

**SAUSALITO-MARIN CITY
SANITARY DISTRICT
Marin County, California**

**PLANS
FOR THE CONSTRUCTION OF
SECONDARY SEDIMENTATION TANKS
IMPROVEMENTS**

**NUTE ENGINEERING
907 Mission Ave.
San Rafael, California
Tel: 415-453-4480
Fax: 415-453-0343**

JUNE 2016

Printed: June 10, 2016 3:02 PM
L:\District\Sausalito\City\8561 Secondary Sedimentation Tank\8561 Cover Page.dwg Layout: 2 NOTES Pagesetup: dwg to pdf 11x17 nute ps pens

GENERAL PROJECT NOTES

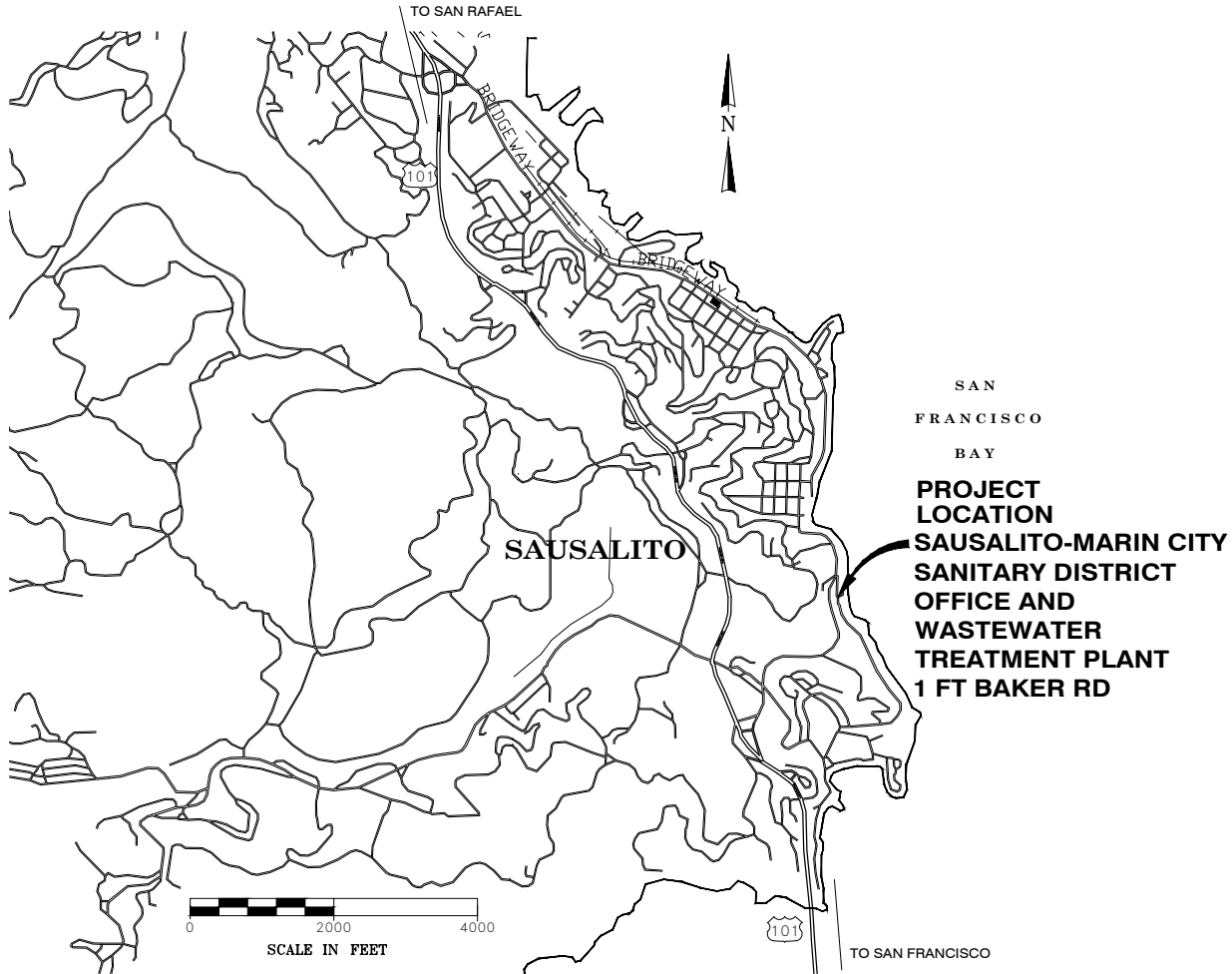
1. THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
2. HOURS OF WORK SHALL BE LIMITED TO 6:30 AM TO 3:00 PM MONDAY THROUGH FRIDAY WITHOUT PRIOR WRITTEN APPROVAL.
3. THE CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR POLICE, FIRE, AMBULANCE, AND THOSE AGENCIES RESPONSIBLE FOR MAINTENANCE OF UTILITIES IN THE VICINITY OF JOBSITE.
4. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL OF THE WORK PERFORMED BY HIS SUBCONTRACTORS, WITHOUT EXCEPTION.
5. THE CONTRACTOR SHALL IDENTIFY A RESPONSIBLE CONTACT PERSON, WHO IS AN EMPLOYEE OF THE CONTRACTOR, AND A 24-HOUR TELEPHONE NUMBER TO CALL TO RESOLVE PROBLEMS WITH NOISE, DUST OR OTHER CONSTRUCTION-RELATED ISSUES.
6. WHILE WORKING ON THE PROJECT, THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH THE CONFINED SPACE ENTRY PROCEDURES FOR ALL PERMIT SPACE ENTRIES.
7. TANK FLOOR WILL BE SPRAYED DOWN BUT NOT DISINFECTED. FLOORS WILL REMAIN SLIPPERY, ESPECIALLY WHEN WET. CONTRACTOR SHALL USE CAUTION WHEN WORKING ON TANK FLOOR TO PREVENT INJURY.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY LIGHTING, GAS DETECTORS, VENTILATION FANS, CONFINED SPACE ATTENDANT EQUIPPED WITH SIGN IN/OUT SHEET, RESCUE TRIPOD, ETC. AS REQUIRED TO ENTER AND WORK IN A CONFINED SPACE AND AS OUTLINED IN OSHA'S PERMIT REQUIRED CONFINED SPACE GUIDELINES.
9. CONTRACTOR SHALL PROTECT SLUDGE TROUGHS/HOPPERS FROM ALL DEBRIS INCLUDING BUT NOT LIMITED TO CONCRETE, BOLTS, METAL FILINGS, ETC. ANY DEBRIS INTRODUCED INTO THE TROUGHS SHALL BE RECOVERED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ANY DAMAGE TO DOWNSTREAM EQUIPMENT CAUSED EITHER DIRECTLY OR INDIRECTLY BY CONSTRUCTION DEBRIS SHALL BE REPAIRED TO ITS PRE-CONSTRUCTION CONDITION AT NO ADDITIONAL COST TO OWNER. ANY SUCH REPAIRS SHALL BE EXPEDITED AS NECESSARY TO MINIMIZE IMPACTS ON THE PROJECT SCHEDULE AND TO SUPPORT NORMAL OPERATION OF THE TREATMENT PLANT.
10. THE CONTRACTOR IS RESPONSIBLE FOR OFF-HAUL AND DISPOSAL OF ALL REMOVED EQUIPMENT UNLESS NOTED OTHERWISE.

LAYOUT NOTES

11. ALL ELEVATIONS ON THE DRAWINGS ARE ASSUMED.
12. HORIZONTAL AND VERTICAL DIMENSIONS PROVIDED ON THE DRAWINGS ARE APPROXIMATE FIELD MEASUREMENTS MAY VARY FROM THOSE ON THE DRAWINGS.
13. THE CONTRACTOR IS RESPONSIBLE FOR ALL FIELD MEASUREMENTS OF EXISTING TANKS.
14. ALL LAYOUT AND INSTALLATION OF ALL EQUIPMENT SHALL BE IN ACCORDANCE WITH MAUNUFACTURER'S RECOMMENDATIONS AND TOLERANCES.
15. SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO, IS INSUFFICIENTLY OR INCORRECTLY DETAILED OR EXPLAINED ON THESE PLANS, CONTRACTOR SHALL CONTACT THE DISTRICT'S REPRESENTATIVE FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
16. THE CONTRACTOR SHALL NOTIFY THE DISTRICT'S REPRESENTATIVE IMMEDIATELY, UPON DISCOVERY OF ANY POTENTIAL FIELD CONFLICTS.
17. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL SOUND CONTROL AND NOISE LEVEL RULES, REGULATION AND ORDINANCES WHICH APPLY TO ANY WORK PERFORMED UNDER THE CONTRACT. EACH INTERNAL COMBUSTION ENGINE USED ON THE PROJECT SHALL BE EQUIPPED WITH A MUFFLER RECOMMENDED BY THE MANUFACTURER. NO INTERNAL COMBUSTION ENGINE SHALL BE OPERATED ON THE PROJECT WITHOUT SAID MUFFLER. NOISE LEVELS SHALL BE KEPT TO THE SATISFACTION OF THE CITY OR COUNTY ENGINEER.
18. CONTRACTOR IS REQUIRED TO SUBMIT DETAILED AS BUILT DRAWINGS AND OPERATION AND MAINTENANCE MANUALS. FINAL PAYMENT OR RELEASE OF RETENTION WILL NOT BE APPROVED UNTIL AFOREMENTIONED SUBMITTALS HAVE BEEN FAVORABLY REVIEWED.

