

Projec	t Nam	е	East Mud Lakes	Neir B	ox Replacement	
Projec	t No.	11362	Task No.	01	Addendum No. $1$	
То:	Prospe	ctive Bid	ders		Date:	2/8/2024

The following items are clarifications to the bid documents. These items are hereby included in the bid documents by this addendum.

Item	Description
1.	The Pre-Bid sign in sheet is attached and is hereby incorporated into the bid documents by this addendum.
2.	Modified drawings are attached and is hereby incorporated into the bid documents by this addendum. G002, C100, S100, S104, S105, and four as-built drawings for information only.
3.	Clarification: Grating type. Sheet G002 Note 8.3 calls for McNichols GW 125, 19-W-4 Serrated. Sheet S100 Note 10 calls for 2"x2"x2" Corvex FRP 7 and Weir Box Plan calls for 1". Answer: See revised drawing G002 and S100 for clarification.
4.	Question: Can the anchor bolts be drilled after placing the weir box or do they need to be poured in the foundation? Answer: Anchor bolts shall be cast-in-place.
5.	Question: Does the entire existing weir box need to be removed or can we cut the exposed portion of the box, leave the rest, and fill it with concrete up to the top of the pipe? Answer: See demolition note on Sheet G003 that describes demolishing the box down to 1 foot above the top of the pipe and plugging with flowable fill.
6.	Questions: Is there an estimate for this bid? Answer: There is no estimate provided for this project.

Please indicate your receipt of this addendum by adding the addendum number in the appropriate place in your Requisition & Proposal or Specification Book.

### **Project Manager:**

2/8/2024

M. Thompson Mike Thompson, Project Engineer



**Alabama State Port Authority PRE-Bid Opening Sign-In Sheet** 

### **Project Name**

**East Mud Lakes Weirbox** 

**Time** 2:00 pm

**Project #** 11362

**Task #** 01

Date

January 31, 2024

**Location** East Mud Lakes DMMA, Mobile, AL

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ASPA Representatives	Mike Thompson	Lynn Turner	
(printed names) (signatures)	Micha Houpo-	Afri	
Contractor (Business) Name	Attendee Name Printed	Attendee Signature	Telephone #
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GILLIS	THELER		251-406-2573,

## 1. STRUCTRUAL GENERAL REQUIREMENTS:

- 1.1. THESE STRUCTURAL DRAWINGS HAVE BEEN PREPARED IN ACCORDANCE WITH THE SPECIFIED BUILDING CODE. ALL CONSTRUCTION SHALL CONFORM TO THE EDITION OF THE BUILDING CODE REFERENCED. REFERENCE TO OTHER SPECIFICATIONS OR CODES SHALL MEAN THE VERSION INDICATED IN THE BUILDING CODE.
- 1.2. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS ARE A PORTION OF THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR AND SUBCONTRACTORS SHALL REFERENCE AND COORDINATE WITH ALL OTHER DISCIPLINES DRAWINGS. ANY DISCREPANCIES OR OMISSIONS SHALL BE REPORTED TO THE ARCHITECT/ENGINEER.
- 1.3. THE CONTRACTOR SHALL VERIFY SITE CONDITIONS AND COORDINATE STRUCTURAL DIMENSIONS, ELEVATIONS AND SECTIONS WITH ARCHITECTURAL DIMENSIONS, ELEVATIONS, AND SECTIONS AND REPORT ANY DISCREPANCY TO THE ARCHITECT/ENGINEER PRIOR TO THE FABRICATION OR INSTALLATION OF STRUCTURAL MEMBERS.
- 1.4. STRUCTURAL DRAWINGS SHOW TYPICAL AND CERTAIN SPECIFIC CONDITIONS ONLY AND SHALL APPLY FOR LIKE OR SIMILAR CONDITIONS UNLESS NOTED OTHERWISE. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS SIMILAR TO THOSE SHOWN. IF THERE IS A QUESTION REGARDING THE APPLICABILITY OF A DETAIL, CONTACT THE ARCHITECT/ENGINEER IN WRITING REQUESTING CLARIFICATION.
- 1.5. COORDINATE AND VERIFY ALL OPENING SIZES AND LOCATIONS WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND/OR ELECTRICAL DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION. STRUCTURAL DRAWINGS ONLY SHOW OPENINGS RELATIVE TO THE STRUCTURE.
- COORDINATE ALL LIMITS AND DEPTHS OF DEPRESSIONS FOR FLOOR FINISHES WITH ARCHITECTURAL DRAWINGS 1.6. AND SCHEDULES. LIMITS SHOWN ON STRUCTURAL DRAWINGS ARE SCHEMATIC. COORDINATE FLOOR JOINTS WITH ARCHITECTURAL FLOOR FINISHES.
- 1.7. STRUCTURAL MEMBERS SHALL NOT BE CUT, NOTCHED, CHANGED OR MODIFIED WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.
- 1.8. DO NOT SCALE FOR DIMENSIONS NOT SHOWN ON THE DRAWINGS. SEND A WRITTEN REQUEST FOR INFORMATION TO THE ARCHITECT/ENGINEER FOR DIMENSIONS NOT PROVIDED.
- THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE 1.9. INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION
- 1.10. THE STRUCTURE SHOWN ON THESE DRAWINGS IS STRUCTURALLY SOUND ONLY IN ITS COMPLETED FORM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, ADEQUACY, AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC. THE ENGINEER WILL NOT ADVISE ON OR ISSUE DIRECTION RELATED TO SAFETY REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE OSHA REGULATIONS.
- 1.11. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS/ROOFS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT CONSTRUCTION LOADS DO NOT EXCEED THE DESIGN LIVE LOAD.
- 1.12. DISSIMILAR METALS MUST BE SEPARATED BY A COATING SUCH AS ECK CORROSION COATING OR AN APPROVED EQUIVALENT, OR NEOPRENE GASKET MATERIAL TO PREVENT GALVANIC ACTION.
- 1.13. WHERE SPECIFIED, POST INSTALLED ANCHORING SYSTEMS SUCH AS MANUFACTURED BY SIMPSON OR HILTI, SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. SPECIAL ATTENTION SHALL BE GIVEN TO THE DRILLING, CLEANING, AND PREPARATION OF HOLES. WHERE ADHESIVE ANCHORS ARE SHOWN, SPECIAL ATTENTION SHALL BE GIVEN TO THE REQUIRED MIXING, APPLICATION, AND CURING TIME OF THE ADHESIVE SPECIFIED.
- 1.14. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES IN THE AREA OF CONSTRUCTION THAT MIGHT BE AFFECTED BY, OR OTHERWISE INTERFERE WITH, INSTALLATION OF NEW WORK. THIS INCLUDES THOSE THAT MIGHT BE DAMAGED BY NEW FOUNDATIONS OR OTHER WORK, AND THOSE WHOSE PRESENCE MIGHT LEAD DAMAGE TO THE NEW WORK (e.g. DIFFERENTIAL SETTLEMENT)

2. <u>DESIGN CRITERIA:</u>

- 2.1. GENERAL BUILDING CODE:
- 2.1.1. INTERNATIONAL BUILDING CODE, IBC 2012 EDITION. ALL CODES BELOW ARE THE EDITION REFERENCED IN THE IBC.
- 2.2. DESIGN LOAD CRITERIA:
- 2.2.1. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, AMERICAN SOCIETY OF CIVIL ENGINEERS, ASCE 7.
- 2.3. CONCRETE:
- 2.3.1. BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, AMERICAN CONCRETE INSTITUTE, ACI 318. 2.4. STRUCTURAL STEEL:
- SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AISC 2.4.1.
- 2.4.2. SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AISC 341.
- DESIGN LOADS:

3.1. DESIGN DEAD LOAD IS ACTUAL WEIGHT OF THE STRUCTURE. ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.

- 3.2. LIVE LOADS (PSF):
- MAINTENANCE CATWALK 3.3. LIVE LOAD REDUCTIONS HAVE BEEN APPLIED IN ACCORDANCE WITH THE BUILDING CODE WHEN PERMITTED.
- 4. <u>SHOP DRAWINGS AND SUBMITTALS:</u>
- 4.1. THE USE OR REPRODUCTION OF THE CONTRACT DRAWINGS BY ANY CONTRACTOR, SUBCONTRACTOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS IS NOT PERMITTED.
- 4.2. SHOP DRAWINGS SHALL DETAIL ALL CONDITIONS IN ACCORDANCE WITH SPECIFIED STANDARDS AND THE SPECIFIC REQUIREMENTS OF THIS PROJECT AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE 4.3 PREPARATION OF SHOP DRAWINGS AS SPECIFIED IN THE CONTRACT DOCUMENTS. ALL SHOP DRAWINGS MUST BE REVIEWED AND "APPROVED" BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE STRUCTURAL ENGINEER. REVIEW OF SHOP DRAWINGS AND OTHER SUBMITTALS BY THE STRUCTURAL ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITIES.
- 4.4. SHOP DRAWINGS AND CALCULATIONS SUBMITTED AS PART OF A DELEGATED DESIGN SHALL BE SIGNED AND SEALED BY A LICENSED ENGINEER IN THE STATE OF THE PROJECT.
- 4.5. HARDCOPY SHOP DRAWING SUBMITTALS: SUBMIT ALL SHOP DRAWINGS ON THREE PRINTS ONLY. ONE PRINT WILL BE RETURNED TO THE CONTRACTOR. ALL PRINTS REQUIRED BY THE CONTRACTOR ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE AFTER APPROVED SHOP DRAWINGS ARE RETURNED. IF ADDITIONAL PRINTS ARE SUBMITTED, THEY WILL BE RETURNED UNMARKED.
- 4.6. ELECTRONIC SHOP DRAWING SUBMITTALS: SUBMIT ALL ELECTRONIC SHOP DRAWINGS IN PDF FORMAT. REVIEWED SHOP DRAWINGS WILL BE RETURNED IN PDF FORMAT. ALL PRINTS REQUIRED BY THE CONTRACTOR ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE AFTER APPROVED SHOP DRAWINGS ARE RETURNED.
- 4.7. RESUBMITTED SHOP DRAWINGS: RESUBMITTED SHOP DRAWINGS SHALL HAVE ALL CHANGES SINCE THE PREVIOUS SUBMISSION IDENTIFIED BY CLOUDING OR OTHER CLEAR COMMUNICATION. RE-REVIEWED SHOP DRAWINGS WILL ONLY BE REVIEWED FOR IDENTIFIED CHANGES.

4.8. SHOP DRAWINGS: SEE THE RELATED MATERIAL SECTION FOR THE REQUIRED SUBMITTALS AND SHOP DRAWINGS. 5. SOILS, SLABS, WALLS, AND SHALLOW FOUNDATIONS:

- 5.1. A GEOTECHNICAL ENGINEER SHALL PROVIDE COMPACTED FILL REQUIREMENTS FOR THE BUILDING PAD AND REVIEW THE FOUNDATION BEARING SURFACE TO VERIFY THE ASSUMED ALLOWABLE BEARING PRESSURE NOTED. DO NOT PLACE CONCRETE PRIOR TO GEOTECHNICAL ENGINEER'S APPROVAL.
- 5.2. ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ENSURE THEIR COMPLIANCE WITH THE PRESSURES NOTED, THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS, AND THE GEOTECHNICAL REPORT. IN THE ABSENCE OF SPECIFIC REQUIREMENTS, A DYNAMIC CONE PENETROMETER TEST (ASTM STP-399) SHALL BE PROVIDED AT EACH ISOLATED COLUMN FOOTING AND A MAXIMUM OF EVERY 50' OF CONTINUOUS FOUNDATION AND/OR THICKENED SLAB TO VERIFY BEARING CAPACITY. SOILS DEEMED UNSUITABLE SHALL BE UNDERCUT TO COMPETENT MATERIAL. BACKFILLED WITH AN APPROVED AND PROPERLY COMPACTED MATERIAL, AND RETESTED.

5.4. COMPACTED FILL SHALL MEET THE REQUIREMENTS NOTED IN THE GEOTECHNICAL REPORT. 5.5. WHEN EXCAVATIONS APPROACH THE GROUND WATER TABLE, THE WATER LEVEL SHALL BE LOWERED BY AN ACCEPTABLE DEWATERING SYSTEM SO THAT THE WATER LEVEL IS MAINTAINED CONTINUOUSLY A MINIMUM OF 2' BELOW THE EXCAVATION DURING CONSTRUCTION. 5.6. BACKFILL FOR FOUNDATION AND RETAINING WALLS SHALL BE A FREE DRAINING GRANULAR MATERIAL. BACKFILL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT SUBSIDENCE OF SURFACE ADJACENT TO WALL. THE GRANULAR MATERIAL SHALL BE PLACED IN A 45 DEGREE WEDGE EXTENDING FROM THE BASE OF THE FOOTING 5.7. COORDINATE THROUGH WALL OR BEHIND WALL DRAINAGE SYSTEM WITH THE GEOTECHNICAL AND CIVIL ENGINEER 5.8. FOUNDATION AND RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL CONCRETE HAS ATTAINED THE REQUIRED 28 DAY COMPRESSIVE STRENGTH. BACKFILLING OF WALLS AND PIERS SHALL BE PLACED SUCH THAT SYMMETRICAL LOADING SHALL BE MAINTAINED 5.9. ON BOTH SIDES. WHERE DESIGN CONDITIONS REQUIRE BACKFILLING EACH SIDE TO UNEQUAL HEIGHTS, THEN WALLS OR PIERS SHALL BE FIRMLY SHORED IN POSITION, AND SHORES SHALL REMAIN UNTIL FLOORS OR OTHER PERMANENT BRACING ELEMENTS ARE PLACED AND PROPERLY SET TO PROVIDE FULL SUPPORT. 5.10. HEAVY EQUIPMENT FOR SPREADING AND COMPACTING BACKFILL SHALL NOT BE OPERATED CLOSER TO WALL, GRADE BEAM, ETC., THAN A DISTANCE EQUAL TO THE HEIGHT OF BACKFILL ABOVE THE TOP OF WALL FOOTING AND BOTTOM OF GRADE BEAM, ETC. THE AREA REMAINING SHALL BE COMPACTED BY HAND TAMPERS. 5.11. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTHWORK OPERATIONS. 5.12. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS AND FROM PONDING ON PREPARED SUBGRADES AND SLABS. DO NOT USE EXCAVATED TRENCHES AS TEMPORARY DRAINAGE DITCHES. 5.13. DEWATER EXCAVATIONS AND REMOVE ANY WET MATERIAL PRIOR TO THE PLACING OF CONCRETE. 5.14. IMMEDIATELY NOTIFY THE OWNERS REPRESENTATIVE AND ENGINEER IF UNUSUAL SOIL CONDITIONS ARE FOUND. 6. <u>CONCRETE</u>: 6.1. ALL CONCRETING OPERATIONS SHALL COMPLY WITH ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS". 6.2. DETAIL CONCRETE REINFORCEMENT AND ACCESSORIES IN ACCORDANCE WITH ACI 315 "DETAILING MANUAL". 6.3. THE CONTRACTOR SHALL SUBMIT FOR THE STRUCTURAL ENGINEER'S REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS. ITEMS MARKED (#) SHALL BE SUBMITTED FOR THE STRUCTURAL ENGINEER'S RECORD ONLY. 6.3.1. CONCRETE MIX DESIGNS 6.3.2. CONCRETE REINFORCING 6.4. CONTRACTOR SHALL NOT FABRICATE OR PLACE REINFORCEMENT UNTIL REINFORCEMENT SHOP DRAWINGS, REVIEWED AND STAMPED BY THE STRUCTURAL ENGINEER, ARE RECEIVED ON THE JOB SITE. SHOP DRAWINGS SHALL CONSIST OF BOTH "CUT" AND PLACEMENT SHEETS. PLACEMENT SHEETS SHALL CONTAIN ALL INFORMATION NECESSARY TO POSITION ALL REINFORCING STEEL IN THE FIELD WITHOUT HAVING TO REFER TO THE STRUCTURAL DRAWINGS. ARCHITECTURAL AND STRUCTURAL DRAWINGS SHALL NOT BE COPIED OR REPRODUCED FOR USE AS SHOP DRAWINGS. 6.5. A QUALITY ASSURANCE PROGRAM CONSISTING OF SUBMITTALS, TESTING, AND INSPECTIONS SHALL BE USED TO VERIFY THAT CONSTRUCTION IS IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. MATERIAL QUALITY, HANDLING, STORAGE, PREPARATION, PLACEMENT, AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE BUILDING CODE. 6.6. THE PROPOSED MATERIALS AND MIX DESIGN SHALL BE FULLY DOCUMENTED AND REVIEWED BY THE OWNER'S

