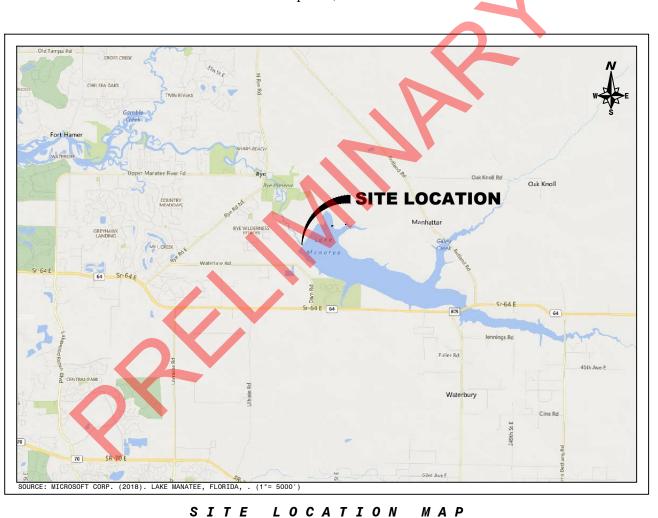
ENGINEERING DESIGN FOR:

MANATEE COUNTY UTILITIES DEPARTMENT SUPPLEMENTAL CUTOFF WALL AND APPROACH SLAB

LAKE MANATEE RESERVOIR

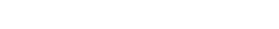
MANATEE COUNTY, FLORIDA

AMEC PROJECT NUMBER: 300472x4 April 10, 2018



MANATEE COUNTY, FLORIDA SECTION 25, TOWNSHIP 34 SOUTH, RANGE 19 EAST

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PROJECT LOCATION

PLANS PREPARED BY:

amec foster wheeler

Amec Foster Wheeler Environment & Infrastructure, Inc.

1000 Channelsite Drive, Suite 200, Tampa, FL 33602 Phone: 1.813.289.0750 Fax: 1.813.289.5474 www.amecfw.com CA-5392

ROLES

- 1. OWNER: MANATEE COUNTY UTILITIES DEPARTMENT (COUNTY)
- 2. DESIGNER: AMEC FOSTER WHEELER (ENGINEER)

GENERAL NOTES

- 1. SUBMIT TO THE COUNTY, FOR APPROVAL, A PROPOSED CONSTRUCTION WORK PLAN PRIOR TO REGINNING WORK
- 2. INVESTIGATE, LOCATE, SUPPORT, PROTECT AND/OR RESTORE ALL EXISTING UTILITIES, WHETHER SHOWN ON THESE PLANS OR NOT, CALL THE UTILITIES PROTECTION SERVICE AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION, AND SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES. COORDINATING WITH OWNER AND LOCATE PRIVATE UTILITIES ON
- 3. CONFIRM ALL FIELD MEASUREMENTS NECESSARY FOR EXECUTION OF THE WORK PRIOR TO ORDERING ANY MATERIAL
- 4. IF CONTRACTOR ACCESSES THE PROJECT VIA ADJACENT PROPERTY, OR UTILIZES OTHER PROPERTY FOR PROJECT WORK, ARRANGE AND PROCURE ANY PERMITS COORDINATION CONSTRUCTION MAINTENANCE, AND CLEAN-UP ON THE PRIVATE PROPERTIES
- 5. MAINTAIN THE STABILITY OF EXISTING STRUCTURES, AND TEMPORARY/PERMANENT FARTH SLOPES THROUGHOUT CONSTRUCTION OPERATIONS, SUCH AS BY INSTALLING TEMPORARY SUPPORTS, SHORING, BRACING OR OTHER MEASURE AS MAY BE NECESSARY AT NO ADDITIONAL COSTS.
- 6. MAINTAIN TEMPORARY CONSTRUCTION EXCAVATION IN ACCORDANCE WITH OSHA, STATE, AND FEDERAL REGULATIONS.
- 7. ON-SITE CONSTRUCTION BY OTHERS, INCLUDING ROUTINE MAINTENANCE WORK MAY OCCUR THROUGHOUT THIS CONTRACT. COORDINATE CONSTRUCTION ACTIVITIES THROUGH THE OWNER TO MINIMIZE INTERFERENCE WITH OTHERS.
- 8. COORDINATE ANY ROAD CLOSURE, REROUTING OF TRAFFIC, OR INSTALLATION OF TRAFFIC MANAGEMENT DEVICES WITH OWNER.
- 9. COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS GOVERNING THE WORK.
- 10. OWNER RESERVES THE RIGHT TO HALT OR STOP WORK FOR ANY REASON DURING THE PERIOD OF CONSTRUCTION. IF WORK IS STOPPED DUE TO FAULT OF CONTRACTOR (UNSAFE PRACTICES, DAMAGE TO PROPERTY, DISRUPTION TO FACILITY, ETC.), NO COMPENSATION FOR DELAYS OR OTHER MONETARY LOSSES WILL BE PROVIDED.
- 11. NOTE THAT WORK IS TO BE PERFORMED ALONG AN ACTIVE IMPOUNDMENT, EXERCISE EXTREME CARE TO KEEP FROM FROM ADVERSELY AFFECTING EARTHEN DAM. CONTINUOUSLY MONITOR PERFORMANCE OF DAM AND NOTIFY OWNER AND ENGINEER IMMEDIATELY OF NOTICEABLE SLOPE INSTABILITY.
- 12. AREA OF DISTURBANCE IS EXPECTED TO BE LESS THAN 1 ACRE. IF LAND DISTURBING ACTIVITIES EXCEED 1 ACRE, OBTAIN NPDES PERMIT TO INCLUDE, BUT NOT BE LIMITED TO A STORMWATER POLLUTION PREVENTION PLAN, IF REQUIRED. CONTRACTOR SHALL FOLLOW EROSION AND SEDIMENT CONTROL, BEST MANAGEMENT PRACTICES IN ACCORDANCE WITH FDEP FOR ON-SITE CONSTRUCTION ACTIVITIES
- 13. TEMPORARILY BRACE ALL STRUCTURES AS REQUIRED FOR STABILITY AND SAFETY

WORKS BY OTHERS

1 ALL WORK ON THIS PROJECT SHALL BE CONSTRUCTED BY THE CONTRACTOR, UNLESS NOTED OTHERWISE

SPECIFICATIONS

- 1. PERFORM THE WORK IN ACCORDANCE WITH THESE DRAWINGS. IN ADDITION TO THESE PLANS, REFERENCE TO THE FOLLOWING DOCUMENTS SHALL BE CONSIDERED PART OF THE PROJECT
 - A. FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", 2018 EDITION
 - B. FLORIDA BUILDING CODE, 2017
- 2. IF THERE IS ANY CONFLICT BETWEEN AGENCIES, PLANS, ETC., THE MOST STRINGENT CRITERIA GOVERN.
- 3. IF THERE IS ANY CONFLICT BETWEEN PLANS AND REFERENCED SPECIFICATIONS, THE PLANS GOVERN.

