# ALABAMA STATE PORT AUTHORITY



## McDUFFIE TERMINALS - RCD #2 FOUNDATION MODIFICATIONS

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OCTOBER 2021

REFERENCE DRAWINGS

### DRAWING LIST

4515-G1

4515-G2 GENERAL ARRANGEMENT — PLAN

PLAN - TOC EL (-)26'-0"

SECTIONS & DETAIL (1 OF 4)

SECTIONS & DETAILS (4 OF 4)

PROJECT COVER SHEET & DRAWING INDEX

4515-S1 PLAN - TOC EL (+)22'-0"

SECTIONS & DETAIL (2 OF 4)

SECTIONS & DETAIL (3 OF 4)

BUMPER STOPS - SECTIONS & DETAILS

#### **GENERAL NOTES:**

- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VERIFYING THE ACTUAL EXISTING CONDITIONS AND HOW THOSE CONDITIONS AFFECT THE REQUIRED WORK. PRIOR TO SUBMITTING HIS BID. ANY DISCREPANCY NOTED BETWEEN ACTUAL CONDITIONS AND THOSE DESCRIBED BY THESE DRAWINGS SHALL BE PROMPTLY BROUGHT TO ENGINEER'S ATTENTION. NO ADDITIONAL COST ASSOCIATED WITH MODIFICATIONS TO THE SCOPE OF WORK REQUIRED DUE TO INACCURATE EXISTING CONDITIONS AS SHOWN BY THESE DRAWINGS WILL BE CONSIDERED UNLESS SAID CONDITIONS HAVE BEEN BROUGHT TO ENGINEER'S ATTENTION PRIOR TO RECEIVING BIDS.
- 2. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH ASPA/MCDUFFIE TERMINALS.
- 3. ALL WORK SHALL CONFORM TO ALL APPLICABLE LOCAL BUILDING CODES AND ORDINANCES.
- 4. AT ALL TIMES, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF PERSONS AND PROPERTY, AND FOR ALL NECESSARY INDEPENDENT ENGINEERING REVIEW OF THESE CONDITIONS. REVIEW OF THE JOB SITE BY ENGINEER IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF CONTRACTOR'S SAFETY MEASURES
- EQUIPMENT ATTACHMENT DETAILS AND BOLTING REQUIREMENTS INDICATED ON THE DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY INTERFACES BETWEEN ALL EQUIPMENT AND STRUCTURAL STEEL OR CONCRETE PRIOR TO DETAILING AND FABRICATION. ANY DISCREPANCIES BETWEEN THE DETAILS INDICATED ON THE DRAWINGS AND THE ACTUAL REQUIRED INTERFACES SHALL BE PROMPTLY BROUGHT TO ENGINEER'S ATTENTION. ANY REWORK REQUIRED DUE TO INADEQUATE COORDINATION SHALL BE SOLELY CONTRACTOR'S RESPONSIBILITY.

### **MATERIALS:**

- 1. ALL CAST-IN-PLACE CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- 2. REINFORCING BARS SHALL BE DEFORMED AND SHALL CONFORM TO ASTM A615, GRADE 60.
- 3. ANCHOR BOLT MATERIAL SHALL BE AS SHOWN ON THE DRAWINGS AND SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A-123 AND ASTM A-143, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- 4. EMBEDDED STEEL MATERIAL SHALL CONFORM TO ASTM A36. ALL EMBEDDED STEEL ITEMS WILL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A-123 AND ASTM A-143 UNLESS NOTED OTHERWISE.
- GROUT MATERIAL UNDERNEATH ALL STRUCTURAL COLUMNS, EQUIPMENT BASES, ETC SHALL BE PREPACKAGED, CEMENTITIOUS NON-SHRINK, NON-METALLIC GROUT. GROUT MATERIAL THAT WILL BE SUBJECTED TO DYNAMIC LOADS, SUCH AS UNDERNEATH LARGE ROTATING EQUIPMENT, SHALL BE AN EPOXY BASED MATERIAL.
- 6. EPOXY MATERIAL FOR DRILLED AND GROUTED REBAR AND ANCHORS SHALL BE AS CALLED FOR ON THE DRAWINGS OR ENGINEERING APPROVED EQUAL.
- 7. STRUCTURAL STEEL "W", "WT" "S" SHAPES AND PLATES SHALL CONFORM TO ASTM A992, GRADE 50. TUBE STEEL SHALL CONFORM TO
- 8. PLATE MATERIAL SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH APPLICABLE PROVISIONS OF ASTM A123, A143, A384 AND A385. ALL DAMAGED HOT-DIP GALVANIZED AREAS SHALL BE COATED WITH ZRC COLD GALVANIZING COMPOUND OR EQUAL. SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