5.3. ALL FOOTING ELEVATIONS ARE ESTIMATED AND MAY BE ADJUSTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.

- TESTING LABORATORY. RESPONSIBILITY FOR OBTAINING THE REQUIRED CONCRETE DESIGN STRENGTH IS THE CONTRACTOR'S.
- 6.7. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60.
- 6.8. REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A706.
- WELDED WIRE REINFORCEMENT (WWR) SHALL CONFORM TO ASTM A1064. MINIMUM LAP AND EMBEDMENT TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2" OR 8". WWR SHALL BE SUPPLIED IN FLAT SHEETS (NOT ROLLS).
- 6.10. DEFORMED BAR ANCHORS (DBA'S) SHALL CONFORM TO ASTM A496. DBA'S SHALL BE AUTOMATICALLY END WELDED USING MANUFACTURERS RECOMMENDED PROCEDURES, EQUIPMENT, FLUX, AND FERRULES. DBA'S SHALL BE NELSON FLUXED DBA'S OR APPROVED ALTERNATE.
- 6.11. SEE CONCRETE MIX DESIGN SCHEDULE FOR REQUIRED CONCRETE STRENGTH AND PROPERTIES.
- 6.12. USE OF CALCIUM CHLORIDE, CHLORIDE IONS, OR OTHER SALTS IN CONCRETE IS NOT PERMITTED.
- 6.13. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4 INCH CHAMFER.
- 6.14. CONSTRUCTION JOINTS IN A HORIZONTAL PLANE ARE NOT PERMITTED.
- 6.15. ANY STOP IN CONCRETE WORK MUST BE MADE WITH VERTICAL BULKHEADS AND HORIZONTAL KEYS. MAKE ALL REINFORCING CONTINUOUS THROUGH CONSTRUCTION JOINTS. CONTROL JOINTS FOR CONCRETE SLABS ON GRADE SHALL BE AS DETAILED AND LOCATED AS SHOWN IN THE CONSTRUCTION DOCUMENTS.
- 6.16. SEE SECTIONS AND DETAILS FOR CONCRETE COVER. FOR CONCRETE COVERS NOT INDICATED IN SECTIONS AND DETAILS, SEE CONCRETE COVER SCHEDULE FOR REQUIRED STEEL COVERAGE.
- 6.17. REINFORCING STEEL SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT REINFORCING EXISTS. SEE SCHEDULES, SECTION NOTES, AND GENERAL NOTES FOR ACTUAL REINFORCING REQUIRED.
- 6.18. REINFORCING BAR PLACING ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS. WHERE CONCRETE IS SAND-BLASTED OR BUSH-HAMMERED, PROVIDE ACCESSORIES OF STAINLESS STEEL. 6.19. ALL SPLICES SHALL BE CLASS "B" TENSION LAP SPLICE, UNLESS NOTED OTHERWISE.
- 6.20. TIE ALL REINFORCING STEEL AND EMBEDMENT'S SECURELY IN PLACE PRIOR TO PLACING CONCRETE. PROVIDE SUFFICIENT SUPPORTS TO MAINTAIN POSITION OF REINFORCEMENT WITHIN SPECIFIED TOLERANCES DURING ALL CONSTRUCTION ACTIVITIES. "STICKING" DOWELS INTO WET CONCRETE IS NOT PERMITTED.
- 6.21. ADDITIONAL REINFORCING AND THE QUANTITY OF REINFORCING OCCURRING AT OPENINGS SHALL BE PLACED EQUALLY EACH SIDE OF OPENINGS AS DETAILED.
- 6.22. HOOKS IN REINFORCING ARE IN ADDITION TO LENGTH SHOWN.
- 6.23. WHERE REINFORCING BARS ARE NOTED AS CONTINUOUS, THE FOLLOWING REQUIREMENTS APPLY:
- 6.23.1. THE TERMINATION OF ALL CONTINUOUS REINFORCING BAR RUNS SHALL BE A STANDARD HOOK UNLESS NOTED OTHERWISE. 6.23.2. SPLICES IN CONTINUOUS TOP BARS SHALL OCCUR OVER PARALLEL CMU WALLS OR AT THE CENTER OF
- THE CLEAR SPAN. 6.23.3. SPLICES IN CONTINUOUS BOTTOM BARS SHALL OCCUR OVER PERPENDICULAR CMU WALLS OR CENTERED OVER COLUMNS.
- 6.24. FIELD BENDING OF BARS LARGER THAN #4 IS NOT PERMITTED. ALL BENDS FOR BARS LARGER THAN #4 SHALL BE SHOP MADE COLD BENDS.

7. <u>STRUCTURAL STEEL</u> 7.2.1. STRUCTURAL STEEL 7.2.2. STEEL HANDRAILS STRUCTURE IS ACHIEVED. 7.4. STRUCTURAL STEEL: 7.4.4. ASTM 572 FOR ALL PLATE STEEL OTHERWISE OR RODS, AND COLUMN BASE PLATES. STEEL; AWS D1.1, TYPE B. CONNECTIONS. GALVANIZED ITEMS. 8. <u>GRATING:</u> MANUFACTURERS. 8.2.1. BAR GRATING TO FABRICATION.

SUPPORTS.

7.1. FABRICATE AND ERECT ALL STRUCTURAL STEEL IN ACCORDANCE WITH AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".

7.2. THE CONTRACTOR SHALL SUBMIT FOR THE STRUCTURAL ENGINEER'S REVIEW SHOP DRAWINGS WHICH INCLUDE ERECTION DRAWINGS, MATERIALS, CONNECTIONS, FABRICATION, AND ALL DETAILS FOR THE FOLLOWING ITEMS.

7.3. THE STEEL FRAME IS "NON-SELF-SUPPORTING". ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL THE LATERAL LOAD RESISTANCE SYSTEM IS INSTALLED AND STABILITY OF THE COMPLETED

7.4.1. ASTM A992 FOR WIDE FLANGE BEAMS AND COLUMNS

7.4.2. ASTM A36 FOR STEEL ANGLES AND CHANNELS 7.4.3. ASTM A36 FOR STIFFENER PLATES, BASE PLATES, COLUMN CAP PLATES, BEAM CONNECTION PLATES

7.5. HOLLOW STRUCTURAL SECTIONS: ASTM A500, GRADE C.

7.6. WELDED CONNECTIONS: E70XX ELECTRODES, MINIMUM SIZE FILLET WELD 3/16". ALL SHOP AND FIELD WELDING SHALL BE BY A CERTIFIED WELDER AND IN ACCORDANCE WITH AMERICAN WELDING SOCIETY D1.1 SPECIFICATION. 7.7. HEADED ANCHOR RODS: ASTM F1554, GRADE 55, WELDABLE ANCHOR AND HEAVY HEX NUT, UNLESS INDICATED

7.8. ENGINEER SHALL BE CONTACTED FOR APPROVAL OF ANY FIELD MODIFICATIONS OR REPAIRS OF ANCHOR BOLTS

7.9. SHEAR CONNECTORS: ASTM A108, GRADE 1015 THROUGH 1020, HEADED-STUD TYPE, COLD FINISHED CARBON

7.10. COMPRESSIBLE WASHER TYPE DIRECT TENSION INDICATOR DEVICES (DTI'S) SHALL CONFORM TO ASTM F959, AND SHALL BE BY J&M TURNER, INC. OR APPROVED EQUIVALENT. TWIST OFF TYPE TENSION CONTROL BOLTS (TCB'S) SHALL CONFORM TO ASTM F1852.

7.11. BOLTED CONNECTIONS: BEARING TYPE A325-N IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". BOLTS THROUGH 4" WIDE BEAM FLANGES SHALL BE 5/8" DIAMETER. OTHER BOLTS SHALL BE 3/4" DIAMETER. USE SNUG TIGHT BEARING CONNECTIONS FOR ALL BOLTED

7.12. BOLTS SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT BOLTS MAY BE USED. ACTUAL NUMBER, UNLESS SPECIFIED, TO BE IN ACCORDANCE WITH AISC.

7.13. PACK UNDER BASE PLATES WITH NON-SHRINK, NON-METALLIC, HI-STRENGTH (6,000 PSI MIN) GROUT MEETING THE REQUIREMENTS OF ASTM 1107 AFTER SETTING AND LEVELING.

