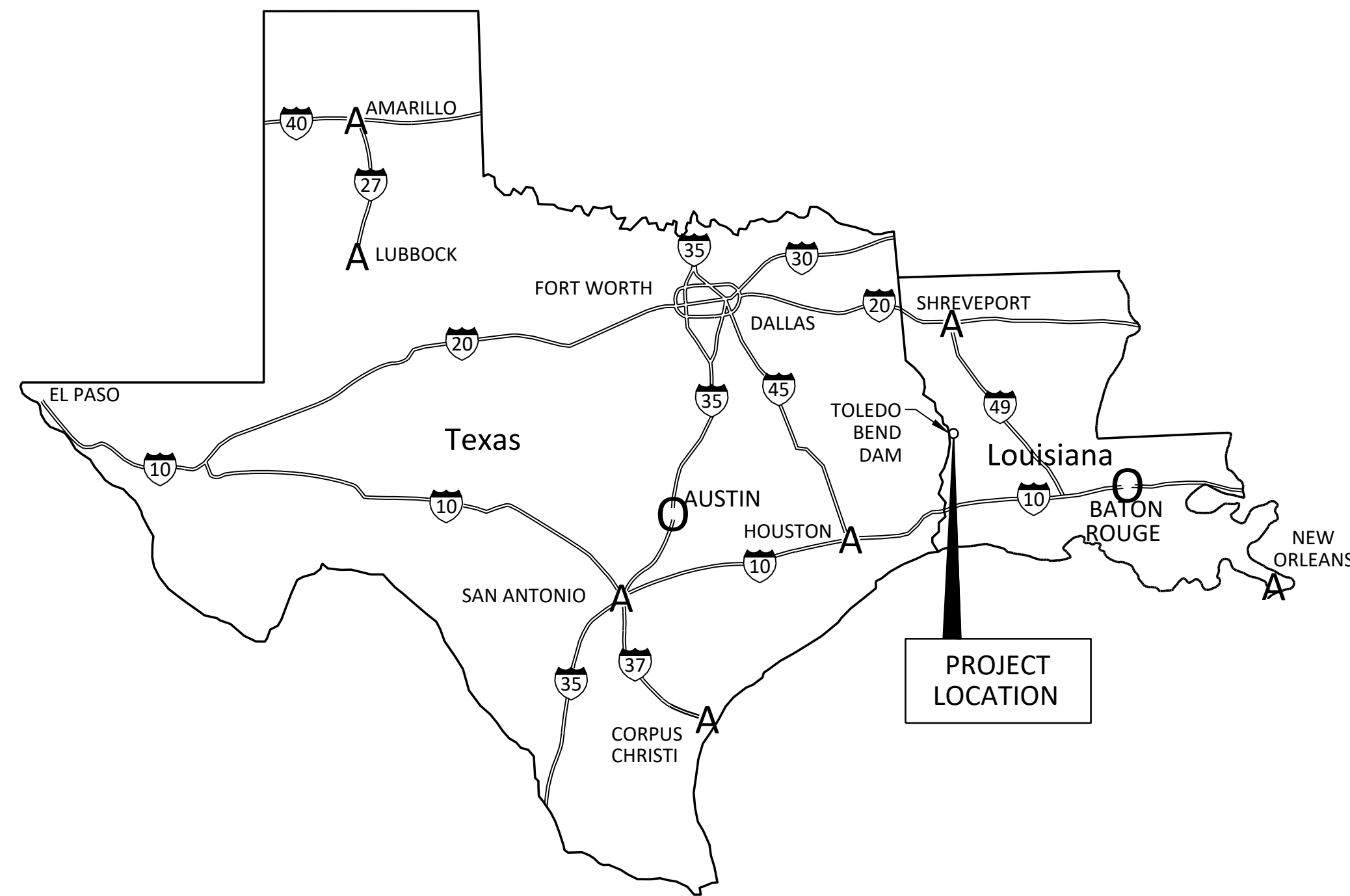
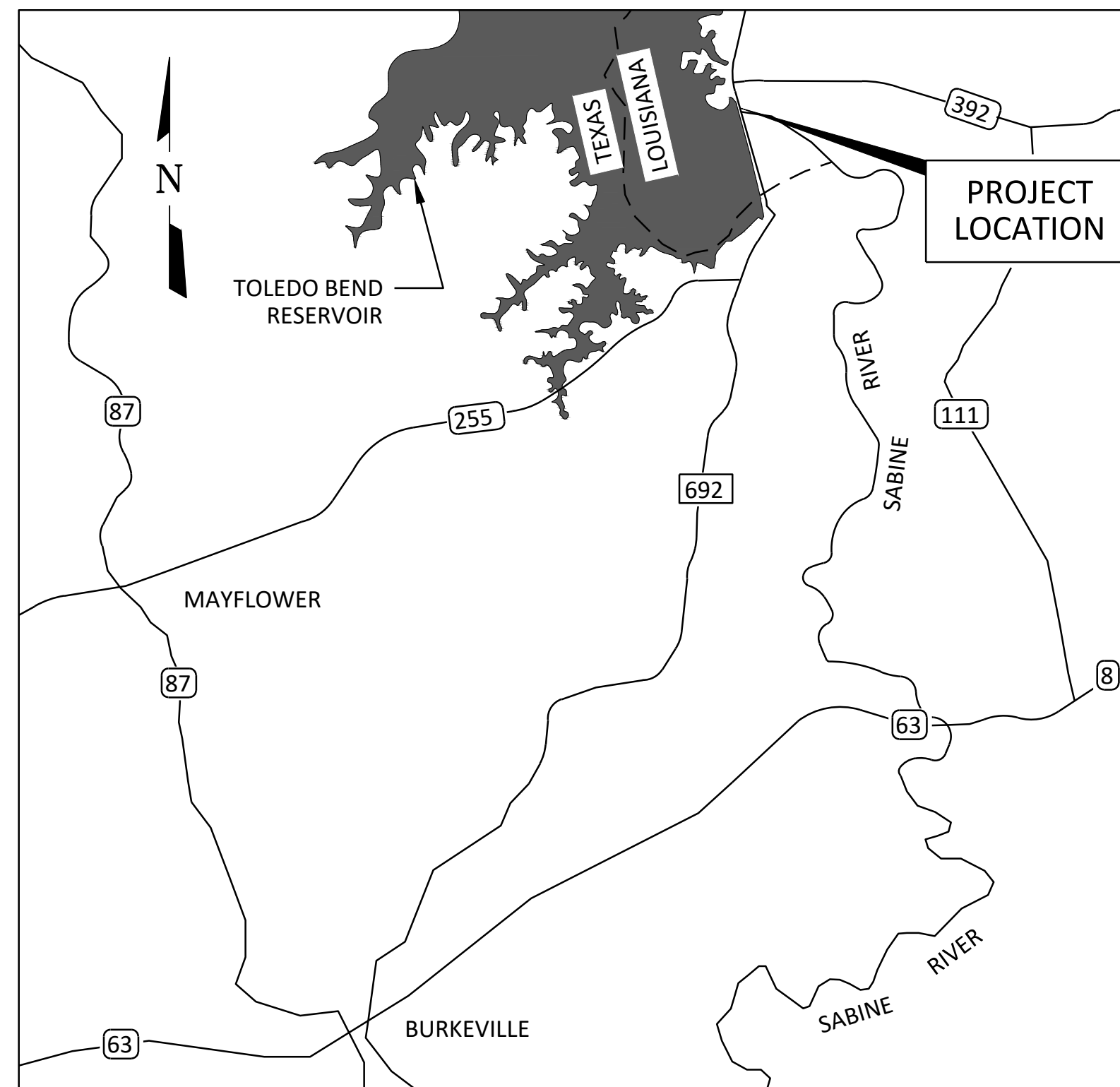


SABINE RIVER AUTHORITY OF TEXAS & SABINE RIVER AUTHORITY, STATE OF LOUISIANA

PLANS FOR TOLEDO BEND PROJECT SPILLWAY ELECTRICAL IMPROVEMENTS MARCH 2023



LOCATION MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

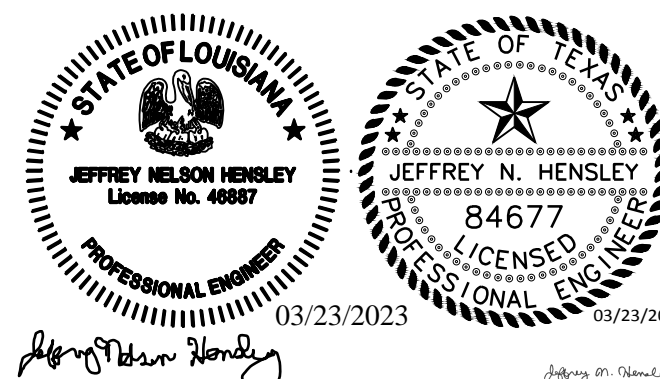
INDEX OF SHEETS

SHEET NO.	SHEET TITLE
GENERAL	
G-1	COVER SHEET I
G-2	GENERAL NOTES I
	GENERAL NOTES II
CIVIL	
C-1	FENCE AND GATE DETAILS
STRUCTURAL	
S-1	FUEL TANK PLATFORM PLAN AND DETAILS
S-2	MOW STRIP NOTES AND DETAILS
ELECTRICAL	
E-1	LEGEND I
E-2	LEGEND II
E-3	SITE PLAN - DEMOLITION
E-4	DEMOLITION DETAILS I
E-5	DEMOLITION DETAILS II
E-6	DEMOLITION DETAILS III
E-7	ONE-LINE DIAGRAM - DEMOLITION
E-8	SITE PLAN
E-9	ENLARGED SITE PLAN - ELECTRICAL EQUIPMENT AREA
E-10	SPILLWAY PLAN
E-11	CANOPY MODIFICATIONS
E-12	SPILLWAY BRIDGE MODIFICATIONS
E-13	CONTROL ROOM FLOOR PLAN
E-14	GATE & SPILLWAY GALLERY MODIFICATIONS
E-15	ONE-LINE DIAGRAM
E-16	CONTROL SCHEMATICS
E-17	SCHEDULES
E-18	PUMP CONTROL SCHEMATIC
E-19	RELIEF WELLS NO.4 & NO.10 LEVEL CONTROLS
E-20	INTERCONNECTION DIAGRAM & SCHEMATICS
E-21	DETAILS
REFERENCE DRAWINGS	
	COVER SHEET II
	SPILLWAY ELECTRICAL DETAILS



801 Cherry Street, Suite 2800
Fort Worth, Tx 76102
Phone - (817) 735-7300
Web - www.freese.com

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144
Freese and Nichols, Inc.
LA Registered Engineering Firm E.F.-0000341

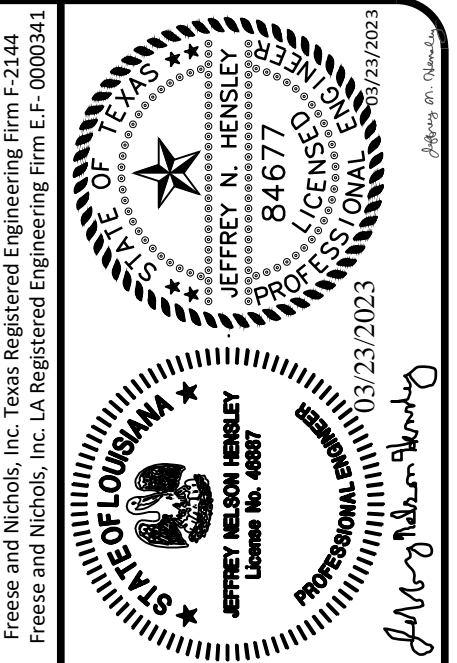


GENERAL CONSTRUCTION NOTES:

- THE FOLLOWING GENERAL NOTES SHALL APPLY TO THESE CONTRACT DOCUMENTS AS IF THEY WERE WRITTEN IN THEIR ENTIRETY ON EACH SHEET.
- COORDINATE ALL WORK WITH THE TOLEDO BEND PROJECT JOINT OPERATION CONSTRUCTION MANAGER, OR HIS DESIGNEE.
- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SUBJECT TO INSPECTION BY THE TOLEDO BEND PROJECT JOINT OPERATION CONSTRUCTION MANAGER, HIS DESIGNEE, OR THE ENGINEER.
- NO FIREARMS ALLOWED AT PROJECT SITE.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OSHA RULES AND REGULATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, BONDS, AND INSURANCE PRIOR TO START OF WORK.
- STAGING/LAYDOWN AREAS FOR CONTRACTOR'S USE AND ACCESS/ENTRY POINTS TO PROJECT SITE SHALL BE COORDINATED WITH THE TOLEDO BEND PROJECT JOINT OPERATION'S CONSTRUCTION MANAGER, OR HIS DESIGNEE. THE AREA, OR AREAS, SHALL BE IN A LOCATION, OR LOCATIONS, WHICH WILL REDUCE THE POTENTIAL FOR LOSS OF EQUIPMENT, MATERIAL, OR OTHER DURING HIGH FLOW EVENTS OR GATE OPERATIONS. USE OF THE SPILLWAY APRON IS AVAILABLE AS AN AREA TO SUPPORT THE WORK; HOWEVER THE RISK ASSOCIATED WITH THIS AREA SHOULD BE UNDERSTOOD. THE OWNER HAS IDENTIFIED TWO AREAS FOR THE CONTACTOR TO STORE HIS MATERIAL: 1) PENINSULA AREA JUST SOUTHWEST OF THE SPILLWAY AND 2) INSIDE THE FENCED IN AREA IN THE VICINITY OF WHERE THE NEW ELECTRICAL SERVICE WILL BE LOCATED. CONTRACTOR IS RESPONSIBLE FOR PROPERLY SECURING HIS MATERIALS. LOSS OR THEFT IS THE CONTRACTOR'S RESPONSIBILITY. ACCESS IN AND OUT OF GATE AT EACH LOCATION SHALL BE AVAILABLE AT ALL TIMES FOR SRA AND OTHER CONTRACTORS. THE OWNER HAS IDENTIFIED TWO AREAS FOR THE CONTRACTOR TO STORE HIS MATERIAL: 1) PENINSULA AREA JUST SOUTHWEST OF THE SPILLWAY AND 2) INSIDE THE FENCED IN AREA IN THE VICINITY OF WHERE THE NEW ELECTRICAL SERVICE WILL BE LOCATED. CONTRACTOR IS RESPONSIBLE FOR PROPERLY SECURING HIS MATERIALS. LOSS OR THEFT IS THE CONTRACTOR'S RESPONSIBILITY. ACCESS IN AND OUT OF GATE AT EACH LOCATION SHALL BE AVAILABLE AT ALL TIMES FOR SRA AND OTHER CONTRACTORS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY CLEAN-UP OF THE PROJECT SITE.
- PLANS AND SPECIFICATIONS SHALL NOT BE SUBSTANTIALLY OR MATERIALLY ALTERED WITHOUT PRIOR WRITTEN APPROVAL OF ENGINEER, FERC, OR TCEQ'S EXECUTIVE DIRECTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING MAINTENANCE/ACCESS ROADS. ALL MAINTENANCE/ACCESS ROADS, AND ENTIRE CONSTRUCTION SITE, TO BE RESTORED TO ORIGINAL OR BETTER CONDITION WHEN CONSTRUCTION IS COMPLETE AT NO ADDITIONAL COST TO THE TOLEDO BEND PROJECT JOINT OPERATION. INGRESS AND EGRESS VIA EXISTING ACCESS ROAD(S) DRIVE IS THE CONTRACTOR'S RESPONSIBILITY.
- CONTRACTOR SHALL PROVIDE INGRESS AND EGRESS ACCESS TO TOLEDO BEND PROJECT JOINT OPERATION PERSONNEL AT ALL TIMES DURING CONSTRUCTION.
- INSPECTION OF PROJECT CAN BE PERFORMED BY FERC, TCEQ DAM SAFETY, OR LOUISIANA DEPARTMENT OF DAM SAFETY AT ANY TIME. THIS INSPECTION WILL BE COORDINATED THROUGH THE TOLEDO BEND PROJECT JOINT OPERATION.
- CONTRACTOR SHALL UNDERSTAND THE TOLEDO BEND DAM WAS DESIGNED AND CONSTRUCTED TO STORE SURFACE WATER AND TO SAFELY PASS HIGH FLOW EVENTS. CONTRACTOR SHALL CONDUCT HIS MEANS AND METHODS AS NECESSARY TO COMPLETE THE WORK ASSOCIATED WITH THE CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP ABEAST OF THE WEATHER CONDITIONS AT ALL TIMES. TOLEDO BEND PROJECT JOINT OPERATION MAY TEMPORARILY HALT CONSTRUCTION IF AND WHEN GATE OPERATIONS ARE IMMINENT; HOWEVER, CONTRACTOR SHALL UNDERSTAND THAT GATE OPERATIONS ARE POSSIBLE AT TOLEDO BEND DAM AND ADVANCED NOTICE MAY NOT BE AVAILABLE. IN THESE SITUATIONS, CONTRACTOR WILL BE REQUIRED TO IMMEDIATELY TERMINATE CONSTRUCTION UNTIL SUCH TIME THAT THE GATE OPERATIONS CONCLUDE AND TOLEDO BEND PROJECT JOINT OPERATION APPROVES THE CONTRACTOR TO RESUME WORK.
- CONTRACTOR SHALL COORDINATE WITH TOLEDO BEND PROJECT JOINT OPERATION CONSTRUCTION MANAGER, OR HIS DESIGNEE, WHENEVER ACCESS ACROSS SPILLWAY IS PROHIBITED. AT LEAST 48 HR ADVANCED NOTICE BY THE CONTRACTOR IS REQUIRED.
- SOME ELEVATIONS AND DIMENSIONS RELATED TO THE EXISTING STRUCTURES WERE OBTAINED FROM ORIGINAL CONSTRUCTION/RECORD DRAWINGS. ALL EXISTING ELEVATIONS AND DIMENSIONS SHALL BE FIELD VERIFIED AS NECESSARY BY THE CONTRACTOR.
- SITE SECURITY AND PROTECTION OF CONTRACTOR'S WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- VERIFY ALL DIMENSIONS, ELEVATIONS, OPENING SIZES, AND MECHANICAL EQUIPMENT WEIGHTS PRIOR TO STARTING WORK.
- FIELD VERIFY ALL EXISTING CONDITIONS, INCLUDING LOCATION AND DIMENSIONS OF ALL EXISTING CONSTRUCTION AND UTILITIES. NOTIFY ENGINEER IF THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONDITIONS BEFORE PROCEEDING WITH WORK. PROVIDE EXCAVATION SHORING TO PROTECT AND SUPPORT FOUNDATION SOILS UNDER EXISTING STRUCTURES.
- PLANS, SECTIONS, AND DETAILS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, OR FIT OF MATERIALS.
- THE GENERAL NOTES AND TYPICAL DETAILS ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY.
- CONTRACTOR SHALL ABIDE BY ALL APPLICABLE GOVERNMENTAL AND REGULATORY STANDARDS AND REQUIREMENTS AND OBTAIN ALL NECESSARY PERMITS AND APPROVALS FOR CONSTRUCTION OF ELECTRICAL IMPROVEMENTS SHOWN IN THE PLANS.
- CONTRACTOR SHALL COORDINATE THE PROPOSED CONSTRUCTION WITH OTHER CONTRACTORS IN THE EVENT THE OTHER CONTRACTORS ARE DOING WORK IN THE SAME AREA SIMULTANEOUSLY WITH THIS PROJECT. THIS INCLUDES, BUT IS NOT LIMITED TO, ALL CONNECTION POINTS OR OTHER SPECIAL ITEMS AS REQUIRED FOR TESTING.
- NO BURNING OR BLASTING IS ALLOWED.
- THE LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS AND DEPTHS OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES 48 HOURS PRIOR TO THE MAKE AND LAY OF THE PROPOSED PIPE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES WHETHER SHOWN ON THE PLANS OR NOT, AND TO PROTECT ALL UTILITIES DURING CONSTRUCTION, AT NO COST TO THE OWNER.
- CONTRACTOR IS RESPONSIBLE FOR LOCATING AND REPAIRING ANY UTILITIES DAMAGED DURING CONSTRUCTION. NO SEPARATE PAY ITEM.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL OVERHEAD AND UNDERGROUND ELECTRIC UTILITIES WITHIN OR ADJACENT TO WORK AREAS.
- CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION. CONTRACTOR IS

- RESPONSIBLE FOR A TRENCH SAFETY PLAN PREPARED BY A PROFESSIONAL ENGINEER FOR THIS PROJECT.
- CONTRACTOR SHALL PROTECT OR REMOVE AND REPLACE ROAD SIGNS AND OTHER SIGNS. ANY DAMAGE TO SIGNS SHALL BE REPAIRED TO ORIGINAL OR BETTER CONDITION BY THE CONTRACTOR. NO SEPARATE PAY ITEM.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SAFE ACCESS TO RESIDENCES AND BUSINESSES. NO SEPARATE PAY ITEM.
- ALL WORK NECESSARY TO COMPLETE THIS PROJECT SHALL BE COVERED IN THE ITEMS ON THE BID PROPOSAL. IF SPECIFIC WORK IS NOT SHOWN ON THE BID PROPOSAL, IT SHALL BE CONSIDERED INCIDENTAL TO PROJECT INSTALLATION.
- ALL EXCAVATION IS UNCLASSIFIED, NO EXTRA PAYMENTS WILL BE MADE TO THE CONTRACTOR FOR ROCK, MUD, MUCK, GRAVEL, WATER, OR OTHER STABLE OR UNSTABLE MATERIALS OR CONDITIONS ENCOUNTERED.
- ERECT TEMPORARY FENCING BEFORE COMMENCING SITE PREPARATION WORK, MAINTAIN FENCING DURING FULL CONSTRUCTION PERIOD. REMOVE TEMPORARY FENCING WHEN NO LONGER NEEDED OR WHEN ACCEPTABLE TO THE OWNER.
- CONTRACTOR'S STAGING, PARKING AND MATERIAL STORAGE SHALL BE COORDINATED WITH SRA. ALL DAMAGE TO LANDSCAPE OR OTHER PROPERTY DUE TO CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED TO A CONDITION EQUAL OR BETTER THAN THE CONDITION PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PROPERTY CORNER MARKERS AND CONTROL POINTS. PROPERTY CORNER MARKERS AND CONTROL POINTS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REESTABLISHED BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF LOUISIANA AT CONTRACTOR'S EXPENSE. CONSTRUCTION SURVEYING AND STAKING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY ALL CONTROL MONUMENTATION PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL BY SRA AND ENGINEER PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY LDOT AND SRA A MINIMUM OF ONE WEEK IN ADVANCE WHEN BRIDGE CLOSURE IS NEEDED.
- ANY DISCREPANCY OR CONFLICT WITHIN THE DRAWINGS AND SPECIFICATION SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND CONSULTANT. DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE OWNER AND ENGINEER'S ATTENTION AND CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF THE WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE OWNER AND ENGINEER'S INTERPRETATION. ALL ITEMS, WORK, AND IMPROVEMENTS SHOWN OR INDICATED IN THE CONSTRUCTION DOCUMENTS SHALL BE COMPLETED FOR THE PRICES BID, WHETHER OR NOT A SEPARATE PAY ITEM IS INCLUDED IN THE CONTRACT. IF IN THE OPINION OF THE INSPECTOR, BASED ON TESTING SERVICE REPORTS AND INSPECTION, MATERIALS OR COMPACTION ARE BELOW THE SPECIFIED REQUIREMENTS, THE CONTRACTOR SHALL CORRECT THE DEFICIENCY AND RE-TEST TO OBTAIN THE SPECIFIED PARAMETERS AT NO ADDITIONAL EXPENSE TO THE OWNER.
- EXCAVATED MATERIAL THAT IS SUITABLE MAY BE USED FOR FILL AND BACKFILL. PROVIDE ANY ADDITIONAL FILL MATERIAL FROM OFF-SITE AS MAY BE REQUIRED TO PRODUCE DESIGNATED LINES AND GRADES OF FILLS, BACKFILLS AND ROUGH GRADES.
- PERFORM EARTHWORK IN A MANNER TO PREVENT SURFACE WATER AND SUBGRADE OR GROUND WATER FROM FLOWING INTO EXCAVATIONS, AND TO PREVENT WATER AND SEDIMENTATION FROM FLOODING THE PROJECT SITE AND SURROUNDING AREA.
- ALL WASTE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND IT SHALL BE THEIR SOLE RESPONSIBILITY TO DISPOSE OF THESE MATERIALS IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS. NO STOCK PILING ON SITE WILL BE ALLOWED.
- WORK HOURS: M-F, 6:30 A.M TO 5:30 P.M. ADVANCE NOTICE AND APPROVAL REQUIRED FROM OWNER FOR EXTENDED WORK HOURS AND/OR WEEKEND HOURS, SUBJECT TO INSPECTION FEES AND INSPECTOR OVERTIME PAY.
- THE CONTRACTOR SHALL REMOVE ALL FENCES, INTERFERING WITH CONSTRUCTION OPERATION AND PROVIDE TEMPORARY FENCING DURING CONSTRUCTION. REMOVED FENCES SHALL BE REPLACED WITH A NEW FENCE OR UNDAMAGED ORIGINAL FENCING. ALL AFFECTED PROPERTY OWNERS SHALL BE NOTIFIED PRIOR TO CONSTRUCTION. REMOVAL AND REPLACEMENT OF EXISTING AND TEMPORARY FENCES SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICE FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.
- THE SPILLWAY ELECTRICAL DISTRIBUTION SYSTEM SHALL REMAIN ENERGIZED AND OPERATIONAL WITH MINIMUM DOWNTIME. AT MOST ONE GATE CAN BE TAKEN OUT OF SERVICE AT A TIME. CONTRACTOR SHALL PROVIDE BACK-UP POWER AND TEMPORARY CABLING AS REQUIRED TO ACHIEVE THIS. AT THE END OF EACH WORKDAY FULL ELECTRICAL SERVICE SHALL BE PROVIDED TO THE REST OF THE GATES. PERMANENT OR EMERGENCY POWER CANNOT BE DISCONNECTED FOR MORE THAN A TOTAL 12 HOURS IN A DAY.
- RELIEF WELL PUMPS FOR WELLS 4 AND 10 SHALL REMAIN FULLY OPERATIONAL WITH MINIMUM DOWNTIME. AT MOST ONE PUMP CAN BE OUT OF SERVICE A MAXIMUM OF 24 HOURS AT A TIME. CONTRACTOR SHALL PROVIDE BACK-UP POWER, TEMPORARY STARTERS, AND CABLING AS REQUIRED TO ACHIEVE THIS.

ACAD Rev: 24.2
 Filename: N:\ELEC\EL-ALL-GN-NOTE01.dwg
 Last Saved: 2/21/2023 9:41 AM Saved By: 03823



FREESSE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freesse.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
GENERAL NOTES I

NO.	ISSUE	BY	DATE	REV. JOB NO.	SRA19480
				DATE	MAR 2023
				DESIGNED	JNH
				DRAWN	JTR
				REVISION	
				CHECKED	TWZ
				FILE NAME	EL-ALL-GN-NOTE01.dwg
Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.					
VERIFY SCALE 1					
SHEET					
G-1					
SEQ.					

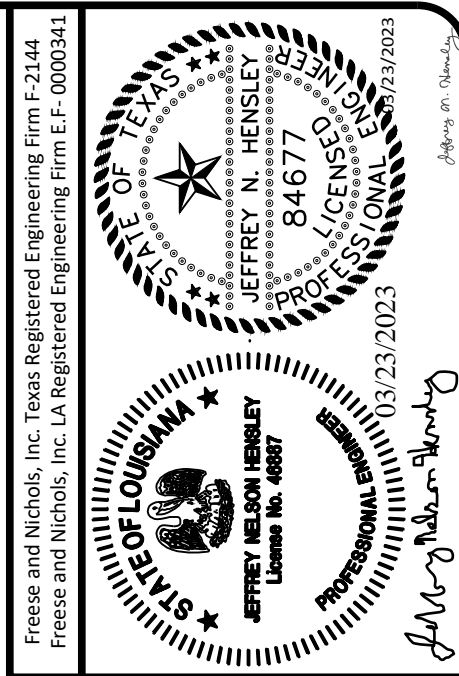
GENERAL ELECTRICAL NOTES:

1. THE CONTRACTOR SHALL FAMILIARIZE SELF WITH THE DETAILS OF THE WORK, CONDITIONS, AND DIMENSIONS FOR THIS PROJECT AND INCLUDE IN THE BID ALL NECESSARY COSTS ASSOCIATED WITH COMPLETION OF THE WORK. IF DISCREPANCIES OF ANY KIND ARE IDENTIFIED, THE CONTRACTOR SHALL IMMEDIATELY ADVISE THE ENGINEER IN WRITING OF THE DISCREPANCIES FOR RESOLUTION BY THE ENGINEER.
2. PROVIDE ALL MATERIALS, SERVICES, SUPERVISION, AND LABOR NECESSARY FOR COMPLETE, FUNCTIONAL, AND OPERATIONAL SYSTEMS.
3. CONTRACTOR SHALL TAKE PROPER PRECAUTIONS TO PROTECT ALL EXISTING FACILITIES, UTILITIES, AND PROPERTY. CONTRACTOR SHALL ALSO TAKE PROPER PRECAUTIONS OVER PROPERTY WHICH HE MAY TRANSPORT, HOIST OR MOVE MATERIAL, EQUIPMENT, AND DEBRIS AND SHALL BE REPAIRED TO ENGINEER'S SATISFACTION ALL DAMAGES CAUSED DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE AND NOTIFY EPW FOR APPROVAL AND SCHEDULING OF ANY SYSTEM INTERRUPTION.
4. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED RECOMMENDATIONS FOR SERVICE AS INTERPRETED BY THE ENGINEER. THE INSTALLATION OF ALL EQUIPMENT SHALL BE MADE BY EXPERIENCED CRAFTSMAN IN A NEAR WORKMANLIKE MANNER. ALL MATERIALS, TOOLS, COSTS AND SERVICES SHALL BE FURNISHED BY THE CONTRACTOR.
5. THE TERM "PROVIDE" USED IN THE DRAWINGS AND SPECIFICATIONS IMPLIES THE CONTRACTOR IS TO FURNISH, TRANSPORT, INSTALL, CONNECT, WARRANT AND START-UP, INCLUSIVELY.
6. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY BUT ARE REQUIRED TO BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION CONDITIONS AND WORK OF OTHER TRADES PERMIT.
7. PROVIDE MANUFACTURERS' OPERATING AND MAINTENANCE MANUAL UPON COMPLETION OF WORK FOR ALL ELECTRICAL EQUIPMENT WITH REPLACEMENT PARTS LIST FOR ALL EQUIPMENT.
8. ALL ELECTRICAL CONSTRUCTION WORK UNDER THIS CONTRACT SHALL BE DONE IN STRICT COMPLIANCE WITH CURRENT VERSION OF NATIONAL ELECTRICAL CODE (N.E.C.) AND MUNICIPAL ELECTRICAL CODE.
9. ELECTRICAL CONTRACTOR SHALL COORDINATE POWER OUTAGES WITH SABINE RIVER AUTHORITY (SRA).
10. CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY AT THE JOBSITE. CONTRACTOR SHALL INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE PROJECT. ALL TRENCHING, EXCAVATION, AND SHORING ACTIVITIES SHALL BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.
11. CONTRACTOR SHALL MAINTAIN, RELOCATE, OR REPLACE EXISTING SURVEY MONUMENTS, CONTROL POINTS AND STAKES THAT ARE DISTURBED OR DESTROYED DURING CONSTRUCTION.
12. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL PROVIDE A COMPLETE MATERIAL AND PROJECT MANUFACTURER'S SUBMITTAL PACKAGE FOR ENGINEER'S REVIEW AND APPROVAL.
13. DEMOLISH AND EXTEND EXISTING ELECTRICAL WORK AS INDICATED OR NOTED, REMOVE RELOCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.
14. EXTEND EXISTING INSTALLATIONS USING MATERIALS AND METHODS COMPATIBLE WITH EXISTING ELECTRICAL INSTALLATIONS, PER THE (N.E.C.), OR AS INDICATED OTHERWISE.
15. CLEAN AND REPAIR EXISTING MATERIALS AND EQUIPMENT WHICH IS TO REMAIN OR IS TO BE REUSED
16. FOR CABLE IDENTIFIED ON DRAWINGS FOR REUSE, PROPERLY TERMINATE CONDUCTORS, TAG THE CONDUCTORS AND RACEWAYS WITH IDENTIFICATION TAGS. PROPERLY IDENTIFY PHASING.
17. ROUTING OF EXISTING UNDERGROUND RACEWAYS IS BASED ON AS-BUILT DRAWINGS AND SHOWN DIAGRAMMATIC FOR CONNECTIVITY PURPOSES ONLY. CONTRACTORS SHALL CIRCUIT TRACE ALL EXISTING UNDERGROUND RACEWAYS TO VERIFY EXACT ROUTING PRIOR TO REMOVAL OR EXTENSION. REMOVAL OR EXTENSION OF EXISTING UNDERGROUND CONDUIT SHALL BE PERFORMED REGARDLESS OF GROUND CONDITIONS ENCOUNTERED (I.E., ROCK, GRAVEL, BOULDERS, CONCRETE ENCASEMENT) AT NO ADDITIONAL COST TO EPW.
18. EXISTING IS SHOWN AS LIGHT. NEW WORK PROVIDED UNDER THIS PROJECT IS SHOWN AS DARK.
19. ALL EQUIPMENT AND ELECTRICAL EQUIPMENT ENCLOSURE LOCATIONS, OR TERMINAL BOX LOCATIONS, ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER/ENGINEER, DURING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.
20. ALL EQUIPMENT AND ELECTRICAL EQUIPMENT ENCLOSURES DIMENSIONS ARE APPROXIMATE. ALL EQUIPMENT AND ELECTRICAL EQUIPMENT ENCLOSURES OR TERMINAL BOX DIMENSIONS SHALL BE VERIFIED WITH THE EQUIPMENT SUPPLIER. ALLOW FOR LOCATION CHANGES AND INCLUDE IN THE CONTRACT PRICE THE EXACT LOCATIONS OF ALL ELECTRICAL EQUIPMENT AND ROUTING OF ALL CABLES AND CONDUITS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER/ENGINEER DURING CONSTRUCTION.
21. THE LOCATION OF ALL ELECTRICAL EQUIPMENT AND ROUTING OF CABLES AND CONDUITS SHALL BE COORDINATED AND APPROVED BY THE OWNER.
22. THE DUCT BANK ROUTING AS SHOWN ON THE DRAWING IS APPROXIMATE. THE EXACT DUCT BANK ROUTING, CABLE LENGTH SHALL BE VERIFIED IN THE FIELD.
23. THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE ALL UNDERGROUND UTILITIES BEFORE DIGGING. CONTRACTOR SHALL COORDINATE THE EFFORT WITH THE OWNER.
24. THE CONTRACTOR SHALL PROVIDE DETAILED AS-BUILTS OF THE DUCT BANKS AND DUCT BANK ROUTINGS. THE CONTRACTOR SHALL INCLUDE PHOTOGRAPHS OF DUCT BANKS DURING CONSTRUCTION DOCUMENTING CONDUIT LAYOUTS PRIOR TO INSTALLATION. INCLUDE GPS COORDINATES OF DUCT BANK CORNERS, AND DUCT BANK BENDS.

ELECTRICAL DEMOLITION NOTES:

1. DEMOLITION DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ENGINEER BEFORE DISTURBING EXISTING INSTALLATION. BEGINNING OF DEMOLITION MEANS INSTALLER ACCEPTS EXISTING CONDITIONS AND WILL MAKE MODIFICATIONS AND ADJUSTMENTS AS REQUIRED AT NO ADDITIONAL COST TO EPW.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL UNDERGROUND OBSTRUCTIONS BEFORE ANY EXCAVATION BEGINS.
3. ALL ELECTRICAL WORK SHALL BE DONE IN A NEAT WORKMANLIKE MANNER, ANY DAMAGE DONE TO ANY ADJACENT CONSTRUCTION OR FINISHES SHALL BE REPAIRED TO THE ENGINEER/OWNER'S SATISFACTION AT NO COST TO EPW
4. DEMOLITION ASSOCIATED WITH THIS PROJECT IS SHOWN HATCHED
5. THE ELECTRICAL DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE GENERAL SCOPE OF WORK. ALL EXISTING DEVICES SHALL BE FIELD VERIFIED PRIOR TO BEGINNING WORK. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL EXISTING UNDERGROUND 15KV CABLES, ASSOCIATED CONDUIT, PULL BOXES AND JUNCTION BOXES BE DEMOLISHED UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL COORDINATE THE DEMOLITION OF THE ELECTRICAL CONDUIT, WIRE, EQUIPMENT AND DEVICES WITH THE GENERAL DEMOLITION AND SCHEDULE. THE DRAWINGS ARE INTENDED TO CONVEY THE GENERAL NATURE AND SCOPE OF THE DEMOLITION WORK. EVERY ITEM TO BE DEMOLISHED MAY NOT BE SHOWN. FIELD VERIFY WITH OWNER PRIOR TO BID, AND INCLUDE ALL DEMOLITION WORK IN THE CONTRACT PRICE.
7. PROVIDE TEMPORARY WIRE AND CONDUIT FOR THE EQUIPMENT WHICH MAY BE AFFECTED BY THE DEMOLITION BUT TO REMAIN IN SERVICE, WHERE NOTED.
8. RELOCATE AND RECONNECT POWER AND CONTROL RACEWAYS AND CONDUCTORS TO EQUIPMENT AFFECTED BY DEMOLITION WORK.
9. ALL CONDUCTORS BEING DEMOLISHED SHALL BE DISCONNECTED AND REMOVED FROM THE LOAD TO THE SOURCE. SURFACE MOUNTED CONDUITS AND MOUNTING HARDWARE SHALL BE REMOVED. UNDERGROUND CONDUITS WHICH ARE NOT BEING REMOVED OR OTHERWISE NOT BEING MADE UNUSABLE SHALL BE CAPPED AND TAGGED AS SPARE, WITH INFORMATION CLEARLY INDICATING THE LOCATION OF THE OTHER END.
10. ALL SURFACES WHERE DEMOLISHED EQUIPMENT OR CONDUIT IS REMOVED SHALL BE CLEANED, PATCHED AND PAINTED TO MATCH THE SURROUNDING SURFACE.
11. THE CONTRACTOR SHALL BE RESPONSIBLE TO CHECK THE FUNCTION OF EACH CONDUCTOR BEFORE REMOVING OR DISCONNECTING.
12. IF A CONDUCTOR WHICH HAS TO STAY IN SERVICE (NOT BEING DEMOLISHED) IS INSTALLED IN A COMMON CONDUIT WITH CONDUCTORS WHICH ARE BEING DEMOLISHED, THE CONTRACTOR SHALL REMOVE ALL CONDUCTORS FROM THE CONDUIT, PROVIDE NEW CONDUCTORS WHICH ARE REPLACEMENTS FOR THE CONDUCTORS THAT ARE TO REMAIN IN SERVICE AND RE-INSTALL THE NEW CONDUCTORS. AFTER THE CONDUCTORS ARE PULLED, MEGGER OR HIPOT TEST EACH CONDUCTOR. CONNECT BOTH ENDS OF THE NEW CONDUCTORS AND TEST THE SYSTEM FOR PROPER FUNCTION. DO NOT RE-PULL USED CONDUCTORS.
13. WHERE EQUIPMENT IS BEING RE-FED FROM A NEW SOURCE, EXISTING CONDUIT MAY BE REUSED ONLY IF THE CONDUIT AND FITTINGS ARE THE TYPE SPECIFIED FOR NEW WORK ON THIS CONTRACT. IF NOT, THE CONDUIT AND CONDUCTORS SHALL BE REPLACED WITH NEW MATERIAL MEETING THE SPECIFICATIONS, AT NO ADDITIONAL COST TO THE OWNER.
14. THE CONTRACTOR SHALL COORDINATE WITH OWNER TO FLAG EXISTING UNDERGROUND CONDUITS BEFORE DIGGING.
15. SRA HAS THE RIGHT OF FIRST REFUSAL TO THE EQUIPMENT BEING REMOVED. THE CONTRACTOR SHALL DELIVER THE EQUIPMENT WHICH THE OWNER WISHES TO KEEP AT LOCATION DESIGNATED BY THE OWNER. SEE SECTION 26 05 10.
16. SRA RESERVES THE RIGHT TO COLLECT ALL AND ANY PIECE OF EQUIPMENT OR MATERIAL DISCARDED FROM THE PROJECT.
17. THE CONTRACTOR SHALL NOT MAKE ANY MODIFICATION UNTIL THE FOLLOWING HAS BEEN DONE:
 - A. SRA/CONTRACTOR SHALL WITNESS AND RECORD THE CONDITION OF THE EXISTING EQUIPMENT. THE CONTRACTOR SHALL DOCUMENT ANY DEFECTS OR DEFICIENCIES.
 - B. SRA SHALL OPERATE THE EQUIPMENT TO DEMONSTRATE THE CURRENT CONDITIONS. THE CONTRACTOR SHALL DOCUMENT ANY DEFECTS OR DEFICIENCIES.
 - C. A WRITTEN AND PHOTOGRAPHIC RECORD OF THE OPERATION AND EXISTING CONDITION SHALL BE KEPT IN A THREE RING BINDER AT THE SRA/CONTRACTOR TRAILER, IN FORM OF PICTURES AND INFORMATION ON A FORM.
 - D. A FORM SHALL BE GENERATED BY THE CONTRACTOR TO RECORD THE OBSERVATIONS. BOTH PARTIES SHALL SIGN ON THE FORM.
 - E. THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH AND INSTALL MATERIAL OR EQUIPMENT DAMAGED DURING THE COURSE OF HIS WORK.
 - F. AFTER THE CHANGES ARE MADE, THE EQUIPMENT SHALL BE INSPECTED AND RE-TESTED TO DEMONSTRATE THAT IT FUNCTIONS CORRECTLY.
 - G. NO PORTION OF EXISTING CONDUCTORS SHALL BE SPLICED TO NEW CONDUCTORS FOR RE-USE WITHOUT SPECIFIC APPROVAL FROM SRA/ENGINEER ON A CASE-BY-CASE BASIS.

ACAD Rev: 24.2
 Filename: N:\ELEC\EL-ALL-GN-NOTE02.dwg
 Last Saved: 2/13/2023 8:55 AM Saved By: 03823



FREESSE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freese.com

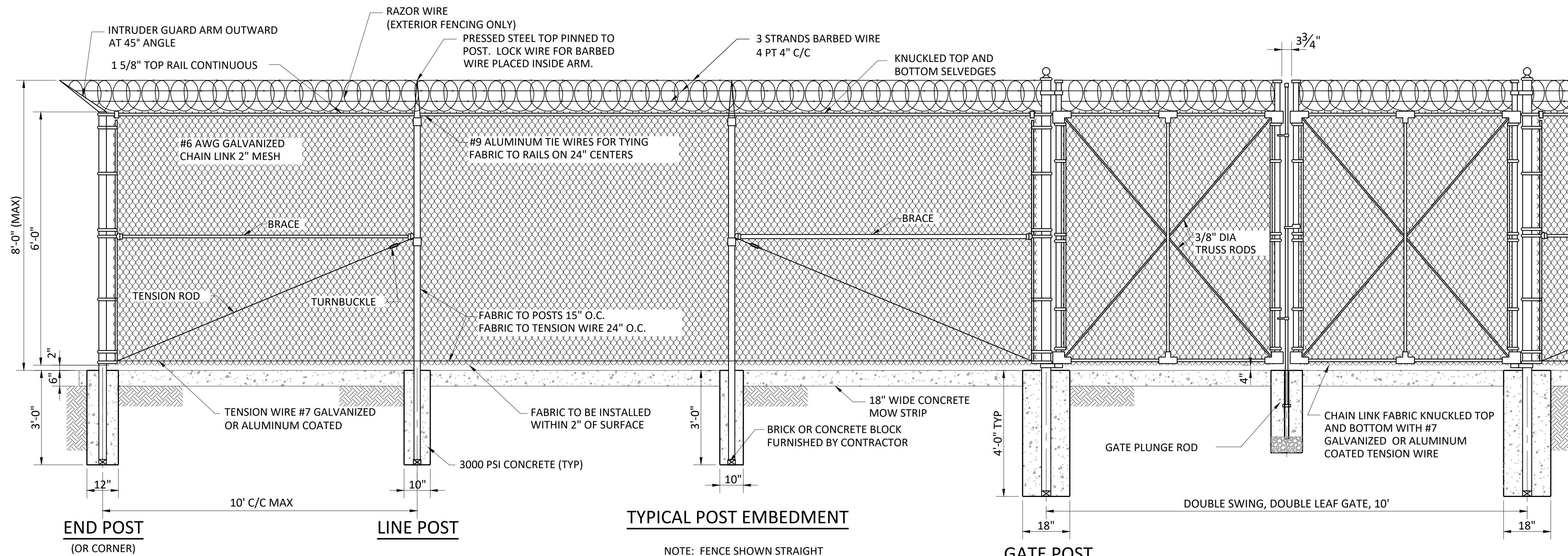
SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
GENERAL NOTES II

NO.	ISSUE	BY	DATE	REV. JOB NO.	SRA19480
				DATE	MAR 2023
				DESIGNED	JNH
				DRAWN	JTR
				REVISED	
				CHECKED	TWZ
				FILE NAME	EL-ALL-GN-NOTE02.dwg
Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.					
VERIFY SCALE					
SHEET					
G-2					
SEQ.					

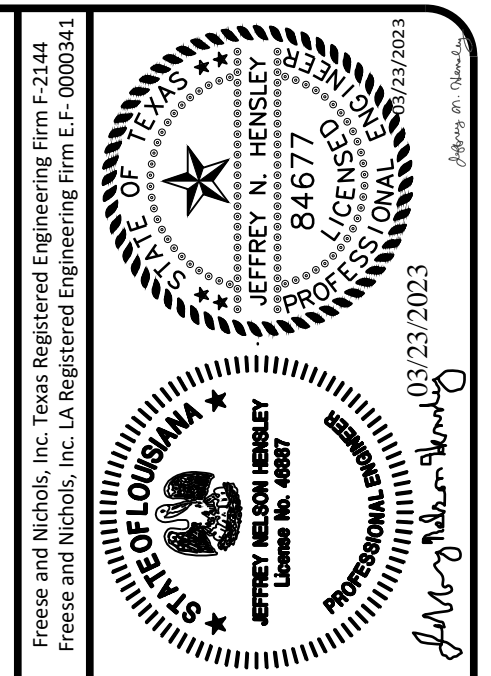
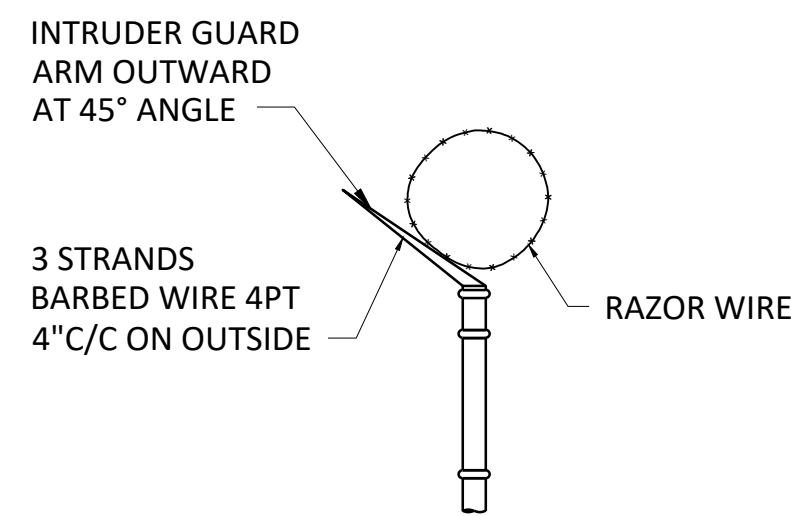
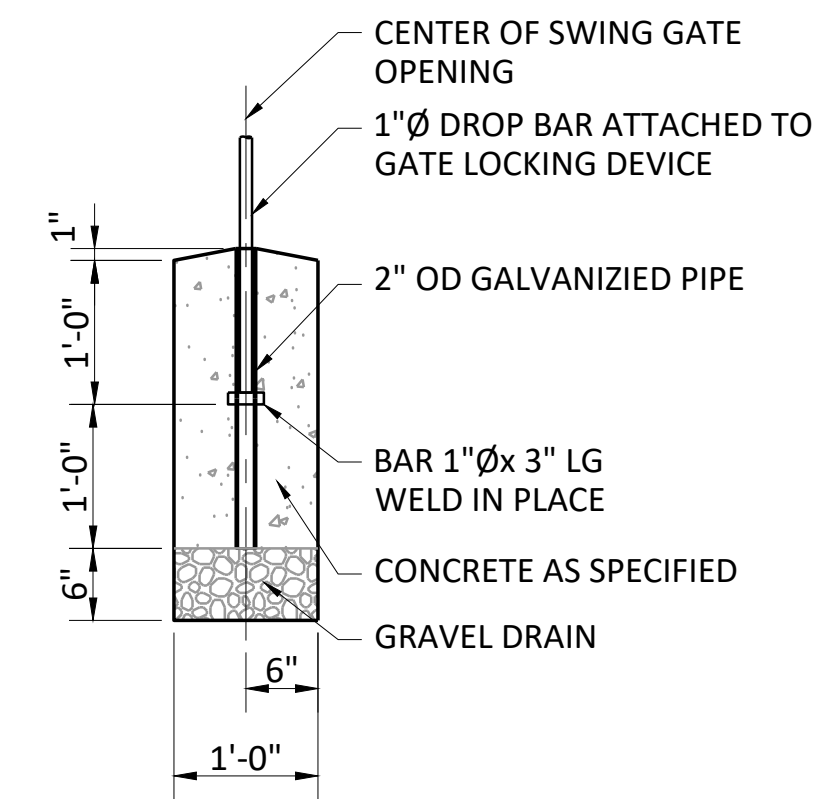
ASTM A53 SCHEDULE 40 - FENCE POSTS		
USE	O.D.	SCH. 40 WT/FT IN LBS.
TOP RAIL	1 5/8"	2.27
LINE POST	2 3/8"	3.65
GATE POST	6 5/8"	18.97
	2 7/8"	5.79

GENERAL NOTES:

- ALL METAL PARTS SHALL BE HOT DIP GALVANIZED.
- FENCES AND GATES SHALL BE FURNISHED COMPLETE WITH ALL NECESSARY FITTINGS AND HARDWARE.
- FOR GATES, SIZES OF PIPES, SAG RODS AND TURNBUCKLES SHALL BE MANUFACTURER'S STANDARD WHICH ALSO MEET THE REQUIREMENTS OF THIS DRAWING.
- POSTS SHALL BE ROLLED OR EXTRUDED SECTIONS OR TUBING OF STEEL OR ALUMINUM CAPABLE OF WITHSTANDING A LATERAL FORCE OF 100 POUNDS APPLIED AT THE TOP. ALL HOLLOW POSTS SHALL BE CAPPED.
- STANDARD PIPE SIZES INDICATED ARE NOMINAL DIAMETER, SCHEDULE 40, PER AMERICAN STANDARDS ASSOCIATION B 36.10.
- PROVIDE PLUNGE ROD AND CATCHES FOR ALL GATES IN OPEN AND CLOSED POSITION.
- FENCE MEASUREMENTS TO BE VERIFIED BY CONTRACTOR PRIOR TO INSTALLATION.
- SEE SHEET S-2 FOR CONCRETE REQUIREMENTS.
- SEE SHEET E-9 FOR SITE PLAN SHOWING FENCED AREA.
- CONTRACTOR SHALL PROVIDE GREEN PRIVACY SLATS FOR FENCE. SLATS SHALL BE MADE OF HIGH DENSITY POLYETHYLENE (HDPE) AND HAVE UV INHIBITORS (UV RESISTANT COLOR CONCENTRATES) TO ADD COLOR PROTECTION AND GUARD AGAINST CRACKING, CHALKING AND FADING IN THE SUNLIGHT.
- CONTRACTOR SHALL PROVIDE FORMAL SUBMITTAL ON FENCE AND SLATS FOR ENGINEERS REVIEW AND APPROVAL.
- SEE SHEET S-2 FOR MOW STRIP DETAIL.



