE WITH COATING SPECIFICATIONS.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER
GERARDO AGUIRRE
NO. C 68362
EXP: 09/30/27
CIVIL
STATE OF CALIFORNIA

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ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS
10 & 16 REHABILITATION PROJECT

STRUCTURAL

SST's 10 & 16
LAUNDER & SLUDGE COLLECTOR
REPAIR CONSTRUCTION NOTES

SCALE
N.T.S.

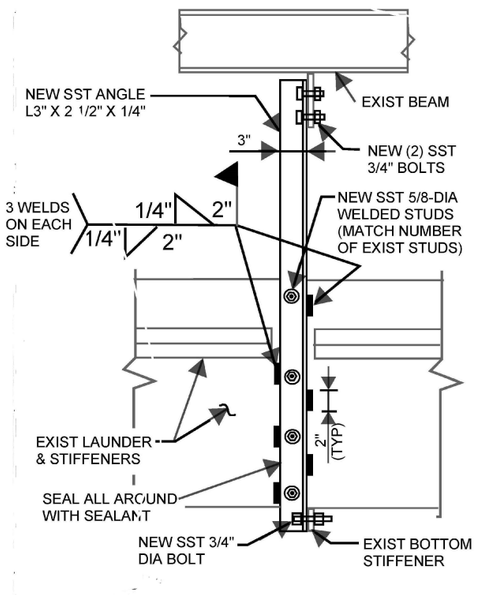
DRAWING NUMBER
94S05

SHEET NUMBER
11 OF 18

PHOTO A N.T.S. S06

PHOTO B N.T.S. S06

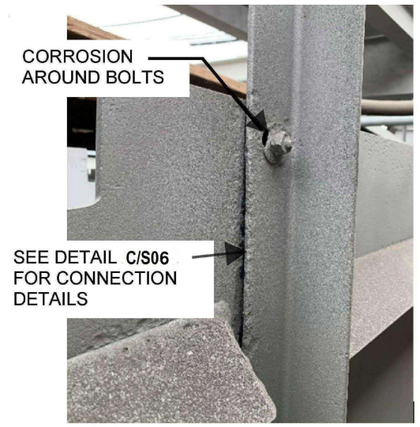
CASE 1: ONE LEG OF SUPPORT ANGLE COMPLETELY CORRODED, OR SUPPORT ANGLE IN FAIR CONDITION BUT DETACHED FROM LAUNDER PLATE DUE TO RUST POCKETS BEHIND ANGLE



VERTICLE SUPPORT DETAIL C N.T.S. S06

CASE 1 REPAIR PROCEDURES (TYPICAL 40 PER TANK):

1. AFTER BLASTING, ANGLE REPLACEMENT LOCATIONS TO BE DETERMINED BY DISTRICT ENGINEER.
2. SEE SHEET 94S05 FOR MATERIAL AND CONSTRUCTION NOTES.
3. REMOVE EXITING SUPPORT ANGLE. CUT EXISTING BOLTS FLUSH WITH LAUNDER PLATE. BLAST CLEAN EFFLUENT LAUNDER PLATE AND COAT AS SPECIFIED IN THE CONTRACT.
4. WELD STAINLESS STEEL $\frac{5}{8}$" DIA THREADED STUD TO LAUNDER PLATE. CONNECT NEW STAINLESS STEEL ANGLE L 3" X 2 $\frac{1}{2}$" X 5' 6" X $\frac{1}{4}$" TO TOP SUPPORTING BEAMS AND TO LAUNDER. IF EXISTING LAUNDER PLATE IS LESS THAN $\frac{3}{16}$" THICK STITCH WELD NEW SUPPORT ANGLE TO EXISTING EFFLUENT LAUNDER WITH (6) $\frac{1}{4}$" FILLET WELDS BY 2" LONG. AND STAGGER 3 WELDS ON EACH SIDE OF THE ANGLE LEG. SEE DETAIL C/S06 FOR WELD INFORMATION. CONNECT NEW SUPPORT ANGLE TO EXISTING LAUNDER BOTTOM STIFFENER PLATE WITH A STAINLESS STEEL $\frac{3}{4}$" DIAMETER BOLT, NUT AND WASHER.
5. SEAL ALL EDGES OF NEW ANGLE IN CONTACT WITH THE LAUNDER PLATE WITH SIKAFLEX 1A SEALANT.



CASE 2: SUPPORT ANGLE IN FAIR CONDITION BUT WITH LOCALIZED CORROSION AROUND THE BOLTS

PHOTO D N.T.S. S06

CASE 2 REPAIR PROCEDURES (TYPICAL 40 PER TANK):

1. AFTER BLASTING, LOCATIONS TO BE DETERMINED BY DISTRICT ENGINEER.
2. SEE SHEET 94S05 FOR MATERIAL AND CONSTRUCTION NOTES.
3. CUT EXISTING STUD BOLTS, CLEAN HOLES AND WELD NEW STAINLESS STEEL $\frac{5}{8}$" DIA THREADED STUD BOLTS TO LAUNDER PLATE. CONNECT EXISTING STAINLESS STEEL ANGLE L 3" X 2 $\frac{1}{2}$" X 5' 6" X $\frac{1}{4}$" TO TOP SUPPORTING BEAMS TO LAUNDER.
4. IF WELDING NEW STUD BOTS ARE NOT FEASIBLE, STICH WELD EXISTING ANGLE TO EXISTING EFFLUENT LAUNDER WITH (6) $\frac{1}{4}$" FILLET WELDS BY 2" LONG, AND STAGGER 3 WELDS ON EACH SIDE OF THE ANGLE LEG. SEE DETAIL C/S06 FOR WELD INFORMATION.
5. CONNECT SUPPORT ANGLE TO EXISTING LAUNDER BOTTOM STIFFNER PLATE WITH A STAINLESS STEEL $\frac{3}{4}$" DIA BOLT, NUT AND WASHER AS SHOWN IN DETAIL C/S06.
6. SEAL ALL EDGES OF NEW ANGLE IN CONTACT WITH THE LAUNDER PLATE WITH SIKAFLEX 1A SEALANT.