DESIGN NOTES

- 1. ALL DIMENSIONS ARE IN US CUSTOMARY UNITS.
- 2. VERTICAL ELEVATIONS ON THE PROJECT PLANS ARE SHOWN WITH REFERENCE TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- 3. DRAWINGS HAVE BEEN PREPARED BASED ON SURVEY DATA AND OTHER AVAILABLE INFORMATION. THE CONTRACTOR CAN EXPECT AND SHOULD PLAN ON ENCOUNTERING VARIANCES AND DEVIATIONS BETWEEN THE INFORMATION IN THE DRAWINGS AND THE EXISTING SITE CONDITIONS. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS IN CONSTRUCTION DETAILS AND QUANTITIES.
- 4. DO NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES. SCALES ARE SHOWN FOR INFORMATION ONLY. FIELD VERIFY ALL DETAILS INCLUDING GEOMETRY AND ELEVATIONS PRIOR TO THE FABRICATION AND INSTALLATION OF ANY MATERIALS. SUBMIT COPIES OF FIELD SURVEYS AND VERIFICATIONS TO THE ENGINEER FOR INCLUSION INTO THE CONSTRUCTION RECORDS
- 5. ALL DIMENSIONS AND ELEVATIONS SHOWN IN THESE PLANS APPLY TO THE PROPOSED FINISHED GRADE AND STRUCTURE.
- 6. ELEVATIONS SHOWN IN THESE PLANS ARE BASED ON SURVEY CONTROL POINT ELEVATIONS ESTABLISHED IN THE FIELD.

CONTROL OF ALL WORK

ALL METHODS OF HANDLING WORK AFFECTING PLANT TRAFFIC AND THE SAFETY OF PLANT OPERATIONS MUST BE APPROVED BY THE OWNER BEFORE PROCEEDING WITH THAT PORTION OF THE WORK

PREMOBILIZATION ACTIVITIES

- AFTER REQUIRED PERMITS HAVE BEEN OBTAINED FROM LOCAL, STATE, AND FEDERAL AUTHORITIES, AND PRIOR TO THE COMMENCEMENT OF WORK, PERFORM ANY ADDITIONAL GEOTECHNICAL INVESTIGATION AND BATHYMETRY SURVEY REQUIRED TO COMPLETE THE WORK
- ESTABLISH AND MAINTAIN HORIZONTAL AND VERTICAL CONTROL, SURVEY BASELINE, DISPOSAL DETAILS, VOLUME AND QUANTITY REQUIREMENTS, AND ANY ENVIRONMENTAL PROTECTION MEASURES.
- ALL MOBILIZATION ACTIVITIES REQUIRE ENVIRONMENTAL PROTECTION, INCLUDING HANDLING OF HAZARDOUS MATERIALS, SPILL PREVENTION, NOISE ABATEMENT, AND GENERAL ENVIRONMENTAL AWARENESS. CONDUCT WORK SO THAT ALL APPLICABLE LAWS, REGULATIONS, AND ORDINANCES IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL AUTHORITIES ARE MET.

SERVICE BRIDGE ALLOWABLE LOADING

- 1. THE SERVICE BRIDGE OVER THE EXISTING TAINTER GATES IS RATED FOR A 35 TON, 4 AXLE TRUCK (FDOT STANDARD S/U-4). PLAN THE WORK SO THAT THE CAPACITY OF THE BRIDGE IS NOT EXCEEDED.
- 2. LIMIT VEHICLE SPEED ON THE SERVICE BRIDGE TO 10 MPH OR LESS.
- 3. DO NOT SUBJECT THE 1" X 8" WELDED STEEL GALVANIZED GRATING OVER THE STOP LOG RECESS TO VEHICLE LOADING.

ACCESS ACROSS MANATEE RIVER

- 1. THE MANATEE RIVER MAY BE CROSSED WITH HEAVY EQUIPMENT IMMEDIATELY DOWNSTREAM OF THE SERVICE SPILLWAY ALONG AN EXISTING RIPRAP ROAD. UPGRADE AND MAINTAIN THE ROAD AS NECESSARY FOR USE DURING CONSTRUCTION.
- 2. THE EXISTING RIPRAP ROAD IS SUBJECT TO PERIODIC INUNDATION BY THE RIVER DURING HIGH STORM EVENTS THAT MAY OCCUR THROUGHOUT THE YEAR, PARTICULARLY BETWEEN JUNE AND SEPTEMBER.

Wheeler		ster Wheeler	Infrastructure Inc	00. Tampa. FL 33602	50 Fax: 1.813.289.5474	CA-5392 NO. DATE
						REVISION