1 ELEVATION OF CHAIN LINK FENCE
 NOT TO SCALE



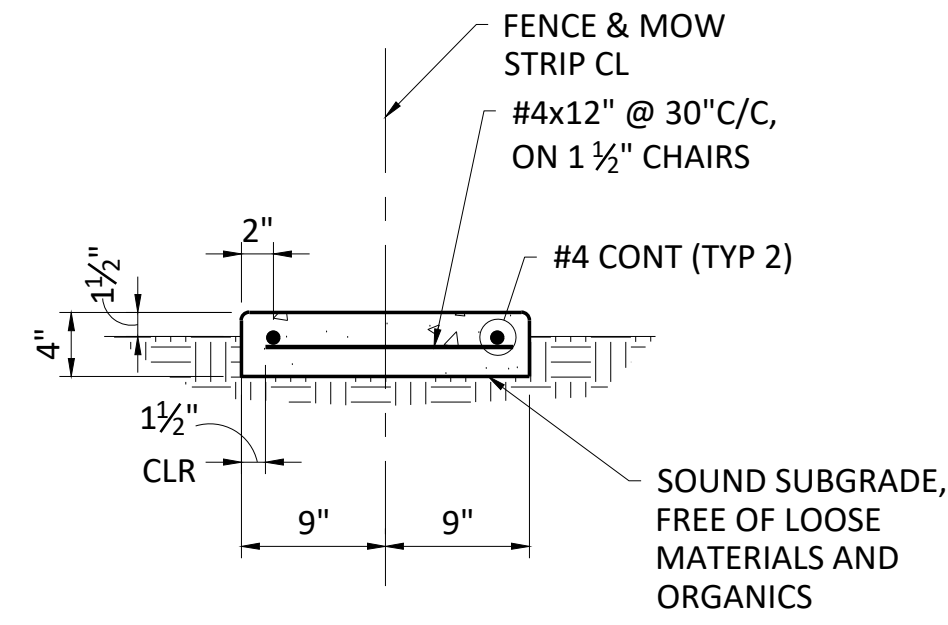
FREES & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freese.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
 SPILLWAY ELECTRICAL IMPROVEMENTS
 CIVIL
FENCE AND GATE DETAILS

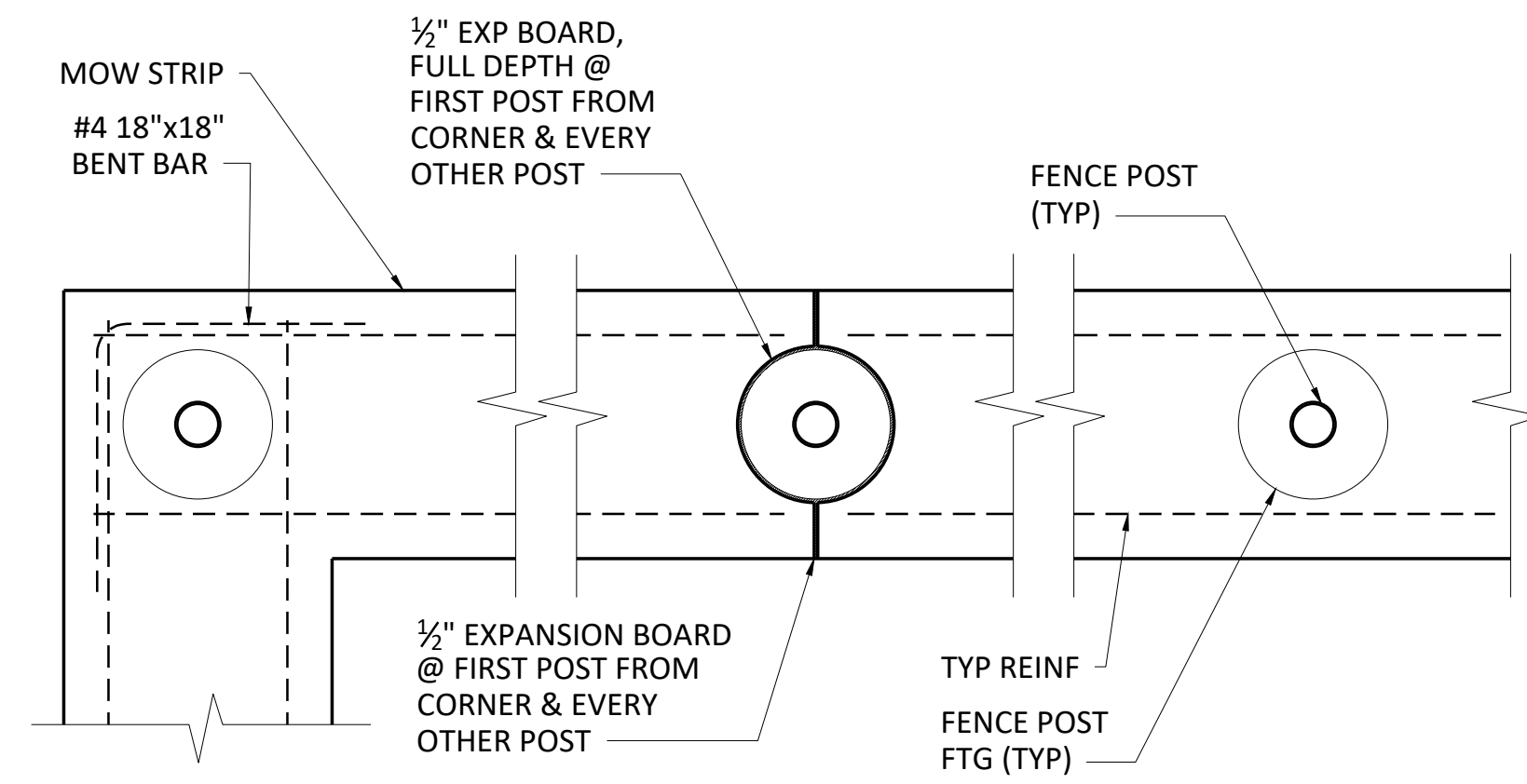
NO.	ISSUE	BY	DATE	REVISED	CHECKED	TWZ
0						
VERIFY SCALE: 1" = 10'-0" (on original drawing, if not one inch on this sheet, adjust scale.)						
FILE NAME: EL-ALL-DT-MISC02.dwg						
DATE: MAR 2023						
DESIGNED: JNH						
DRAWN: JTR						
NO. 194680						
SHEET C-1						
SEQ.						

CONCRETE

1. CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITIONS OF ACI 301 AND ACI 318.
2. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS NOTED OTHERWISE, SHALL BE IN ACCORDANCE WITH THE ACI DETAILING MANUAL (ACI SP-66), LATEST EDITION.
3. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI IN ACCORDANCE WITH ACI 301.
4. NORMAL WEIGHT CONCRETE AND AS FOLLOWS:
 - A. PORTLAND CEMENT, ASTM C 595, TYPE II, EQUIVALENT ALKALIES < 0.60%
 - B. W/C RATIO: 0.45 MAXIMUM
 - C. MINIMUM CEMENT CONTENT OF 5 SACKS PER CUBIC YARD OF CONCRETE.
 - D. CLASS F FLY ASH WITH A MAXIMUM CEMENT REPLACEMENT OF 25%. IF F ASH IS NOT AVAILABLE, THEN PROVIDE A STRAIGHT CEMENT MIX.
 - E. AGGREGATE: ASTM C 33, 1" MAXIMUM, CLASS 3M
 - F. ENTRAINED AIR: ACI 318, EXPOSURE CLASS F1
 - G. SLUMP: 4" (+/-1")
 - H. MOIST CURE A MINIMUM OF 7 DAYS.
5. ALL REINFORCING SHALL BE IN ACCORDANCE WITH ASTM A615, GRADE 60, DEFORMED.
6. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" INSIDE FORMS OR TOOLED TO 3/4" RADIUS ON SLABS UNLESS OTHERWISE NOTED.
7. PRIOR TO FABRICATION OR CONSTRUCTION, SUBMIT FOR REVIEW AND APPROVAL:
 - A. PROPOSED MIXED DESIGN FOR ALL CONCRETE APPLICATIONS
 - B. HISTORICAL SAMPLES/DATA THAT VERIFIES PROPOSED MIX WILL MEET REQUIRED PERFORMANCE REQUIREMENTS
 - C. MATERIAL CERTIFICATIONS OR PRODUCT DATA AS APPLICABLE FOR ALL MIX CONSTITUENTS (AGGREGATE, CEMENT, AND ADMIXTURES).

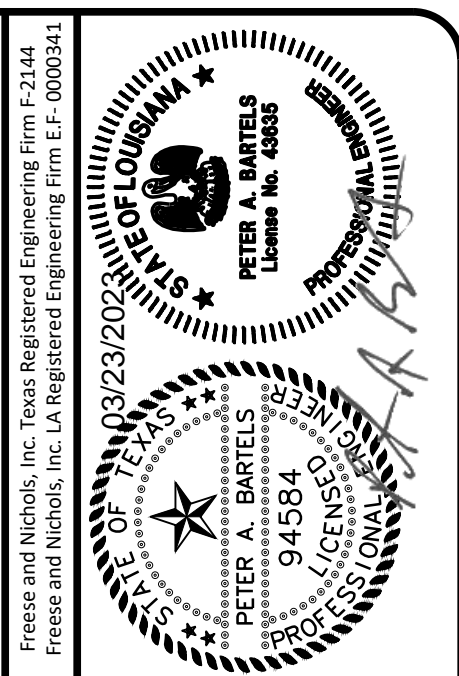


1 TYPICAL MOW STRIP
NOT TO SCALE



DETAIL NOTE
1. EXPANSION BOARD SHALL BE ASPHALT IMPREGNATED FIBER BOARD ASTM D994.

2 TYPICAL JOINT PLAN
NOT TO SCALE



SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 STRUCTURAL
MOW STRIP NOTES AND DETAILS

PROJECT NO.	SRA19480
DATE	MAR 2023
DESIGNED	PAB
DRAWN	PAB
CHECKED	BBW
FILE NAME	ST-MOW-DT-TYP.dwg

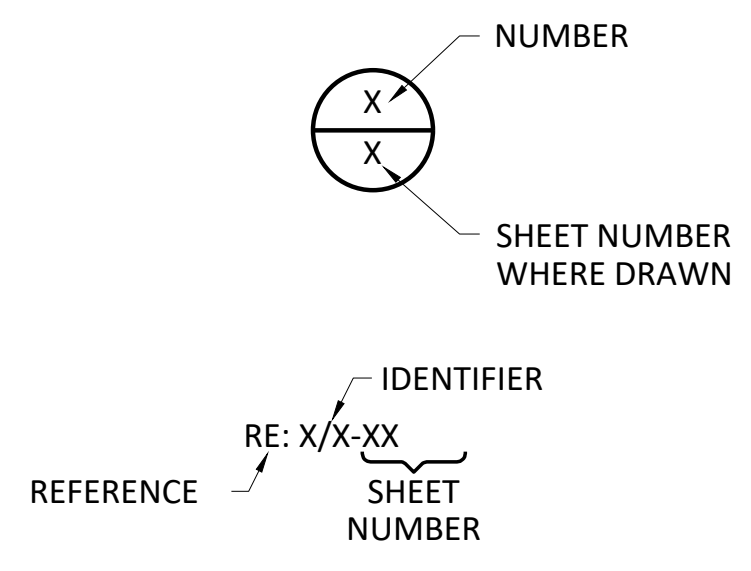
NO.	ISSUE
0	VERIFY SCALE
1	Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.

ACAD Rev: 2A.2
 File Name: N:\ELEC\EL-ALL-GN-LGND01.dwg
 Last Saved: 2/14/2023 8:39 AM Saved By: 03823

ABBREVIATIONS	
AC	ALTERNATING CURRENT
AF	AMP FRAME
AFD	ADJUSTABLE FREQUENCY DRIVE
AFF	ABOVE FINISHED FLOOR OR GRADE
AG	ABOVE GRADE
AGSB	ABOVE GROUND SPLICE BOX
AIC	AMPERES INTERRUPTING CAPACITY
AL OR ALUM	ALUMINUM
AMP OR A	AMPERE
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CB	CIRCUIT BREAKER
C/C	CENTER TO CENTER
CHH	COMMUNICATION MANHOLE/HANDHOLE
CKT	CIRCUIT
CLF	CURRENT LIMITING FUSE
CONT.	CONTINUATION
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CS	CONTROL SWITCH OR COMBINATION STARTER
CT	CURRENT TRANSFORMER
CU	COPPER
DC	DIRECT CURRENT
DI	DOOR INTERLOCK
DN	DOWN
DP	DIFFERENTIAL PRESSURE
DWG	DRAWING
EMH	ELECTRICAL MANHOLE/HANDHOLE
EC	EMPTY CONDUIT
ELEC	ELECTRICAL
ELEV	ELEVATION
EM	EMERGENCY
EHH	ELECTRICAL MANHOLE
EO	ELECTRICALLY OPERATED
ETM	ELAPSED TIME METER
EUC	ELECTRIC UTILITY CO.
EXIST.	EXISTING
FBO	FURNISHED BY OTHERS
FO	FIBER OPTIC
FRP	FIBERGLASS REINFORCED POLYESTER
FT	FEET
FU	FUSE
G. OR GRD	GROUND
GA	GAUGE
GCP	GENERATOR CONTROL PANEL
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GFS	GROUND FAULT SENSING
GO	GATE OPERATOR
GRS	GALVANIZED RIGID STEEL
HH	HANDHOLE
HP	HORSEPOWER
HT	HEIGHT
HTP	HEAT TRACE PANEL
HTR	HEATER
HZ	HERTZ
ID	INTERNAL DIAMETER
IMH	INSTRUMENT MANHOLE
INST	INSTRUMENT
IRP	INTERPOSING RELAY PANEL
JB	JUNCTION BOX
KAIC	KILO AMPERE INTERRUPTING CAPACITY
KVA	KILOVOLT-AMPERE
KW	KILOWATT
LA	LIGHTNING ARRESTER
LC	LIGHTNING CONTACTOR
LED	LIGHT EMITTING DIODE
LGTS ON LTG	LIGHTS/LIGHTING
LP	LIGHTING PANEL
LSI	LONG, SHORT, INSTANTANEOUS
LSIG	LONG, SHORT, INSTANTANEOUS, GROUND
MBFV	MOTOR OPERATED BUTTERFLY VALVE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFR	MANUFACTURER
MFR'S	MANUFACTURER'S
MH	MANHOLE
ML	MULTILIN
MOV	MOTOR OPERATED VALVE
MLO	MAIN LUGS ONLY
MPR	MOTOR PROTECTION RELAY
MR	MULTIRATIO
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH

ABBREVIATIONS	
NC or N.C.	NORMALLY CLOSED
NF	NON-FUSED
NO or N.O.	NORMALLY OPEN OR NUMBER
NO.	NUMBER
OD	OUTSIDE DIAMETER
OHE	OVERHEAD ELECTRIC
OL	OVERLOAD
OLX	OVERLOAD CONTROL RELAY
P	POLE
PB	PULL BOX OR PUSH BUTTON
PC	PHOTOCELL
PCC	PUMP CONTROL CONSOLE
PFCC	POWER FACTOR CORRECTION CAPACITOR
PFR	PHASE FAILURE RELAY
PH	PHASE
PL	PLATE
PLC	PROGRAMMABLE LOGIC CONTROLLER
PoE	POWER OVER ETHERNET
PPR	PHASE PROTECTIVE RELAY
PQM	POWER QUALITY METER
PR.	PAIR OR PAIR CABLE
PT	POTENTIAL TRANSFORMER
PTT	PUSH TO TEST TYPE
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RC	REMOTE CONTROL
RCP	RELAY CONTROL PANEL
REC.	CIRCUIT RECLOSURE
RECP	RECEPTACLES
REQD.	REQUIRED
RTD	RESISTANCE TEMPERATURE DETECTOR
RTU	REMOTE TERMINAL UNIT
SC	SURGE CAPACITOR
SCH	SCHEMATIC
SCTB	SHORT CIRCUIT TERMINAL BLOCK
SEC	SECONDS OR SECONDARY
SHLD. OR SH	SHIELD OR SHIELDED
SHT	SHEET
SN OR S/N	SOLID NEUTRAL
SPD	SURGE PROTECTION DEVICES
SSRVS	SOLID-STATE REDUCED VOLTAGE STARTER
SS	STAINLESS STEEL
ST	STARTER
STA.	STATION
STC	SIGNAL TERMINATION CABINET
SV	SOLENOID VALVE
SW	SWITCH
SWGR	SWITCHGEAR
Sz#	MOTOR STARTER WITH SIZE
TC	TERMINATION CABINET OR TRAY CABLE
TEL	TELEPHONE
TO	TIME DELAY ON OPENING
TR.	TRIAD
TS	TEMPERATURE SWITCH
TW	TWISTED
TYP	TYPICAL
UG	UNDERGROUND
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR CABLE
V	VOLTS
VAR.	VARIABLE
VFD	VARIABLE FREQUENCY DRIVE
VFI	VACUUM FAULT INTERRUPTER
VO	VALVE OPERATOR
W	WITH, WIRE OR WATT
WP	WEATHERPROOF
WR	WEATHER RESISTANT
XFMR	TRANSFORMER
XMTR	TRANSMITTER
XP	EXPLOSION PROOF

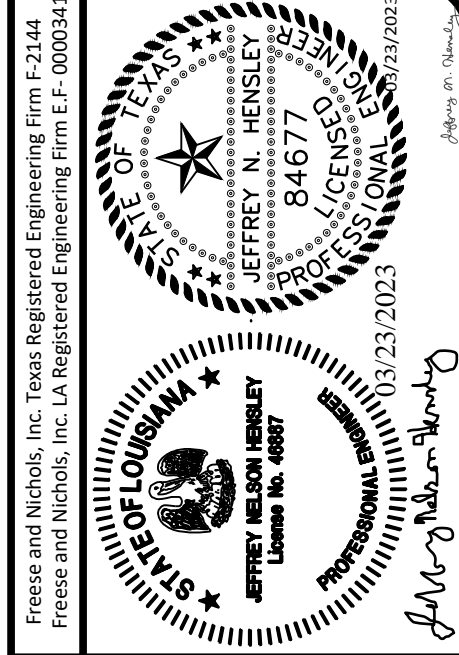
NOTE:
 THIS IS A STANDARD LEGEND. THEREFORE, NOT ALL
 OF THIS INFORMATION MAY BE USED ON THIS
 PROJECT.



PLAN SYMBOL	DESCRIPTION
	LIGHTING FIXTURE "A" - FIXTURE TYPE "b" - SWITCH NUMBER
	EMERGENCY BATTERY PACK LIGHT FIXTURE "A" - FIXTURE TYPE
	CEILING MOUNTED EXIT SIGN "X" - FIXTURE TYPE
	WALL MOUNTED EXIT SIGN ARROW INDICATES DIRECTION OF EGRESS "X" - FIXTURE TYPE
	FIRE ALARM CONTROL PANEL
	MANUAL PULL STATION
	CEILING MOUNTED STROBE
	WALL MOUNTED STROBE
	SMOKE DETECTOR
	HEAT DETECTOR
	HORN
	COMBINATION STROBE/HORN
	CONDUIT, EXPOSED/SURFACE MOUNTED
	CONDUIT OR DUCTBANK, CONCEALED
	CONDUIT, EXPOSED/SURFACE MOUNTED, TURNING UP
	CONDUIT, EXPOSED/SURFACE MOUNTED, TURNING DOWN
	CONDUIT STUBBED OUT AND CAPPED
	OVERHEAD ELECTRIC LINE
	UNDERGROUND ELECTRIC LINE
	OVERHEAD PRIMARY LINE
	UNDERGROUND PRIMARY LINE
	OVERHEAD SECONDARY LINE
	UNDERGROUND SECONDARY LINE
	OVERHEAD COMMUNICATION LINE
	UNDERGROUND COMMUNICATION LINE
	OVERHEAD FIBER OPTIC LINE
	UNDERGROUND FIBER OPTIC LINE
	FLEXIBLE METAL CONDUIT
	HEAT TRACE
	DENOTES A QUANTITY OF TWO (2) 3-INCH CONDUITS EACH CONTAINING THREE NO. 3/0 AWG CONDUCTORS AND ONE NO.2 AWG GROUND CONDUCTOR
	DENOTES A QUANTITY OF TWO INSTRUMENT CABLES. EACH CONSISTS OF TWO NO.16 AWG CONDUCTORS
	THREE 4-INCH CONDUITS
	CABLE TAG FOUR #14 CONTROL OR POWER CONDUCTORS, ONE #14 GROUND CONDUCTOR. ALL CONDUCTORS IN A 3/4" CONDUIT. TWO OF THE FOUR #14 CONTROL OR POWER CONDUCTORS ARE SPARE.
	HOMERUN, CIRCUITS 1 AND 3 RUN TO PANEL LA 2 #12, #12G., 3/4"C. UNLESS NOTED OTHERWISE
	SINGLE POLE SWITCH "b" - INDICATES SWITCH LEG SHALL CONTROL LIGHT FIXTURES WITH "b" - DESIGNATION
	MULTI POLE SWITCH "x" - INDICATES NUMBER OF POLE "c" - INDICATES SWITCH SHALL CONTROL LIGHT FIXTURES WITH "c" DESIGNATION
	MANUAL MOTOR STARTER /DISCONNECT
	3 WAY SWITCH
	4 WAY SWITCH
	DIMMER LIGHTING CONTROL SWITCH
	TIME SWITCH
	DUPLEX RECEPTACLE, 20A, 120V, 2P, 3W *C" - MOUNTED ABOVE COUNTERTOP "GFI" OR "GF" - GROUND FAULT INTERRUPTER TYPE "WP" - WEATHERPROOF
	FLOOR MOUNTED RECEPTACLE
	SIMPLEX RECEPTACLE, GROUNDED TYPE
	QUADPLEX RECEPTACLE

PLAN SYMBOL	DESCRIPTION
	JUNCTION BOX
	PULL BOX
	TERMINAL CABINET
	OCCUPANCY SENSOR
	PHOTOCELL
	PREWIRED
	MANHOLE
	UTILITY METER
	MOTORIZED LOUVER
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 12 CONSTRUCTION UNLESS OTHERWISE NOTED
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4 CONSTRUCTION UNLESS OTHERWISE NOTED
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION UNLESS OTHERWISE NOTED
	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL CONFORM TO N.E.C REQUIREMENTS FOR THE HAZARDOUS AREA CLASSIFICATION SHOWN

ONE-LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
		PANEL
		MOTOR, NUMBER DESIGNATES HORSEPOWER
	-	VOLTMETER (WITH SWITCH IF 3-PHASE)
	-	AMMETER (WITH SWITCH IF 3-PHASE)
	-	METER * WM - WATTMETER WHM - WATTHOUR METER WHDM - WATTHOUR DEMAND METER WHDR - WATTHOUR DEMAND RECORDER PF - POWER FACTOR METER ETM - ELAPSED TIME METER TRANSDUCER AX - CURRENT TRANSDUCER WX - WATT TRANSDUCER
	-	RELAY, NO. AS INDICATED 25 - SYNCHRONISM CHECK RELAY 27 - UNDER VOLTAGE RELAY 38 - BEARING PROTECTIVE DEVICE 40 - LOSS OF EXCITATION RELAY 42 - RUNNING CONTACTOR/PILOT RELAY 46 - REVERSE PHASE/PHASE BALANCE/CURRENT RELAY 47 - PHASE SEQUENCE VOLTAGE RELAY 48 - MACHINE OR TRANSFORMER THERMAL RELAY 50 - INSTANTANEOUS OVERCURRENT RELAY 50G - INSTANTANEOUS GROUND 51 - TIME OVER CURRENT RELAY, GROUNDING RESISTOR TYPE 51N - TIME OVERCURRENT RELAY, RESIDUAL TYPE 51V - TIME OVERCURRENT RELAY WITH VOLTAGE RESTRAINT 59 - OVER VOLTAGE RELAY 60 - NEGATIVE SEQUENCE VOLTAGE RELAY 62 - TIME DELAY RELAY 63 - OVER PRESSURE RELAY 67 - AC DIRECTIONAL OVERCURRENT RELAY 83 - AUTOMATIC SELECTIVE CONTROL OR TRANSFER RELAY 86 - LOCKING-OUT RELAY 87 - DIFFERENTIAL PROTECTIVE RELAY B - SUFFIX INDICATES "BUS" G - SUFFIX INDICATES "GENERATOR" GF - GROUND FAULT IR - INTERPOSING RELAY PFR - PHASE FAILURE, PHASE REVERSAL, UNDERVOLTAGE, OVERVOLTAGE RELAY ST - SHUNT TRIP T - SUFFIX INDICATES "TRANSFORMER" TRP CAP - CAPACITOR TRIP X - SUFFIX INDICATES "AUXILIARY"



FREESSE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freese.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
LEGEND I

NO.	ISSUE	BY	DATE	REVISED	FILE NAME
					EL-ALL-GN-LGND01.dwg
0	VERIFY SCALE				1

ACAD Rev: 24.2
 File Name: N:\ELEC\EL-ALL-GN-LGND02.dwg
 Last Saved: 9/17/2020 8:21 AM Saved By: 03823

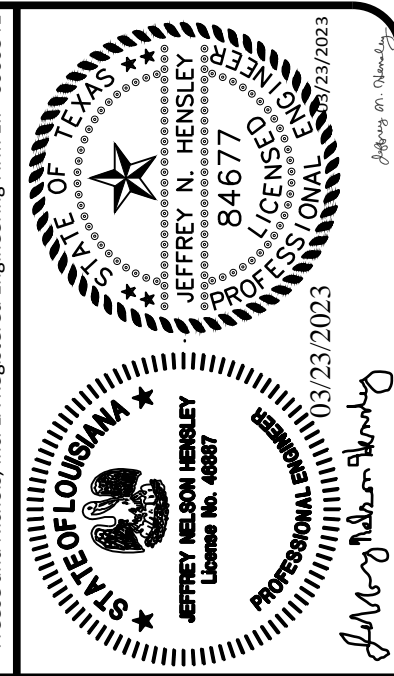
ONE-LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION														
	-	AC INDUSTRIAL CONTROL RELAY COIL, # - NUMBER AS INDICATED														
	-	MOTOR STARTER COIL, # - NUMBER AS INDICATED														
	-	SPECIAL CAPACITOR *SC - SURGE CAPACITOR PF - POWER FACTOR CORRECTION CAPACITOR														
	-	PUSH BUTTON, MOMENTARY CONTACT, SPRING RETURN, NORMALLY CLOSED														
	-	PUSH BUTTON, MOMENTARY CONTACT, SPRING RETURN, NORMALLY OPEN														
	-	EMERGENCY STOP PUSH BUTTON WITH RED MUSHROOM HEAD OPERATOR (MAINTAINED CONTACT)														
	-	OFF/ON SELECTOR SWITCH														
	-	3 POSITION SELECTOR SWITCH, MAINTAINED CONTACT O-OPEN X-CLOSED														
		<table border="1"> <thead> <tr> <th>POSITION</th> <th>TOP CONTACT</th> <th>MIDDLE CONTACT</th> <th>BOTTOM CONTACT</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>X</td> <td>O</td> <td>O</td> </tr> <tr> <td>B</td> <td>O</td> <td>O</td> <td>O</td> </tr> <tr> <td>C</td> <td>O</td> <td>O</td> <td>X</td> </tr> </tbody> </table>	POSITION	TOP CONTACT	MIDDLE CONTACT	BOTTOM CONTACT	A	X	O	O	B	O	O	O	C	O
POSITION	TOP CONTACT	MIDDLE CONTACT	BOTTOM CONTACT													
A	X	O	O													
B	O	O	O													
C	O	O	X													
	-	(A/B/C) HOA - HAND/OFF/AUTO HOR - HAND/OFF/REMOTE LOR - LOCAL/OFF/REMOTE OCS - OPEN/CLOSE/STOP OOA - ON/OFF/AUTO NOTE: 2 POSITION MULTI-CONTACT SWITCH FOLLOWS SAME CONVENTION														
	-	INDICATING LAMP, COLOR INDICATED *R - RED G - GREEN B - BLUE W - WHITE A - AMBER O - ORANGE PTT - PUSH TO TEST														
	-	MEDIUM VOLTAGE DRAWOUT TYPE POWER CIRCUIT BREAKER														
	CB	LOW VOLTAGE CIRCUIT BREAKER, 3 POLE UNLESS OTHERWISE NOTED A - AMP TRIP, P - POLES														
	-	MOTOR CIRCUIT PROTECTOR														
	☑	COMBINATION MOTOR CIRCUIT PROTECTOR AND MAGNETIC MOTOR STARTER, FULL VOLTAGE NON-REVERSING UNLESS OTHERWISE NOTED: *FVR - FULL VOLTAGE REVERSING *FVNR - FULL VOLTAGE, NON REVERSING RVNR - REDUCED VOLTAGE NON-REVERSING 2S1W - TWO SPEED, ONE WINDING 2S2W - TWO SPEED, TWO WINDING Sz# - NEMA SIZE OF STARTER														
	☐	NON-FUSIBLE DISCONNECT SWITCH, 600 VOLT, 3 POLE * AMPERE RATING NOTED														
	☑	FUSIBLE DISCONNECT SWITCH, 600 VOLT, 3 POLE, AMPERE RATING AND FUSE SIZE AS NOTED * AMPERE RATING NOTED * FUSE RATING														
	-	DRAWOUT TYPE EQUIPMENT OR DEVICE														
	-	MEDIUM VOLTAGE CABLE TERMINATION														
	-	MEDIUM VOLTAGE AIR INTERRUPTER SWITCH														
	-	MEDIUM VOLTAGE FUSED AIR INTERRUPTER SWITCH														
	-	MEDIUM VOLTAGE FUSED MOTOR CONTROLLER FUSED CONTACTOR DRAWOUT TYPE														
	-	VACUUM CONTACTOR														
	-	SPEED POTENTIOMETER														

ONE-LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
	-	TIMING RELAY RANGE AS NOTED, SET POINT AS NOTED #-NUMBER AS INDICATED TDD-TIME DELAY AFTER DE-ENERGIZATION-OFF DELAY TDE-TIME DELAY AFTER ENERGIZATION-ON DELAY
	-	NOTC-NORMALLY OPEN, TIMED CLOSING WHEN ENERGIZED NCTO-NORMALLY CLOSED, TIMED OPENING WHEN ENERGIZED NOTO-NORMALLY OPEN, TIMED OPENING WHEN DE-ENERGIZED NCTC-NORMALLY CLOSED, TIMED CLOSING WHEN DE-ENERGIZED
	☑	FIELD INSTRUMENT, TAG NO. OR LOOP NO. AS INDICATED * - INDICATES INSTRUMENT TYPE DEFINED ON LOOP SHEETS ## - INDICATES LOOP NO.
	OR ☑	LIQUID LEVEL (FLOAT) SWITCH NORMALLY CLOSED, OPENS ON FALLING LEVEL NORMALLY OPEN, CLOSING ON FALLING LEVEL NORMALLY CLOSED, OPENS ON RISING LEVEL NORMALLY OPEN, CLOSING ON RISING LEVEL
	PS OR ☑	PRESSURE OR VACUUM SWITCH NORMALLY OPEN, CLOSING ON RISING PRESSURE NORMALLY CLOSED, OPENS ON RISING PRESSURE NORMALLY OPEN, CLOSING ON DROPPING PRESSURE NORMALLY CLOSED, OPENS ON DROPPING PRESSURE
	T OR TS OR ☑	TEMPERATURE SWITCH OR THERMOSTAT NORMALLY OPEN, CLOSING ON RISING TEMPERATURE NORMALLY OPEN, CLOSING ON DROPPING TEMPERATURE NORMALLY CLOSED, OPENS ON RISING TEMPERATURE NORMALLY CLOSED, OPENS ON DROPPING TEMPERATURE
	FS OR ☑	FLOW SWITCH (AIR, WATER, ETC.) NORMALLY OPEN, CLOSING ON INCREASED FLOW NORMALLY CLOSED, OPENS ON INCREASED FLOW
	ZS OR ☑	POSITION (LIMIT) SWITCH NORMALLY OPEN NORMALLY OPEN - HELD CLOSED NORMALLY CLOSED NORMALLY CLOSED - HELD OPEN
	TQ OR ☑	TORQUE SWITCH NORMALLY CLOSED, OPENS ON HIGH TORQUE
	T	TRANSFORMER, RATINGS AND CONNECTIONS AS NOTED
	-	CURRENT TRANSFORMER # - QUANTITY A - RATIO
	-	POTENTIAL TRANSFORMER # - QUANTITY
	-	GROUND CURRENT SENSOR TRANSFORMER # - QUANTITY A - RATIO
	-	CONTROL TRANSFORMER
	-	CONTROL POWER TRANSFORMER
	OR G	GENERATOR, RATINGS AND CONNECTIONS AS NOTED
	-	TRANSFER SWITCH ATS - AUTOMATIC TRANSFER SWITCH MTS - MANUAL TRANSFER SWITCH "N" - INDICATES NORMAL SOURCE "S" - INDICATES STANDBY SOURCE #A - INDICATES CONTINUOUS CURRENT RATING
	-	MOTOR OVERLOAD OVERLOAD RELAY HEATER

SYMBOL	DESCRIPTION
	DATA
	TELEPHONE
	COMBINATION TELEPHONE/DATA
	FLOOR MOUNTED DATA OUTLET
	FLOOR MOUNTED TELEPHONE OUTLET
	POKE-THRU DEVICE COMBINATION POWER/DATA/VOICE OUTLET
	FLOOR COMBINATION POWER/DATA/VOICE OUTLET
	CATV
	SECURITY CAMERA *F - FIXED Z - PAN/TILT/ZOOM
	SECURITY DEVICE SEC - SECURITY PANEL MAG - MAGNETIC LOCK CR - CARD READERS DR - REMOTE DOOR RELEASE MD - MOTION DETECTOR SK - SECURITY KEYPAD ES - ELECTRIC STRIKE DS - DOOR SWITCH IC - INTERCOM STATION SB - SECURITY PANIC BUTTON

NOTE:
THIS IS A STANDARD LEGEND. THEREFORE, NOT ALL OF THIS INFORMATION MAY BE USED ON THIS PROJECT.

ONE-LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
	-	CONDUCTORS OR CONDUITS CROSSING PATHS BUT NOT CONNECTED
	-	CONDUCTORS ELECTRICALLY CONNECTED
	-	INDICATES LIMITS OF EQUIPMENT OR WIRING ENCLOSURE
	-	LIGHTNING ARRESTER
	OG	GROUND ROD
	OT	GROUND ROD TEST WELL
	-	FUSE, AMPERE RATING AS NOTED
	-	HEATER
	-	INDUCTOR
	-	CONTACT, NORMALLY OPEN (NO)
	-	CONTACT, NORMALLY CLOSED (NC)
	-	OVERLOAD CONTACT
	-	KIRK KEY INTERLOCK
	-	MECHANICAL INTERLOCK
	-	TERMINAL
	-	NODE
	-	TERMINAL OR TEST BLOCK
	-	PUSH BUTTON STATION, REFER TO ELECTRICAL SCHEMATIC FOR NUMBER OF DEVICES.
	-	LOCATED AT SCADA RTU
	-	LOCATED REMOTE
	-	LOCATED AT MOTOR
	-	FUSED SWITCH/FUSED CUTOUT
	M	UTILITY METER



FREESSE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freese.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
LEGEND II

NO. ISSUE	BY	DATE	REVISED	CHECKED	TWZ
FILE NAME	EL-ALL-GN-LGND02.dwg				
VERIFY SCALE	1" = 1" (Bar is one inch on original drawing; if not one inch on this sheet, adjust scale.)				
SHEET	E-2				
SEQ.					

ACAD Rev: 24.2
 Filepath: N:\ELEC\EL-SRA-PL-DEM001.dwg
 Last Saved: 8/6/2023 11:06 AM Saved By: 03769



1
-

SITE PLAN - DEMOLITION

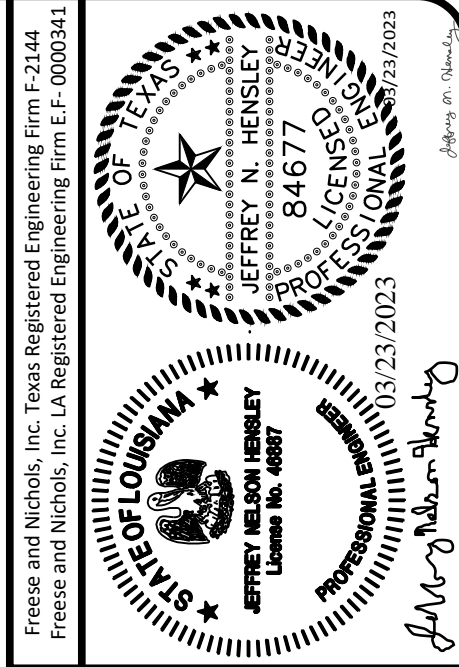
NOT TO SCALE

GENERAL NOTES:

- COORDINATE WITH CLECO POWER, LLC FOR DEMOLITION OF EXISTING ELECTRICAL SERVICE. CONTACT DREW MARONEY, PH: 318-308-9150.

NOTES BY SYMBOL "⬡"

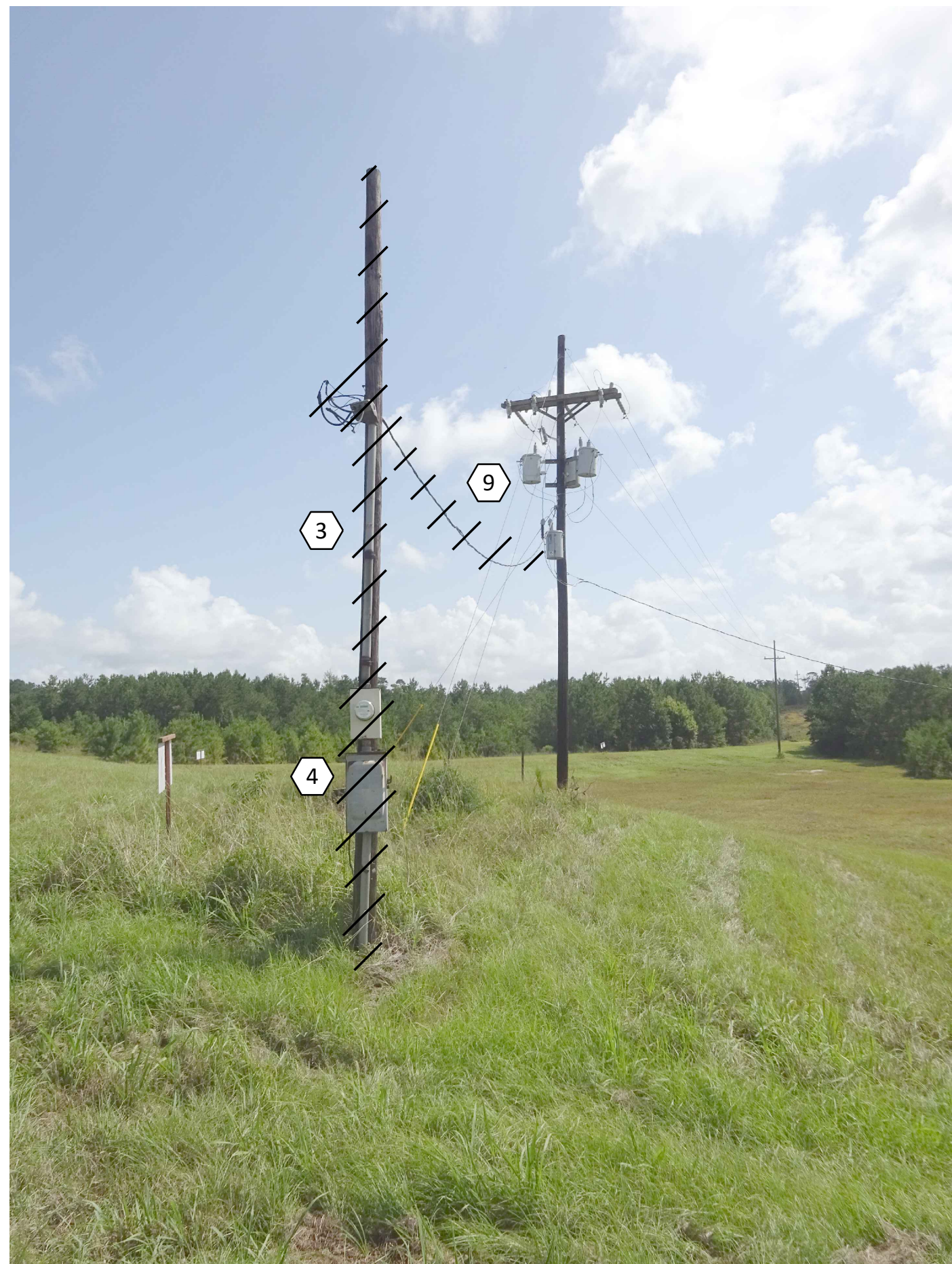
- DEMOLISH POWER POLE, METER BASE AND SERVICE ENTRANCE DISCONNECT SWITCH. RE: 1/E-4.
- DEMOLISH EXISTING UNDERGROUND CABLES TO EMERGENCY CIRCUIT BREAKER TAP BOX. ABANDON UNDERGROUND CONDUIT IN PLACE.
- DEMOLISH EXPOSED CONDUIT UNDER BRIDGE ROUTED TO EMERGENCY CIRCUIT BREAKER TAP BOX.
- DEMOLISH EMERGENCY CIRCUIT BREAKER TAP BOX. RE: 2/E-4.
- CANOPY WITH GATE 1 CONTROLS. RE: 3/E-4 & 1/E-5.
- CANOPY WITH GATE 2 CONTROLS. RE: 3/E-4 & 1/E-5.
- CANOPY WITH GATE 3 CONTROLS. RE: 3/E-4 & 1/E-5.
- CANOPY WITH GATE 4 CONTROLS. RE: 3/E-4 & 1/E-5.
- CANOPY WITH GATE 5 CONTROLS. RE: 3/E-4 & 1/E-5.
- CANOPY WITH GATE 6 CONTROLS. RE: 3/E-4 & 1/E-5.
- CANOPY WITH GATE 7 CONTROLS. RE: 3/E-4 & 1/E-5.
- CANOPY WITH GATE 8 CONTROLS. RE: 3/E-4 & 1/E-5.
- CANOPY WITH GATE 9 CONTROLS. RE: 3/E-4 & 1/E-5.
- CANOPY WITH GATE 10 CONTROLS. RE: 3/E-4 & 1/E-5.
- CANOPY WITH GATE 11 CONTROLS. RE: 3/E-4 & 1/E-5.
- CANOPY. RE: 1/E-5.
- CLECO POWER'S BANK OF POLE MOUNTED TRANSFORMERS.
- SPILLWAY CONTROL ROOM RE: 4/E-4 AND 2/E-5.



FREESE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freese.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
SITE PLAN - DEMOLITION

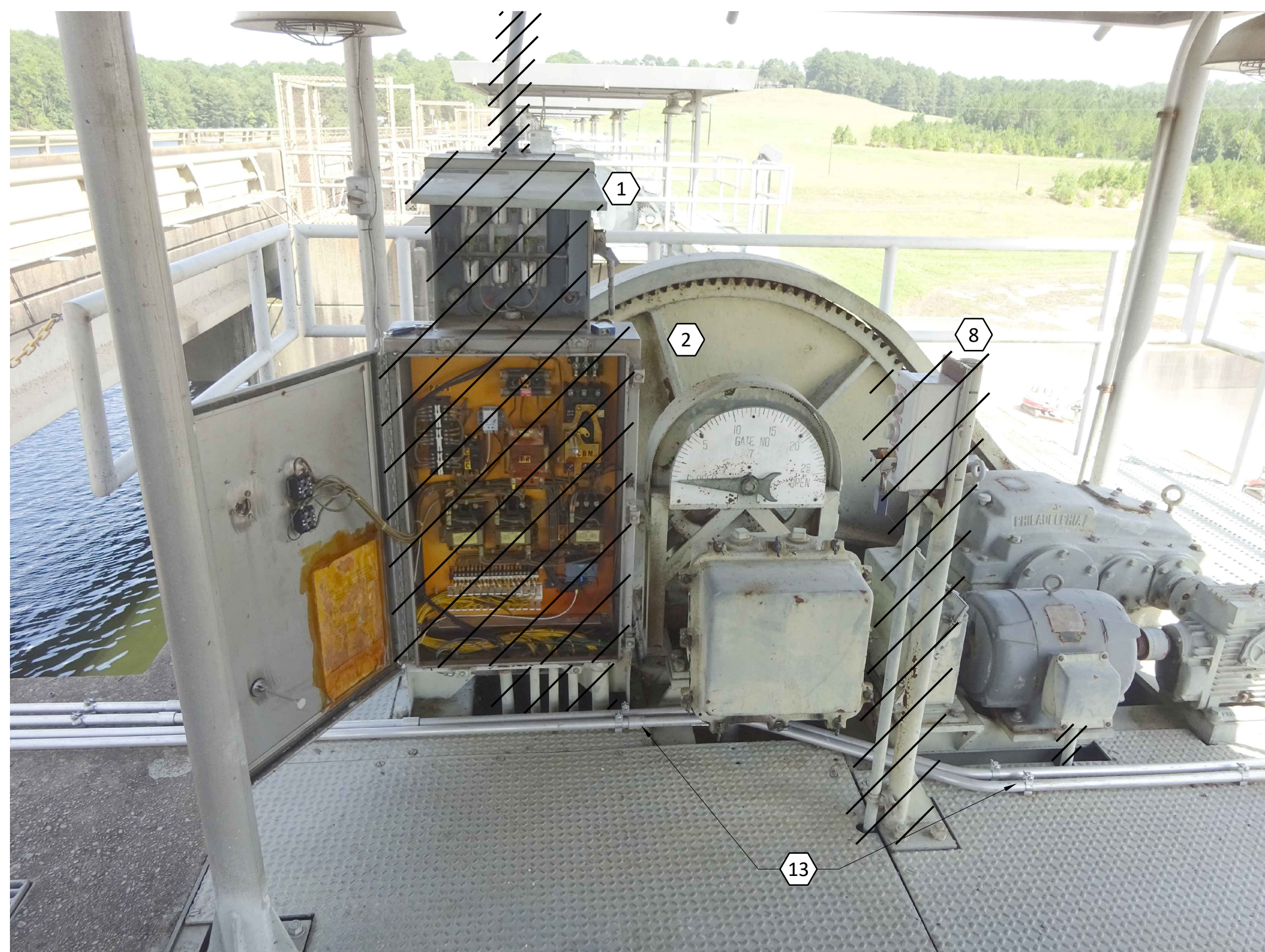
NO.	ISSUE	BY	DATE	REV. NO.	DATE	DESIGNED	DRAWN	REVISION	CHECKED	FILE NAME
						JNH	JTR		TWZ	EL-SRA-PL-DEM001.dwg
VERIFY SCALE: 1" = 100' (if not one inch on original drawing, adjust scale.) SHEET: E-3 SEQ.:										



1
INCOMING ELECTRICAL SERVICE DEMOLITION
NOT TO SCALE



2
EMERGENCY CIRCUIT BREAKERS TAP BOX DEMOLITION
NOT TO SCALE



3
GATE CONTROL PANEL DEMOLITION
NOT TO SCALE (TYP. GATES 1 THRU 11)



4
GENERATOR DEMOLITION
NOT TO SCALE



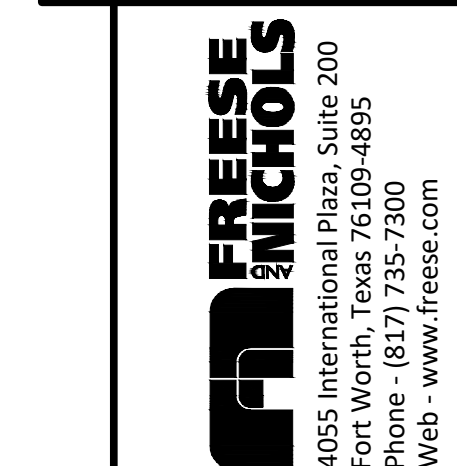
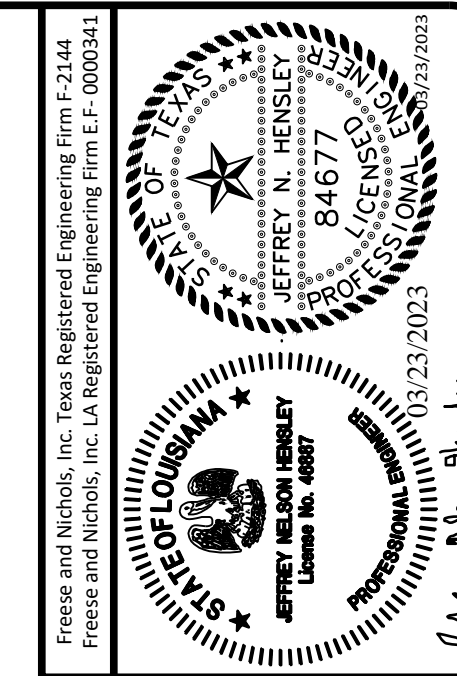
5
GENERATOR DIESEL FUEL TANK DEMOLITION
NOT TO SCALE

GENERAL NOTES:

- CONTRACTOR SHALL COORDINATE WITH CLECO POWER LLC, DREW MARONEY, PH: 318-308-9150 FOR DEMOLITION OF METER BASE AND ALL UPSTREAM CABLE AND CONDUIT ASSOCIATED WITH INCOMING ELECTRICAL SERVICE.
- DEMOLISH ALL CABLE AND CONDUIT BACK TO THE SOURCE UNLESS NOTED OTHERWISE.
- THE SABINE RIVER AUTHORITY (SRA) SHALL HAVE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED. COORDINATE EQUIPMENT TO BE RETAINED WITH SRA. CONTRACTOR SHALL DELIVER TO LOCATION IDENTIFIED BY SRA WITHIN A 2 MILE RADIUS OF THE DAM.
- ALL DEMOLISHED EQUIPMENT AND MATERIALS SHALL BE PROPERLY DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.
- CONTRACTOR SHALL TEMPORARILY REMOVE HANDRAILS, DOORS, AND OTHER EQUIPMENT AS REQUIRED FOR THE DEMOLITION OF THE GENERATOR, FUEL TANK AND ASSOCIATED EQUIPMENT. RESTORE TO ORIGINAL CONDITION ONCE ALL WORK HAS BEEN COMPLETED.
- DEMOLITION ASSOCIATED WITH THIS PROJECT IS SHOWN HATCHED.