#### CONSTRUCTION METHODS:

- 1. COORDINATE CONCRETE WORK WITH PIPING, ELECTRICAL AND MECHANICAL WORK PRIOR TO PLACING CONCRETE. EQUIPMENT ATTACHMENT BETWEEN ALL EQUIPMENT AND CONCRETE FOUNDATIONS PRIOR TO PLACEMENT OF CONCRETE. ANY DISCREPANCIES BETWEEN THE DETAILS INDICATED ON THE DRAWINGS AND THE ACTUAL REQUIRED INTERFACE SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. ANY
- 2. EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4" CHAMFER.
- 3. CONCRETE COVER FOR REINFORCING IN CAST-IN-PLACE CONCRETE WORK SHALL BE AS FOLLOWS UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DETAIL DRAWINGS:
- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO THE EARTH 3 INCHES - CONCRETE EXPOSED TO WEATHER - 2 INCHES
- ALL OTHER REINFORCING 1½ INCHES (MINIMUM)
- 4. EXTERIOR CONCRETE FLOOR SLABS, DOCK SURFACE, ROADWAYS AND AREA PAVING SHALL HAVE A BROOM FINISH. VERTICAL WALLS SHALL HAVE A RUBBED FINISH AS DESCRIBED IN THE PROJECT SPECIFICATIONS.
- 5. AT LOCATIONS WHERE NEW CONCRETE IS TO BE PLACED AGAINST PREVIOUSLY HARDENED CONCRETE, THE EXISTING CONCRETE SURFACE SHALL BE CLEAN AND FREE OF LAITANCE AND ROUGHENED TO A FULL AMPLITUDE OF APPROXIMATELY  $\frac{1}{4}$  INCH. PRIOR TO PLACING THE NEW CONCRETE, AN EPOXY BONDING AGENT SHALL BE APPLIED TO THE CLEAN, ROUGHENED SURFACE. EPOXY BONDING AGENT SHALL BE "CEILCOTE 17 BRUTEM" OR APPROVED EQUAL.

#### **TESTING**

JEJ

APPD

DRAWN CK'D

1. PERFORM SLUMP TEST, AIR ENTRAINMENT, AND STRENGTH TESTS IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM.

2. PREPARE (4) CYLINDERS FOR EACH BATCH TO BE TESTED. TEST ONE AT 7 DAYS, TWO AT 28 DAYS AND HOLD ONE CYLINDER IN RESERVE



PROJECT NO: 4515

ALABAMA STATE PORT **AUTHORITY** 

CLIENT DWG NO:

NOTES

ISSUED FOR BID

REVISION



AGAINST BOTH DELIBERATE AND INADVERTENT DISCLOSURE TO ANY THIRD PARTY.

APPD: JEJ

CK'D: JEJ

ECHNOLOGY OWNED BY APTIM AND DEEMED TO BE COMMERCIALLY SENSITIVE. IT IS TO B SED ONLY IN CONNECTION WITH WORK BEING PERFORMED BY APTIM. REPRODUCTION IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN WORK PERFORMED BY APTIM IS