TYPICAL EFFLUENT LAUNDER VERTICLE SUPPORT ANGLE REPAIRS

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER — ALEJANDRO AGUIRRE — NO. C 68362 — EXP: 09/30/27 — CIVIL — STATE OF CALIFORNIA

REVISIONS					
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OF SACRAMENTO COUNTY, CALIFORNIA

ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

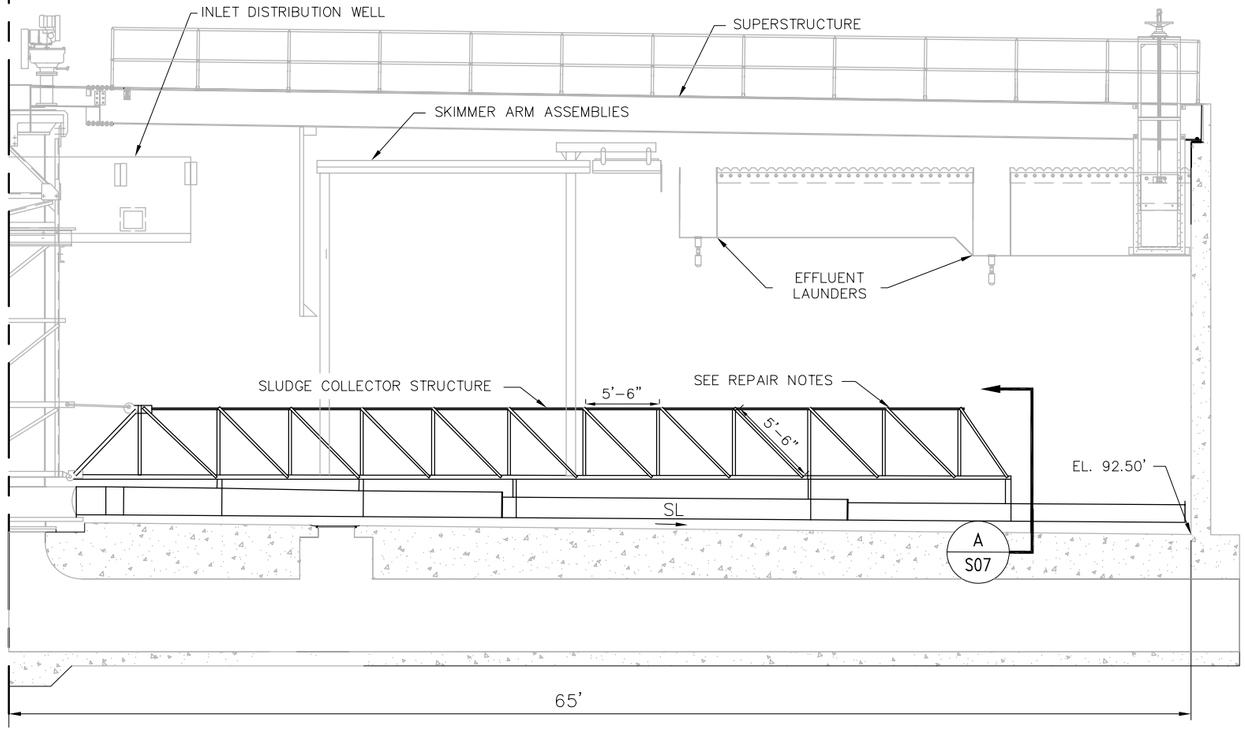
STRUCTURAL

SST's 10 & 16
EFFLUENT LAUNDER VERTICAL SUPPORT REPAIR

SCALE N.T.S.

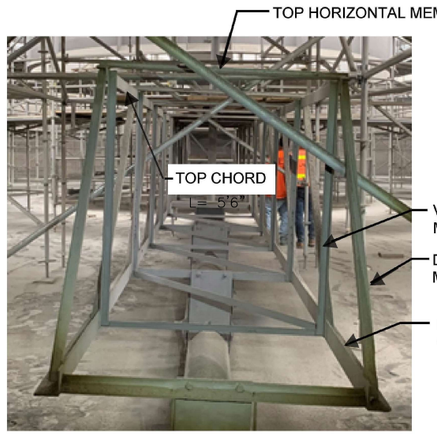
DRAWING NUMBER 94S06

SHEET NUMBER 12 OF 18



SECTION 1/S07 N.T.S. (TYPICAL OF 2 TANKS)

SLUDGE COLLECTOR STRUCTURE PLAN VIEW

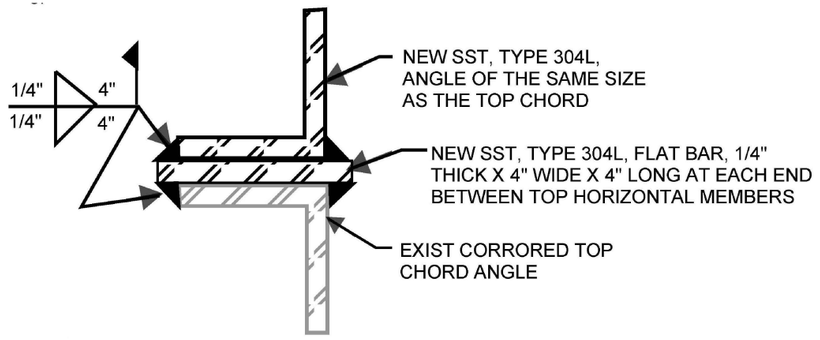


COLLECTOR PIPE SUPPORT ARM

PHOTO A/S07 N.T.S.

TYPICAL MEMBER CORROSION

PHOTO B/S07 N.T.S.



DETAIL C/S07 N.T.S.

SLUDGE COLLECTOR ARM REPAIR

SLUDGE COLLECTOR REPAIR NOTES (TYPICAL 20 PER TANK):

1. AFTER BLASTING, DISTRICT ENGINEER WILL IDENTIFY CORRODED MEMBERS WITH CROSS SECTIONAL AREA LOSS OF 25 PERCENT OR MORE.
2. FOR CORRODED HORIZONTAL, VERTICAL AND DIAGONAL TRUSS MEMBERS WELD NEW STAINLESS STEEL TYPE 304I, ANGLE OF THE SAME SIZE AS THE CORRODED MEMBER TO THE OPPOSITE SIDE OF THE TOP AND BOTTOM CHORD MEMBERS ADJUST LOCATION OF THE NEW ANGLE TO AVOID CONFLICTS WITH EXISTING MEMBERS.
3. FOR CORRODED TOP CHORD MEMBERS WELD A 304L SST GUSSET PLATE ¼" THICK X 4" WIDE X 4" LONG ON THE TO LEG, ONE AT EACH SIDE, BETWEEN TOP HORIZONTAL MEMBERS. WELD A NEW STAINLESS STEEL ANGLE OF THE SAME SIZE AS THE CORRODED MEMBER TO THE GUSSET PLATE PER DETAIL C/S07.
4. SEE DWG 94S05 FOR MATERIAL AND CONSTRUCTION NOTES

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER ALEJANDRO AGUIRRE NO. C 68362 EXP: 09/30/27 CIVIL STATE OF CALIFORNIA