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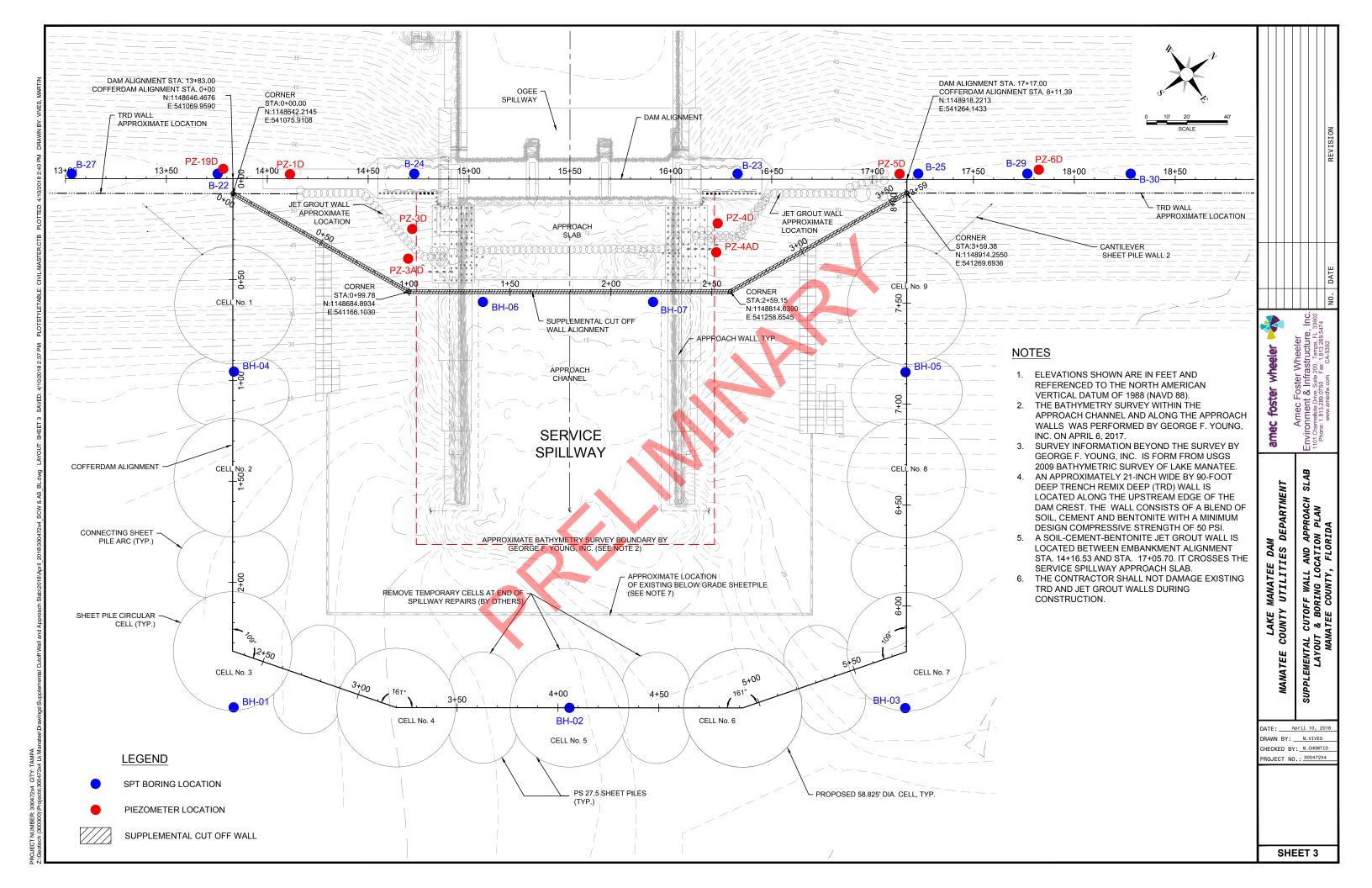
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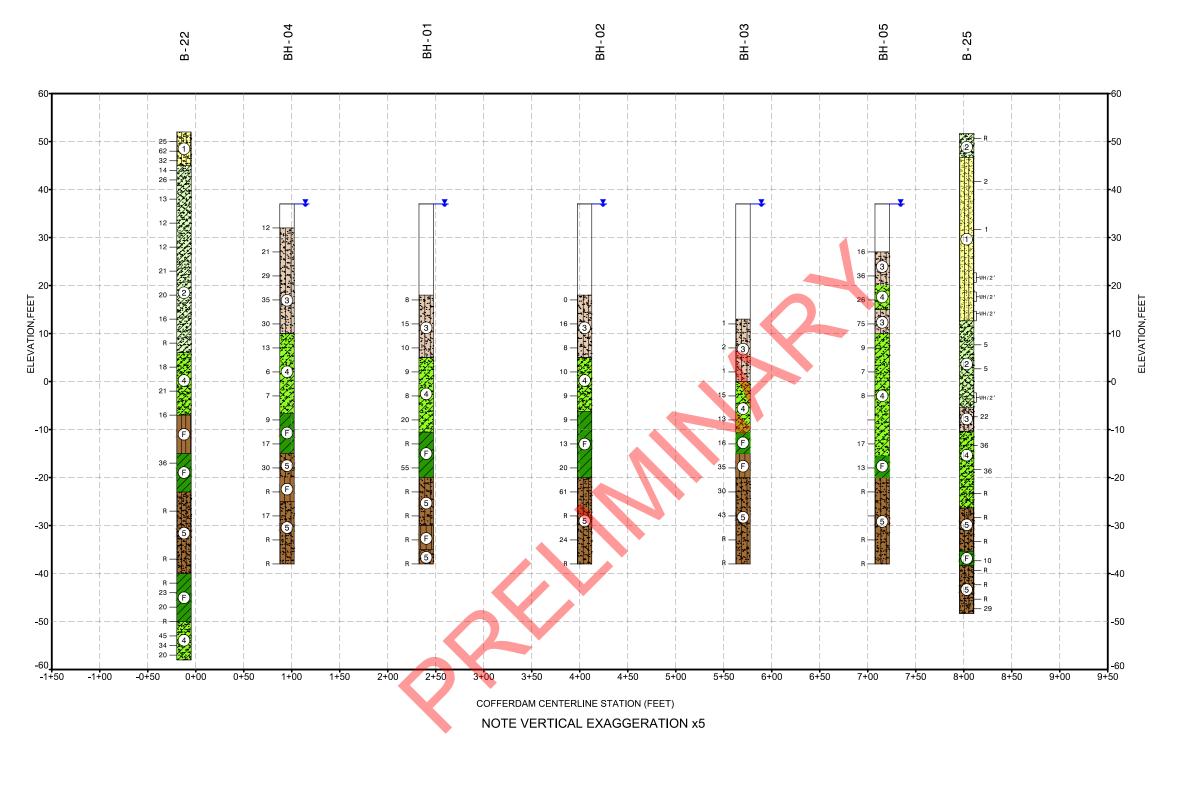
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DEPARTMEN APPR04 TAL CUTOFF WALL AND APPI GENERAL NOTES MANATEE COUNTY, FLORIDA MANATEE DAM 'UTILITIES D LAKE I MANATEE

DATE: April 10, 2018 CHECKED BY: J.BERISWIL PROJECT NO.: 300472X4

SHEET 2





EXPLANATION



DARK BROWN, BROWN, LIGHT GRAY, GREENISH GRAY, SAND TO SAND WITH SILT TO SAND WITH CLAY TO SILTY SAND (SP, SP-SM, SM, SP-SC) POORLY GRADED SANDS, TRACE ORGANICS, VARIABLY SILTY, VARIABLY CLAYEY (FILL)



② LIGHT GREENISH GRAY, GREENISH GRAY, CLAYEY SAND (SC) TRACE PHOSPHATIC SANDS, TRACE SILTS, TRACE CALCAREOUS (FILL)



DARK BROWN, BROWN, LIGHT GRAY, GREENISH GRAY, SAND TO SAND WITH SILT TO SAND WITH CLAY TO SILTY SAND (SP, SP-SM, SM, SP-SC) POORLY GRADED SANDS, TRACE ORGANICS, VARIABLY SILTY, VARIABLY CLAYEY (NATIVE)



4 LIGHT GREENISH GRAY, GREENISH GRAY, CLAYEY SAND (SC) TRACE PHOSPHATIC SANDS, TRACE SILTS, TRACE CALCAREOUS (NATIVE)



(5) GRAY, LIGHT GRAY, GREENISH GRAY, POORLY GRADED FINE QUARTZ. SAND, VARIABLE SILTY TO CLAYEY (SP. SP-SM, SM, SP-SC), ABUNDANT PHOSPHATIC SANDS, VARIABLE CEMENTED FRAGMENTS.



 $(F) \begin{array}{l} \text{GRAY, LIGHT GRAY, GREENISH GRAY, SILT WITH SAND (ML, MH) POORLY} \\ \text{GRADED SANDS, TRACE ORGANICS, TRACE PHOSPHATIC SANDSTONE PEBBLES,} \\ \text{TRACE CALCARIOUS/DOLOMITC, CEMENTED (NATIVE)} \end{array}$



LIGHT GREENISH GRAY, GREENISH GRAY, CLAY WITH SAND (CL, CH) TRACE PHOSPHATIC SANDS TO PEBBLES, TRACE SILTS, TRACE CALCARIOUS/DOLOMITC, VARIABLE THINLY BEDDED, FINE PHOSPHATIC SAND SEAMS, IRON MOTTLING (NATIVE)

