



RODEO SANITARY DISTRICT

HYDROSCIENCE PROJECT NO.: 230-003

2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT

BID SET
MARCH 2024

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VICINITY MAP
NTS



LOCATION MAP
NTS



G001

DRAWING NUMBER

SHEET 1 OF 15

Plot Date: 3/11/2024 2:09 PM
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LINE LEGENDS

GENERAL LEGEND table with symbols for CENTERLINE, BUILDING, CONCRETE, EQUIPMENT, EXISTING FEATURES, PROPERTY LINE, MATCH LINE, RIGHT OF WAY, FENCE, HANDRAIL, GRADE BREAK, SWALES OR DITCH, EDGE OF WATER, MAJOR CONTOURS, MINOR CONTOURS, EXISTING GUARD RAIL, DENSE BRUSH.

CIVIL LEGEND

CIVIL LEGEND table with symbols for PIPING TO BE ABANDONED OR REMOVED, WATER MAIN PIPE, EXISTING WATER MAIN PIPE, SEWER FORCE MAIN, EXISTING SEWER FORCE MAIN, RECYCLED WATER PIPE, EXISTING RECYCLED WATER PIPE, SANITARY SEWER PIPE, EXISTING SANITARY SEWER PIPE, STORM DRAIN LINE, EXISTING STORM DRAIN LINE, OVER FLOW LINE, EXISTING OVER FLOW LINE, DRAIN LINE, EXISTING DRAIN LINE, ELECTRICAL CONDUIT, EXISTING ELECTRICAL CONDUIT, ELECTRICAL GROUND, CULVERT, EXISTING CULVERT, EXISTING UNKNOWN PIPE, EXISTING GAS LINE, EXISTING NATURAL GAS LINE.

GENERAL SYMBOLS

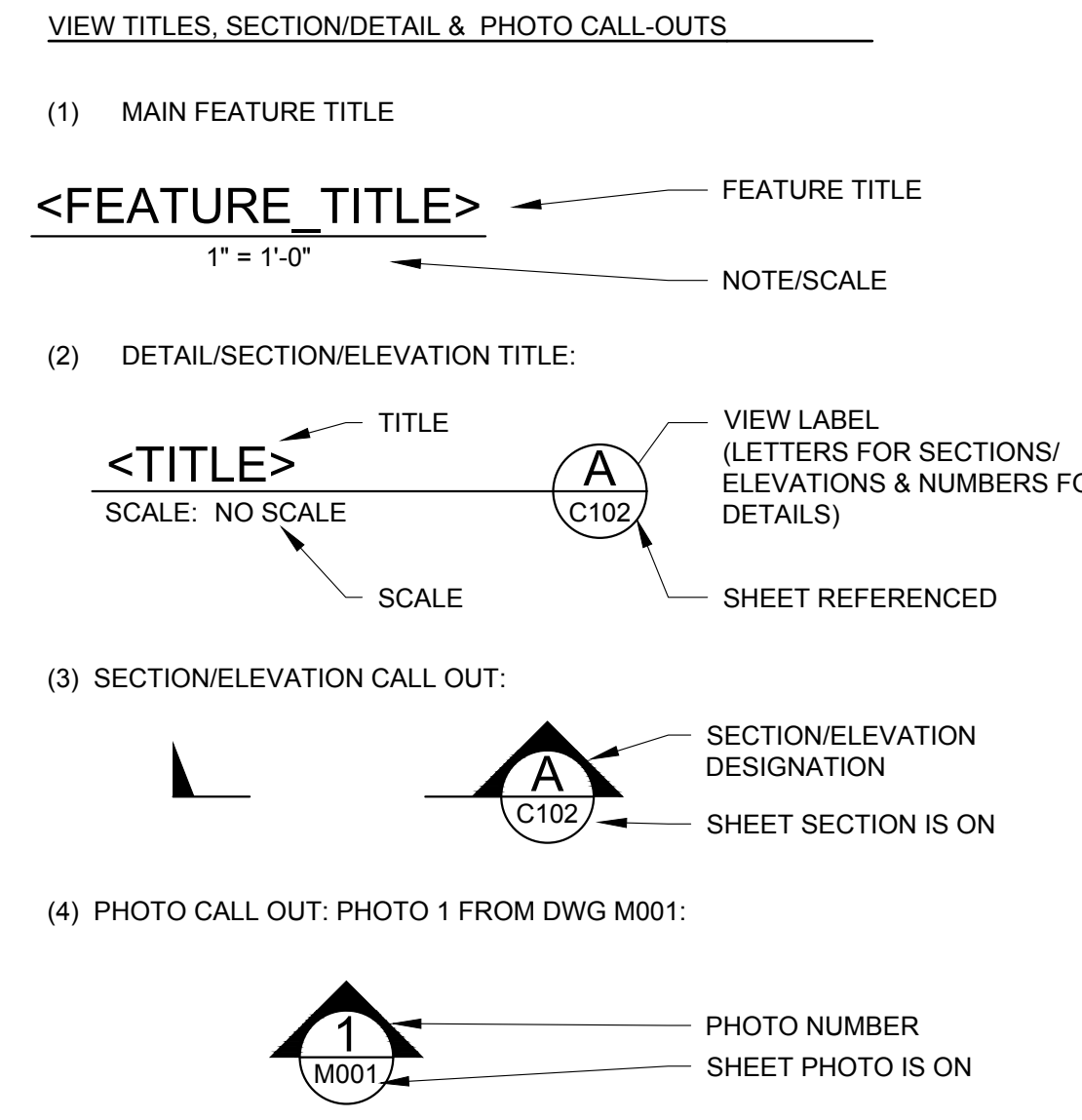
MISCELLANEOUS SYMBOLS

MISCELLANEOUS SYMBOLS table with symbols for SINGLE LINE CONTINUATION, DOUBLE LINE CONTINUATION, GENERAL CONTINUATION, WATERLINE, POTHOLE, BORING HOLE, NORTH ARROW, INTERSTATE HIGHWAY, HIGHWAY, TREE, UTILITY BOX, POWER POLE.

TYPICAL PIPING SYMBOLS

TYPICAL PIPING SYMBOLS table with symbols for SANITARY SEWER MANHOLE, STORM DRAIN MANHOLE, GATE VALVE, BUTTERFLY VALVE, PLUG VALVE, CHECK VALVE, REDUCER, FLOW METER, BACKFLOW PREVENTER, DROP INLET, FIRE HYDRANT, CAP, BLIND FLANGE, HOSE BIBB, CLEAN OUT.

REFERENCE LABELS

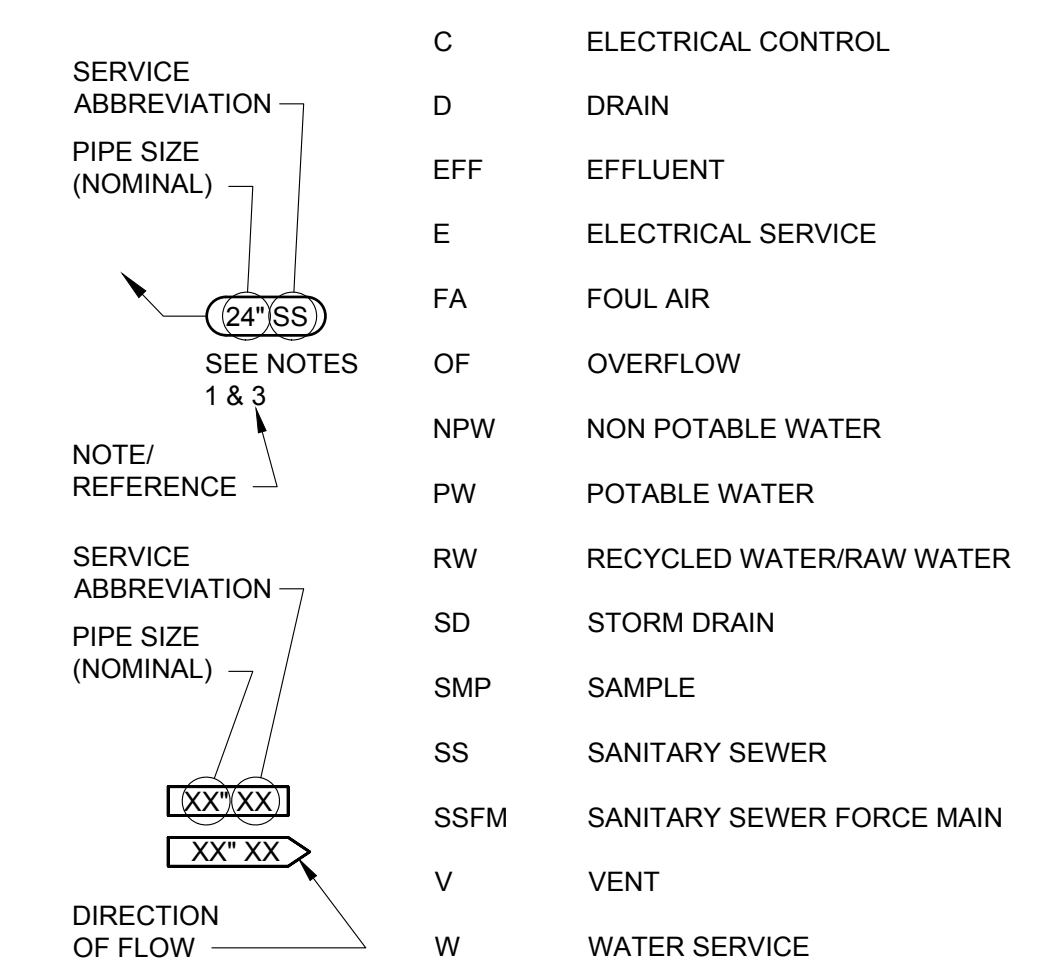


ABBREVIATIONS

ABBREVIATIONS table with columns A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z listing various engineering abbreviations like ANCHOR BOLT, FUTURE, MAXIMUM, SOUTH, WATER/WEST, etc.

SERVICE IDENTIFICATION SYSTEM

SERVICE ABBREVIATIONS



PATTERNS LEGEND

PATTERNS LEGEND table with columns NEW and EXISTING, listing patterns for DEMOLITION AREA, AC W/ AB (SECTION VIEW), NATURAL GROUND OR GRADE, COMPACTED BACKFILL, AB (SECTION VIEW), CONCRETE, CHECKER PLATE, STEEL OR STAINLESS STEEL, AC PAVEMENT (PLAN VIEW) OR GROUT (SECTION VIEW), GRATING, MISCELLANEOUS MATERIAL, HIGHLIGHTED AREA.

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REVISIONS table with columns REV, DESCRIPTION, DATE, APVD

RODEO SANITARY DISTRICT

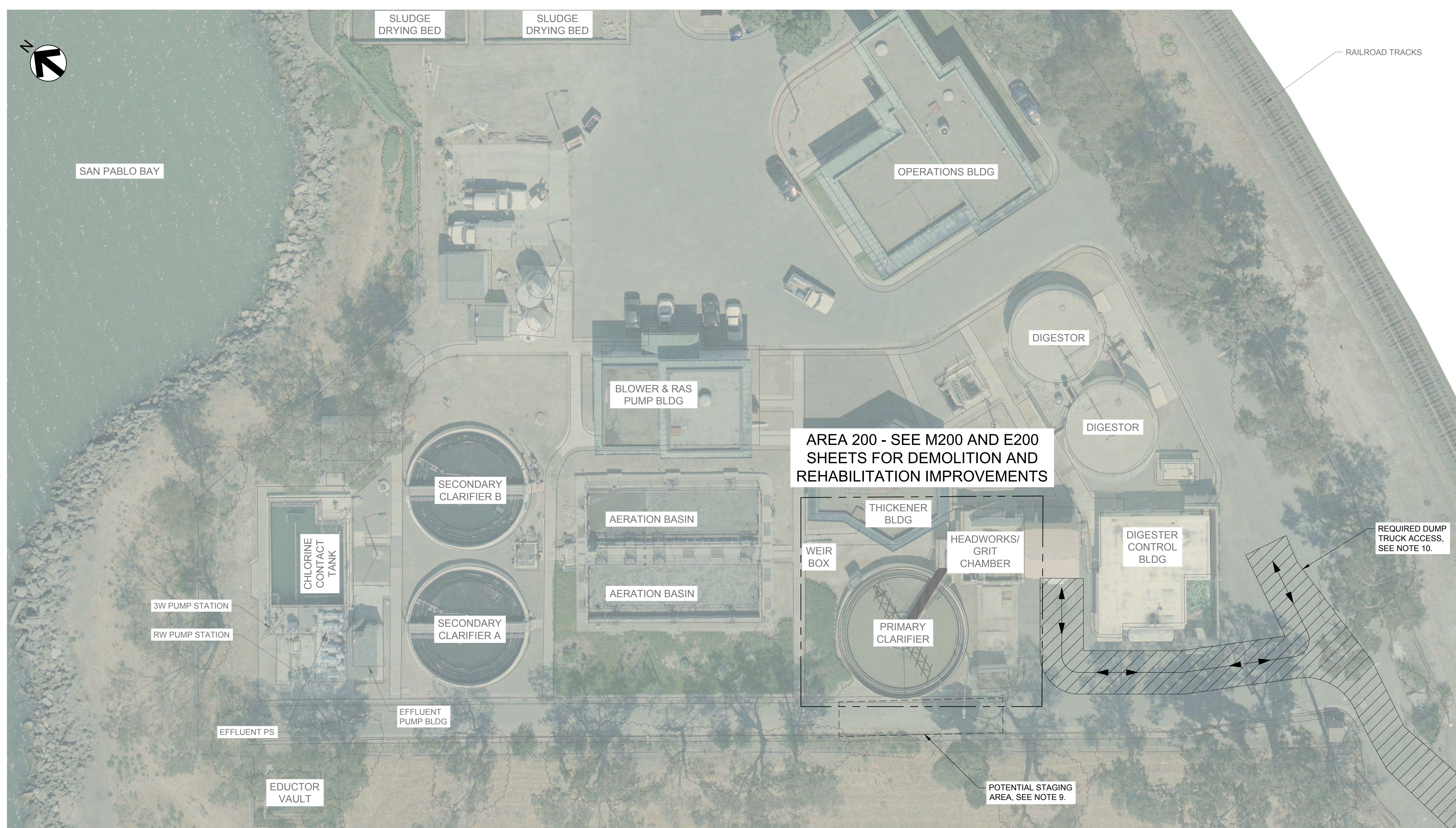
2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT

STANDARD LEGENDS, PATTERNS, LABELS, SYMBOLS, SYSTEM IDENTIFICATION & ABBREVIATIONS



G002 DRAWING NUMBER, SHEET 2 OF 15

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OVERALL SITE PLAN
 SCALE: 1" = 20'-0"

- SURVEY NOTES**
1. THIS MAP WAS PREPARED USING PHOTOGRAMMETRIC METHODS BY TETRA TECH GEOMATIC TECHNOLOGIES IN LAFAYETTE, CALIFORNIA.
 2. IN AREAS OF DENSE VEGETATION, ACCURACY OF CONTOURS MAY DEVIATE FROM ACCEPTED ACCURACY STANDARDS.
 3. THE GRID IS BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 1983 (2011)
 4. ELEVATIONS ARE BASED ON NAVD 88.
 5. CONTROL SURVEY PERFORMED BY CUNHA ENGINEERING INC., PINOLE, CA. ON AUGUST 12, 2014 USING 2 HOUR STATIC GPS OBSERVATIONS, ADJUSTED AND CONSTRAINED TO CORS COORDINATES AS PROVIDED BY NGS.

- GENERAL NOTES**
1. ALL WORK SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION AND TO THE SATISFACTION OF RODEO SANITATION DISTRICT. ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND ACCOMPANYING SPECIFICATIONS.
 2. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS.
 3. CONTRACTOR IS RESPONSIBLE FOR ALL SURVEY WORK REQUIRED TO LOCATE EXISTING OR NEW FACILITIES.
 4. DIMENSIONS SHOWN ON PLANS ARE APPROXIMATE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXACT DIMENSIONS IN THE FIELD.
 5. THE CONTRACTOR SHALL NOTIFY RODEO SANITATION DISTRICT 48 HOURS PRIOR TO START OR RESTART OF WORK.
 6. ONLY DISTRICT PERSONNEL SHALL WORK ON ACTIVE EXISTING SYSTEM.
 7. THE CONTRACTOR SHALL HAVE A RESPONSIBLE PARTY WHO SHALL HAVE THE AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR ON THE JOB SITE DURING ALL WORKING HOURS.
 8. THE CONTRACTOR SHALL HAVE A COPY OF DISTRICT APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS ON SITE.
 9. CONTRACTOR SHALL PROPOSE AND OBTAIN DISTRICT APPROVAL FOR ALL REQUIRED STAGING AND STOCKPILE AREAS PRIOR TO MOVING ANY EQUIPMENT OR MATERIALS ONTO THE SITE. CONTRACTOR SHALL PROVIDE OPERATOR ACCESS TO ALL FACILITIES AT ALL TIMES. CONTRACTOR SHALL DOCUMENT EXISTING CONDITION OF STAGING AREA PRIOR TO MOBILIZATION AND UPON COMPLETION OF CONSTRUCTION, RESTORE ALL STAGING AREAS USED DURING CONSTRUCTION TO THEIR CONDITION PRIOR TO THE START OF THE WORK. ADDITIONAL STAGING AREA MAY BE AVAILABLE WEST OF THE AREA SHOWN. COORDINATE WITH OWNER THE LIMITS OF THE STAGING AREA.
 10. EXCLUSION ZONE ACCESS ROUTE FOR DEWATERING TRUCKS. KEEP ZONE OPEN AND CLEAR AT ALL TIMES AND COORDINATE WITH OWNER FOR ALL ACTIVITIES THAT MAY AFFECT TRUCK TRAFFIC.
 11. EXISTING TREATMENT FACILITY OPERATES 24 HOURS A DAY, 7 DAY A WEEK. CONTRACTOR SHALL PROTECT ONGOING FACILITY OPERATIONS AT ALL TIMES. SEE SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO, SECTION 01010, 1.02 FOR WORK SEQUENCING REQUIREMENTS AND CONSTRAINTS.