APPROVALS & COORDINATION NOTES

19. ALL SCADA AND ALARM SIGNALS AND TERMINATION POINTS SHALL BE COORDINATED WITH CALCON SYSTEMS (FRANK ORTEGA, 925-277-0665).
20. ALL CONNECTIONS TO SCADA AND PROGRAMMING TO BE PERFORMED BY OTHERS (CALCON SYSTEMS).
21. ALL CONNECTIONS TO POWER CIRCUITS AND ALL SHUTDOWNS SHALL BE COORDINATED WITH DISTRICT ASSOCIATE ENGINEER.
22. CONTRACTOR SHALL PROVIDE A GENERATOR SUITABLE TO MEET ALL TEMPORARY POWER REQUIREMENTS, SEE NOTE 13, ABOVE.



PROJECT LOCATION MAP

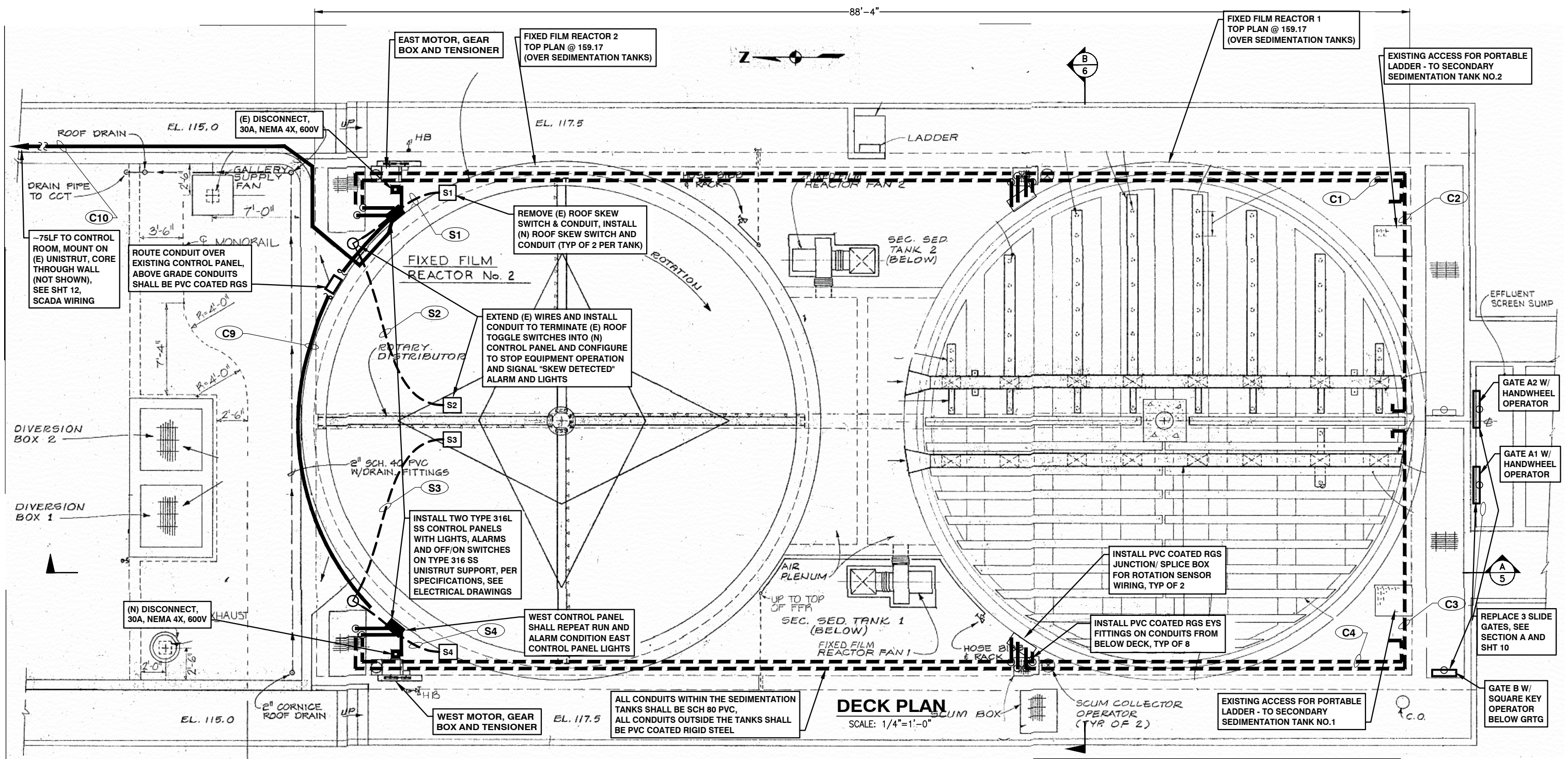
INDEX TO PLANS

1. COVER PAGE
2. PROJECT LOCATION MAP AND INDEX TO PLANS
3. DECK PLAN
4. PIT PLAN AT ELEV 103
5. SECTION A
6. SECTION B AND DETAILS
7. PHOTOS AND LAYOUTS
8. PROPOSED FLIGHTS
9. SCHEMATICS
10. GATE REPLACEMENT DETAILS
11. SLIDE GATE REFERENCE DRAWING
12. MOTOR CONTROL PANELS AND DETAILS

1" = 1' IF THIS DOES NOT MEASURE ONE INCH, THESE PLANS ARE NOT TO SCALE.

SAUSALITO-MARIN CITY SANITARY DISTRICT		
Marin County, California		
SECONDARY SEDIMENTATION TANKS IMPROVEMENTS		
PROJECT LOCATION MAP AND INDEX TO PLANS		
NUTE ENGINEERING		
907 MISSION AVE, SAN RAFAEL, CALIFORNIA TEL 415-453-4480		
Drawn by:	pm	Job No.: 8561
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L:\District\SanSalito\City 8561 Secondary Sedimentation Tank-MECHANICAL.dwg Layout: 3 Deck Plan Pagesetup: 11x17 dwg-to-pdf with nute ps pens



CIRCUIT SCHEDULE

SIZE	CIRCUIT NUMBER	WIRE/CABLE REQUIREMENTS	FROM:	TO:	CONNECTION POINT
3/4"	C1	1 16GA TWISTED/SHIELDED PAIR - POTTED TO SENSOR	EAST ROTATION SENSOR 1	EAST CONTROL PANEL	EAST IDLER SPROCKET
3/4"	C2	1 16GA TWISTED/SHIELDED PAIR - POTTED TO SENSOR	EAST ROTATION SENSOR 2	EAST CONTROL PANEL	EAST IDLER SPROCKET
3/4"	C3	1 16GA TWISTED/SHIELDED PAIR - POTTED TO SENSOR	WEST ROTATION SENSOR 1	WEST CONTROL PANEL	WEST IDLER SPROCKET
3/4"	C4	1 16GA TWISTED/SHIELDED PAIR - POTTED TO SENSOR	WEST ROTATION SENSOR 2	WEST CONTROL PANEL	WEST IDLER SPROCKET
3/4"	S1	1 16GA TWISTED/SHIELDED PAIR - POTTED TO SWITCH	EAST SKEW SENSOR 1	EAST CONTROL PANEL	EAST SKEW SENSOR S1
3/4"	S2	1 16GA TWISTED/SHIELDED PAIR - POTTED TO SWITCH	EAST SKEW SENSOR 2	EAST CONTROL PANEL	EAST SKEW SENSOR S2
3/4"	S3	1 16GA TWISTED/SHIELDED PAIR - POTTED TO SWITCH	WEST SKEW SENSOR 1	WEST CONTROL PANEL	WEST SKEW SENSOR S3
3/4"	S4	1 16GA TWISTED/SHIELDED PAIR - POTTED TO SWITCH	WEST SKEW SENSOR 2	WEST CONTROL PANEL	WEST SKEW SENSOR S4
1"	C9	2X 6 16GA TWISTED/SHIELDED PAIRS	EAST CONTROL PANEL	WEST CONTROL PANEL	CONTROLS AND ALARMS
1"	C10	2X 6 16GA TWISTED/SHIELDED PAIRS	EAST CONTROL PANEL	CONTROL ROOM	CONTROL CENTER PLC (SCADA)