SP UNIFIED SOIL CLASSIFICATION SYSTEM classification

78 SPT N-value

Depth of water table

R Weight of Rod

H Weight of Hammer R No Recovery

R Refusal

SHEET 4

foster wheeler

MANATEE DAM UTILITIES DEPARTMENT

LAKE I

MANATEE

DATE: ____April 5, 2018

CHECKED BY: M.CHOMTID

PROJECT NO.: 300472X4

DRAWN BY: M.VIVES

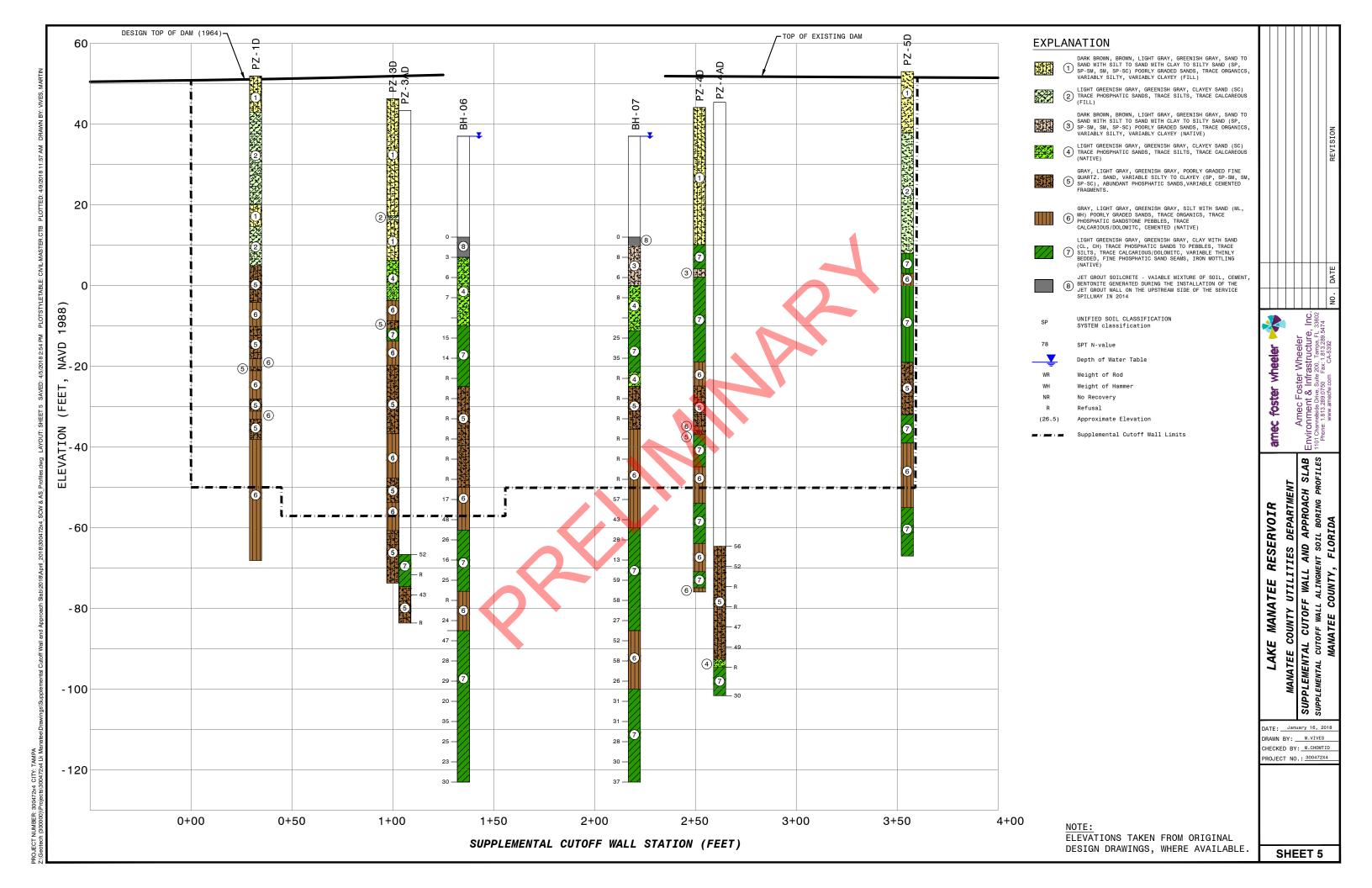
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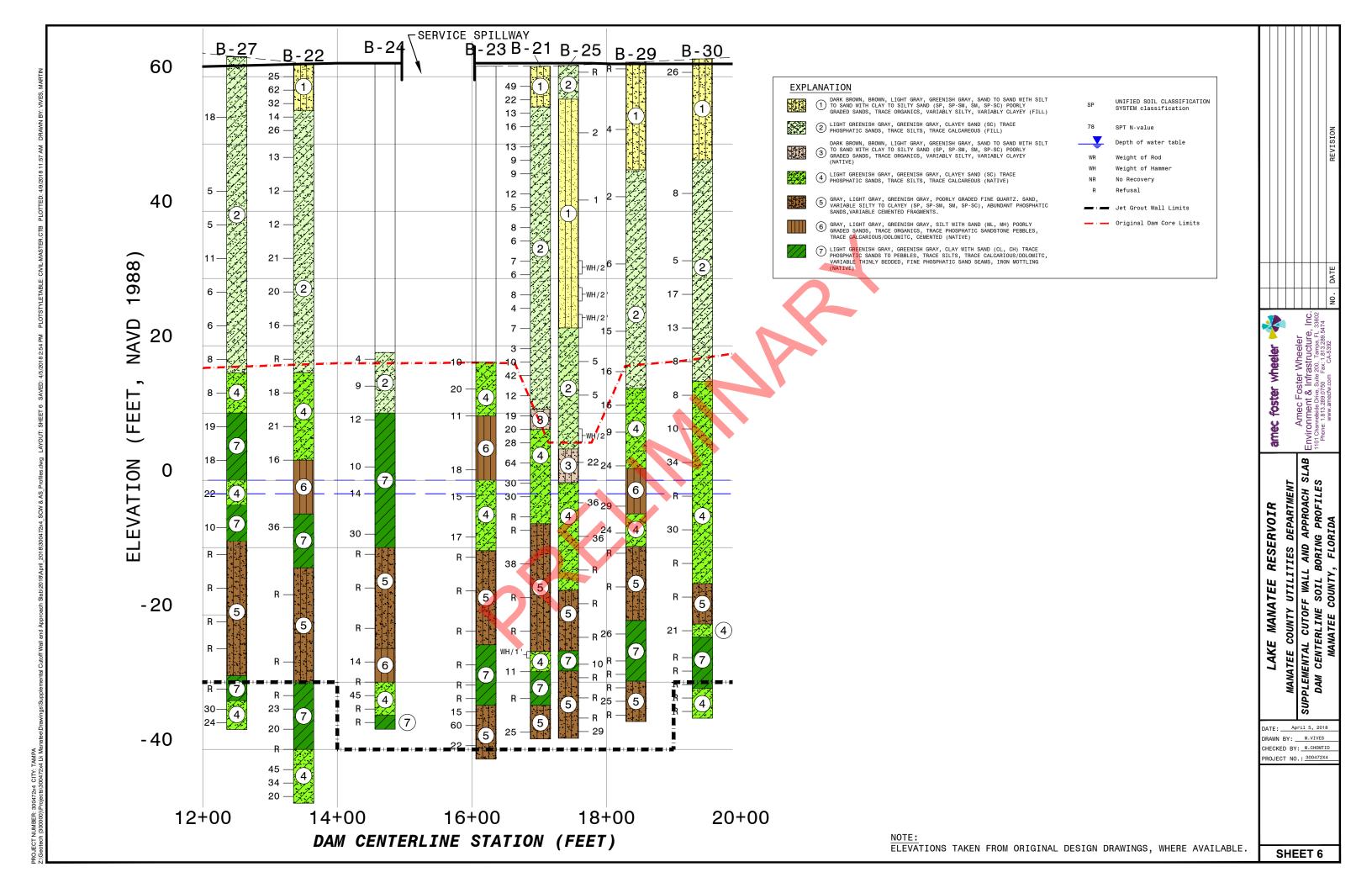
. AND APPROACH SLAB 'L BORING PROFILES ', FLORIDA