7.14. ALL EXTERIOR ELEMENTS AND THOSE ELEMENTS NOTED TO BE GALVANIZED SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 AFTER SANDBLAST CLEANING PER SSPC-SP10. USE ASTM A325 BOLTS HOT DIPPED GALVANIZED WITH GALVANIZED HARDENED WASHERS AND GALVANIZED HEAVY HEX NUTS FOR BOLTING OF

7.15. STEEL COLUMNS, BASE PLATES AND ALL STEEL BELOW GRADE SHALL HAVE A MINIMUM 3" CONCRETE COVER.

8.1. FABRICATE AND ERECT ALL GRATING IN ACCORDANCE WITH THE NATIONAL ASSOCIATION OF ARCHITECTURAL METAL

8.2. THE CONTRACTOR SHALL SUBMIT FOR THE STRUCTURAL ENGINEER'S REVIEW SHOP DRAWINGS WHICH INCLUDE ERECTION DRAWINGS, MATERIALS, CONNECTIONS, FABRICATION, AND ALL DETAILS FOR THE FOLLOWING ITEMS.

8.2.2. BAR GRATING CONNECTIONS

RAMP: GRATING SHALL BE 1"x3/16" STEEL GRATING SPACED 1 3/16" O.C. TYPE WB AS MANUFACTURED BY IKG BORDEN. GRATING TO BE MANUFACTURED IN FULLY BANDED PIECES NOT-TO-EXCEED 150 LBS. IN TOTAL WEIGHT. WEIR: GRATING SHALL BE 2"x2"x2" CORVEX FRP GRATING IN 4-FT BY 4-FT PANELS

8.4. EXTEND GRATING CONTINUOUSLY OVER SUPPORTS, GRATE GUIDES, AND GATES AS REQUIRED.

8.5. NOTCH GRATING AT SUPPORTS AS REQUIRED.

 $(1)_{(8.6.)}$  width of RAMP GRATING SECTIONS SHALL NOT EXCEED 3'-0

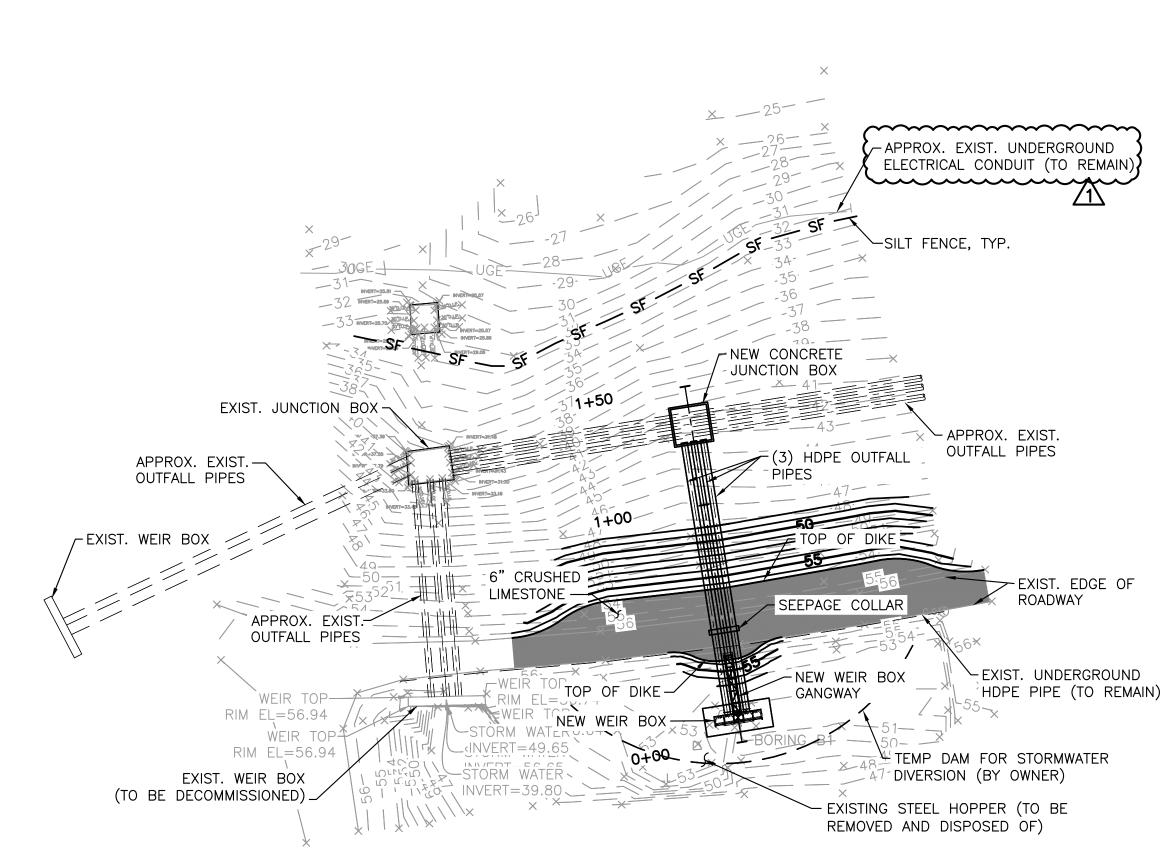
SHOP DRAWINGS BASED ON FIELD MEASUREMENTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR

8.8. BAND ALL EDGES WITH MATERIAL MATCHING GRATING WITH A MINIMUM SIZE OF 3/16" x DEPTH OF BEARING BAR. 8.9. PROVIDE GRATING FASTENERS AS REQUIRED TO ANCHOR GRATING AND BRING INTO FULL CONTACT WITH

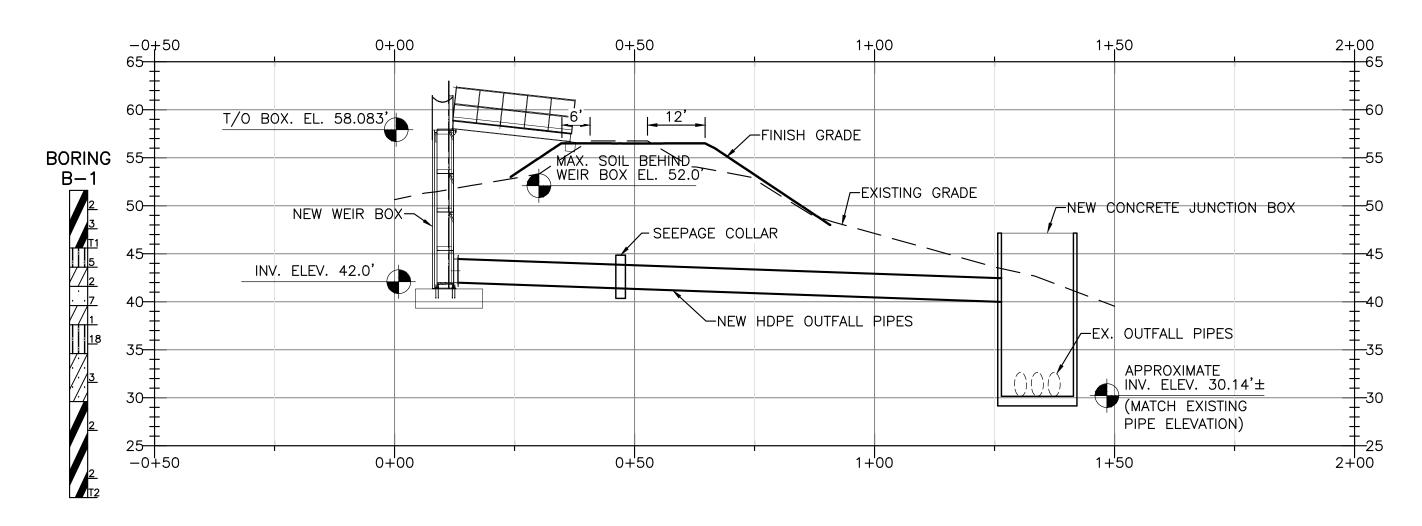
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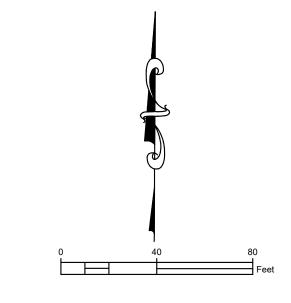
PROFESSIONAL 1-26-2024 SNGINEE

SEAL









NOTE: 1. TOP OF DIKE ROADWAY IS TO BE RESURFACED WITH 6–IN. OF DENSE GRADED CRUSHED LIMESTONE BASE.