NOTES BY SYMBOL "□"

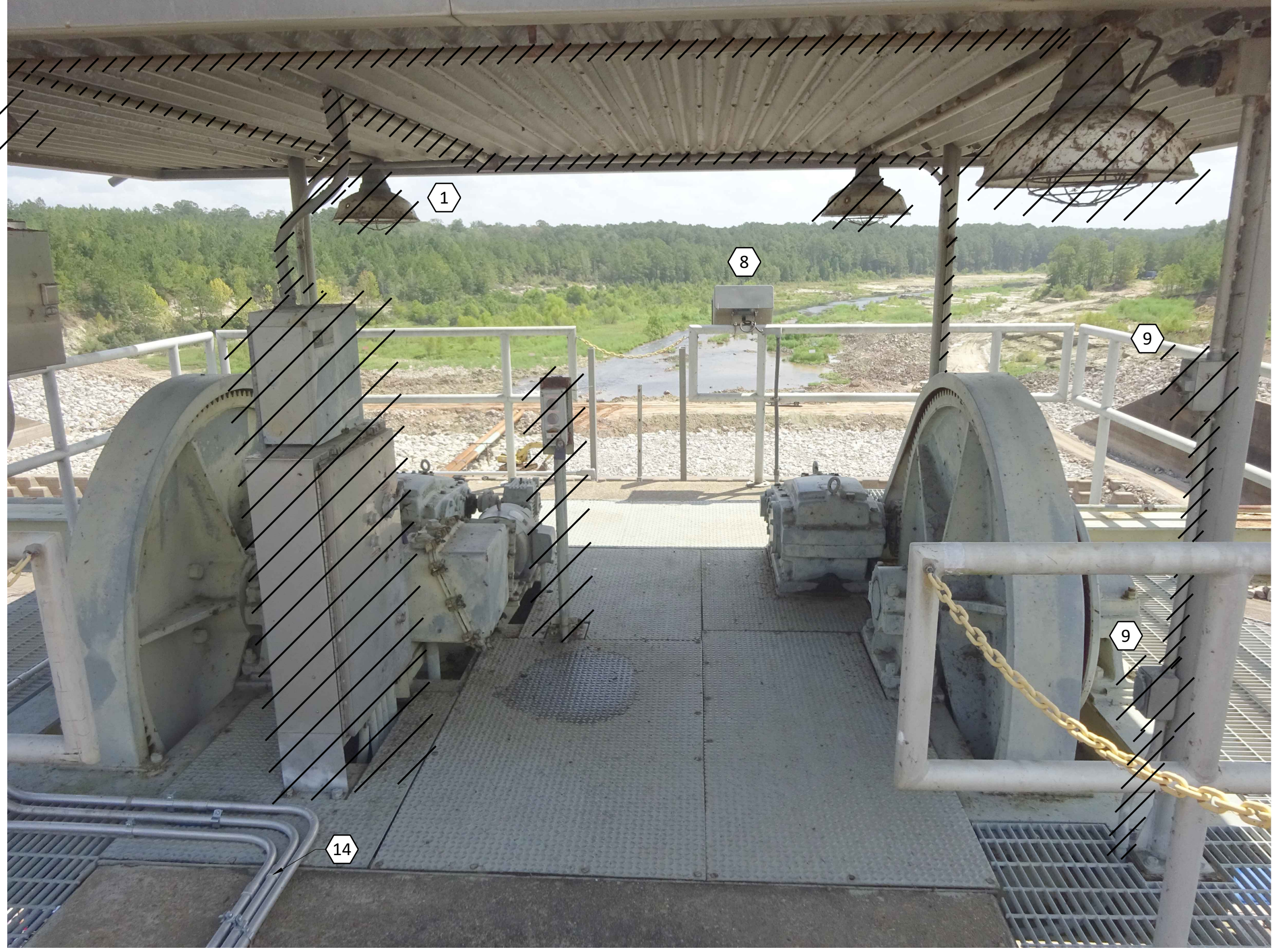
- DEMOLISH TRANSFER SWITCH AT GATES - 11 LOCATIONS.
- DEMOLISH CONTROL PANEL - 11 LOCATIONS.
- DEMOLISH POWER POLE.
- DEMOLISH METER BASE AND SERVICE ENTRANCE DISCONNECT AND ASSOCIATED CABLE AND ABOVE GROUND CONDUIT. ABANDON IN PLACE UNDERGROUND CONDUIT.
- DEMOLISH TAP BOX.
- DEMOLISH EMERGENCY GENERATOR FUEL TANK.
- DEMOLISH EMERGENCY GENERATOR.
- DEMOLISH LOCAL CONTROL STATION AND EXISTING SUPPORT.
- DEMOLISH OVERHEAD CONDUCTORS.
- DEMOLISH GENERATOR EXHAUST PIPE.
- DEMOLISH INSTRUMENTATION CABINET.
- CONDUIT SHALL REMAIN AND BE REUSED.
- CONDUIT AND CABLE TO REMAIN.
- DEMOLISH CIRCUIT BREAKER.



SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
ELECTRICAL
DEMOLITION DETAILS I

NO.	ISSUE	BY	DATE	REV. NO.	DATE	DESIGNED	DRAWN	REVISION	CHECKED	FILE NAME
						JNH	JTR		TWZ	EL-ALL-PH-DEMO01.dwg
VERIFY SCALE 1 Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.										
SHEET										E-4
SEQ.										

ACAD Plot: 24.2
 File Name: N:\ELEC\EL-ALL-PH-DEMO02.dwg
 Last Saved: 3/21/2023 9:45 AM. Saved By: 03823



1 CANOPY DEMOLITION
 NOT TO SCALE (TYP. GATES 1 THRU 11)



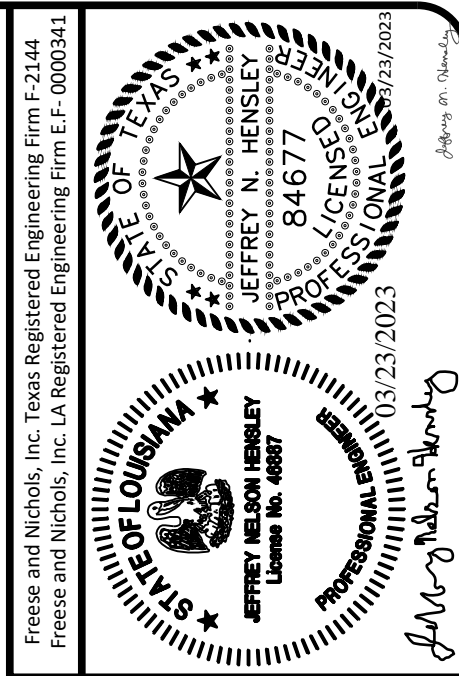
2 CONTROL ROOM DEMOLITION
 NOT TO SCALE

GENERAL NOTES:

1. THE SABINE RIVER AUTHORITY (SRA) SHALL HAVE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED. COORDINATE EQUIPMENT TO BE RETAINED WITH SRA. CONTRACTOR SHALL DELIVER TO LOCATION IDENTIFIED BY SRA WITHIN A 2 MILE RADIUS OF THE DAM.
2. ALL DEMOLISHED EQUIPMENT AND MATERIALS SHALL BE PROPERLY DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.
3. DEMOLISH CABLE AND CONDUIT BACK TO THE SOURCE UNLESS NOTED OTHERWISE.
4. DEMOLITION ASSOCIATED WITH THIS PROJECT IS SHOWN HATCHED.

NOTES BY SYMBOL "□"

1. DEMOLISH EXISTING CANOPY LIGHT FIXTURES AND ALL ASSOCIATED CABLE AND CONDUIT - TYP 12 CANOPY LOCATIONS (4 FIXTURES AT EACH LOCATION). EXCEPTION: CANOPY ASSOCIATED WITH GATE 1 CONTROLS HAS FLUORESCENT FIXTURES THAT SHALL BE DEMOLISHED.
2. DEMOLISH 100A/3P FUSED DISCONNECT SWITCH.
3. DEMOLISH GENERATOR CONTROL PANEL.
4. DEMOLISH 480V PANEL.
5. DEMOLISH 75KVA XFMR.
6. DEMOLISH 208Y/120V PANEL.
7. DEMOLISH DISCONNECT SWITCH/STARTER
8. LIGHT TO REMAIN. TYP. 12 LOCATIONS.
9. DEMOLISH LIGHT SWITCH AND RECEPTACLE.
10. DEMOLISH AUTOMATIC TRANSFER SWITCH.
11. DEMOLISH RELIEF WELLS LEVEL CONTROL PANEL AND ASSOCIATED WIRE AND CABLE AND ELECTRODES.
12. DEMOLISH RELIEF WELL PUMPS STARTER PANELS.
13. ELECTRICAL WALL CHASE COVER.
14. CONDUIT/CABLE TO REMAIN.



FREESE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freese.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
DEMOLITION DETAILS II

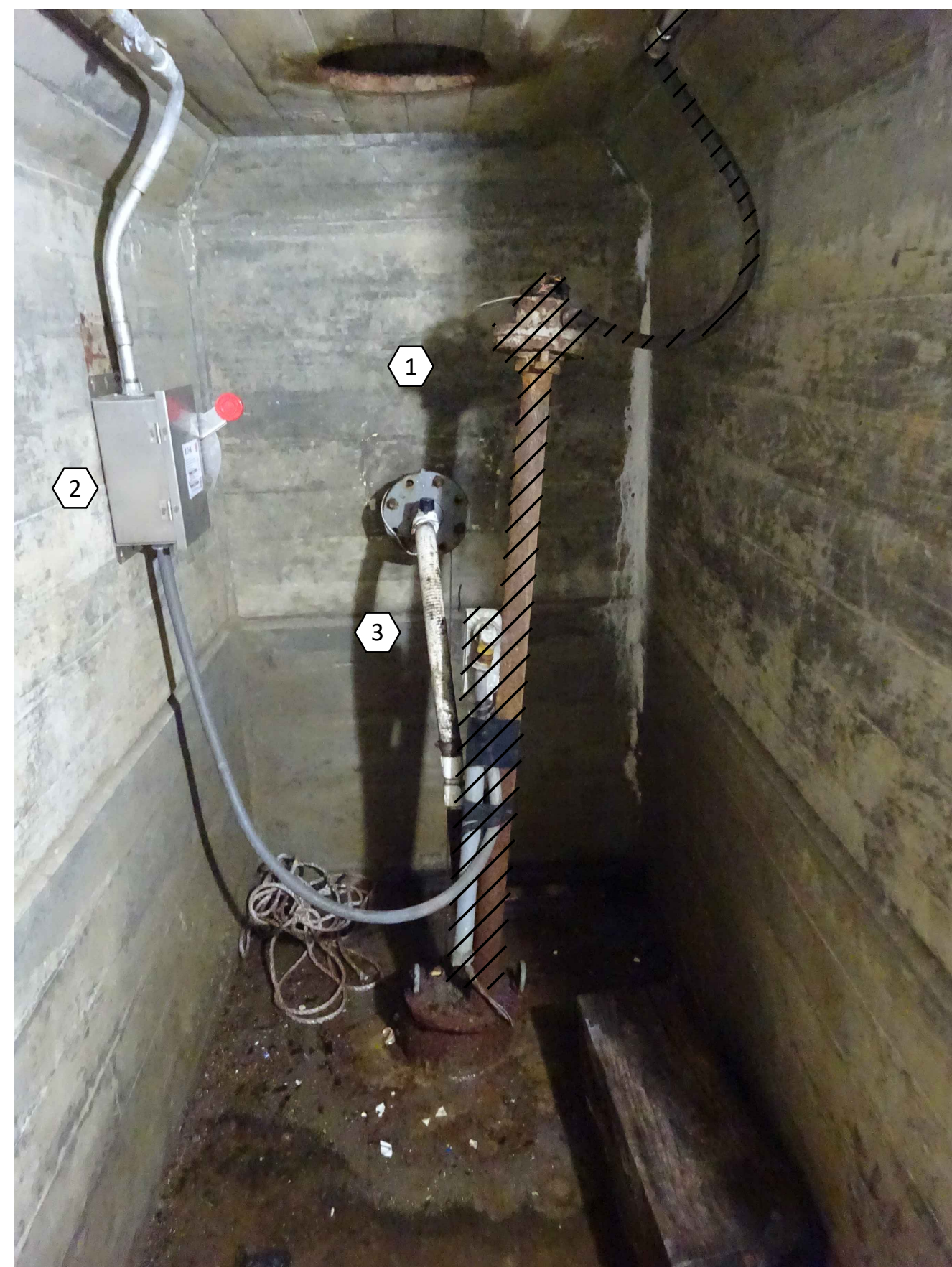
NO.	ISSUE	BY	DATE	REV. NO.	DATE	DESIGNED	DRAWN	REVISION	CHECKED	FILE NAME
						JNH	JTR		TWZ	EL-ALL-PH-DEMO02.dwg
VERIFY SCALE 1 Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.										
SHEET										
E-5										
SEQ.										



1 RELIEF WELL NO.4 DEMOLITION
NOT TO SCALE



2 GATE 1 BEACON DEMOLITION
NOT TO SCALE



3 RELIEF WELL NO.10 DEMOLITION
NOT TO SCALE



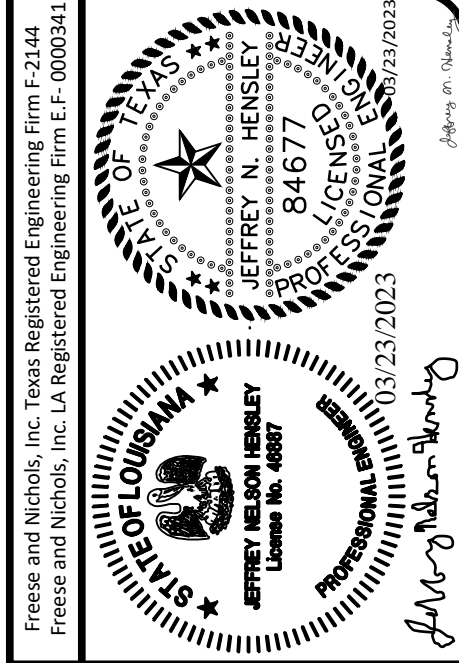
4 GATE 12 BEACON DEMOLITION
NOT TO SCALE

GENERAL NOTES:

1. DEMOLISH ALL CABLE AND CONDUIT BACK TO THE SOURCE UNLESS NOTED OTHERWISE.
2. THE SABINE RIVER AUTHORITY (SRA) SHALL HAVE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED. COORDINATE EQUIPMENT TO BE RETAINED WITH SRA. CONTRACTOR SHALL DELIVER TO LOCATION IDENTIFIED BY SRA WITHIN A 2 MILE RADIUS OF THE DAM.
3. ALL DEMOLISHED EQUIPMENT AND MATERIALS SHALL BE PROPERLY DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.
4. DEMOLITION ASSOCIATED WITH THIS PROJECT IS SHOWN HATCHED.

NOTES BY SYMBOL "⬡"

1. DEMOLISH PIPE EXTENSION, FLANGES, ELECTRODES AND ASSOCIATED CABLE AND CONDUIT.
2. DISCONNECT SWITCH AND ASSOCIATED CABLING TO PUMP MOTOR TO REMAIN.
3. PUMP DISCHARGE PIPING TO REMAIN.
4. DEMOLISH BEACONS AND ASSOCIATED CABLE AND CONDUIT. FOR THE BEACON DEMOLITION AT GATE 12, DEMOLISH ASSOCIATED TIMER.
5. LIGHT TO REMAIN.

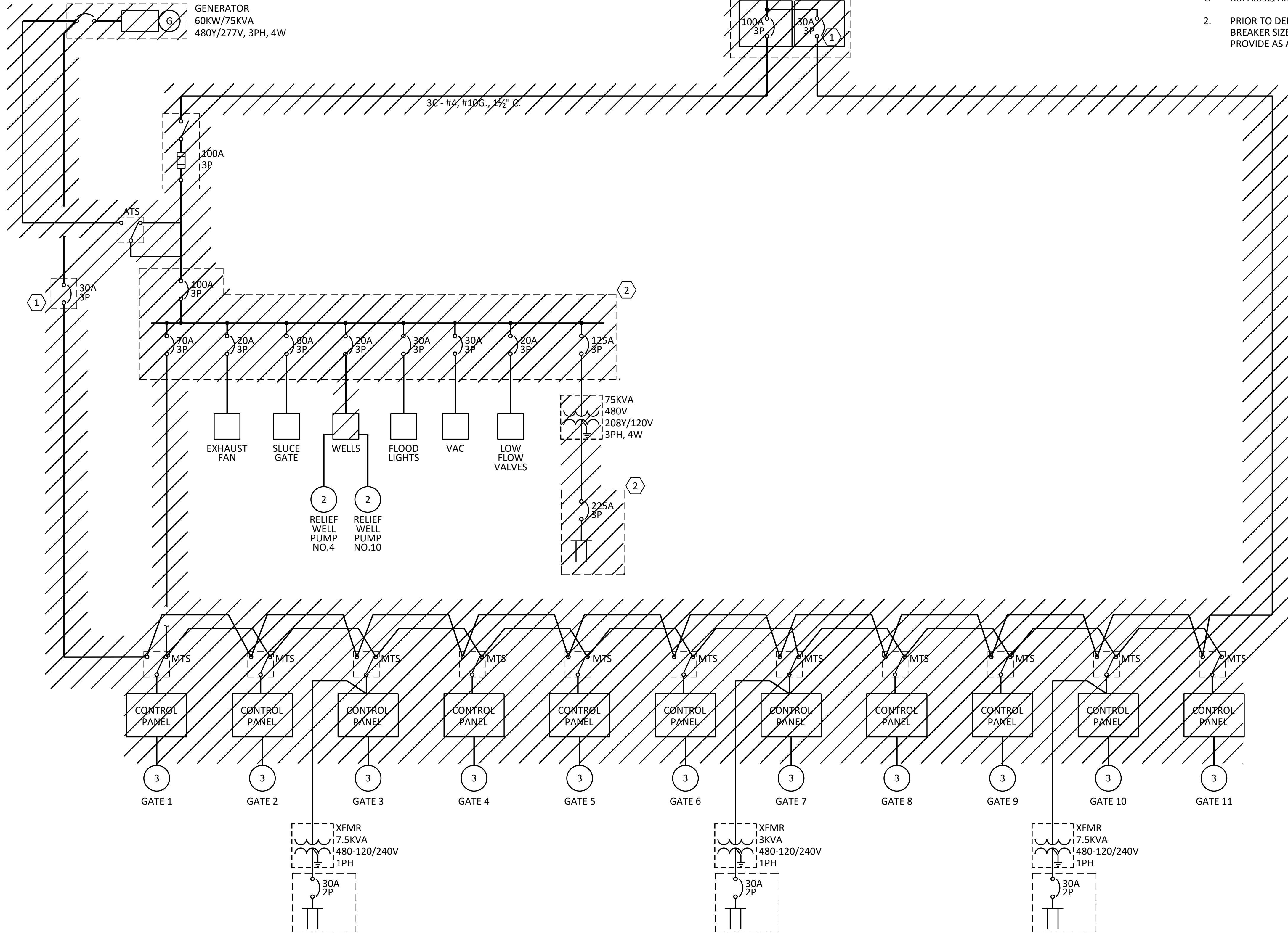


SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
ELECTRICAL
DEMOLITION DETAILS III

NO.	ISSUE	BY	DATE	REV. NO.	DATE	DESIGNED	DRAWN	REVISION	CHECKED	FILE NAME
				1	MAR 2023	JNH	JTR		TWZ	EL-ALL-PH-DEMO03.dwg
VERIFY SCALE: 1" = 10' (if not one inch on this sheet, adjust scale.)										
SHEET: E-6										
SEQ.										

480Y/277V INCOMING SERVICE FROM CLECO
480V, 3PH, 4W

GENERATOR
60KW/75KVA
480Y/277V, 3PH, 4W

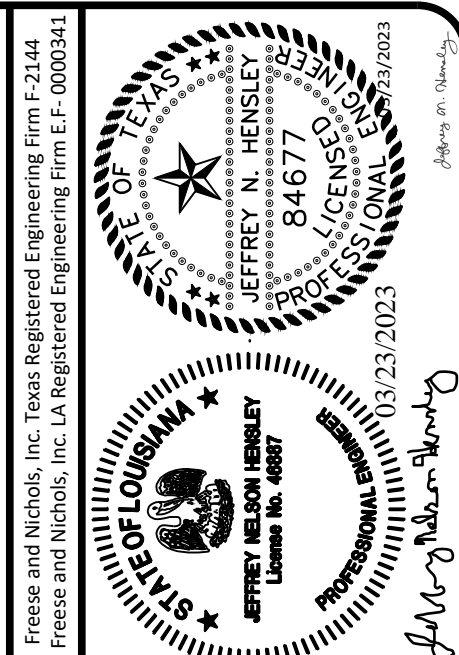


GENERAL NOTES:

1. DEMOLITION ASSOCIATED WITH THIS PROJECT IS SHOWN HATCHED.
2. CONSTRUCTION INSTALLATION SHALL BE DONE IN MULTIPLE PHASES AND SHALL BE COORDINATED WITH THE DEMOLITION PHASING.
3. THE SABINE RIVER AUTHORITY (SRA) SHALL HAVE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED. COORDINATE EQUIPMENT TO BE RETAINED WITH SRA. CONTRACTOR SHALL DELIVER TO LOCATION IDENTIFIED BY SRA WITHIN A 2 MILE RADIUS OF THE DAM.
4. THE CONTRACTOR SHALL REMOVE ALL UNUSED/ABANDONED CONDUIT AND ALL UNUSED/ABANDONED SUPPORT SYSTEMS.

NOTES BY SYMBOL "⬡"

1. BREAKERS ARE KIRK-KEY INTERLOCKED.
2. PRIOR TO DEMOLISHING PANELS CONTRACTOR SHALL FIELD VERIFY BREAKER SIZE AND DETERMINE WHAT LOAD EACH BREAKER FEEDS AND PROVIDE AS A FORMAL SUBMITTAL TO THE ENGINEER.



FREESSE & NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Web - www.freese.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
ELECTRICAL
ONE-LINE DIAGRAM - DEMOLITION

NO. ISSUE	BY	DATE	REV. JOB NO.	SRA19480
SHEET			DATE	MAR 2023
SEQ.			DESIGNED	JNH
			DRAWN	JTR
			REVISION	
			CHECKED	TWZ
			FILE NAME	EL-ALL-DG-DEM001.dwg
			VERIFY SCALE	1
			Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.	
			E-7	

ACAD Plot: 24.2
Filename: N:\ELEC\EL-ALL-DG-DEM001.dwg
Last Saved: 2/13/2023 9:00 AM. Saved By: 03823

ACAD Rev: 24.2
 Filepath: N:\ELEC\EL-SRA-PL-SITE.dwg
 Last Saved: 8/6/2023 11:09 AM Saved By: 03769



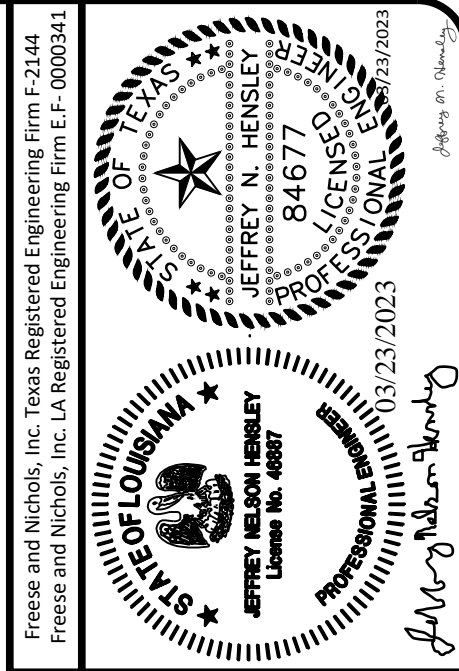
SITE PLAN
 NOT TO SCALE

GENERAL NOTES:

1. COORDINATE WITH CLECO POWER, LLC FOR INSTALLATION OF NEW ELECTRICAL SERVICE. CONTACT DREW MARONEY, PH: 318-308-9150.
2. CAP AND PROVIDE PULL STRING IN ALL SPARE CONDUITS.
3. PROVIDE EXPANSION COUPLINGS FOR ALL CONDUIT ROUTED UNDER BRIDGE.
4. HATCH LOCATED IN ROADWAY ON NORTH END OF SPILLWAY BRIDGE THAT CAN BE USED TO LOWER EQUIPMENT TO SPILLWAY GALLERY IS APPROXIMATELY 2500 LBS.

NOTES BY SYMBOL "⬡"

1. RE: 1/E-9 FOR WORK IN THIS AREA.
2. CIRCUIT BREAKER TAP BOX.
3. CAP SPARE 3" CONDUIT WHERE IT BEGINS TO BE ROUTED UNDER BRIDGE.
4. SPILLWAY CONTROL ROOM RE: 1/E-13.
5. RE: 1/E-10 FOR WORK IN THIS AREA.

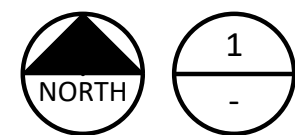


FREESE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freese.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
SITE PLAN

NO.	ISSUE	BY	DATE	REV. JOB NO.	SRA19480
0	VERIFY SCALE			DATE	MAR 2023
1	Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.			DESIGNED	JNH
				DRAWN	JTR
				REVISION	
				CHECKED	TWZ
FILE NAME				EL-SRA-PL-SITE.dwg	
SHEET		F-8			
SEQ.					

ACAD Rev: 24.2
 File Name: N:\ELEC\EL-SRA-PL-ENLG02.dwg
 Last Saved: 8/6/2023 11:07 AM. Saved By: 03769



**ENLARGED SITE PLAN -
 ELECTRICAL EQUIPMENT AREA**

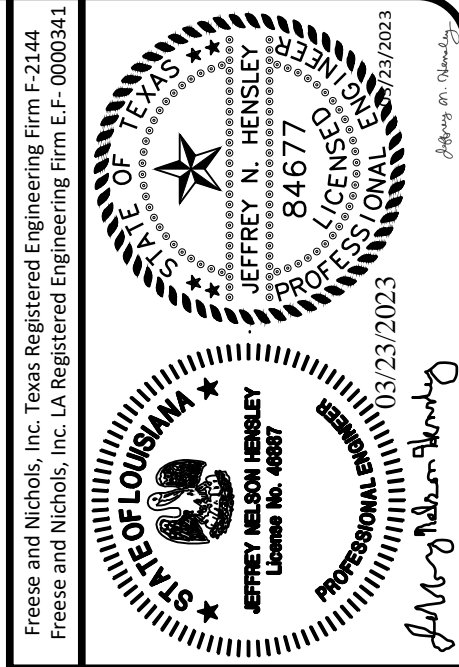
NOT TO SCALE

GENERAL NOTES:

1. COORDINATE WITH CLECO POWER, LLC FOR INSTALLATION OF NEW ELECTRICAL SERVICE. CONTACT DREW MARONEY, PH: 318-308-9150.
2. COORDINATE WITH SABINE RIVER AUTHORITY FOR EXACT LOCATION TO INSTALL FENCED IN ELECTRICAL EQUIPMENT AREA.
3. REFER TO ONE-LINE DIAGRAM, RE: 1/E-15 FOR CABLE AND CONDUIT ROUTED BETWEEN ELECTRICAL EQUIPMENT ON RACK.

NOTES BY SYMBOL "⬡"

1. CLECO POWER LLC BANK OF POLE MOUNTED TRANSFORMERS.
2. TREE HAS BEEN REMOVED.
3. ELECTRICAL EQUIPMENT RACK. RE: 5/E-21.
4. CLECO POWER METER. PROVIDE METER BASE. COORDINATE ALL REQUIREMENTS WITH CLECO.
5. SERVICE ENTRANCE DISCONNECT SWITCH.
6. FUSED MANUAL TRANSFER SWITCH FOR PORTABLE GENERATOR CONNECTION.
7. PROVIDE DIRECT BURIED, 3" PVC SCHEDULE 80 CONDUIT, 24" DEEP. INSTALL PER CLECO POWER'S REQUIREMENTS.
8. OWNER WILL BE RESPONSIBLE FOR GRADING AND LEVELING FENCED IN AREA AND WILL INSTALL FLEX BASE AND FABRIC IN FENCED IN AREA. CONTRACTOR SHALL PERFORM ALL CONCRETE WORK - MOW STRIP, EQUIPMENT RACK PAD, UNDERGROUND DUCT BANKS, ETC. PRIOR TO OWNER INSTALLING FLEX BASE. COORDINATE WITH OWNER FOR TIMING AND ALL WORK IN THIS AREA.
9. FENCE. RE: C-1.
10. RE:1/E-3 FOR LOCATION OF CLECO POWER POLE FOR ROUTING OF UNDERGROUND CONDUIT. FIELD VERIFY EXISTING LOCATION PRIOR TO BEGINNING ANY WORK.

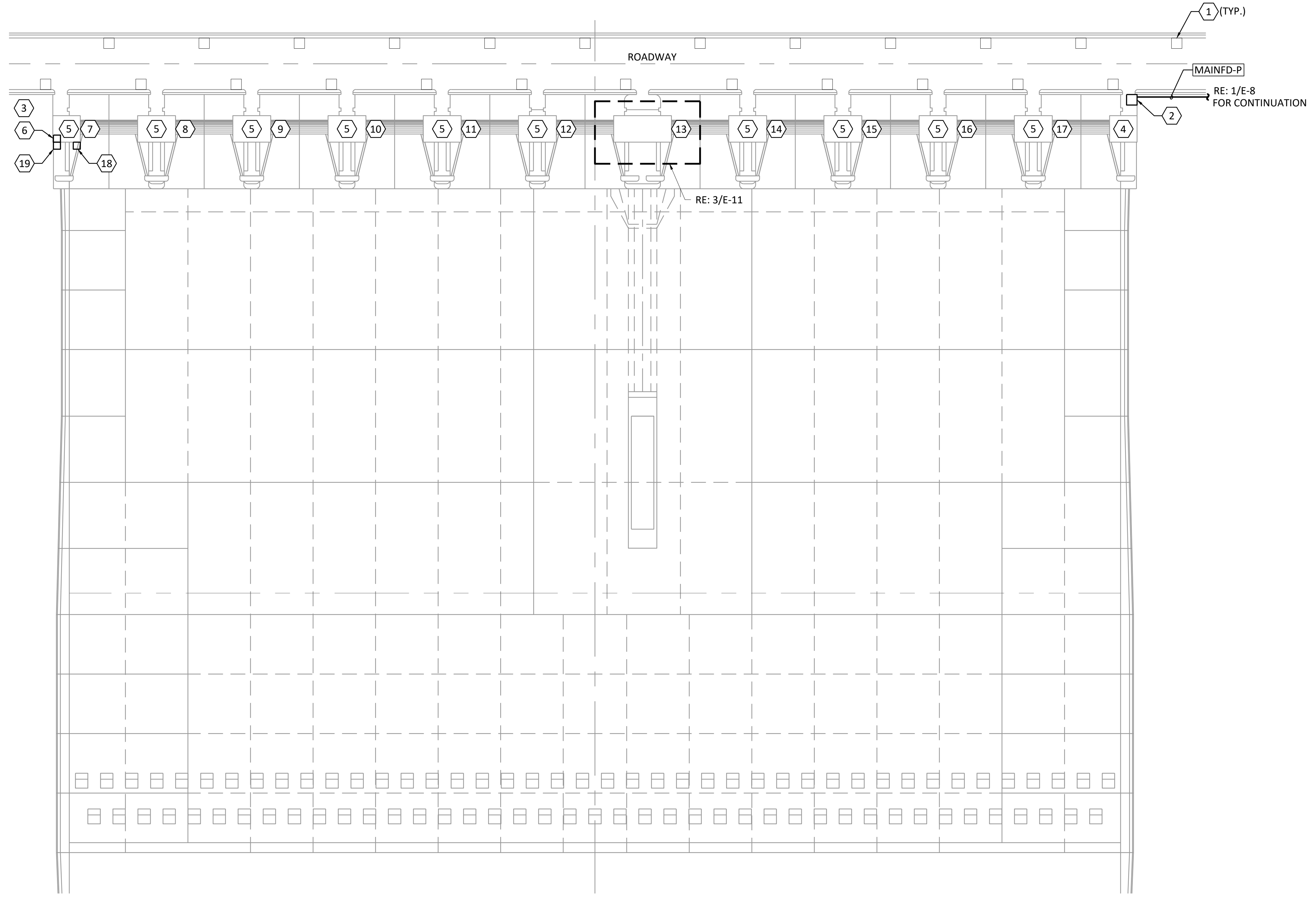


SABINE RIVER AUTHORITY
**TOLEDO BEND PROJECT
 SPILLWAY ELECTRICAL IMPROVEMENTS**
 ELECTRICAL
**ENLARGED SITE PLAN -
 ELECTRICAL EQUIPMENT AREA**

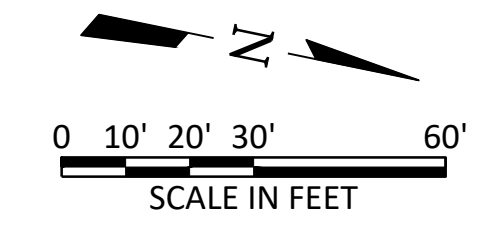
REV. NO.	DATE	BY	DATE	REVISION
SRA19480	MAR 2023	JNH	JTR	TWZ

NO.	ISSUE	FILE NAME
0	VERIFY SCALE	EL-SRA-PL-ENLG02.dwg

ACAD Plot: 24.2
 File Name: N:\ELEC\EL-SRA-PL-SPIL.dwg
 Last Saved: 2/21/2023 9:47 AM. Saved By: 03823



1
 -
SPILLWAY PLAN
 1"=30'

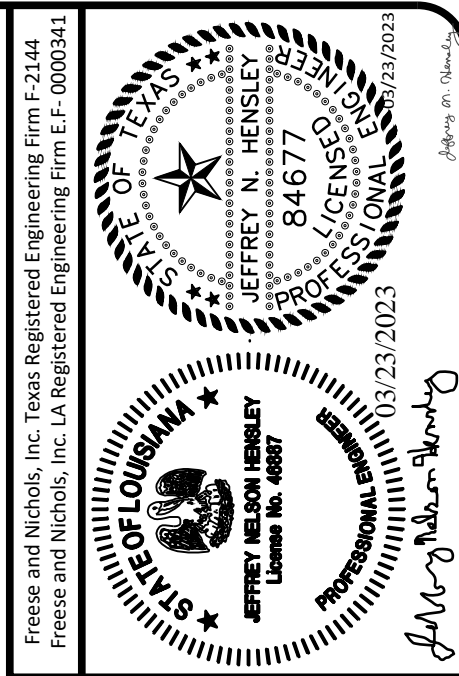


GENERAL NOTES:

- ROUTE NEW CABLE TO NEW FIXTURES VIA NEW CONDUIT. PRIOR TO INSTALLING NEW CABLE, CONTRACTOR SHALL REPLACE EXISTING CONDUIT, JUNCTION BOXES, LB'S, ETC.
- RELIEF WELL NO.4 IS LOCATED BETWEEN GATES 2 AND 3. RELIEF WELL NO.10 IS LOCATED BETWEEN GATES 9 AND 10. WELLS ARE LOCATED AT ELEVATION 123. SEE DRAINAGE GALLERY DETAIL, SHEET S-29 LOCATED IN REFERENCE MATERIALS. RE: E-14 FOR MORE INFORMATION REGARDING WORK ASSOCIATED WITH RELIEF WELLS.

NOTES BY SYMBOL "⬡"

- EXISTING BRIDGE LIGHTS.
- CIRCUIT BREAKER TAP BOX.
- SPILLWAY CONTROL ROOM. RE: 1/E-13.
- CANOPY. RE: 2/E-11.
- RE: 1/E-11 & 2/E-11.
- RELIEF WELLS HIGH LEVEL ALARM BEACON. MOUNT TO EXISTING HANDRAIL. PROVIDE SUPPORTS AS REQUIRED TO MOUNT BEACON ABOVE CANOPY SO BEACON CAN EASILY BE SEEN. COORDINATE WITH OWNER FOR EXACT LOCATION AND MOUNTING HEIGHT. PROVIDE #12 CABLE AND 3/4" CONDUIT AS REQUIRED. RE: 4/E-18.
- CANOPY WITH GATE 1 CONTROLS.
- CANOPY WITH GATE 2 CONTROLS.
- CANOPY WITH GATE 3 CONTROLS.
- CANOPY WITH GATE 4 CONTROLS.
- CANOPY WITH GATE 5 CONTROLS.
- CANOPY WITH GATE 6 CONTROLS.
- CANOPY WITH GATE 7 CONTROLS.
- CANOPY WITH GATE 8 CONTROLS.
- CANOPY WITH GATE 9 CONTROLS.
- CANOPY WITH GATE 10 CONTROLS.
- CANOPY WITH GATE 11 CONTROLS.
- WARNING HORN. MOUNT TO CANOPY SUPPORT. COORDINATE WITH OWNER FOR EXACT LOCATION TO MOUNT. PROVIDE #12 CABLE AND 3/4" CONDUIT AS REQUIRED. RE: 3/E-18.
- GENERATOR RUN BEACON. MOUNT TO EXISTING HANDRAIL. PROVIDE SUPPORTS AS REQUIRED TO MOUNT BEACON ABOVE CANOPY SO BEACON CAN EASILY BE SEEN. COORDINATE WITH OWNER FOR EXACT LOCATION AND MOUNTING HEIGHT. PROVIDE #12 CABLE IN 3/4" CONDUIT AS REQUIRED. RE: 2/E-18.



FREESSE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freese.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
SPILLWAY PLAN

NO.	ISSUE	BY	DATE	REV. JOB NO.	DATE	DESIGNED	DRAWN	REVISION	CHECKED	FILE NAME
				SRA19480	MAR 2023	JNH	JTR		TWZ	EL-SRA-PL-SPIL.dwg

Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.

VERIFY SCALE 1

SHEET **E-10**

SCALE IN FEET

SEQ.



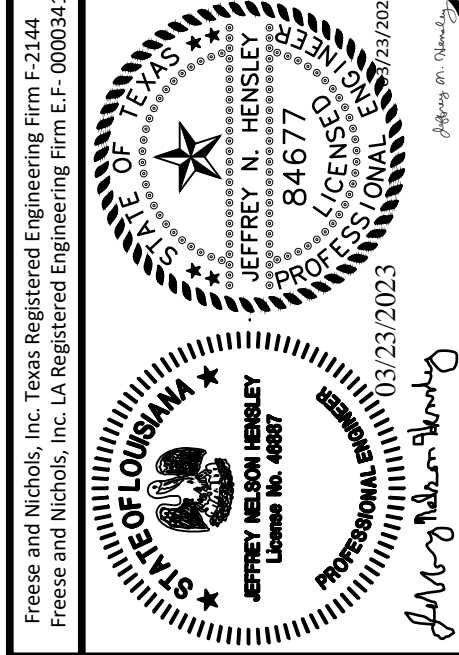
1
-

SPILLWAY BRIDGE NAVIGATION LIGHTS MODIFICATIONS

NOT TO SCALE

NOTES BY SYMBOL "⬡"

1. NAVIGATION LIGHTS (FIXTURE TYPE C) - TYP 10 LOCATIONS. CONTRACTOR SHALL REMOVE EXISTING FIXTURE AND REPLACE WITH NEW. RECONNECT EXISTING CONDUCTORS TO NEW FIXTURE. MODIFY MOUNTING AS REQUIRED. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING WORK. REFER TO FIXTURE SCHEDULE ON SHEET E-17 FOR MORE INFORMATION.



FREESE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freese.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
SPILLWAY BRIDGE MODIFICATIONS

NO.	ISSUE	BY	DATE	REVISED	FILE NAME
					EL-SRA-PL-ENLG.dwg
1					
0	VERIFY SCALE				
Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.					
SHEET E-12					
SEQ.					

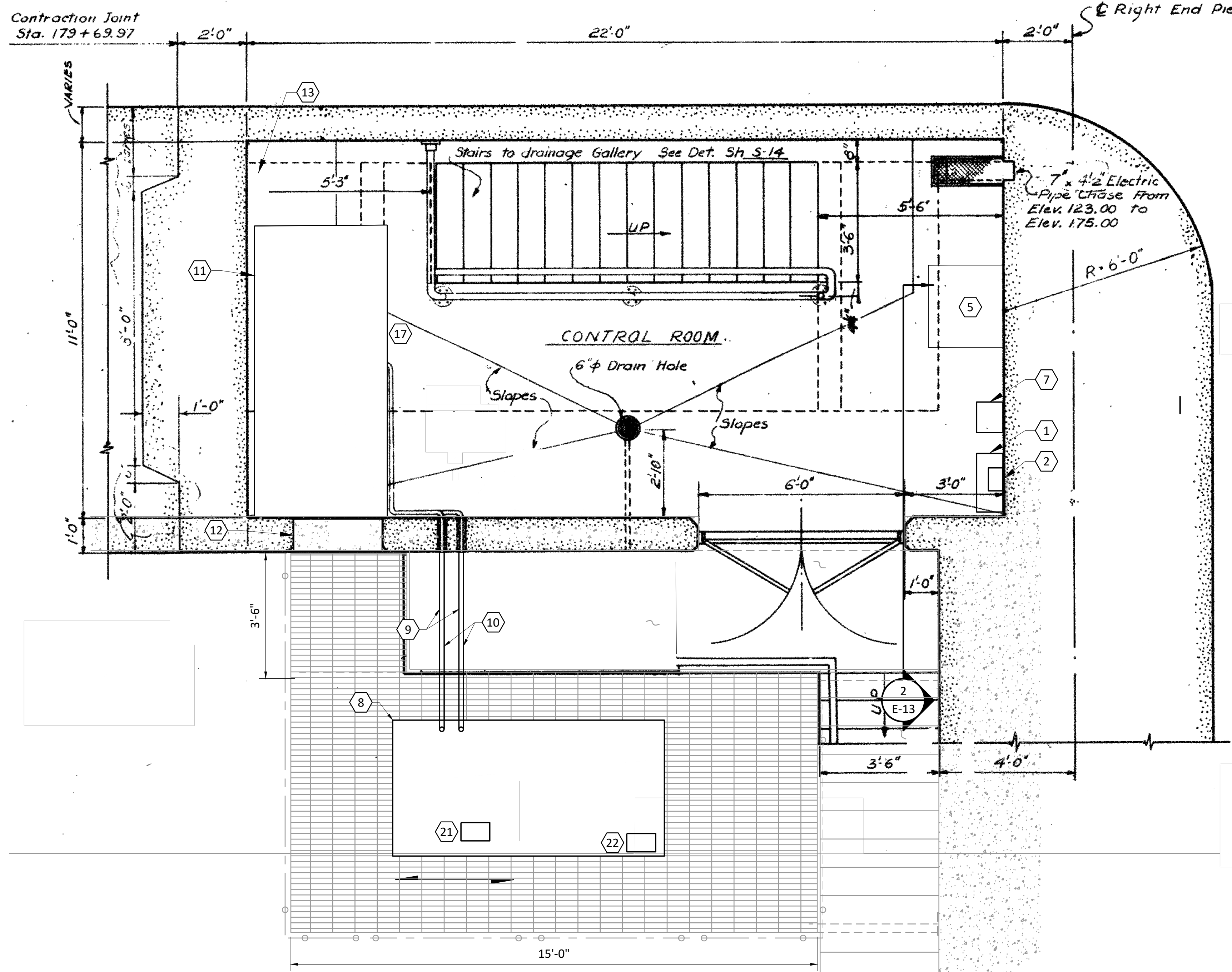
GENERAL NOTES:

- CONTRACTOR SHALL BOND NEW EQUIPMENT-75KVA TRANSFORMER, PANELBOARDS, GENERATOR, ETC. TO EXISTING GROUND GRID AT SPILLWAY AND GROUND IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. ALL GROUNDING SHALL BE SIZED PER THE NATIONAL ELECTRICAL CODE. FIELD VERIFY LOCATION OF EXISTING GROUND GRID AT SPILLWAY.
- CONTRACTOR SHALL TEMPORARILY REMOVE HANDRAILS, DOORS, AND OTHER EQUIPMENT AS REQUIRED FOR THE INSTALLATION OF THE NEW GENERATOR, FUEL TANK AND ASSOCIATED EQUIPMENT. RESTORE TO ORIGINAL CONDITION ONCE ALL WORK HAS BEEN COMPLETED. CONTRACTOR SHALL FIELD VERIFY NEW EQUIPMENT CAN BE INSTALLED IN EXISTING SPACE DURING EQUIPMENT SUBMITTAL REVIEW PHASE PRIOR TO ORDERING EQUIPMENT. FIELD VERIFY ALL DIMENSIONS PRIOR TO EQUIPMENT SUBMITTAL REVIEW STAGE.
- PROPERLY SEAL ALL WALL PENETRATIONS. RE: 4/E-21.
- RE: S-1 FOR FUEL TANK PLATFORM DETAILS.

