



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT
100 WEST OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3604

May 8, 2020

Regulatory Division
SAS-2019-00854

JOINT PUBLIC NOTICE
Savannah District/State of Georgia

The Savannah District has received an application for a Department of the Army permit, pursuant to Section 404 of the Clean Water Act (33 U.S.C § 1344), as follows:

Application Number: SAS-2019-00854

Applicant: Mr. James Irvin
Georgia Central Railway, L.P.
13901 Sutton Park Drive, Suite 125
Jacksonville, Florida 32224

Agent: Mr. Michael J. DeMell
ENVIRONMENTAL SERVICES, INC., A Terracon Company
2201 Rowland Avenue
Savannah, Georgia 31404

Location of Proposed Work: In waters and wetland located west of Pooler Parkway, and south of U.S. 80, near Bloomingdale, Chatham County, Georgia (Latitude 32.1175 and Longitude -81.2891).

Description of Work Subject to the Jurisdiction of the U.S. Army Corps of Engineers:

The applicant is proposing to fill 0.81 acre of wetland and 0.05 acre of canal to construct a rail spur adjacent to the current mainline. The spur is designed to provide head room for large switching movements without fouling the main rail line. Most of the wetland impacts (0.76-acre) would be from parallel construction of the rail spur on the north side of the existing track. An additional 0.05-acre wetland impact on the south side of the rail is needed for construction and placement of a double box culvert which is needed to accompany the additional weight of the new track. Lastly, a 0.05-acre impact would occur within the canal/tributary for the replacement of the existing 60" reinforced concrete pipe with two box culverts. To mitigate for the proposed impacts, the applicant would purchase 4.88 grandfathered credits from a Corps approved compensatory mitigation bank that services the project area and provides appropriate functional replacement credits.

BACKGROUND

This Joint Public Notice announces a request for authorizations from both the Corps and the State of Georgia. The applicant's proposed work may also require local governmental approval.

STATE OF GEORGIA

Water Quality Certification: The Georgia Department of Natural Resources, Environmental Protection Division will review the proposed project for water quality certification, in accordance with the provisions of Section 401 of the Clean Water Act. Prior to issuance of a Department of the Army permit for a project location in, on, or adjacent to the waters of the State of Georgia, review for Water Quality Certification is required. A reasonable period of time, which shall not exceed one year, is established under the Clean Water Act for the State to act on a request for Water Quality Certification, after which, issuance of such a Department of the Army permit may proceed.

State-owned Property and Resources: The applicant may also require assent from the State of Georgia, which may be in the form of a license, easement, lease, permit or other appropriate instrument.

Georgia Coastal Management Program: Prior to the Savannah District Corps of Engineers making a final permit decision on this application, the project must be certified by the Georgia Department of Natural Resources, Coastal Resources Division, to be consistent with applicable provisions of the State of Georgia Coastal Management Program (15 CFR 930). Anyone wishing to comment on Coastal Management Program certification of this project should submit comments in writing within 30 days of the date of this notice to the Federal Consistency Coordinator, Coastal Management Program, Coastal Resources Division, Georgia Department of Natural Resources, One Conservation Way, Brunswick, Georgia 31523-8600 (Telephone 912-264-7218).

U.S. ARMY CORPS OF ENGINEERS

The Savannah District must consider the purpose and the impacts of the applicant's proposed work, prior to a decision on issuance of a Department of the Army permit.

Cultural Resources Assessment: Review of the latest published version of the National Register of Historic Places indicates that no registered properties or properties listed as eligible for inclusion are located at the site or in the area affected by the proposed work. Presently unknown archaeological, scientific, prehistorical or historical data may be located at the site and could be affected by the proposed work.

Endangered Species: A preliminary review the U.S. Fish and Wildlife Service (FWS) list of Endangered and Threatened Species (IPaC) indicates the following listed species may occur in the project area: Eastern Indigo snake (*Drymarchon corais couperi*), Wood stork (*Mycteria americana*); red cockaded woodpecker (*Picoides borealis*); frosted flatwoods salamander (*Ambystoma cingulatum*) and pondberry (*Lindera melissifolia*).

Pursuant to Section 7(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 et seq.), we request information from the U.S. Department of the Interior, Fish and Wildlife Service, the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service; or, any other interested party, on whether any species listed or proposed for listing may be present in the area.