NOTE:
FIELD VERIFY ALL GATE
OPERATOR DIMENSIONS

3
OF
12

SAUSALITO-MARIN CITY SANITARY DISTRICT
Marin County, California

SECONDARY SEDIMENTATION TANKS IMPROVEMENTS

MECHANICAL

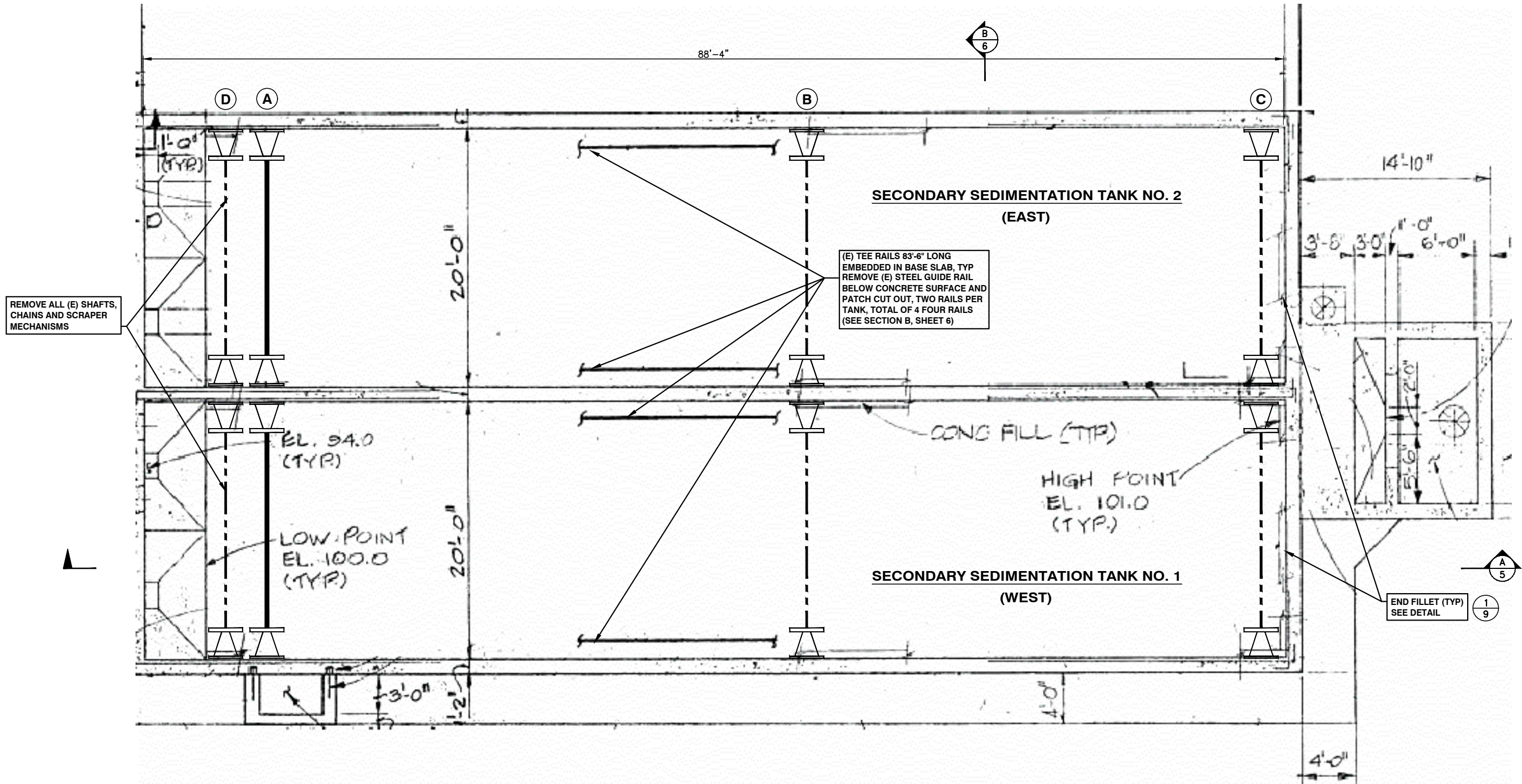
DECK PLAN

NUTE ENGINEERING
907 MISSION AVE., SAN RAFAEL, CALIFORNIA TEL 415-453-4480

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1" = 1'-0"
IF THIS DOES NOT MEASURE ONE INCH,
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ENTIRE SCAPER MECHANISM IN EACH TANK SHALL BE REMOVED AND REPLACED PER SPECIFICATIONS

MECHANISM SHAFT DESIGNATIONS

- SHAFT (A) REPLACE STEEL DRIVE SHAFT (HEAD SHAFT) W/ FIBERGLASS SHAFT, FULL TANK WIDTH
- SHAFT (B) REPLACE STEEL TOP IDLER SHAFT W/ TWO STUB SHAFTS (PEDESTAL MOUNTS)
- SHAFT (C) REPLACE STEEL TAIL IDLER SHAFT W/ TWO STUB SHAFTS (PEDESTAL MOUNTS)
- SHAFT (D) REPLACE STEEL LOWER IDLER (SEDIMENT DISCHARGE) SHAFT W/ TWO STUB SHAFTS (PEDESTAL MOUNTS)

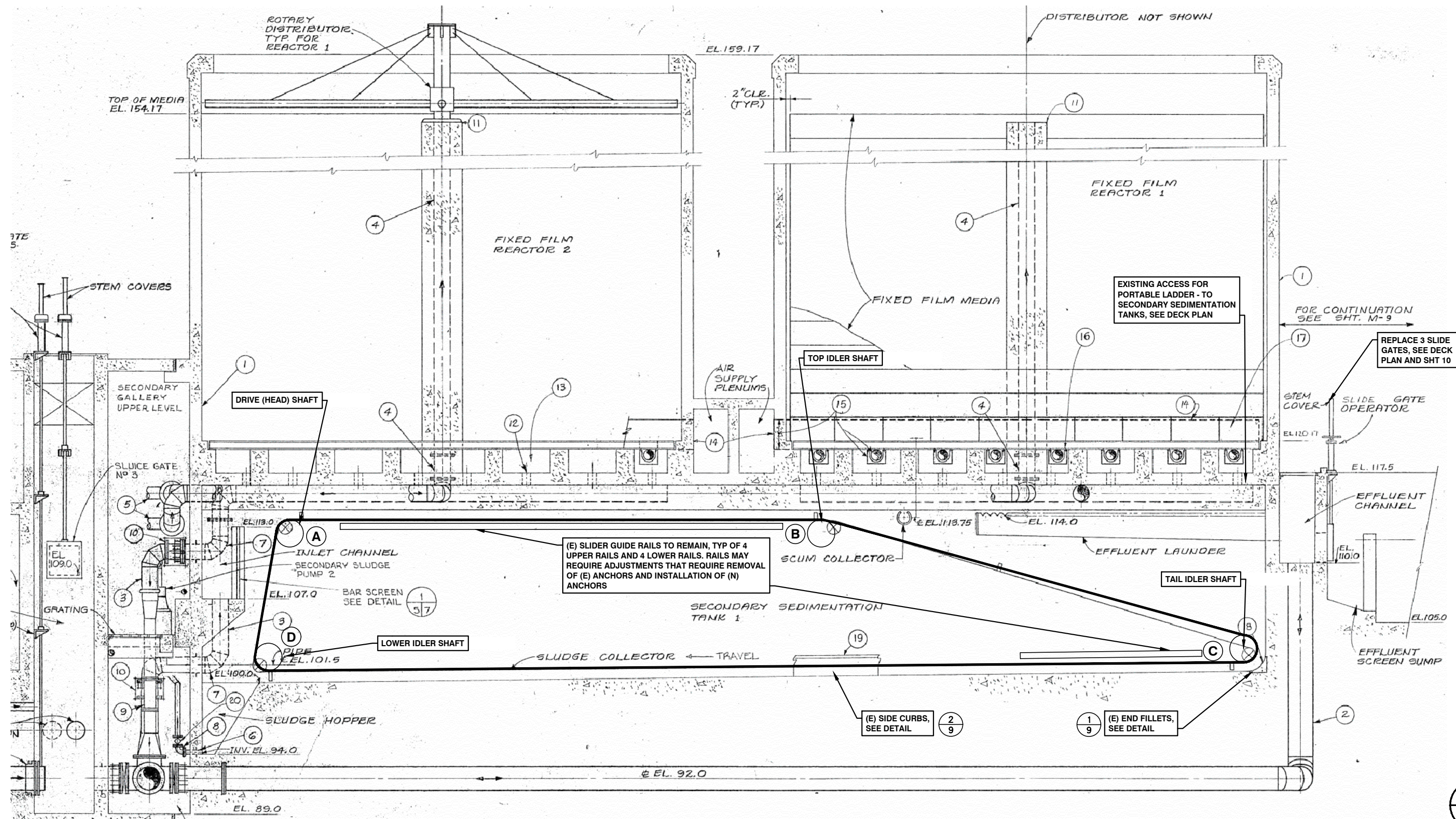
PIT PLAN

SCALE: 1/4" = 1'- 0"

1" = 1'- 0"
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SAUSALITO-MARIN CITY SANITARY DISTRICT Marin County, California			
SECONDARY SEDIMENTATION TANKS IMPROVEMENTS			
MECHANICAL			
PIT PLAN AT ELEV 103			
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SCRAPER SPROCKET DIMENSIONS (TEETH)		
	EXISTING	PROPOSED
A	23	23
B	17	17
C	13	17
D	19	17