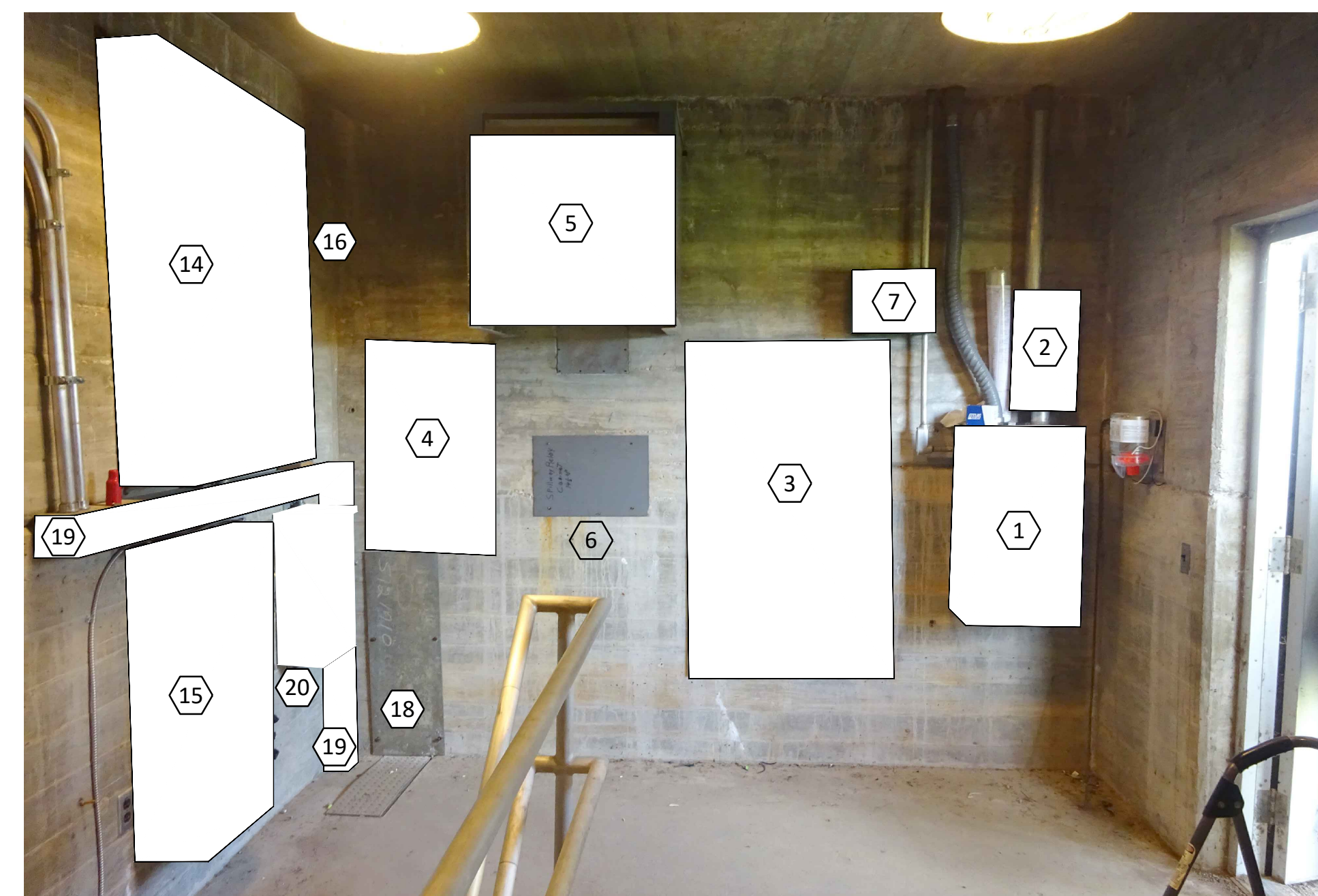
NOTES BY SYMBOL "⬡"

- 200A, 3P AUTOMATIC TRANSFER SWITCH (ATS), NEMA 12 ENCLOSURE. EQUIPMENT IS FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTOR.
- 200A FUSED DISCONNECT SWITCH IN NEMA 12 ENCLOSURE.
- 480V RECESSED PANELBOARD, DP-1.
- 208Y/120V RECESSED PANELBOARD, LP-1.
- 75KVA, 480-208Y/120V TRANSFORMER T1. CONTRACTOR SHALL PROVIDE 316 STAINLESS STEEL UNISTRUT SUPPORTS AS REQUIRED TO PROPERLY SUPPORT TRANSFORMER.
- EXISTING LIGHTING CONTACTOR.
- GENERATOR CONTROL PANEL. EQUIPMENT IS FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. PROVIDE CABLE AND CONDUITS AS REQUIRED FROM GENERATOR.
- DIESEL FUEL TANK. EQUIPMENT IS FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. FUEL TANK IS 96"L X 48"W X 36"H.

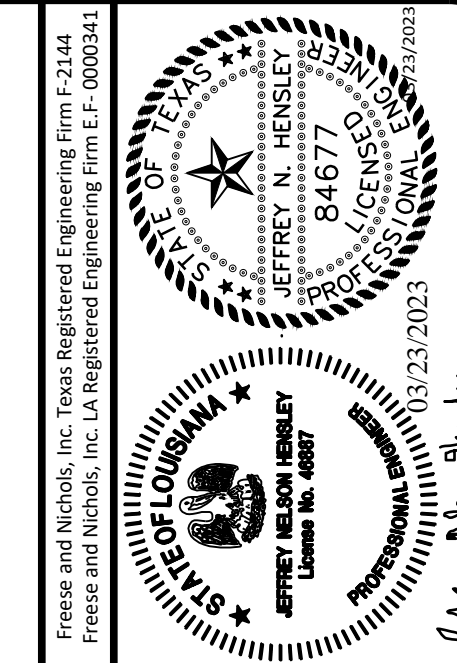
- FUEL LINES (SUPPLY & RETURN). COORDINATE WITH TANK MANUFACTURER FOR EXACT ROUTING. FIELD VERIFY EXACT ROUTING. PROPERLY SUPPORT FUEL LINES. FUEL LINES SHALL BE STEEL PIPE: ASTM A53, SCHEDULE 40 BLACK. FITTINGS: ASTM B61.3, 150 lb. THREADED MALLEABLE IRON, OR A105, FORGED STEEL WELDING TYPE. PIPING SHALL BE PRIMED AND FINISH PAINT WITH INDUSTRIAL ENAMEL. MECHANICAL FUEL PIPING SYSTEM SHALL BE BONDED. COMPLY WITH NFPA 70-250 AND NFPA 30 REQUIREMENTS FOR GROUNDING AND BONDING PIPING SYSTEMS. THE BOND AND GROUND SHALL BE PHYSICALLY APPLIED OR SHALL BE INHERENTLY PRESENT BY THE NATURE OF THE INSTALLATION. ANY ELECTRICALLY ISOLATED SECTION OF METALLIC PIPING OR EQUIPMENT SHALL BE BONDED AND GROUNDED TO PREVENT HAZARDOUS ACCUMULATION OF STATIC ELECTRICITY. MECHANICAL CONTRACTOR SHALL COORDINATE WITH DIVISION 26 CONTRACTOR.
- FUEL LINES. COORDINATE WITH GENERATOR MANUFACTURER FOR ALL REQUIREMENTS AND WHERE TO ROUTE TO ON FUEL TANK. FUEL PIPING SHALL BE ASTM A53/A53M SCHEDULE 40 BLACK STEEL, TYPE E OR S, GRADE B. PROVIDE THREADED FITTINGS AND JOINTS ON PIPE SIZES 2" AND SMALLER. PROVIDE WELDED FITTINGS AND JOINTS ON ALL PIPING LARGER THAN 2".
- 60KW, 480Y/277V GENERATOR. EQUIPMENT IS FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. GENERATOR DIMENSIONS ARE 73.6"L X 30.7"W X 49.6"H. CONTRACTOR SHALL PROVIDE ALL EXHAUST PIPING, EXHAUST THIMBLE, DUCT WORK AND SUPPORTS AS REQUIRED BY GENERATOR MANUFACTURER FOR A COMPLETE AND OPERATIONAL SYSTEM. COORDINATE WITH GENERATOR MANUFACTURER FOR ALL REQUIREMENTS AND FIELD VERIFY ALL DIMENSIONS BASED ON NEW GENERATOR DIMENSIONS AND DATA.
- GENERATOR AIR EXHAUST. MODIFY OPENING IN WALL AS REQUIRED. COORDINATE WITH GENERATOR MANUFACTURER FOR REQUIREMENTS. PROVIDE GALVANIZED DUCTWORK FOR RADIATOR EXHAUST WITH FLEXIBLE DUCT CONNECTION BETWEEN DUCTWORK AND RADIATOR SHROUD. SIZE DUCTWORK BASED ON MANUFACTURER'S RADIATOR AIRFLOW REQUIREMENTS. FOR THE GENERATOR EXHAUST PIPING PROVIDE MINIMUM OF 4" THICK CALCIUM SILICATE INSULATION FOR EXHAUST PIPING. PROVIDE NEW DIRECT DRIVE WALL MOUNTED EXHAUST FAN ON EXISTING OPENING: 800 CFM @ 0.1 ESP, 1/4 HP, 120V/1/60. MODIFY EXISTING OPENING AS REQUIRED FOR NEW FAN. FIELD VERIFY EXISTING CONDITIONS. LOUVER IS LOCATED JUST ABOVE THE GENERATOR EXHAUST PIPING. REFER TO EXISTING SPILLWAY DRAWING S12 LOCATED IN REFERENCE DRAWINGS FOR LOCATION OF OPENING. PROVIDE MANUAL ON/OFF SWITCH FOR FAN. FAN IS TO RUN ALL THE TIME. PROVIDE 2 #12, #12G. IN 3/4" CONDUIT FROM FAN TO PANEL LP-1.
- GENERATOR BATTERY CHARGER. EQUIPMENT IS FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. PROVIDE 120V, 20A CKT. FROM PANELBOARD, LP-1. PROVIDE 2 #10, #10G., 3/4"C. FROM PANEL LP-1 TO BATTERY CHARGER. FIELD VERIFY LOCATION TO INSTALL. PROVIDE CABLES/CONDUIT AS REQUIRED. PROVIDE MOUNTING HARDWARE AS REQUIRED.
- RELIEF WELLS NO.4 & NO.10 LEVEL CONTROL PANEL.
- RELIEF WELL NO.4 & NO.10 PUMPS COMBINATION STARTER PANEL.
- CONTRACTOR SHALL LEAVE ENOUGH SPACE ON WALL TO INSTALL FUTURE LEVEL CONTROL PANEL OF SAME SIZE AS THAT BEING INSTALLED UNDER THIS PROJECT.
- EXISTING GROUND FOR GENERATOR. CONTRACTOR SHALL EXTEND EXISTING BARE COPPER GROUND AS REQUIRED AND BOND TO GENERATOR. CONDUCTOR EXTENSION SHALL BE VIA EXOTHERMIC WELD PROCESS. GROUND CONDUCTOR SIZE SHALL MATCH THAT OF EXISTING AND BE #4//0 MINIMUM. FIELD VERIFY EXISTING LOCATION.
- EXISTING ELECTRICAL CHASE.
- NEMA 12 WIREWAY. SIZE AS REQUIRED PER THE NATIONAL ELECTRICAL CODE.
- CONTRACTOR SHALL LEAVE ENOUGH SPACE ON WALL ADJACENT TO STARTER PANEL TO INSTALL STARTER PANEL ASSOCIATED WITH FUTURE RELIEF WELL PUMPS.
- FUEL POLISHING SYSTEM CONTROL PANEL. PROVIDED WITH THE TANK TO BE INSTALLED BY THE CONTRACTOR. FIELD VERIFY LOCATION TO INSTALL. PROVIDE 2 #12, #12G., IN 3/4"C. FROM CONTROL PANEL TO PANELBOARD LP-1.
- FUEL ALARM PANEL. PROVIDED WITH THE TANK. PROVIDE 2 #12, #12G. IN 3/4"C. FROM PANEL TO PANELBOARD LP-1.



1 CONTROL ROOM FLOOR PLAN
NOT TO SCALE



2 CONTROL ROOM WALL ELEVATION
NOT TO SCALE



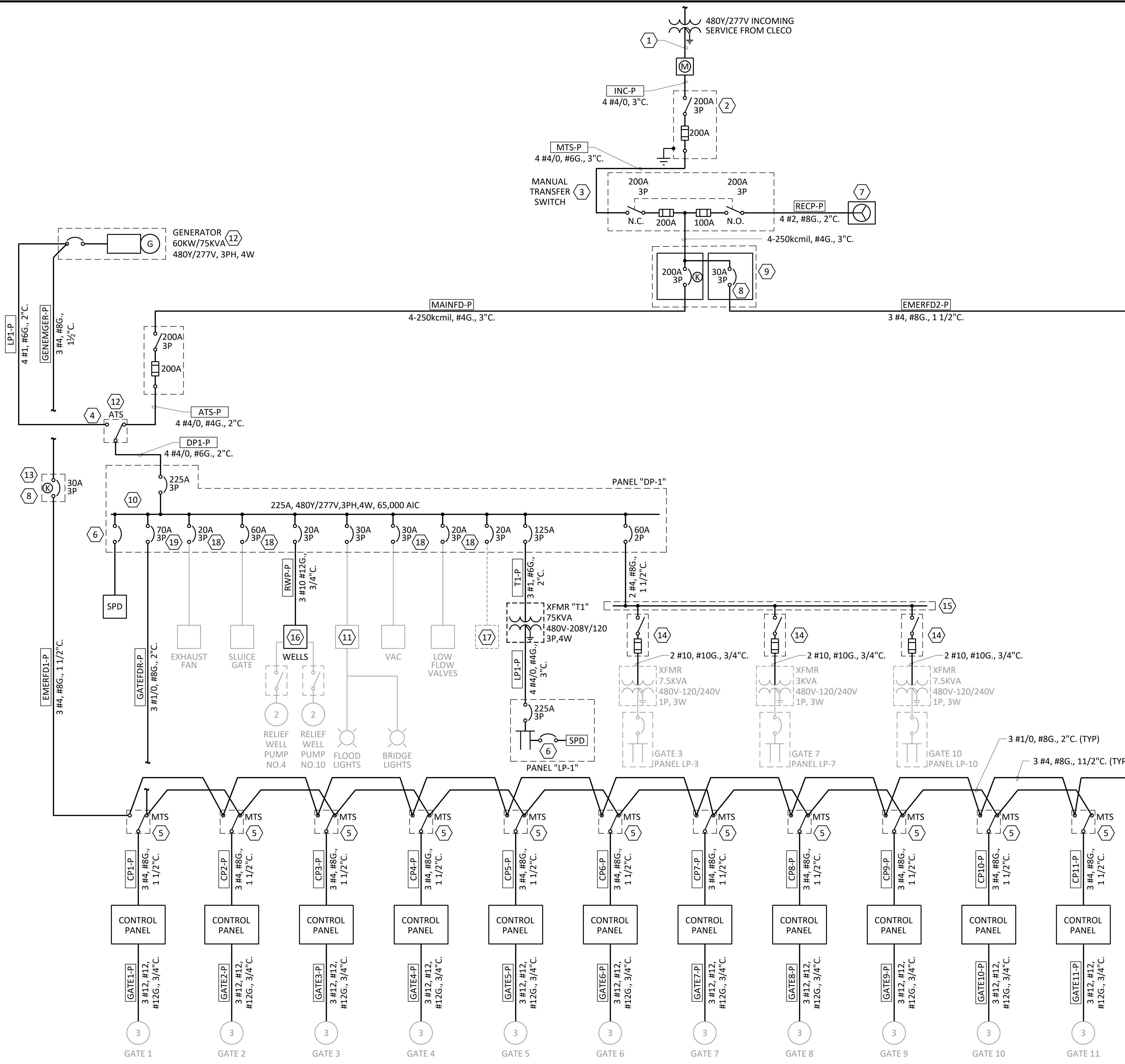
FREESSE & NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Web - www.freesse.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
ELECTRICAL
CONTROL ROOM FLOOR PLAN

NO.	ISSUE	BY	DATE	REV. NO.	DESCRIPTION
0	VERIFY SCALE				Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.
1					
2					

FILE NAME: EL-CTR-PL-ROOM.dwg
SHEET: E-13
SEQ.

ACAD Ref: 24.2
 File Name: N:\ELEC\EL-ALL-DG-ONEL.dwg
 Last Saved: 3/22/2023 9:26 AM. Saved By: 04169



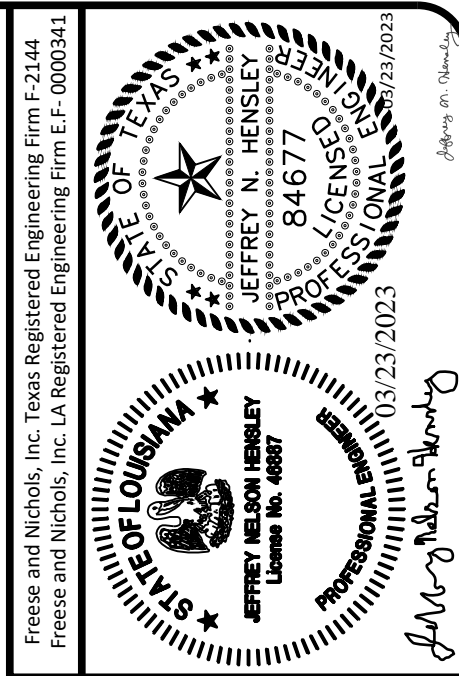
GENERAL NOTES:

- EXISTING SHOWN LIGHT. WORK PROVIDED UNDER THIS CONTRACT IS SHOWN DARK.
- COORDINATE ALL ELECTRICAL SERVICE REQUIREMENTS WITH CLECO POWER LLC, DREW MARONEY, PH: 318-308-9150.

NOTES BY SYMBOL "◯"

- CONTRACTOR SHALL PROVIDE 3" CONDUIT, PVC SCHEDULE 40 FROM METER BASE INSTALLED ON ELECTRICAL EQUIPMENT RACK TO CLECO POLE MOUNTED TRANSFORMERS COORDINATE ALL REQUIREMENTS WITH CLECO.
- PROVIDE HEAVY DUTY 200A FUSED DISCONNECT SWITCH WITH 200A FUSES WITH A SERVICE ENTRANCE RATING IN A NEMA 4X, 316 STAINLESS STEEL ENCLOSURE.
- HEAVY DUTY DOUBLE THROW FUSED MANUAL TRANSFER SWITCH (MTS), 480Y/277V, IN A NEMA 3R, 316 STAINLESS STEEL ENCLOSURE. MANUFACTURER SHALL BE EATON, CATALOG NUMBER: DT-3-6-200-F-F-R-K-LC OR APPROVED EQUAL.
- NEMA 12, 200A AUTOMATIC TRANSFER SWITCH, 65,000AIC.
- HEAVY DUTY, MANUAL TRANSFER SWITCH, 30A, 3P IN A NEMA 4X, 316 STAINLESS STEEL ENCLOSURE.
- COORDINATE CIRCUIT BREAKER SIZE AND CONDUCTOR SIZE WITH SPD MANUFACTURER.
- 100A, 3PH, 4W, RECEPTACLE, COOPER CROUSE-HINDS ARKITE HEAVY DUTY RECEPTACLE, NEMA 4X, COPPER-FREE ALUMINUM METALLIC HOUSING, RECEPTACLE ASSEMBLY, MODEL AREA 10404-S22. RECEPTACLE ASSEMBLY SHALL BE MOUNTED TO NEMA 4X, 316 STAINLESS STEEL JUNCTION BOX. PROVIDE FORMAL SUBMITTAL ON RECEPTACLE AND HOUSING AND INSTALLATION TO NEMA 4X JUNCTION BOX FOR OWNER AND ENGINEER'S REVIEW AND APPROVAL. CONNECTORS SHALL BE SUITABLE FOR USE WITH OWNERS PORTABLE GENERATOR. FIELD VERIFY EXISTING SO NEW CONNECTORS ARE COMPATIBLE.
- BREAKERS ARE KIRK-KEY INTERLOCKED. PROVIDE KIRK-KEY INTERLOCKS ON BREAKERS COORDINATE WITH BREAKER MANUFACTURER ON STYLE TO USE. KEY SHALL BE REMOVABLE WHEN BREAKER IS IN THE OPEN POSITION.
- CIRCUIT BREAKER TAP BOX, NEMA 4X, 316 STAINLESS STEEL BOX TO HOUSE INDIVIDUAL CIRCUIT BREAKERS. BREAKERS SHALL BE HOUSED IN A NEMA 1 ENCLOSURE. INSIDE TAP BOX.
- PANEL SHALL BE 42 POLE PANEL. RECONNECT EXISTING CONDUCTORS NOT BEING REPLACED TO NEW PANEL. BREAKER SIZES IN PANEL ARE BASED OFF EXISTING INSTALLATION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING LOADS BEING FED FROM EXISTING PANEL AND NOTIFY ENGINEER OF ANY EXISTING LOADS NO LONGER FED FROM PANEL. CONTRACTOR SHALL FIELD VERIFY WHAT EACH EXISTING BREAKER FEEDS PRIOR TO PURCHASING BREAKER PANEL.
- EXISTING LIGHTING CONTACTOR. RECONNECT EXISTING CIRCUITS TO NEW PANELBOARD. FIELD VERIFY EXISTING CONDITIONS.
- EQUIPMENT TO BE PROVIDED BY THE OWNER AND INSTALLED BY THE CONTRACTOR.
- NEMA 12 ENCLOSURE. MOUNT AT GENERATOR, 65,000AIC.
- PROVIDE HEAVY DUTY 30A FUSED DISCONNECT SWITCH, NEMA 4X 316 STAINLESS STEEL ENCLOSURE, WITH 25A FUSES FOR 7.5kVA TRANSFORMERS AND 10A FUSES FOR 3kVA TRANSFORMER.
- NEMA 4X 316 STAINLESS STEEL WIREWAY. LOCATE UNDER GATE 7 CANOPY. FIELD VERIFY LOCATION TO INSTALL. COORDINATE WITH OWNER FOR EXACT LOCATION.
- MOTOR STARTER PANEL FOR RELIEF WELL PUMPS NO.4 AND NO.10 PANEL SHALL BE PROVIDED WITH MAIN CIRCUIT BREAKER AND INDIVIDUAL MCP'S FOR EACH STARTER.
- STARTER PANEL FOR FUTURE RELIEF WELL PUMPS.
- RECONNECT EXISTING CONDUCTORS TO NEW PANEL. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDUCTOR SIZE AND LET ENGINEER KNOW PRIOR TO SUBMITTING SHOP DRAWINGS ON PANEL.
- BREAKER SHALL HAVE PROVISIONS TO BE LOCKED IN THE OPEN POSITION.

1 ONE-LINE DIAGRAM
 - NOT TO SCALE



FREESSE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freesse.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
ONE-LINE DIAGRAM

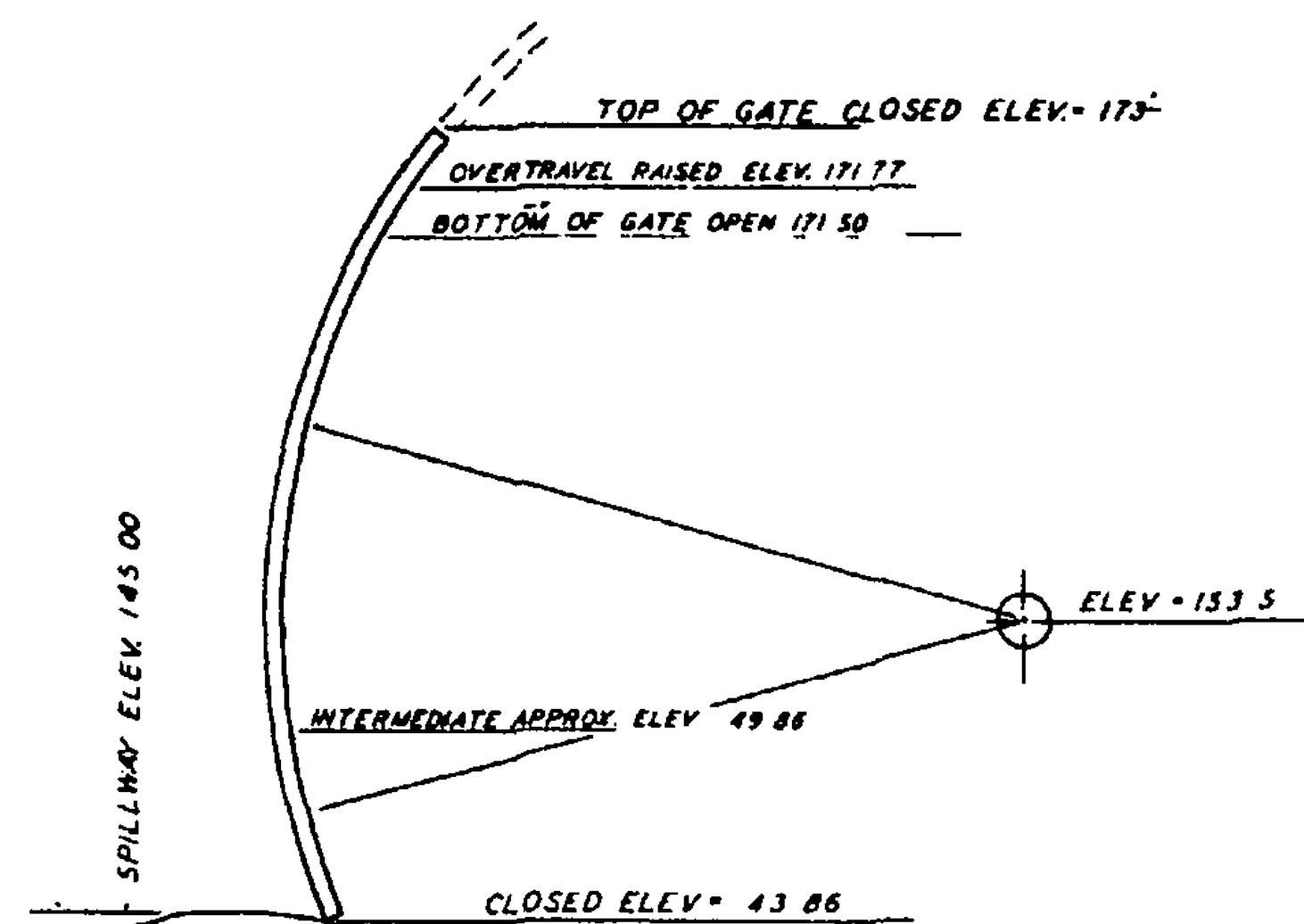
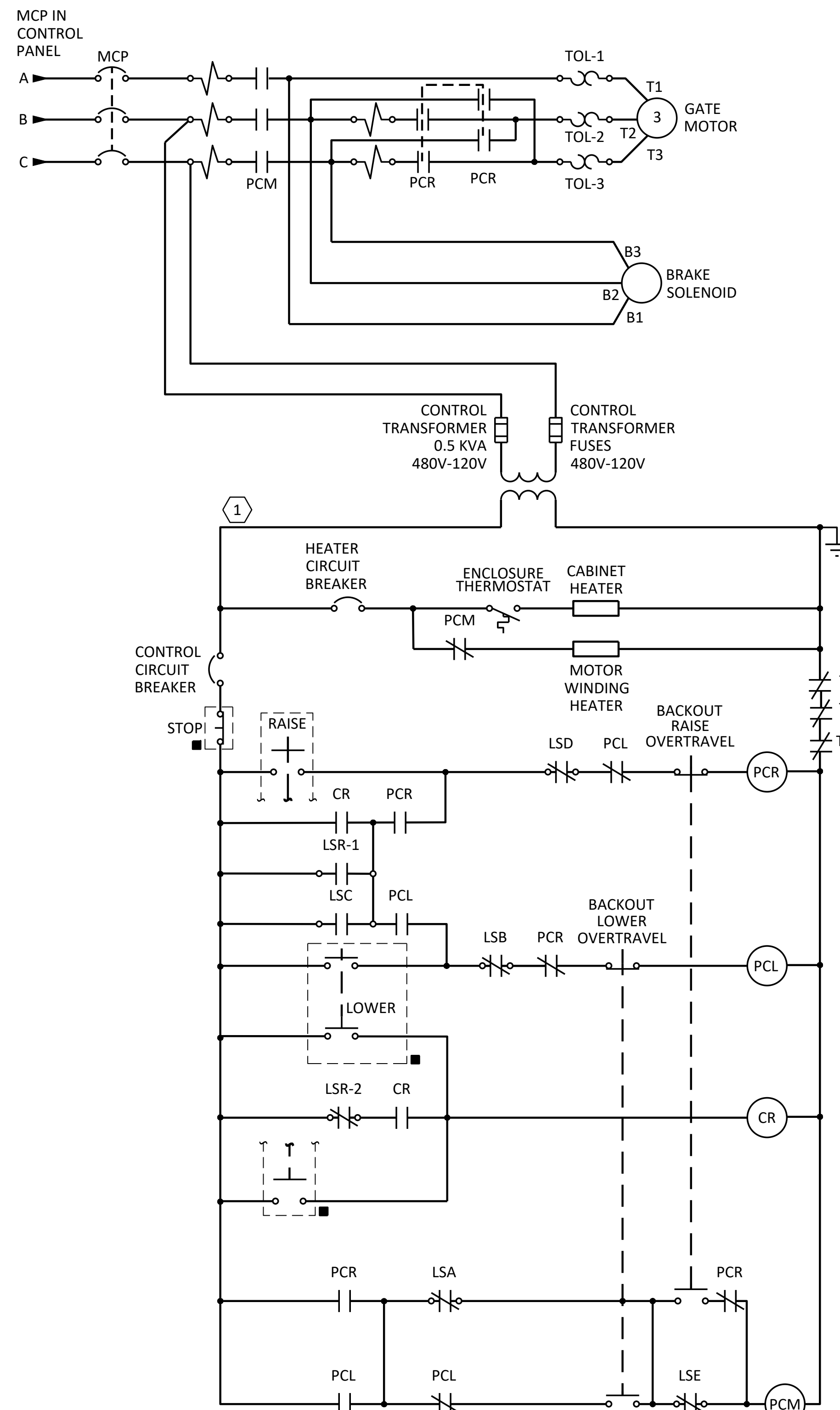
NO.	ISSUE	BY	DATE	REV. NO.	FILE NAME
0	VERIFY SCALE				EL-ALL-DG-ONEL.dwg
1	Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.				

SR19480
 MAR 2023
 JNH
 JTR
 TWZ

SHEET E-15

NOTES BY SYMBOL "◊"

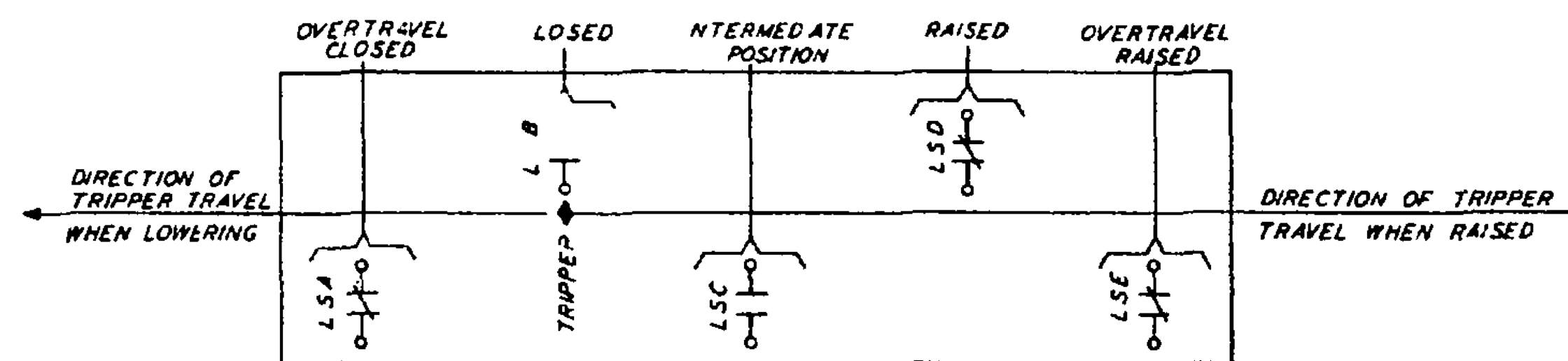
- GATE CONTROL PANEL SHALL BE NEMA 4X, 316 STAINLESS STEEL. SEE SPECIFICATION 26 29 87, ELECTRICAL CONTROL PANELS, FOR ADDITIONAL INFORMATION ON CONTROL RELAYS, INDICATING LIGHTS, TERMINAL BLOCKS, ETC. CONTRACTOR SHALL VERIFY EXACT CONTROLS PRIOR TO SUBMITTING FORMAL SUBMITTAL TO THE OWNER AND ENGINEER FOR REVIEW AND APPROVAL.



GATE POSITIONS

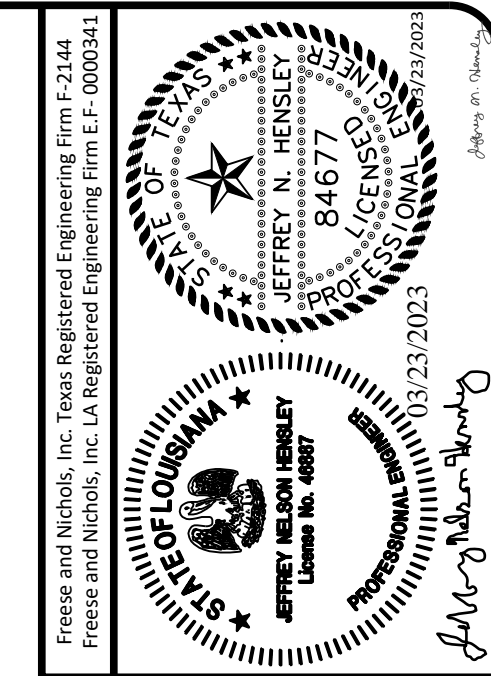
CONTACT DESIGNATION	CIRCUIT DUTY	GATE POSITION					DIRECTION OF TRAVEL TO OPERATE SWITCH
		OVER-TRAVEL CLOSED	CLOSED	INTER-MEDIATE	RAISED	OVER-TRAVEL RAISED	
LSA	STOP MOTOR OVERTRAVEL CLOSED	█					DOWN
LSB	STOP MOTOR GATE CLOSED	█					DOWN
LSC	BY-PASS INCREMENTAL CONTROL		█				UP
LSD	STOP MOTOR GATE RAISED			█			UP
LSE	STOP MOTOR OVERTRAVEL RAISED				█		UP
LSR 1	INTERRUPTED RAISING AND LOWERING	█				█	DOWN AND UP
LSR 2	INTERRUPTED RAISING AND LOWERING					█	DOWN AND UP

LIMIT SWITCH SEQUENCE OF OPERATION



ARRANGEMENT OF LIMIT SWITCH ELEMENTS

1
GATE OPERATOR CONTROL SCHEMATIC
NOT TO SCALE



FREESSE & NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Web - www.freese.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
ELECTRICAL
CONTROL SCHEMATICS

NO.	ISSUE	BY	DATE	REV. NO.	DATE	DESIGNED	DRAWN	REVISION	CHECKED	TWZ
						JNH	JTR			
FILE NAME: EL-ALL-SM-CTRL.dwg										
Bar is one inch on original drawing; if not one inch on this sheet, adjust scale.										
VERIFY SCALE 1										
SHEET E-16										
SEQ.										

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NO.	VOLT.	DESCRIPTION	LAMPS	INPUT WATTS
A	HOLOPHANE	EMS L48 4000LM IMAFD VD MVOLT GZ10 50K 80CRI	120V	EMS LED (EMS LED): EMS LED, 48 IN, 4,000 LUMENS, ACRYLIC, CLEAR DEEP FROSTED LENS, WIDE, MVOLT, 0-10V DIMMING, 5000K, 80 CRI	LED	29.78
B	HOLOPHANE	PSLED P4 MVOLT 45 50K YMS BZSDP 06 43 10KVMP NR AO WL	120V	PREDATOR SMALL LED (PSLED): PSLED, 17,600 LUMEN PACKAGE, MULTIPLE VOLTAGE (120V-277V), MEDIUM FLOOD (4X5), 5000K, YOKE STAINLESS STEEL, BRONZE SUPER DURABLE PAINT OVER STANDARD PRETREAT, 6 FT. CORD LENGTH, 14 GAUGE, 3 CONDUCTOR, 10KV/5KA MOV PACK FAIL ON, NO PHOTOCONTROL RECEPTACLE, FIELD ADJUSTABLE OUTPUT MODULE, WET LOCATION	LED	118.8
C	RIG-A-LITE	AVP20L2UHRRGW50	120V	GLOBE LIGHT WITH GUARD, A360 ALUMINUM BODY AND GUARD, STAINLESS STEEL HARDWARE, BOROSILICATE RED GLASS GLOBE, 5000K, NEMA 4X, UL1598 & UL1598A LISTED, 5 YEAR WARRANTY.	LED	20

NOTES BY SYMBOL "⬡"

- BREAKER SIZES IN PANELBOARD ARE BASED OFF EXISTING INSTALLATION. CONTRACTOR SHALL FIELD VERIFY BREAKER SIZES PRIOR TO PURCHASING BREAKER PANEL. CONTRACTOR SHALL FIELD VERIFY WHAT EACH BREAKER POWERS AND PROVIDE UPDATED PANELBOARD SCHEDULE. PROVIDE NEW CABLE FROM PANELBOARD TO CANOPY LIGHTS, RECEPTACLES, BEACON LIGHT, HORN, ETC. AS REQUIRED. FIELD VERIFY EXISTING CIRCUITRY. ALL CABLE INCLUDING GROUND SHALL BE SIZED PER THE NATIONAL ELECTRICAL CODE.
- EXISTING PANELBOARDS SHOWN FOR INFORMATION ONLY. CONTRACTOR SHALL FIELD VERIFY LOADS FED BY EACH BREAKER AND PROVIDE UPDATED TYPED PANELBOARD SCHEDULE FOR EACH PANEL.
- PROVIDE PROPERLY SIZED BREAKER FOR SPD.

⬡

DESCRIPTION		BREAKER		VOLT AMPS			CKT NO	BUSS CONN	CKT NO	VOLT AMPS			BREAKER		DESCRIPTION
		POLE	AMP	A	B	C			A	B	C	POLE	AMP		
HOIST CANOPY LIGHTS		1	30				1	●	2			1	20	ROADWAY LIGHTS	
HOIST CANOPY LIGHTS		1	20				3	●	4			1	20	ROADWAY LIGHTS	
HOIST CANOPY LIGHTS		1	30				5	●	6			1	20	ROADWAY LIGHTS	
HOIST CANOPY LIGHTS		1	30				7	●	8			1	20	GALLERY LIGHTS	
OUTSIDE SUMP PNL		1	30				9	●	10			1	30	GALLERY LIGHTS	
OUTSIDE WALL LIGHTS		1	30				11	●	12			1	30	GALLERY LIGHTS	
GALLERY RECEPT. & SUMP PUMP		2	50				13	●	14			1	20	CONTROL ROOM LIGHTS	
							15	●	16			1	20	CONTROL ROOM RECEPT.	
HOIST CANOPY LIGHTS		1	20				17	●	18			1	20	EX. FAN CONTROL RM	
HOIST CANOPY LIGHTS		1	20				19	●	20			1	20	PHOTOCCELL/NAVIGATION LIGHTS	
HOIST CANOPY LIGHTS		1	20				21	●	22			1	20	LOW FLOW VALVE CONTROL PANEL	
HOIST CANOPY LIGHTS		1	20				23	●	24			1	20	WARNING HORN	
HOIST CANOPY LIGHTS		1	20				25	●	26			1	20	STAIR LIGHTS	
HOIST CANOPY LIGHTS		1	20				27	●	28			1	20	RELIEF WELL NO 4 & NO.10 CONTROL PNL	
HOIST CANOPY LIGHTS		1	20				29	●	30			1	20	STAIR LIGHTS	
GENERATOR RUN BEACON		1	20				31	●	32			1	20	RELIEF WELL HIGH LEVEL BEACON	
GENERATOR FUEL POLISHING SYSTEM		1	20				33	●	34			1	20	FUEL ALARM PANEL	
SPARE		1	20				35	●	36			1	20	SPARE	
SPARE		1	20				37	●	38					⬡ SPD	
SPARE		1	20				39	●	40						
SPARE		1	20				41	●	42						
SPARE		1	20												
CONNECTED BUS A		VA		0	0	0							DEMAND KVA: _____		
CONNECTED BUS B		VA										DEMAND AMPS: _____			
CONNECTED BUS C		VA										NOTE: * INDICATES GFI BREAKER			

⬡

DESCRIPTION		BREAKER		VOLT AMPS			CKT NO	BUSS CONN	CKT NO	VOLT AMPS			BREAKER		DESCRIPTION
		POLE	AMP	A	B				A	B	C	POLE	AMP		
AMALGAMATOR/INCLINOMETER CONTROL PANEL		1	20				1	●	2			2	30	MAIN BREAKER	
GATE X		1	20				3	●	4						
SPACE							5	●	6					SPACE	
SPACE							7	●	8					SPACE	
CONNECTED BUS A		VA		0	0	0							DEMAND KVA: 0.0		
CONNECTED BUS B		VA										DEMAND AMPS: 0.0			
												NOTE: ** INDICATES ITEMS UNDER THIS CONTRACT			

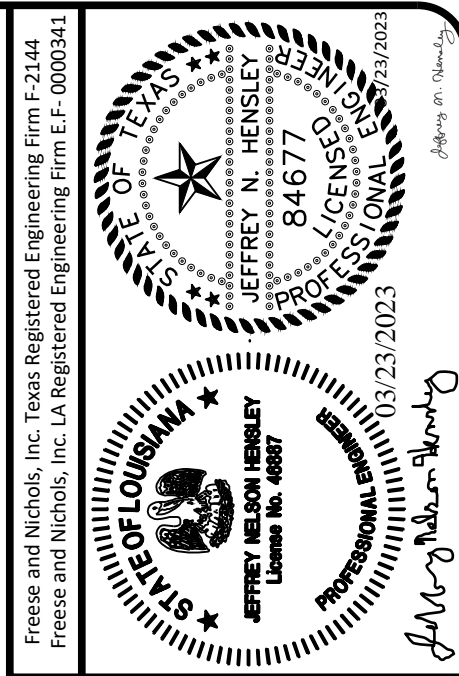
⬡

DESCRIPTION		BREAKER		VOLT AMPS			CKT NO	BUSS CONN	CKT NO	VOLT AMPS			BREAKER		DESCRIPTION
		POLE	AMP	A	B				A	B	C	POLE	AMP		
MAIN BREAKER		2	30				1	●	2			1	20	GATE 10 AMALGAMATOR/ INCLINOMETER CNTL PNL	
GATE 8 AMALGAMATOR/ INCLINOMETER CONTROL				1	20				3	●	4			1	20
SPACE							5	●	6			1	20	GATE 9 AMALGAMATOR/ INCLINOMETER CNTL PNL	
SPACE							7	●	8					SPACE	
SPACE							9	●	10					SPACE	
SPACE							11	●	12					SPACE	
CONNECTED BUS A		VA		0	0	0							DEMAND KVA: 0.0		
CONNECTED BUS B		VA										DEMAND AMPS: 0.0			
												NOTE: * INDICATES GFI BREAKER			

⬡

DESCRIPTION		BREAKER		VOLT AMPS			CKT NO	BUSS CONN	CKT NO	VOLT AMPS			BREAKER		DESCRIPTION
		POLE	AMP	A	B				A	B	C	POLE	AMP		
MAIN BREAKER		2	30				1	●	2			1	20	GATE 1 AMALGAMATOR/ INCLINOMETER CNTL PNL	
GATE 4 AMALGAMATOR/ INCLINOMETER CNTL PNL				1	20				3	●	4			1	20
SPACE							5	●	6			1	20	GATE 2 AMALGAMATOR/ INCLINOMETER CNTL PNL	
SPACE							7	●	8			1	20	GATE 5 AMALGAMATOR/ INCLINOMETER CNTL PNL	
SPACE							9	●	10					SPACE	
SPACE							11	●	12					SPACE	
CONNECTED BUS A		VA		0	0	0							DEMAND KVA: 0.0		
CONNECTED BUS B		VA										DEMAND AMPS: 0.0			
												NOTE: ** INDICATES ITEMS UNDER THIS CONTRACT			

⬡



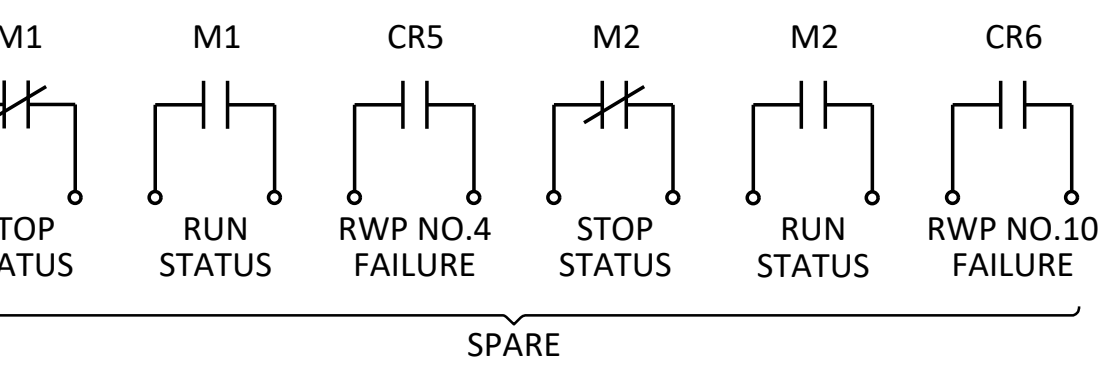
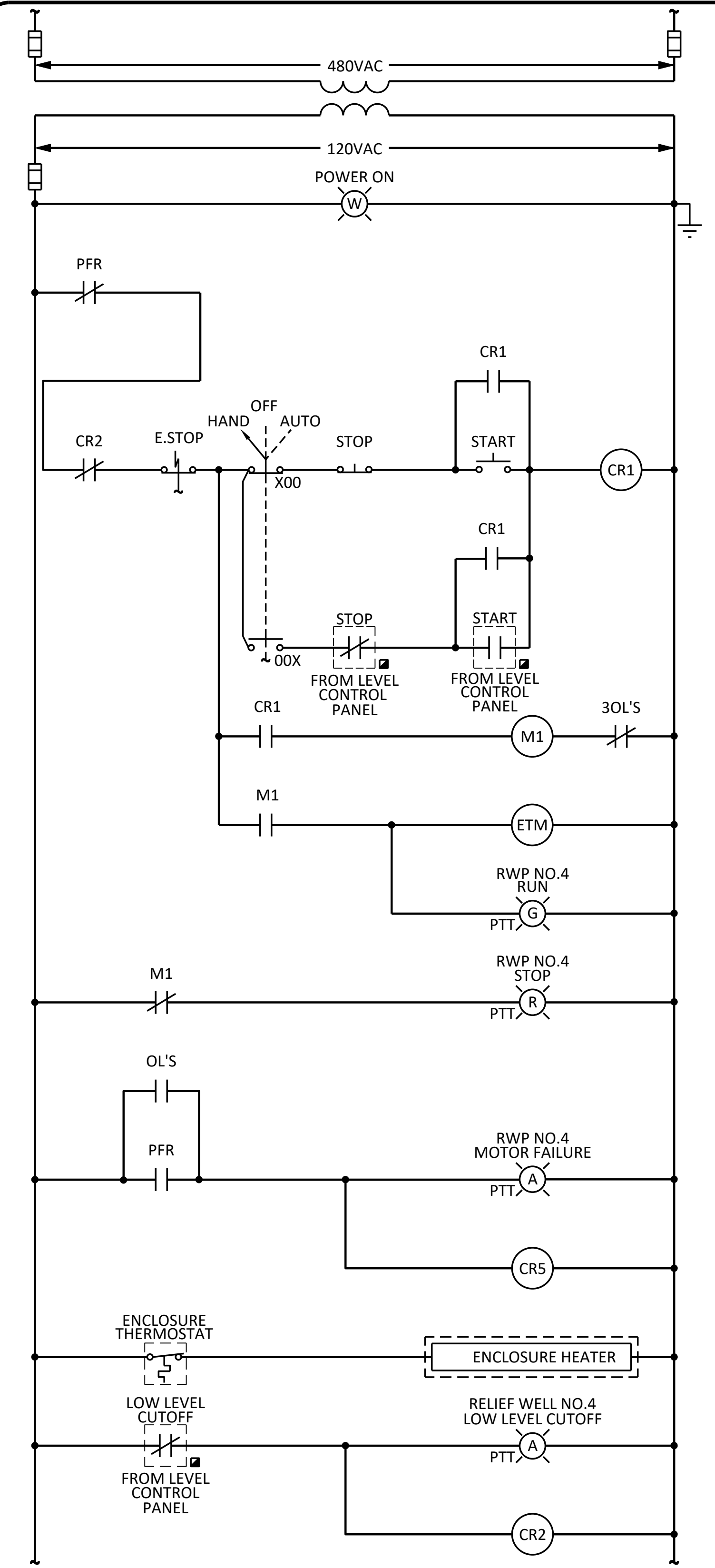
FREESSE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freese.com

SABINE RIVER AUTHORITY TOLEDO BEND PROJECT SPILLWAY ELECTRICAL IMPROVEMENTS ELECTRICAL SCHEDULES

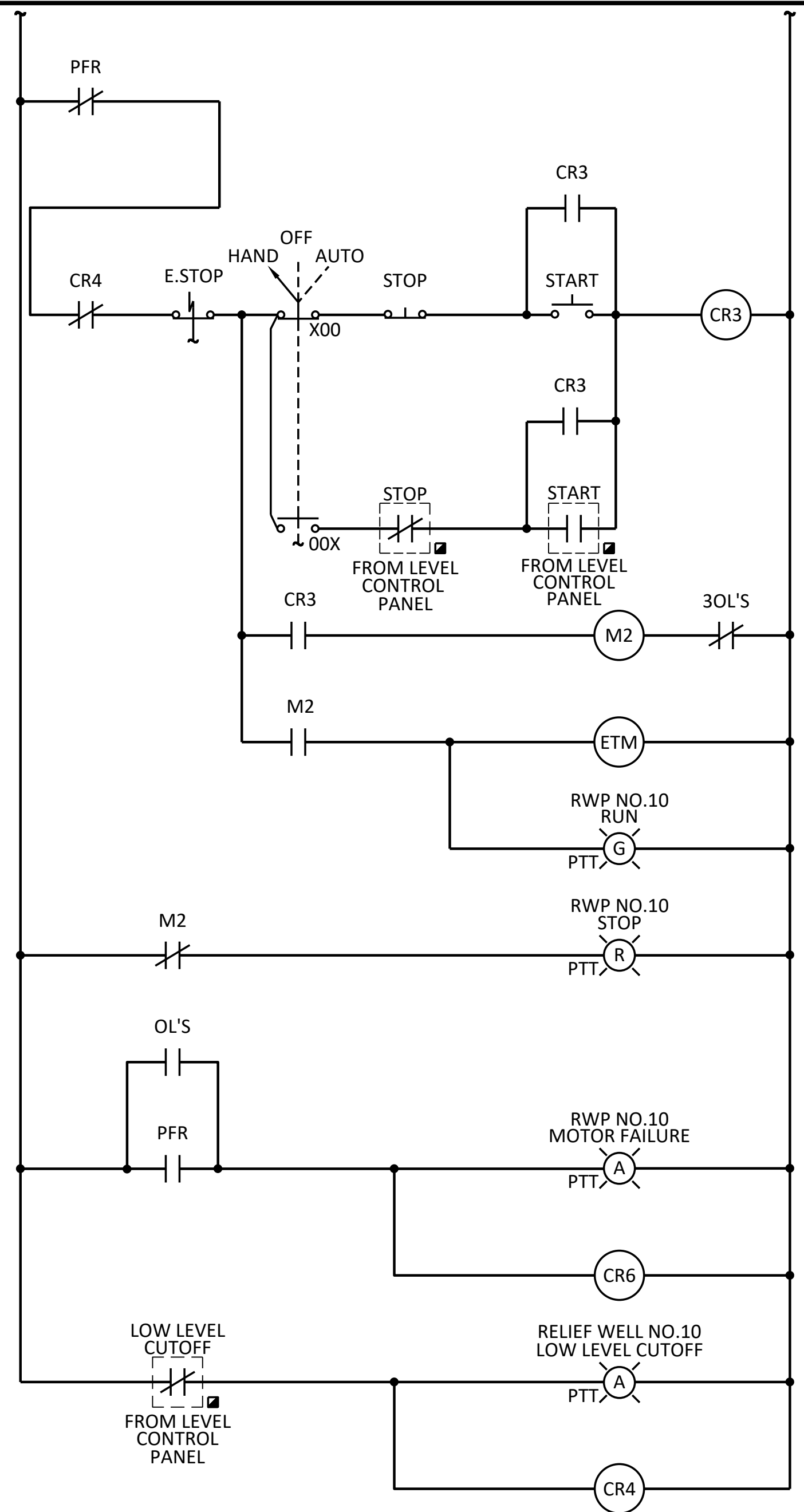
NO.	ISSUE	BY	DATE	REV. NO.	DATE	DESIGNED	DRAWN	REVIEWED	CHECKED	TWZ
						JNH	JTR			
FILE NAME: EL-ALL-SH-LTNG.dwg										
SHEET E-17										