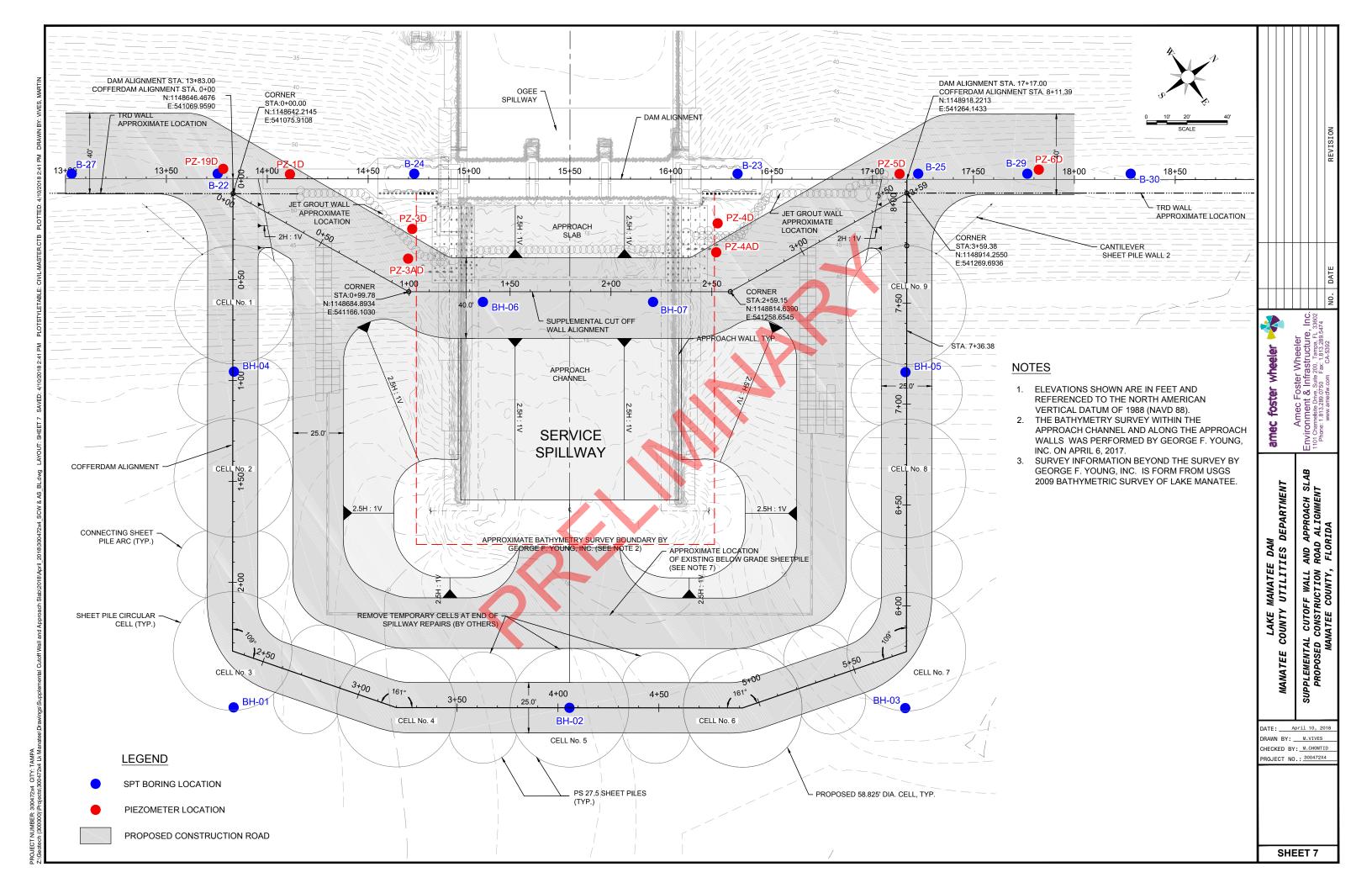
SUPPLEMENTAL CUTOFF WALL A COFFERDAM ALIGNMENT SOIL MANATEE COUNTY,

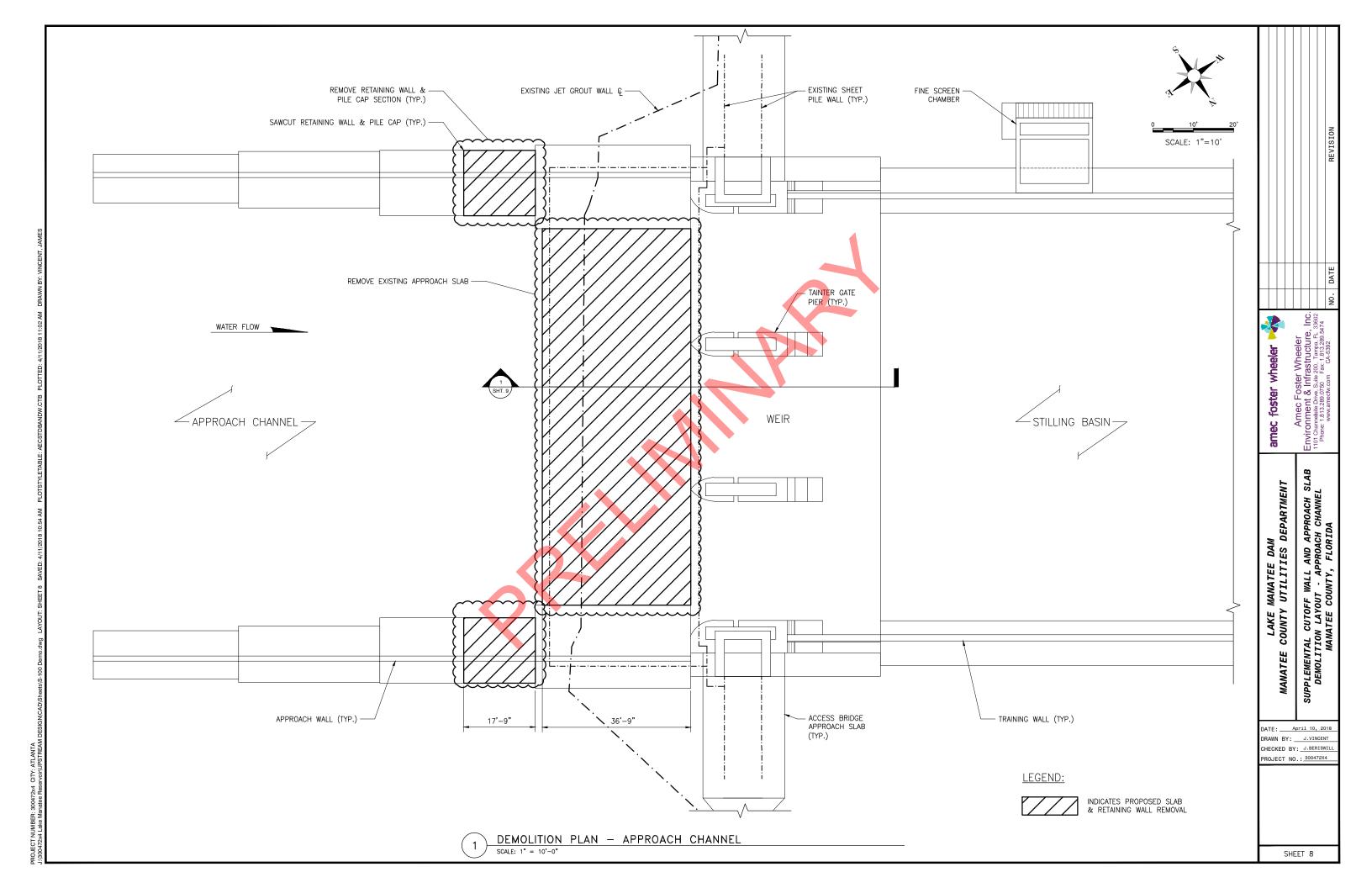