Public Interest Review: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and in general, the needs and welfare of the people.

Consideration of Public Comments: The Corps is soliciting comments from the public; federal, state, and local agencies and officials; Native American Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Application of Section 404(b)(1) Guidelines: The proposed activity involves the discharge of dredged or fill material into the waters of the United States. The Savannah District's evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act.

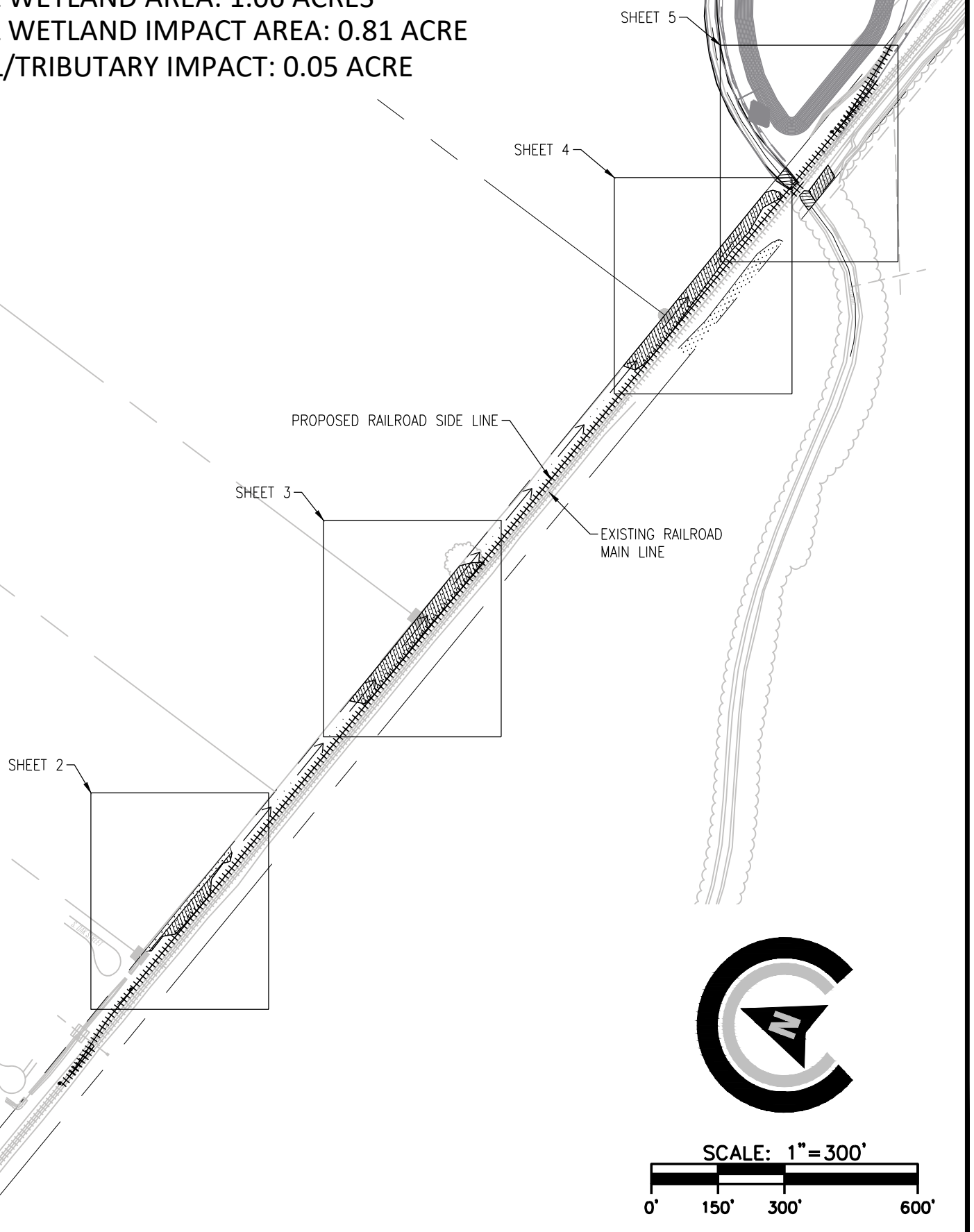
Public Hearing: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application for a Department of the Army permit. Requests for public hearings shall state, with particularity, the reasons for requesting a public hearing. The decision whether to hold a public hearing is at the discretion of the District Engineer, or his designated appointee, based on the need for additional substantial information necessary in evaluating the proposed project.