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 PROJ. MGR.: ELJ

REV	DESCRIPTION	DATE	APVD
REVISIONS			

RODEO SANITARY DISTRICT

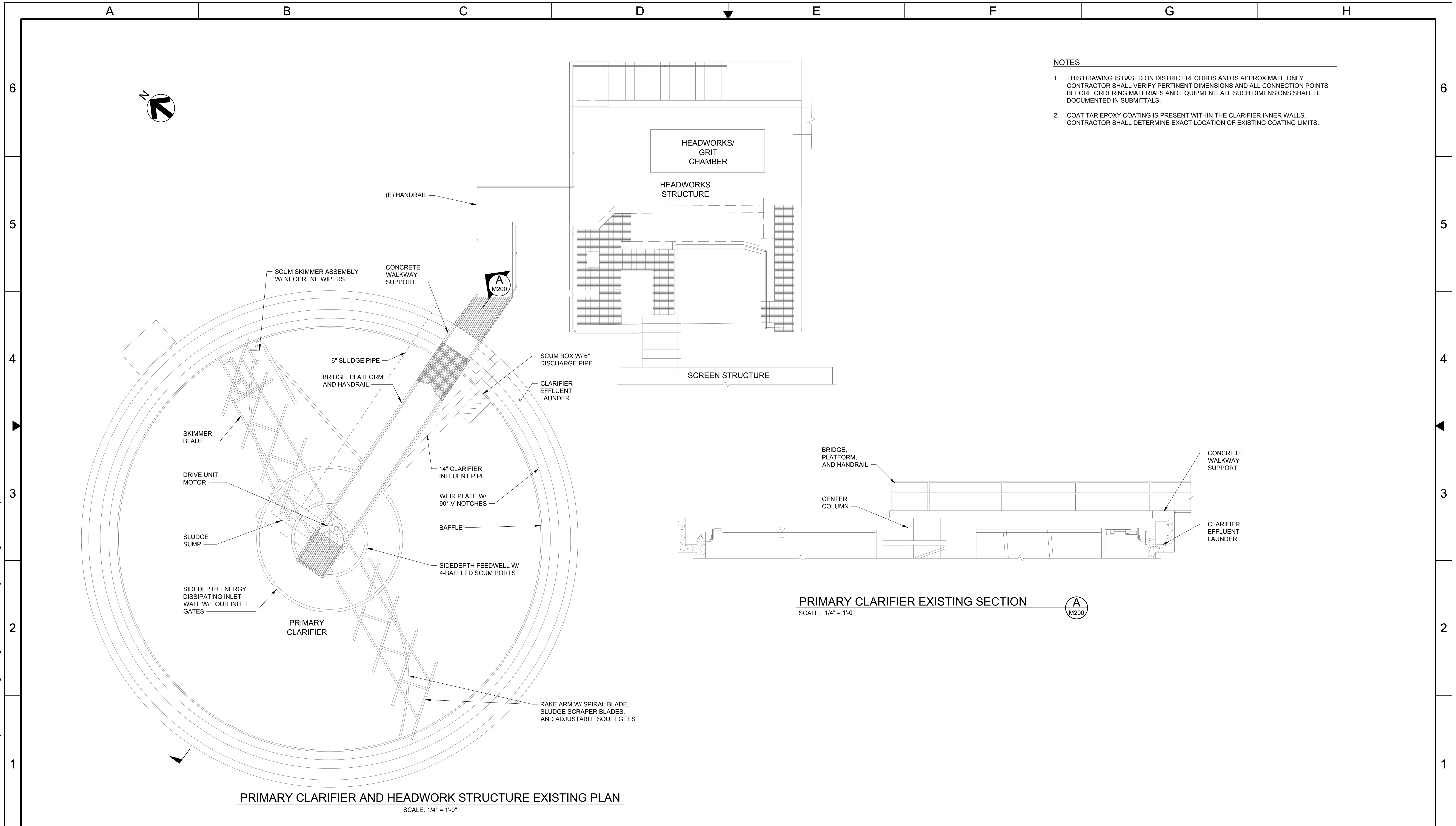
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EXISTING SITE PLAN AND KEY MAP



C100
 DRAWING NUMBER
 SHEET 3 OF 15

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RODEO SANITARY DISTRICT

2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT

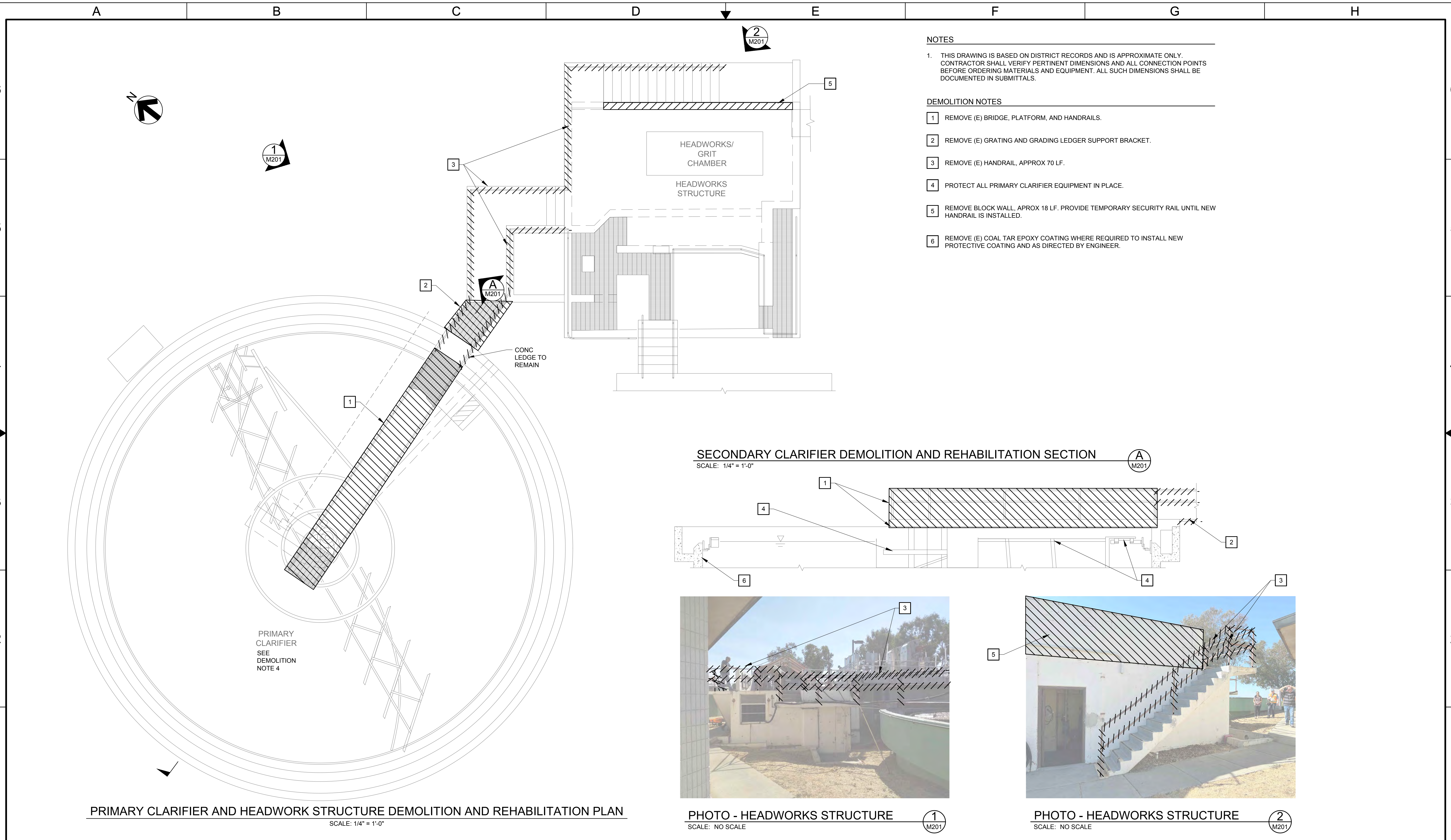
PRIMARY CLARIFIER AND HEADWORKS STRUCTURE EXISTING PLAN AND SECTION



M200
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SHEET 4 OF 15

A B C D E F G H

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- NOTES**
- THIS DRAWING IS BASED ON DISTRICT RECORDS AND IS APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY PERTINENT DIMENSIONS AND ALL CONNECTION POINTS BEFORE ORDERING MATERIALS AND EQUIPMENT. ALL SUCH DIMENSIONS SHALL BE DOCUMENTED IN SUBMITTALS.
- DEMOLITION NOTES**
- REMOVE (E) BRIDGE, PLATFORM, AND HANDRAILS.
 - REMOVE (E) GRATING AND GRADING LEDGER SUPPORT BRACKET.
 - REMOVE (E) HANDRAIL, APPROX 70 LF.
 - PROTECT ALL PRIMARY CLARIFIER EQUIPMENT IN PLACE.
 - REMOVE BLOCK WALL, APROX 18 LF. PROVIDE TEMPORARY SECURITY RAIL UNTIL NEW HANDRAIL IS INSTALLED.
 - REMOVE (E) COAL TAR EPOXY COATING WHERE REQUIRED TO INSTALL NEW PROTECTIVE COATING AND AS DIRECTED BY ENGINEER.

PRIMARY CLARIFIER AND HEADWORK STRUCTURE DEMOLITION AND REHABILITATION PLAN
SCALE: 1/4" = 1'-0"

SECONDARY CLARIFIER DEMOLITION AND REHABILITATION SECTION
SCALE: 1/4" = 1'-0"



PHOTO - HEADWORKS STRUCTURE
SCALE: NO SCALE



PHOTO - HEADWORKS STRUCTURE
SCALE: NO SCALE

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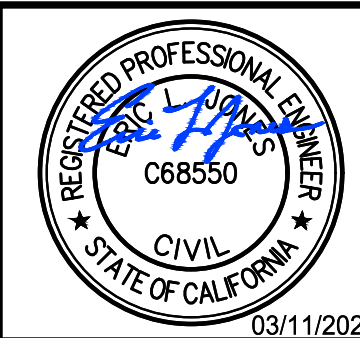
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2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT

PRIMARY CLARIFIER AND HEADWORKS STRUCTURE DEMOLITION AND REHABILITATION PLAN, SECTION, AND PHOTOS



M201
DRAWING NUMBER
SHEET 5 OF 15



PHOTO - HEADWORKS STRUCTURE 3
SCALE: NO SCALE M203

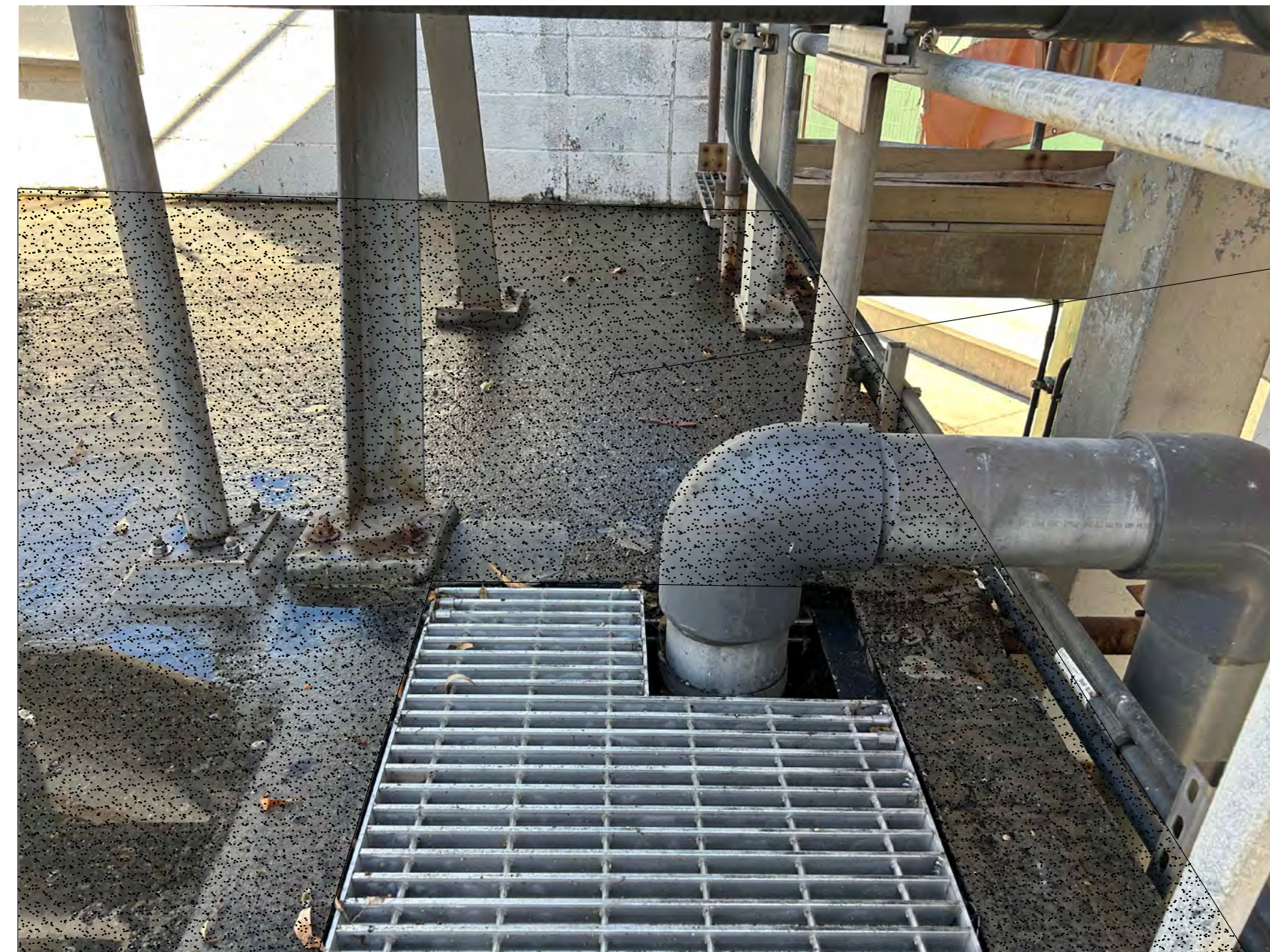


PHOTO - HEADWORKS STRUCTURE 4
SCALE: NO SCALE M203



PHOTO - HEADWORKS STRUCTURE 5
SCALE: NO SCALE M203

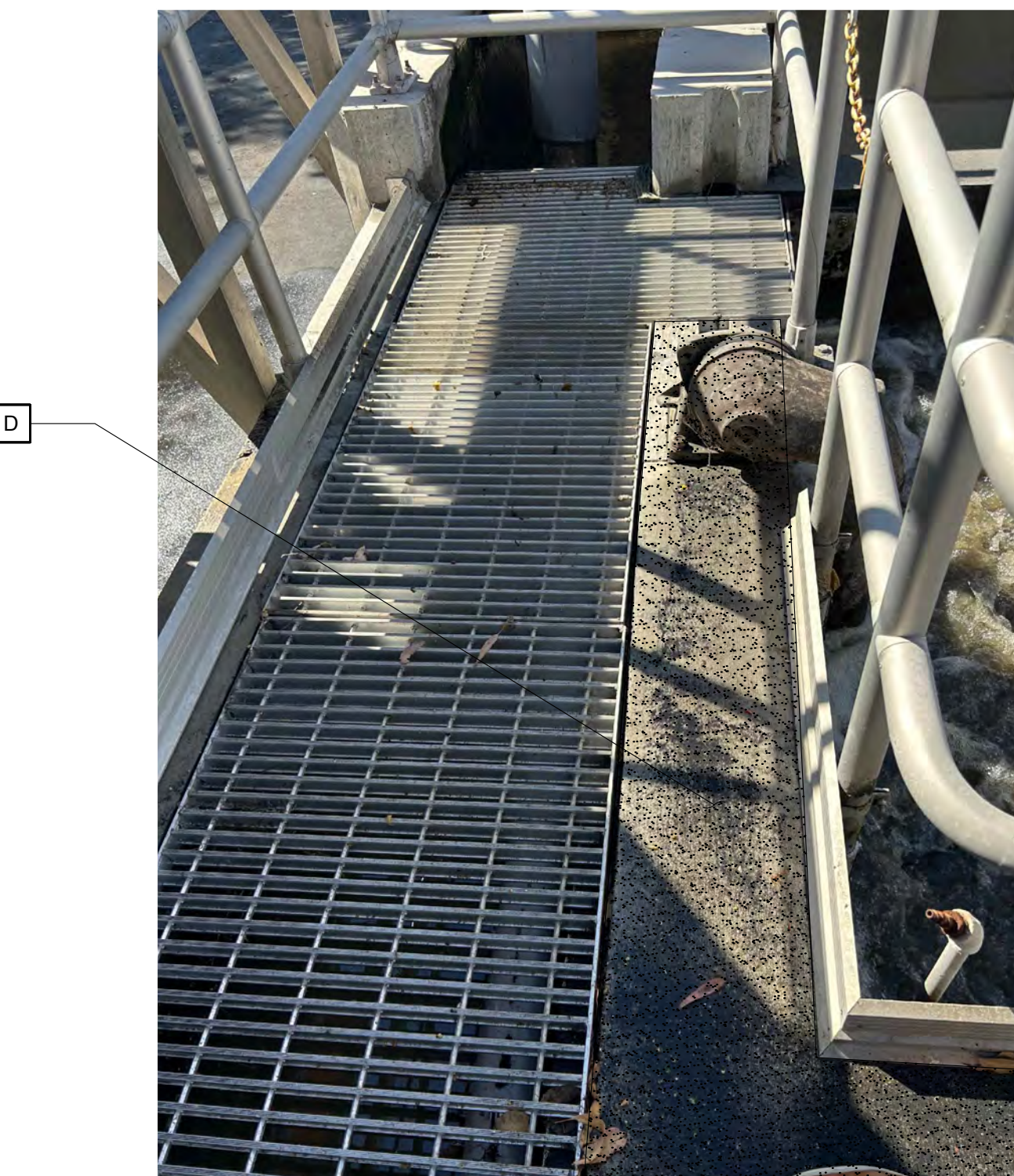
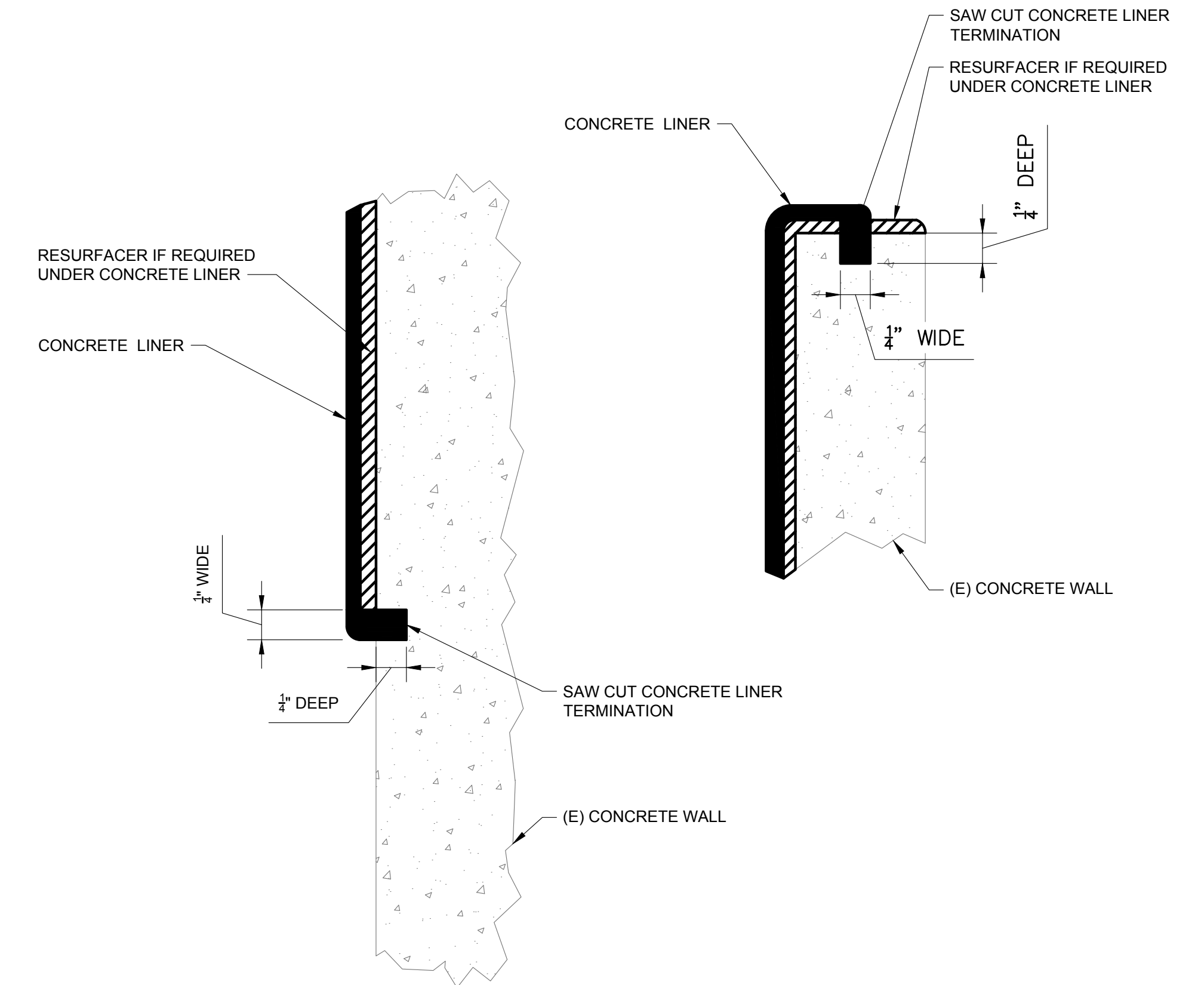


PHOTO - HEADWORKS STRUCTURE 6
SCALE: NO SCALE M203

CONSTRUCTION/REHABILITATION NOTES

- D RESURFACE CONCRETE WITH ANTI-SLIP MIX ADD ON, APPROX 280 SF. PRIOR TO RESURFACING, CONTRACTOR SHALL PROVIDE A SAMPLE FOR THE DISTRICT TO INSPECT AND CONFIRM THE AMOUNT OF ANTI-SLIP ADDER.