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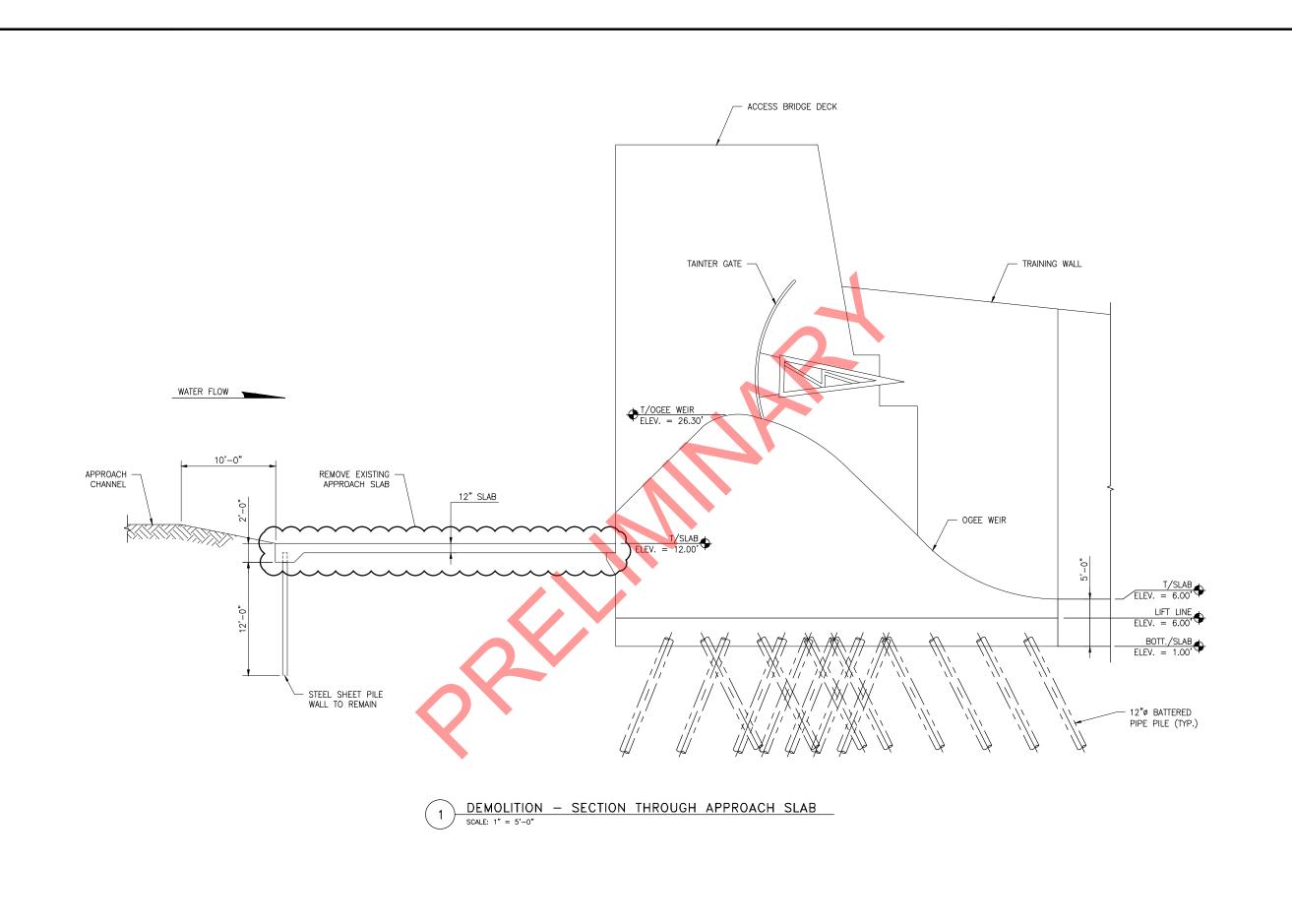
PROJECT NUMBER: 300472x4 CITY: TAMPA











0 5' 1 SCALE: 1"= 5'