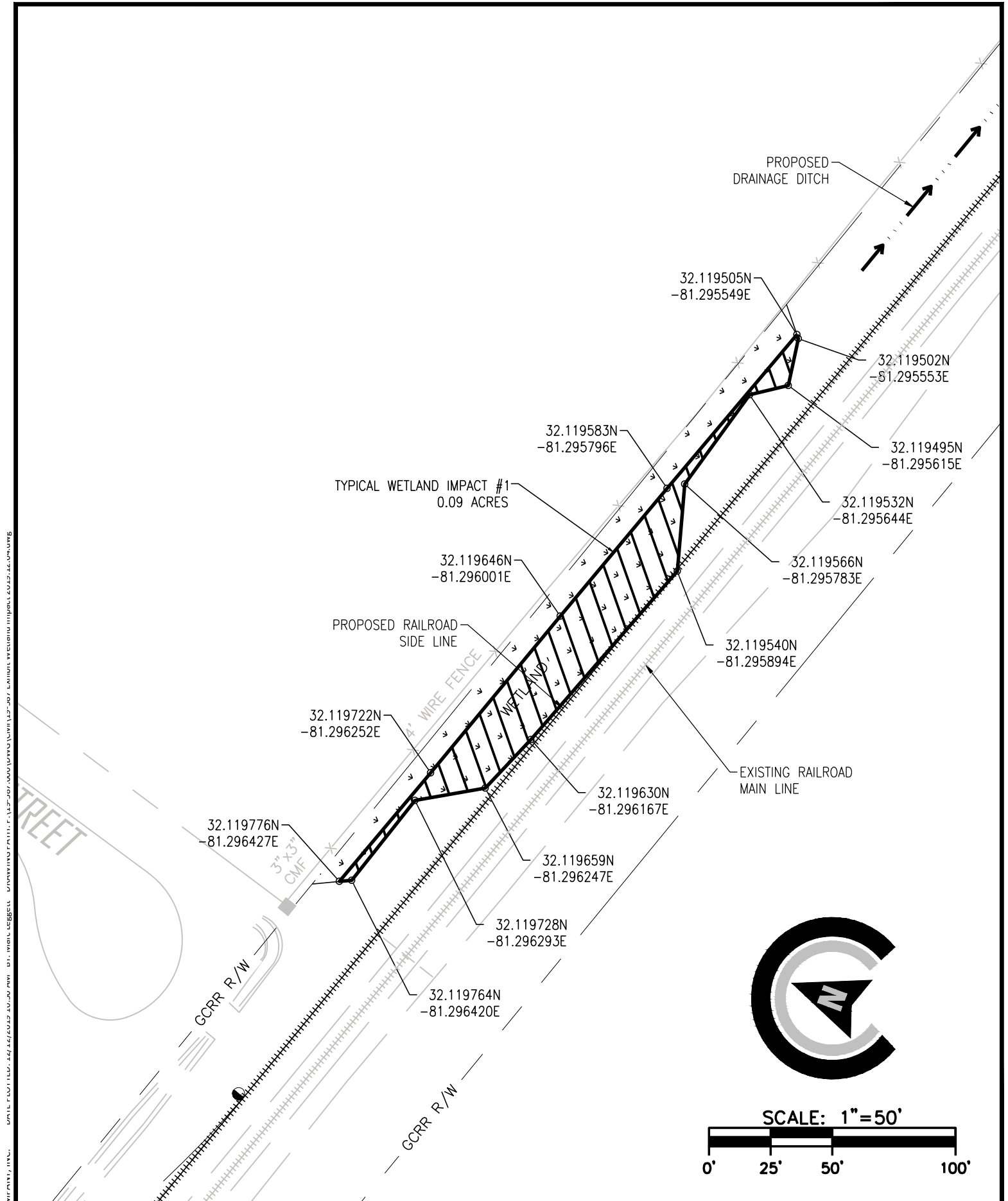
Comment Period: Anyone wishing to comment on this application for a Department of the Army permit should submit comments by email to sarah.e.wise@usace.army.mil. Alternatively, you may submit comments in writing to the Commander, U.S. Army Corps of Engineers, Savannah District, Attention: Ms. Sarah E. Wise, 100 West Oglethorpe Avenue Savannah, Georgia 31401-3604, no later than 30 days from the date of this notice. Please refer to the applicant's name and the application number in your comments.