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SACRAMENTO AREA SEWER DISTRICT
OF SACRAMENTO COUNTY, CALIFORNIA

ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

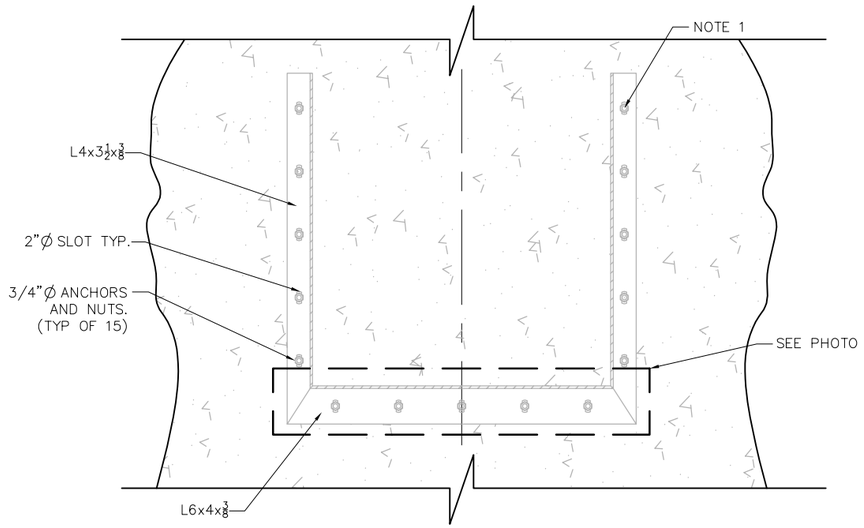
STRUCTURAL

SST's 10 & 16
SLUDGE COLLECTOR
PIPE SUPPORT REPAIR

SCALE
N.T.S.

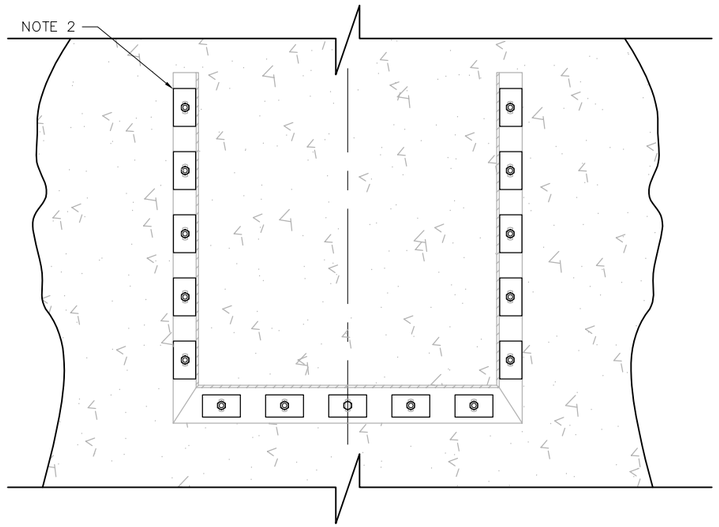
DRAWING NUMBER
94S07

SHEET NUMBER
13 OF 18

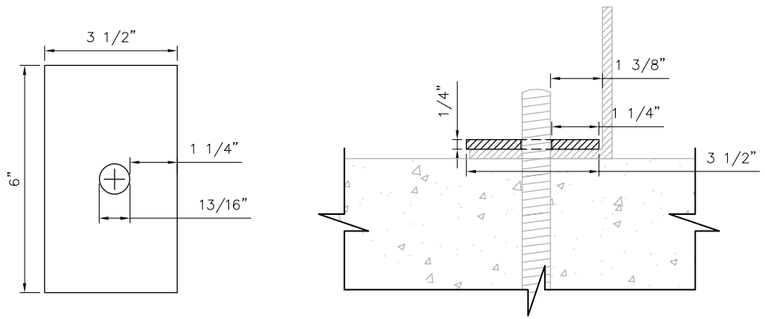


EXISTING LAUNDER & CONCRETE WALL CONNECTION DETAIL

EXISTING LAUNDER & CONCRETE WALL CONNECTION



NEW LAUNDER & CONCRETE WALL CONNECTION DETAIL PER TANK



SQUARE WASHER DETAIL

NOTES:

1. REMOVE EXISTING ¾" NUTS AND RETHREAD EXISTING ANCHORS AS NEEDED. REPLACE ANCHORS THAT BREAK DURING THE NUT REMOVAL.
2. PROVIDE FIFTEEN (15) 6"X3½"X½" STAINLESS STEEL PLATE WASHERS WITH OFFSET 1–1/8" DIA. HOLE TO AVOID INTERFERENCE WITH LAUNDER (APPROXIMATELY 15 WASHERS PER TANK).
3. SANDBLAST LAUNDER FLANGE AND COAT PER SPEC. 09 90 00. CLEAN PLATE WASHERS OF OILS PRIOR TO INSTALLATION WITH NEW ¾" STAINLESS STEEL NUTS. SEAL ALL EDGES AND BOLTS WITH SIKA1A TO PREVENT WATER INTRUSION BETWEEN PLATES.

SACRAMENTO AREA SEWER DISTRICT

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SACRAMENTO AREA SEWER DISTRICT
OF SACRAMENTO COUNTY, CALIFORNIA

ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

STRUCTURAL

SST's 10 & 16
EFFLUENT LAUNDER REPAIR

SCALE

DRAWING NUMBER
94S08

SHEET NUMBER
14 OF 18

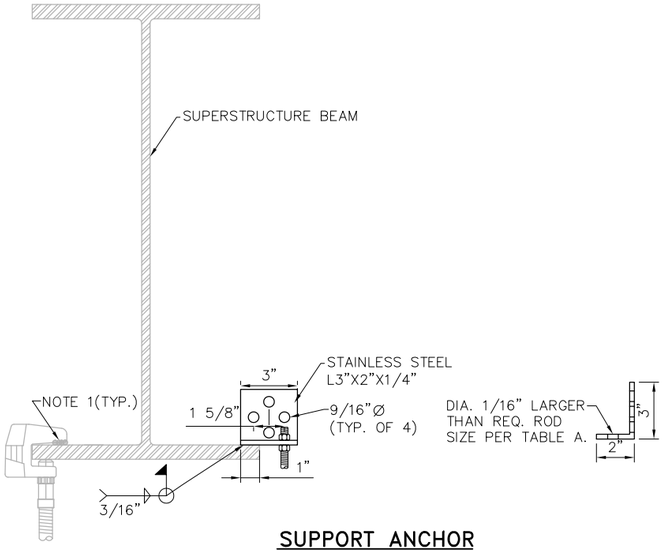
TABLE A

NOMINAL PIPE SIZE	TYPE 1 PIPE HANGER		MAXIMUM PIPE SPAN (FEET)			
	ROD SIZE (INCHES)	DESIGN LOAD (POUNDS)	STEEL SEE NOTE 3	COPPER	PLASTIC SEE NOTE 3	CAST IRON SEE NOTE 4
1/2	3/8	610	5	5	CONTINUOUS	--
3/4	3/8	610	5	5	5	--
1	3/8	610	5	5	5	--
1-1/4	3/8	610	5	5	5	--
1-1/2	3/8	610	5	5	5	--
2	3/8	610	10	5	5	10 FEET FOR SOIL PIPE
2-1/2	1/2	1130	11	10	5	
3	1/2	1130	12	20	5	
3-1/2	1/2	1130	--	--	--	
4	5/8	1430	14	20	5	
5	5/8	1430	--	--	--	
6	3/4	1940	17	20	5	
8	3/4	2000	19	20	5	
10	--	--	22	--	5	
12	--	--	23	--	10	