DRIVE SPROCKETS		
	EXISTING	NEW
MOTOR	11	11
DRIVE (HEAD) SHAFT	40	40
CHAIN TENSIONER	NO	YES

ENTIRE COLLECTION SYSTEM AND MONITORING ASSEMBLY IN EACH TANK SHALL BE REMOVED AND REPLACED PER SPECIFICATIONS

SEE SHT 7 OF 11

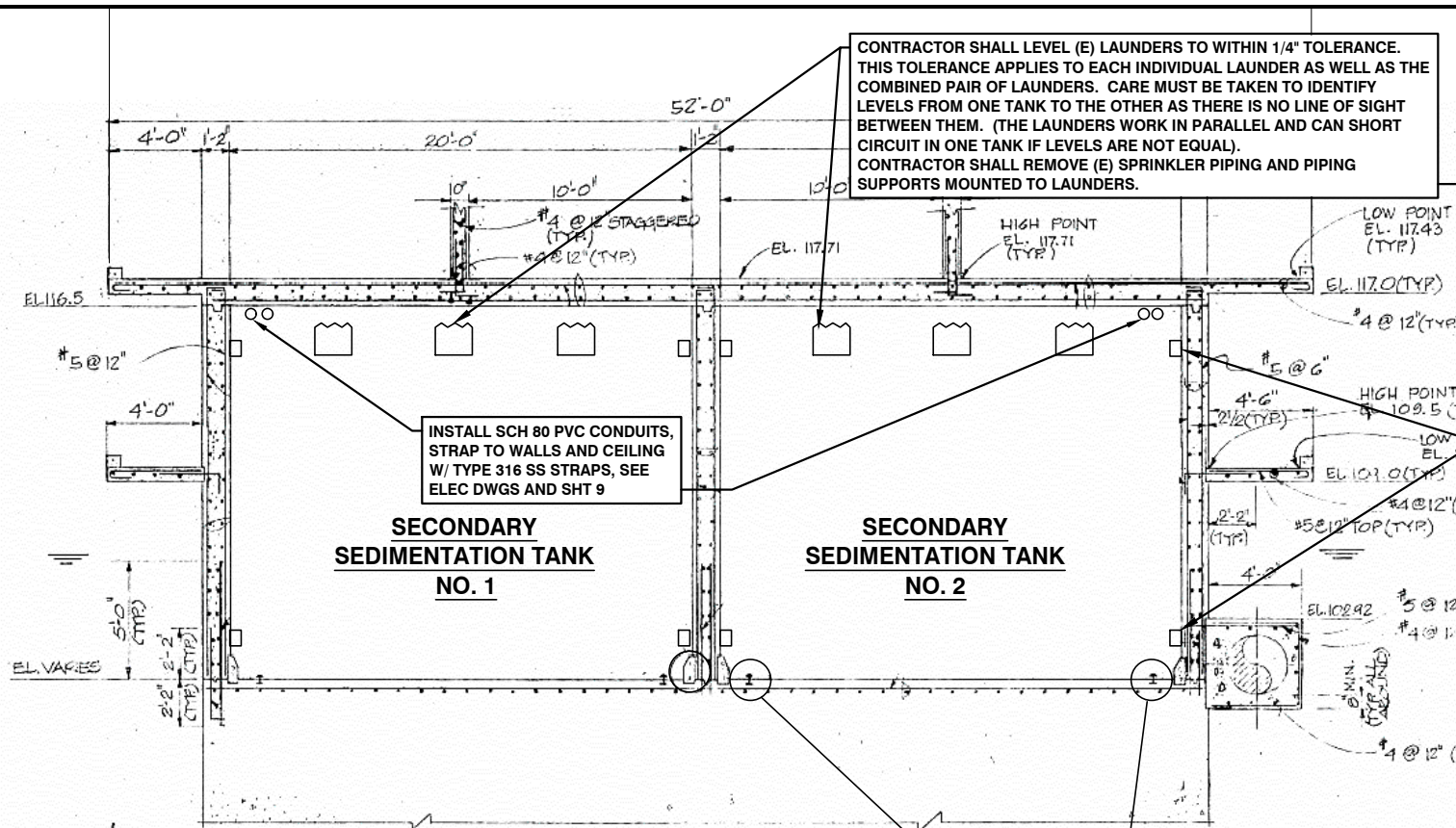
SECTION A

SCALE: 1/4" = 1'- 0"

1" = 1'
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Marin County, California			
SECONDARY SEDIMENTATION TANKS IMPROVEMENTS			
MECHANICAL			
SECTION A			
NUTE ENGINEERING			
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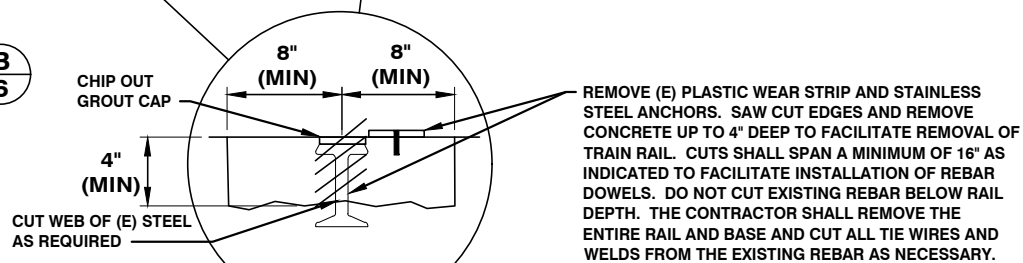


SLOTTED ADJUSTMENT BOLTS ON (E) LAUNDERS (TYP)



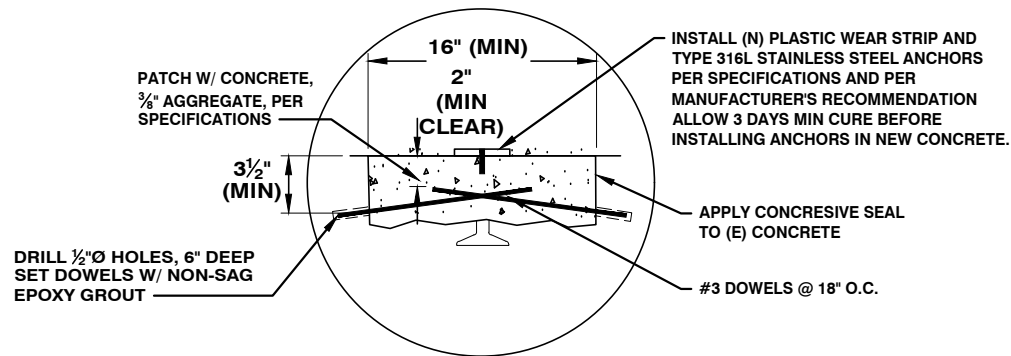
CONTRACTOR SHALL REMOVE (E) SPRINKLER PIPING AND PIPING SUPPORTS MOUNTED TO LAUNDERS.

SECTION B SCALE: 1/4" = 1'-0"



DEMOLISH (E) STEEL GUIDE RAIL

NOT TO SCALE
(TYPICAL EACH TANK)



PATCH CUT OUT

NOT TO SCALE
(TYPICAL EACH TANK)