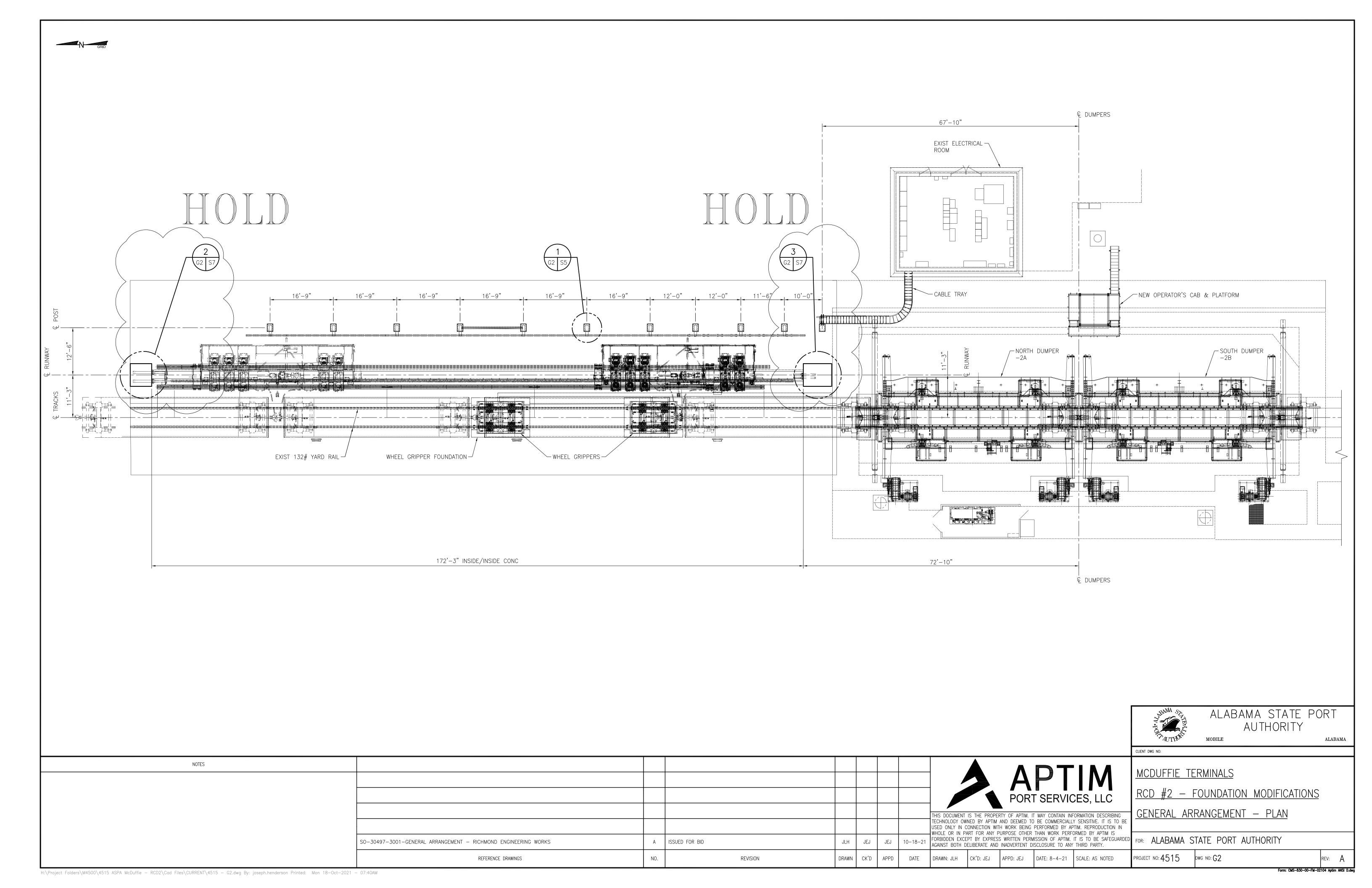
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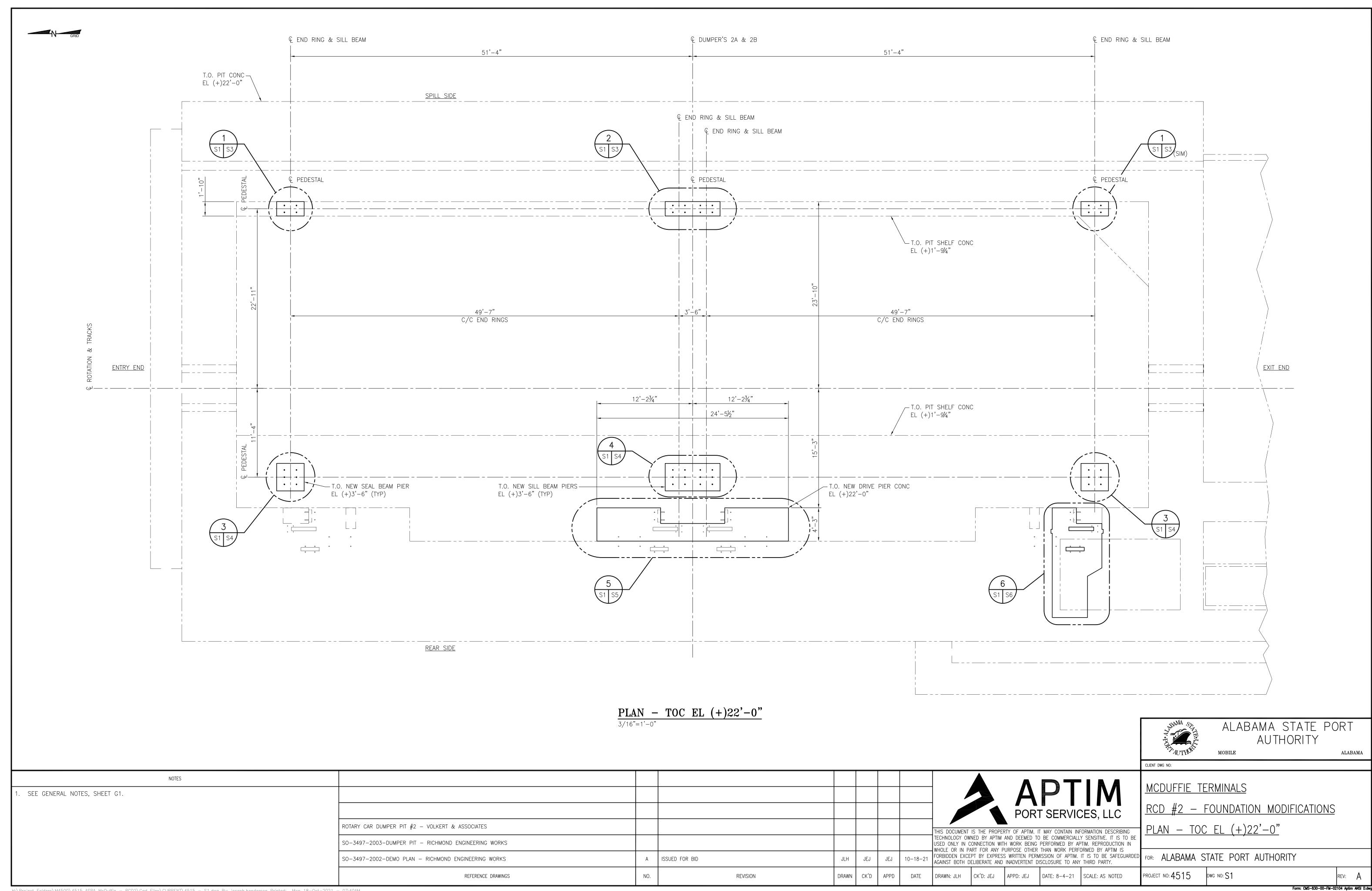
MCDUFFIE TERMINALS RCD #2 - FOUNDATION MODIFICATIONS