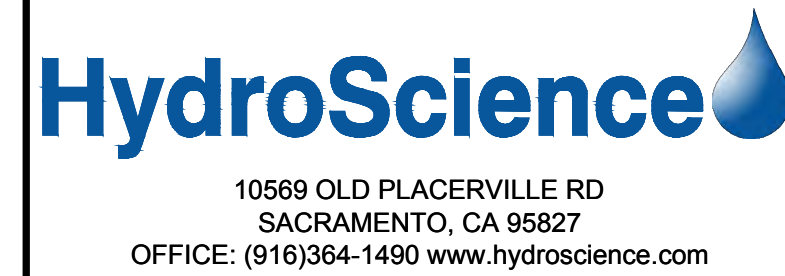


NOTES

1. CONTRACTOR SHALL COMPLETELY REMOVE (E) COAL TAR EPOXY COATING WHERE REQUIRED AND REPAIR WITH RESURFACER AS SPECIFIED IN SECTION 09900.
2. TROWEL CONCRETE LINER INTO SAW CUT TERMINATION TO DISPLACE ENTRAPPED AIR.

CONCRETE COATING DETAIL A

SCALE: NO SCALE



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RODEO SANITARY DISTRICT

2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT

HEADWORKS STRUCTURE REHABILITATION PHOTOS & CONCRETE COATING DETAIL

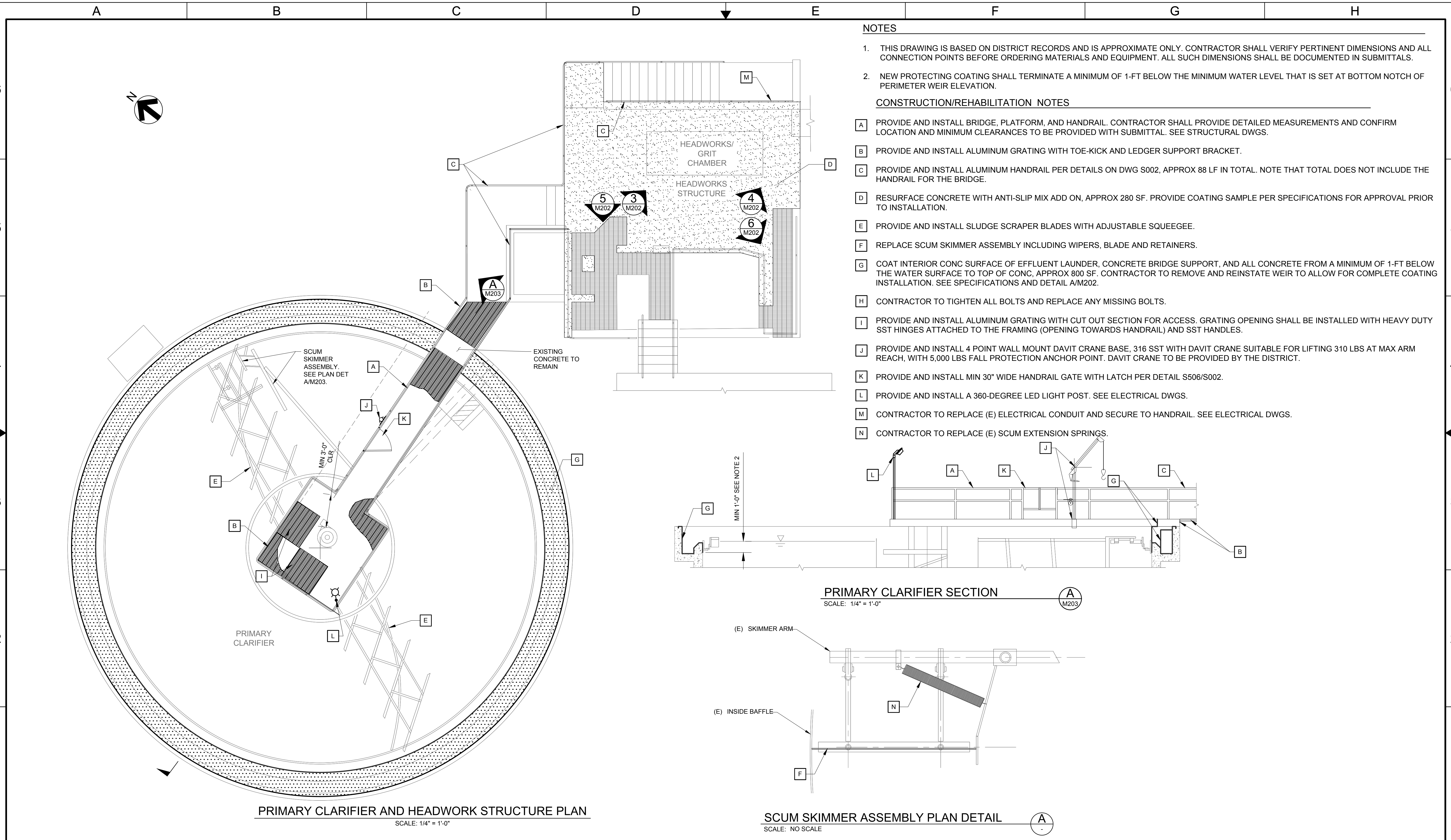


M202

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- NOTES**
- THIS DRAWING IS BASED ON DISTRICT RECORDS AND IS APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY PERTINENT DIMENSIONS AND ALL CONNECTION POINTS BEFORE ORDERING MATERIALS AND EQUIPMENT. ALL SUCH DIMENSIONS SHALL BE DOCUMENTED IN SUBMITTALS.
 - NEW PROTECTING COATING SHALL TERMINATE A MINIMUM OF 1-FT BELOW THE MINIMUM WATER LEVEL THAT IS SET AT BOTTOM NOTCH OF PERIMETER WEIR ELEVATION.
- CONSTRUCTION/REHABILITATION NOTES**
- A** PROVIDE AND INSTALL BRIDGE, PLATFORM, AND HANDRAIL. CONTRACTOR SHALL PROVIDE DETAILED MEASUREMENTS AND CONFIRM LOCATION AND MINIMUM CLEARANCES TO BE PROVIDED WITH SUBMITTAL. SEE STRUCTURAL DWGS.
 - B** PROVIDE AND INSTALL ALUMINUM GRATING WITH TOE-KICK AND LEDGER SUPPORT BRACKET.
 - C** PROVIDE AND INSTALL ALUMINUM HANDRAIL PER DETAILS ON DWG S002, APPROX 88 LF IN TOTAL. NOTE THAT TOTAL DOES NOT INCLUDE THE HANDRAIL FOR THE BRIDGE.
 - D** RESURFACE CONCRETE WITH ANTI-SLIP MIX ADD ON, APPROX 280 SF. PROVIDE COATING SAMPLE PER SPECIFICATIONS FOR APPROVAL PRIOR TO INSTALLATION.
 - E** PROVIDE AND INSTALL SLUDGE SCRAPER BLADES WITH ADJUSTABLE SQUEEGEE.
 - F** REPLACE SCUM SKIMMER ASSEMBLY INCLUDING WIPERS, BLADE AND RETAINERS.
 - G** COAT INTERIOR CONC SURFACE OF EFFLUENT LAUNDER, CONCRETE BRIDGE SUPPORT, AND ALL CONCRETE FROM A MINIMUM OF 1-FT BELOW THE WATER SURFACE TO TOP OF CONC, APPROX 800 SF. CONTRACTOR TO REMOVE AND REINSTATE WEIR TO ALLOW FOR COMPLETE COATING INSTALLATION. SEE SPECIFICATIONS AND DETAIL A/M202.
 - H** CONTRACTOR TO TIGHTEN ALL BOLTS AND REPLACE ANY MISSING BOLTS.
 - I** PROVIDE AND INSTALL ALUMINUM GRATING WITH CUT OUT SECTION FOR ACCESS. GRATING OPENING SHALL BE INSTALLED WITH HEAVY DUTY SST HINGES ATTACHED TO THE FRAMING (OPENING TOWARDS HANDRAIL) AND SST HANDLES.
 - J** PROVIDE AND INSTALL 4 POINT WALL MOUNT DAVIT CRANE BASE, 316 SST WITH DAVIT CRANE SUITABLE FOR LIFTING 310 LBS AT MAX ARM REACH, WITH 5,000 LBS FALL PROTECTION ANCHOR POINT. DAVIT CRANE TO BE PROVIDED BY THE DISTRICT.
 - K** PROVIDE AND INSTALL MIN 30" WIDE HANDRAIL GATE WITH LATCH PER DETAIL S506/S002.
 - L** PROVIDE AND INSTALL A 360-DEGREE LED LIGHT POST. SEE ELECTRICAL DWGS.
 - M** CONTRACTOR TO REPLACE (E) ELECTRICAL CONDUIT AND SECURE TO HANDRAIL. SEE ELECTRICAL DWGS.
 - N** CONTRACTOR TO REPLACE (E) SCUM EXTENSION SPRINGS.

PRIMARY CLARIFIER AND HEADWORK STRUCTURE PLAN
SCALE: 1/4" = 1'-0"

PRIMARY CLARIFIER SECTION
SCALE: 1/4" = 1'-0"

SCUM SKIMMER ASSEMBLY PLAN DETAIL
SCALE: NO SCALE

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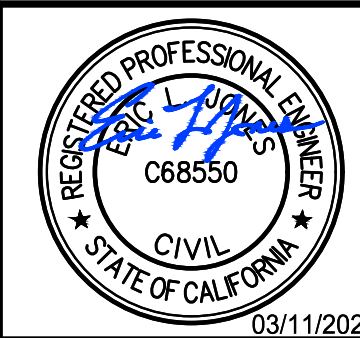
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2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT

PRIMARY CLARIFIER AND HEADWORKS STRUCTURE PLAN AND SECTION



M203
DRAWING NUMBER
SHEET 7 OF 15

ABBREVIATIONS:

Table with 4 columns: Abbreviation, Description, Abbreviation, Description. Includes items like AB AGGREGATE BASE, ANCHOR BOLT; AL ALUMINUM; ARCH ARCHITECTURAL; etc.

DESIGN CRITERIA:

- 1. CODE: 2022 CALIFORNIA BUILDING CODE (CBC)
2. DESIGN LIVE LOADS: AREA LIVE LOAD 40 PSF
3. WIND DESIGN PARAMETERS: BASIC WIND SPEED (3-SEC GUST) V= 102 MPH
4. EARTHQUAKE DESIGN PARAMETERS: SEISMIC IMPORTANCE FACTOR, I_s 1.5

STRUCTURAL OBSERVATIONS:

- 1. VISUAL OBSERVATIONS WILL BE PERFORMED AS STATED BELOW. VISUAL OBSERVATIONS SHALL NOT BE CONSIDERED AS A SUBSTITUTE FOR THE SPECIAL INSPECTION REQUIREMENTS.
2. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY THE STRUCTURAL ENGINEER AS TO WHEN EACH PHASE OF CONSTRUCTION IS READY FOR OBSERVATION A MINIMUM OF 48 HRS IN ADVANCE.
3. THE FOLLOWING PHASES OF CONSTRUCTION REQUIRE A SITE VISIT AND STRUCTURAL OBSERVATION REPORT FROM THE STRUCTURAL ENGINEER:
- OBSERVATION OF THE PRIMARY CLARIFIER BASE ATTACHMENT TO THE CONCRETE FOUNDATION
- OBSERVATION OF THE PRIMARY CLARIFIER HEAD FOR CORROSION DAMAGE (WHERE BRIDGE IS ATTACHED)
- OBSERVATION OF CONCRETE SUPPORT AT PERIMETER WALL FOR SUPPORT OF THE BRIDGE
4. DEPENDING ON THE FINDINGS, ADDITIONAL REPAIRS OR WORK MAY BE REQUIRED.

GENERAL:

- 1. INTERPRETATION OF DRAWINGS & SPECIFICATIONS
1.1 WHERE APPLICABLE, SPECIFICATIONS HAVE BEEN PREPARED FOR THIS PROJECT AND ARE ARRANGED IN SEVERAL SECTIONS, BUT SUCH SEPARATION SHALL NOT BE CONSIDERED AS THE LIMITS OF THE WORK REQUIRED BY ANY SEPARATE TRADE.
1.2 IN GENERAL, THE WORKING DETAILS WILL INDICATE DIMENSIONS, POSITIONS AND KIND OF CONSTRUCTION, AND THE SPECIFICATIONS WILL INDICATE QUALITIES AND METHODS.
1.3 SHOULD AN ERROR APPEAR IN THE WORKING DETAILS OR SPECIFICATIONS OR IN WORK DONE BY OTHERS AFFECTING THIS WORK, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT ONCE AND IN WRITING.
2. CONSTRUCTION SHALL CONFORM TO THE 2022 CBC AND ALL APPLICABLE CODES AND REGULATIONS.
3. SHOP DRAWING NOTE:
3.1 SHOP DRAWINGS SHALL BE SUBMITTED ELECTRONICALLY IN PDF FORMAT AT FULL SCALE.
3.2 THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE STRUCTURAL ENGINEER THAT THEY UNDERSTAND THE DESIGN CONCEPT BY INDICATING WHICH MATERIALS THEY INTEND TO USE.
3.3 PRIOR TO FABRICATION, SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW TO THE STRUCTURAL ENGINEER.
3.4 PRIOR TO SUBMISSION THE CONTRACTOR SHALL REVIEW ALL SUBMITTALS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS AND SHALL STAMP SUBMITTALS AS BEING "REVIEWED FOR CONFORMANCE"
3.5 SHOP DRAWING SUBMITTALS PROCESSED BY THE STRUCTURAL ENGINEER ARE NOT CHANGE ORDERS.
3.6 ANY DETAIL ON THE SHOP DRAWING THAT DEVIATES FROM THE CONTRACT DOCUMENTS SHALL CLEARLY BE MARKED WITH THE NOTE "THIS IS A CHANGE".
3.7 SHOP DRAWINGS OR CALCULATIONS SUBMITTED FOR REVIEW THAT REQUIRE RESUBMITTAL FOR RE-REVIEW SHALL BE BILLED HOURLY FOR SUCH TIME TO THE GENERAL CONTRACTOR.
4. SAFETY NOTE:
4.1 IT IS THE CONTRACTORS RESPONSIBILITY TO COMPLY WITH THE PERTINENT SECTIONS, AS THEY APPLY TO THIS PROJECT, OF THE "CONSTRUCTION SAFETY ORDERS" ISSUED BY THE STATE OF CALIFORNIA LATEST EDITION, AND ALL OSHA REQUIREMENTS.
4.2 THE OWNER AND THE STRUCTURAL ENGINEER DO NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH THESE REQUIREMENTS.
4.3 THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE DESIGN AND CONSTRUCTION OF ALL FORMS AND SHORING REQUIRED.
5. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER WHERE A CONFLICT OR A DISCREPANCY OCCURS BETWEEN THE STRUCTURAL DRAWINGS AND ANY OTHER PORTION OF THE CONTRACT DOCUMENTS OR EXISTING FIELD CONDITIONS.
6. WHERE NO SPECIFIC DETAIL IS SHOWN, THE CONSTRUCTION SHALL BE IDENTICAL OR SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION ON THIS PROJECT.
7. WHEN CONSTRUCTION ATTACHES TO AN EXISTING BUILDING, A COMPLETE SET OF DRAWINGS OF THE EXISTING BUILDING SHALL BE KEPT ON THE JOB SITE.
8. ANY SUBSTITUTIONS FOR STRUCTURAL MEMBERS, HARDWARE, OR DETAILS SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER.
9. DO NOT SCALE DRAWINGS. CONTACT THE STRUCTURAL ENGINEER FOR ANY DIMENSIONS NOT SHOWN.
10. THESE DRAWINGS ARE NOT COMPLETE UNTIL REVIEWED AND ACCEPTED BY THE LOCAL BUILDING OFFICIAL AND SIGNED BY THE OWNER AND THE STRUCTURAL ENGINEER.
11. ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTES THE ORIGINAL AND UNPUBLISHED WORK OF THE STRUCTURAL ENGINEER AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF THE STRUCTURAL ENGINEER.
12. THE STRUCTURE SHOWN ON THESE DRAWINGS IS STRUCTURALLY SOUND ONLY IN ITS COMPLETED FORM. THE STABILITY OF THIS STRUCTURE DEPENDS ON THE DIAPHRAGMS AND THE BRACING MEMBERS SHOWN. THE CONTRACTOR IS TO PROVIDE FOR THE DESIGN AND CONSTRUCTION OF SHORING FOR ALL EARTH, FORMS, CONCRETE, STEEL, WOOD, AND MASONRY TO RESIST GRAVITY, EARTH, WIND, SEISMIC, AND CONSTRUCTION LOADS. SHORING SHALL REMAIN IN PLACE UNTIL ALL DIAPHRAGMS AND LATERAL RESISTING ELEMENTS ARE IN PLACE IN THEIR ENTIRETY.