REMOVE (E) STEEL GUIDE RAIL BELOW CONCRETE SURFACE AND PATCH CUT OUT



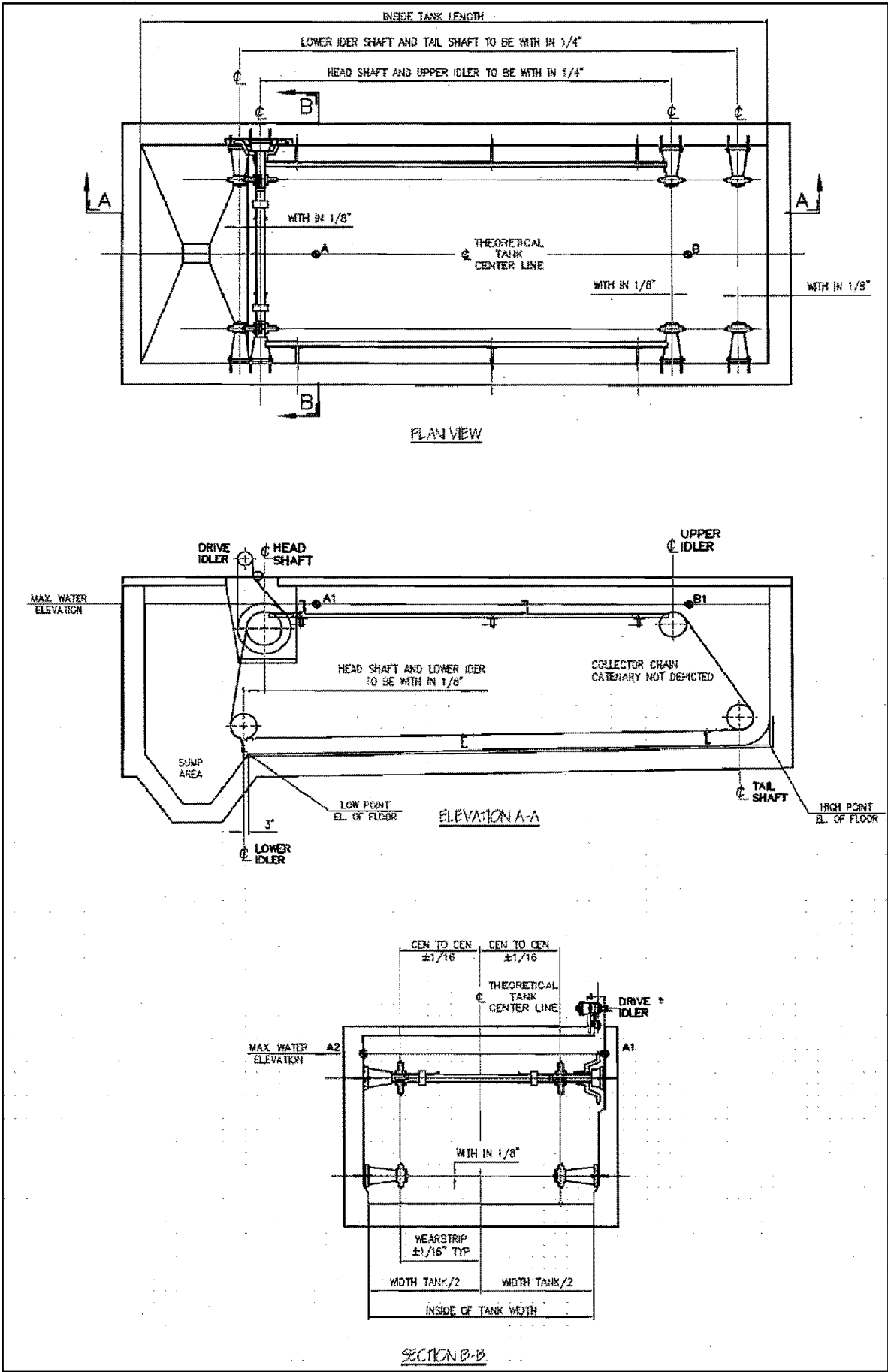
(E) STEEL RAIL W/ GROUT CAP

REMOVE (E) PLASTIC WEAR STRIP, INSTALL (N) PLASTIC WEAR STRIP AND TYPE 316L STAINLESS STEEL ANCHORS PER SPECIFICATIONS AND PER MANUFACTURER'S RECOMMENDATION

1" = 1'-0"
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SECONDARY SEDIMENTATION TANKS IMPROVEMENTS			
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SECTION B AND DETAILS			
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PROPOSED EQUIPMENT LAYOUT
NOT TO SCALE
TANK SCRAPER ASSEMBLY
(FOR REFERENCE ONLY)

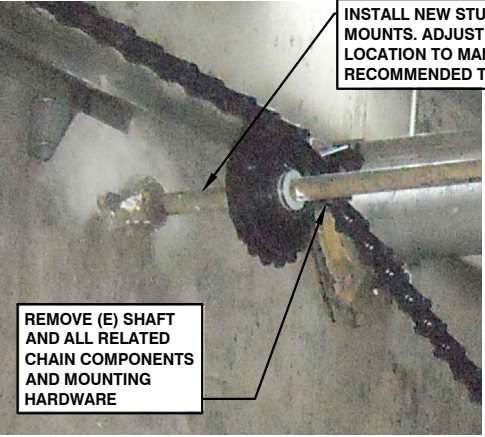


SHAFT A
NOT TO SCALE
(E) DRIVE SHAFT AT MOTOR



SHAFT A
NOT TO SCALE
(E) DRIVE SHAFT AT DIVIDING WALL

DRIVE (HEAD) SHAFT - THE CENTERLINE OF THE NEW SHAFT MOUNTS MAY BE RELOCATED UP TO 3" NORTH (TOWARD END WALL OF TANK) TO FACILITATE NEW ANCHORAGE MOUNTING POINTS AND IMPROVE CHAIN WRAP. MAINTAIN ALL CLEARANCES AND ALIGNMENTS REQUIRED BY THE MANUFACTURER. CONTRACTOR SHALL FIELD MEASURE AND COORDINATE THE GEARBOX, TENSIONER AND SHAFT LOCATIONS SUCH THAT THE DRIVE CHAIN REMAINS FREE AND CLEAR OF EXISTING CONCRETE OPENING.



SHAFT B
NOT TO SCALE
(E) TOP IDLER SHAFT

INSTALL NEW STUB SHAFT PEDESTAL MOUNTS. ADJUST SHAFT CENTERLINE LOCATION TO MANUFACTURER'S RECOMMENDED TOLERANCES.

REMOVE (E) SHAFT AND ALL RELATED CHAIN COMPONENTS AND MOUNTING HARDWARE

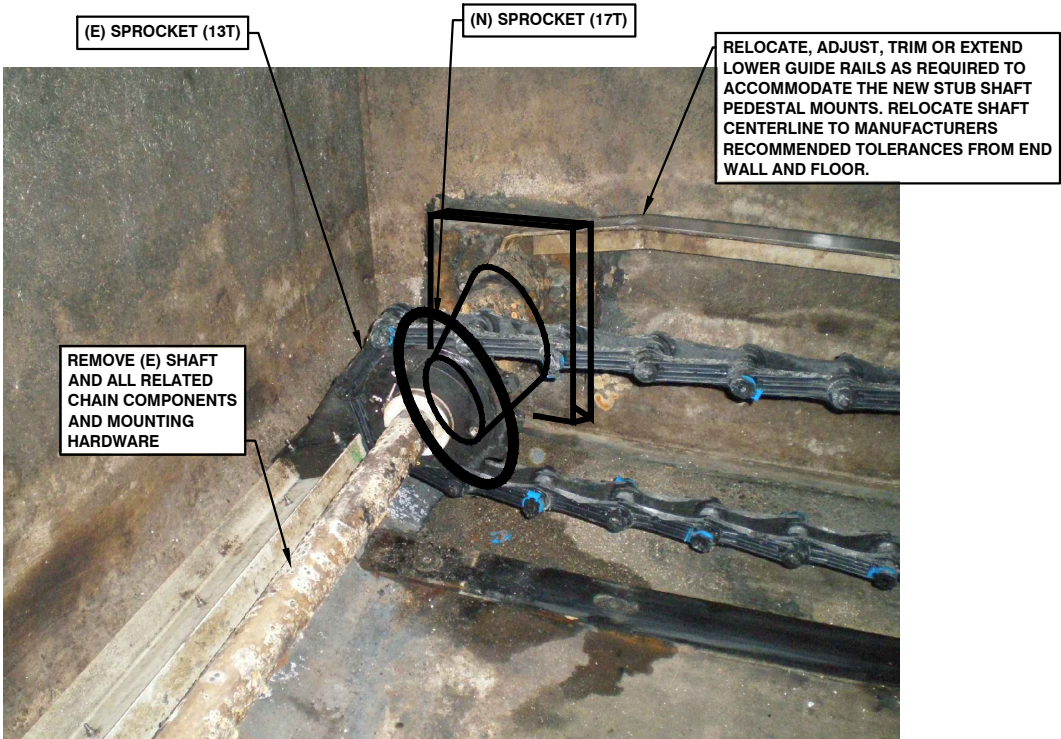
REMOVE (E) SHAFT AND ALL RELATED CHAIN COMPONENTS AND MOUNTING HARDWARE

(E) SLIDER GUIDE RAILS TO REMAIN, TYP OF 4 UPPER RAILS AND 4 LOWER RAILS. RAILS MAY REQUIRE ADJUSTMENTS THAT REQUIRE REMOVAL OF (E) ANCHORS AND INSTALLATION OF (N) ANCHORS