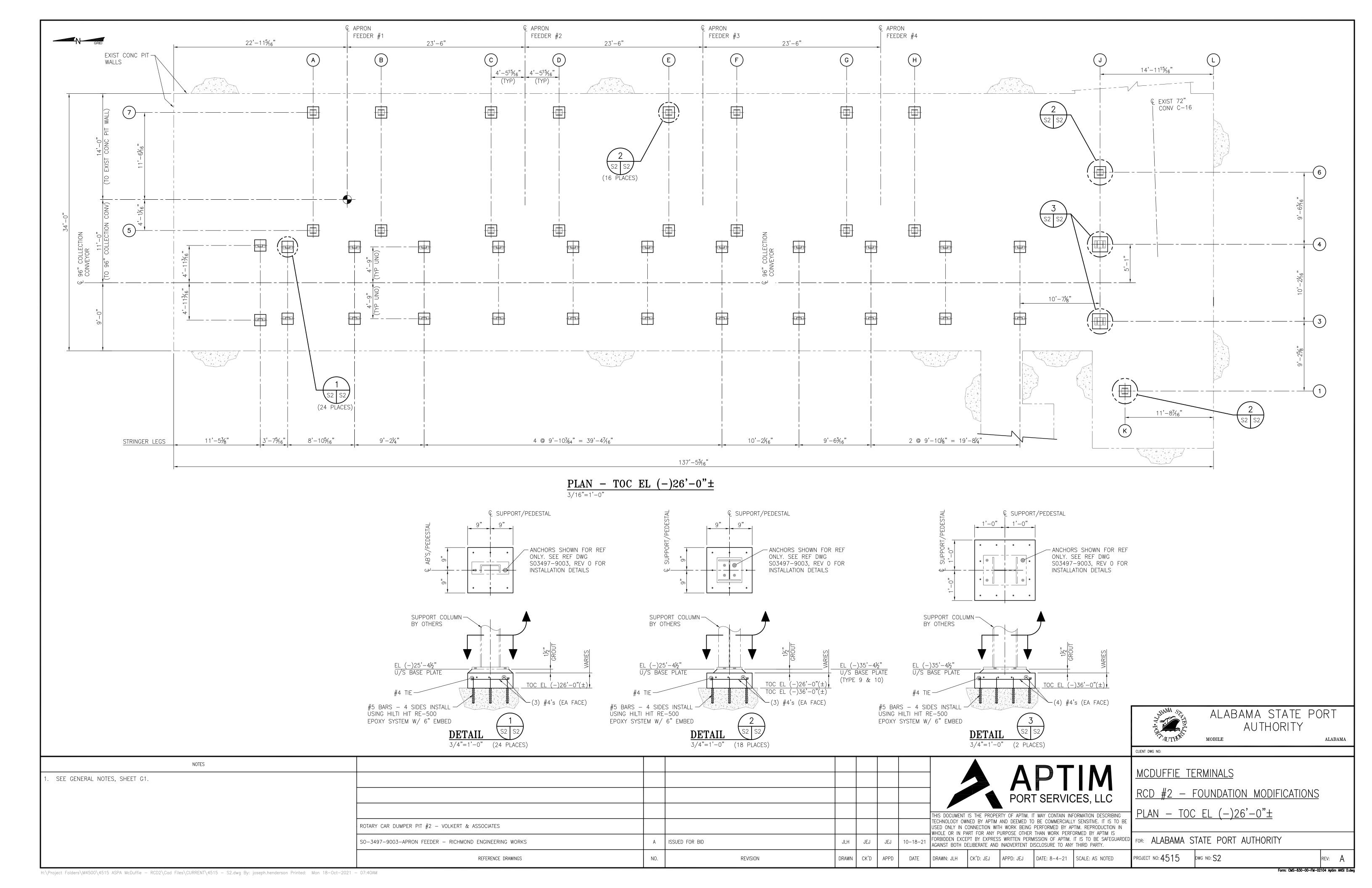
PROJECT COVER SHEET & DRAWING INDEX

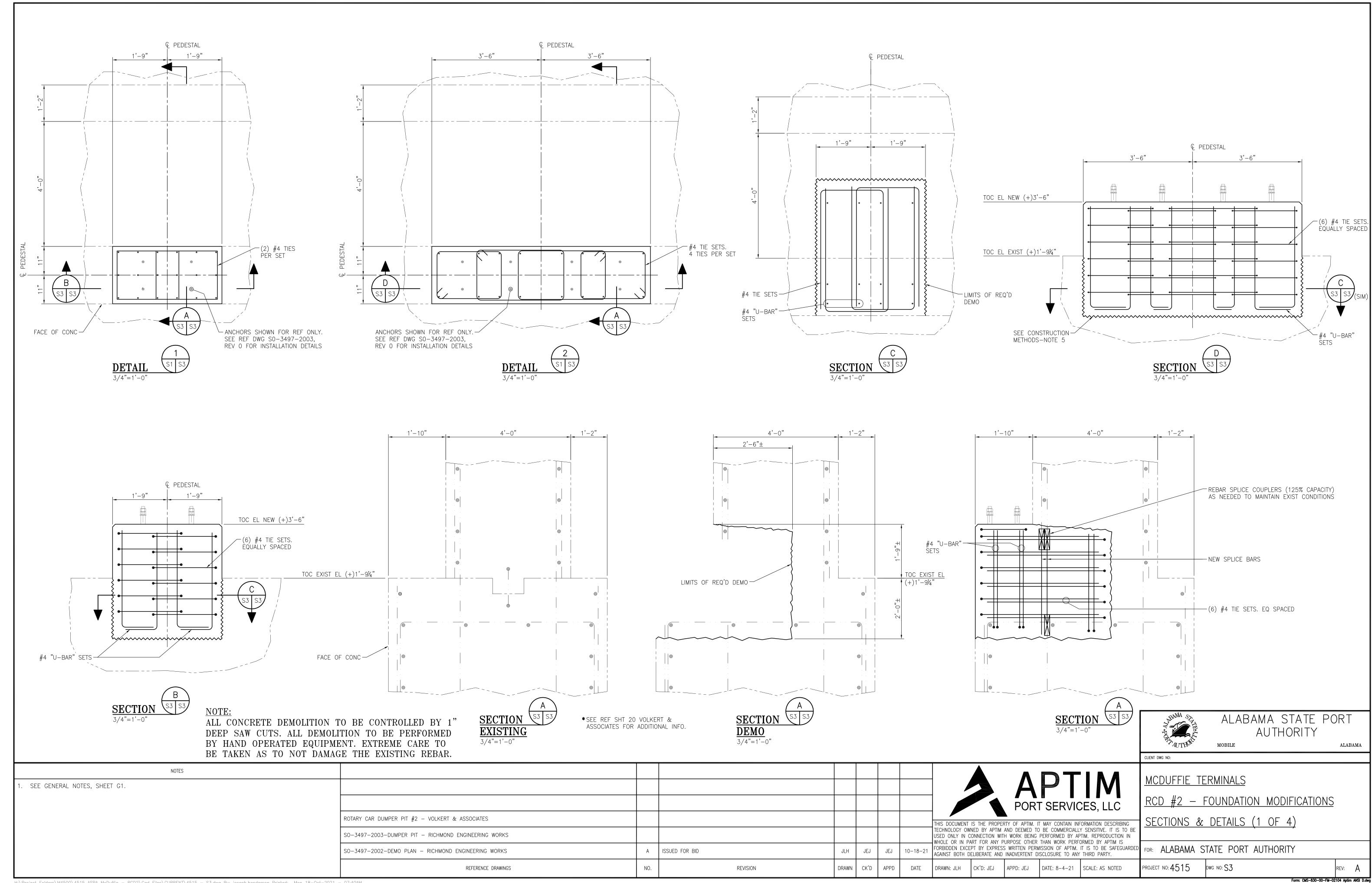
FOR: ALABAMA STATE PORT AUTHORITY FORBIDDEN EXCEPT BY EXPRESS WRITTEN PERMISSION OF APTIM. IT IS TO BE SAFEGUARD