ACAD Rev: 24.2
 File Name: N:\ELEC\EL-ALL-SH-LTNG.dwg
 Last Saved: 2/21/2023 10:04 AM
 Saved By: 03823

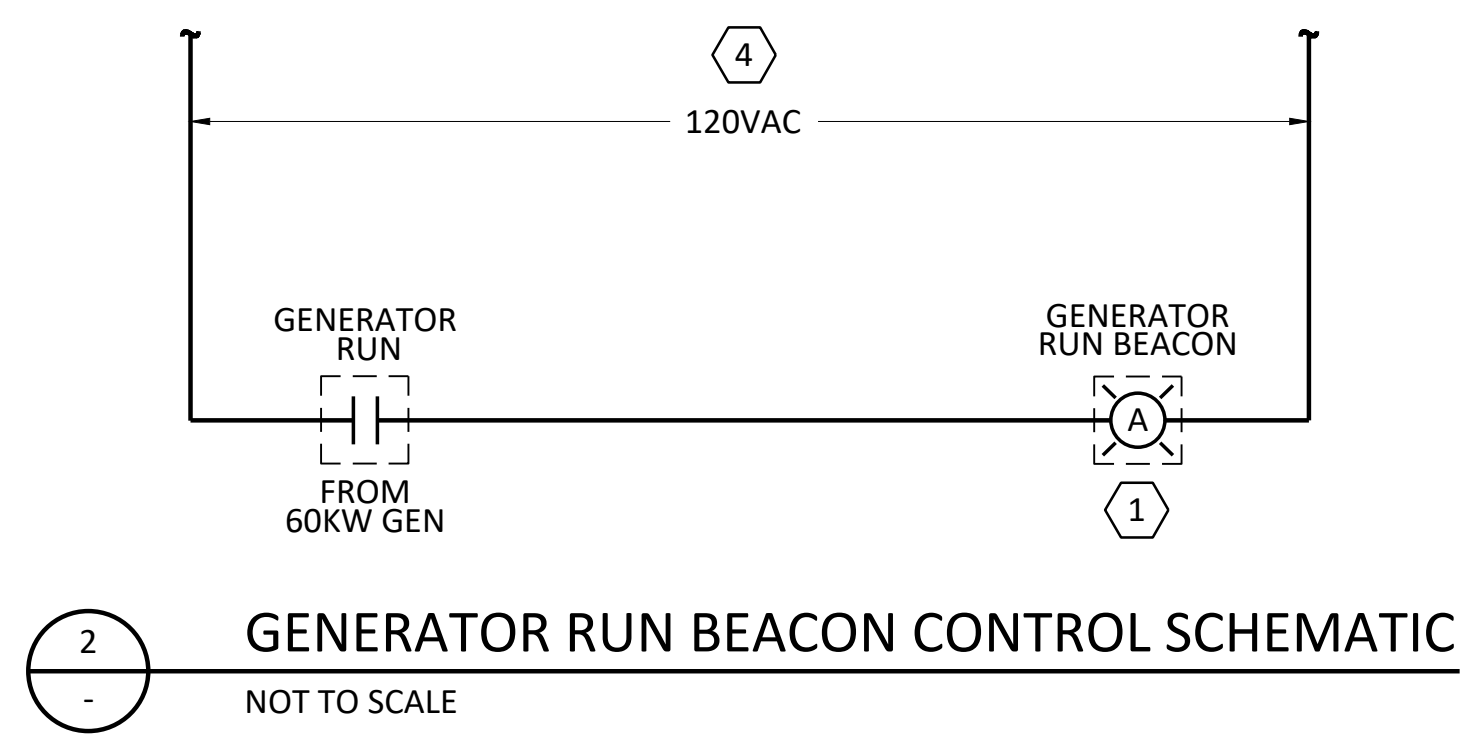
ACAD Rev: 24.2
 File Name: N:\ELEC\EL-ALL-SM-CTRL01.dwg
 Last Saved: 8/6/2023 11:07 AM Saved By: 03769



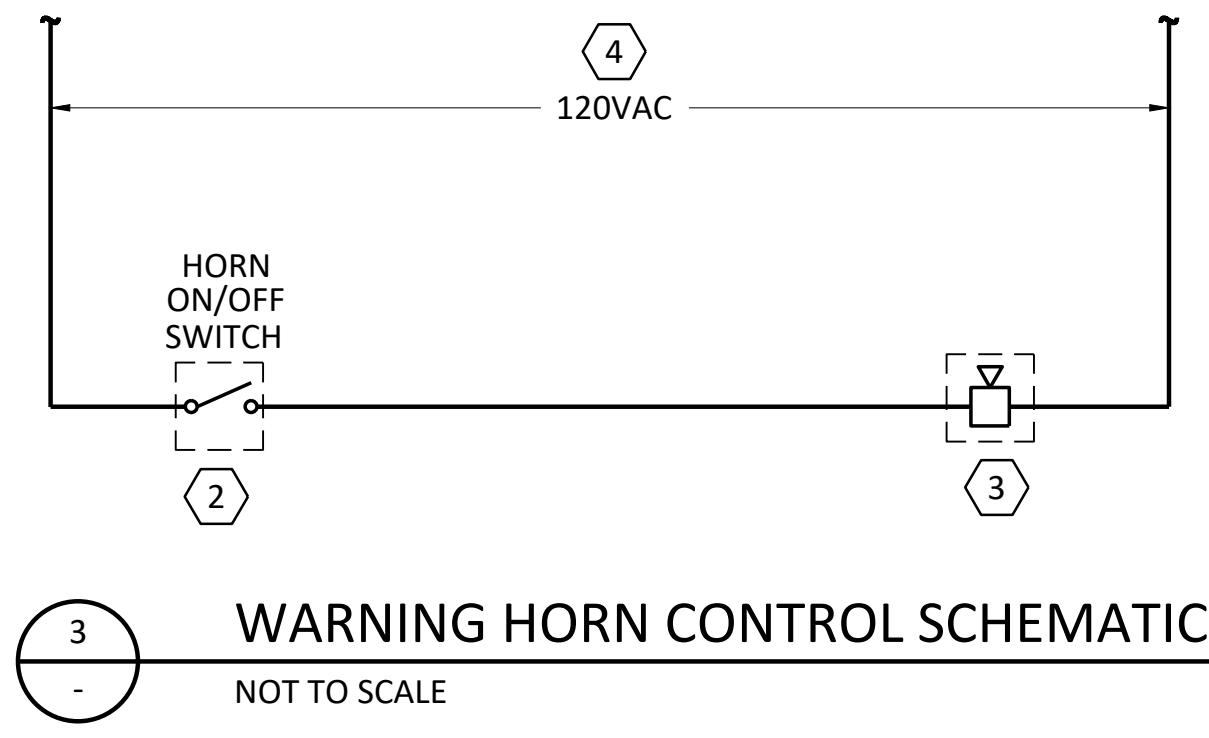
1 PUMP CONTROL SCHEMATIC
 NOT TO SCALE (TYP FOR RELIEF WELL PUMPS 4&10)



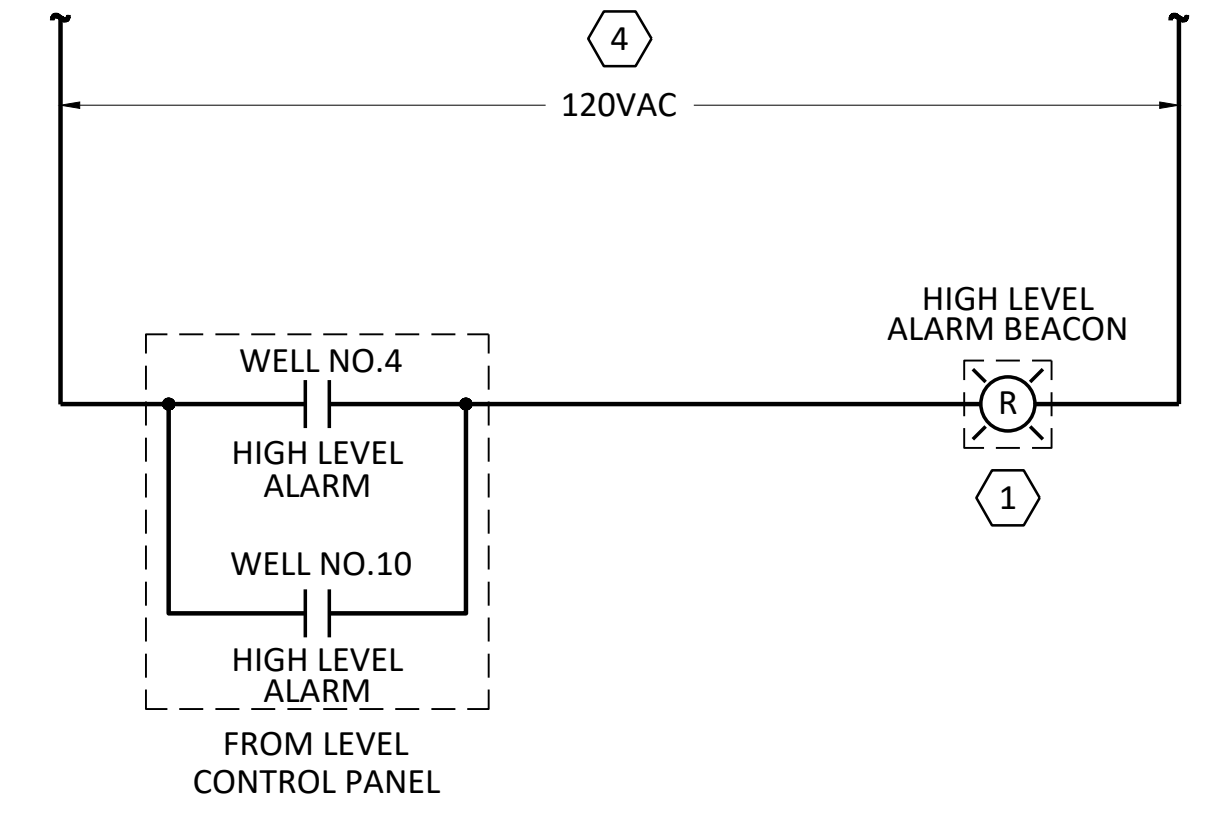
4 RELIEF WELL HIGH LEVEL ALARM BEACON CONTROL SCHEMATIC
 NOT TO SCALE



2 GENERATOR RUN BEACON CONTROL SCHEMATIC
 NOT TO SCALE



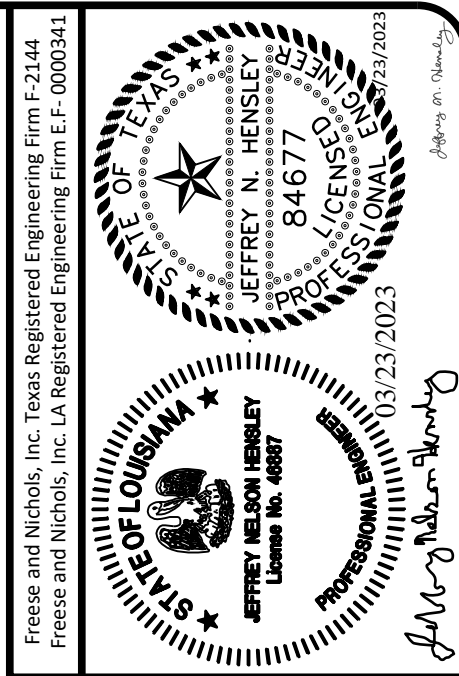
3 WARNING HORN CONTROL SCHEMATIC
 NOT TO SCALE



4 RELIEF WELL HIGH LEVEL ALARM BEACON CONTROL SCHEMATIC
 NOT TO SCALE

NOTES BY SYMBOL " " "

1. PROVIDE NEMA 4X MULTI-MODE LED AMBER BEACON. EDWARDS CATALOG NUMBER 48XBRMA120A. PROVIDE 316 STAINLESS STEEL MOUNTING HARDWARE AS REQUIRED.
2. WEATHERPROOF NEMA 4X STAINLESS STEEL ON/OFF SWITCH COOPER CROUSE-HINDS OR APPROVED EQUAL.
3. WARNING HORN. FEDERAL SIGNAL, 120VAC, OUTDOOR DUTY HORN. HORN SHALL BE HEARD AT LEAST ONE MILE AWAY. CONTRACTOR SHALL TEST AND VERIFY.
4. 120V CIRCUIT FROM PANEL LP-1. PROVIDE 2 #10, #10G., 3/4" C.
5. PROVIDE NEMA 4X MULTI-MODE LED RED BEACON. EDWARDS CATALOG NUMBER 48XBRMR120A PROVIDE 316 STAINLESS STEEL MOUNTING HARDWARE AS REQUIRED.

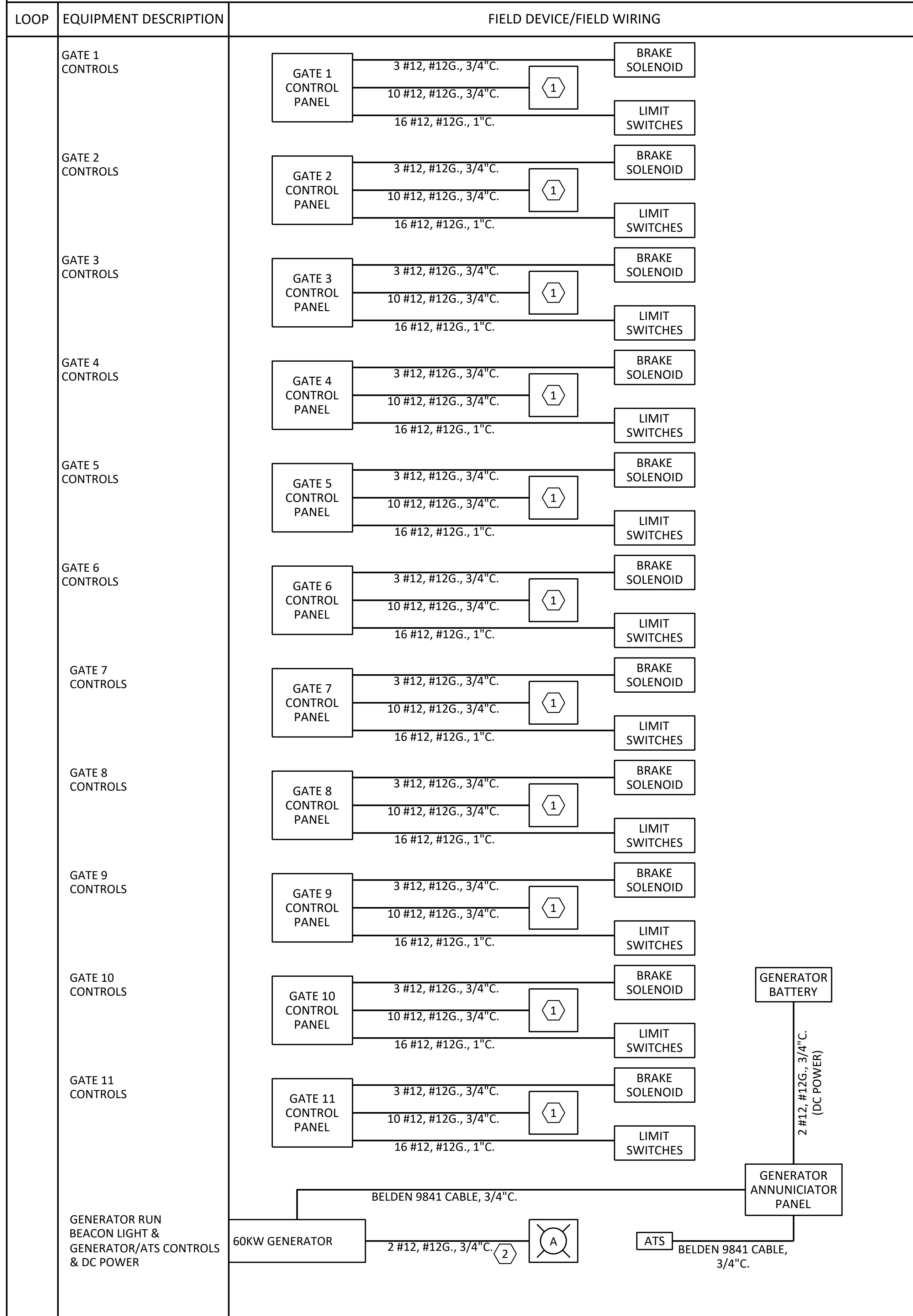


FREESSE & NICHOLS
 4055 International Plaza, Suite 200
 Fort Worth, Texas 76109-4895
 Phone - (817) 735-7300
 Web - www.freesse.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
PUMP CONTROL SCHEMATIC

NO.	ISSUE	BY	DATE	REVISED	FILE NAME
0	VERIFY SCALE				EL-ALL-SM-CTRL01.dwg
1	Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.				
SHEET					
E-18					
SEQ.					

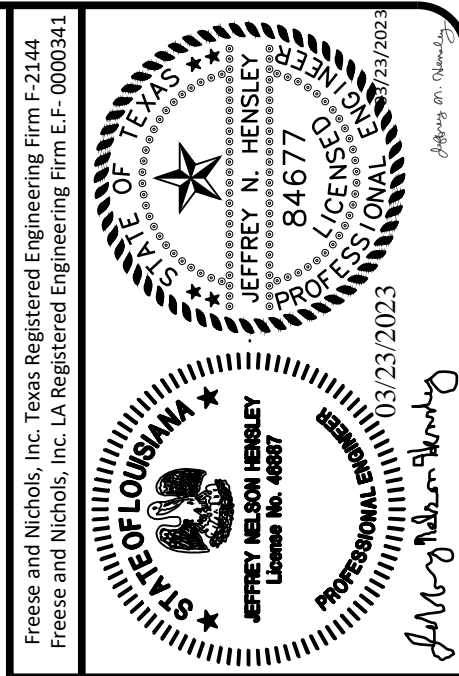
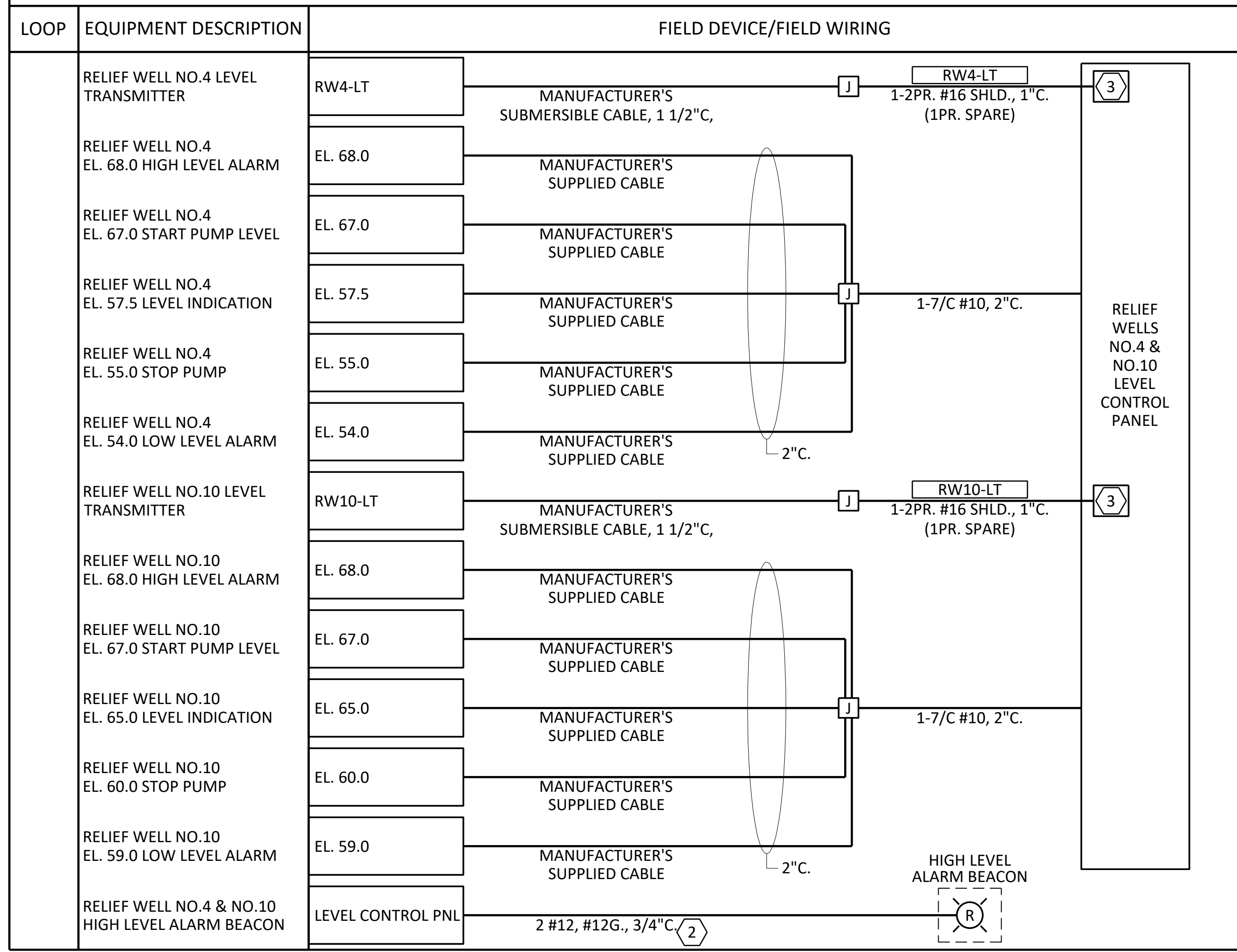
INTERCONNECTION DIAGRAM



NOTES BY SYMBOL "⬡"

- LOCAL CONTROL STATION - RAISE/LOWER/STOP.
- VIA 120V CIRCUIT FROM PANEL LP-1.
- LEVEL DISPLAY. ENDRESS & HAUSER RIA 261 OR APPROVED EQUAL.

INTERCONNECTION DIAGRAM



SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
 ELECTRICAL
INTERCONNECTION DIAGRAM & SCHEMATICS

NO.	ISSUE	BY	DATE	REVISED	FILE NAME
0					EL-ALL-DG-INTC.dwg
1					

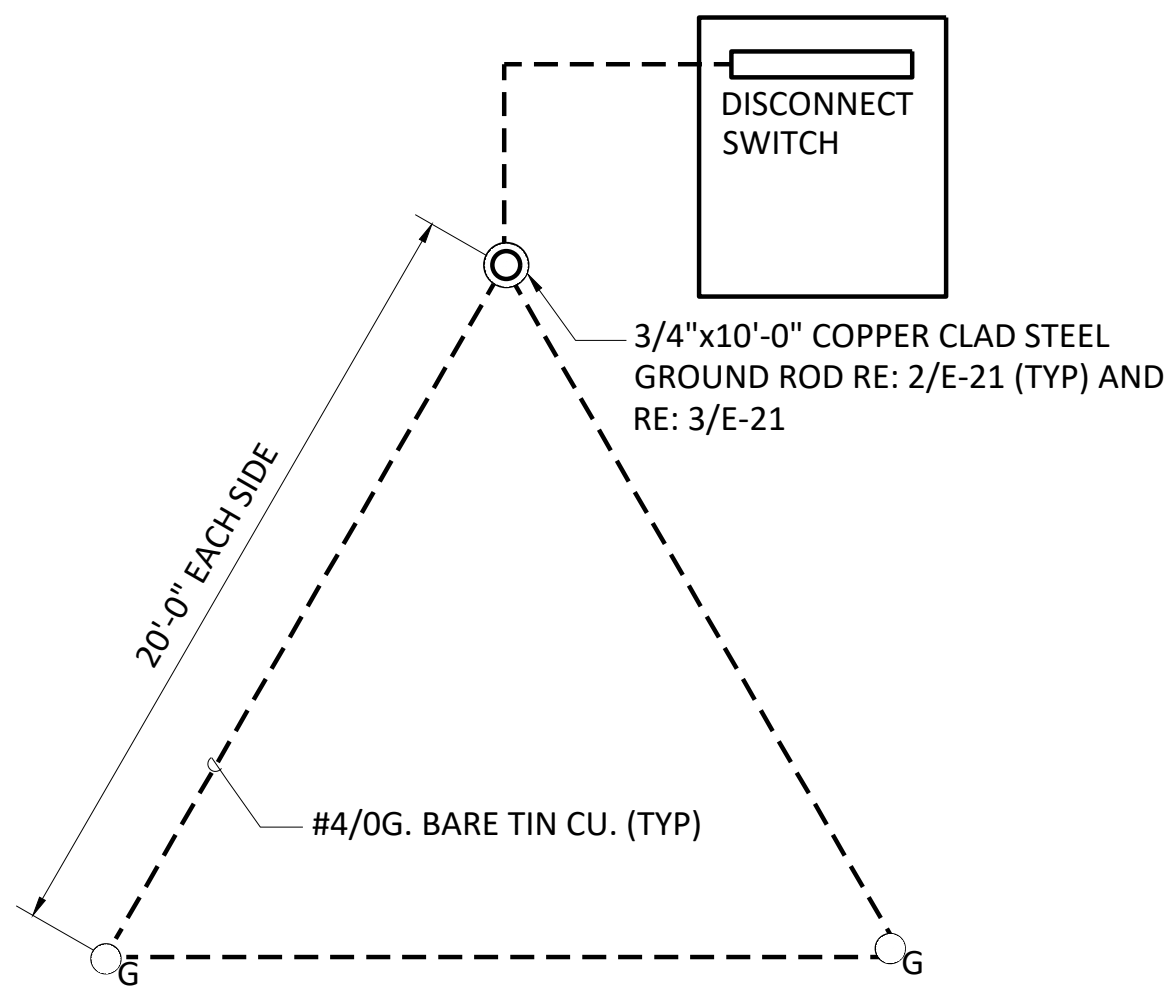
Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.

VERIFY SCALE

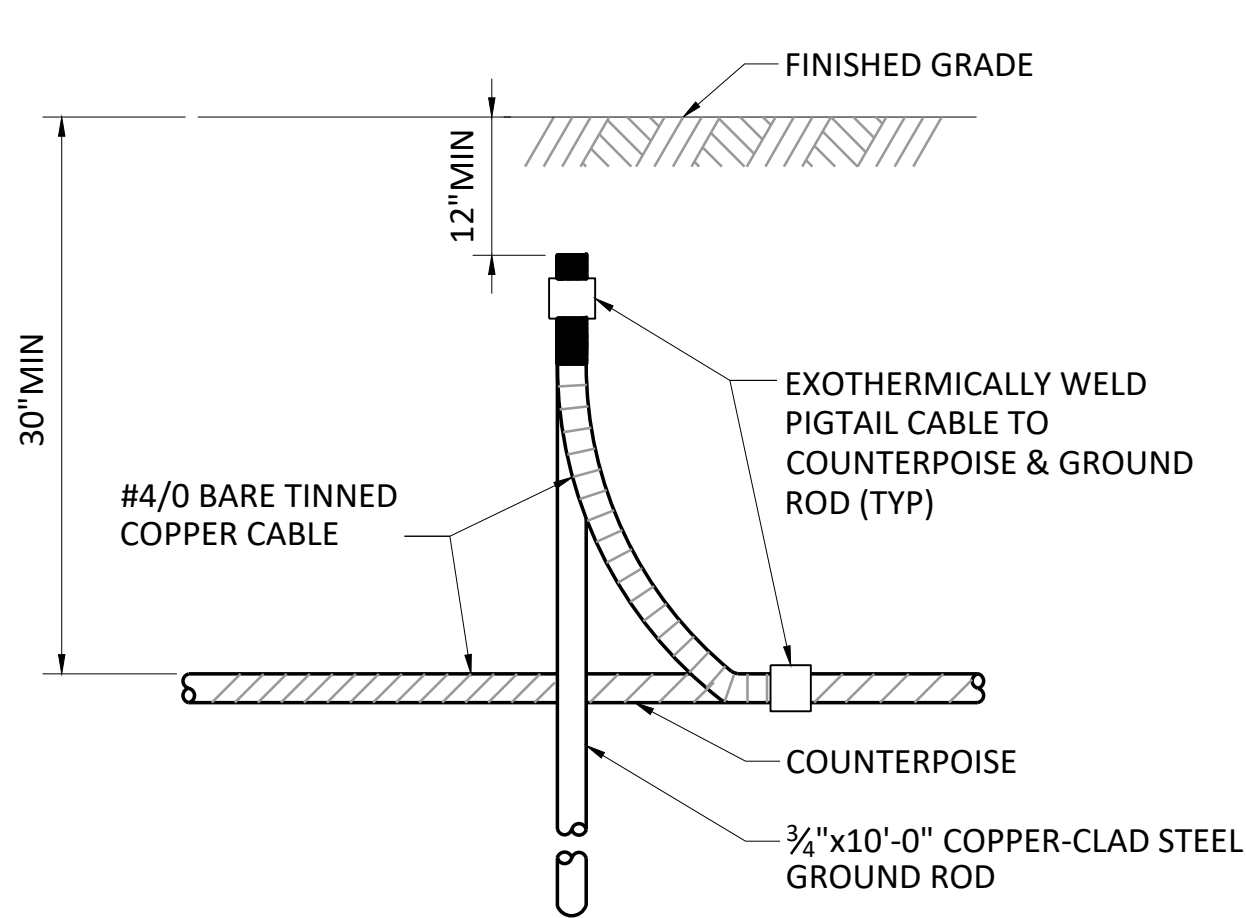
SHEET **E-20**

SEQ.

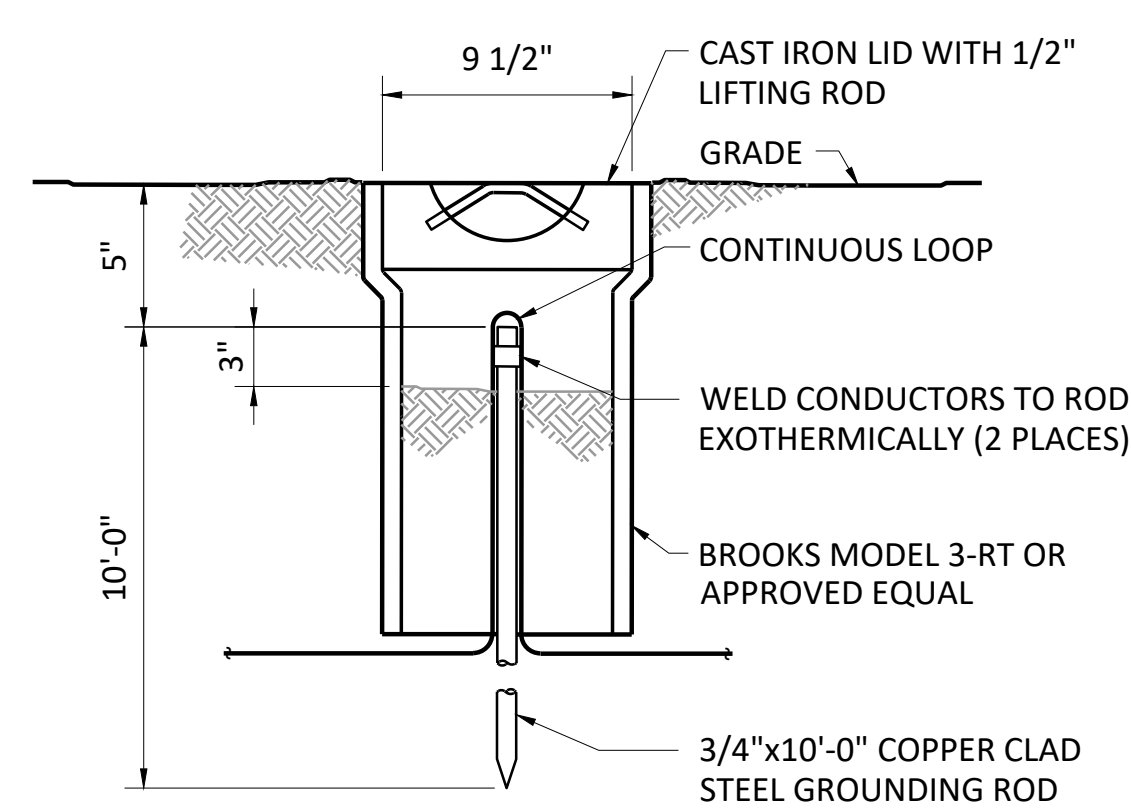
ACAD Rev: 24.2
 File Name: N:\ELEC\EL-ALL-DG-INTC.dwg
 Last Saved: 1/6/2023 9:40 AM Saved By: 03823



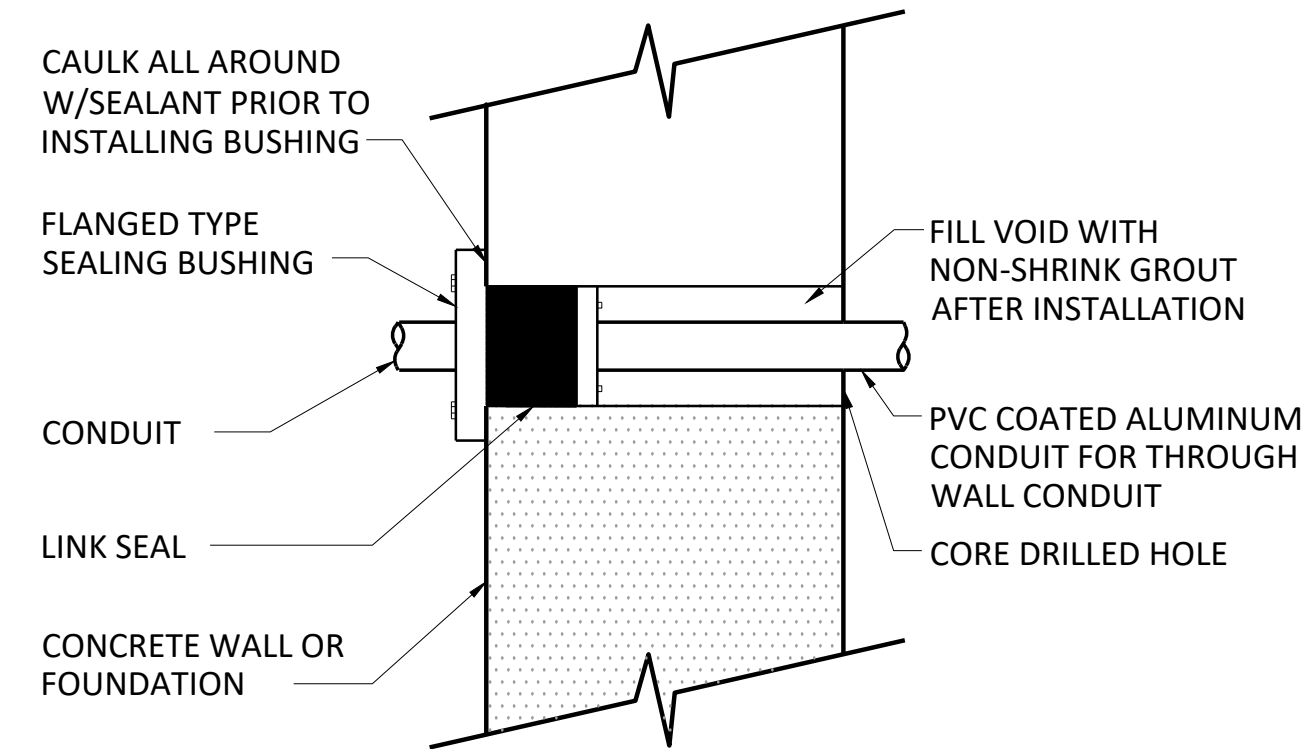
1 GROUND MAT
NOT TO SCALE



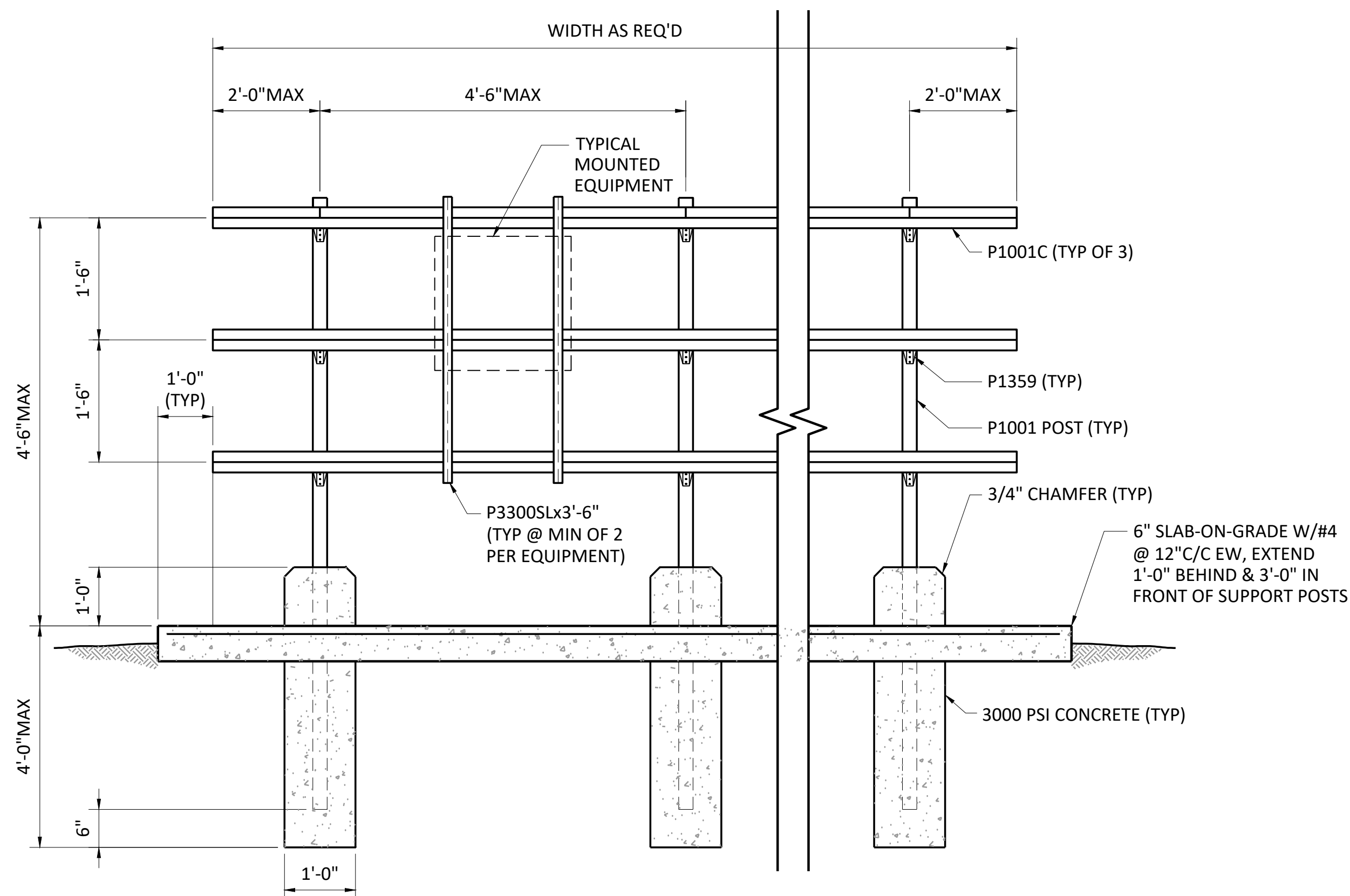
2 GROUND ROD/COUNTERPOISE
INSTALLATION (TYPICAL)
NOT TO SCALE



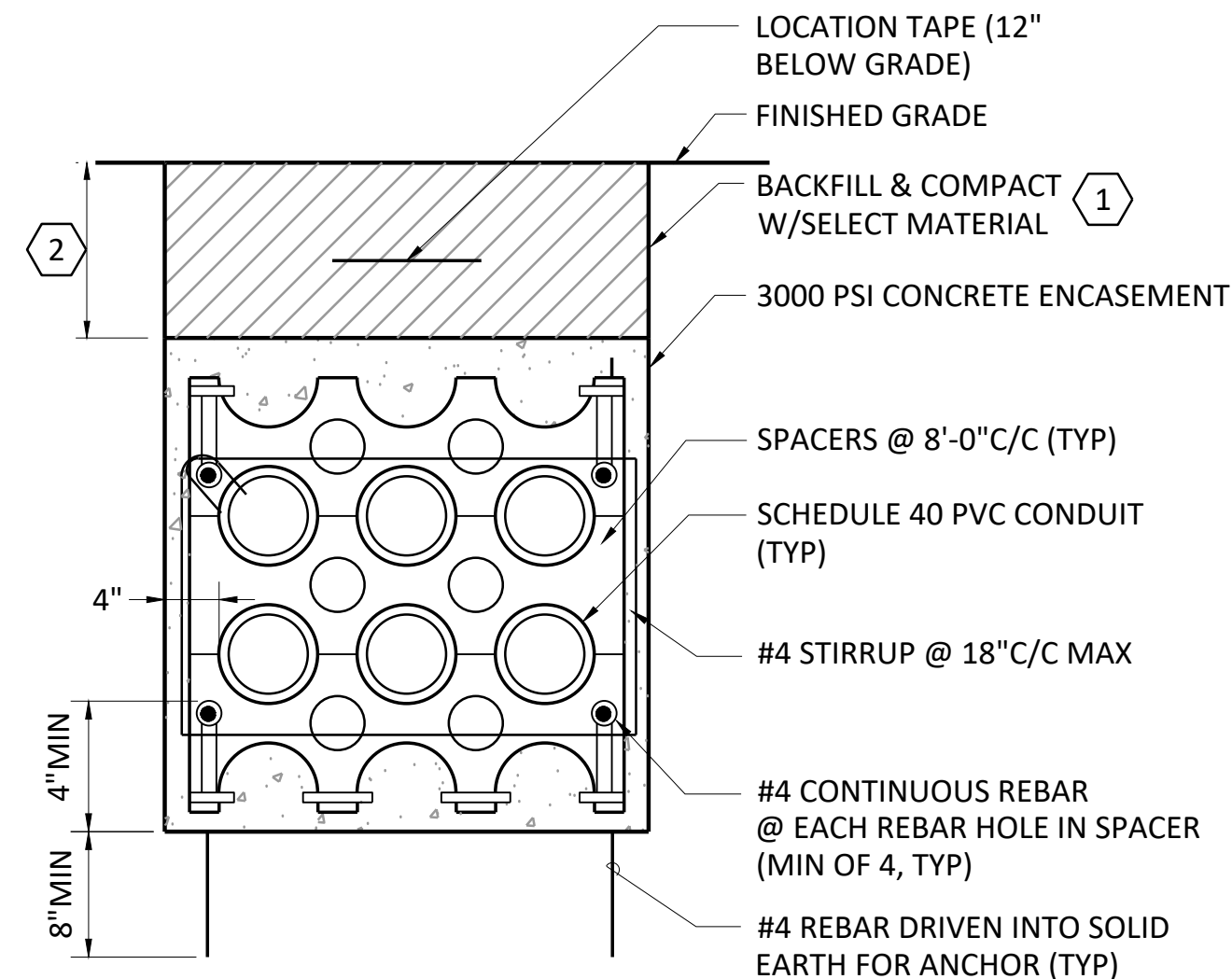
3 GROUND ROD
TEST WELL DETAIL
NOT TO SCALE



4 CONCRETE WALL ABOVE OR BELOW GRADE
WATERTIGHT CONDUIT PENETRATION
NOT TO SCALE

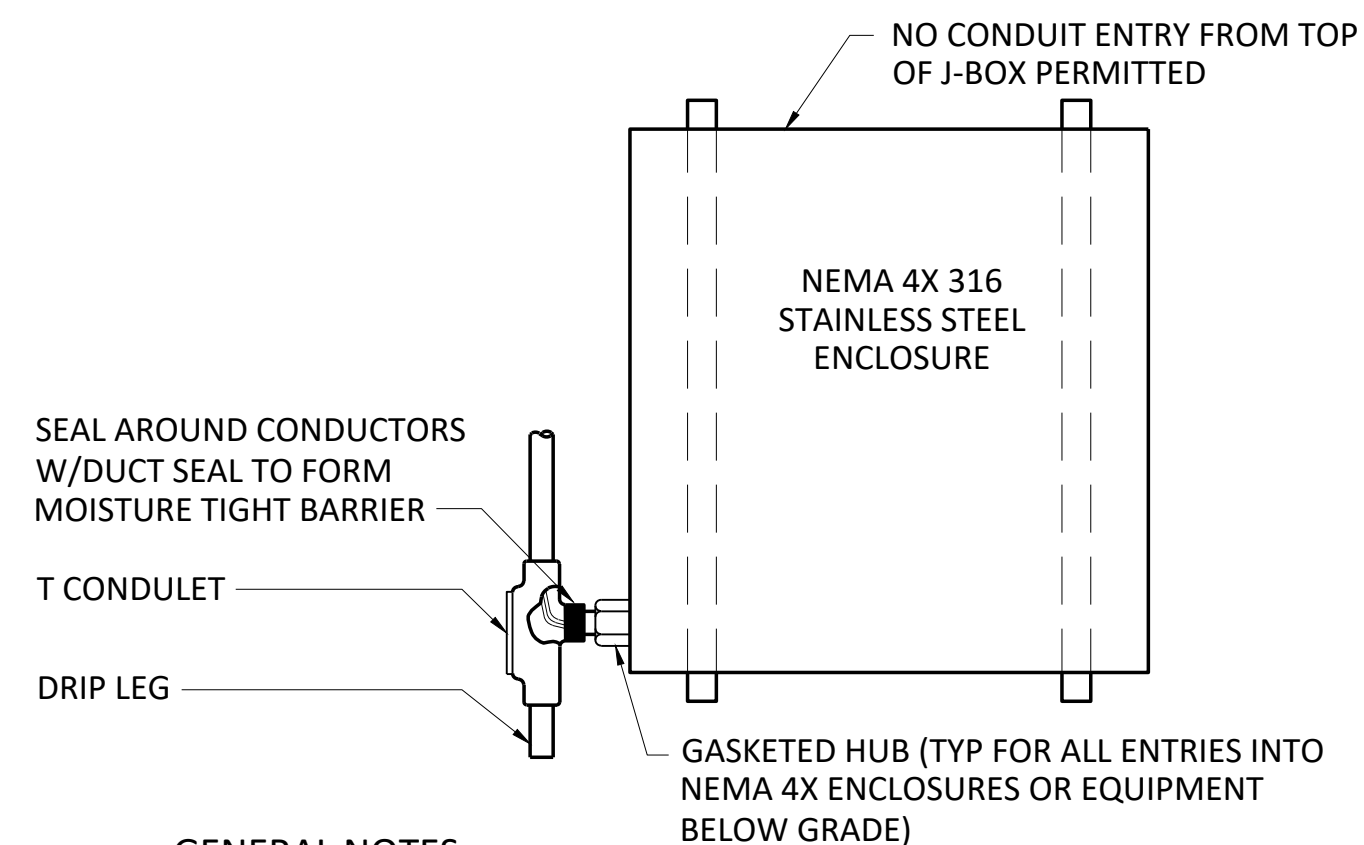


5 EQUIPMENT RACK MOUNTING DETAIL
NOT TO SCALE

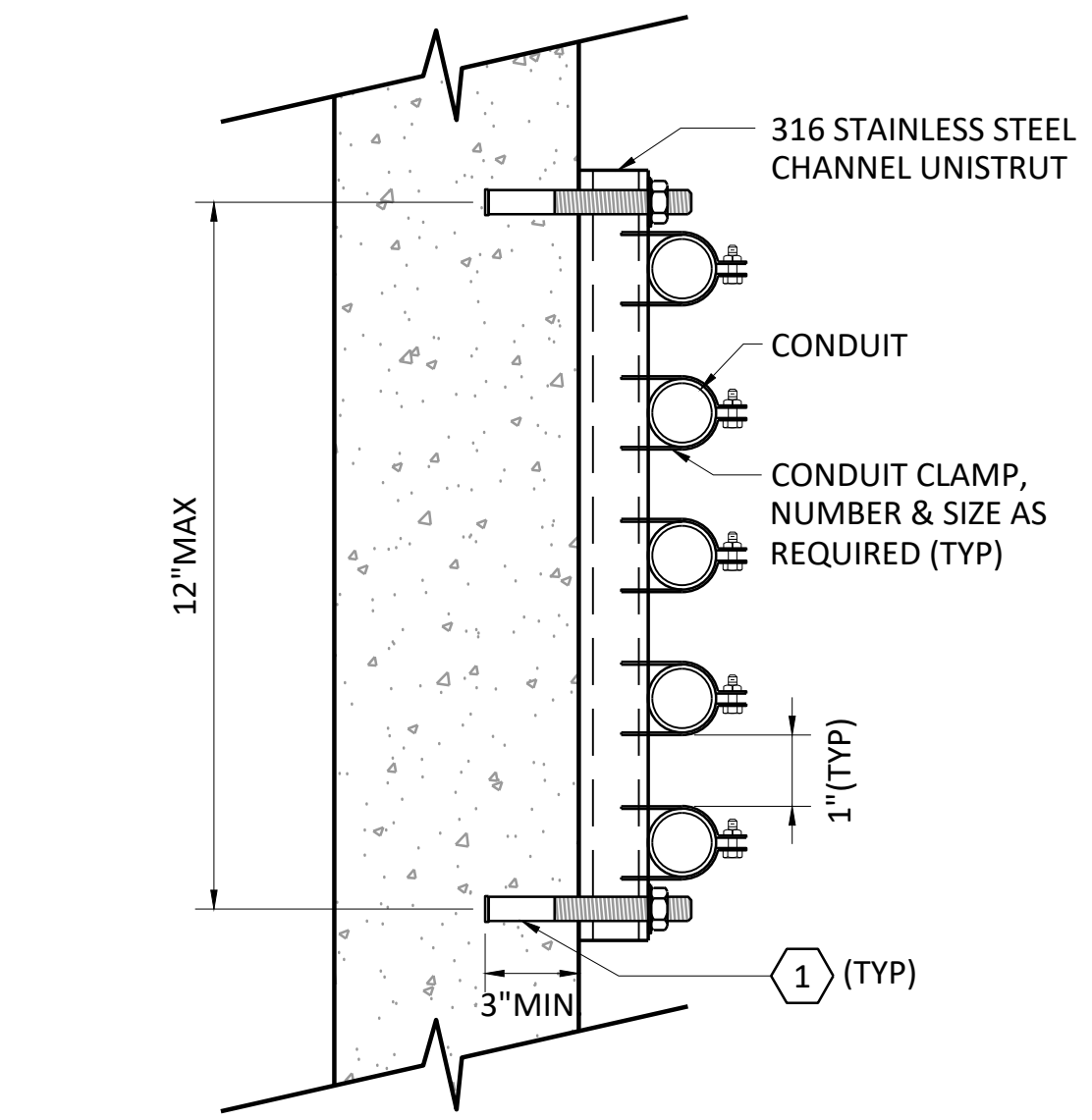


- GENERAL NOTES:
- CONTRACTOR SHALL PROVIDE CONCRETE BLOCKS FOR REBAR SUPPORT ROUTED ALONG BOTTOM OF DUCT BANK TO VERIFY THAT REBAR IS FULLY ENCASED WITH 4" OF CONCRETE.
- NOTES BY SYMBOL "1"
- SELECT BACKFILL TO BE CLASS 4 EARTH FILL. FILL SHALL CONSIST OF MATERIALS WHICH ARE CLASSIFIED AS SP, SM, SC, CL OR DUAL CLASSIFICATIONS THEREOF, WHICH HAVE A LIQUID LIMIT LESS THAN OR EQUAL TO 35 AND A PLASTICITY INDEX OF A MINIMUM OF 4 AND A MAXIMUM OF 15, WHICH ARE FREE OF ORGANIC MATERIALS.
 - 18" FOR 600V AND BELOW.