12 FEET FOR PRESSURE PIPE

SST 10 ONLY NOTES:

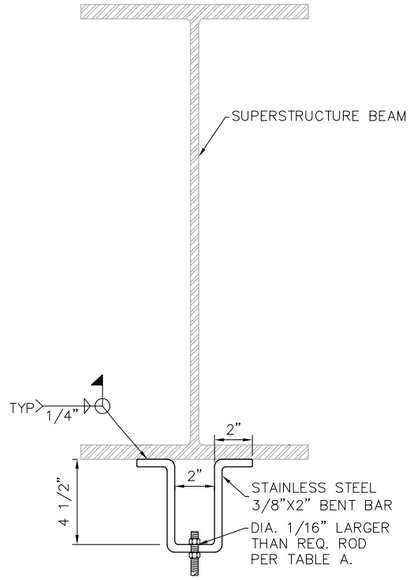
1. DESIGN WEIGHT SHALL BE TWICE THE WEIGHT OF THE PIPE FULL OF WATER. HANGER SYSTEMS SHALL BE DESIGNED USING THIS DESIGN WEIGHT.
2. ROD SIZES AND DESIGN LOADS BASED ON LOAD CALCULATIONS FOR B-LINE HANGERS. THE TOTAL DESIGN LOAD SHALL NOT EXCEED THE MAXIMUM LOADS SHOWN IN THE TABLE ABOVE.
3. SPAN SHOWN IS FOR SCHEDULE 80 PVC PIPE AT 100°F. SPANS FOR OTHER PLASTICS, OTHER PVC PIPE SCHEDULES AND PIPE AT HIGHER TEMPERATURES SHALL BE SHORTENED IN ACCORDANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS. "CONTINOUS" MEANS PIPE SHALL BE IN UNISTRUT OR SIMILAR CHANNEL.



SUPPORT ANCHOR

1/2" THROUGH 3-1/2" PIPE

DETAIL C / VAR — NO SCALE



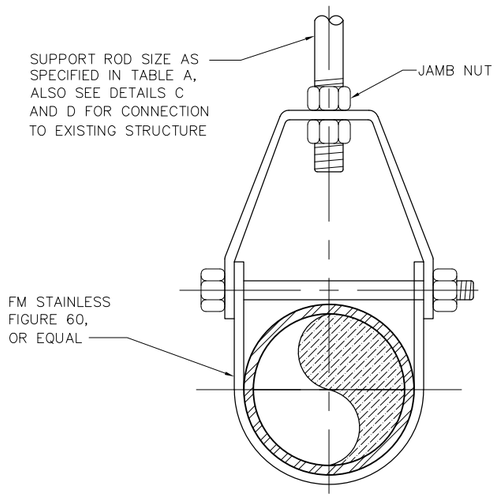
SUPPORT ANCHOR

4"TROUGH 6" PIPE

DETAIL D / VAR — N.T.S.

SST 10 ONLY NOTES:

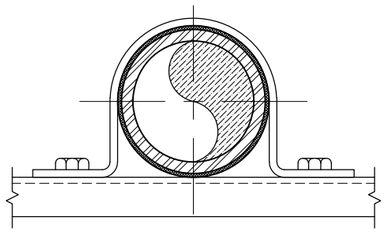
1. REMOVE ALL EXISTING WELDED C-TYPE CLAMPS (APPROX 80) AND GRIND FLUSH WELDS LEAVING NO SHARP EDGES PRIOR TO COATING OF BEAMS. CONTRACTOR TO FIELD VERIFY QUANTITY OF CLAMPS TO BE REMOVED.
2. REMOVABLE BEAM CLAMPS WILL NOT BE ALLOWED DUE TO THE DAMAGE CAUSED TO COATINGS. DETAIL C/VAR SUPPORT MAY BE ORIENTED AS NEEDED TO ACCOMMODATE THE USE OF S.S. UNITSTRUT CHANNELS. UN-USED HORIZONTAL HOLES ON "L" BRACKET WILL NOT BE PERMITTED.



TYPE 1 PIPE HANGER (APPROX 80)

1/2" THROUGH 8" PIPE

DETAIL A / VAR — NO SCALE



TYPE 6 PIPE HANGER

DETAIL B / VAR — NO SCALE

SST 10 ONLY GENERAL NOTES:

1. HANGERS AND SUPPORTS SHALL BE TYPE 304 STAINLESS STEEL.
2. UNLESS OTHERWISE SPECIFIED, EXPANSION ANCHORS SHALL NOT BE USED.
3. ALL PIPING SUPPORTED BY HANGERS AND/OR STRUCTURAL ATTACHMENTS SHALL BE BRACED AGAINST HORIZONTAL, VERTICAL, AXIAL, AND LONGITUDINAL SWAY.
4. UNLESS OTHERWISE SPECIFIED, TRAPEZE AND PIPE RACK COMPONENTS SHALL HAVE A MINIMUM STEEL THICKNESS OF 12 GAGE WITH A MAXIMUM DEFLECTION OF 1/240 OF THE SPAN. MINIMUM CHANNEL COMPONENT SIZE SHALL BE 1-5/8" SQUARE AS MANUFACTURED BY B-LINE B22 OR EQUAL.
5. NOT ALL PIPE HANGERS ARE USED IN THESE CONTRACT DRAWINGS.
6. SECURE ALL NUTS WITH THREAD LOCKING COMPOUND.
7. FOR COPPER PIPE SECURE 10 MIL PVC TAPE HALFLAP WRAP AROUND PIPE.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER — GERARDO AGUIRRE — NO. C 68362 — EXP: 09/30/27 — CIVIL — STATE OF CALIFORNIA

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ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

MECHANICAL

SST 10 (ONLY)
STANDARD PIPE HANGERS

SCALE
N.T.S.