SHEET 9

DATE: April 10, 2018

DRAWN BY: J.VINCENT

CHECKED BY: J.BERISWILL

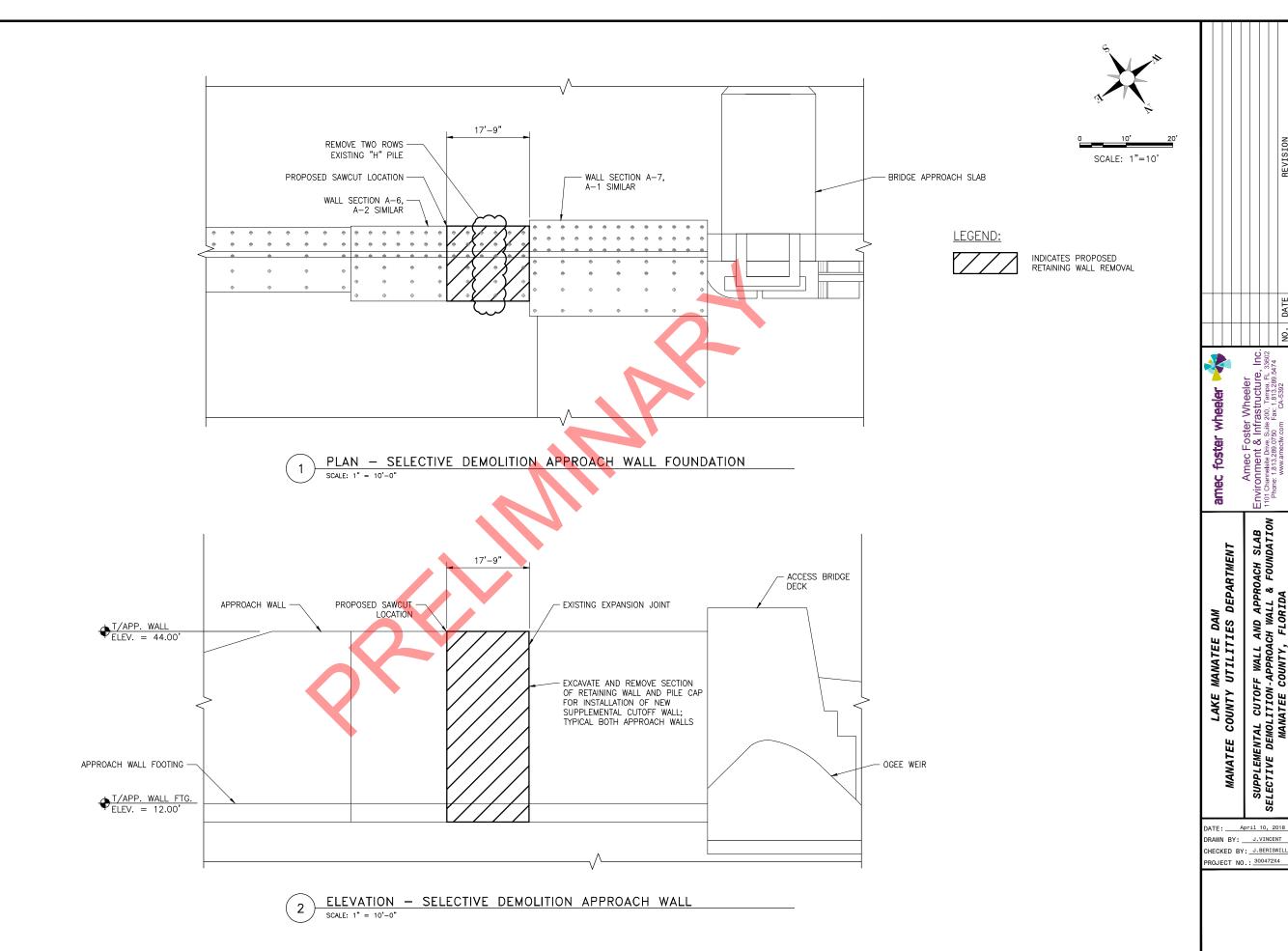
PROJECT NO.: 300472X4

amec foster wheeler 😽

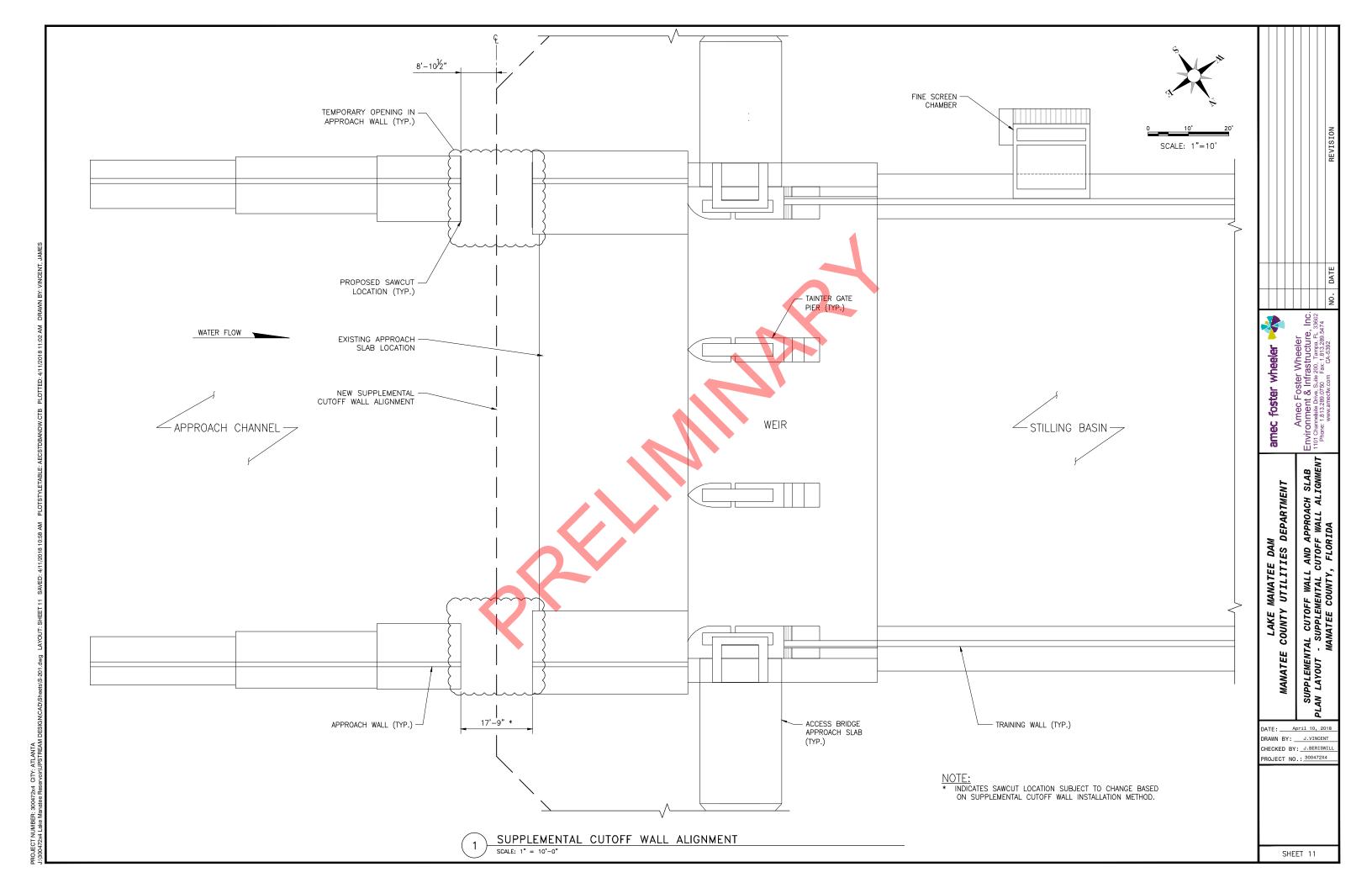
Amec Foster Wheel Environment & Infrastructut 1101 Channelsie Drive, Suite 200, Tamps Phone 1 813.289,070 Ear. 1 813.2