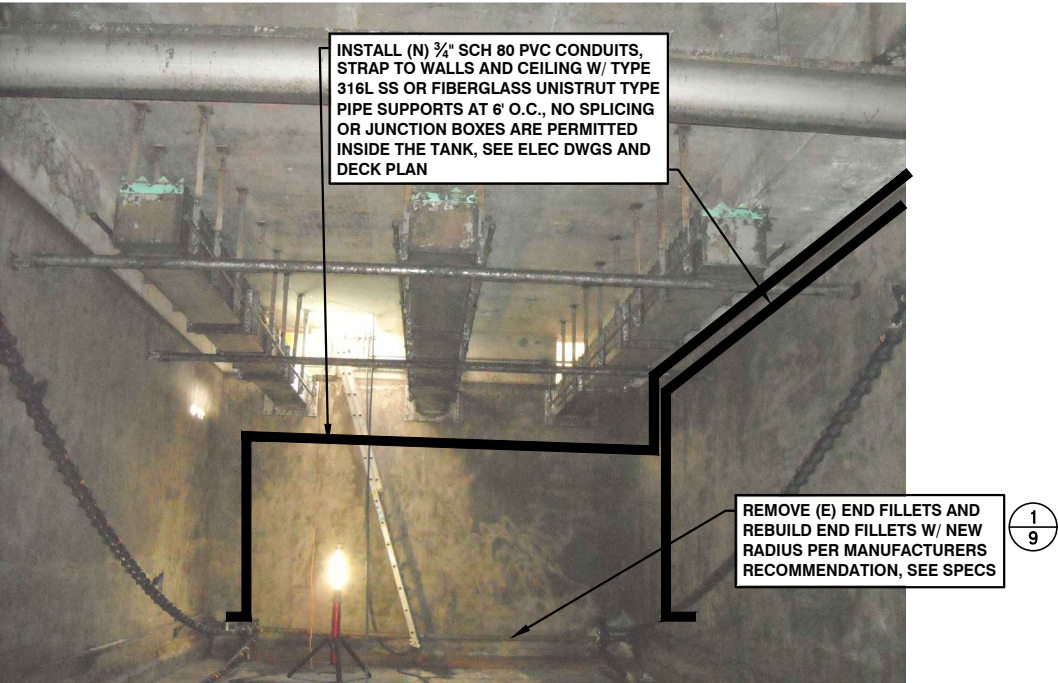
1" = 1"
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Marin County, California			
SECONDARY SEDIMENTATION TANKS IMPROVEMENTS			
MECHANICAL			
PHOTOS AND LAYOUTS			
NUTE ENGINEERING			
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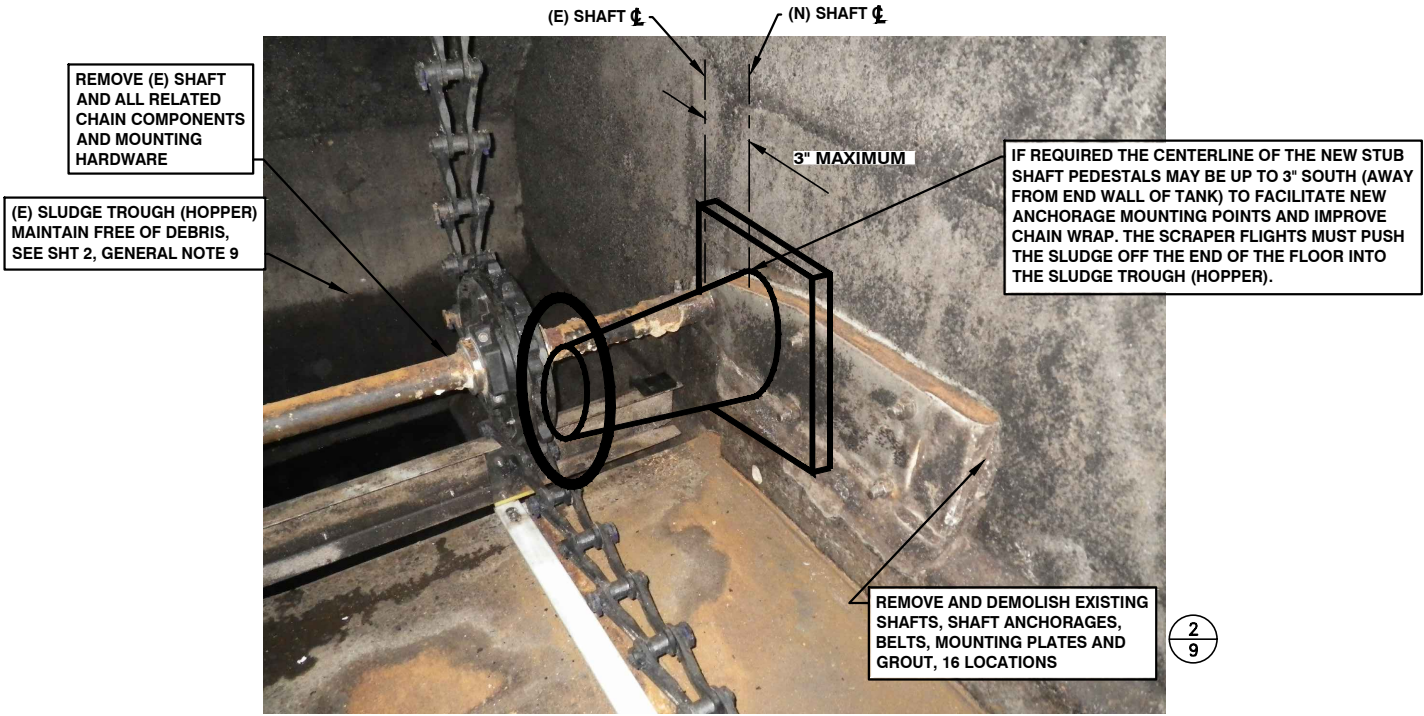
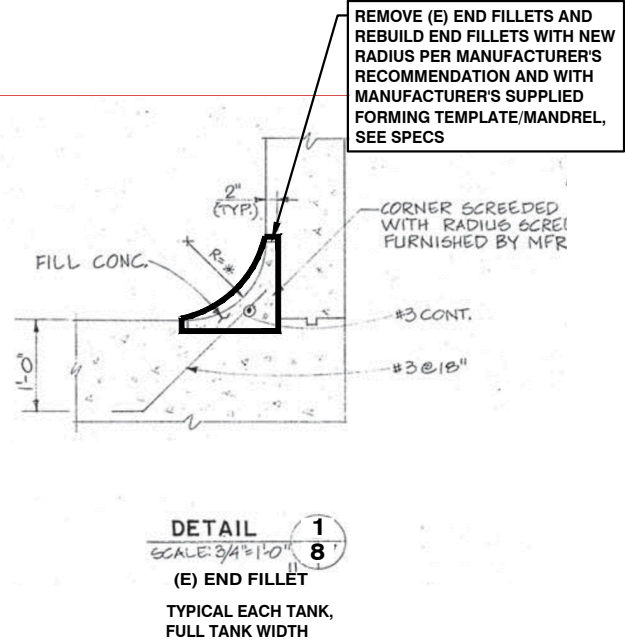
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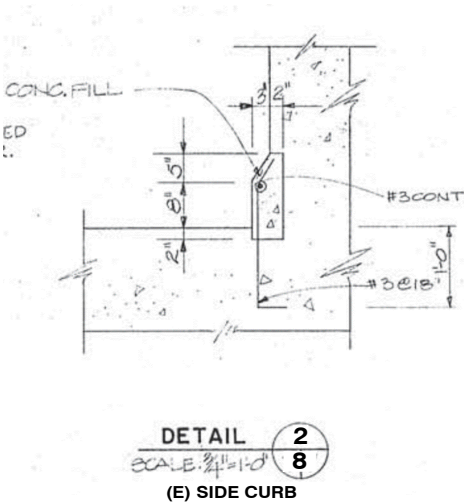
SHAFT C SCHEMATIC
NOT TO SCALE
TAIL IDLER SHAFT



SIGNAL WIRE CONDUIT LAYOUT - SCHEMATIC
NOT TO SCALE



SHAFT D SCHEMATIC
NOT TO SCALE
LOWER IDLER (DISCHARGE) SHAFT



1" = 1'-0"
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Marin County, California			
SECONDARY SEDIMENTATION TANKS IMPROVEMENTS			
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SCHEMATICS			
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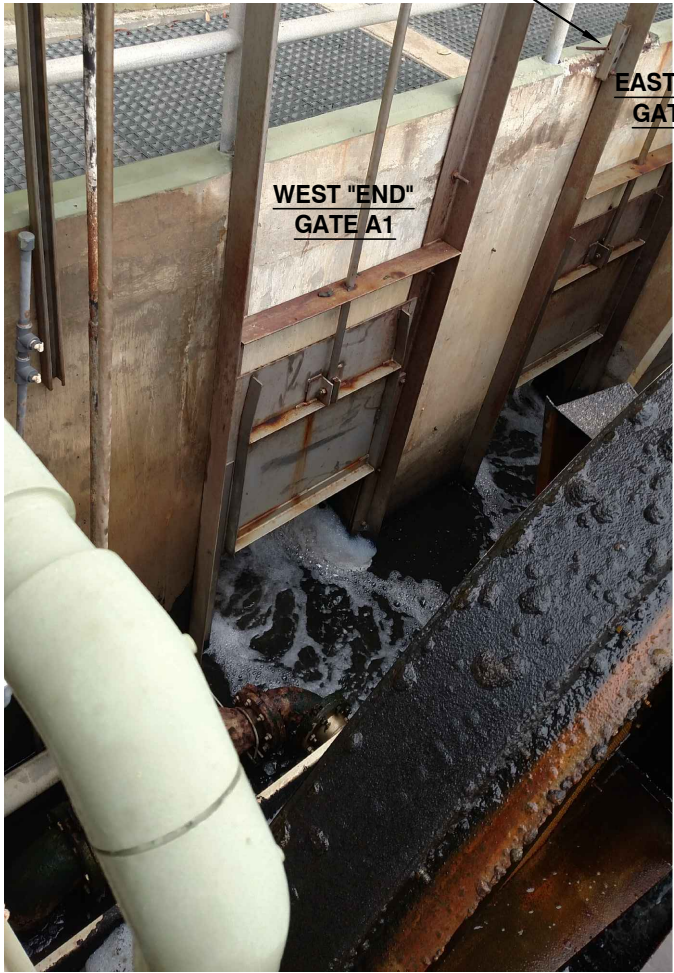


CHIP OUT AND REPAIR A 5' LONG SECTION OF THE TOP OF (E) CONCRETE WALL



LABEL FOR (E) FONTAINE GATE B
FOR REFERENCE ONLY

REMOVE (E) FOUNTAIN GATE B AND INSTALL 1- NEW 20"x 20" COMPOSITE SLIDE GATE TO SEAL AGAINST 15' OF SEATING HEAD. FIELD VERIFY AND MATCH (E) SIZE



EAST "END" GATE A2

WEST "END" GATE A1

REMOVE (E) WATERMAN "END" GATES AND INSTALL 2- NEW 30"x 30" COMPOSITE SLIDE GATES W/ WEDGES TO SEAL AGAINST 15' OF UNSEATING HEAD. FIELD VERIFY AND MATCH (E) SIZE