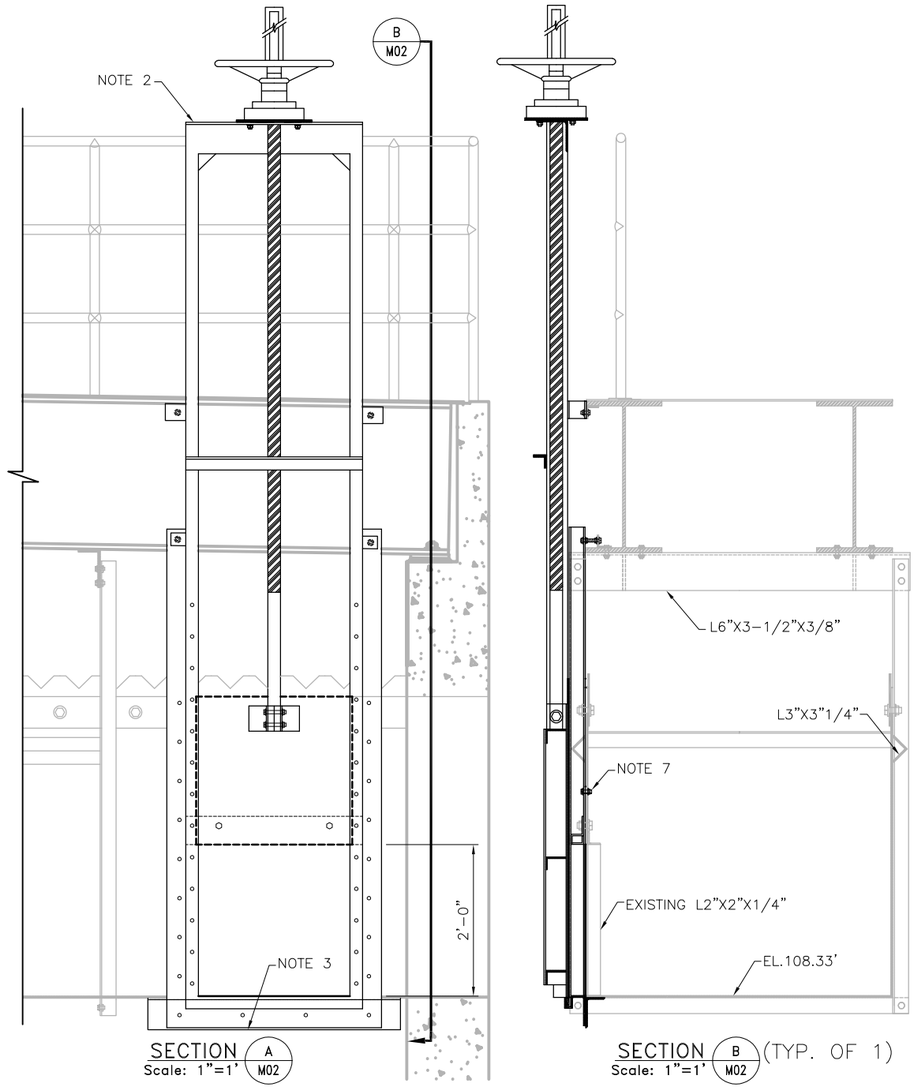
DRAWING NUMBER
94M01

SHEET NUMBER
15 OF 18

PHOTO (A/M02) N.T.S. (TYP OF 2)

SST 10 SLG44214 NOTES:
1. REMOVE EXISTING OPERATOR, SHAFT, AND SLIDE GATE AS SHOWN ON PHOTO A/M02.
2. REMOVE EXISTING SLIDE GATE AND ANGLE IRON ON EXISTING GATE.
3. MODIFY LAUNDERS AS NEEDED FOR THE PROPER INSTALLATION AND OPERATION OF SLIDE GATES INSTALLED UNDER THIS CONTRACT

SST 16 SLG44814 NOTES:
1. REMOVE EXISTING OPERATOR, SHAFT, AND SLIDE GATE AS SHOWN ON PHOTO A/M02 AND RE-USE.

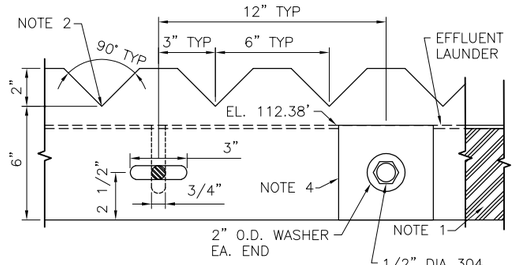


SECTION (A/M02) Scale: 1"=1'

SECTION (B/M02) Scale: 1"=1' (TYP. OF 1)

SST 10 SLG44214 NOTES:
1. INSTALL SLIDE GATES PER SPECIFICATION 40 06 20.30.
2. TOP OF FRAMES MUST BE 44" MINIMUM ABOVE EXISTING DECK AND OPERATORS MUST MAINTAIN A 3" MINIMUM SEPARATION FROM EXISTING RAILINGS.
3. WELD NEW 4' LONG L5"X3"X1/4" ASTM A36 TO EXISTING LAUNDERS.
4. MODIFY EXISTING LAUNDERS AS NEEDED TO ALLOW PROPER INSTALLATION AND INSTALLATION OF THE SLIDE GATES.
5. COAT EXISTING LAUNDER AND BEAM PER SPECIFICATION 09 90 00 PRIOR TO SLIDE GATE INSTALLATION.
6. INSTALL 1/8" NEOPRENE CLOTH INSERT GASKET WITH RTV SEALANT BETWEEN SLIDE GATES AND EXISTING LAUNDERS.
7. TYPICAL SLIDE GATE ANCHORAGE PER MANUFACTURER INSTRUCTIONS. BOLTS SHALL BE TYPE 304 STAINLESS STEEL.

SST 16 SLG44814 NOTES:
1. REINSTALL EXISTING SLIDE GATE AND EXISTING NEOPRENE SEALS.