STRUCTURAL ALUMINUM:

- 1. ALUMINUM CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE ALUMINUM CONSTRUCTION MANUAL OF THE ALUMINUM ASSOCIATION.
2. UNLESS OTHERWISE INDICATED, STRUCTURAL ALUMINUM SHALL BE ALLOY 6061-T6 AS SPECIFIED IN ASTM B308.
3. WHERE ALUMINUM IS IN CONTACT WITH CONCRETE, MASONRY OR STEEL SURFACES IT SHALL BE COATED WITH HEAVY ALKALI-RESISTANT BITUMINOUS PAINT.

STATEMENT OF SPECIAL INSPECTIONS AND TESTING:

1. SPECIAL INSPECTIONS AND TESTING SHALL BE PROVIDED BY AN INSPECTION AGENCY EMPLOYED BY THE OWNER AND QUALIFIED BY THE BUILDING OFFICIAL TO INSPECT THE PARTICULAR TYPE OF CONSTRUCTION NOTED BELOW. TESTS AND INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17, 2022 CBC.

Table with 2 columns: Inspection/Testing Item, Section Reference. Includes items like ALUMINUM CONSTRUCTION, STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL, COLD-FORMED STEEL TRUSSES SPANNING >=60ft, etc.

NOTES:

- 1. ALL HANDRAILS/GUARDRAILS SHALL BE ALUMINUM UNO. COAT ALL SURFACES OF ALUMINUM THAT COME IN CONTACT WITH CONCRETE IN ACCORDANCE WITH SPECIFICATIONS.
2. ALL HANDRAILS/GUARDRAILS SHALL BE IN ACCORDANCE WITH CURRENT OSHA SAFETY CODE REQUIREMENTS.
3. PLACE CENTER OF EMBEDDED POSTS 6" FROM EDGE OF CONCRETE OR 4" FROM EDGE OF CONCRETE STAIR NOSING UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
4. PLACE RAIL POSTS OPPOSITE EACH OTHER WHERE GUARDRAILS ARE PARALLEL.
5. PROVIDE SLIP JOINTS AT 24'-0" CC MAX FOR EXPANSION OF RAILS AND KICKPLATE.
6. PROVIDE KICKPLATE AT ALL LOCATIONS EXCEPT SLOPING GUARDRAILS ON STAIRS AND HANDRAIL MOUNTED ON 6" MIN HIGH CURB.
7. ALL GUARDRAILS SHALL BE FIXED UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
8. HANDRAILS ALONG WALLS SHALL BE SINGLE RAIL WITH TOP OF RAIL AT 2'-10" HIGH ABOVE LANDINGS OR TREAD NOSINGS, OR TO MATCH TOP RAIL ON OPPOSITE SIDE.
9. FOR RAIL POSTS MOUNTED TO BEAM OR STAIR CHANNEL; PROVIDE MANUFACTURER'S REINFORCED CONNECTION FROM POST TO PLATE.
10. PROVIDE #4x3'-0" REINFORCING BAR ADJACENT AND CENTERED AT EVERY EMBEDDED POST IF LONGITUDINAL REINFORCING DOES NOT PASS BETWEEN POST POCKET AND EDGE OF CONCRETE.
11. CONTRACTOR TO PROVIDE CALCULATIONS STAMPED BY A CIVIL OR STRUCTURAL ENGINEER LICENSED IN THE STATE WHERE WORK IS TO BE PERFORMED FOR ALL HANDRAILS AND GUARDRAILS.

HANDRAIL / GUARDRAIL NOTES
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THIS BAR IS 1 INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.

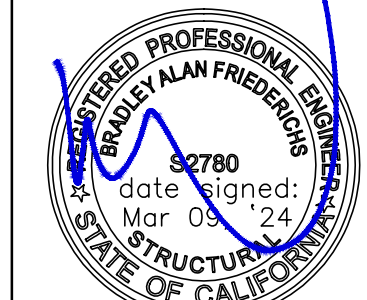
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DATE: 2/5/2024
DRAWN BY:
DESIGNED BY:
PROJ. MGR.:

Table with 4 columns: REV, DESCRIPTION, DATE, APVD. Includes a row for REVISIONS.