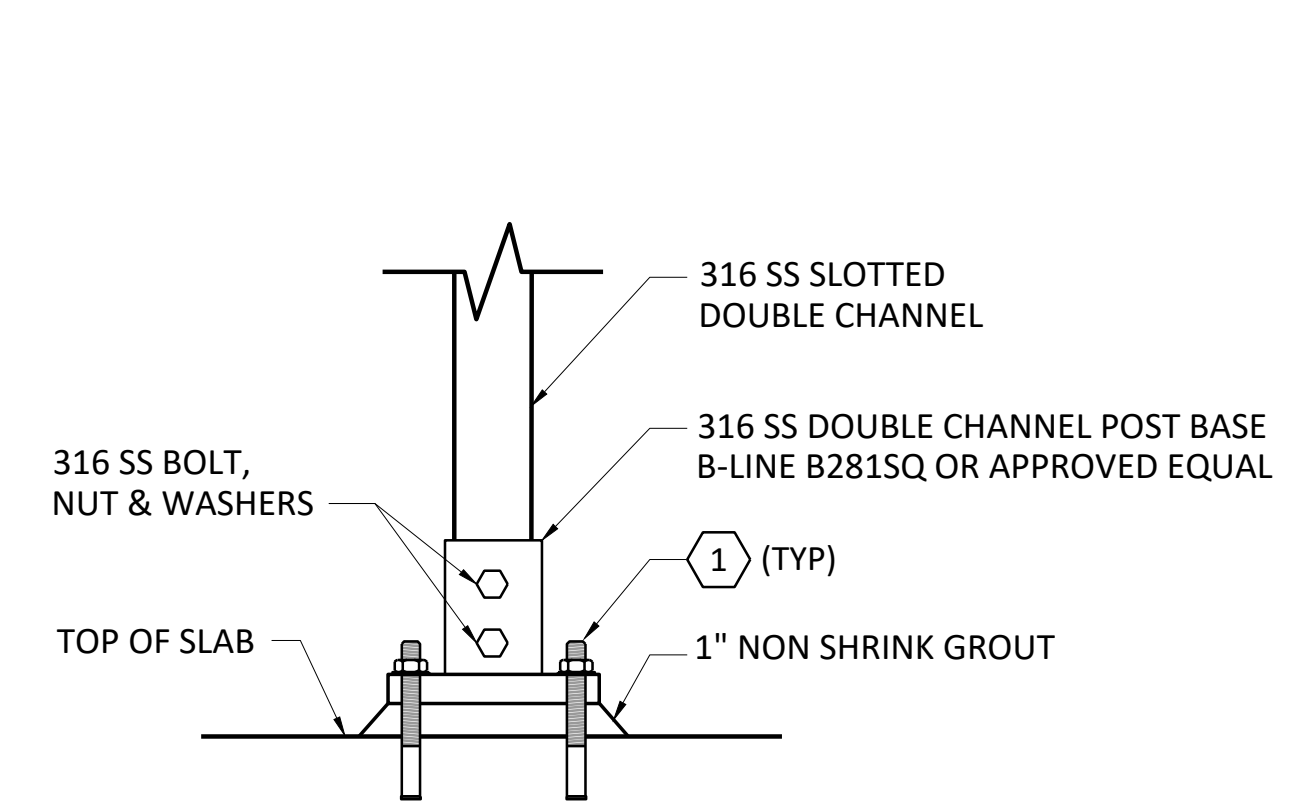
6 CONCRETE ENCASED
DUCT BANK DETAIL
NOT TO SCALE



8 TYPICAL JUNCTION BOX
& CONDUIT DRAIN DETAIL
NOT TO SCALE

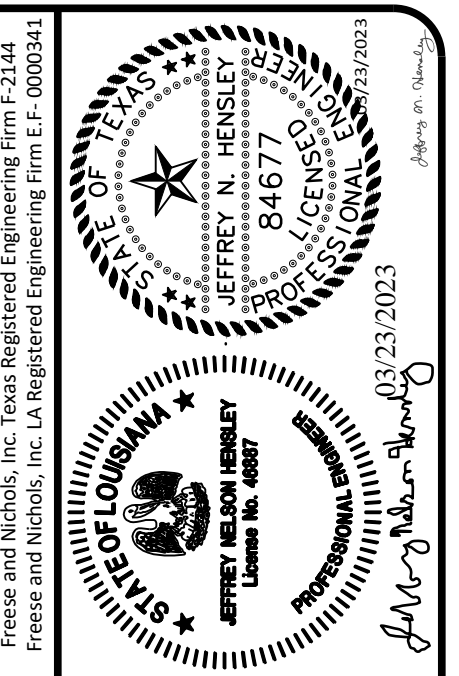


7 WALL MOUNTED CONDUIT RACK
NOT TO SCALE



9 FREE STANDING SUPPORT DETAIL
NOT TO SCALE

- GENERAL NOTES:
- ALL MEMBERS SHOWN AND REQUIRED CONNECTING HARDWARE SHALL BE 316 STAINLESS STEEL.
 - MEMBERS ARE INDICATED BY UNISTRUT PART NUMBERS. PROVIDE ALL MEMBERS AND CONNECTING HARDWARE BY UNISTRUT OR APPROVED EQUAL.
 - SLOPE SLAB-ON-GRADE TO DRAIN.
 - RACKS SHALL BE GROUNDED PER THE NATIONAL ELECTRICAL CODE. PROVIDE AS A MINIMUM ONE 3/4" x 10'-0" COPPER CLAD GROUND ROD ON EACH SIDE OF THE ELECTRICAL EQUIPMENT RACK. PROPERLY BOND RACK TO GROUND RODS VIA #4/0 BARE TINNED COPPER CONDUCTOR. PROPERLY BOND ALL CONDUITS, EQUIPMENT, ETC, TO GROUNDING SYSTEM PER THE REQUIREMENTS OF THE DIVISION 26 SPECIFICATIONS AND THE NATIONAL ELECTRICAL CODE.
 - ELECTRICAL EQUIPMENT RACK SHALL BE A MINIMUM OF 36" WIDE. ARRANGE THE EQUIPMENT TO ALLOW FOR THE INSTALLATION OF FUTURE EQUIPMENT IN ADDITION TO WHAT IS SHOWN.
 - PROVIDE FORMAL SUBMITTAL ON EQUIPMENT RACK FOR THE ENGINEER'S REVIEW AND COMMENT SHOWING RACK DIMENSIONS, SLAB DIMENSIONS, ETC.



FREESSE & NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Web - www.freese.com

SABINE RIVER AUTHORITY
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
ELECTRICAL
DETAILS

FAV JOB NO.	SPR194980	DATE	MAR 2023	DESIGNED	JNH	DRAWN	JTR	REVISION	TWZ
BY		FILE NAME	EL-ALL-DT-MISC01.dwg						
NO. ISSUE		VERIFY SCALE	0	BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE.					
SHEET	E-21								
SEQ.									

Filename: N:\ELECTRICAL-ALL-DT-MISC01.dwg
Last Saved: 2/21/2023 10:21 AM Saved By: 03823

**SABINE RIVER AUTHORITY OF TEXAS &
SABINE RIVER AUTHORITY, STATE OF LOUISIANA
PLANS FOR
TOLEDO BEND PROJECT
SPILLWAY ELECTRICAL IMPROVEMENTS
MARCH 2023**

REFERENCE MATERIALS - SPILLWAY ELECTRICAL DETAILS

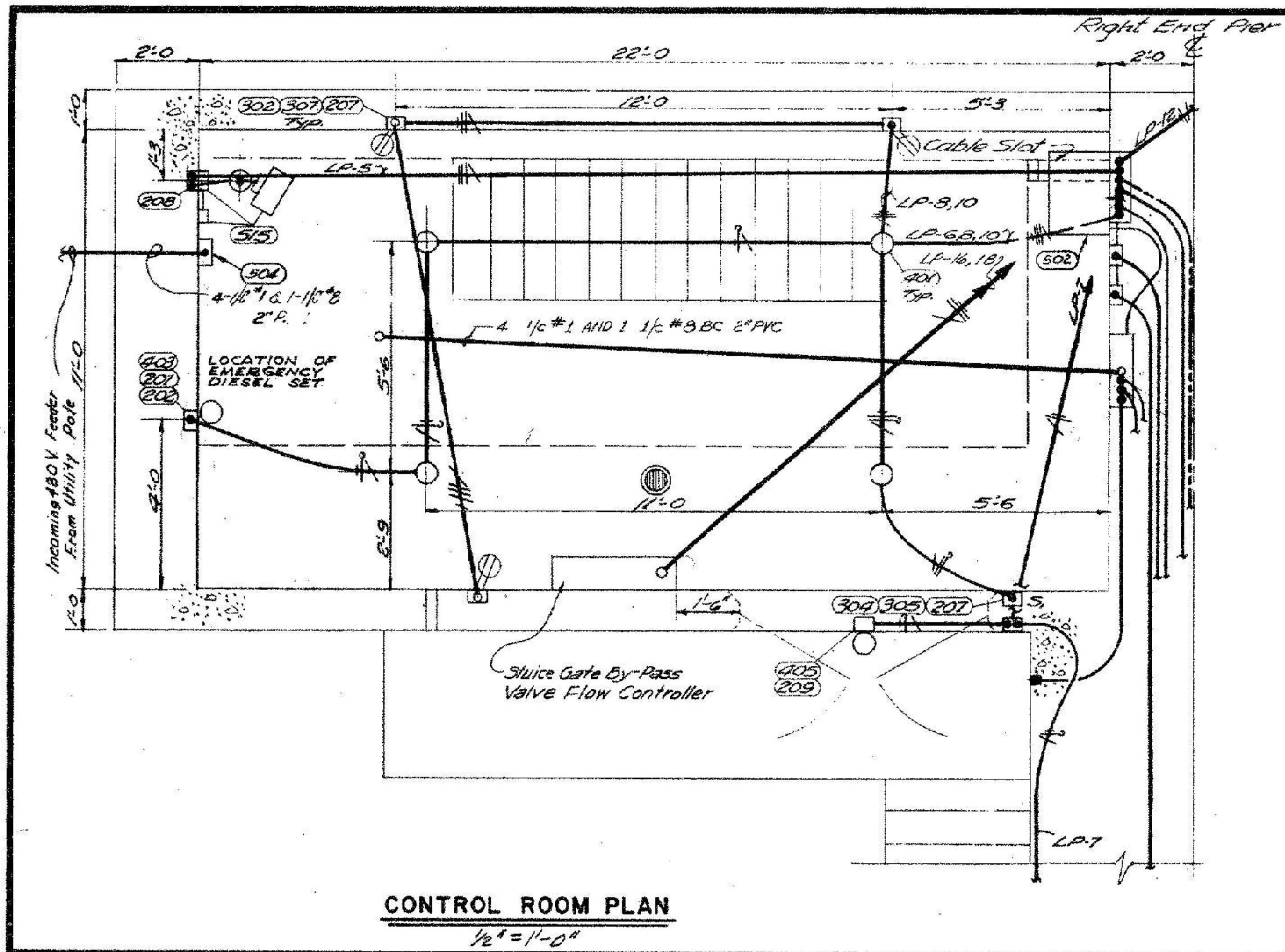
DRAWINGS ARE
PROVIDED FOR
INFORMATION
ONLY



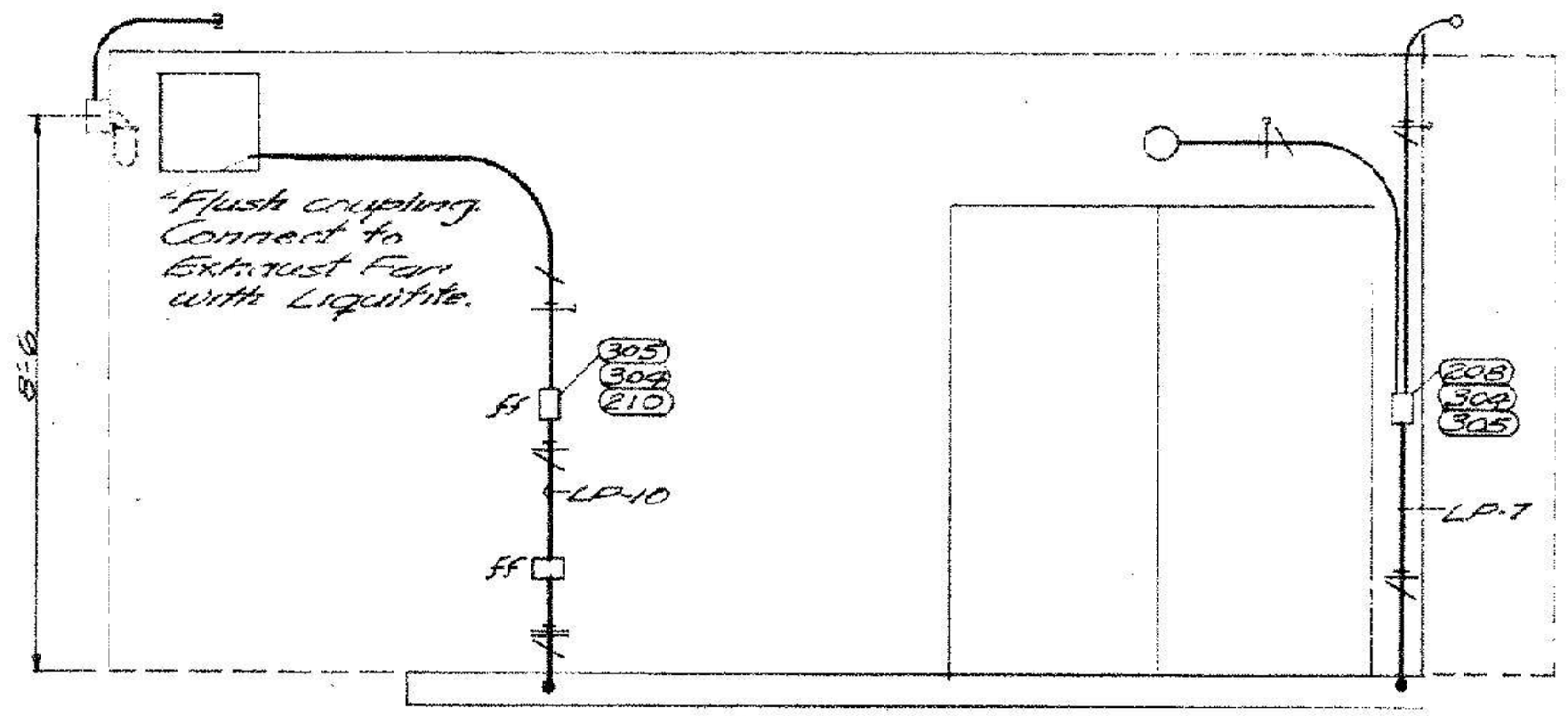
801 CHERRY STREET, SUITE 2800
FORT WORTH, TX 76102
PHONE - (817) 735-7300
WEB - WWW.FREESE.COM

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144
Freese and Nichols, Inc.
LA Registered Engineering Firm E.F-0000341

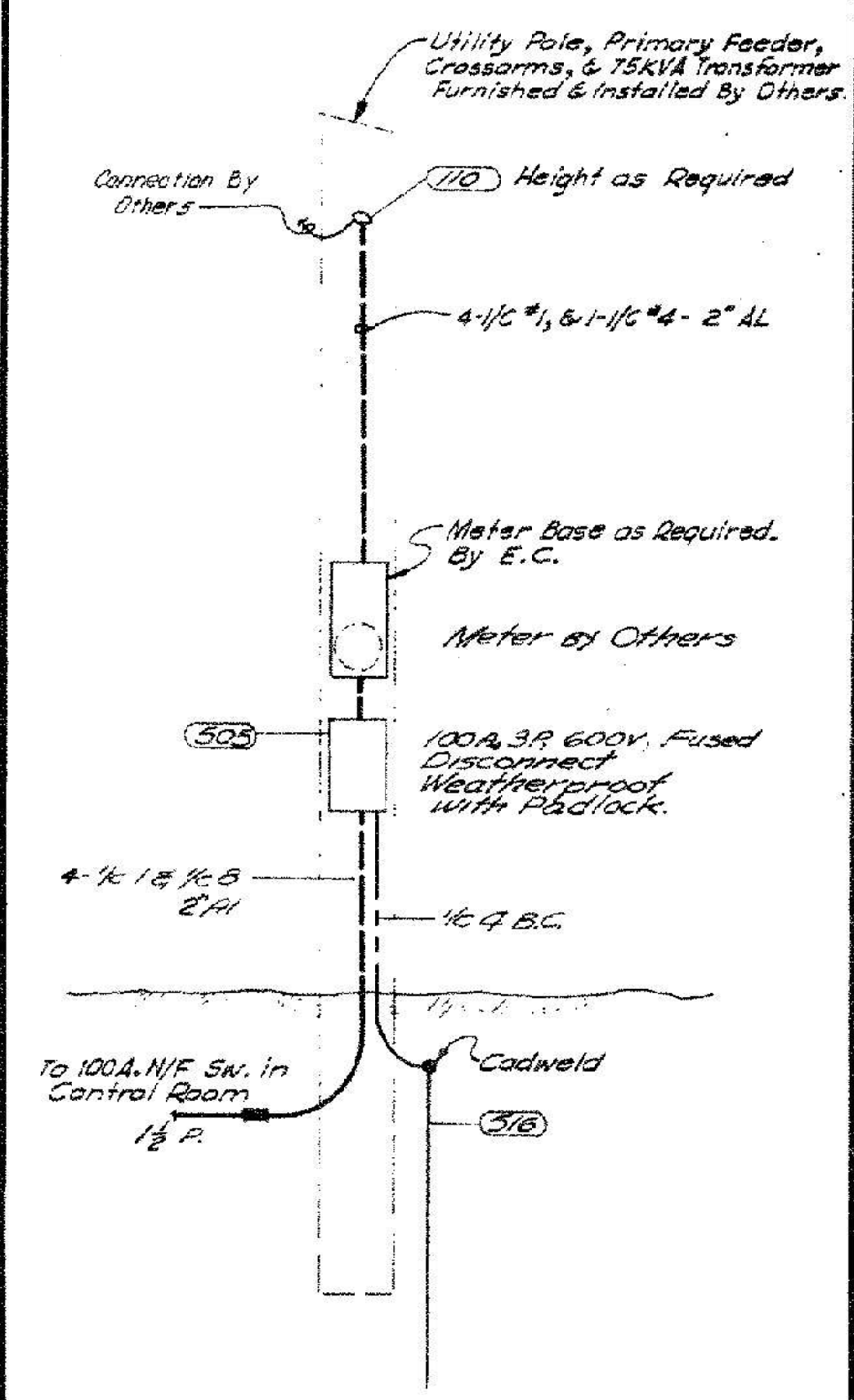




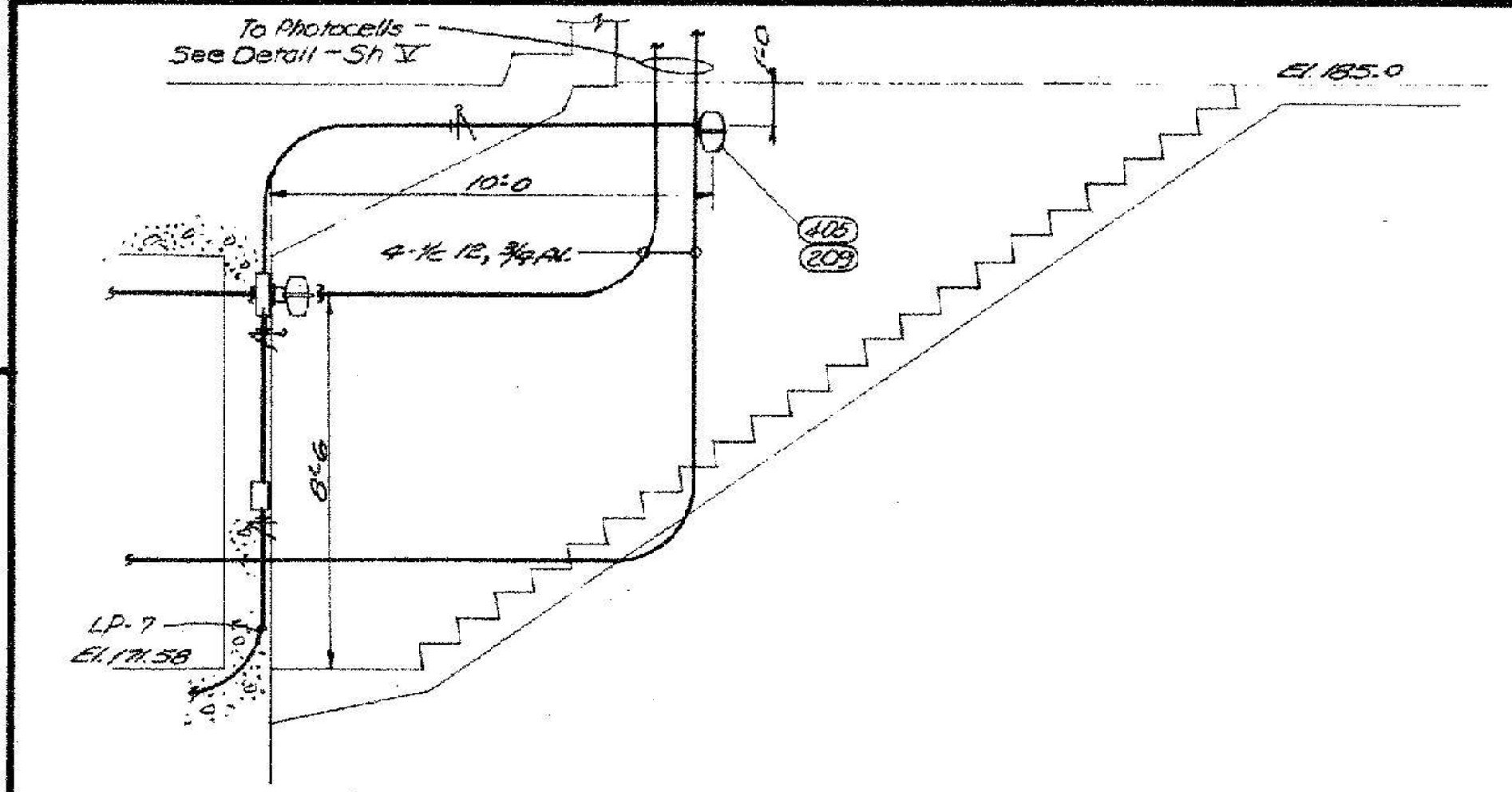
CONTROL ROOM PLAN
1/2" = 1'-0"



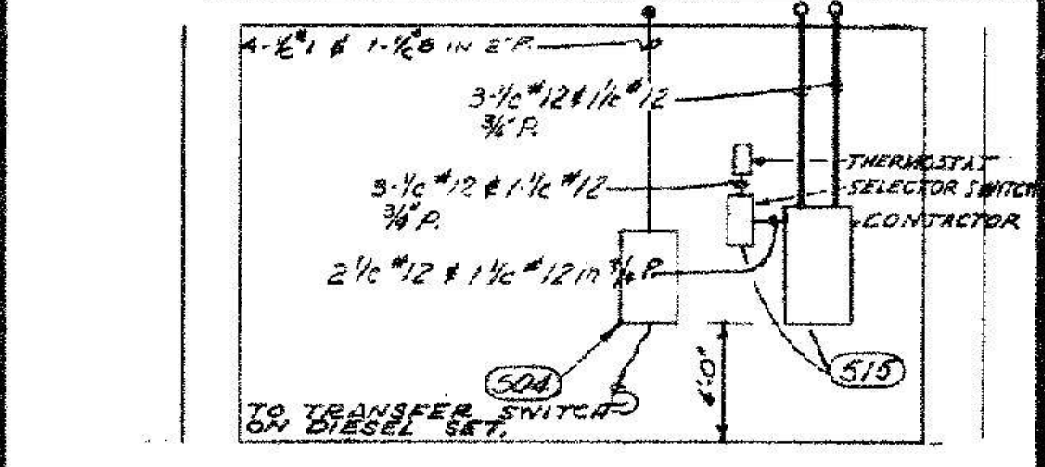
CONTROL ROOM ELEVATION
1/2" = 1'-0"



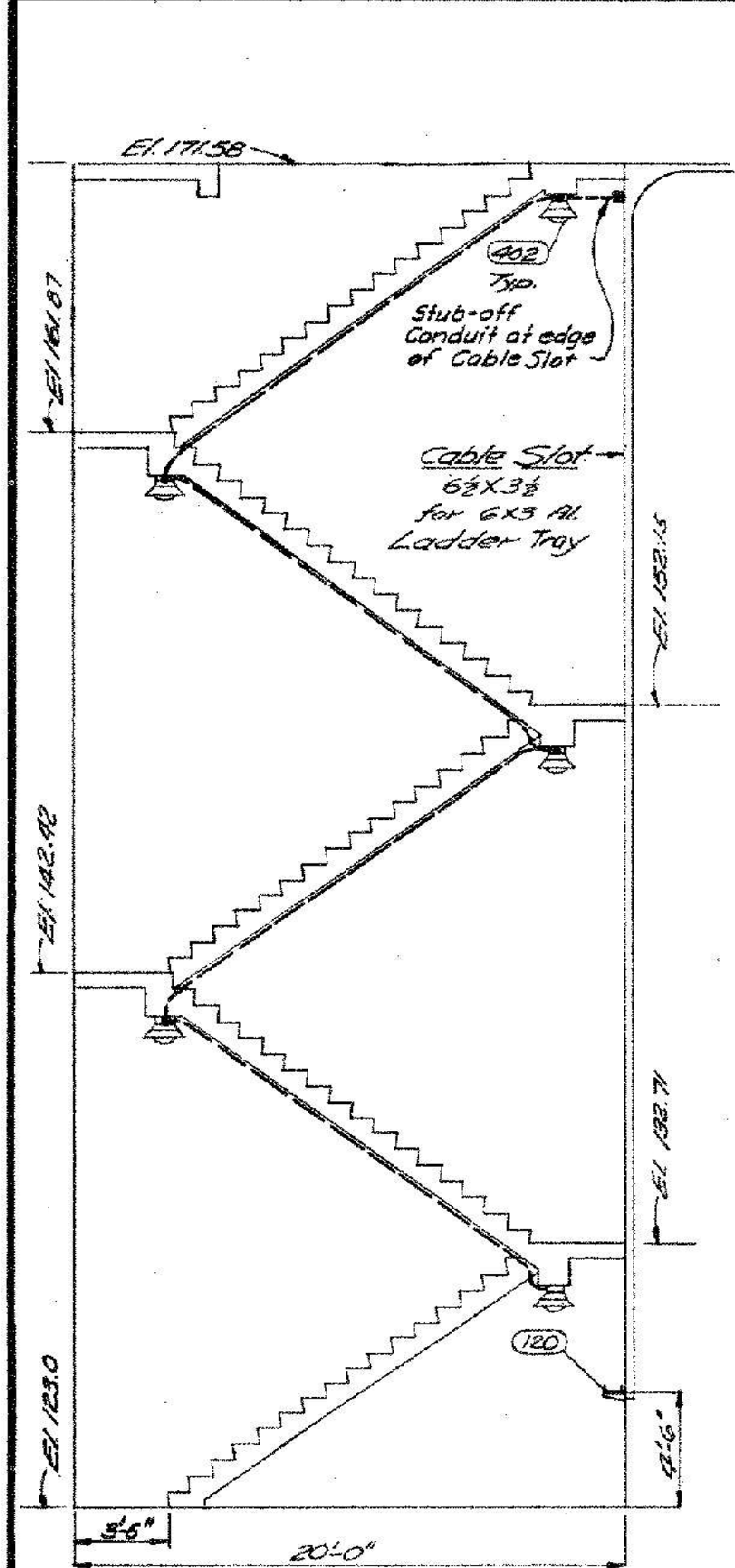
TRANSFORMER POLE
NTS



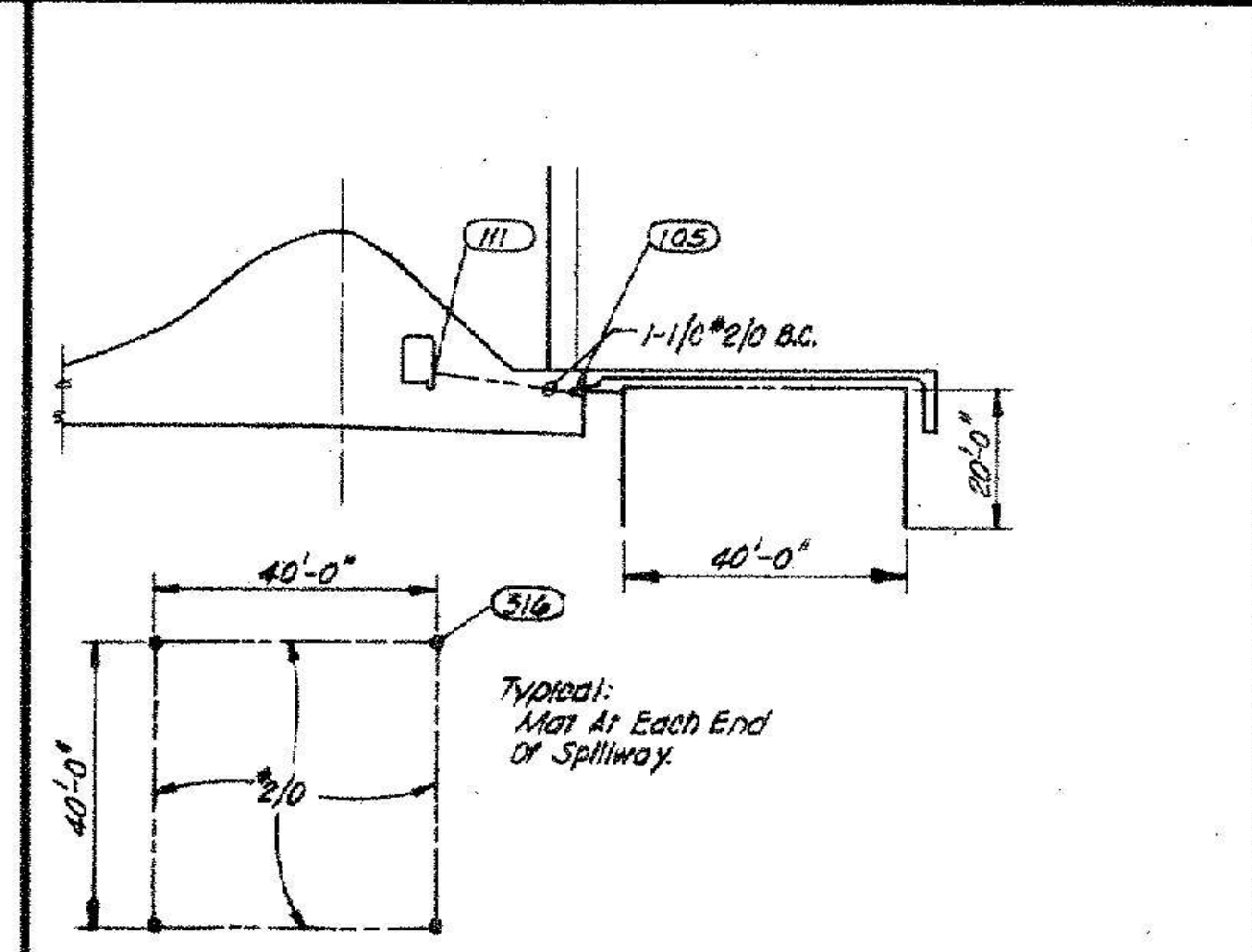
CONTROL ROOM, ENTRANCE - STAIRWAY ELEVATION
3/8" = 1'-0"



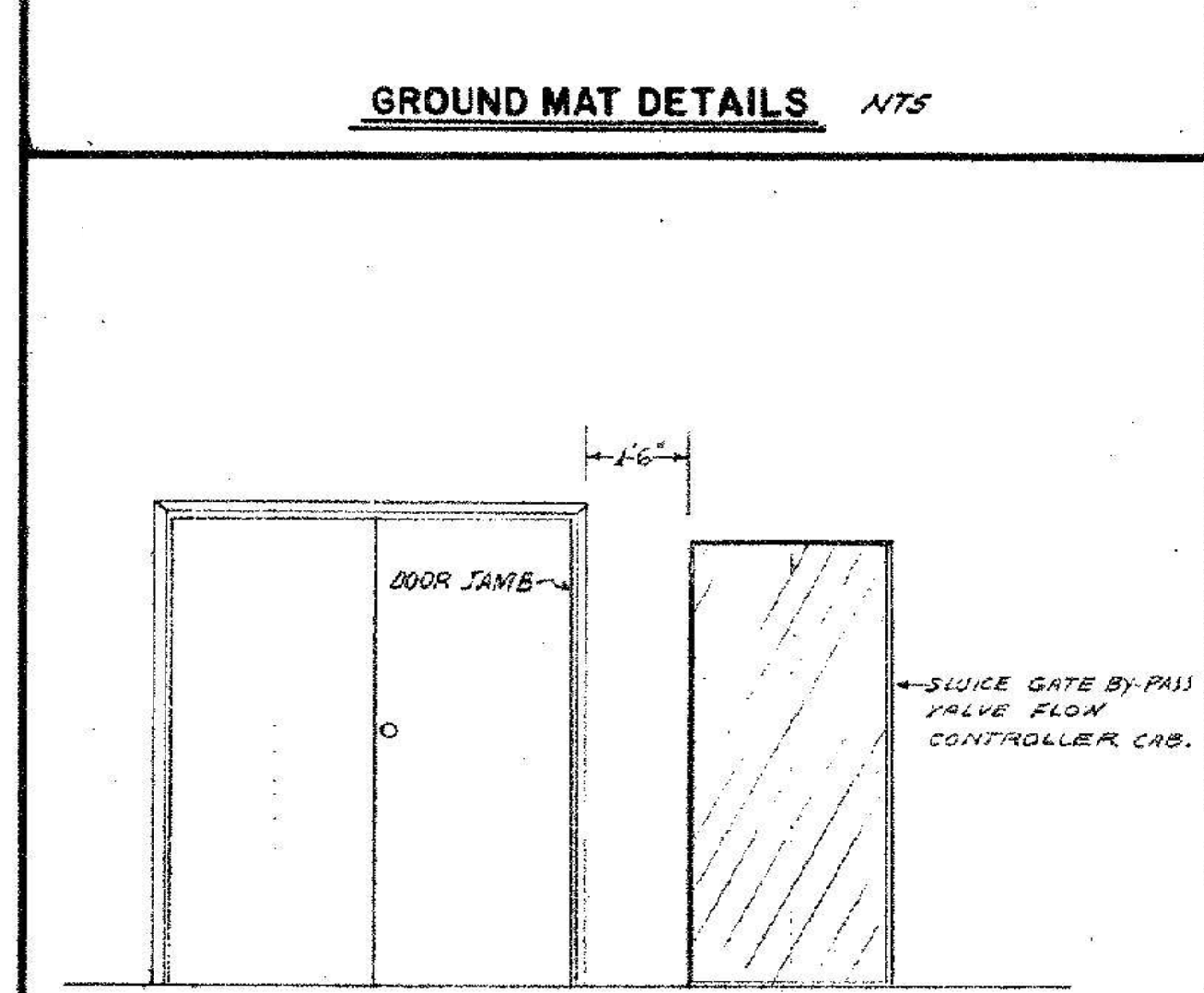
SOUTH WALL ELEVATION CONTROL ROOM
NTS



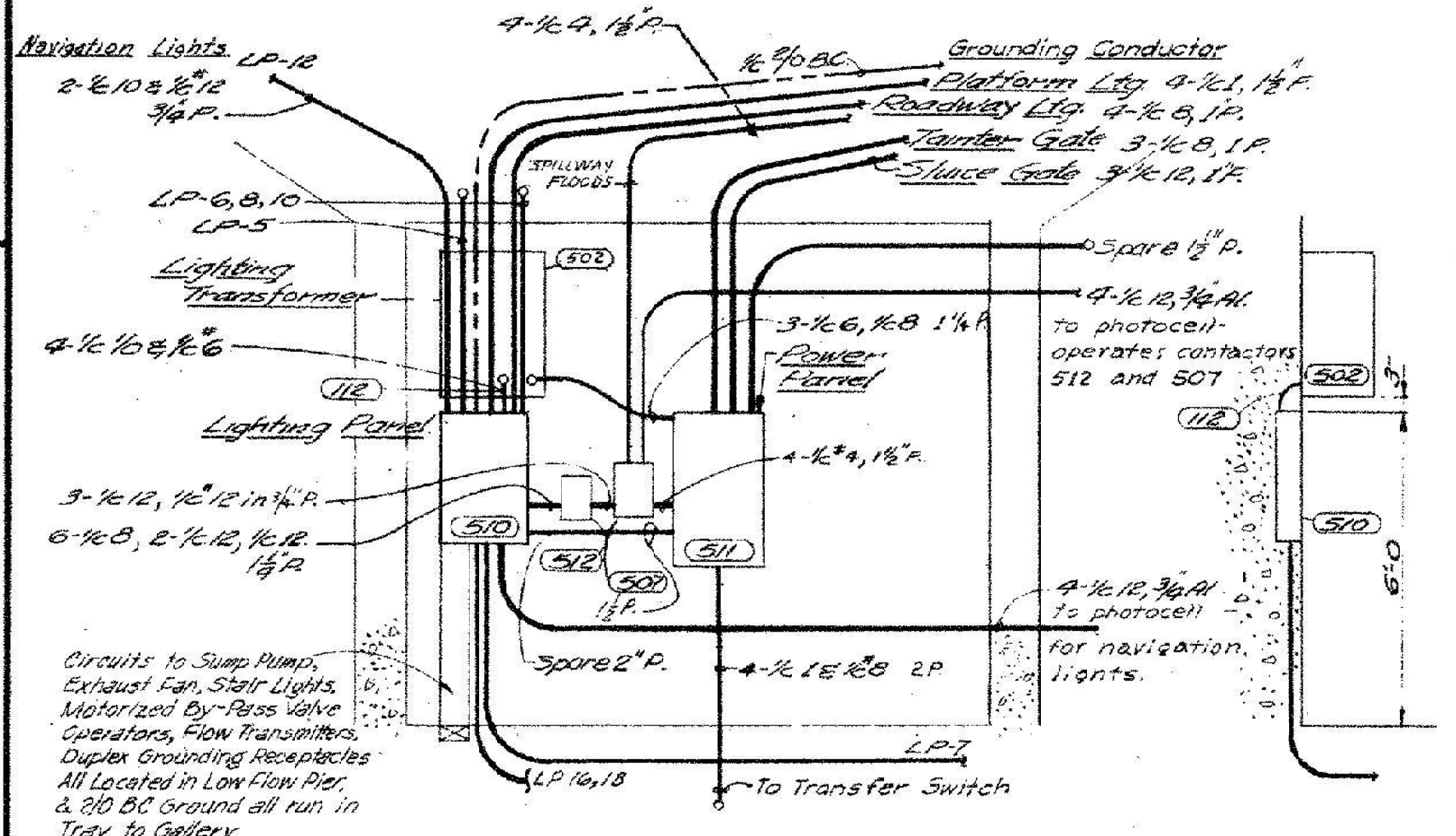
STAIRWAY ELEVATION
1/4" = 1'-0"



GROUND MAT DETAILS
NTS

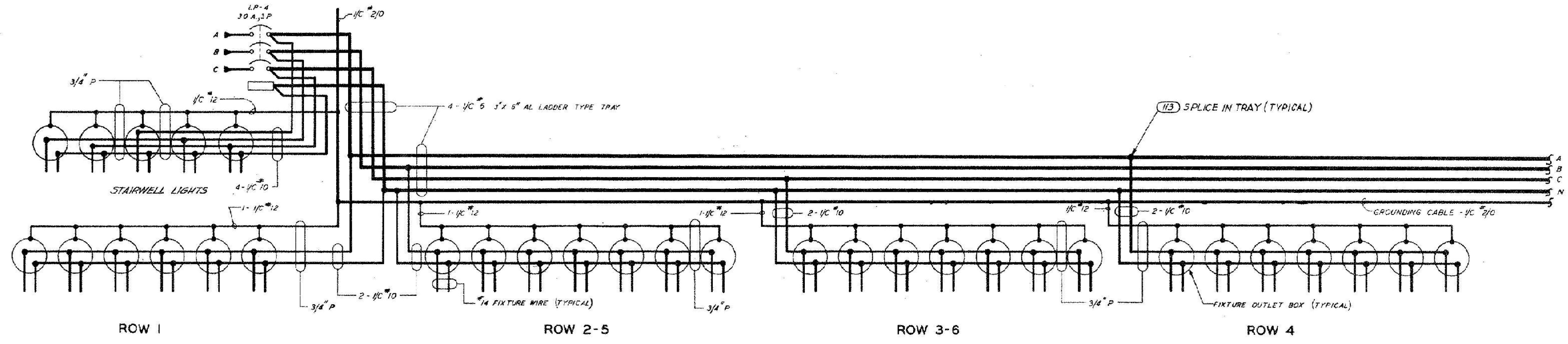


DOWNSTREAM WALL ELEVATION CONTROL ROOM
NTS

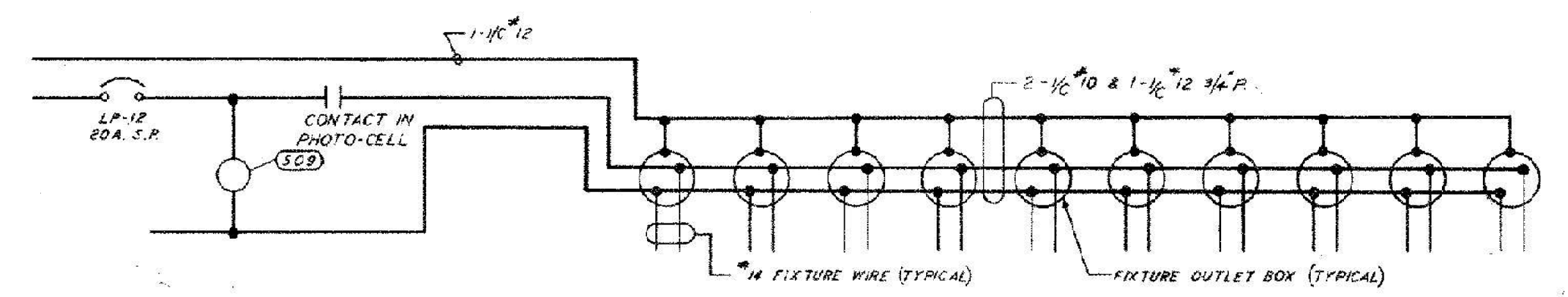


LEFT WALL ELEVATION - CONTROL ROOM
NTS

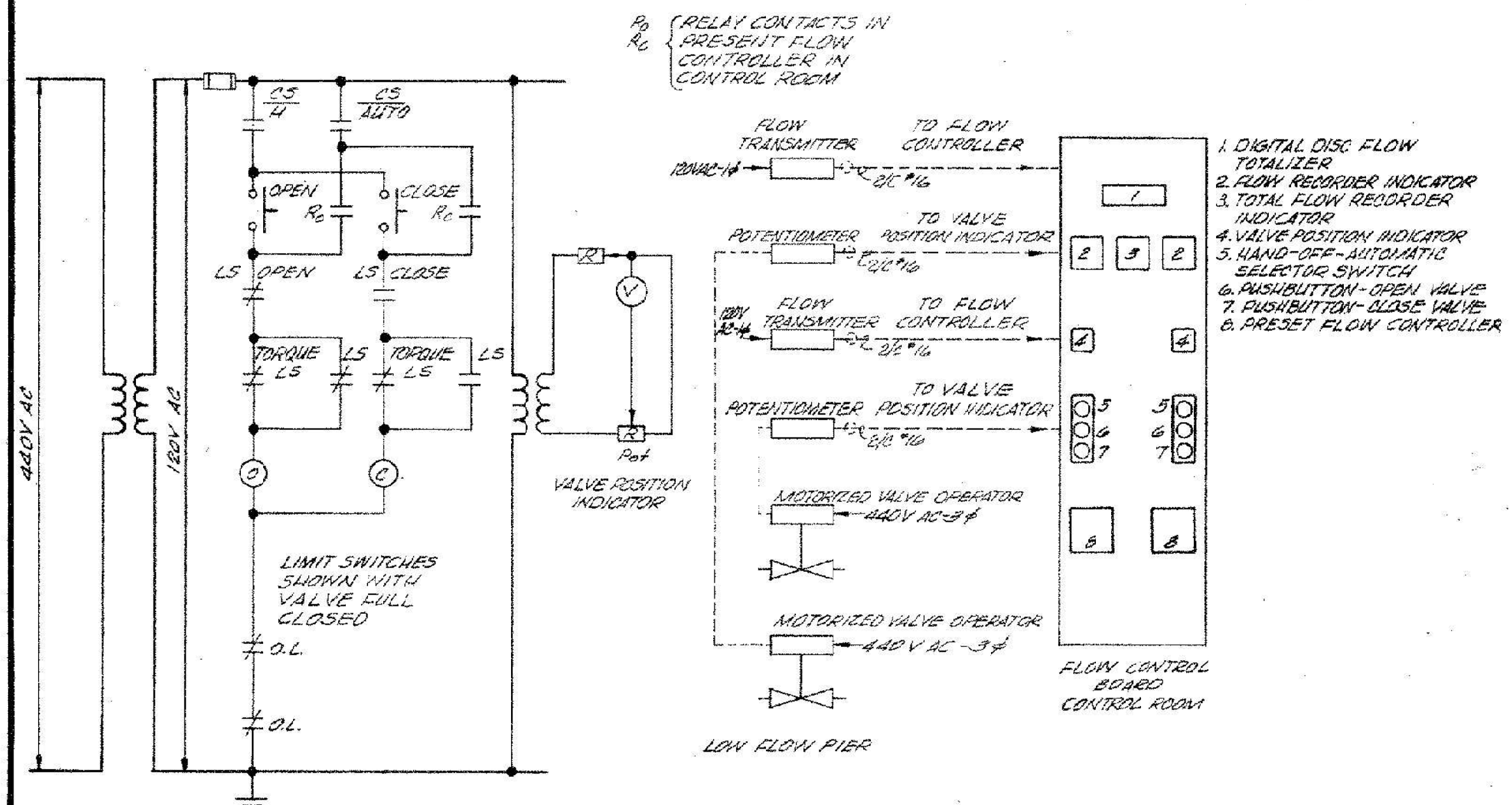
REVISION	DATE	DESCRIPTION	BY
<p>SABINE RIVER AUTHORITIES OF TEXAS AND LOUISIANA SABINE RIVER, TEXAS AND LOUISIANA</p> <p>TOLEDO BEND DAM AND RESERVOIR</p> <p>SPILLWAY ELECTRICAL DETAILS I</p>			
<p>FORREST AND COTTON, INC. CONSULTING ENGINEERS DALLAS, TEXAS</p>			
DESIGNED BY	RLS, B.C.S.	CHECKED BY	RLS, B.C.S.
DRAWN BY	RLS	RECOMMENDED BY	A.M.B., R.L.S.
TRACED BY	RLS	APPROVED BY	Almestill
FILE: 522-04-172	DATE: 8 Nov 1963	SCALE: NO SCALE	CONTRACT NO. TB-8 SHEET 568 OF 573