WEIR PLATE DETAIL (C/M02) Scale: 3"=1'

SST 10 & 16 NOTES:
1. REPLACE EXISTING NEOPRENE WITH $\frac{1}{8}$"THICK X 5" HIGH AND CONTINUOUS LENGTHS WHEN POSSIBLE. NEOPRENE BOLT HOLES TO BE PUNCHED OR DRILLED WITH THIGHT FIT TO PREVENT FLOW SHORT CIRCUITING. CONTRACTOR TO FIELD VERIFY ACTUAL LENGTH ON TANKS 10 & 16.
2. CAUTION MUST BE USED DURING THE WEIR PLATE REMOVAL/LABELING TO ALLOW FOR PROPER REINSTALLATION. CONTRACTOR WILL BE RESPONSIBLE TO CORRECT ANY EFFLUENT SHORT CIRCUITING. DUE TO BEAM DEFLECTIONS, ELEVATIONS ARE DIFFERENT WHEN THE TANK IS EMPTY VS. IN-SERVICE. SET THE V-NOTCH WEIR P TO EL. 112.40' +/- (1/8") WHEN TANKS ARE IN-SERVICE.
3. REUSE EXISTING WEIR BOLTS AND PROVIDE ADDITIONAL BOLTS AS NEEDED OR MISSING. ESTIMATE A TOTAL OF 30 SETS OF BOLTS, NUTS, AND WASHERS WILL NEED TO BE REPLACED ON TANKS 10 & 16. APPLY ANTI-SIEZE COMPOUND TO BOLTS.
4. INSTALL A FIBERGLASS SQUARE 5"X5"X$\frac{1}{4}$" THICK WITH $\frac{9}{16}$" DIAMETER BOLT HOLE IN CENTER AT EACH BOLT TO SUPPORT EXISTING WEIR PLATE. A TOTAL OF 1,300 WASHERS FOR SST's 10 ONLY. FLAT AND SHARP EDGES OF FIBERGLASS WASHERS MUST BE SEALED WITH APPROPRIATE ULTRAVIOLET RESISTANT RESIN.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER — GERARDO AGUIRRE — NO. C 68362 — EXP. 09/30/27 — CIVIL — STATE OF CALIFORNIA

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ZONE	REV.	DESCRIPTION	BY	DATE	APP.

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

FILE
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DESIGNED TU
CHECKED

RFB #8529
CONTRACT NUMBER

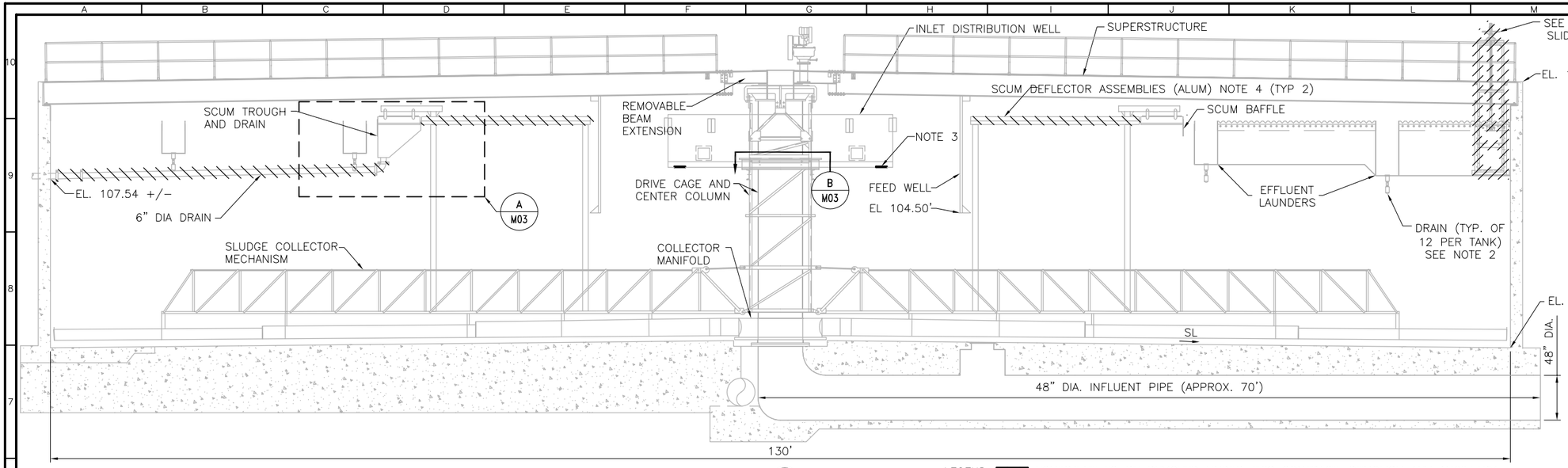
SACRAMENTO AREA SEWER DISTRICT
OF SACRAMENTO COUNTY, CALIFORNIA

ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

MECHANICAL

SST'S 10 & 16 SLIDE GATE AND WEIR PLATE MODIFICATIONS

SCALE: AS NOTED
DRAWING NUMBER: 94M02
SHEET NUMBER: 16 OF 18



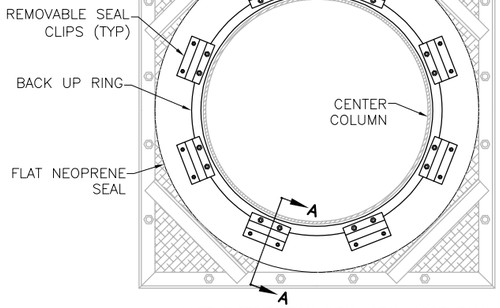
SECTION 1 M03 (TYP. OF 2)
Scale: 3/16"=1'

LEGEND: EQUIPMENT TO BE REMOVED UNDER THIS CONTRACT. DEMOLISH ANY ANCILLARY SUPPORTS AND EQUIPMENT NOT NEEDED FOR THE NEW EQUIPMENT INSTALLATION.

SST 10 (ONLY) NOTES:
1. REPLACE ALL EXISTING BEAM CLAMPS ON WATER LINES AND CONDUITS PER DETAILS ON DRAWING 86M01.
2. REMOVE AND RE-INSTALL DRAIN AFTER COATING. SUPPLY NEW O-RINGS AND 24 HOLLOW WATER FLOATABLE STAINLESS STEEL 1-1/2" DIA. BALLS (18 GRAMS OR LESS).
3. DRILL TWO 3" HOLES EQUALLY SPACED AT THE BOTTOM OF THE INLET DISTRIBUTION WELL OF SST's 10.
4. NEW SCUM DEFLECTOR ASSEMBLIES SHALL MATCH EXISTING AND OPERATE AS PART OF EXISTING EQUIPMENT INSIDE OF TANKS 10. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND MATERIAL.

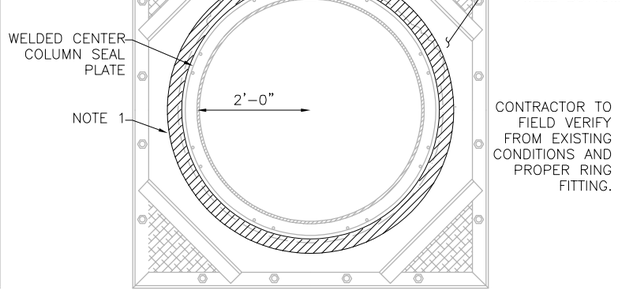
SST 16 (ONLY) NOTES:
1. USE EXISTING BEAM CLAMPS FOR CONDUITS PER DETAILS ON DRAWING 86M01.
2. REMOVE AND RE-INSTALL DRAIN AFTER COATING. SUPPLY NEW O-RINGS AND 24 HOLLOW WATER FLOATABLE STAINLESS STEEL 1-1/2" DIA. BALLS (18 GRAMS OR LESS).
3. USE EXISTING INLET DISTRIBUTION WELL SEAL ASSEMBLY
4. USE EXISTING SCUM DEFLECTOR ASSEMBLIES.