RODEO SANITARY DISTRICT

2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT

STRUCTURAL TYPICAL NOTES

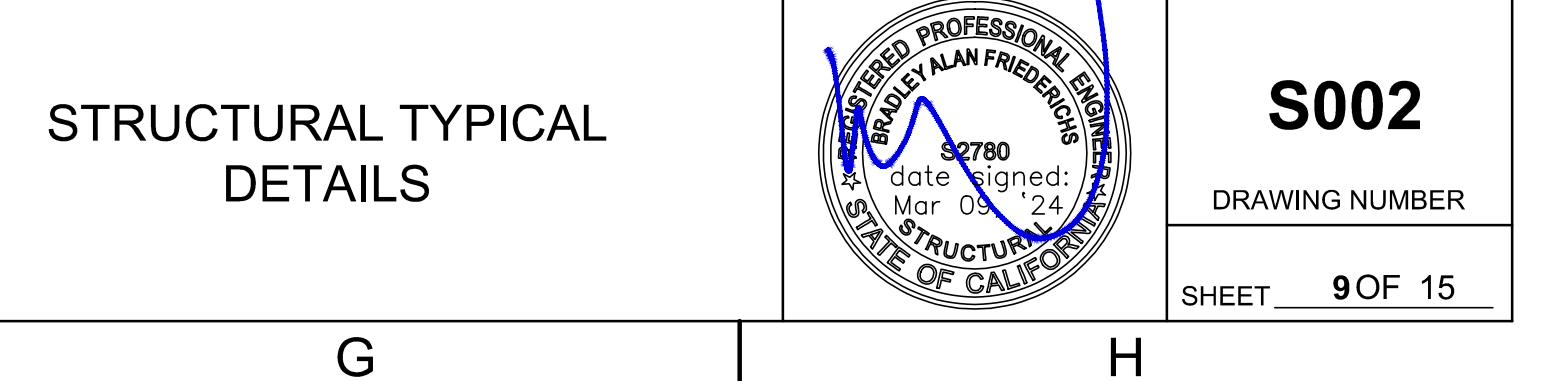
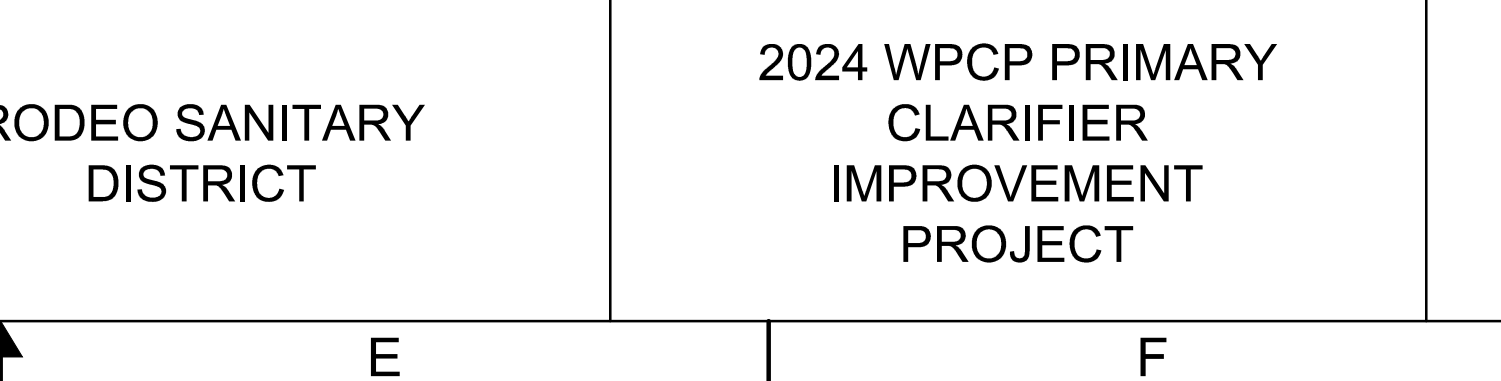
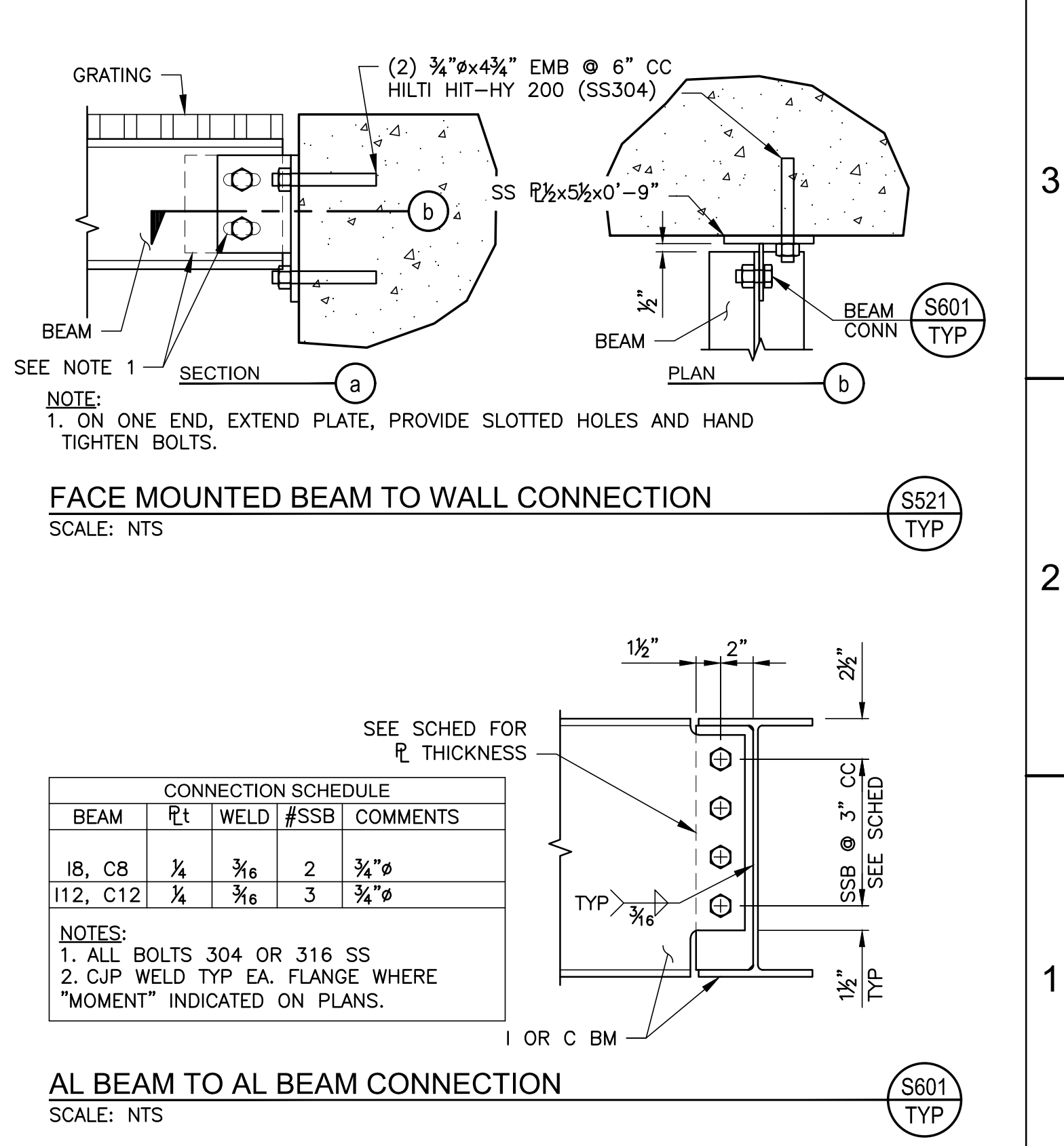
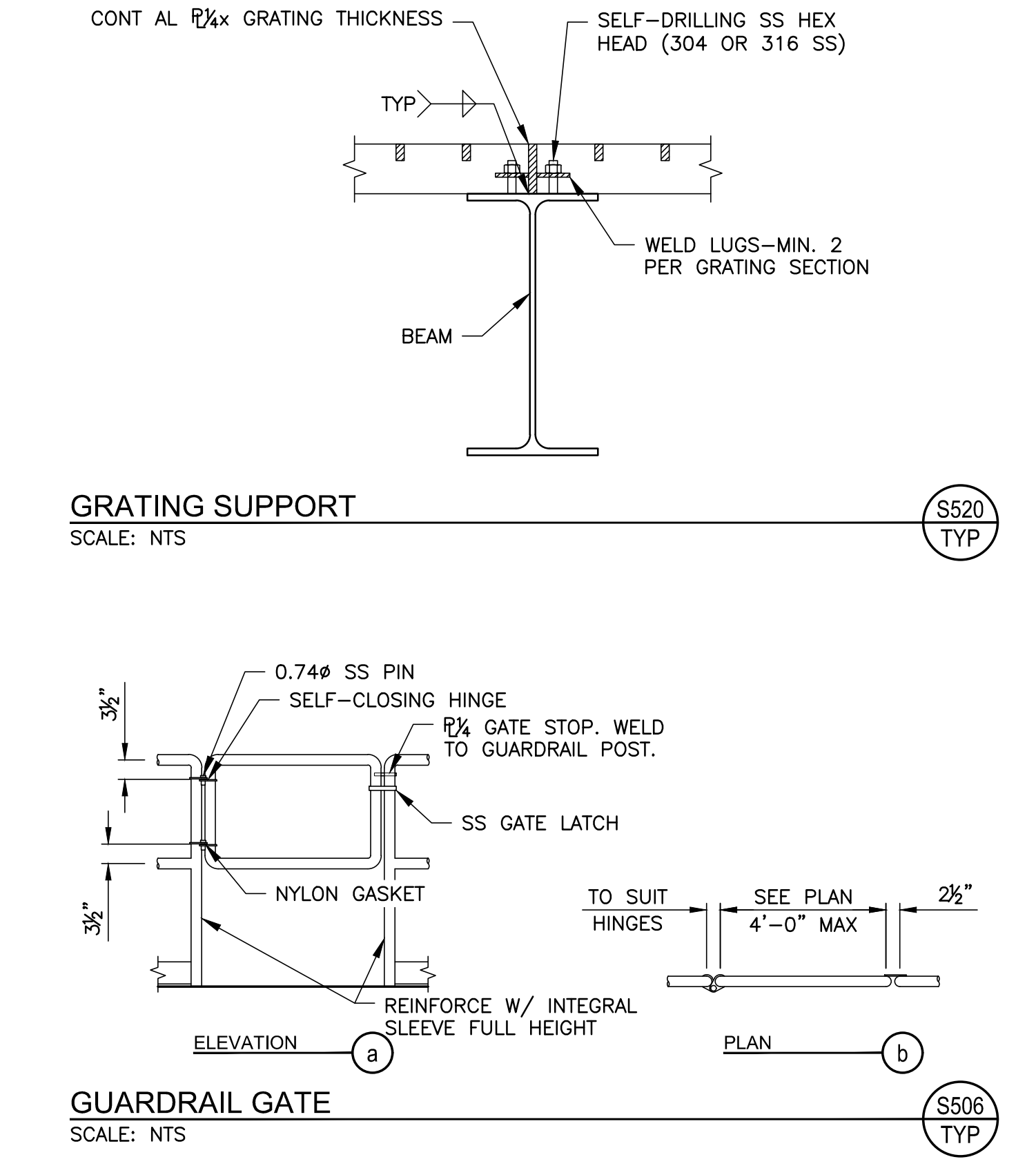
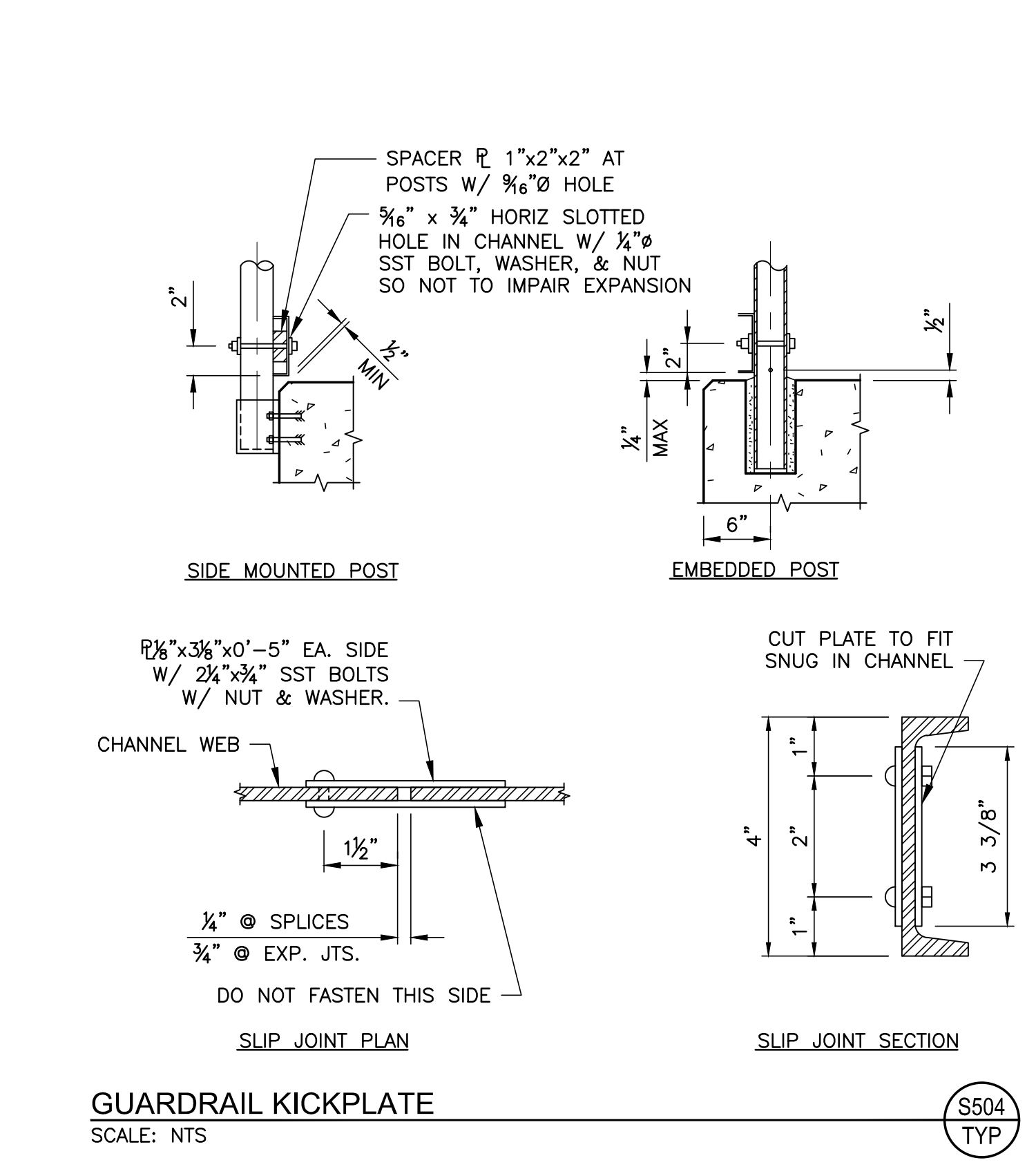
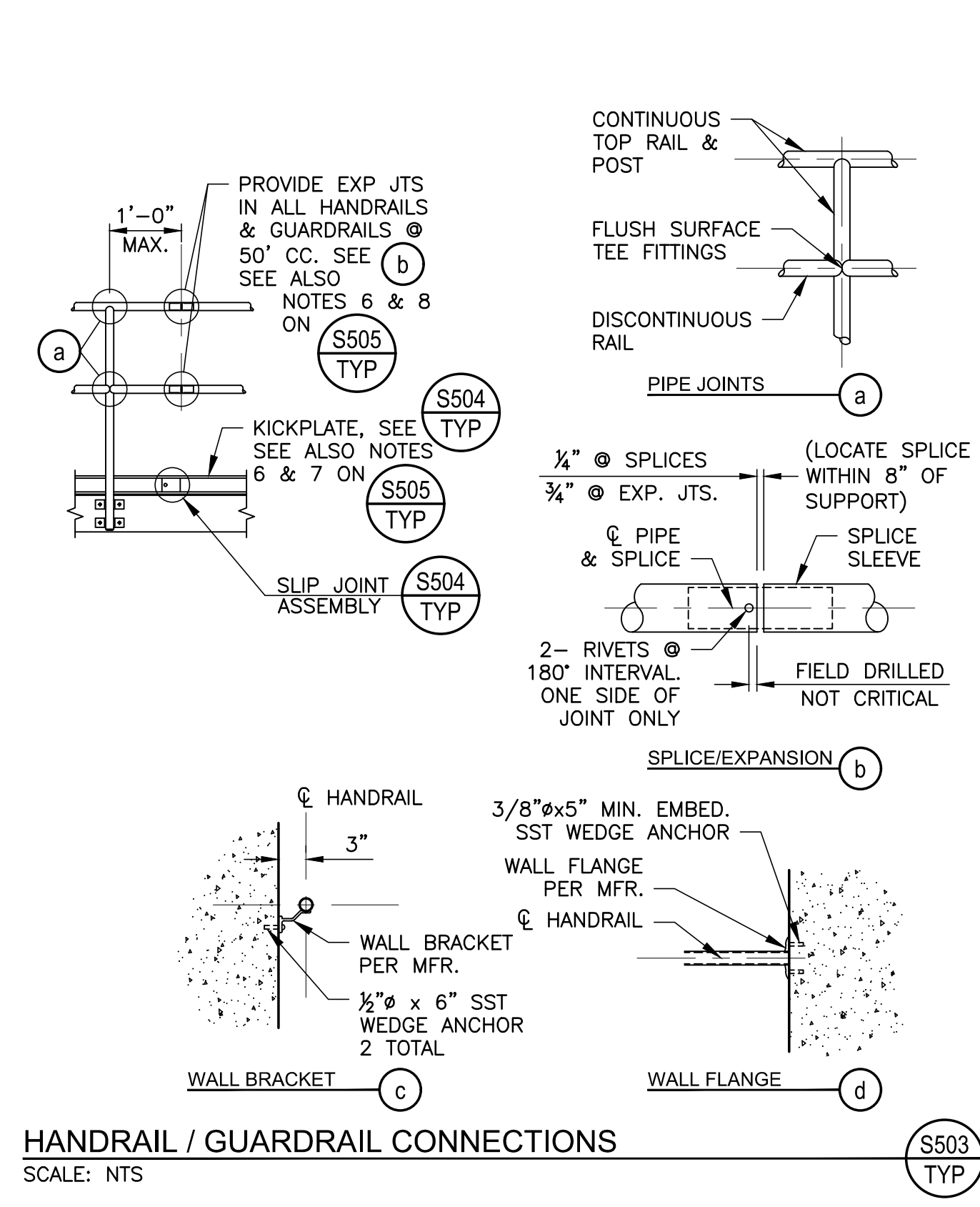
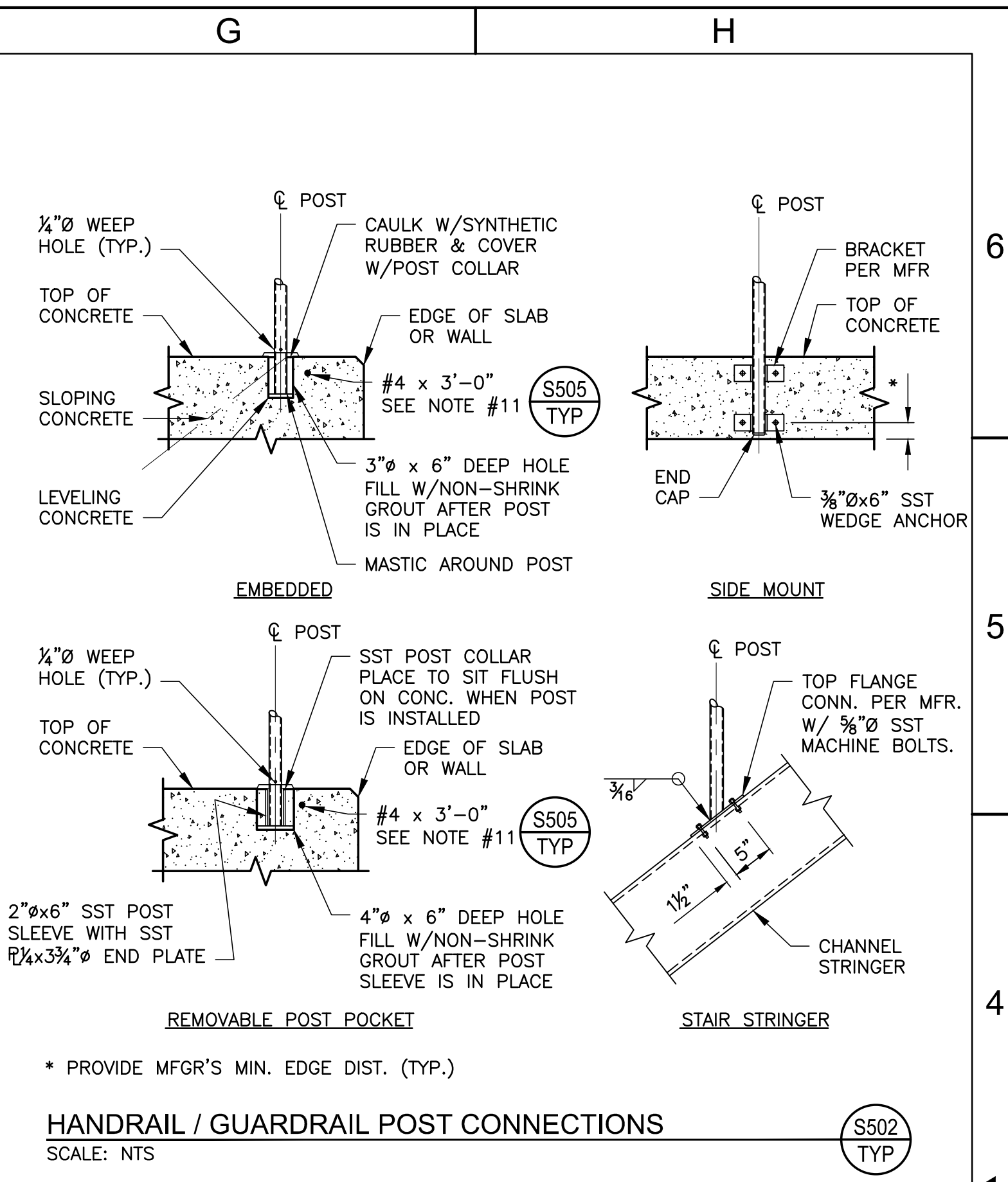
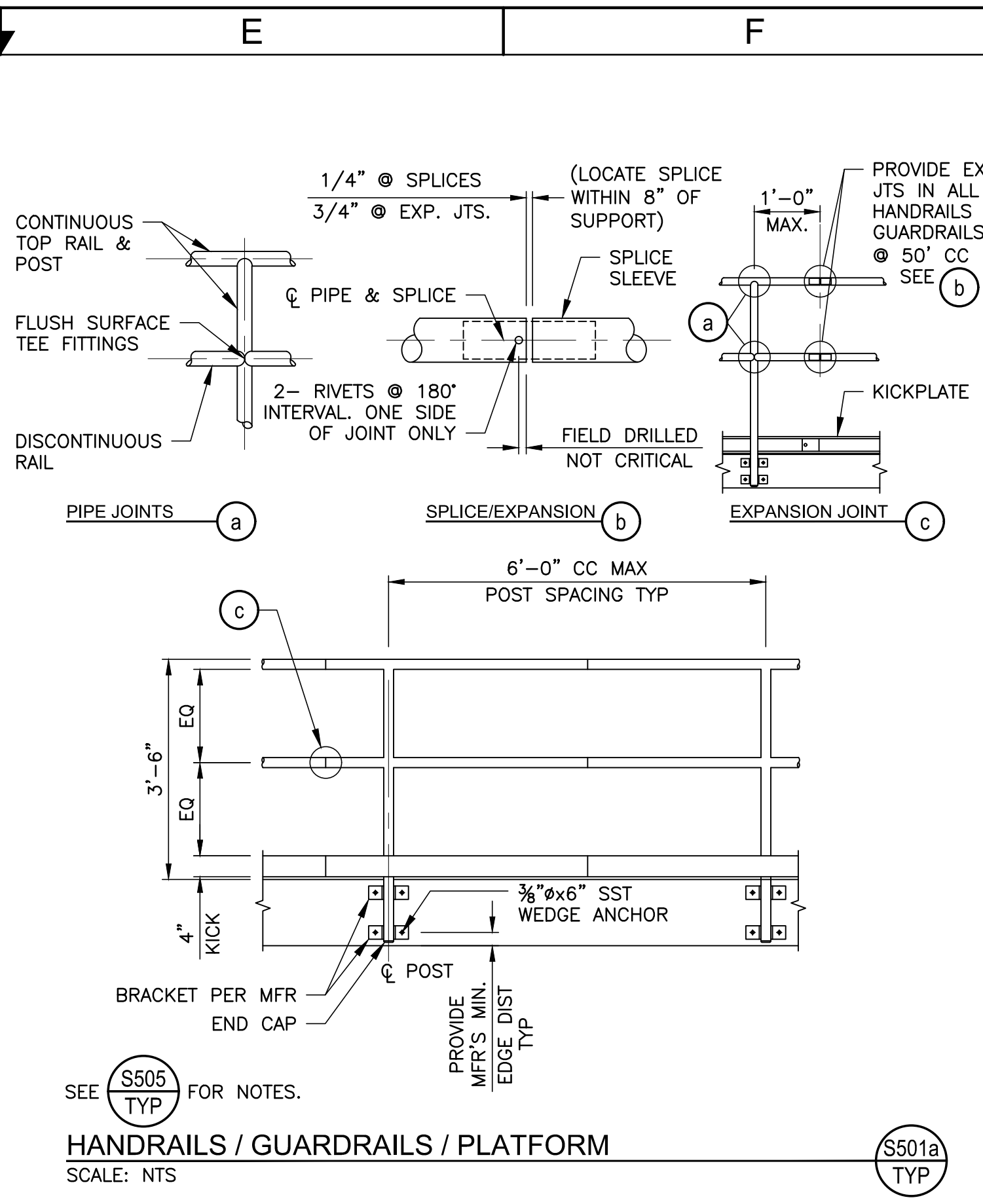
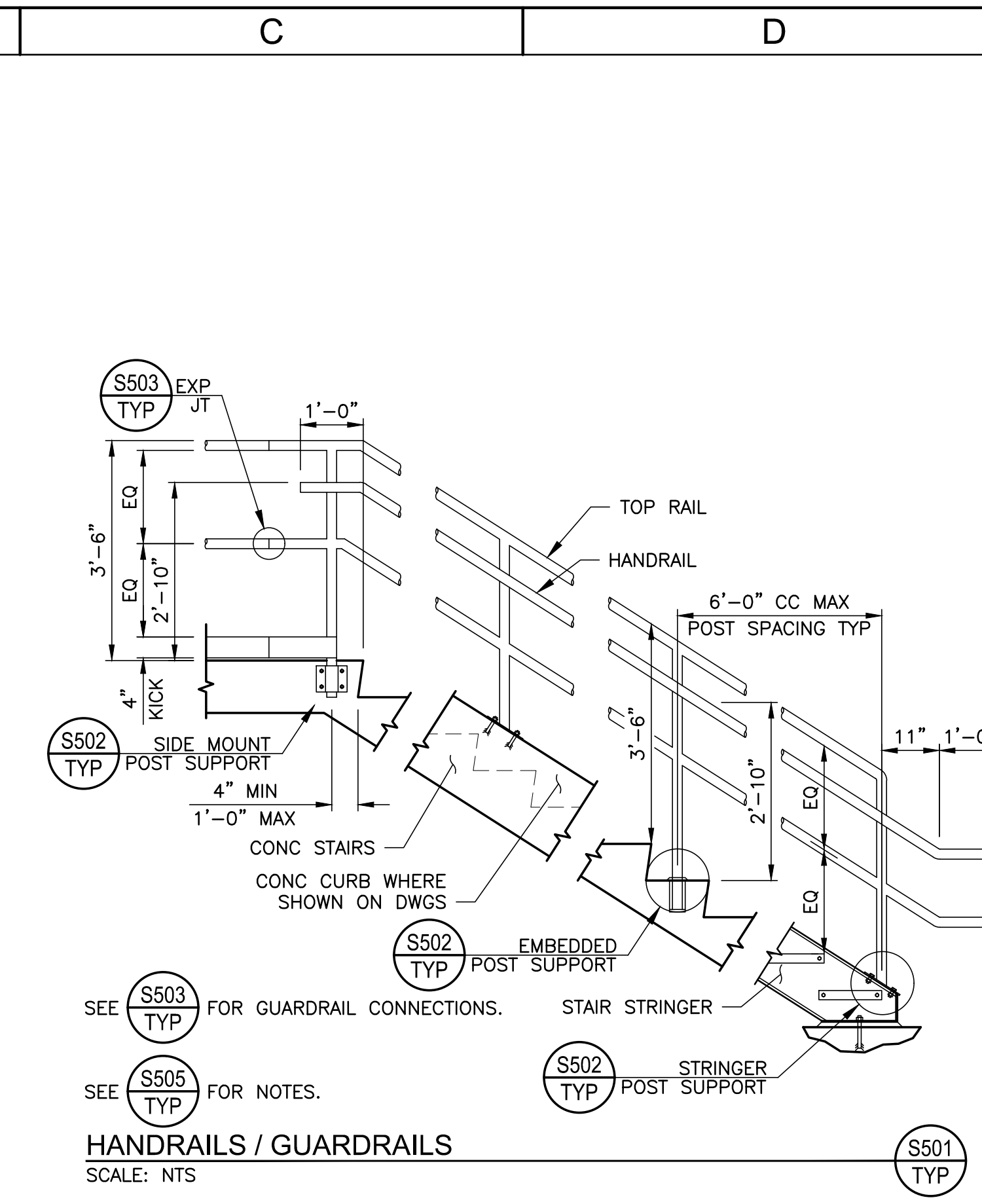
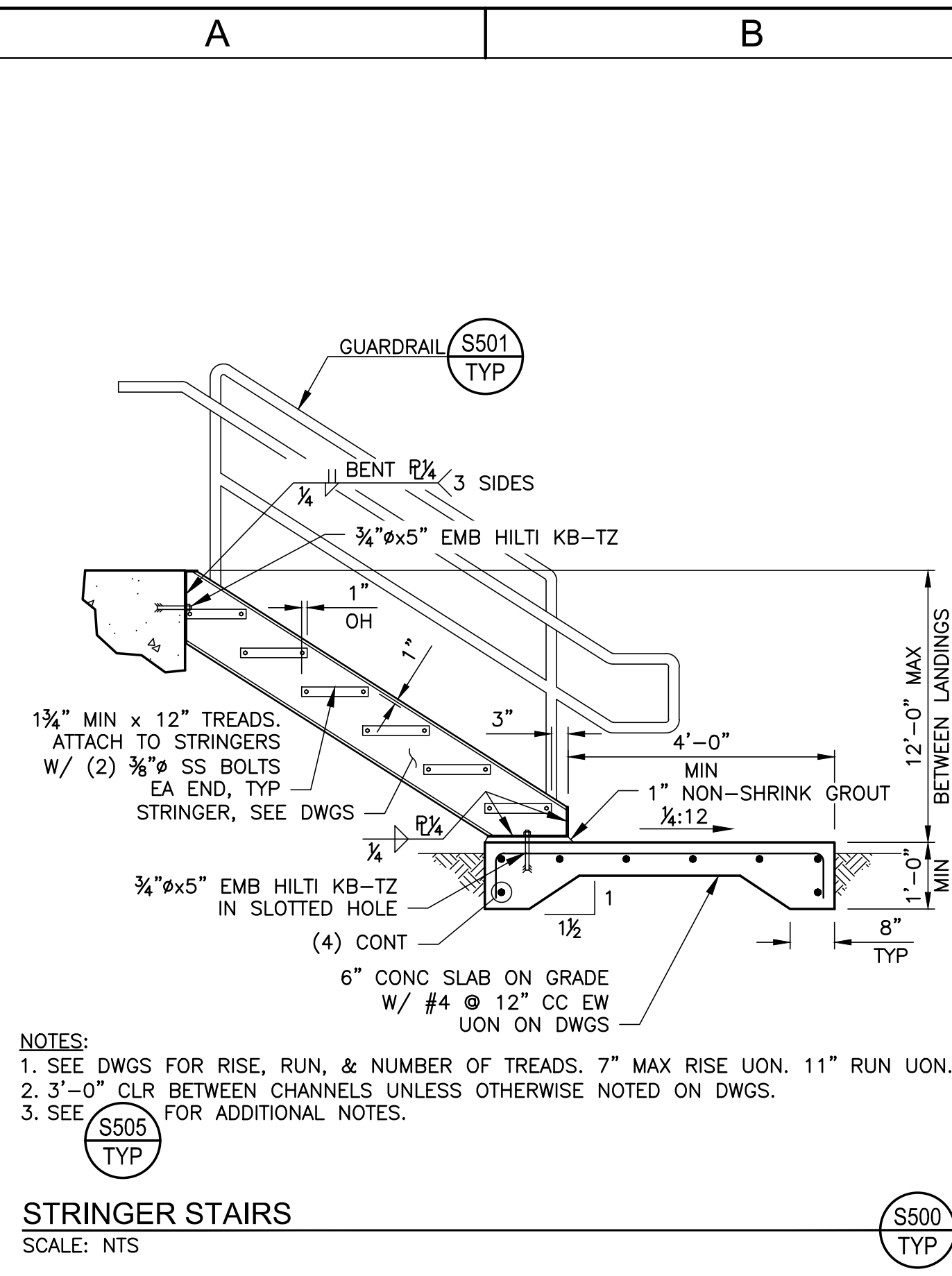