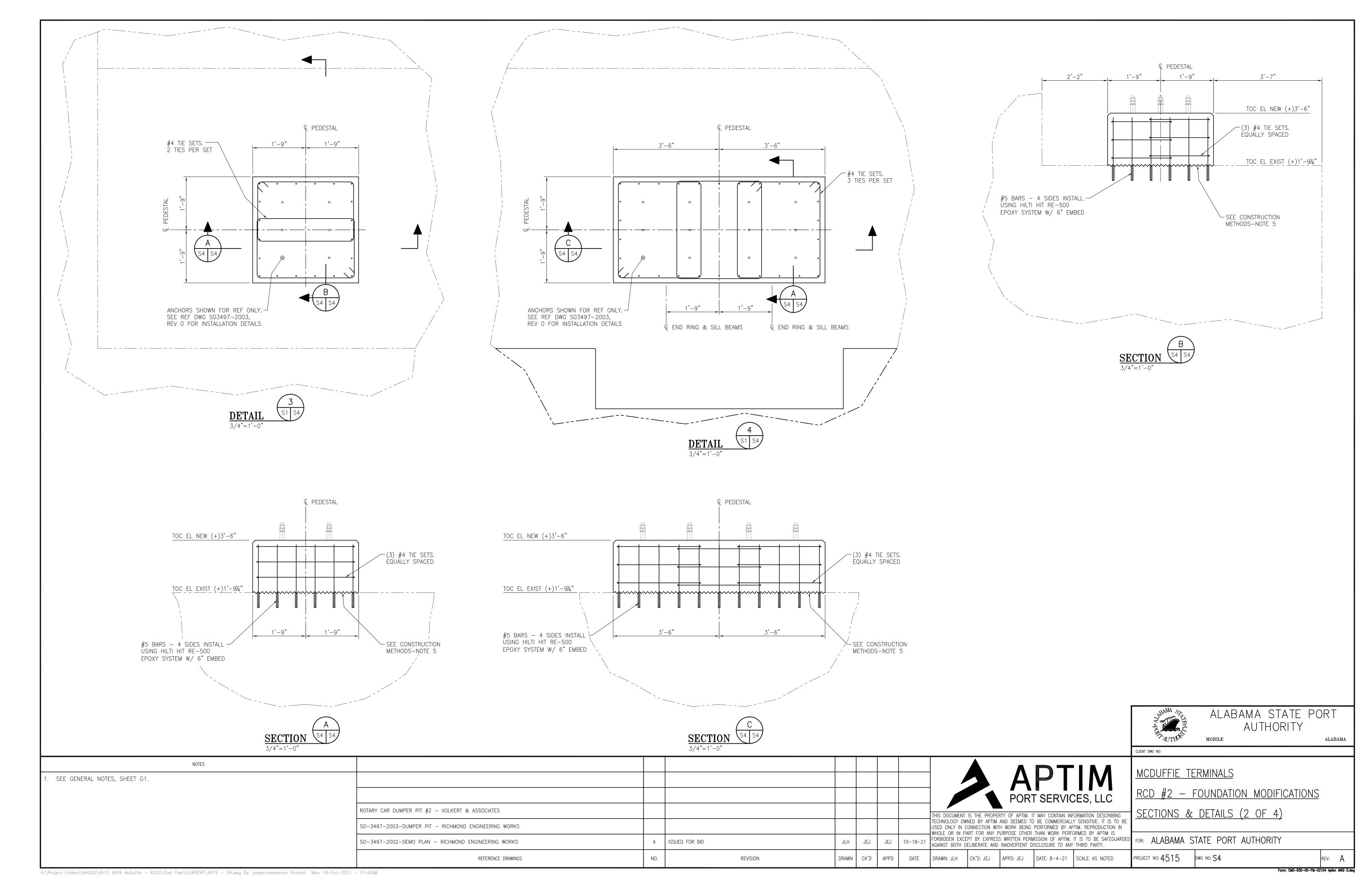
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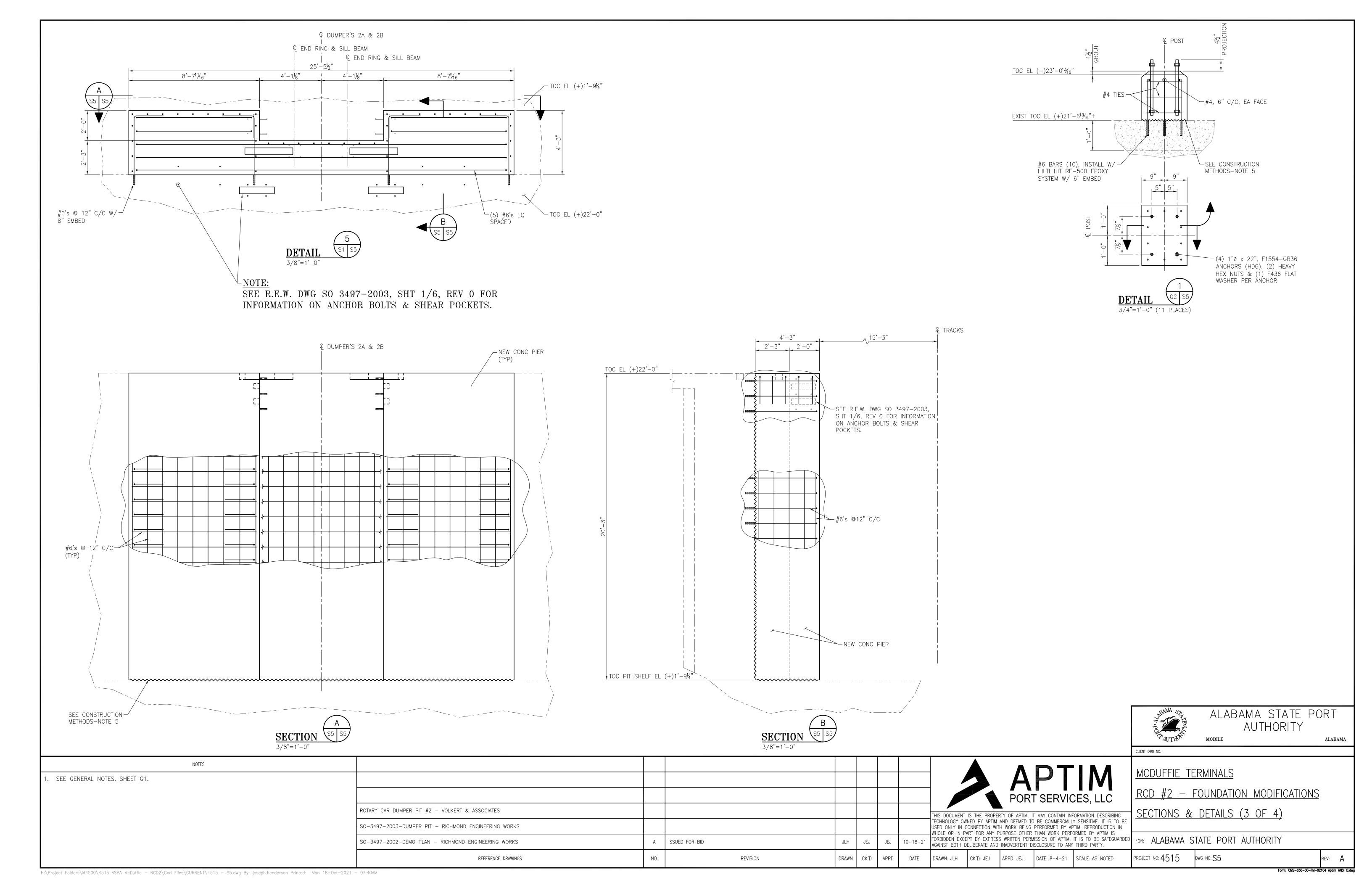