INSPECTION & DRAINAGE GALLERY LIGHTS WIRING DIAGRAM

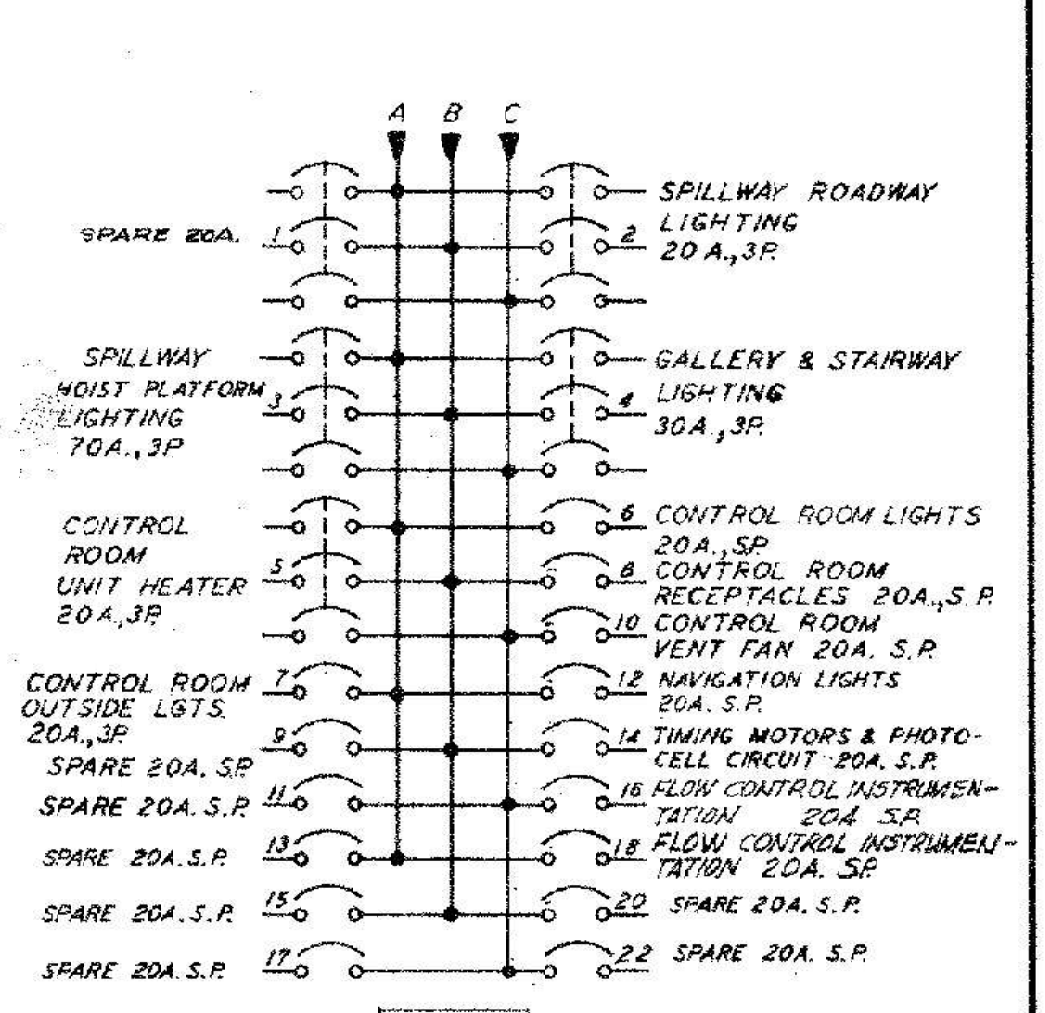


NAVIGATION LIGHTS WIRING DIAGRAM

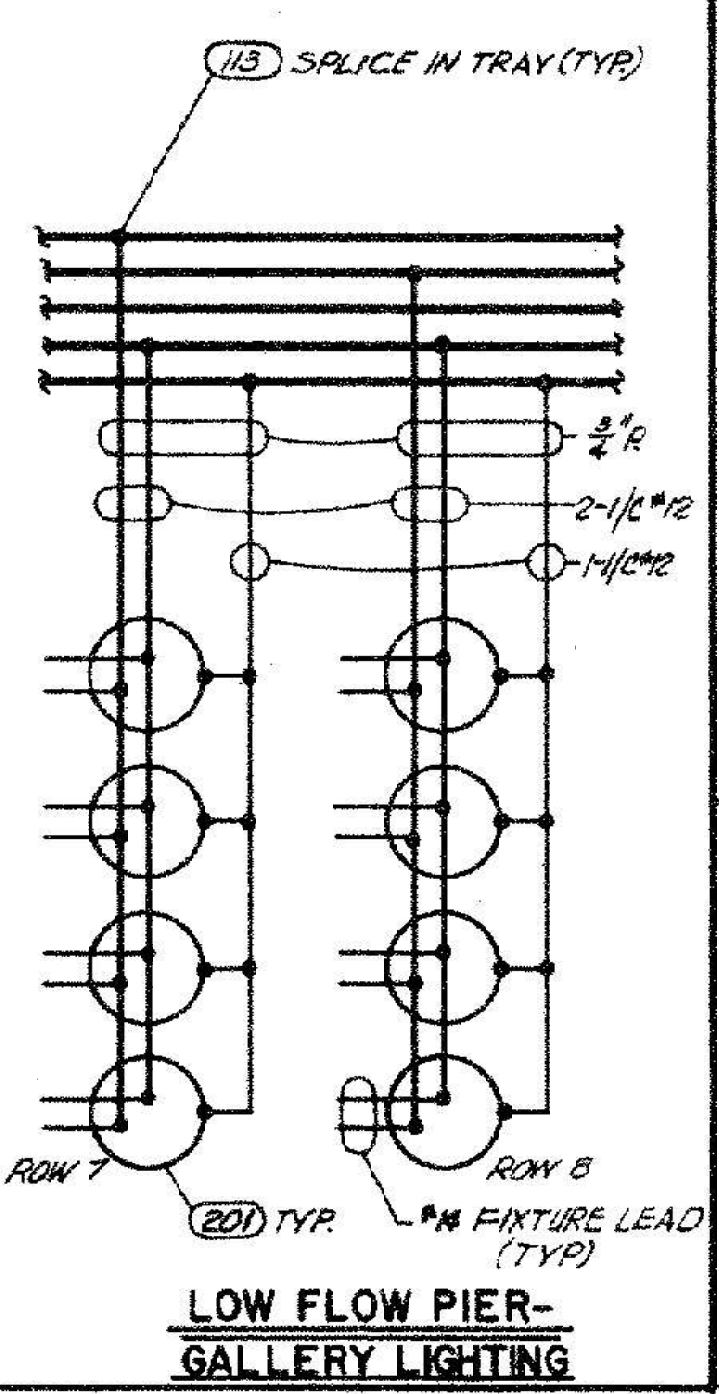


SLUCE GATE BY-PASS FLOW CONTROL
(TWO CIRCUITS REQUIRED)

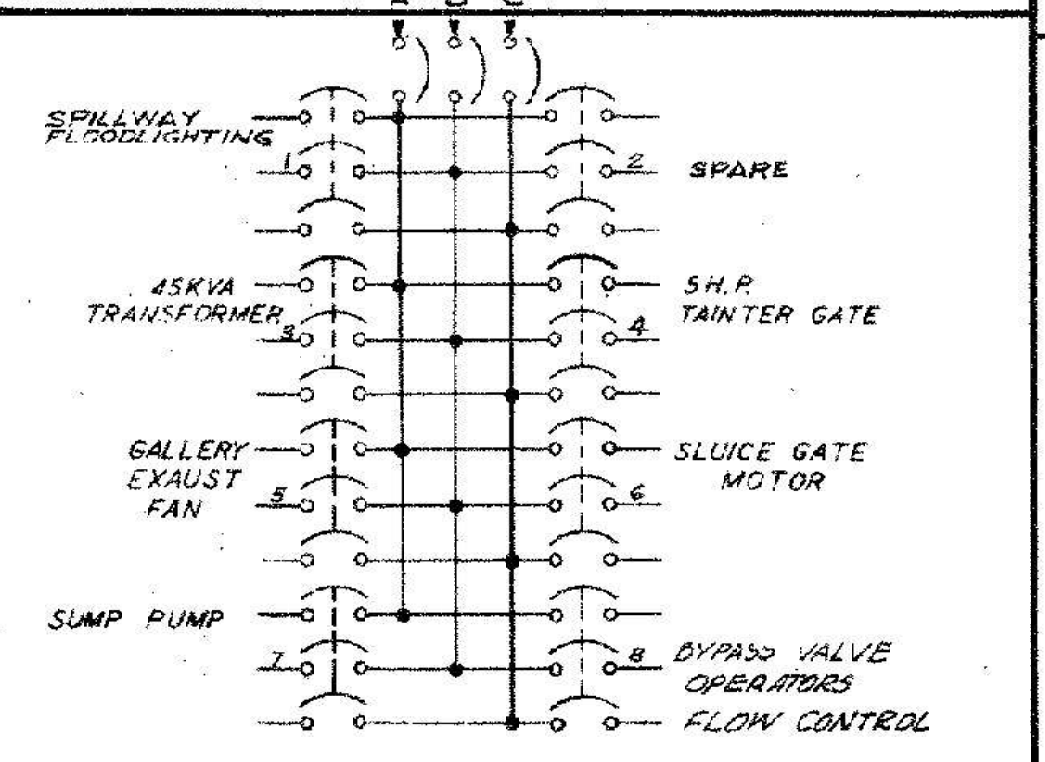
FLOW CONTROL SYSTEM



CONTROL ROOM LIGHTING PANEL
3Ø, 4W, 3LN, 120/208V - 200A M.L.O.



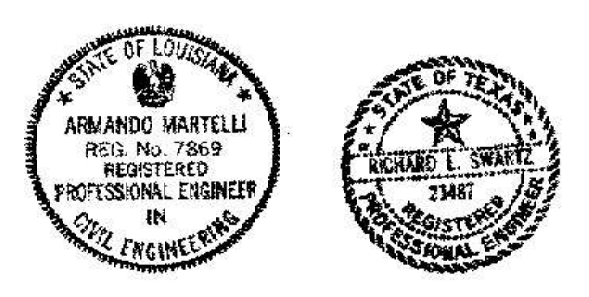
LOW FLOW PIER-GALLERY LIGHTING

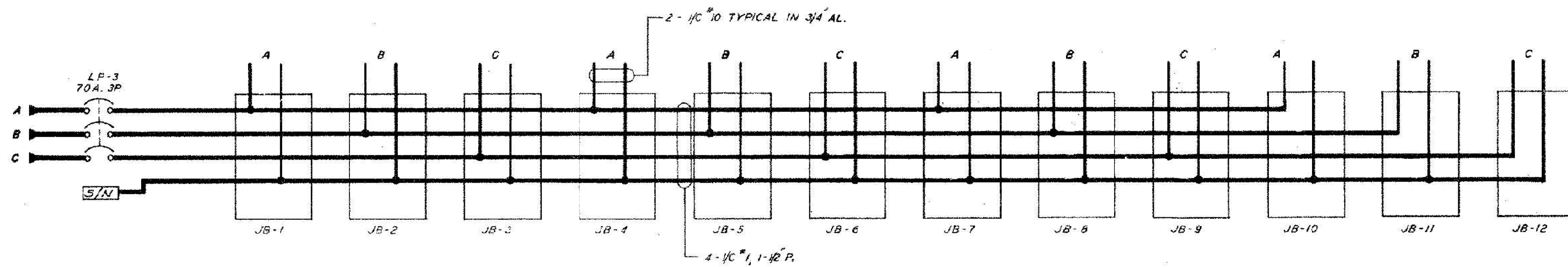
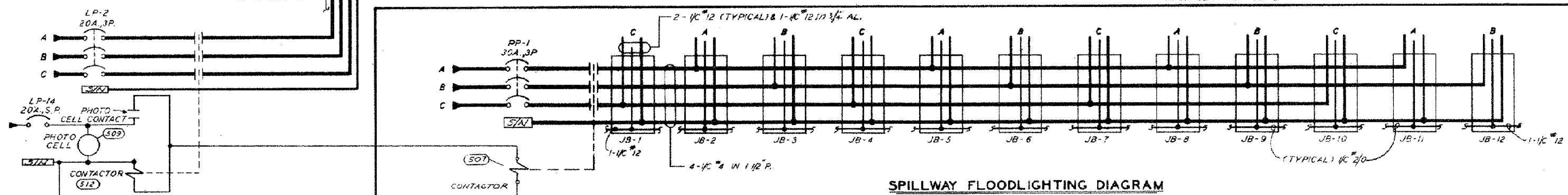
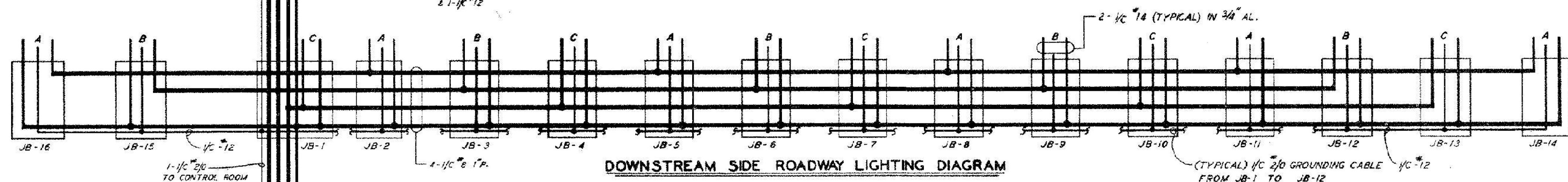
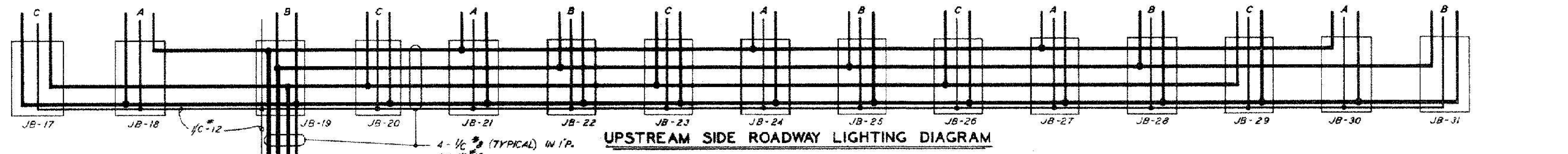
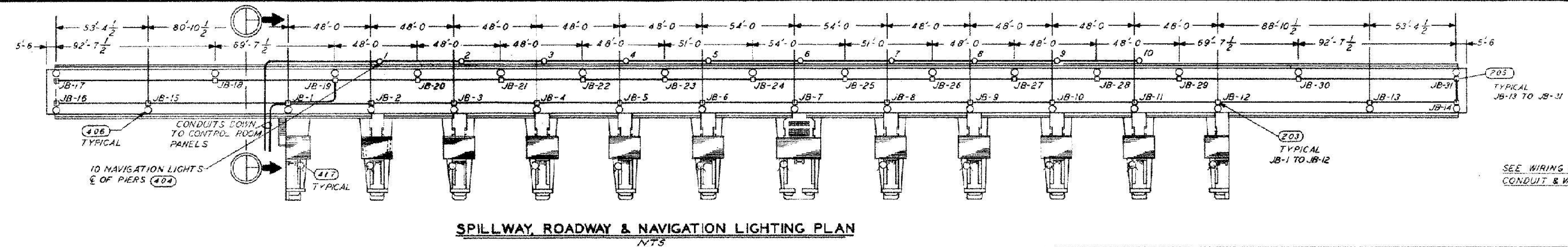
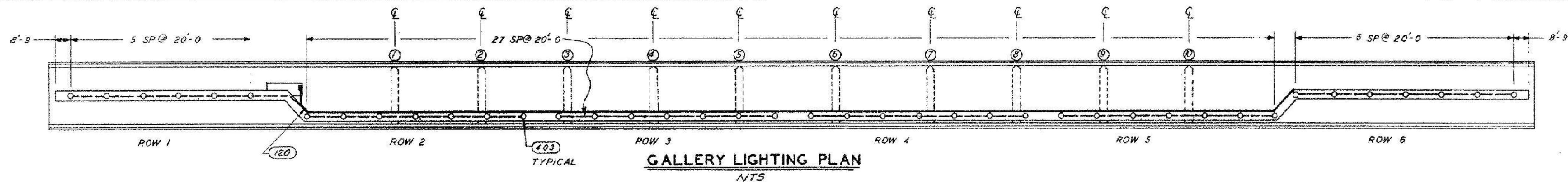


CONTROL ROOM POWER PANEL
3Ø, 4W, 480 VOLT 200A MAIN BREAKER

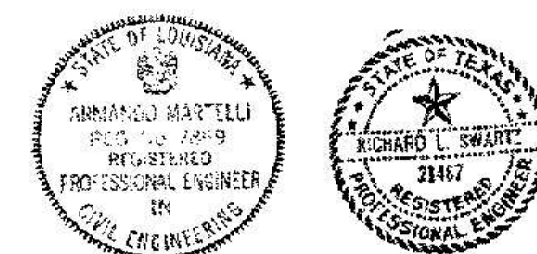
CIR. NO.	FRAME	TRIP	POLES	LOAD
1	EP-ETI-2683	30A	3	125A
2	EP-ETI-2683	30A	3	125A
3	EP-ETI-2625	70A	3	28.6A
4	EP-ETI-2683	105A	3	117A
5	EP-ETI-2481	150A	3	31A
6	EP-ETI-2481	150A	3	31A
7	EP-ETI-2620	150A	3	31A
8	EP-ETI-2681	20A	3	-

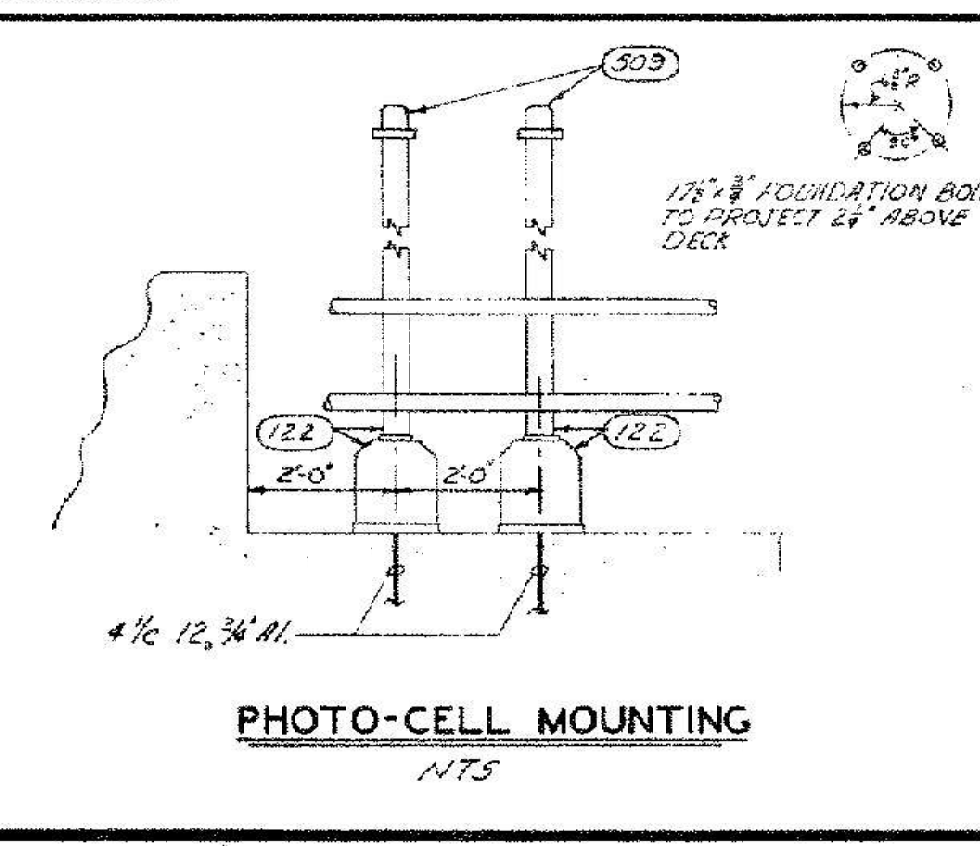
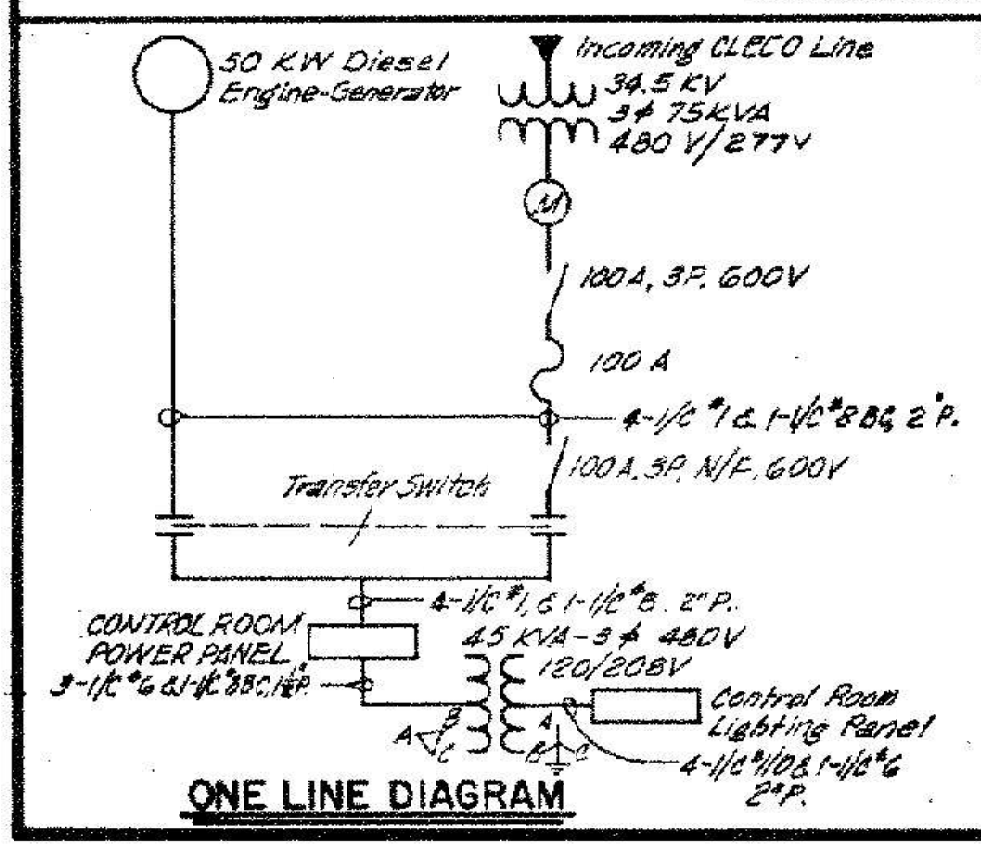
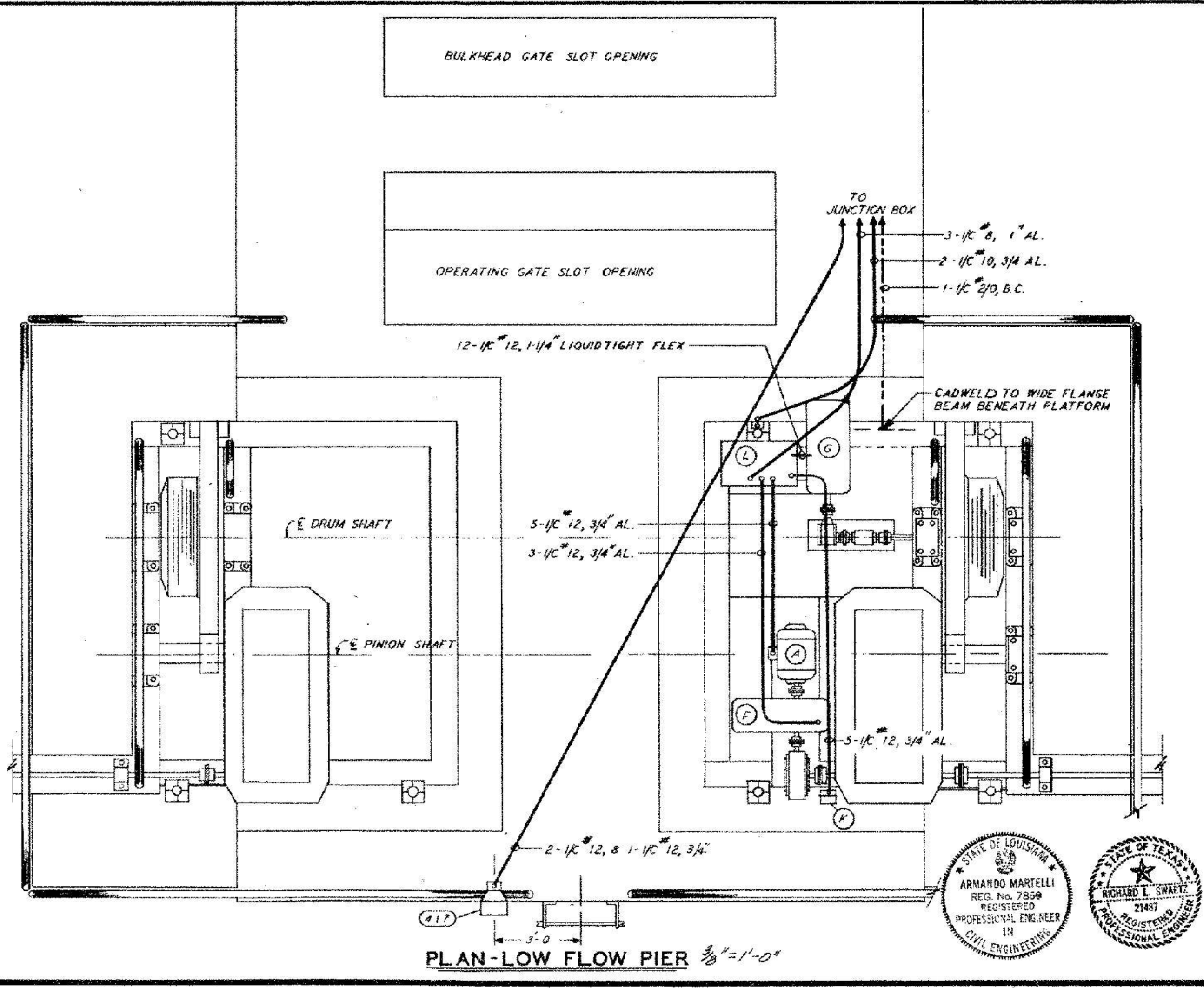
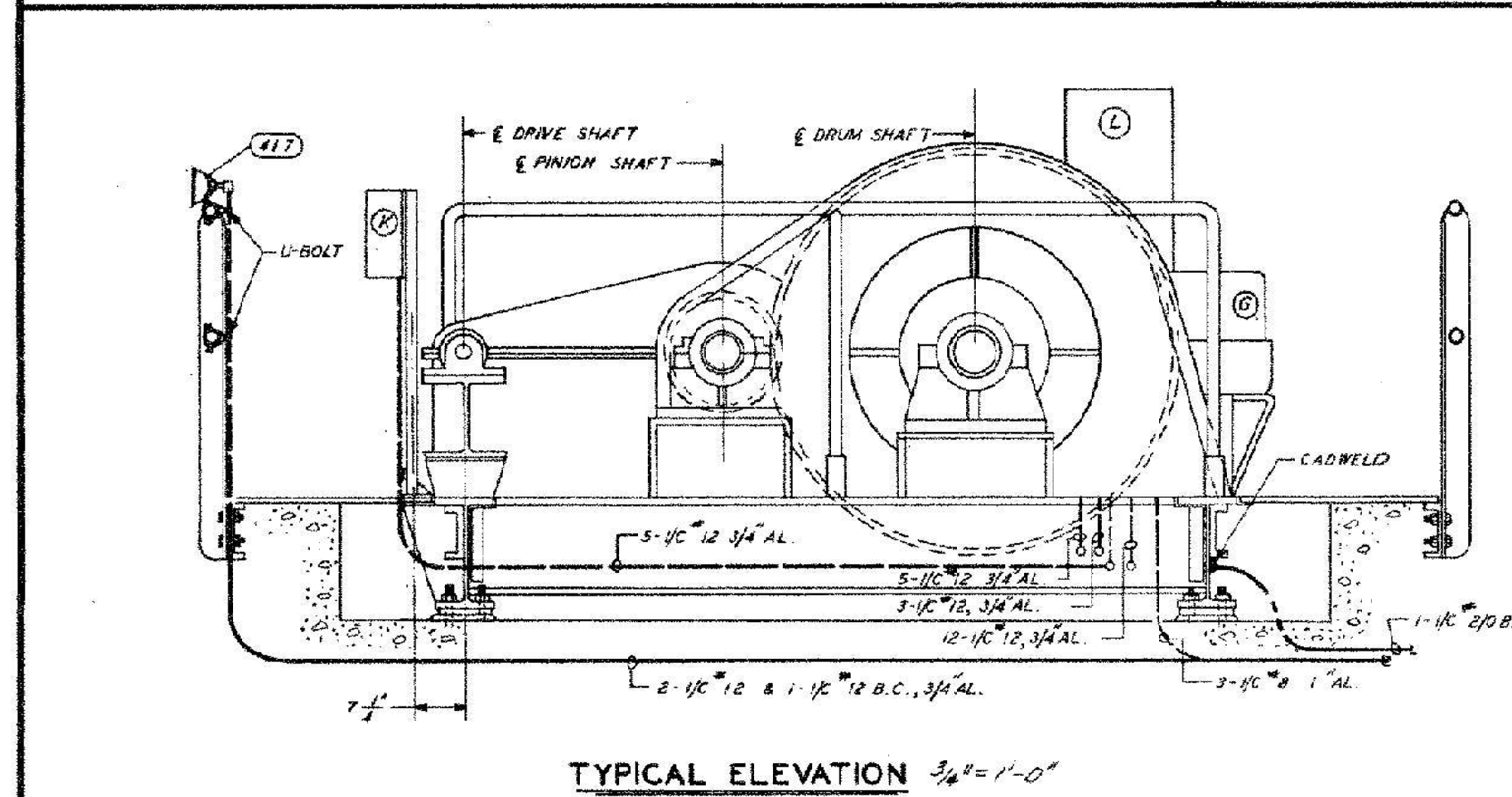
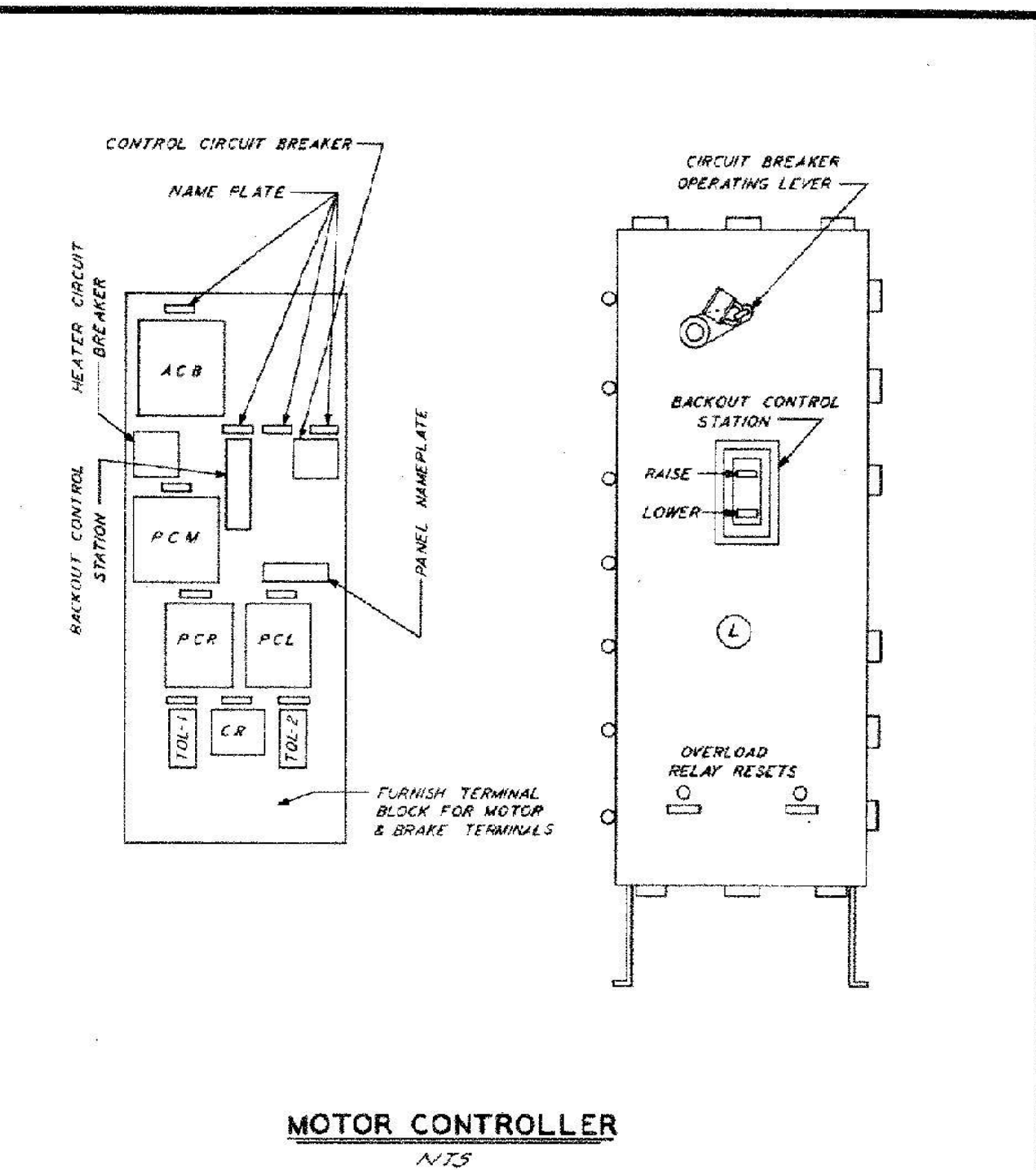
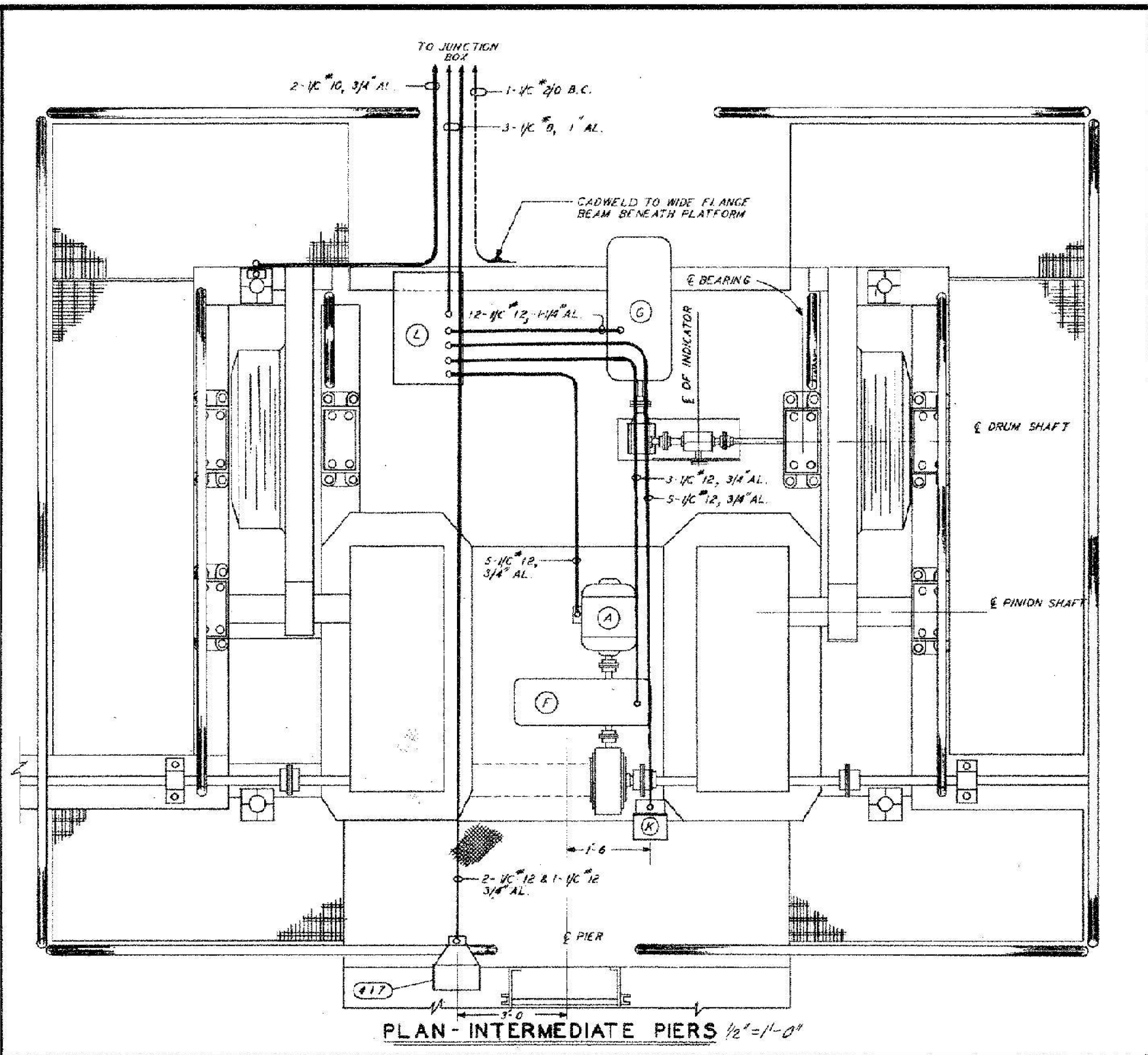
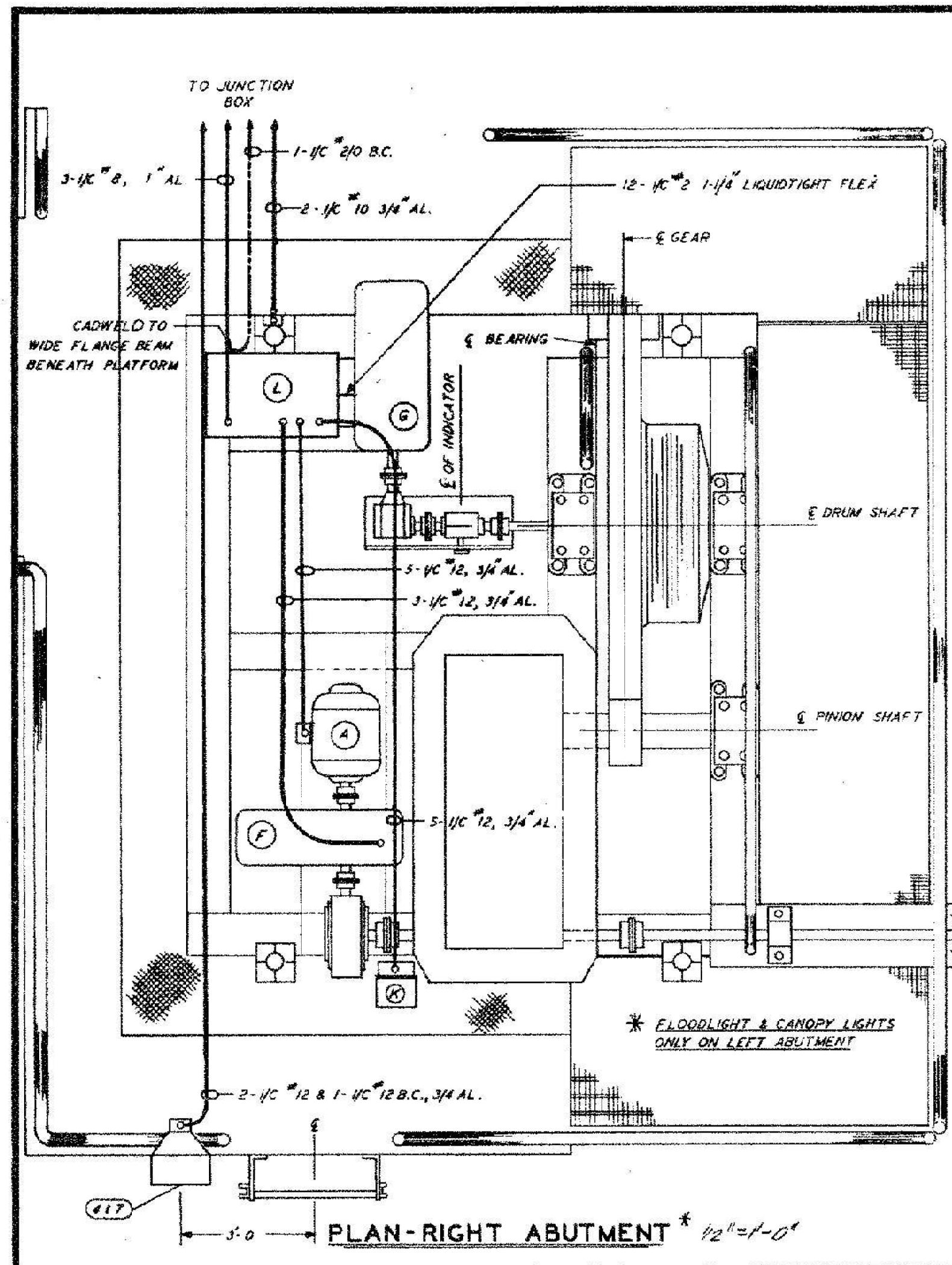
REVISION	DATE	DESCRIPTION	BY
SABINE RIVER AUTHORITIES OF TEXAS AND LOUISIANA SABINE RIVER, TEXAS AND LOUISIANA TOLEDO BEND DAM AND RESERVOIR SPILLWAY ELECTRICAL DETAILS II			
FORREST AND COTTON, INC. CONSULTING ENGINEERS DALLAS, TEXAS			
DESIGNED BY:	R.L.S. B.C.S.	CHECKED BY:	R.L.S. B.C.S.
DRAWN BY:	R.W.G.	RECOMMENDED BY:	A.M.B.R.L.S.
TRACED BY:	R.W.G.	APPROVED:	<i>[Signature]</i>
FILE:	S22-DI-73	CONTRACT NO.:	TB-8
DATE:	9 Nov 1963	SCALE:	NO SCALE
		SHEET:	S-69 OF S-73



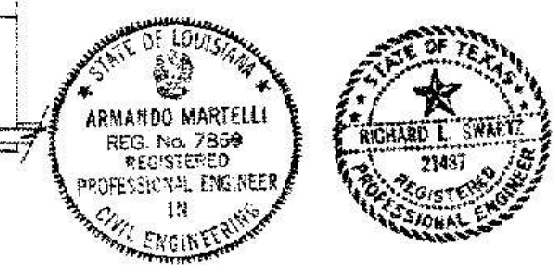


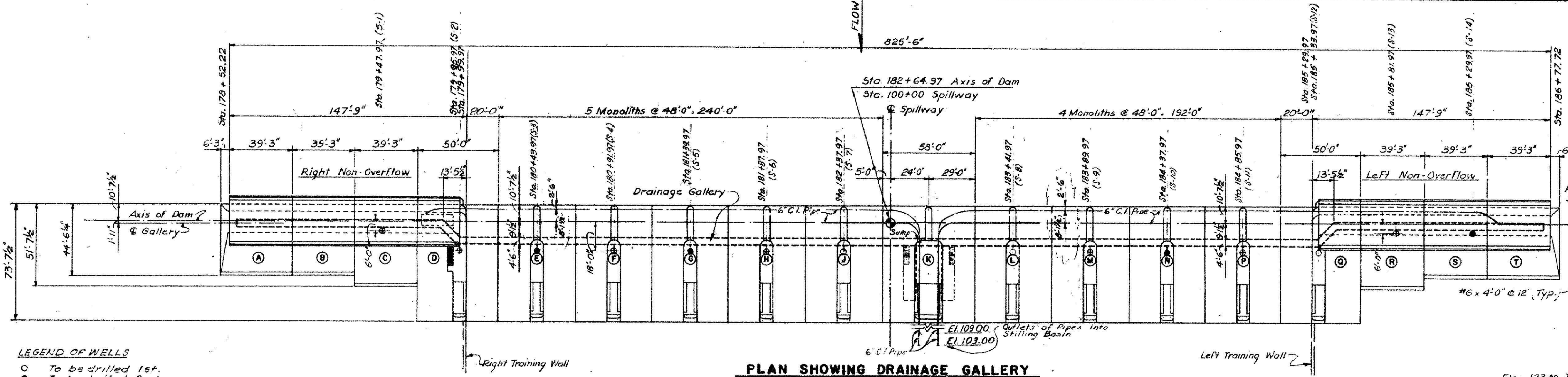
REVISION	DATE	DESCRIPTION	BY
SABINE RIVER AUTHORITIES OF TEXAS AND LOUISIANA SABINE RIVER, TEXAS AND LOUISIANA			
TOLEDO BEND DAM AND RESERVOIR			
SPILLWAY ELECTRICAL DETAILS III			
FORREST AND COTTON, INC.		CONSULTING ENGINEERS	
DALLAS, TEXAS			
DESIGNED BY: R.L.S. & C.S.	CHECKED BY: R.L.S. & C.S.		
DRAWN BY: R.W.G.	RECOMMENDED: A.M. & B.L.S.		
TRACED BY: R.W.G.	APPROVED: <i>[Signature]</i>		
FILE: 622-01-174	DATE: 8 Nov 1963	SCALE: NO SCALE	CONTRACT NO. 18-8 SHEET 570 OF 573





REVISION	DATE	DESCRIPTION	BY
SABINE RIVER AUTHORITIES OF TEXAS AND LOUISIANA SABINE RIVER, TEXAS AND LOUISIANA TOLEDO BEND DAM AND RESERVOIR SPILLWAY ELECTRICAL DETAILS V			
FORREST AND COTTON, INC.		CONSULTING ENGINEERS	
DALLAS, TEXAS			
DESIGNED BY: R.L.S. & C.S.	CHECKED BY: R.L.S. & C.S.		
DRAWN BY: R.W.G.	RECOMMENDED: A.M. & R.L.S.		
TRACED BY: R.W.G.	APPROVED: <i>A. Martello</i>		
FILE: 522-01-178	DATE: 8 Nov 1963	SCALE: NO SCALE	CONTRACT NO. TB-8 SHEET 572 OF 573



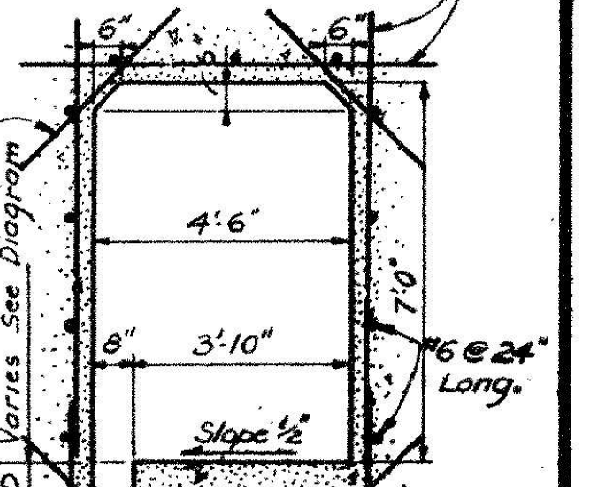


PLAN SHOWING DRAINAGE GALLERY

SCALE: 1/4 INCH = 30 FEET

NOTE: Bridge, Hoist Machinery & Tainter Gates not shown in this view.

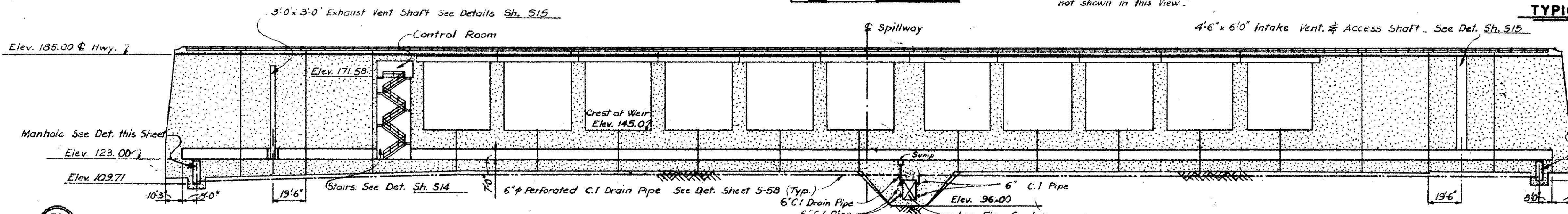
NOTE: Typical Gallery Reinforcing at End Piers & Non-Overflows for Reinf. of Remaining Part of Gallery See Sh. 526 #6 @ 12" Vert. 1/2 Horiz.