S001

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 DRAWN BY:
 DESIGNED BY:
 PROJ. MGR.:

REV	DESCRIPTION	DATE	APVD

RODEO SANITARY DISTRICT

2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT

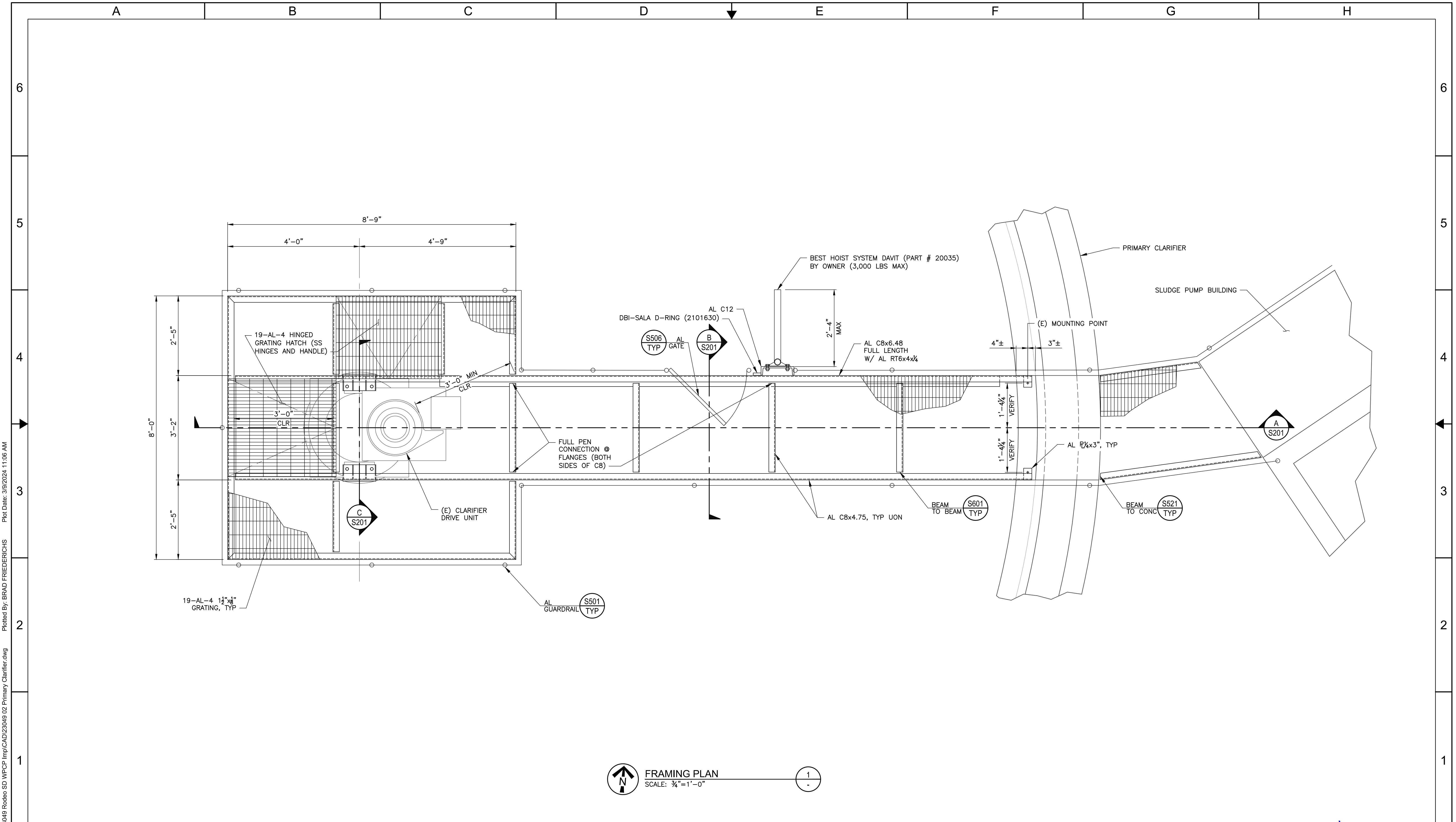
STRUCTURAL TYPICAL DETAILS

S002
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SHEET 9 OF 15



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FRAMING PLAN
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HydroScience
 10569 OLD PLACERVILLE RD
 SACRAMENTO, CA 95827
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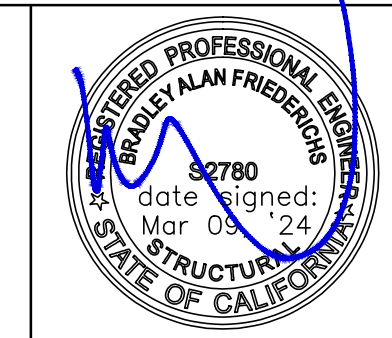
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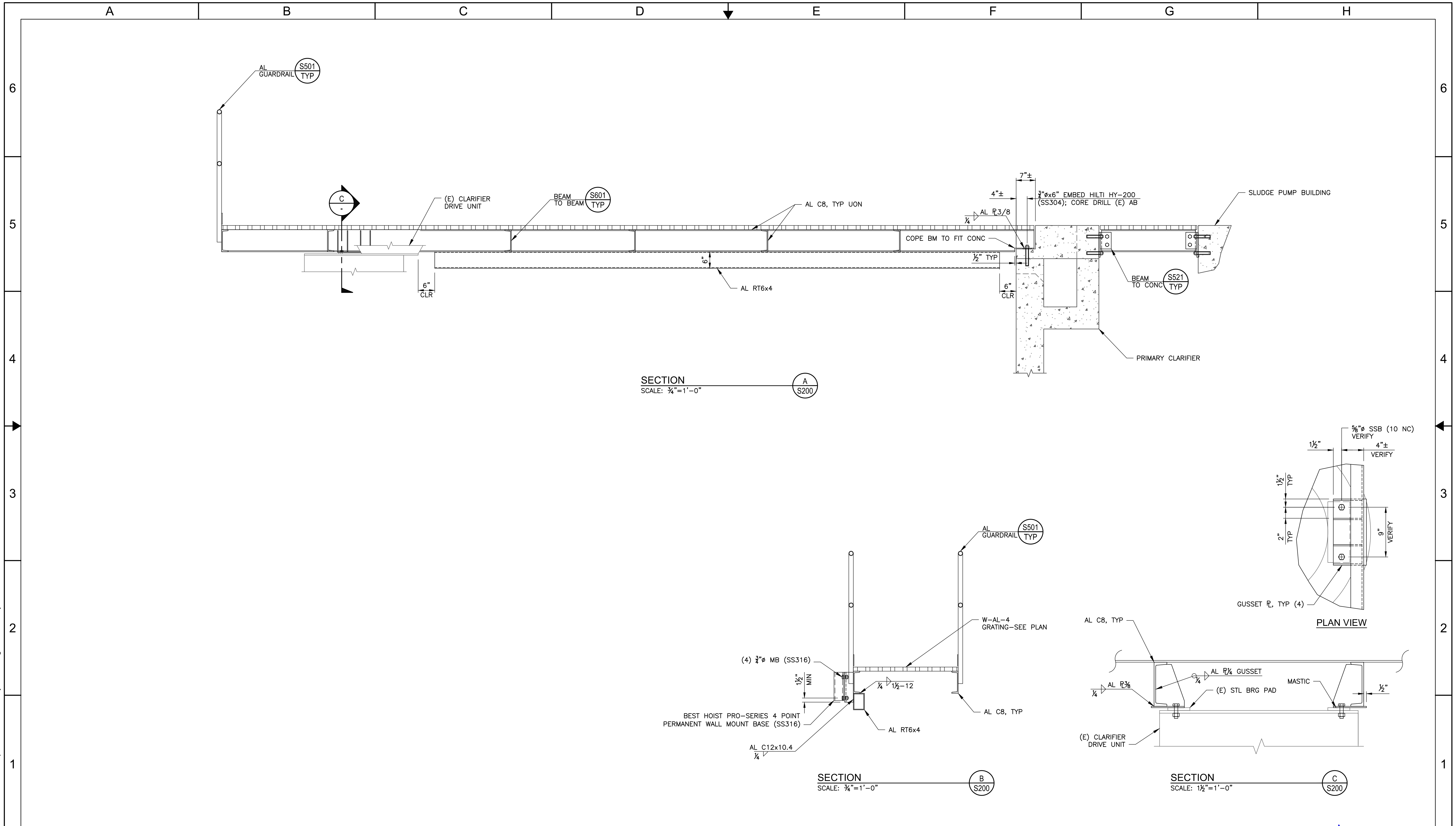
RODEO SANITARY DISTRICT
 2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT

PRIMARY CLARIFIER BRIDGE STRUCTURAL PLAN

S200
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 SHEET 10 OF 15



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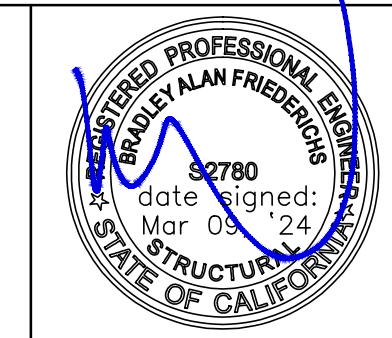
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 DESIGNED BY: _____
 PROJ. MGR.: _____