CAPPED IRON PIN SET N:263468.10 E:1802334.45 ELEV=54.69

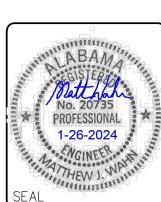
OUTFALL PLAN

SCALE: 1'' = 40'



OUTFALL PROFILE

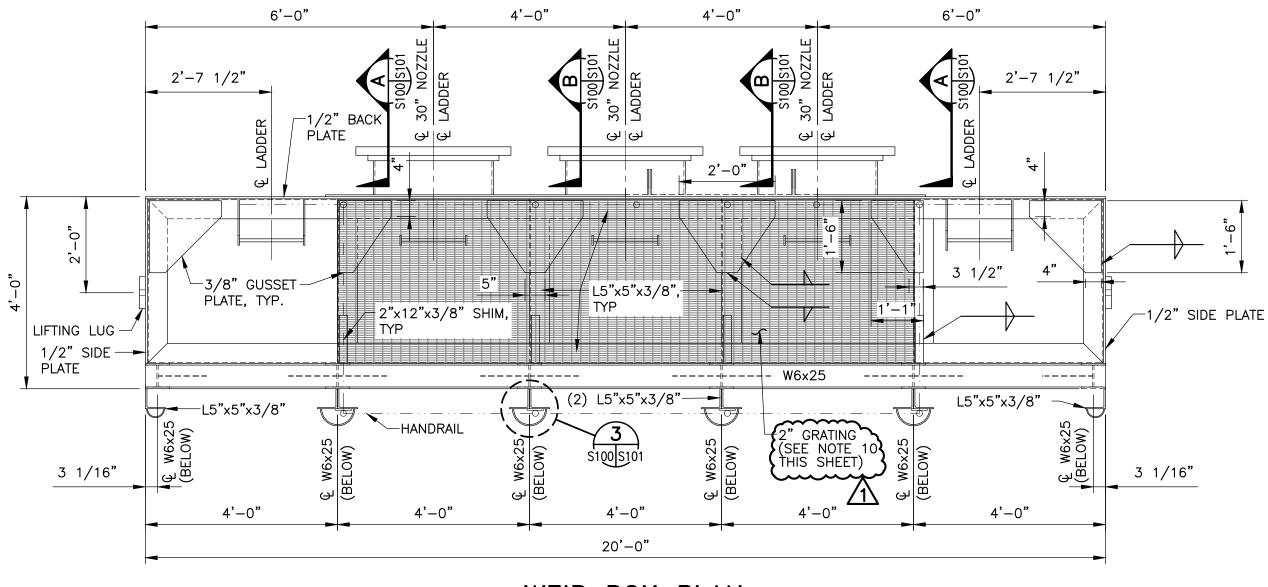
SCALE: 1" = 20'



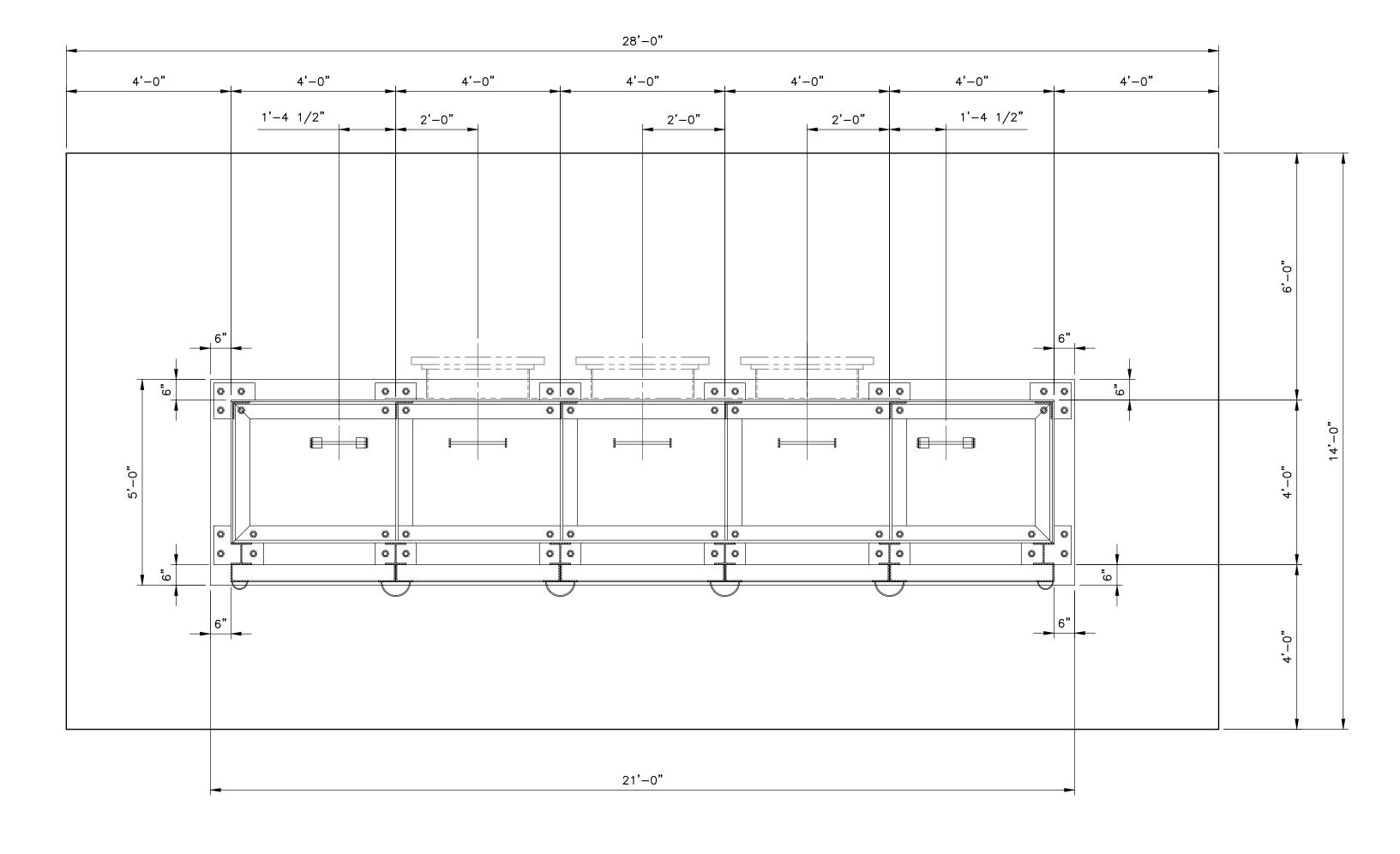
# WEIR BOX REPLACMENT OUTFALL PLAN AND PROFILE WITH CONTROL POINTS Designed by:Drawn by:ASPA No.MJWTPT11362 Sheet No. C100 8/25/23 ckd by: Reviewed by: Submitted by: Plot scale: RAH MJW MJW 1:1 Drawing 4 of 13

1	ISSUE FOR BID	01/26/24	MJV
Mark	Description	Date	Арр
ALITA	MOBILE, ALABAMA		
	thompson Engineering 2970 COTTAGE HILL RO, MOBILE, ALABAMA (251)666–24	36606	)
EAS	ST MUD LAKES WEIR BOX REP		
			NT