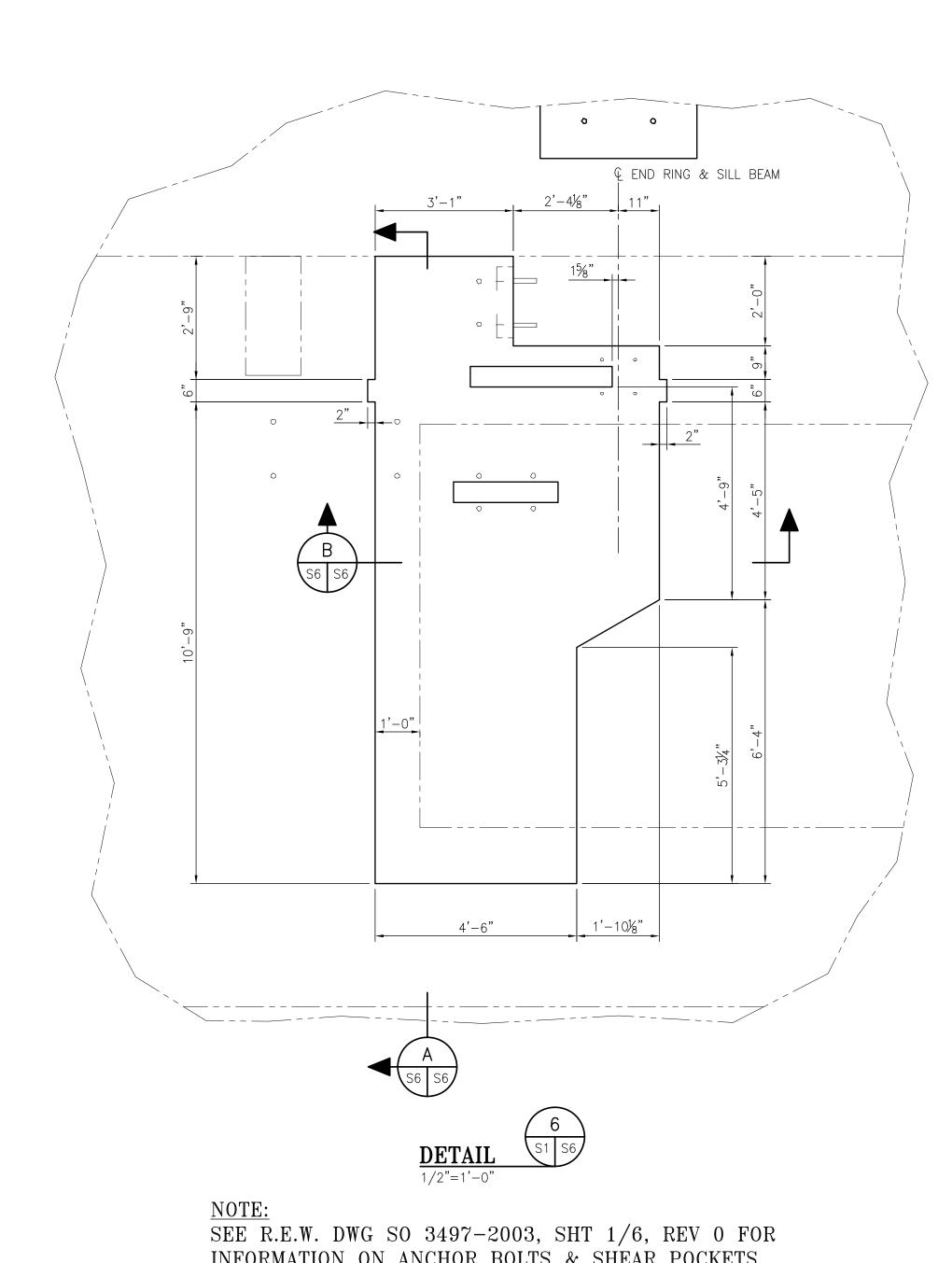




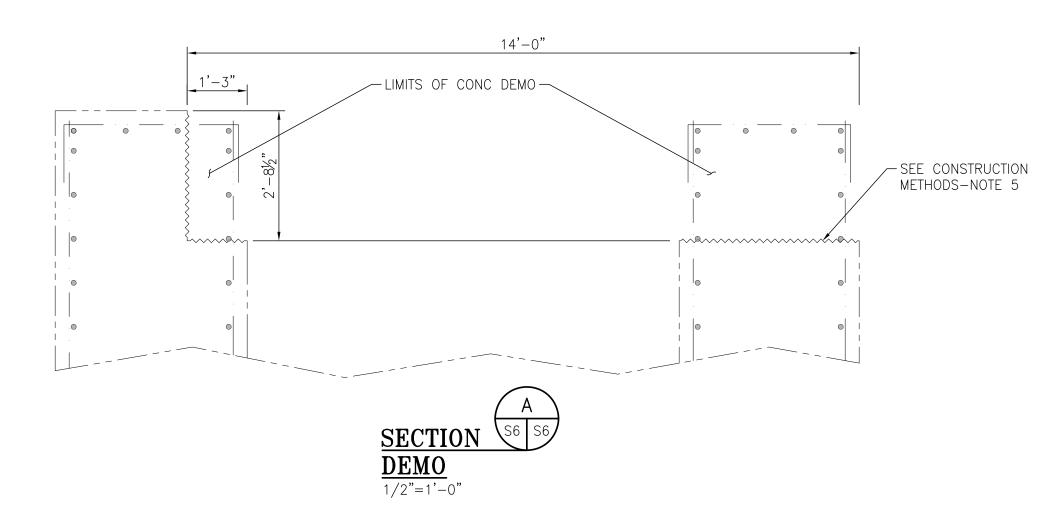


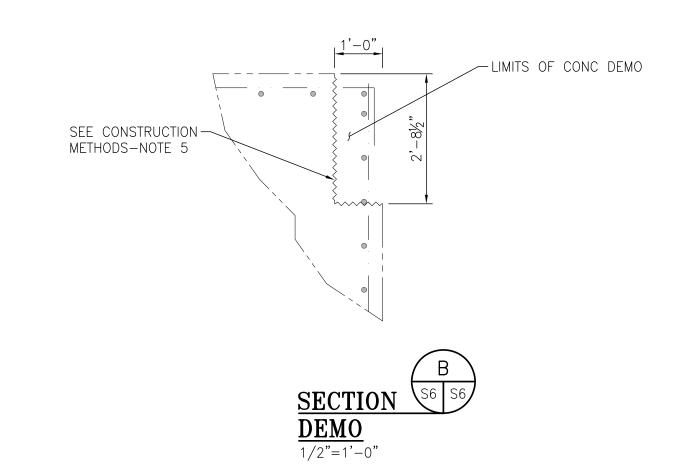




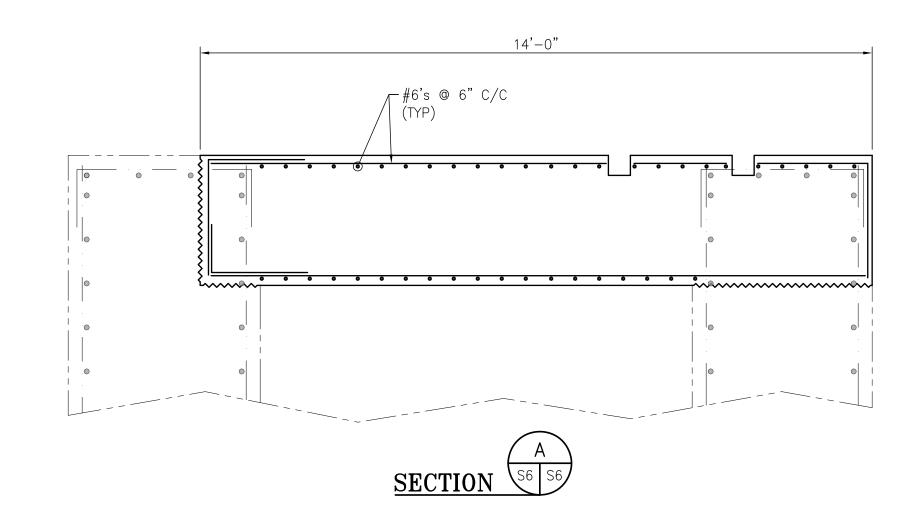


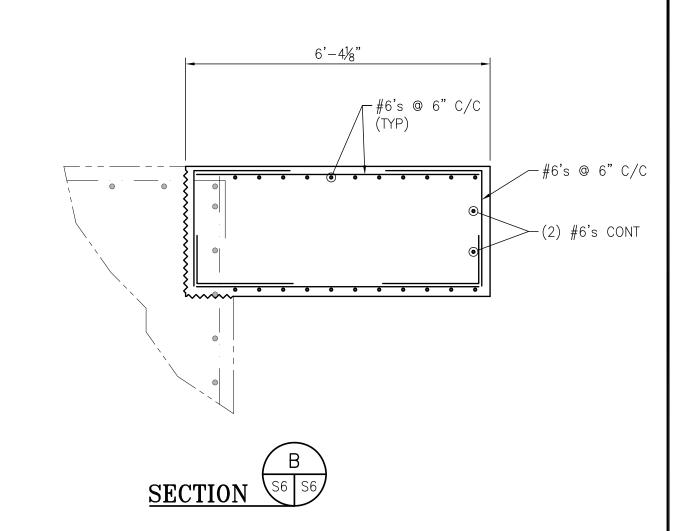
INFORMATION ON ANCHOR BOLTS & SHEAR POCKETS.





NOTE: ALL CONCRETE DEMOLITION TO BE CONTROLLED BY 1" DEEP SAW CUTS. ALL DEMOLITION TO BE PERFORMED BY HAND OPERATED EQUIPMENT. EXTREME CARE TO BE TAKEN AS TO NOT DAMAGE THE EXISTING REBAR.







APPD: JEJ DATE: 8-4-21 SCALE: AS NOTED

ALABAMA STATE PORT AUTHORITY

MOBILE

MCDUFFIE TERMINALS

RCD #2 - FOUNDATION MODIFICATIONS

SECTIONS & DETAILS (4 OF 4)

FOR: ALABAMA STATE PORT AUTHORITY PROJECT NO: **4515** 

DWG NO: **S6** 

ROTARY CAR DUMPER PIT #2 - VOLKERT & ASSOCIATES ECHNOLOGY OWNED BY APTIM AND DEEMED TO BE COMMERCIALLY SENSITIVE. IT IS TO BE SO-3497-2003-DUMPER PIT - RICHMOND ENGINEERING WORKS WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN WORK PERFORMED BY APTIM IS FORBIDDEN EXCEPT BY EXPRESS WRITTEN PERMISSION OF APTIM. IT IS TO BE SAFEGUARDE ISSUED FOR BID SO-3497-2002-DEMO PLAN - RICHMOND ENGINEERING WORKS JEJ AGAINST BOTH DELIBERATE AND INADVERTENT DISCLOSURE TO ANY THIRD PARTY. REFERENCE DRAWINGS REVISION DRAWN CK'D

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NOTES

SEE GENERAL NOTES, SHEET G1.