REV	DESCRIPTION	DATE	APVD

RODEO SANITARY DISTRICT

2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT

PRIMARY CLARIFIER BRIDGE STRUCTURAL SECTION & DETAILS






S201
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 SHEET 11 OF 15

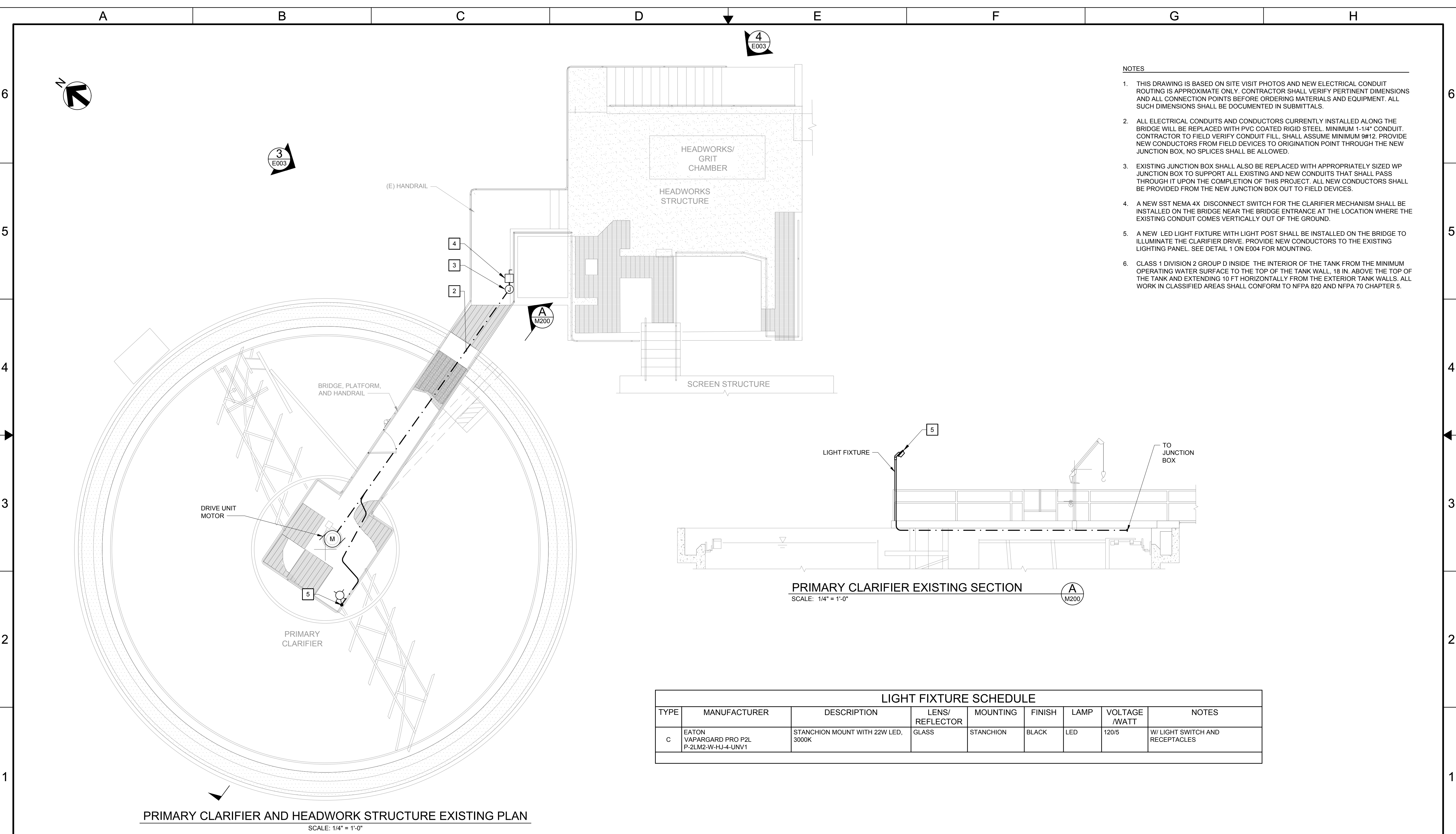
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Plotted By: ERIC JONES
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<h3>WIRING & CONDUIT - CONNECTIONS</h3> <ul style="list-style-type: none"> PANEL OR EQUIPMENT WIRING FIELD WIRING EXISTING WIRING CONDUCTORS - NOT CONNECTED CONDUCTORS - CONNECTED GROUND CHASSIS OR FRAME GROUND PLUG AND RECEPTACLE INCOMING LINE SHIELDED CABLE CONDUIT CONCEALED IN WALL OR CEILING 3/4"C-2#12, 1#12GND UON CONDUIT, IN SLAB OR BELOW GRADE 3/4"C-2#12, 1#12GND UON CONDUIT, EXPOSED 3/4"C-2#12, 1#12GND UON CONDUIT STUBBED OUT AND CAPPED CONDUIT BENDS TOWARD OBSERVER CONDUIT BENDS AWAY FROM OBSERVER BARE COPPER GROUND WIRE GROUND CONNECTION BOLTED TYPE GROUND CONNECTION EXOTHERMIC WELD 	<h3>SWITCHES - OPERATORS</h3> <ul style="list-style-type: none"> TOGGLE OR DISCONNECT SWITCH PUSHBUTTON - NORMALLY OPEN, MOMENTARY ACTION PUSHBUTTON- NORMALLY CLOSED, MOMENTARY ACTION LEVEL SWITCH - OPENS UPON INCREASING LEVEL SELECTOR SWITCH, 3 POSITION- CONTACT STATUS SHOWN EXISTS AT POSITION OF H-HAND, O-OFF, A-AUTO 3-POLE SWITCH 	<h3>DEVICES - MISCELLANEOUS</h3> <ul style="list-style-type: none"> AUDIBLE ALARM HEATER MOTOR, # = MOTOR HORSEPOWER TRANSFORMER GENERATOR SMOKE DETECTOR DISCONNECT, 3 POLE CONTACT ON LINE 28 AND NORMALLY CONTACT ON LINE 111 CIRCUIT BREAKER, 3 POLE TM = THERMAL MAGNETIC MCP = MOTOR CIRCUIT PROTECTOR THERMAL OVERLOAD CONTACT THERMAL OVERLOAD ELEMENT FUSE WITH BLOWN FUSE INDICATOR LIGHT FUSE CIRCUIT BREAKER 	<h3>SYMBOLS - PLAN</h3> <ul style="list-style-type: none"> DISCONNECT SWITCH FIELD MOUNTED DEVICE SPECIAL RECEPTACLE, SIZE AS INDICATED JUNCTION BOX CONTROL STATION WALL MOUNTED LIGHT FIXTURE SITE LIGHT FIXTURE LED LIGHT FIXTURE LIGHT EMERGENCY EXIT LIGHTING CONDUIT AND CONDUCTOR DESIGNATION SEE SCHEDULE FOR SIZE 3 PHASE SPECIAL RECEPTACLE, SIZE AS INDICATED TELEPHONE OUTLET TAMPER SWITCH FLOW SWITCH THERMOSTAT AT +48" UON REMOVE I/O DATA OUTLET FIBER OPTIC OUTLET GROUND ROD, 3/4" X 10'-0" GW INDICATES GROUND ROD IN GROUND ROD BOX SEE GROUND ROD DETAIL. INTERCEPTION POINT - DEMO PLANS: EXISTING TO REMAIN TO EXISTING TO BE REMOVED NEW PLANS: EXISTING TO NEW MOTION DETECTOR PHOTOCELL GROUND ROD, 3/4" X 10'-0" GR INDICATES GROUND ROD IN CONCRETE HANDHOLE TEST WELL. 																																																																																																																																																																																																																																																																																																																																																															
<h3>SWITCHES - PROCESS</h3> <ul style="list-style-type: none"> FLOW SWITCH - CLOSSES UPON INCREASING FLOW FLOW SWITCH - OPENS UPON INCREASING FLOW LEVEL SWITCH - CLOSSES UPON INCREASING LEVEL LEVEL SWITCH - OPENS UPON INCREASING LEVEL PRESSURE SWITCH - CLOSSES UPON INCREASING PRESSURE (INCREASING VACUUM) PRESSURE SWITCH - OPENS UPON INCREASING PRESSURE (INCREASING VACUUM) PRESSURE SWITCH - OPENS UPON INCREASING PRESSURE (INCREASING VACUUM) TEMPERATURE SWITCH - CLOSSES UPON INCREASING TEMPERATURE TEMPERATURE SWITCH - OPENS UPON INCREASING TEMPERATURE LIMIT SWITCH - CLOSSES AT SET LIMIT LIMIT SWITCH - OPENS AT SET LIMIT PROXIMITY SWITCH - CLOSSES UPON DECREASING DISTANCE PROXIMITY SWITCH - CLOSSES UPON DECREASING DISTANCE TORQUE SWITCH - CLOSSES UPON INCREASING TORQUE TORQUE SWITCH - OPENS UPON INCREASING TORQUE 	<h3>DEVICES - RELAY</h3> <ul style="list-style-type: none"> CONTROL RELAY CR1 WITH NORMALLY OPEN CONTACT ON LINE 28 AND NORMALLY CONTACT ON LINE 111 TIME DELAY RELAY TR2 - ADJUSTABLE TIME DELAY RANGE AND SETTING AS SHOWN TIME DELAY RELAY ON ENERGIZATION TIME DELAY RELAY ON DE-ENERGIZATION CONTACTOR OR STARTER M1 SOLENOID NORMALLY OPEN RELAY CONTACT- ACTUATED BY RELAY CR-1 COIL ON LINE 105 NORMALLY CLOSED RELAY CONTACT- ACTUATED BY RELAY CR-1 COIL NORMALLY OPEN, TIME DELAY RELAY CONTACT - CONTACT CLOSSES AFTER RELAY IS ENERGIZED NORMALLY CLOSED, TIME DELAY RELAY CONTACT - CONTACT OPENS AFTER RELAY IS ENERGIZED NORMALLY OPEN, TIME DELAY RELAY CONTACT - CONTACT OPENS AFTER RELAY IS DEENERGIZED NORMALLY CLOSED, TIME DELAY RELAY CONTACT - CONTACT CLOSSES AFTER RELAY IS DEENERGIZED 	<h3>ELECTRICAL ABBREVIATIONS</h3> <table border="0"> <tr> <td>A</td><td>AMPERES</td> <td>GEN</td><td>GENERATOR</td> <td>NC</td><td>NORMALLY CLOSED</td> <td>SEQ</td><td>SEQUENCE</td> </tr> <tr> <td>AFF</td><td>ABOVE FINISHED FLOOR</td> <td>GFCI</td><td>GROUND FAULT CIRCUIT INTERRUPT</td> <td>NIC</td><td>NOT IN CONTRACT</td> <td>SHLD</td><td>SHIELDED</td> </tr> <tr> <td>AI</td><td>ANALOG INPUT</td> <td>GND</td><td>GROUND</td> <td>NL</td><td>NIGHT LIGHT</td> <td>SP</td><td>SET POINT</td> </tr> <tr> <td>AIC</td><td>AMPS INTERRUPTING CAPACITY, SYMM</td> <td>GR</td><td>GROUND ROD</td> <td>NO</td><td>NORMALLY OPEN</td> <td>SPD</td><td>SURGE PROTECTION DEVICE</td> </tr> <tr> <td>AM</td><td>AMMETER</td> <td>GRS</td><td>GALVANIZED RIGID STEEL CONDUIT</td> <td>O</td><td>OPEN</td> <td>SPEC</td><td>SPECIFICATION</td> </tr> <tr> <td>AO</td><td>ANALOG OUTPUT</td> <td>GW</td><td>GROUND WELL</td> <td>OI</td><td>OPERATOR INTERFACE</td> <td>SPST</td><td>SINGLE POLE, SINGLE THROW</td> </tr> <tr> <td>ATS</td><td>AUTOMATIC TRANSFER SWITCH</td> <td>HI</td><td>HIGH</td> <td>OL</td><td>OVERLOAD</td> <td>SR</td><td>SENSING RELAY</td> </tr> <tr> <td>AUX</td><td>AUXILIARY</td> <td>HID</td><td>HIGH INTENSITY DISCHARGE</td> <td>P</td><td>POLE, PRESSURE</td> <td>SS</td><td>SOFT STARTER, SURGE SUPPRESSOR</td> </tr> <tr> <td>AWG</td><td>AMERICAN WIRE GAUGE</td> <td>HOA</td><td>HAND-OFF-AUTO</td> <td>PB</td><td>PULL BOX, PUSHBUTTON</td> <td>STA</td><td>STATION</td> </tr> <tr> <td>BATT</td><td>BATTERY</td> <td>HP</td><td>HORSEPOWER</td> <td>PCP</td><td>PROCESS CONTROL PANEL</td> <td>SV</td><td>SOLENOID VALVE</td> </tr> <tr> <td>BSC</td><td>BARE STRANDED COPPER</td> <td>HPS</td><td>HIGH PRESSURE SODIUM</td> <td>PF</td><td>POWER FACTOR</td> <td>SW</td><td>SWITCH</td> </tr> <tr> <td>BKR</td><td>BREAKER</td> <td>HTR</td><td>HEATER</td> <td>PFR</td><td>POWER (PHASE) FAIL RELAY</td> <td>SWBD</td><td>SWITCHBOARD</td> </tr> <tr> <td>BLDG</td><td>BUILDING</td> <td>HZ</td><td>HERTZ (CYCLES PER SECOND)</td> <td>PH</td><td>PHASE</td> <td>SYMM</td><td>SYMMETRICAL</td> </tr> <tr> <td>C</td><td>CONDUIT, CLOSE, CONTROL</td> <td>HZD</td><td>HAZARDOUS AREA, EXPLOSION PROOF</td> <td>PI</td><td>PROGRAMMABLE LOGIC CONTROLLER FMP PUMP</td> <td>T</td><td>TRIP</td> </tr> <tr> <td>CB</td><td>CIRCUIT BREAKER</td> <td>I</td><td>INTERLOCK OR INTELIGENT/LOGIC DEVICE</td> <td>PLC</td><td>PROGRAMMABLE LOGIC CONTROLLER FMP PUMP</td> <td>TB</td><td>TERMINAL BLOCK</td> </tr> <tr> <td>CKT</td><td>CIRCUIT</td> <td>I/O</td><td>INPUT/OUTPUT</td> <td>PNL</td><td>PANEL</td> <td>TDD, TDE</td><td>TIME DELAY RELAY</td> </tr> <tr> <td>CNTRL</td><td>CONTROL</td> <td>INST</td><td>INSTRUMENTATION</td> <td>POT</td><td>POTENTIOMETER</td> <td>TEL CO</td><td>TELEPHONE COMPANY</td> </tr> <tr> <td>COAX</td><td>COAXIAL CABLE</td> <td>ISC</td><td>SHORT CIRCUIT INTERRUPTING CURRENT (SYMM)</td> <td>PR</td><td>PAIR, TWISTED AND SHIELDED CABLE PROVIDE FURNISH, INSTALL AND CONNECT</td> <td>TM</td><td>THERMAL MAGNETIC</td> </tr> <tr> <td>COMM</td><td>COMMUNICATION PORT</td> <td>ISR</td><td>INTRINSICALLY SAFE RELAY</td> <td>PS</td><td>PRESSURE SWITCH</td> <td>TEMP</td><td>TEMPERATURE</td> </tr> <tr> <td>CP</td><td>CONTROL PANEL</td> <td>JJ-BOX</td><td>JUNCTION BOX</td> <td>PT</td><td>POTENTIAL TRANSFORMER</td> <td>TS</td><td>TEMPERATURE SWITCH</td> </tr> <tr> <td>CPT</td><td>CONTROL POWER TRANSFORMER</td> <td>K</td><td>KILO, THOUSAND (PREFIX)</td> <td>PSI</td><td>POUNDS PER SQUARE INCH</td> <td>TTB</td><td>TELEPHONE TERMINAL BACKBOARD</td> </tr> <tr> <td>CR</td><td>CONTROL RELAY</td> <td>KCMIL</td><td>THOUSAND CIRCULAR MILS</td> <td>PVC</td><td>POLYVINYLCHLORIDE</td> <td>TWP</td><td>TWISTED PAIR</td> </tr> <tr> <td>CT</td><td>CURRENT TRANSFORMER</td> <td>LC</td><td>LIGHTING CONTACTOR</td> <td>PVCRC</td><td>PVC AND GRC CONDUIT</td> <td>TWSP</td><td>TWISTED SHIELDED PAIR</td> </tr> <tr> <td>CU</td><td>COPPER</td> <td>LOS</td><td>LOCK-OUT STOP SWITCH</td> <td>PVC-GRC</td><td>PVC COATED GRC CONDUIT</td> <td>UG</td><td>UNDERGROUND</td> </tr> <tr> <td>DI</td><td>DIGITAL INPUT</td> <td>LI</td><td>LEVEL INDICATOR</td> <td>PVC-RSC</td><td>PVC COATED RSC CONDUIT</td> <td>UON</td><td>UNLESS OTHERWISE NOTED</td> </tr> <tr> <td>DISC</td><td>DISCONNECT</td> <td>LIT</td><td>LEVEL INDICATOR TRANSMITTER</td> <td>PWR</td><td>POWER</td> <td>V</td><td>VOLTAGE</td> </tr> <tr> <td>DO</td><td>DIGITAL OUTPUT</td> <td>LS</td><td>LEVEL SWITCH</td> <td>R</td><td>RED</td> <td>VA</td><td>VOLT AMPS</td> </tr> <tr> <td>DPDT</td><td>DOUBLE POLE, DOUBLE THROW</td> <td>LTG</td><td>LIGHTING</td> <td>REC</td><td>RECEPTACLE</td> <td>VFD</td><td>VARIABLE FREQUENCY DRIVE</td> </tr> <tr> <td>EF</td><td>EXHAUST FAN</td> <td>M</td><td>MOTOR CONTACTOR</td> <td>RGS</td><td>RIGID GALVANIZED STEEL</td> <td>VLV</td><td>VALVE</td> </tr> <tr> <td>EMERG</td><td>EMERGENCY</td> <td>mA</td><td>MILLIAMPERES</td> <td>RMS</td><td>ROOT MEAN SQUARE</td> <td>VM</td><td>VOLTMETER</td> </tr> <tr> <td>EMT</td><td>ELECTRICAL METALLIC TUBING</td> <td>MCC</td><td>MOTOR CONTROL CENTER</td> <td>RSC</td><td>RIGID STEEL CONDUIT</td> <td>VS</td><td>VARIABLE SPEED</td> </tr> <tr> <td>ETM</td><td>ELAPSED TIME METER</td> <td>MCP</td><td>MOTOR CIRCUIT PROTECTOR</td> <td>RT</td><td>RESET TIMER</td> <td>W</td><td>WATTS, WHITE, WIRE</td> </tr> <tr> <td>FACP</td><td>FIRE ALARM CONTROL PANEL</td> <td>MD</td><td>MOISTURE DETECTION</td> <td>RTM</td><td>RUN TIME METER</td> <td>WHM</td><td>WATT-HOUR METER</td> </tr> <tr> <td>FI</td><td>FLOW INDICATOR</td> <td>MFR</td><td>MANUFACTURER</td> <td>RTU</td><td>REMOTE TERMINAL UNIT</td> <td>WM</td><td>WATTMETER</td> </tr> <tr> <td>FIT</td><td>FLOW INDICATOR TRANSDUCER</td> <td>MINS</td><td>MINUTES</td> <td>RVAT</td><td>REDUCED VOLTAGE AUTOTRANSFORMER</td> <td>WP</td><td>WEATHERPROOF, WEATHERPROOF</td> </tr> <tr> <td>FLA</td><td>FULL LOAD AMPS</td> <td>MOA</td><td>MANUAL-OFF-AUTO</td> <td>RVNR</td><td>REDUCED VOLTAGE NON-REVERSING</td> <td>XFMR</td><td>TRANSFORMER</td> </tr> <tr> <td>FO</td><td>FAIL OPEN</td> <td>MOV</td><td>MOTOR OPERATED VALVE</td> <td>RVSS</td><td>REDUCED VOLTAGE SOFT START</td> <td>Y</td><td>YELLOW</td> </tr> <tr> <td>FLEX</td><td>FLEX METAL LIQUID TIGHT CONDUIT</td> <td>MTC</td><td>EMPTY CONDUIT WITH PULLROPE</td> <td>SECS</td><td>SECONDS</td> <td>ZAU</td><td>INTRUSION ALARM</td> </tr> <tr> <td>FS</td><td>FLOW 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RIGID STEEL CONDUIT	O	OPEN	SPEC	SPECIFICATION	AO	ANALOG OUTPUT	GW	GROUND WELL	OI	OPERATOR INTERFACE	SPST	SINGLE POLE, SINGLE THROW	ATS	AUTOMATIC TRANSFER SWITCH	HI	HIGH	OL	OVERLOAD	SR	SENSING RELAY	AUX	AUXILIARY	HID	HIGH INTENSITY DISCHARGE	P	POLE, PRESSURE	SS	SOFT STARTER, SURGE SUPPRESSOR	AWG	AMERICAN WIRE GAUGE	HOA	HAND-OFF-AUTO	PB	PULL BOX, PUSHBUTTON	STA	STATION	BATT	BATTERY	HP	HORSEPOWER	PCP	PROCESS CONTROL PANEL	SV	SOLENOID VALVE	BSC	BARE STRANDED COPPER	HPS	HIGH PRESSURE SODIUM	PF	POWER FACTOR	SW	SWITCH	BKR	BREAKER	HTR	HEATER	PFR	POWER (PHASE) FAIL RELAY	SWBD	SWITCHBOARD	BLDG	BUILDING	HZ	HERTZ (CYCLES PER SECOND)	PH	PHASE	SYMM	SYMMETRICAL	C	CONDUIT, CLOSE, CONTROL	HZD	HAZARDOUS AREA, EXPLOSION PROOF	PI	PROGRAMMABLE LOGIC CONTROLLER FMP PUMP	T	TRIP	CB	CIRCUIT BREAKER	I	INTERLOCK OR INTELIGENT/LOGIC DEVICE	PLC	PROGRAMMABLE LOGIC CONTROLLER FMP PUMP	TB	TERMINAL BLOCK	CKT	CIRCUIT	I/O	INPUT/OUTPUT	PNL	PANEL	TDD, TDE	TIME DELAY RELAY	CNTRL	CONTROL	INST	INSTRUMENTATION	POT	POTENTIOMETER	TEL CO	TELEPHONE COMPANY	COAX	COAXIAL CABLE	ISC	SHORT CIRCUIT INTERRUPTING CURRENT (SYMM)	PR	PAIR, TWISTED AND SHIELDED CABLE PROVIDE FURNISH, INSTALL AND CONNECT	TM	THERMAL MAGNETIC	COMM	COMMUNICATION PORT	ISR	INTRINSICALLY SAFE RELAY	PS	PRESSURE SWITCH	TEMP	TEMPERATURE	CP	CONTROL PANEL	JJ-BOX	JUNCTION BOX	PT	POTENTIAL TRANSFORMER	TS	TEMPERATURE SWITCH	CPT	CONTROL POWER TRANSFORMER	K	KILO, THOUSAND (PREFIX)	PSI	POUNDS PER SQUARE INCH	TTB	TELEPHONE TERMINAL BACKBOARD	CR	CONTROL RELAY	KCMIL	THOUSAND CIRCULAR MILS	PVC	POLYVINYLCHLORIDE	TWP	TWISTED PAIR	CT	CURRENT TRANSFORMER	LC	LIGHTING CONTACTOR	PVCRC	PVC AND GRC CONDUIT	TWSP	TWISTED SHIELDED PAIR	CU	COPPER	LOS	LOCK-OUT STOP SWITCH	PVC-GRC	PVC COATED GRC CONDUIT	UG	UNDERGROUND	DI	DIGITAL INPUT	LI	LEVEL INDICATOR	PVC-RSC	PVC COATED RSC CONDUIT	UON	UNLESS OTHERWISE NOTED	DISC	DISCONNECT	LIT	LEVEL INDICATOR TRANSMITTER	PWR	POWER	V	VOLTAGE	DO	DIGITAL OUTPUT	LS	LEVEL SWITCH	R	RED	VA	VOLT AMPS	DPDT	DOUBLE POLE, DOUBLE THROW	LTG	LIGHTING	REC	RECEPTACLE	VFD	VARIABLE FREQUENCY DRIVE	EF	EXHAUST FAN	M	MOTOR CONTACTOR	RGS	RIGID GALVANIZED STEEL	VLV	VALVE	EMERG	EMERGENCY	mA	MILLIAMPERES	RMS	ROOT MEAN SQUARE	VM	VOLTMETER	EMT	ELECTRICAL METALLIC TUBING	MCC	MOTOR CONTROL CENTER	RSC	RIGID STEEL CONDUIT	VS	VARIABLE SPEED	ETM	ELAPSED TIME METER	MCP	MOTOR CIRCUIT PROTECTOR	RT	RESET TIMER	W	WATTS, WHITE, WIRE	FACP	FIRE ALARM CONTROL PANEL	MD	MOISTURE DETECTION	RTM	RUN TIME METER	WHM	WATT-HOUR METER	FI	FLOW INDICATOR	MFR	MANUFACTURER	RTU	REMOTE TERMINAL UNIT	WM	WATTMETER	FIT	FLOW INDICATOR TRANSDUCER	MINS	MINUTES	RVAT	REDUCED VOLTAGE AUTOTRANSFORMER	WP	WEATHERPROOF, WEATHERPROOF	FLA	FULL LOAD AMPS	MOA	MANUAL-OFF-AUTO	RVNR	REDUCED VOLTAGE NON-REVERSING	XFMR	TRANSFORMER	FO	FAIL OPEN	MOV	MOTOR OPERATED VALVE	RVSS	REDUCED VOLTAGE SOFT START	Y	YELLOW	FLEX	FLEX METAL LIQUID TIGHT CONDUIT	MTC	EMPTY CONDUIT WITH PULLROPE	SECS	SECONDS	ZAU	INTRUSION ALARM	FS	FLOW 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<h3>DEVICES - FRONT PANEL</h3> <ul style="list-style-type: none"> INDICATING LIGHT, LETTER INDICATES COLOR R=RED, G=GREEN, A=AMBER, W=WHITE Y=YELLOW, B=BLUE INDICATING LIGHT, PUSH TO TEST ELAPSED TIME METER 	<h3>REVISIONS</h3> <table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APVD</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV	DESCRIPTION	DATE	APVD																																																																																																																																																																																																																																																																																																																																																													
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 <p>10569 OLD PLACERVILLE RD SACRAMENTO, CA 95827 OFFICE: (916)364-1490 www.hydroscience.com</p>	<p>PAPER SIZE: 22X34 (ANSI D)</p>  <p>THIS BAR IS 1 INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.</p>	<p>JOB NO. : 230-003 DATE: 3/11/2024 DRAWN BY: MAH DESIGNED BY: MAH PROJ. MGR.: ELJ</p>	<h3>REVISIONS</h3> <table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APVD</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV	DESCRIPTION	DATE	APVD									<p>RODEO SANITARY DISTRICT</p>	<p>2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT</p>	<p>STANDARD ELECTRICAL SYMBOLS, LEGENDS & ABBREVIATIONS</p>	 <p>REGISTERED PROFESSIONAL ENGINEER E18362 STATE OF CALIFORNIA 03/11/2024</p>	<p>E001 DRAWING NUMBER</p> <p>SHEET 12 OF 15</p>
REV	DESCRIPTION	DATE	APVD																	

File Name: S:\common\projects\230-Rodeo SD\003-2024 WPCP Improvements\05-Design\Drawings\230-003-Electrical.dwg Plotted By: ERIC JONES Plot Date: 3/11/2024 2:09 PM



- NOTES**
1. THIS DRAWING IS BASED ON SITE VISIT PHOTOS AND NEW ELECTRICAL CONDUIT ROUTING IS APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY PERTINENT DIMENSIONS AND ALL CONNECTION POINTS BEFORE ORDERING MATERIALS AND EQUIPMENT. ALL SUCH DIMENSIONS SHALL BE DOCUMENTED IN SUBMITTALS.
 2. ALL ELECTRICAL CONDUITS AND CONDUCTORS CURRENTLY INSTALLED ALONG THE BRIDGE WILL BE REPLACED WITH PVC COATED RIGID STEEL MINIMUM 1-1/4" CONDUIT. CONTRACTOR TO FIELD VERIFY CONDUIT FILL. SHALL ASSUME MINIMUM #12. PROVIDE NEW CONDUCTORS FROM FIELD DEVICES TO ORIGINATION POINT THROUGH THE NEW JUNCTION BOX, NO SPLICES SHALL BE ALLOWED.
 3. EXISTING JUNCTION BOX SHALL ALSO BE REPLACED WITH APPROPRIATELY SIZED WP JUNCTION BOX TO SUPPORT ALL EXISTING AND NEW CONDUITS THAT SHALL PASS THROUGH IT UPON THE COMPLETION OF THIS PROJECT. ALL NEW CONDUCTORS SHALL BE PROVIDED FROM THE NEW JUNCTION BOX OUT TO FIELD DEVICES.
 4. A NEW SST NEMA 4X DISCONNECT SWITCH FOR THE CLARIFIER MECHANISM SHALL BE INSTALLED ON THE BRIDGE NEAR THE BRIDGE ENTRANCE AT THE LOCATION WHERE THE EXISTING CONDUIT COMES VERTICALLY OUT OF THE GROUND.
 5. A NEW LED LIGHT FIXTURE WITH LIGHT POST SHALL BE INSTALLED ON THE BRIDGE TO ILLUMINATE THE CLARIFIER DRIVE. PROVIDE NEW CONDUCTORS TO THE EXISTING LIGHTING PANEL. SEE DETAIL 1 ON E004 FOR MOUNTING.
 6. CLASS 1 DIVISION 2 GROUP D INSIDE THE INTERIOR OF THE TANK FROM THE MINIMUM OPERATING WATER SURFACE TO THE TOP OF THE TANK WALL, 18 IN. ABOVE THE TOP OF THE TANK AND EXTENDING 10 FT HORIZONTALLY FROM THE EXTERIOR TANK WALLS. ALL WORK IN CLASSIFIED AREAS SHALL CONFORM TO NFPA 820 AND NFPA 70 CHAPTER 5.