CAPPED IRON PIN SET N:263529.86 E:1802832.06 ELEV=54.81

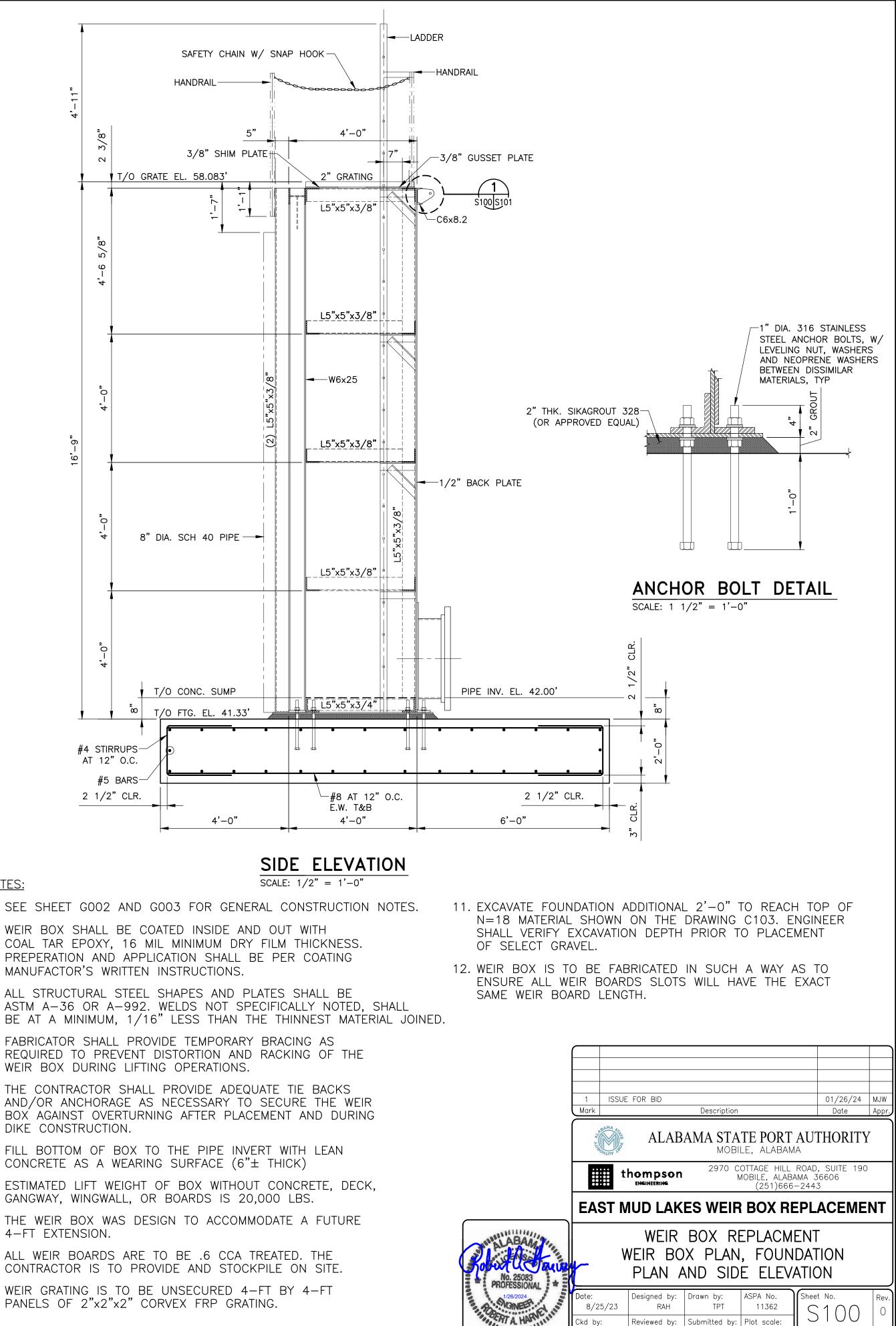


WEIR BOX PLAN SCALE: 1/2" = 1'-0"



WEIR BOX FOUNDATION PLAN SCALE: 1/2" = 1'-0"





1. SEE SHEET GOO2 AND GOO3 FOR GENERAL CONSTRUCTION NOTES.

<u>NOTES:</u>

- 2. WEIR BOX SHALL BE COATED INSIDE AND OUT WITH COAL TAR EPOXY, 16 MIL MINIMUM DRY FILM THICKNESS. PREPERATION AND APPLICATION SHALL BE PER COATING MANUFACTOR'S WRITTEN INSTRUCTIONS.
- 3. ALL STRUCTURAL STEEL SHAPES AND PLATES SHALL BE ASTM A-36 OR A-992. WELDS NOT SPECIFICALLY NOTED, SHALL
- 4. FABRICATOR SHALL PROVIDE TEMPORARY BRACING AS REQUIRED TO PREVENT DISTORTION AND RACKING OF THE WEIR BOX DURING LIFTING OPERATIONS.
- 5. THE CONTRACTOR SHALL PROVIDE ADEQUATE TIE BACKS AND/OR ANCHORAGE AS NECESSARY TO SECURE THE WEIR BOX AGAINST OVERTURNING AFTER PLACEMENT AND DURING DIKE CONSTRUCTION.
- 6. FILL BOTTOM OF BOX TO THE PIPE INVERT WITH LEAN CONCRETE AS A WEARING SURFACE  $(6"\pm THICK)$
- 7. ESTIMATED LIFT WEIGHT OF BOX WITHOUT CONCRETE, DECK, GANGWAY, WINGWALL, OR BOARDS IS 20,000 LBS.
- 8. THE WEIR BOX WAS DESIGN TO ACCOMMODATE A FUTURE 4-FT EXTENSION.
- 9. ALL WEIR BOARDS ARE TO BE .6 CCA TREATED. THE CONTRACTOR IS TO PROVIDE AND STOCKPILE ON SITE.
- 10. WEIR GRATING IS TO BE UNSECURED 4-FT BY 4-FT PANELS OF 2"x2"x2" CORVEX FRP GRATING.