PHOTO A M03
Scale: N.T.S.



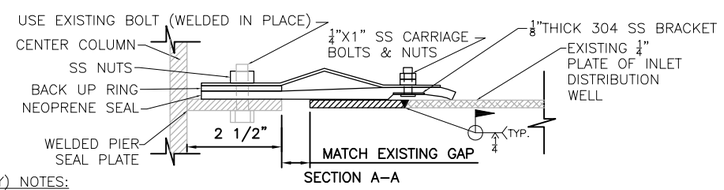
INLET DISTRIBUTION WELL SEAL ASSEMBLY

SECTION B M03
Scale: N.T.S.



INLET DISTRIBUTION WELL WITHOUT SEAL ASSEMBLY

SECTION C M03
Scale: N.T.S.



SECTION A-A

SST 10 (ONLY) NOTES:
1. REMOVE EXISTING SEAL ASSEMBLY TO WELD NEW METAL RING AS SHOWN ON SECTION A-A AND GRIND WELDS FLUSH. CUT EXISTING PLATE AS NEEDED TO MAKE ROOM FOR NEW RING. CONTRACTOR TO PROVIDE 1/4" STEEL REPLACEMENT SEGMENTS AT 61.5" O.D. & 56.5" I.D. SEE TABLE TABLE A FOR MATERIALS LIST. CONTRACTOR TO FIELD VERIFY DIMENSIONS FOR PROPER FITMENT.
2. INSTALL NEW SEAL ASSEMBLY AFTER COATING REPAIRS ARE PERFORMED. UTILIZE FLAT NEOPRENE SEAL, 16GA TYPE 304 SS BACK UP RING, 1/8"THICK 304 SS FORMED SEAL CLIPS, 1/8"THICK 304 SS BRACKET, SS 1/4"X1" CARRIAGE BOLTS AND NUTS TO MATCH EXISTING. SEE TABLE A FOR MATERIALS LIST. CONTRACTOR TO FIELD VERIFY DIMENSIONS.

TABLE A

CENTER COLUMN SEAL MATERIAL LIST
TANK 10 (ONLY)

QTY	UM	PART	DECRIPTION
8	EA	BRACKETS	1/8" 304ss BRACKETS
8	EA	FORMED BRACKET	1/8" THICK 304SS ANGLE BRACKETS
4	EA	SEAL RING SEGMENTS	16GA SS
1	EA	1/4" STEEL RING SET	61.5" OD 56.5" ID
32	EA	1/4"X1" BOLTS	SS CARRIAGE BOLTS
32	EA	NUTS	SS NUTS

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER WILLIAM Y. IU No. 68143 Exp. 06-30-2025 CIVIL ENGINEER STATE OF CALIFORNIA

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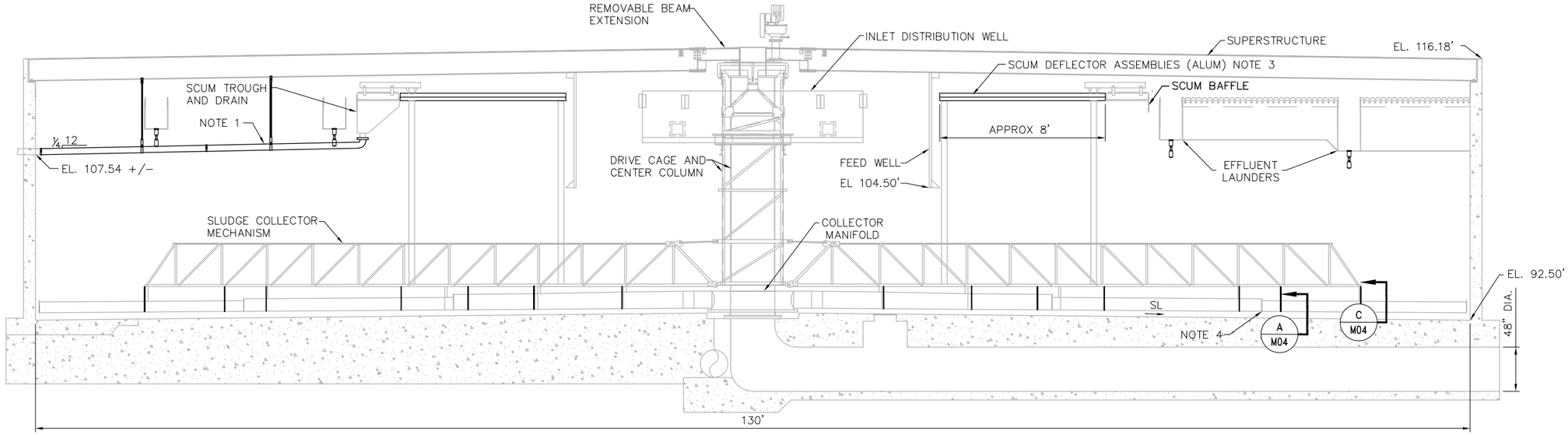
OF SACRAMENTO COUNTY, CALIFORNIA

ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

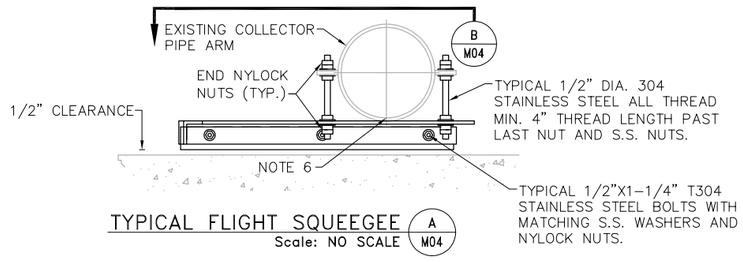
MECHANICAL

SST 10 & 16 DEMOLITION AND DISTRIBUTION WELL SEAL REPAIR

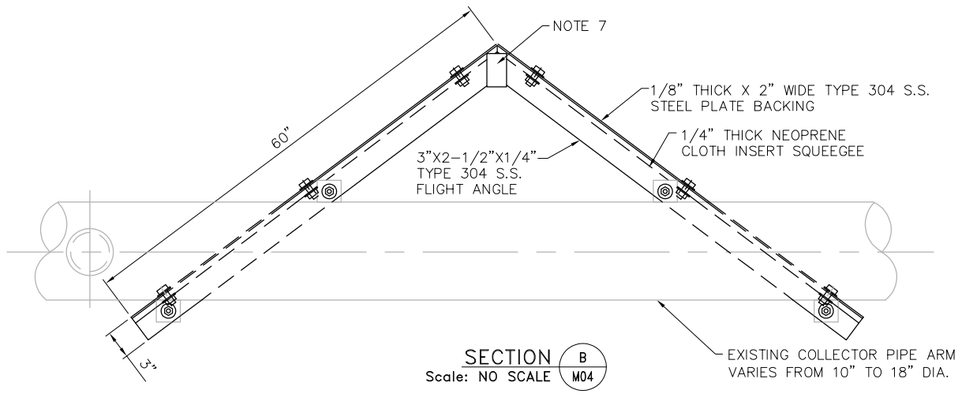
SCALE: AS NOTED
DRAWING NUMBER: 94M03
SHEET NUMBER: 17 OF 18



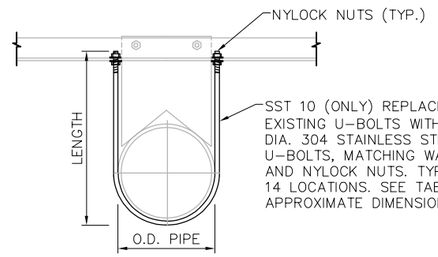
SECTION 1 M04
Scale: 3/16"=1'



TYPICAL FLIGHT SQUEEGEE A M04
Scale: NO SCALE



SECTION B M04
Scale: NO SCALE



SST 10 (ONLY) REPLACE EXISTING U-BOLTS WITH 1/2" DIA. 304 STAINLESS STEEL U-BOLTS, MATCHING WASHERS AND NYLOCK NUTS. TYPICAL OF 14 LOCATIONS. SEE TABLE 1 FOR APPROXIMATE DIMENSIONS.

TABLE 1 (FIELD VERIFY)		
O.D. PIPE (IN)	LENGTH (IN)	QUANTITY (PER TANK)
11	27	4
14	27	4
18	27	6

TYPICAL U-BOLT SUPPORT C M04
Scale: NO SCALE

TANK 10 ONLY NOTES:
1. NEW SCUM PIPE SHALL BE 6" DIA. ASTM A312 TYPE 304L SCH.10 STAINLESS STEEL PIPE. JOINT FITTINGS SHALL BE GRUVLOK FIG.7400SS GROOVE COUPLINGS WITH NITRILE GASKET OR EQUAL. PIPE SUPPORTS SHALL BE STAINLESS STEEL AS SHOWN ON DRAWING 94M01. HORIZONTAL BENDS ON NEW PIPE TO ALLOW FOR MISPLACEMENT OF NEW SCUM TROUGH WILL NOT BE PERMITTED.
2. SECONDARY SEDIMENTATION TANK EQUIPMENT SHALL BE SET TO PROPERLY OPERATE AT NORMAL FLOW CONDITIONS AND WEIR PLATE AND V-NOTCH ELEVATION OF 112.40'. SEE NOTE 2 ON 94M02 FOR ADDITIONAL INFORMATION.
3. SCUM DEFLECTOR ASSEMBLIES SHALL MATCH EXISTING AND OPERATE AS PART OF EXISTING EQUIPMENT INSIDE OF TANKS 10. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND MATERIAL.
4. CONTRACTOR TO REMOVE EXISTING COLLECTOR FLIGHT SQUEEGEES PRIOR TO COATING EXISTING SLUDGE COLLECTOR PIPES. EXISTING FLIGHT SQUEEGEES NOT SHOWN FOR CLARITY (TYP. OF 30 PER TANK).
5. INSTALL NEW FLIGHT SQUEEGEES ACCORDING TO A/M04 AND B/04 (TYP. OF 30 PER TANK). CONTRACTOR TO FIELD VERIFY ORIENTATION AND ACTUAL LENGTHS PRIOR TO REMOVAL OF EXISTING FLIGHTS SO NEW FLIGHTS ARE INSTALLED IN SAME MANNER.
6. INSTALL S.S. SHIMS TACK WELDED TO SQUEEGEE AS NEEDED TO MAINTAIN NEEDED CLEARANCE FROM FLOOR. INSTALL $\frac{1}{8}$" NEOPRENE BETWEEN SHIMS AND COLLECTOR PIPE THEN BOLT TIGHT SQUEEGEE ARM AGAINST THE COLLECTOR ARM.
7. FIELD WELD 3"X2" S.S. BAR TO CONNECT FLIGHT SQUEEGEES.

TANK 16 ONLY NOTES:
1. EXISTING 6" SCUM PIPE TO REMAIN IN-PLACE AND PROTECTED FROM BLASTING AND COATING.
2. SECONDARY SEDIMENTATION TANK EQUIPMENT SHALL BE SET TO PROPERLY OPERATE AT NORMAL FLOW CONDITIONS AND WEIR PLATE V-NOTCH ELEVATION OF 112.40'. SEE NOTE 2 ON 94M02 FOR ADDITIONAL INFORMATION.
3. EXISTING SCUM DEFLECTOR ASSEMBLIES TO REMAIN IN-PLACE AND PROTECTED FROM BLASTING AND COATING..
4. USE EXISTING BOLTED CONNECTIONS TO EXISTING MEMBERS.
5. CONTRACTOR TO REMOVE EXISTING COLLECTOR FLIGHT SQUEEGEES PRIOR TO COATING EXISTING SLUDGE COLLECTOR PIPES. EXISTING FLIGHT SQUEEGEES NOT SHOWN FOR CLARITY (TYP. OF 30 PER TANK).
6. RE-INSTALL EXISTING FLIGHT SQUEEGEES ACCORDING TO A/M04 AND B/M04 (TYP. OF 30 PER TANK). INSTALL NEW $\frac{1}{8}$" NEOPRENE THEN BOLT TIGHT SQUEEGEE ARM AGAINST THE COLLECTOR ARM.

SACRAMENTO AREA SEWER DISTRICT

REGISTERED PROFESSIONAL ENGINEER GERARDO AGUIRRE NO. C 68362 EXP: 09/30/27 CIVIL STATE OF CALIFORNIA

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ECHOWATER RESOURCE RECOVERY FACILITY
SECONDARY SEDIMENTATION TANKS 10 & 16 REHABILITATION PROJECT

MECHANICAL

SST 10 & 16 NEW EQUIPMENT

SCALE: AS NOTED
DRAWING NUMBER: 94M04
SHEET NUMBER: 18 OF 18