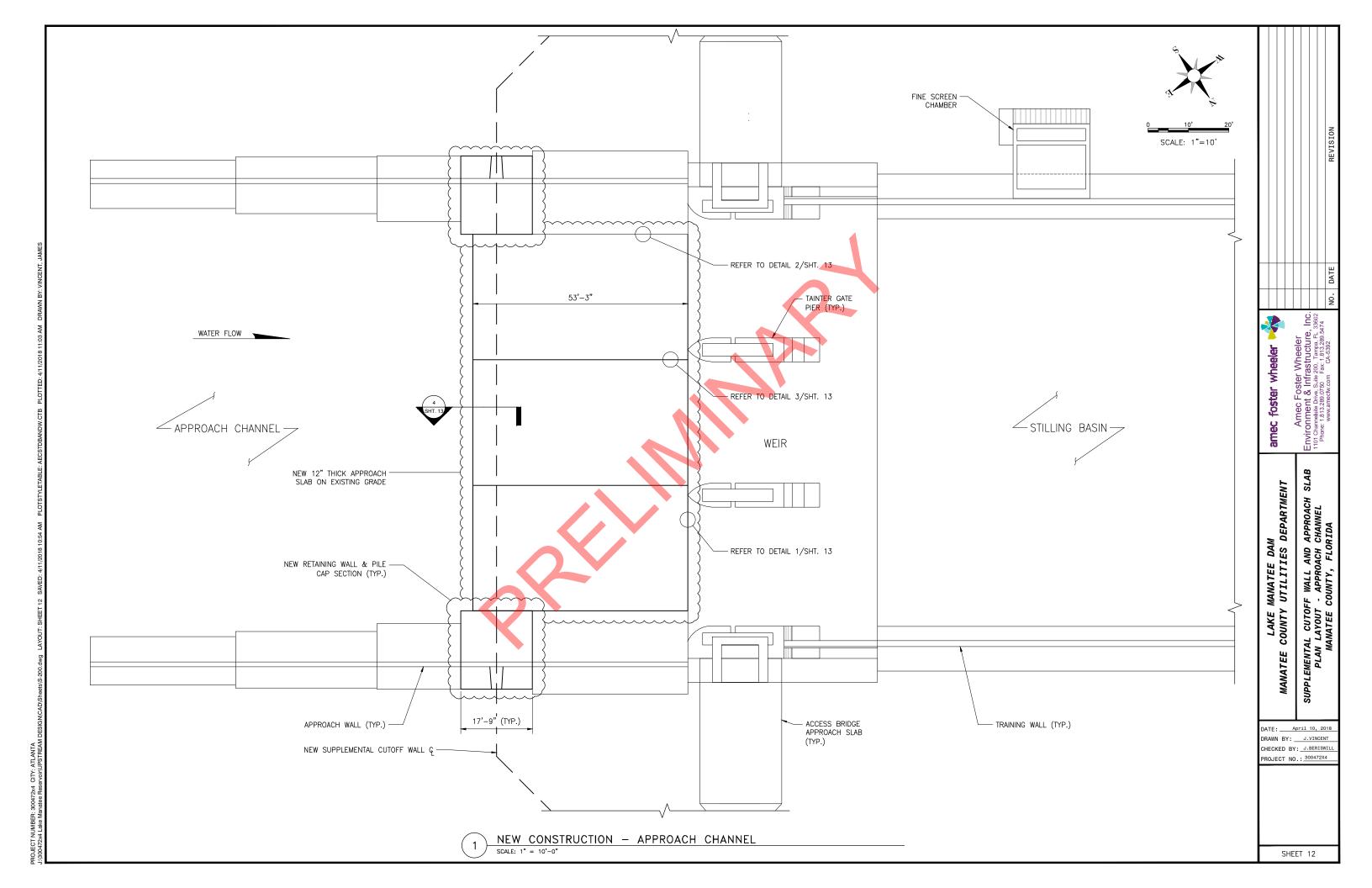
SUPPLEMENTAL CUTOFF WALL AND APPROACH SLAB
DEMOLITION PROFILE - APPROACH SLAB
MANATEE COUNTY, FLORIDA

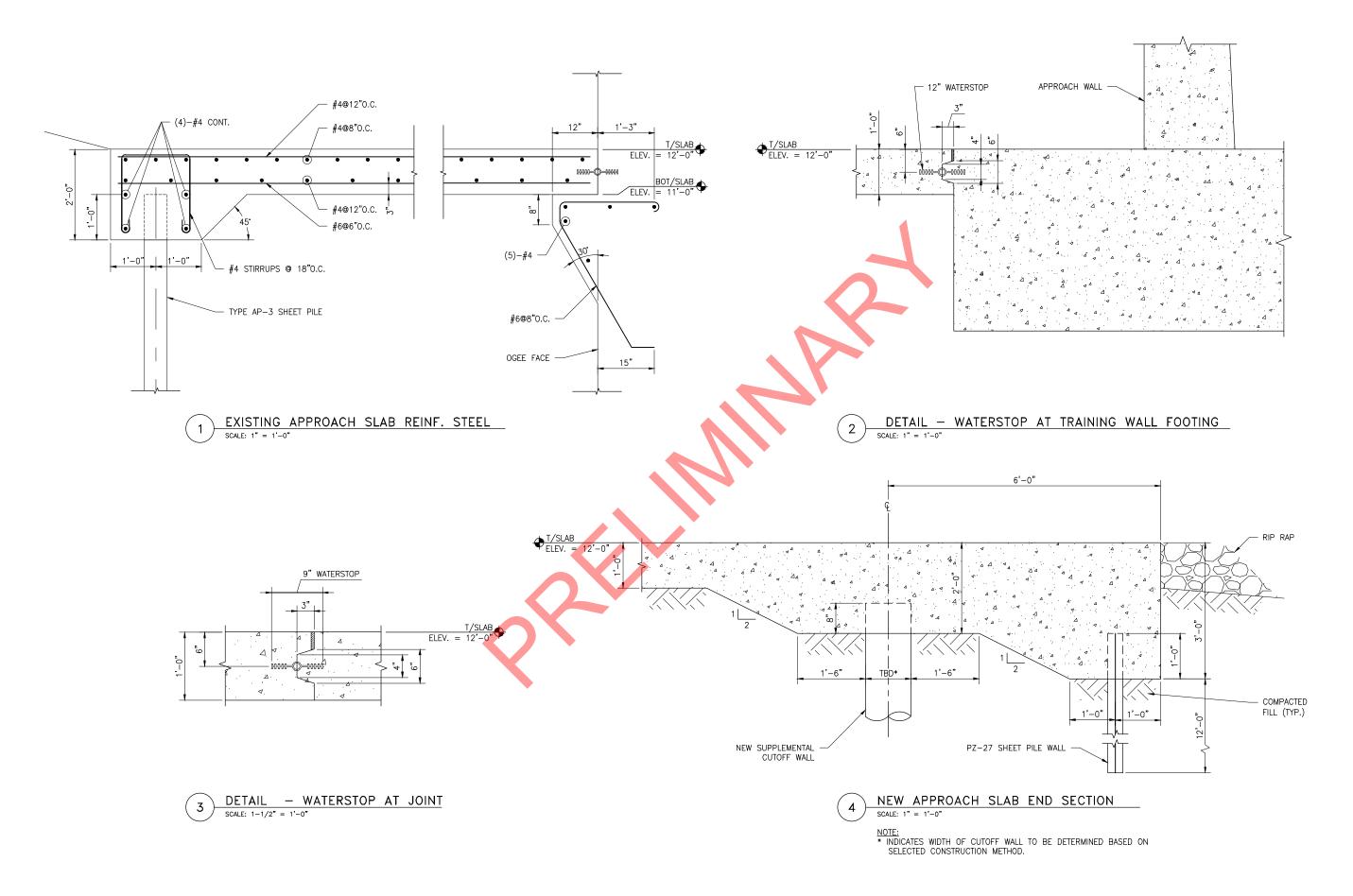
LAKE MANATEE DAM MANATEE COUNTY UTILITIES DEPARTMENT



SHEET 10







amec foster wheeler 😽 SLAB

LAKE MANATEE DAM MANATEE COUNTY UTILITIES DEPARTMENT

DATE: ____April 10, 2018 DRAWN BY: ____J.VINCENT CHECKED BY: J.BERISWILL PROJECT NO.: 300472X4

SHEET 13