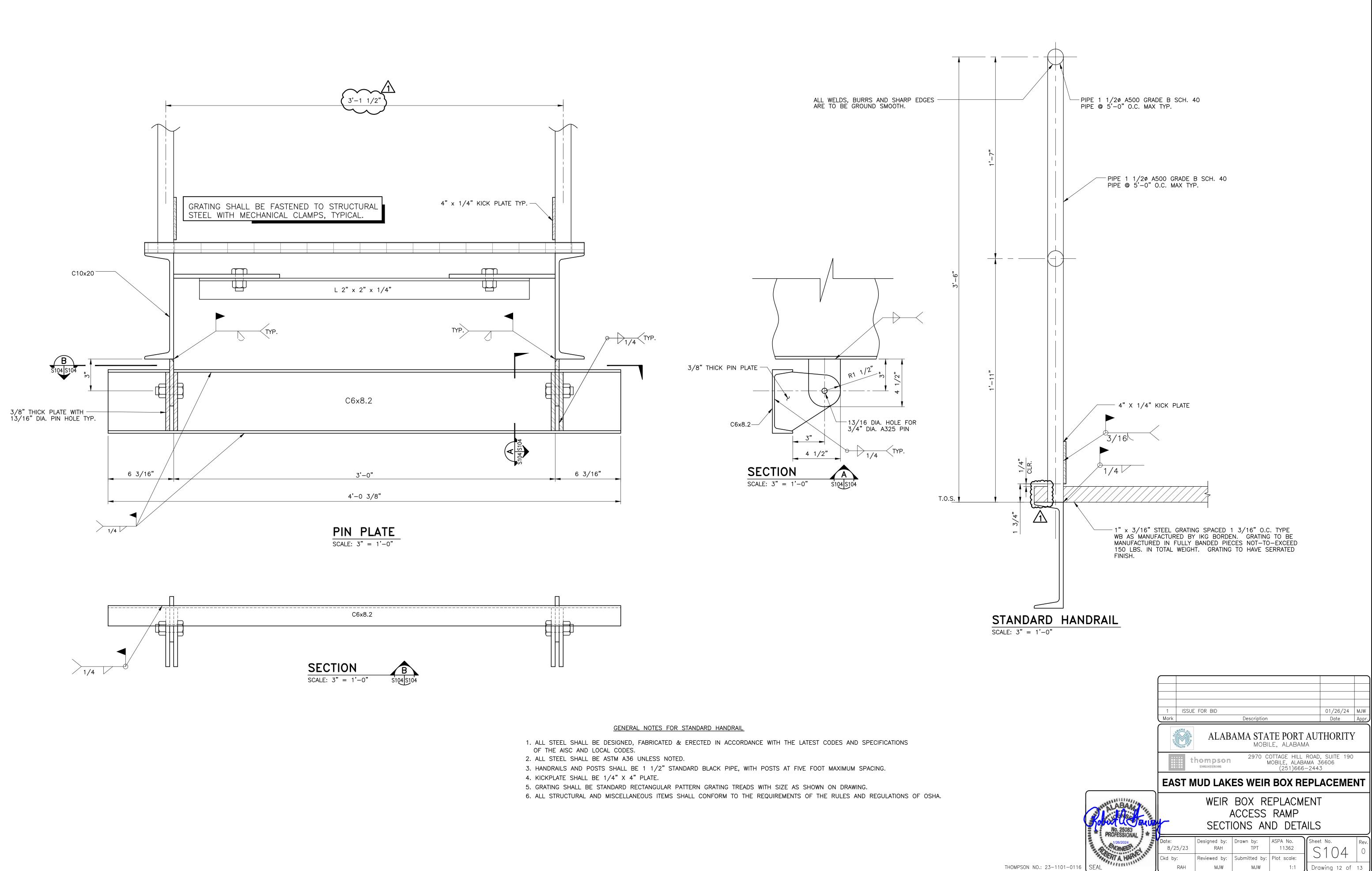
THOMPSON NO .: 23-1101-0116 SEAL RAH

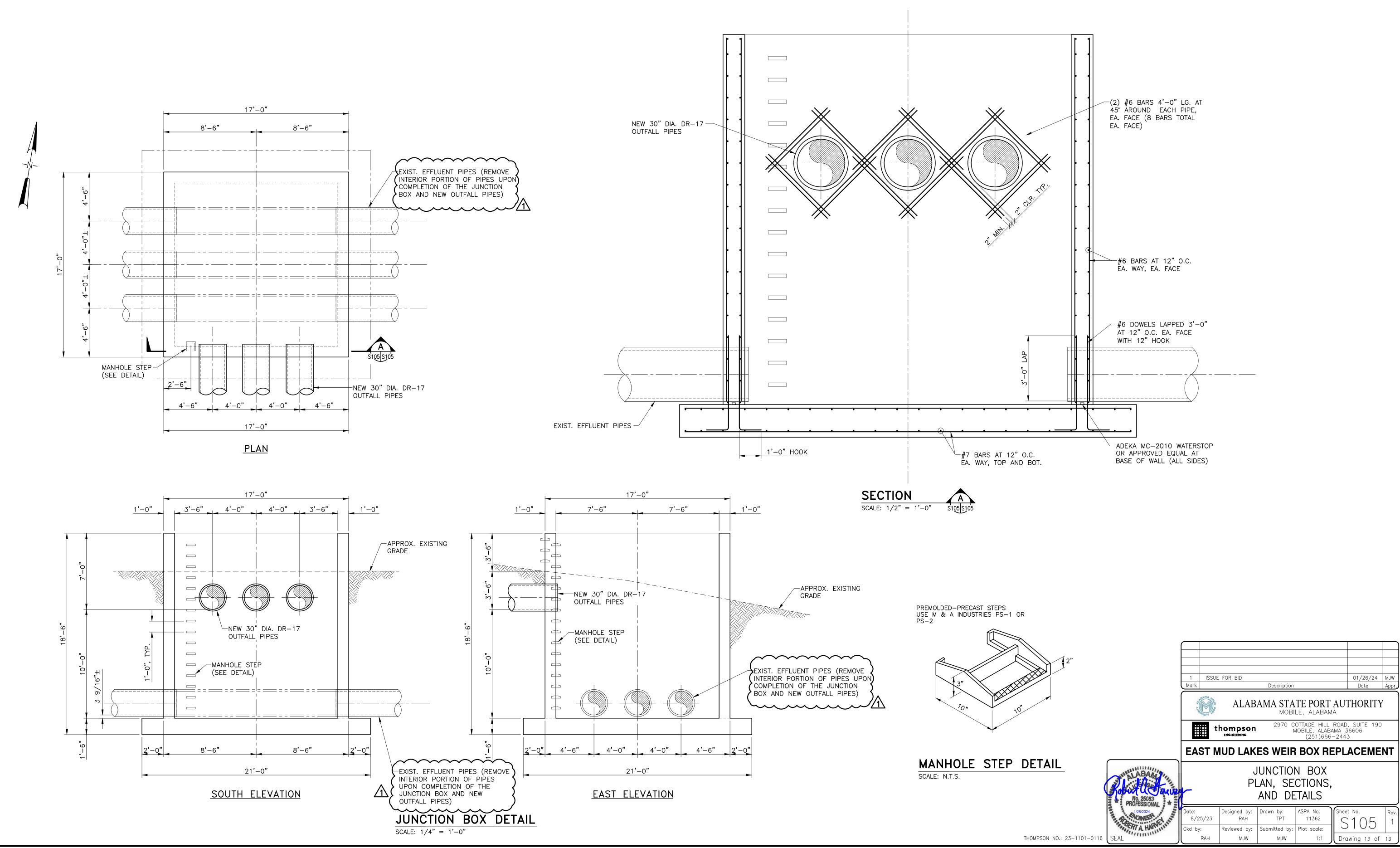
MJW

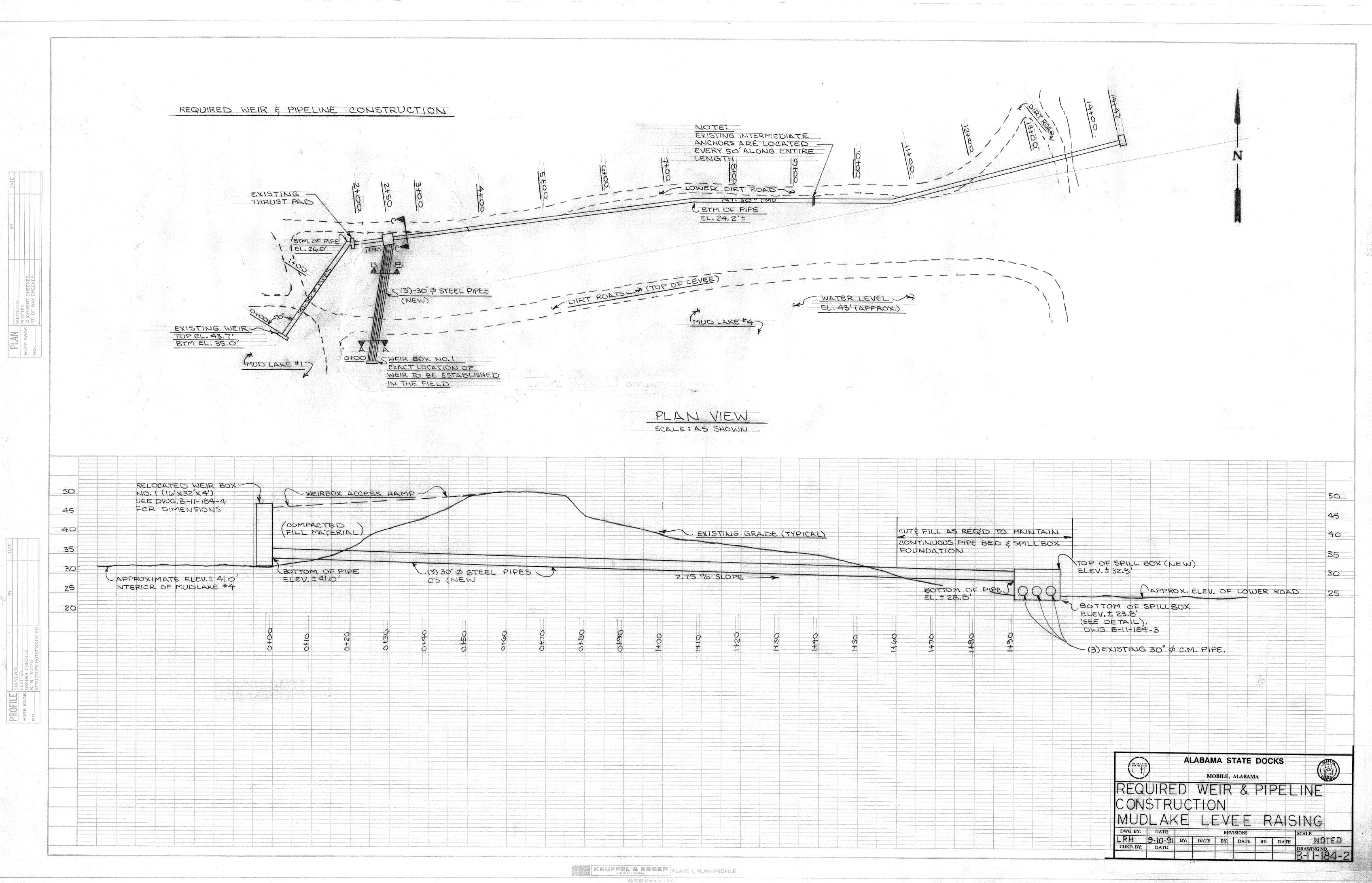
MJW

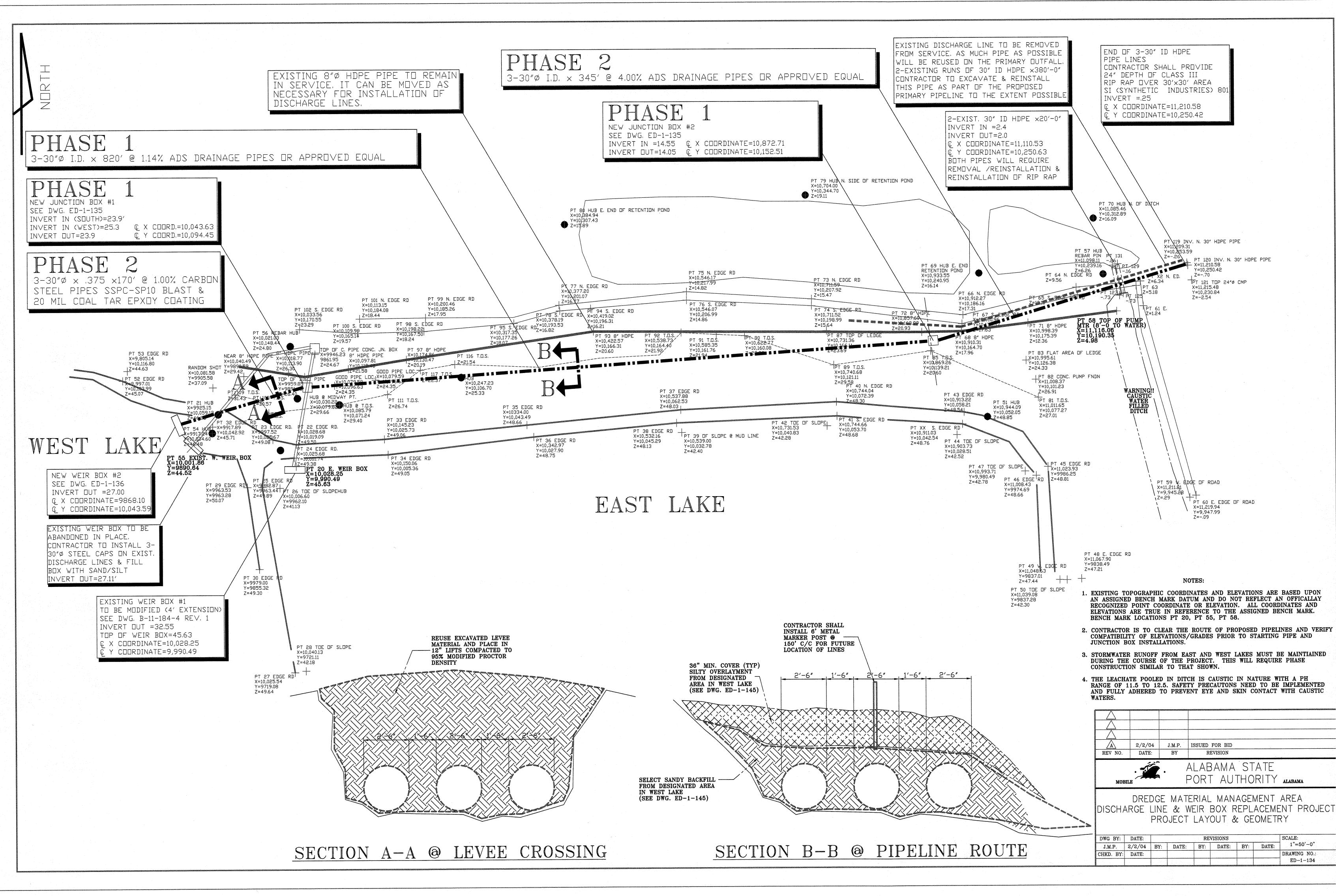
1:1

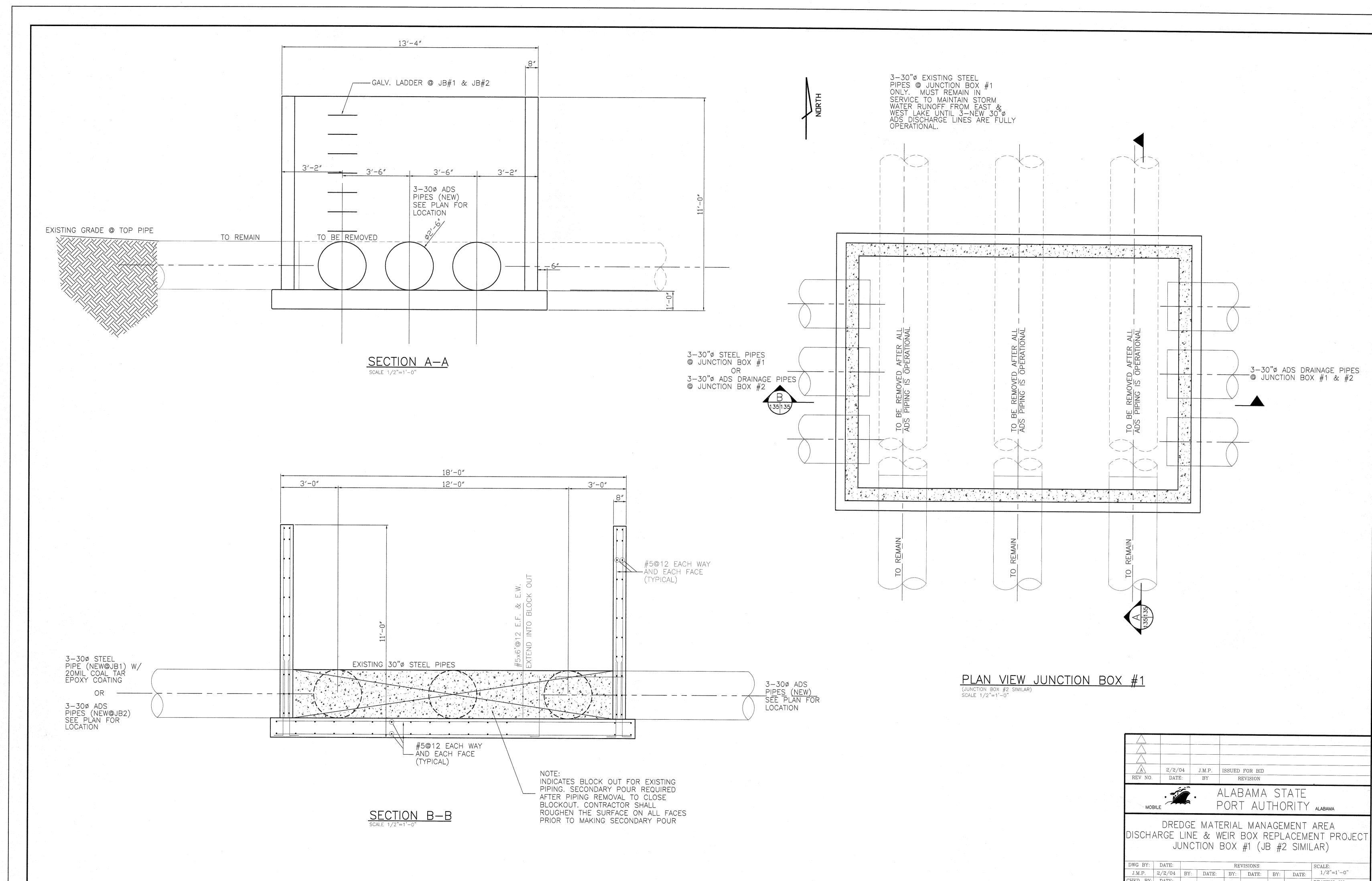
Drawing 8 of 13











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	2/2/0		J.M.P.		FOR BID		· · ·		
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	DREI ARGE	LINE	MATI & W	ERIAL /EIR BOX	- MAN Box f	AGE REPL	MENT ACEM	AREA ENT PR LAR)	
DISCH, DWG BY: J.M.P.	DREI ARGE JL	LINE	MATI & W	ERIAL /EIR BOX	_ MAN BOX F #1 (J	AGE REPL	MENT ACEM	AREA ENT PR LAR)	
DISCH,	DREI ARGE JL date:	LINE JNC	MATI & W TION	ERIAL /EIR BOX <sub>re*</sub>	_ MAN BOX F #1 (J	AGE REPL B #2	MENT ACEM 2 SIMI	AREA ENT PR LAR)	-0"