TYPICAL GALLERY SECTION

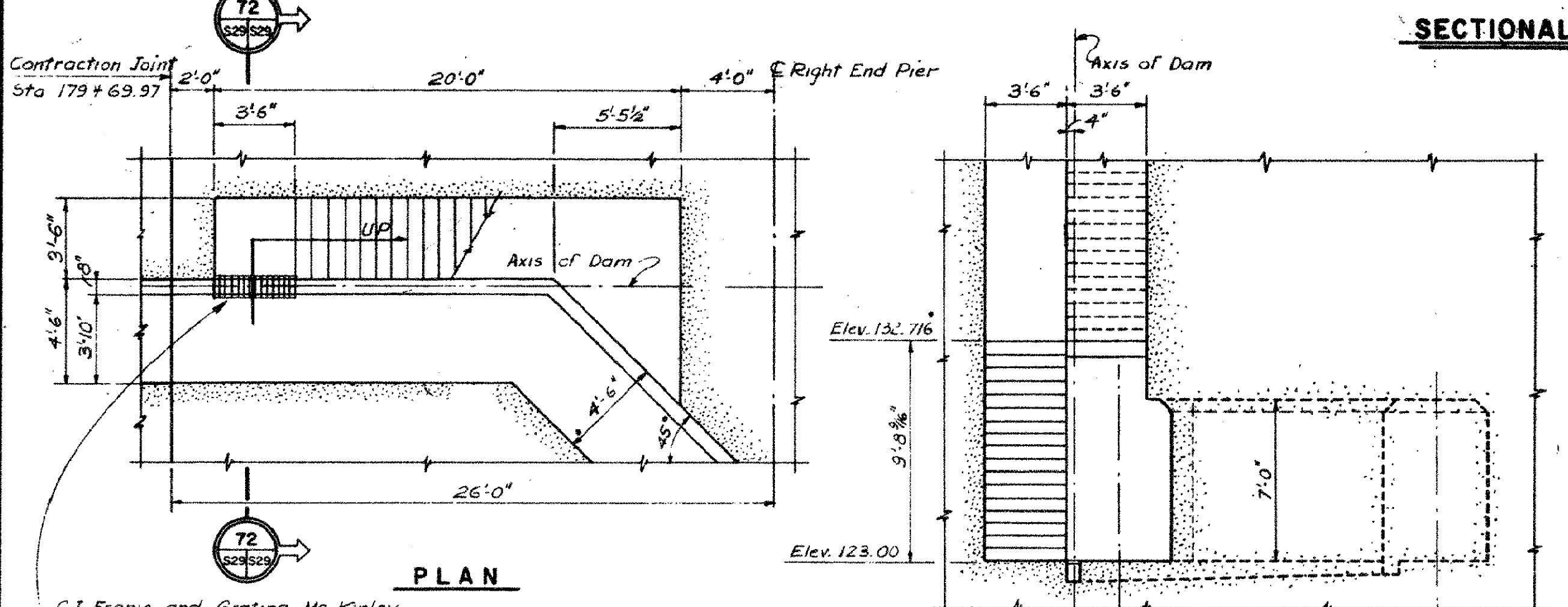
SCALE: 3/8 INCH = 1 FOOT

LEGEND OF WELLS
 ○ To be drilled 1st.
 ● To be drilled 2nd.
 ⊙ To be drilled 3rd.



SECTIONAL ELEVATION THROUGH DRAINAGE GALLERY

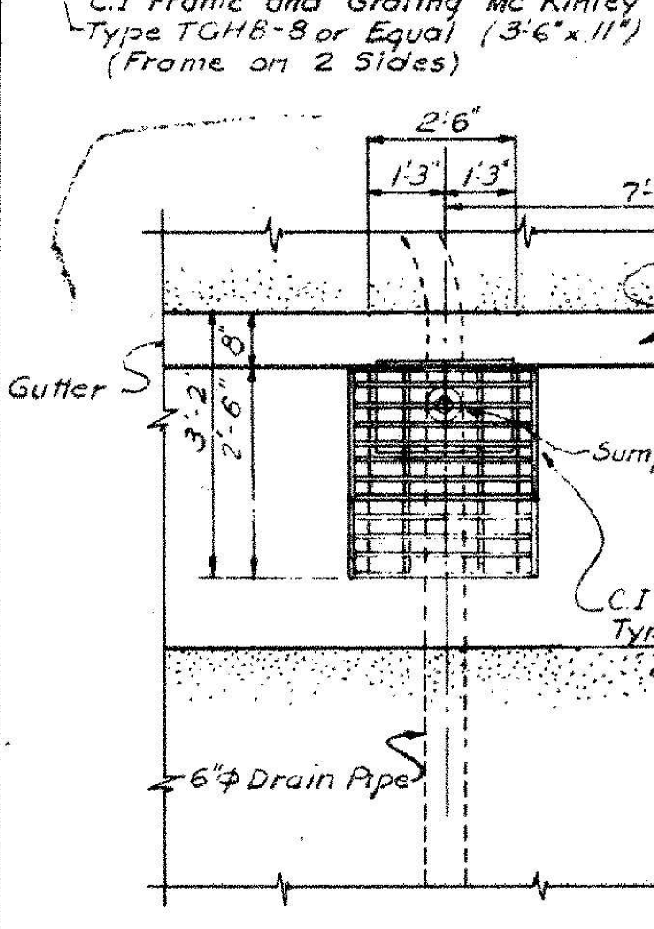
SCALE: 1/4 INCH = 30 FEET



GALLERY DETAILS AT STAIRS

SCALE: 1/4 INCH = 1 FOOT

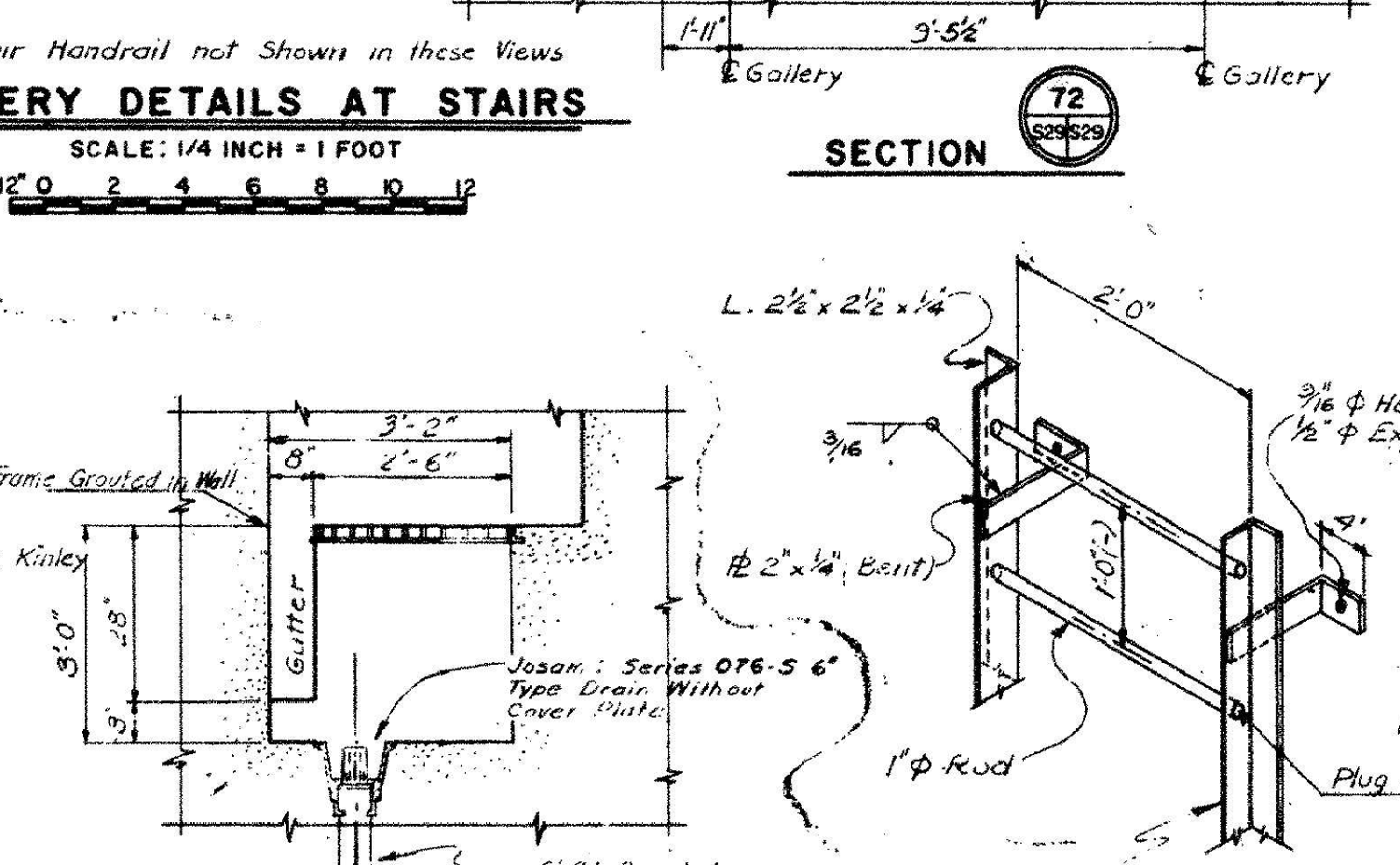
SECTION



PLAN

GALLERY SUMP DETAILS

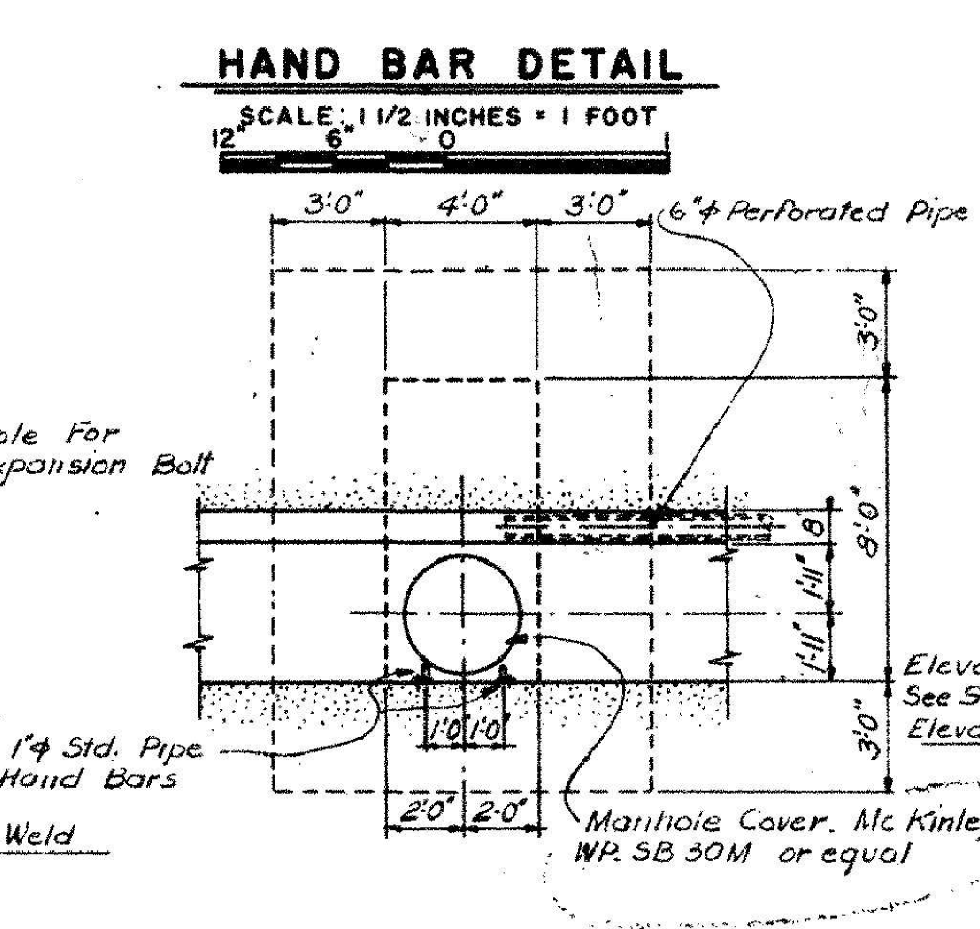
SCALE: 1/2 INCH = 1 FOOT



SECTION

LADDER DETAIL

SCALE: 1/4 INCH = 1 FOOT



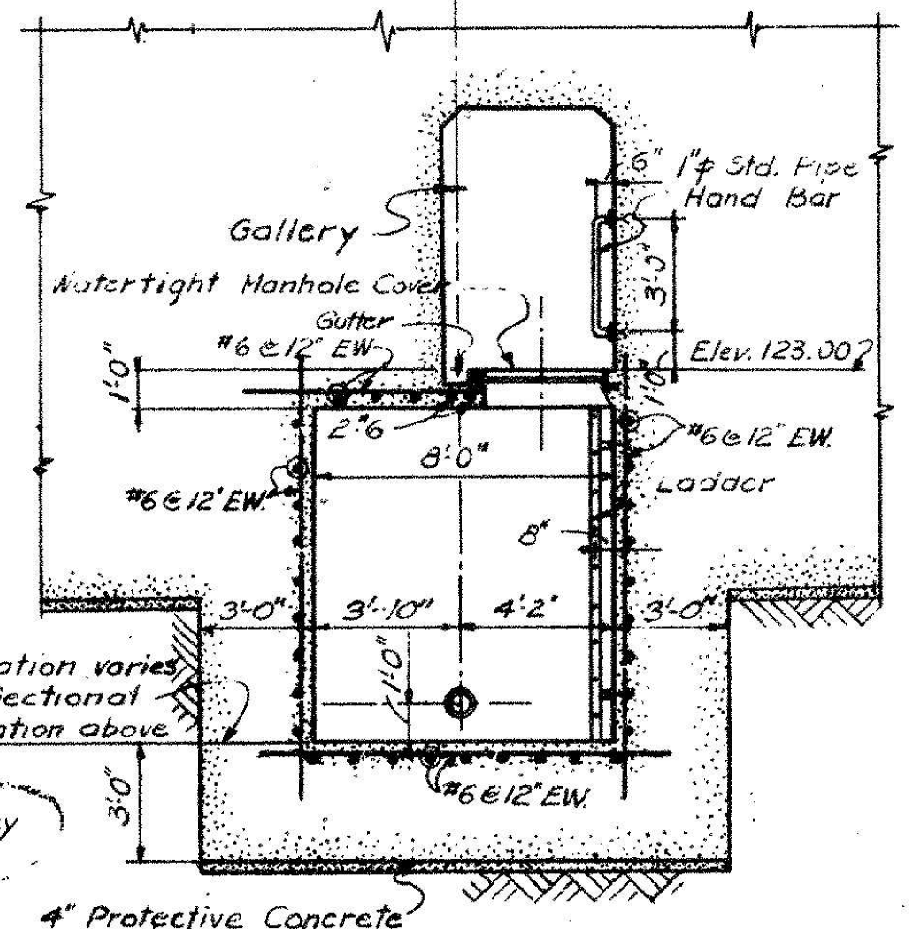
HAND BAR DETAIL

SCALE: 1 1/2 INCHES = 1 FOOT

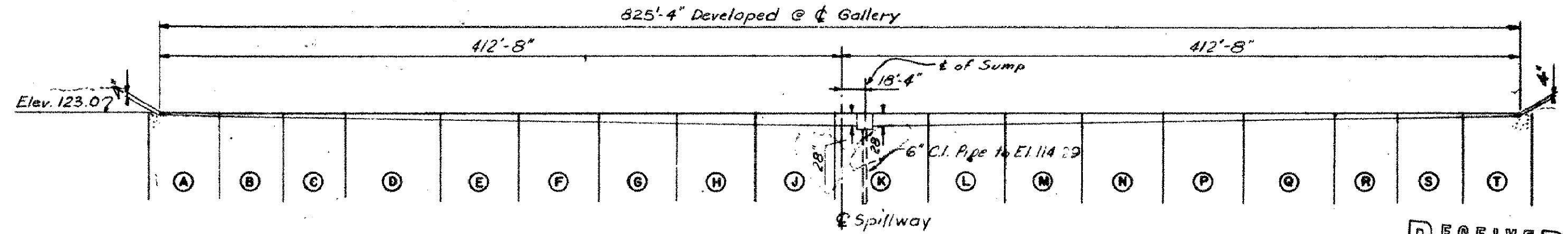
PLAN

MANHOLE DETAILS

SCALE: 1/4 INCH = 1 FOOT



SECTION



GALLERY GUTTER SLOPE

NO SCALE

RECEIVED
 JUL 23 1970
 TEXAS WATER RIGHTS COMMISSION
 AUSTIN, TEXAS

THESE DRAWINGS HAVE BEEN ALTERED TO CONFORM TO CONSTRUCTION RECORDS.
 DATE: July 25, 68
 FORREST AND COTTON, INC.
 CONSULTING ENGINEERS

REVISION	DATE	DESCRIPTION	BY
3	5-4-65	Revised Sump & Pipe Manhole Cover & Ladder	L.B.M.
2	3-29-63	General Revision	L.B.M.
1	2-9-65	Addition of Relief Wells	M.J.P.

SABINE RIVER AUTHORITIES OF TEXAS AND LOUISIANA
 SABINE RIVER, TEXAS AND LOUISIANA

TOLEDO BEND DAM AND RESERVOIR

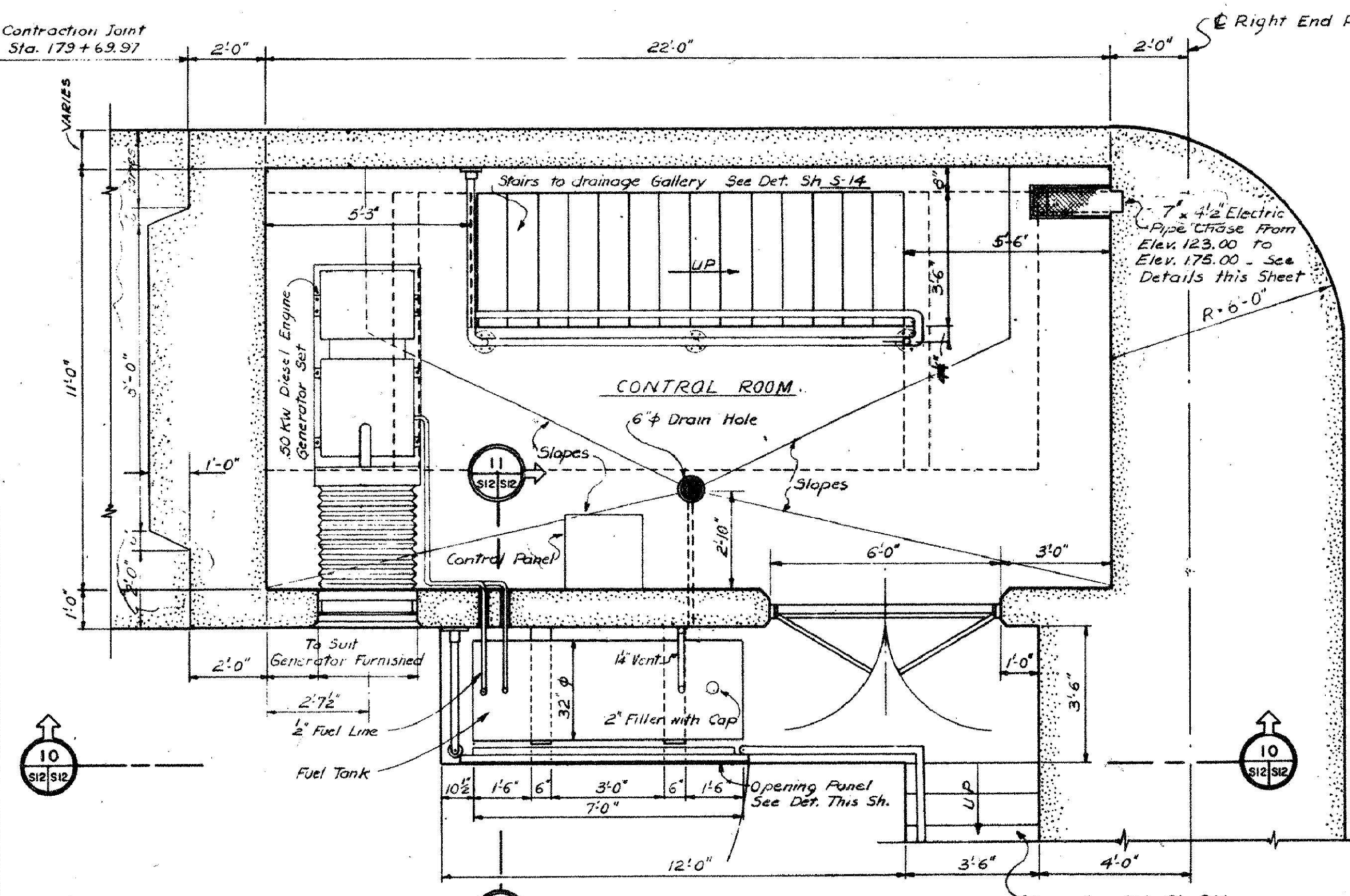
SPILLWAY DRAINAGE GALLERY DETAILS

FORREST AND COTTON, INC. CONSULTING ENGINEERS
 DALLAS, TEXAS

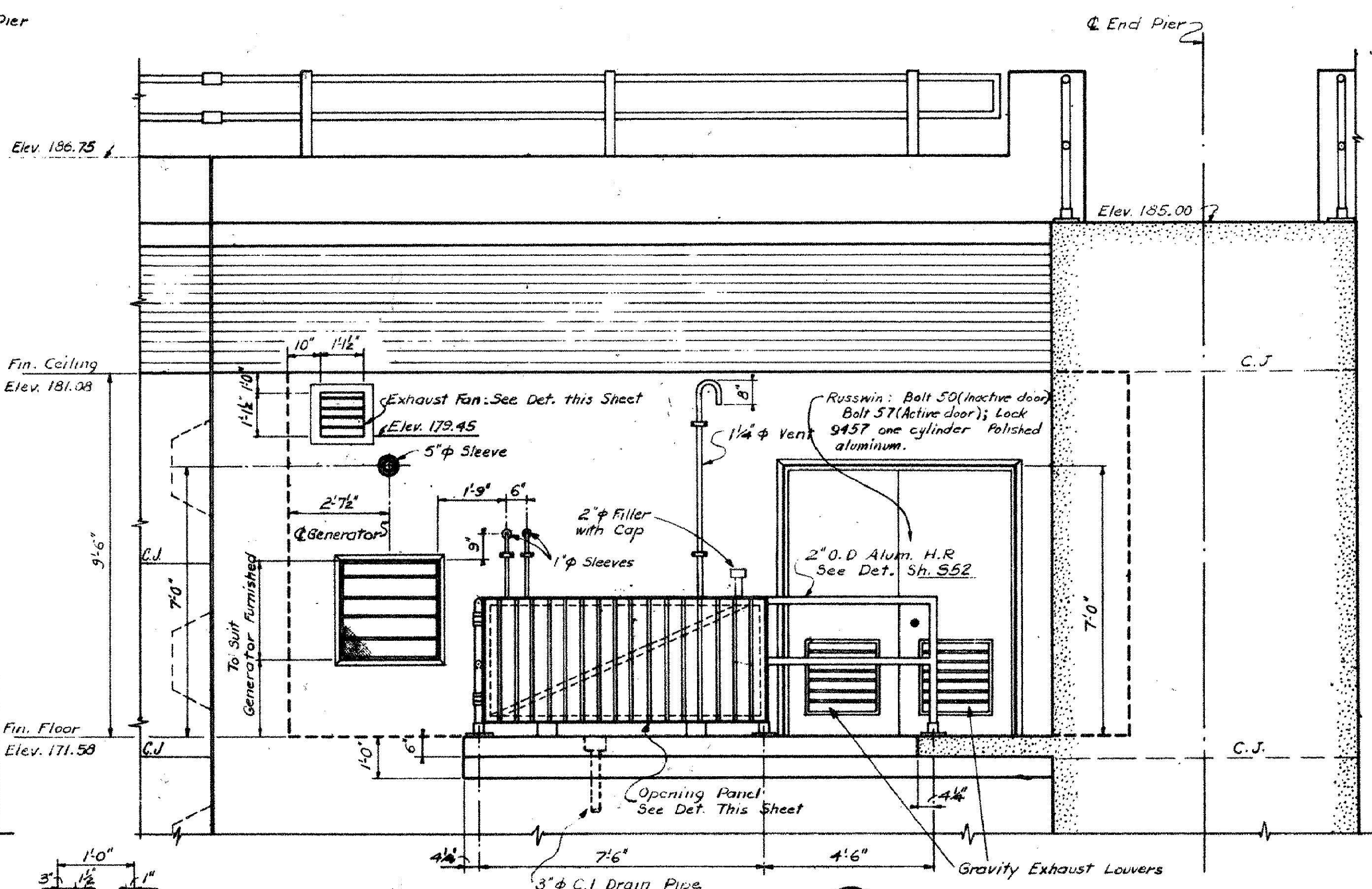
DESIGNED BY: E.W.P.-J.M. CHECKED BY: E.W.P.
 DRAWN BY: P.E.N. RECOMMENDED: A.M. & J.C.B.
 TRACED BY: P.E.N. APPROVED: A. Martell

FILE: 522-01-133 CONTRACT NO. TB-8
 DATE: 8 Nov. 1963 SCALE: NOTED SHEET 529 OF 573

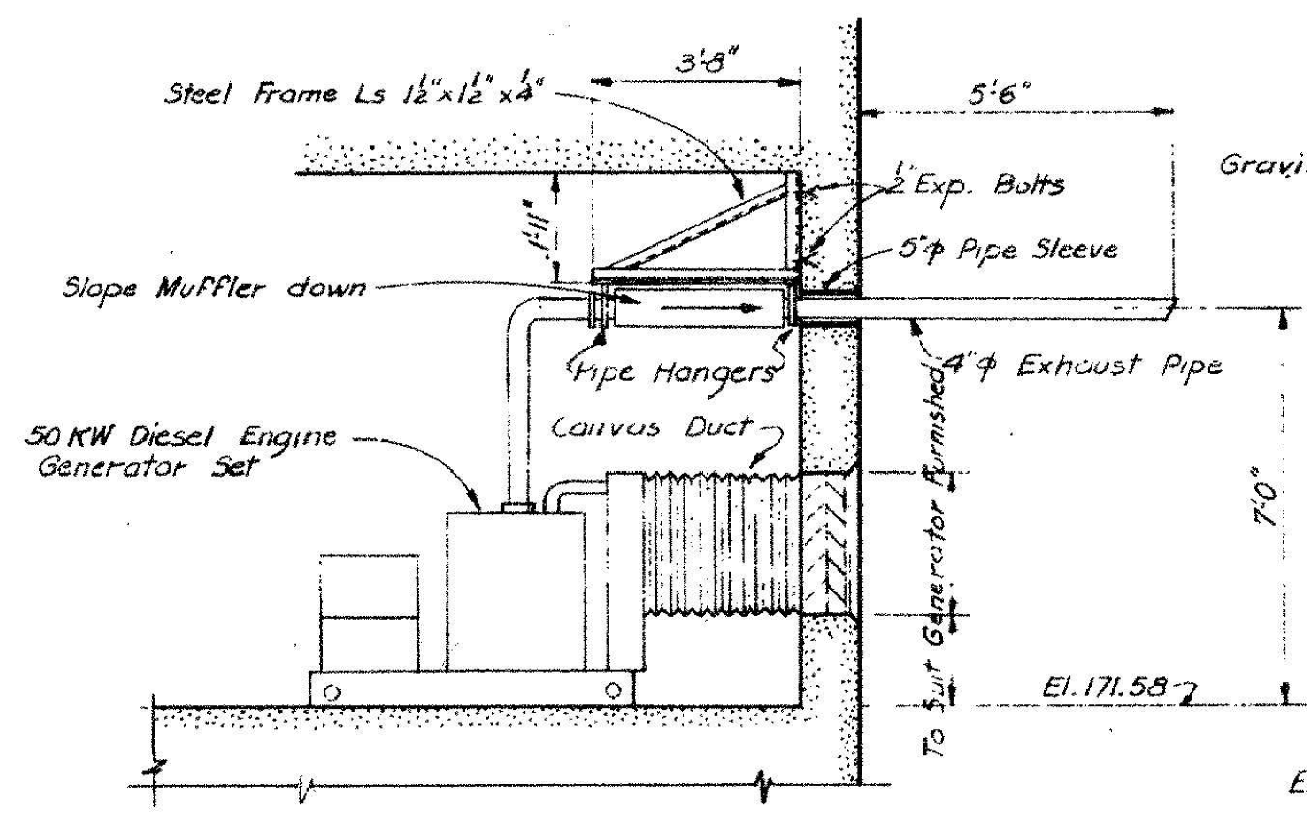
Contraction Joint
Sta. 179 + 69.97



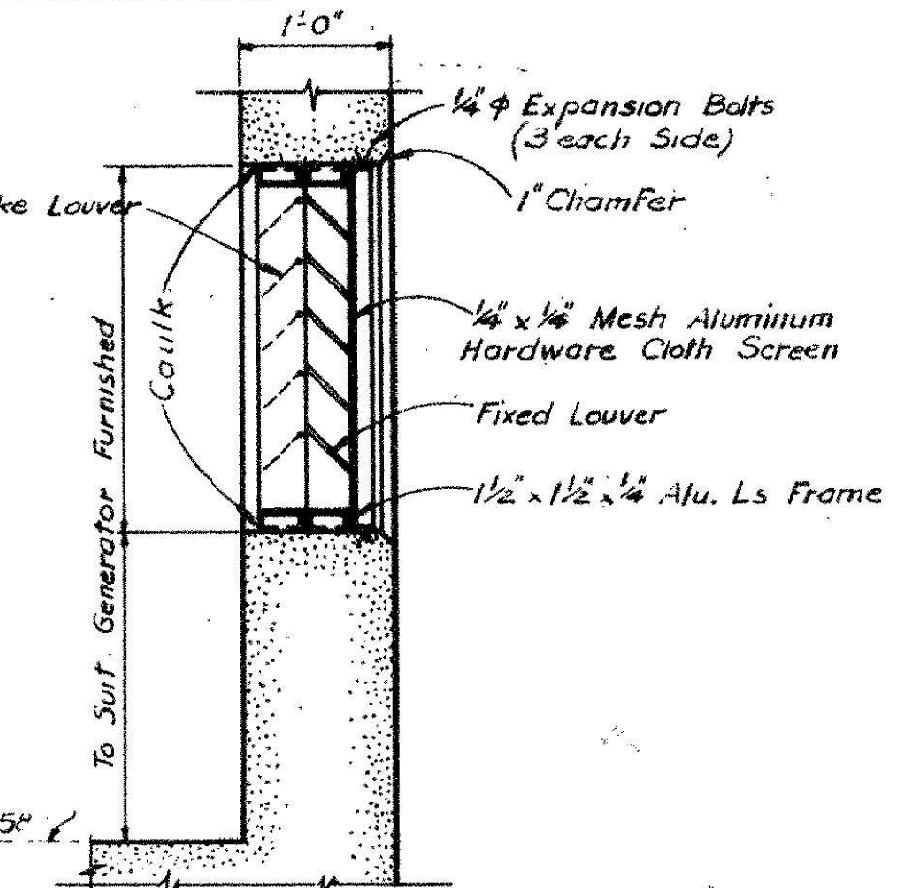
FLOOR PLAN
SCALE: 1/2 INCH = 1 FOOT



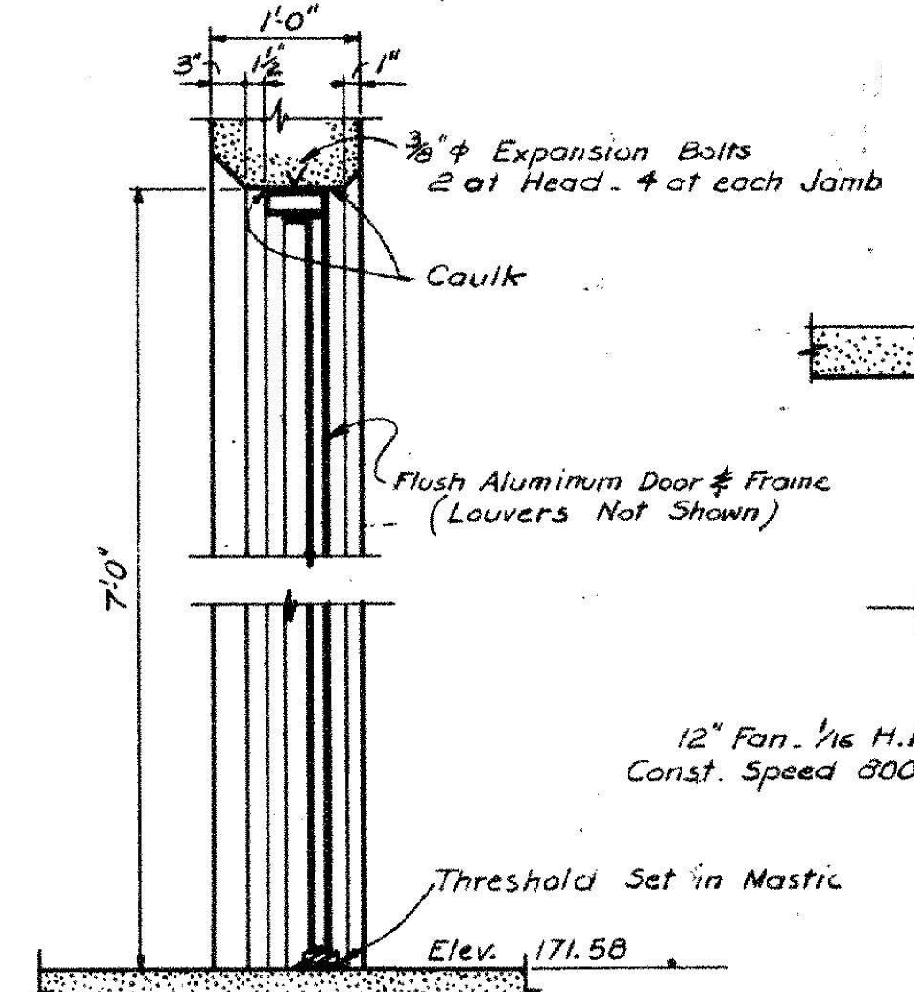
ELEVATION
SCALE: 1/2 INCH = 1 FOOT



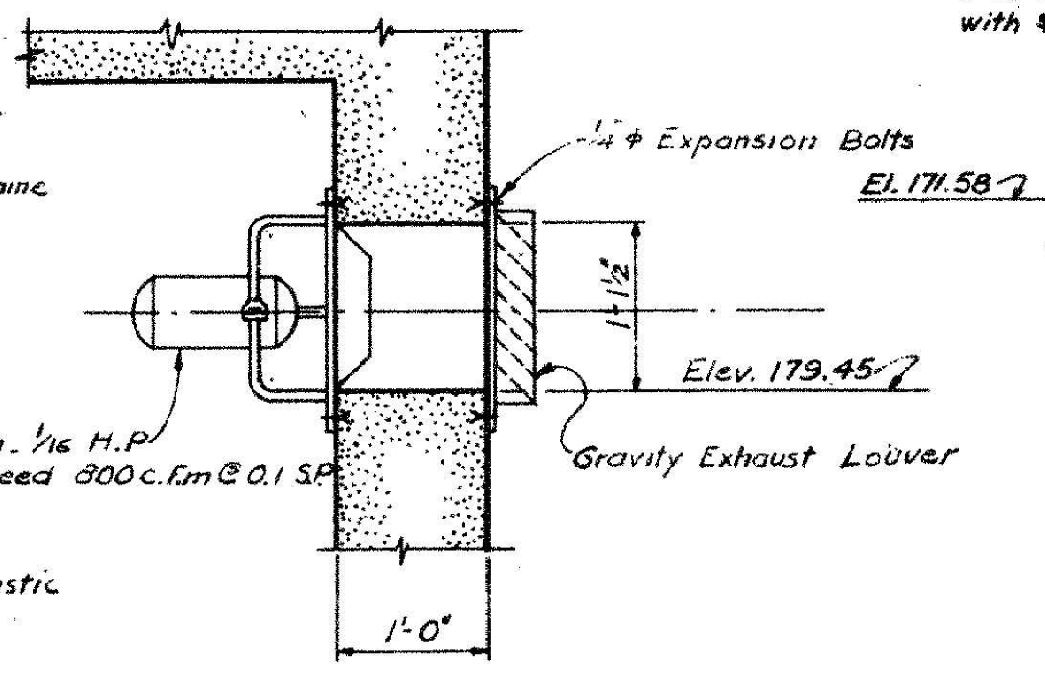
ENGINE GENERATOR EXHAUST DETAILS
SCALE: 3/8 INCH = 1 FOOT



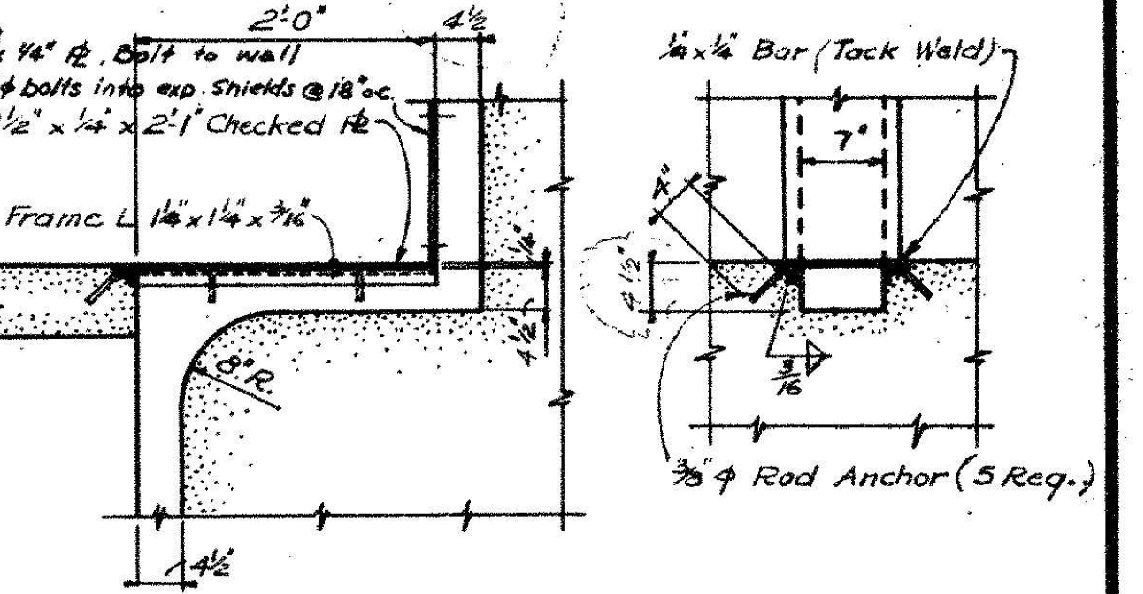
WALL LOUVER DETAILS
SCALE: 1 INCH = 1 FOOT



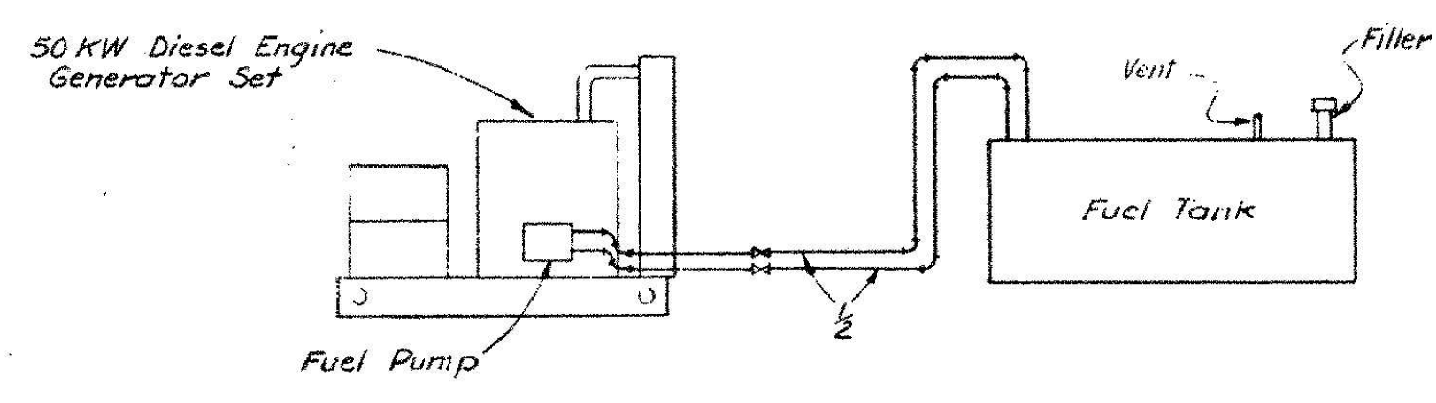
DOOR DETAILS
SCALE: 1 INCH = 1 FOOT



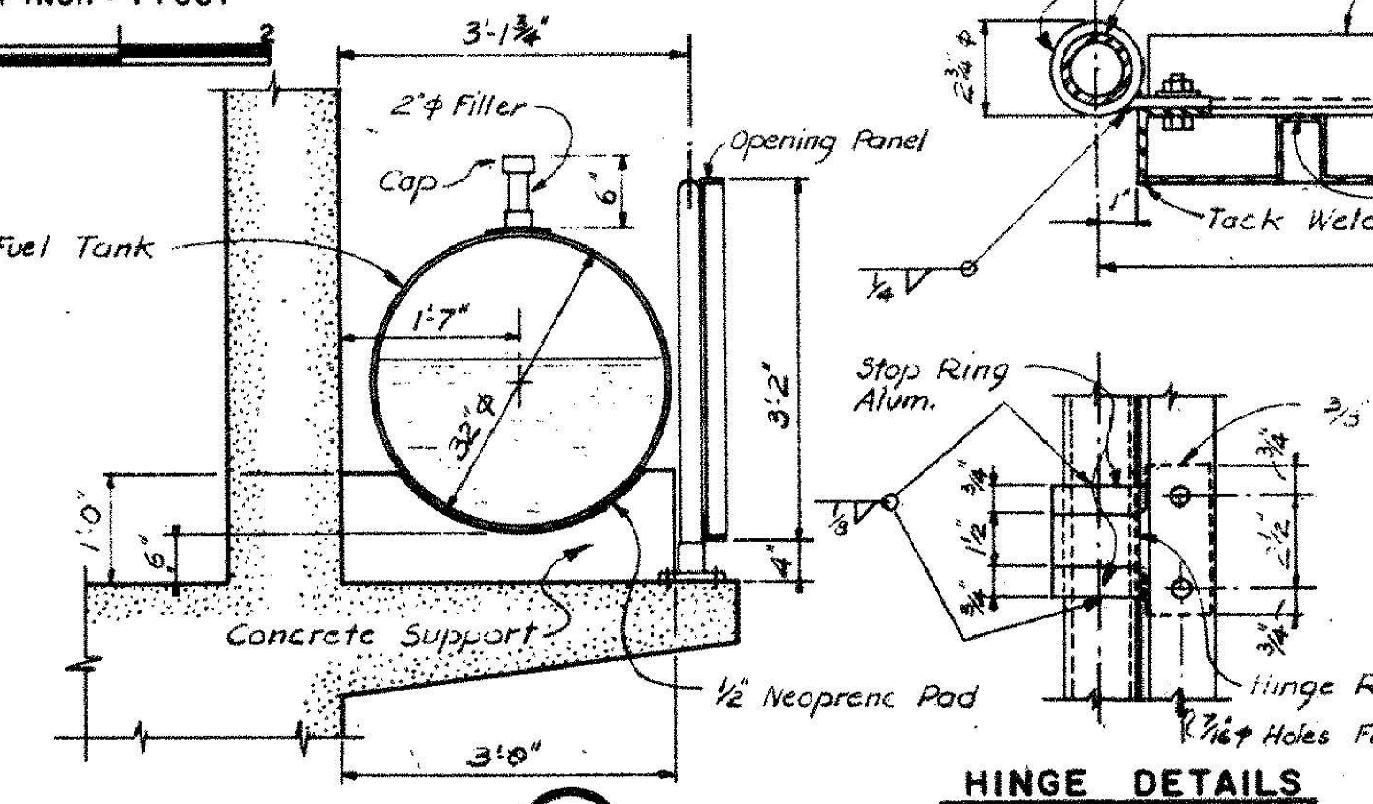
EXHAUST FAN DETAILS
SCALE: 1 INCH = 1 FOOT



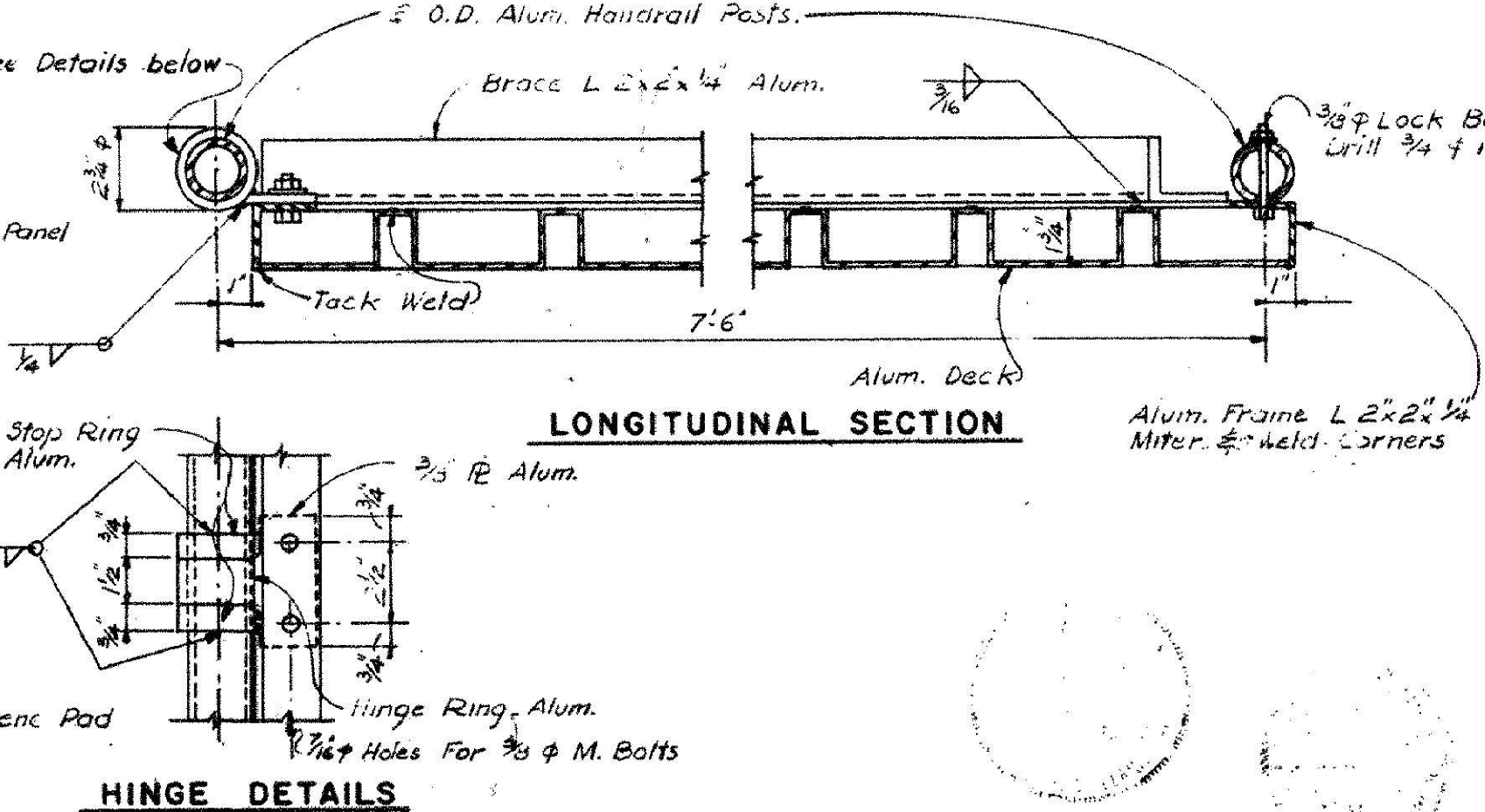
LONG. SECTION **TRANSV. SECTION**
ELECTRIC PIPE CHASE DETAILS
SCALE: 1 INCH = 1 FOOT



FUEL PIPING SCHEMATIC
NOT TO SCALE



SECTION
SCALE: 3/4 INCH = 1 FOOT



HINGE DETAILS

OPENING PANEL DETAILS
SCALE: 3 INCHES = 1 FOOT

RECEIVED
JUL 23 1970
TEXAS WATER RIGHTS COMMISSION
AUSTIN, TEXAS

THESE DRAWINGS HAVE BEEN REVIEWED BY THE COMMISSION TO CONFORM WITH THE RECORDS OF THE COMMISSION.
DATE: July 23, 1970

REVISION	DATE	DESCRIPTION	BY
2	5-17-68	Revised Key - Electric Pipe Chase	L.B.M.
1	1-15-68	Added Key Sta. 179+69.971 Changed Pier and Race Chase	L.E.M.

SABINE RIVER AUTHORITIES OF TEXAS AND LOUISIANA
SABINE RIVER, TEXAS AND LOUISIANA

TOLEDO BEND DAM AND RESERVOIR

SPILLWAY
RIGHT NON-OVERFLOW
CONTROL ROOM-PLAN, ELEV. & SECTIONS

FORREST AND COTTON, INC. CONSULTING ENGINEERS
DALLAS, TEXAS

DESIGNED BY: J.M. CHECKED BY: E.W.P.
DRAWN BY: P.E.M. RECOMMENDED: A.M.B., J.C.B.
TRACED BY: P.E.M. APPROVED: *Amstall*

FILE: 522-01-116 CONTRACT NO. TB-8
DATE: 8 Nov. 1963 SCALE: NOTED SHEET 512 of 573