PRIMARY CLARIFIER EXISTING SECTION
SCALE: 1/4" = 1'-0"

PRIMARY CLARIFIER AND HEADWORK STRUCTURE EXISTING PLAN
SCALE: 1/4" = 1'-0"

LIGHT FIXTURE SCHEDULE								
TYPE	MANUFACTURER	DESCRIPTION	LENS/REFLECTOR	MOUNTING	FINISH	LAMP	VOLTAGE /WATT	NOTES
C	EATON VAPARGARD PRO P2L P-2LM2-W-HJ-4-UNV1	STANCHION MOUNT WITH 22W LED, 3000K	GLASS	STANCHION	BLACK	LED	120/5	W/ LIGHT SWITCH AND RECEPTACLES

 10569 OLD PLACERVILLE RD SACRAMENTO, CA 95827 OFFICE: (916)364-1490 www.hydroscience.com	PAPER SIZE: 22X34 (ANSI D) 0" 1/2" 1" THIS BAR IS 1 INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.	JOB NO. : 230-003 DATE: 3/11/2024 DRAWN BY: MAH DESIGNED BY: MAH PROJ. MGR.: ELJ	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APVD</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV	DESCRIPTION	DATE	APVD					RODEO SANITARY DISTRICT	2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT	PRIMARY CLARIFIER AND HEADWORKS STRUCTURE ELECTRICAL PLAN, SECTION AND SCHEDULE	 REGISTERED PROFESSIONAL ENGINEER THOMAS THAMMILEE E18362 ELECTRICAL STATE OF CALIFORNIA 03/11/2024	E200 DRAWING NUMBER SHEET 13 OF 15
	REV	DESCRIPTION	DATE	APVD												
A	B	C	D	E	F	G	H									

File Name: S:\common\projects\230-Rodeo SD\WPCP Improvements\05-Design\Drawings\230-003-Electrical.dwg Plotted By: ERIC JONES Plot Date: 3/11/2024 2:09 PM

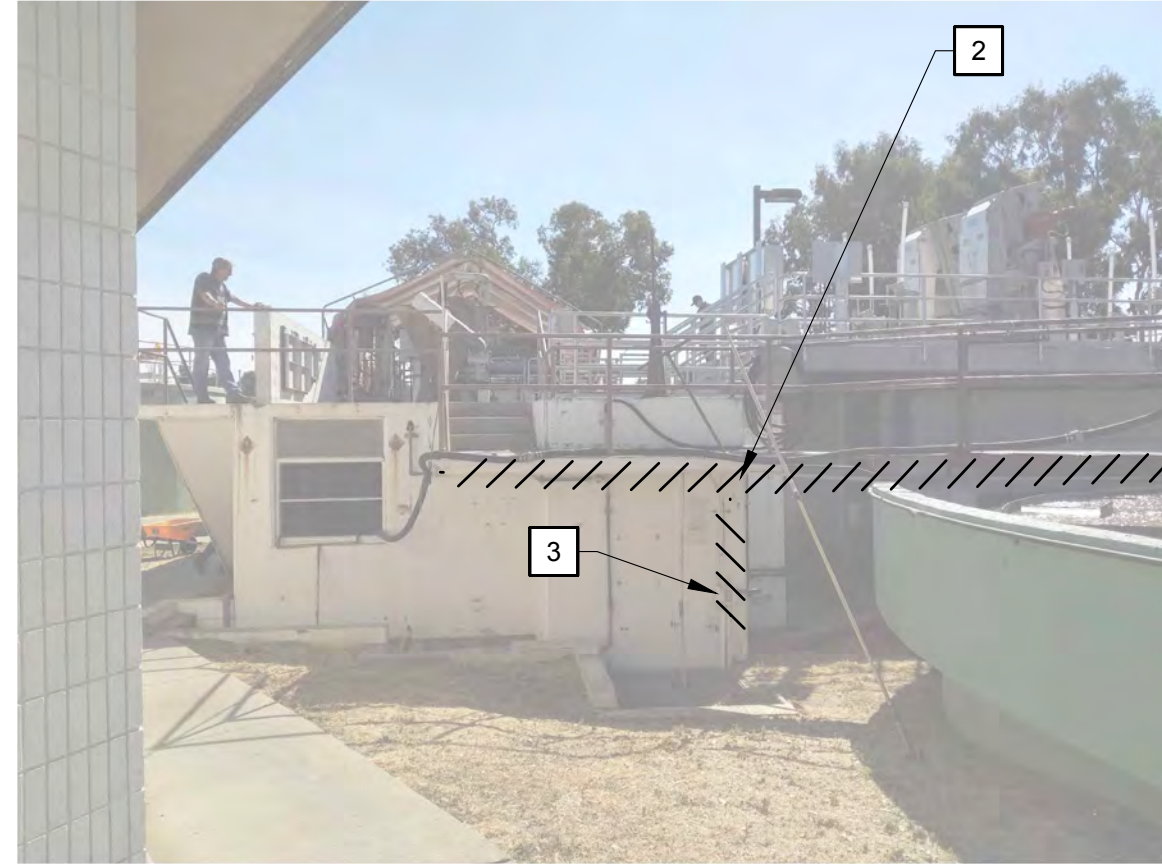


PHOTO - HEADWORKS STRUCTURE DEMO (1)
SCALE: NO SCALE

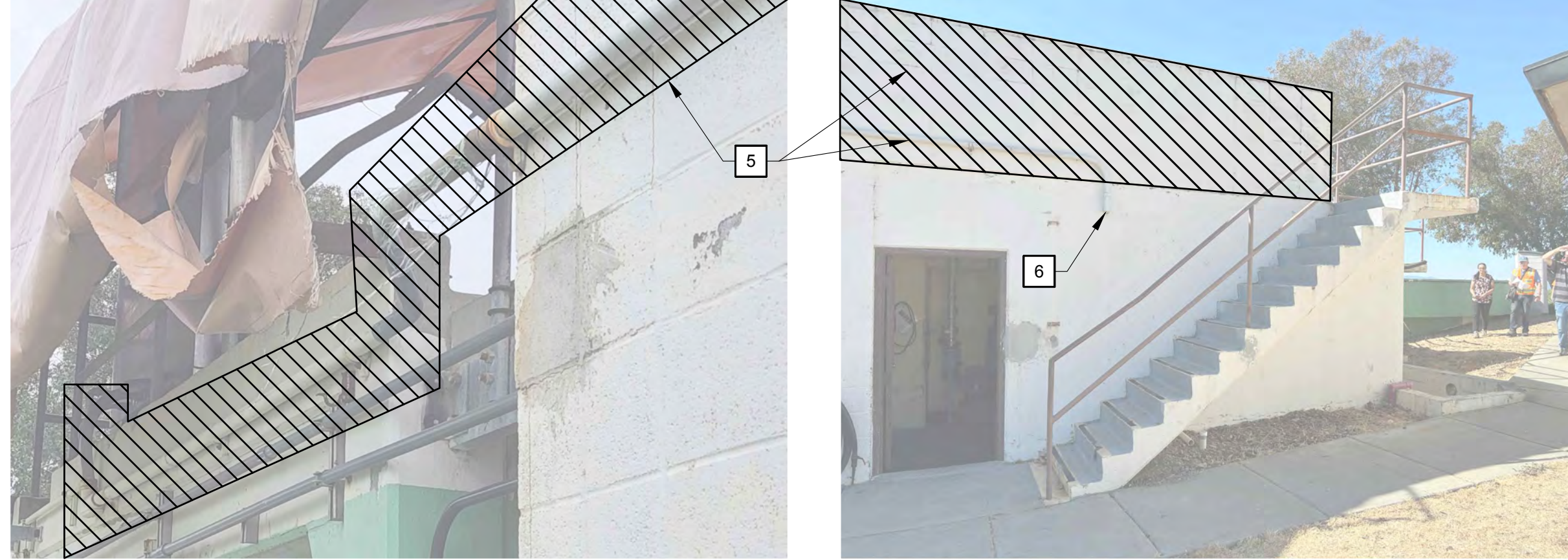


PHOTO - HEADWORKS STRUCTURE DEMO (2)
SCALE: NO SCALE

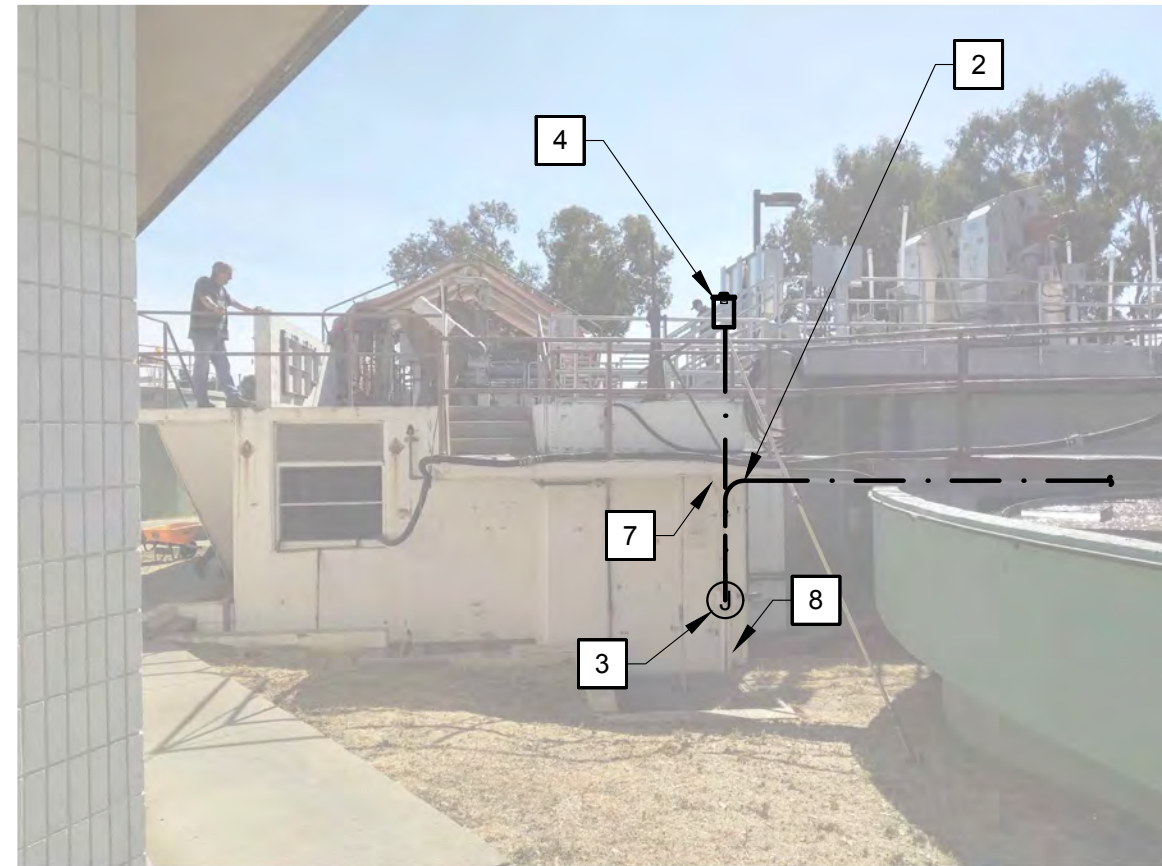


PHOTO - HEADWORKS STRUCTURE (3)
SCALE: NO SCALE



PHOTO - HEADWORKS STRUCTURE (4)
SCALE: NO SCALE

NOTES

1. THIS DRAWING IS BASED ON SITE VISIT PHOTOS AND NEW ELECTRICAL CONDUIT ROUTING IS APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY PERTINENT DIMENSIONS AND ALL CONNECTION POINTS BEFORE ORDERING MATERIALS AND EQUIPMENT. ALL SUCH DIMENSIONS SHALL BE DOCUMENTED IN SUBMITTALS.
2. ALL ELECTRICAL CONDUITS AND CONDUCTORS CURRENTLY INSTALLED ALONG THE BRIDGE SHALL BE REPLACED WITH PVC COATED RIGID STEEL, MINIMUM 1" CONDUIT. CONTRACTOR TO FIELD VERIFY CONDUIT FILL, SHALL ASSUME MINIMUM 9#12. PROVIDE NEW CONDUCTORS FROM FIELD DEVICES TO ORIGINATION POINT THROUGH THE NEW JUNCTION BOX, NO SPLICES SHALL BE ALLOWED.
3. EXISTING JUNCTION BOX SHALL ALSO BE REPLACED WITH APPROPRIATELY SIZED WP JUNCTION BOX TO SUPPORT ALL EXISTING AND NEW CONDUITS THAT SHALL PASS THROUGH IT UPON THE COMPLETION OF THIS PROJECT. ALL NEW CONDUCTORS SHALL BE PROVIDED FROM THE NEW JUNCTION BOX OUT TO FIELD DEVICES.
4. A NEW LOCAL WP DISCONNECT SWITCH FOR THE CLARIFIER MECHANISM SHALL BE INSTALLED ON THE BRIDGE NEAR THE BRIDGE ENTRANCE AT THE LOCATION WHERE THE EXISTING CONDUIT COMES VERTICALLY OUT OF THE GROUND.
5. SUBWALL AND CONDUIT MOUNTED ON THIS WALL SHALL BE DEMOLISHED.
6. DEMOLISH AND PROVIDE NEW JUNCTION BOX. REROUTE NEW CONDUIT TO EXISTING FIELD DEVICE. REPLACE EXISTING FLEXIBLE CONDUIT WITH NEW FLEXIBLE CONDUIT.
7. EXISTING CONDUIT TO REMAIN.
8. STUB-UP TO REMAIN.

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JOB NO.: 230-003
DATE: 3/11/2024
DRAWN BY: MAH
DESIGNED BY: MAH
PROJ. MGR.: ELJ

REV	DESCRIPTION	DATE	APVD

RODEO SANITARY DISTRICT

2024 WPCP
PRIMARY CLARIFIER
IMPROVEMENT PROJECT

PRIMARY CLARIFIER AND
HEADWORKS
STRUCTURE
ELECTRICAL PHOTOS

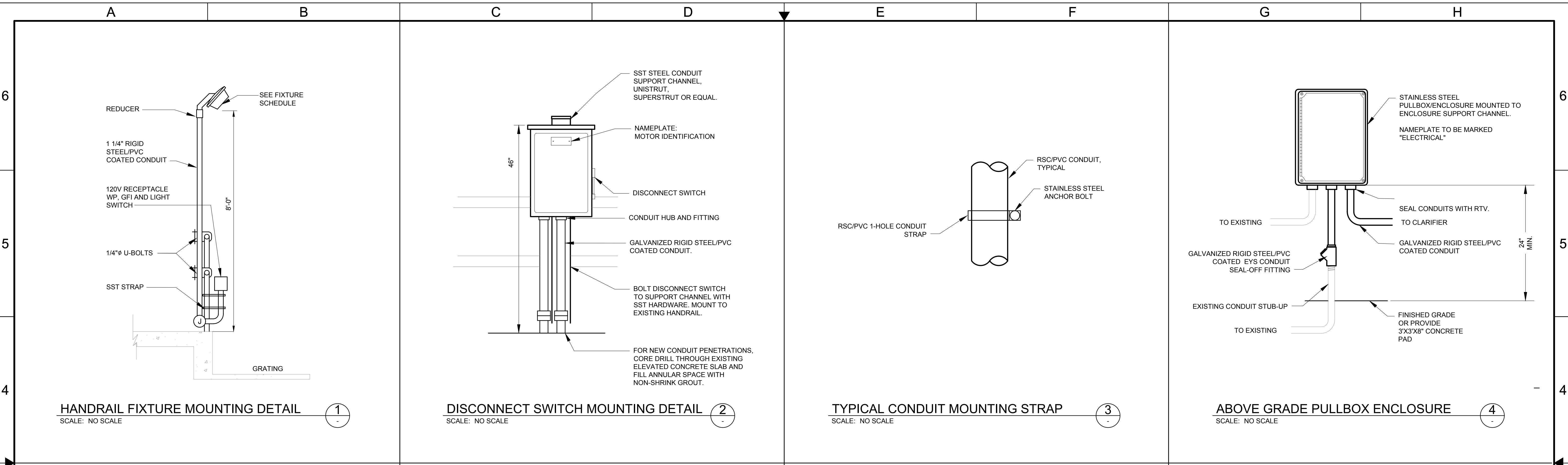


E201

DRAWING NUMBER

SHEET 14 OF 15

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<p style="font-size: 8px;">10569 OLD PLACERVILLE RD SACRAMENTO, CA 95827 OFFICE: (916)364-1490 www.hydroscience.com</p>	<p style="font-size: 8px;">PAPER SIZE: 22X34 (ANSI D)</p> <p style="font-size: 8px;">THIS BAR IS 1 INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.</p>	<p style="font-size: 8px;">JOB NO. : 230-003 DATE: 3/11/2024 DRAWN BY: MAH DESIGNED BY: MAH PROJ. MGR.: ELJ</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">REV</th> <th style="width: 65%;">DESCRIPTION</th> <th style="width: 10%;">DATE</th> <th style="width: 20%;">APVD</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV	DESCRIPTION	DATE	APVD					<p style="font-size: 12px; margin: 0;">RODEO SANITARY DISTRICT</p>	<p style="font-size: 12px; margin: 0;">2024 WPCP PRIMARY CLARIFIER IMPROVEMENT PROJECT</p>	<p style="font-size: 12px; margin: 0;">ELECTRICAL DETAILS</p>		<p style="font-size: 14px; margin: 0;">E202</p> <p style="font-size: 8px; margin: 0;">DRAWING NUMBER</p> <p style="font-size: 8px; margin: 0;">SHEET 15 OF 15</p>
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