EAST "END" GATE A2

WEST "END" GATE A1

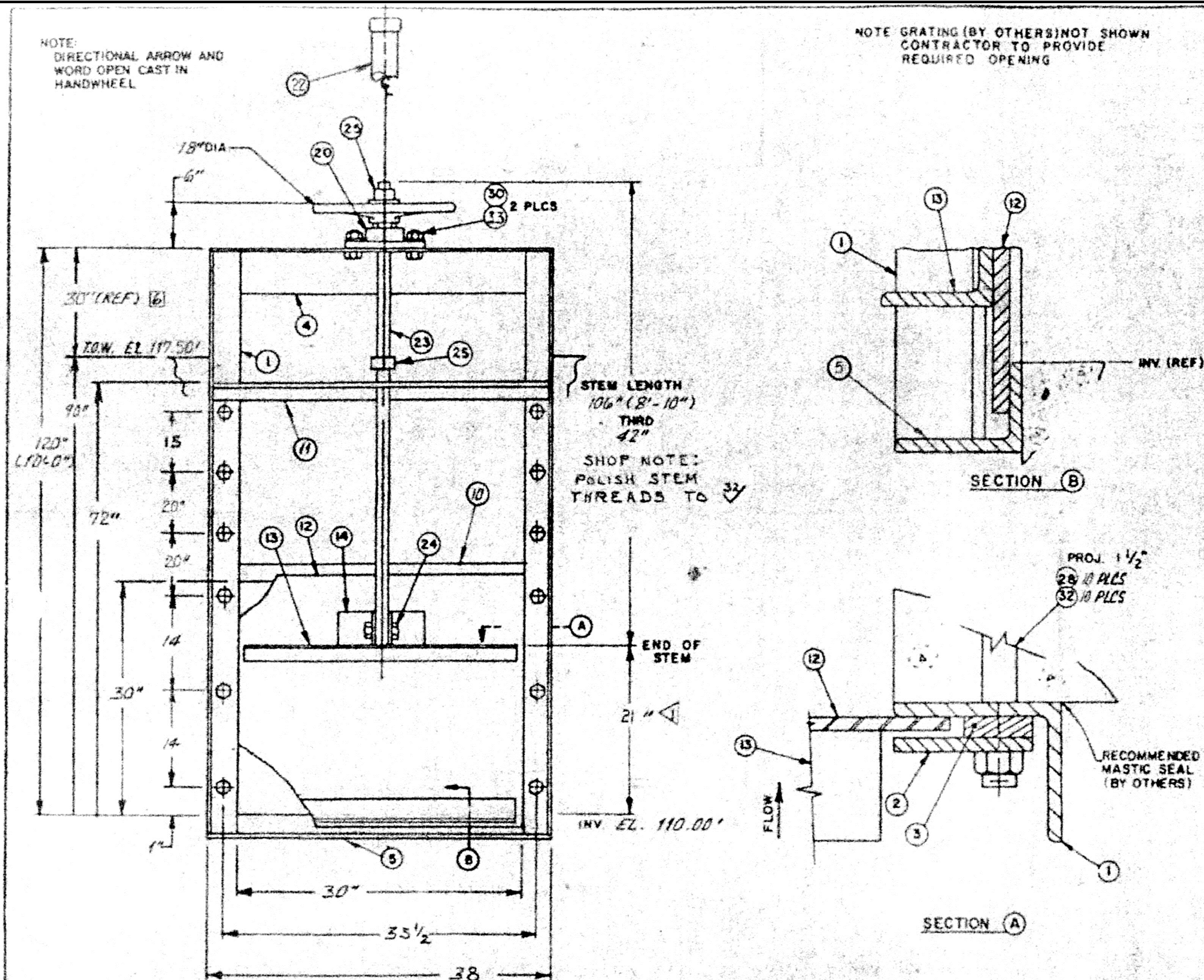
NEW GATES MUST HAVE A WEDGE TYPE SEAL SUFFICIENT TO WITHSTAND (MIN) 15' UNSEATING HEAD PER SPECIFICATIONS. CONSTRUCTION MUST BE TYPE 316L STAINLESS STEEL OR FIBERLITE OR APPROVED EQUAL, PER SPECIFICATIONS.

REPLACE 3 SLIDE GATES, SEE DECK PLAN FOR LOCATIONS

1" = 1'
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SAUSALITO-MARIN CITY SANITARY DISTRICT			
Marin County, California			
SECONDARY SEDIMENTATION TANKS IMPROVEMENTS			
MECHANICAL			
GATE REPLACEMENT DETAILS			
NUTE ENGINEERING			
907 MISSION AVE., SAN RAFAEL, CALIFORNIA TEL 415-453-4480			
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MATERIAL KEY				FINISH KEY	
1. CAST IRON-ASTM A-126 B	10. STEEL- A516 1020	1. CAST	2. MILL	3. MACHINED	
2. CAST DUCTILE-ASTM A-536	11. STEEL PIPE-ASTM A-120	4. GALVANIZE-ASTM A-123			
3. COMP BRZ-ASTM B-584 AL	12. COMMERCIAL BRONZE	5. GALVANIZE-ASTM A-123			
4. MANG. BRZ-ASTM B-584 ALBSS	13. RUBBER-ASTM D-2000	6. PAINT (1)GT (2.5 MILS) (THERMOG)			
5. NAVAL BRZ-ASTM B-21	14. CLEAR PLASTIC BUTYLATE PIPE	SERIES 10 & 20 (1.5 MILS)			
6. STRUCTURAL STL-ASTM A-36	15. STN STL-ASTM A-193 B194TY3/6	27) SERIES 2 (T.O.D. 1.5 MILS)			
7. C.F. STL-ASTM A-108 G12L4	17. ALUMINUM 6061 T6	COLOR-CONTRACTOR TO SPECIFY			
8. STL HARDWARE-ASTM A-307	18. ALUMINUM 6063 T5				
9. 18-8 STN STEEL-ASTM A-276					
-D- TYPE 316L -B- TYPE 316					

ITEM	DESCRIPTION	QTY	UNIT	PART NO. or SIZE	QTY
X	1. GUIDE RAIL	9B	2	4 x 4 x 1/4" ANGLE	2
X	2. COVER GUIDE	9B	2	1/4 x 3/4 BAR	2
X	3. FILLER BAR	9B	2	3/8 x 1/2 BAR	2
X	4. HEAD RAIL	9B	2	4 x 4 x 1/4" ANGLE	1
X	5. BOTTOM RAIL	9B	2	4 x 4 x 1/4" ANGLE	1
X	6. FLUSH SEAL RAIL				
X	7. SEAL SUPPORT				
X	8. SEAL				
X	9. CROSS RAIL	9B	2	1/4 x 2 1/2" BAR	1
X	10. STEM BRACE	9B	2	4 x 4 x 1/4" ANGLE	1
X	11. SLIDE	9B	2	33 1/2 x 35 x 1/4" PLT.	1
X	12. STRONGRIB	9B	2	2" x 2" x 1/4" ANGLE	2
X	13. STEM BRACKET	9B	2	2 1/2 x 2 1/2 x 1/4" ANGLE	2
X	14. LIFT POSITION INDICATOR MECHANICAL SEALS	1, 4	6	TYPE 2-18 DIA. HANDWHL COUNTER TYPE	1
X	15. STEM COVER	11	4	3" SCH. 40 PIPE, 34" LG.	1
X	16. STEM BOLT w/ NUT	9B	2, 3	1/2" w/ (4) TPL, (R) 1025 MOD. STUB ACME THD.	1
X	17. LIMIT NUT	15B	2	5/8 NC x 2 1/2" LG.	1
X	18. ANCHOR BOLT	1	5	1 1/2" (4) TPL (R) STD.	2
X	19. HEX HD. MACH. BOLT	9B	2, 3	1/2" NC x 10" LG.	12
X	20. HEX NUT	15B	2, 3	3/4 NC x 2 1/2 LG.	2
X	21. HEX NUT	15B	2	1/2 NC	12
X	22. HEX NUT	15B	2	3/4 NC	2

NOTES:

1. "X" INDICATES ITEMS USED; THIS DRAWING ONLY

2. MAX. SEATING HD. = 5 FT.; MAX. UNSEATING HD. = 5 FT. (GATE CAPACITY)

3. LIFT CAPACITY, w/ 40 LBS. PULL = 2780 LBS.

4. OPERATING HEAD FROM 1' SEATING = 6 FT.; UNSEATING = 6 FT.

5. TURN HANDWHEEL, CW TO OPEN (RAISE) GATE

6. CONTRACTOR TO VERIFY OR SUPPLY.

(2) GATES REQ'D @ EFFLUENT SCREEN RET. PLN. SHT. M-5 ITEM #4

REF. Wastewater Treatment Plant Improvements Sausalito-Marín City, CA Clean Water Grant C-06-2464 Kennedy/Jenks Engineers	30" X 30" WATERMAN MODEL SSR-5F-RS-Y FABRICATED STAINLESS STEEL SLIDE GATE	FOR: R.D. Walters Construction Co. P.O. Box 4159 Santa Rosa, CA 95402 P.O. NO. 1791	REV. NO. DATE BY JOB NO. J-3238-2 REV. NO. DATE BY QUOTE NO. W089-G-362 REV. NO. DATE BY DRAWN BY M.E. MILLER CHECKED BY G.M.
RED TOP WATERMAN INDUSTRIES, INC. EXETER, CALIFORNIA 92221			11 OF 12
SAUSALITO-MARIN CITY SANITARY DISTRICT Marin County, California SECONDARY SEDIMENTATION TANKS IMPROVEMENTS MECHANICAL SLIDE GATE REFERENCE DRAWING NUTE ENGINEERING 907 MISSION AVE., SAN RAFAEL, CALIFORNIA TEL 415-453-4480 Drawn by: pm Job No.: 8561 Scale: AS SHOWN Checked by: WEN Date: JUNE 2016			

SHOP DRAWING FOR (E) "END" GATES
FOR REFERENCE ONLY

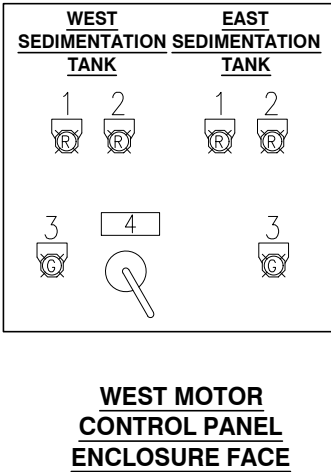
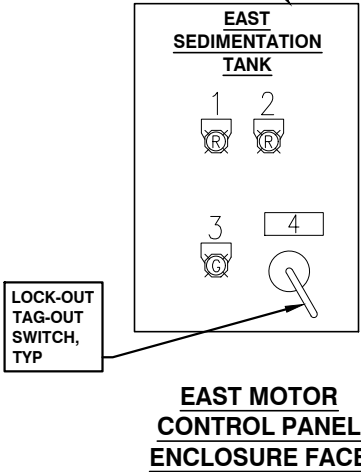
1" = 1'

IF THIS DOES NOT MEASURE ONE INCH, THESE PLANS ARE NOT TO SCALE.

Printed: June 13, 2016 11:38 AM
L:\District\Sausalito\City\8561 Secondary Sedimentation Tank\Mechanical.dwg Layout: 12 Electrical Pagesetup: 11x17 dwg-to-pdf with nute ps pens

TYPE 316L SS
NEMA 4X
ENCLOSURES

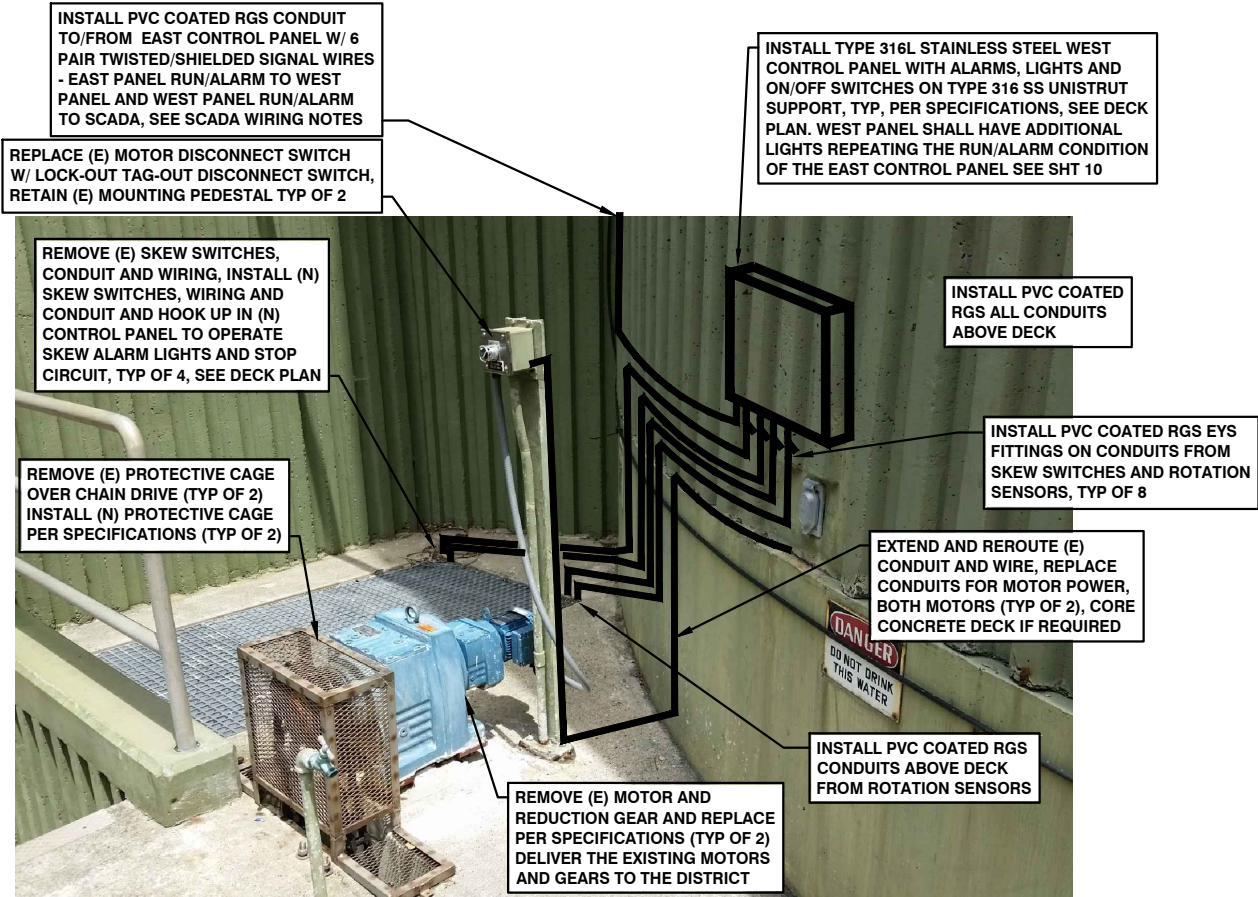
NAMEPLATE ENGRAVING SCHEDULE	
NP 1	FAILURE - SKEW DETECTED
NP 2	FAILURE - LOSS OF ROTATION
NP 3	MOTOR - RUNNING
NP 4	MOTOR - ON / OFF W/ LOCK-OUT TAG-OUT



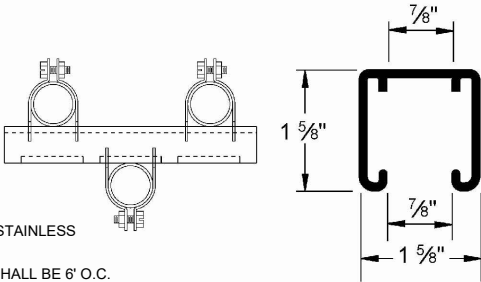
SCADA WIRING NOTES:

- ROUTE SIGNAL CONDUIT FROM EAST SIDE CONTROL PANEL TO CONTROL ROOM AS FOLLOWS:
- 1" RIGID PVC COATED FOR ENTIRE PATH.
 - ROUTE TO FFR WALL AND UP 8'. ROUTE ALONG WALL WITH OTHER CONDUITS; TOTAL DISTANCE IS 75'.
 - ONE CORE IS REQUIRED TO ENTER THE BUILDING (8" CONCRETE).
 - THERE IS ABOUT 25' OF CONDUIT TO BE ROUTED ABOVE HANGING CEILING PANELS.
 - FIELD VERIFY DIMENSIONS.
 - COORDINATE EXACT PLACEMENT WITH OWNER PRIOR TO INSTALLATION.
 - RUN 6 SHIELDED/TWISTED PAIRS OF SIGNAL WIRES TO TERMINATION POINT IN CONTROL ROOM AND PROVIDE AN ADDITIONAL LENGTH OF 20' FOR EACH, COILED AND TAGGED.

CONTROL AND ALARM PANELS
NOT TO SCALE



REPLACE MOTOR, REDUCTION GEAR AND TENSIONER
AND INSTALL CONTROL PANEL
(TYP EACH TANK)



- NOTES:
- UNISTRUT MAY BE TYPE 316L STAINLESS STEEL OR FIBERGLASS.
 - MAX SPACING ON CONDUITS SHALL BE 6' O.C.
 - ALL HARDWARE SHALL BE TYPE 316L STAINLESS STEEL.

TYPICAL UNISTRUT CONDUIT MOUNTING DETAIL
NOT TO SCALE

IF THIS DOES NOT MEASURE ONE INCH,
THESE PLANS ARE NOT TO SCALE.

12
OF
12

SAUSALITO-MARIN CITY SANITARY DISTRICT			
Marin County, California			
SECONDARY SEDIMENTATION TANKS IMPROVEMENTS			
MOTOR CONTROL PANELS AND DETAILS			
NUTE ENGINEERING			
907 MISSION AVE., SAN RAFAEL, CALIFORNIA TEL 415-453-4480			
Drawn by:	pm	Job No.:	8561
Checked by:	WEN	Scale:	AS SHOWN
		Date:	JUNE 2016