If you have any further questions concerning this matter, please contact Ms. Sarah E. Wise, Team Lead, Coastal Branch at 912-652-5550.

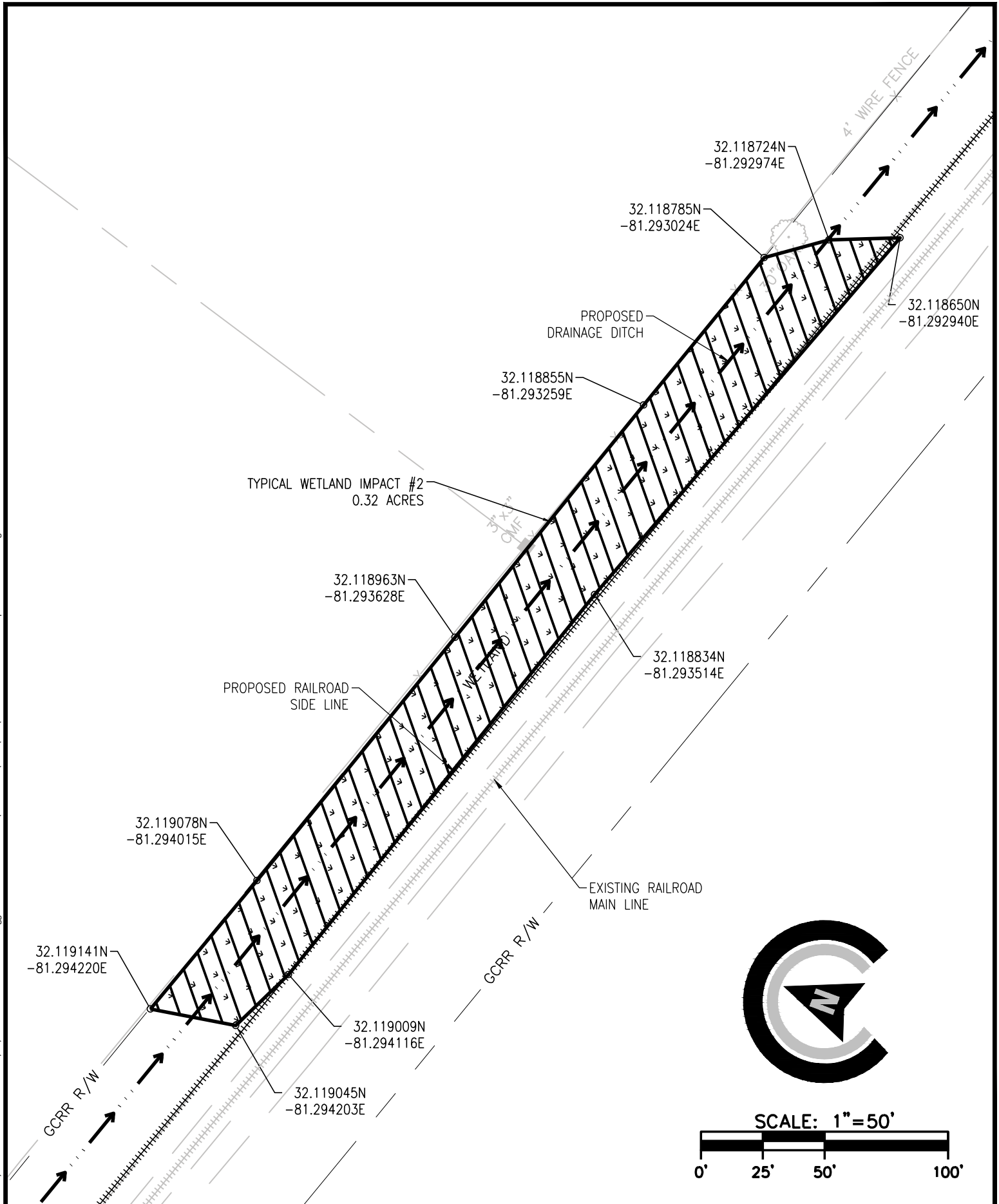
Enclosures:

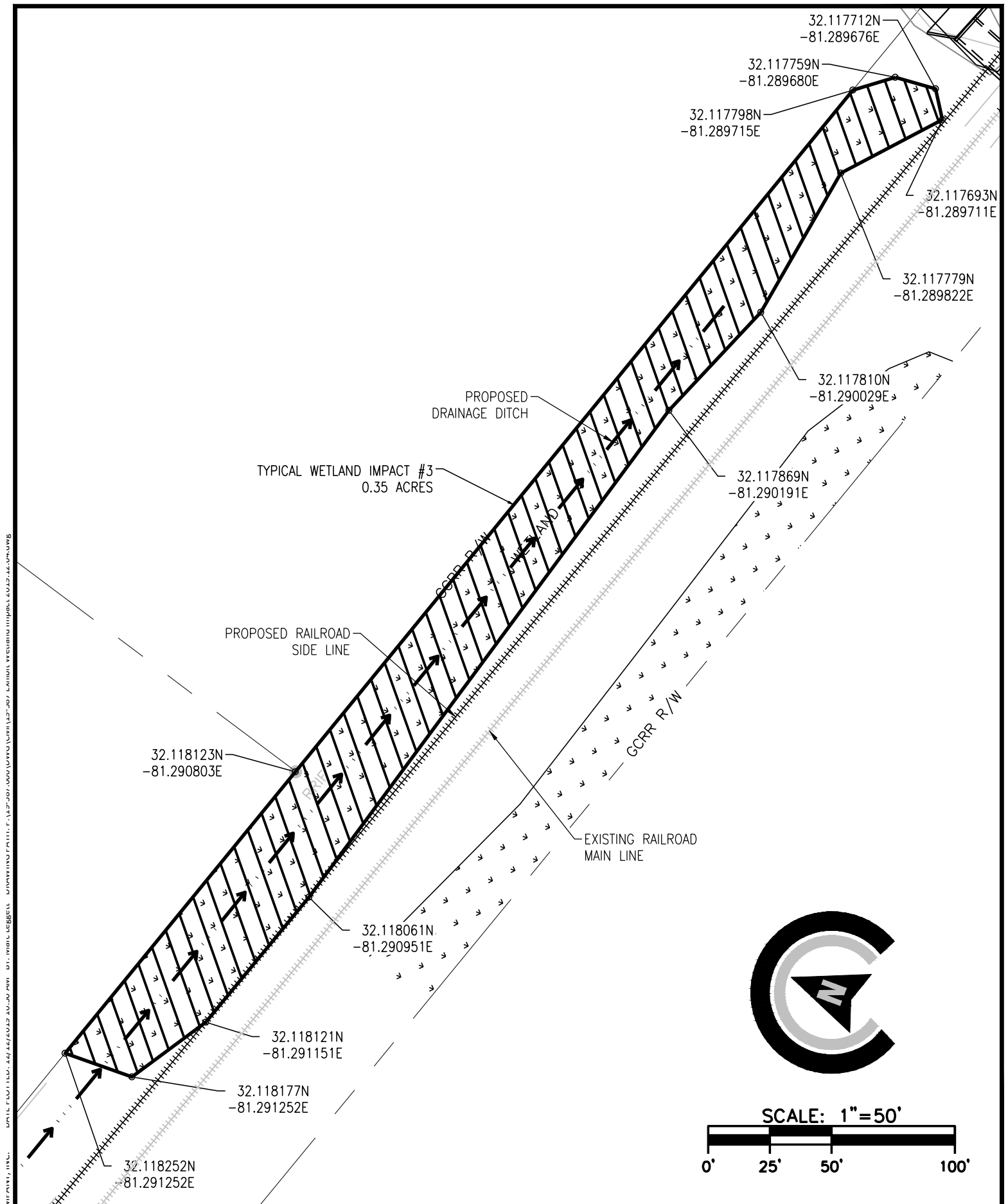
TOTAL PROJECT AREA: 6.18 ACRES
TOTAL WETLAND AREA: 1.06 ACRES
TOTAL WETLAND IMPACT AREA: 0.81 ACRE
CANAL/TRIBUTARY IMPACT: 0.05 ACRE

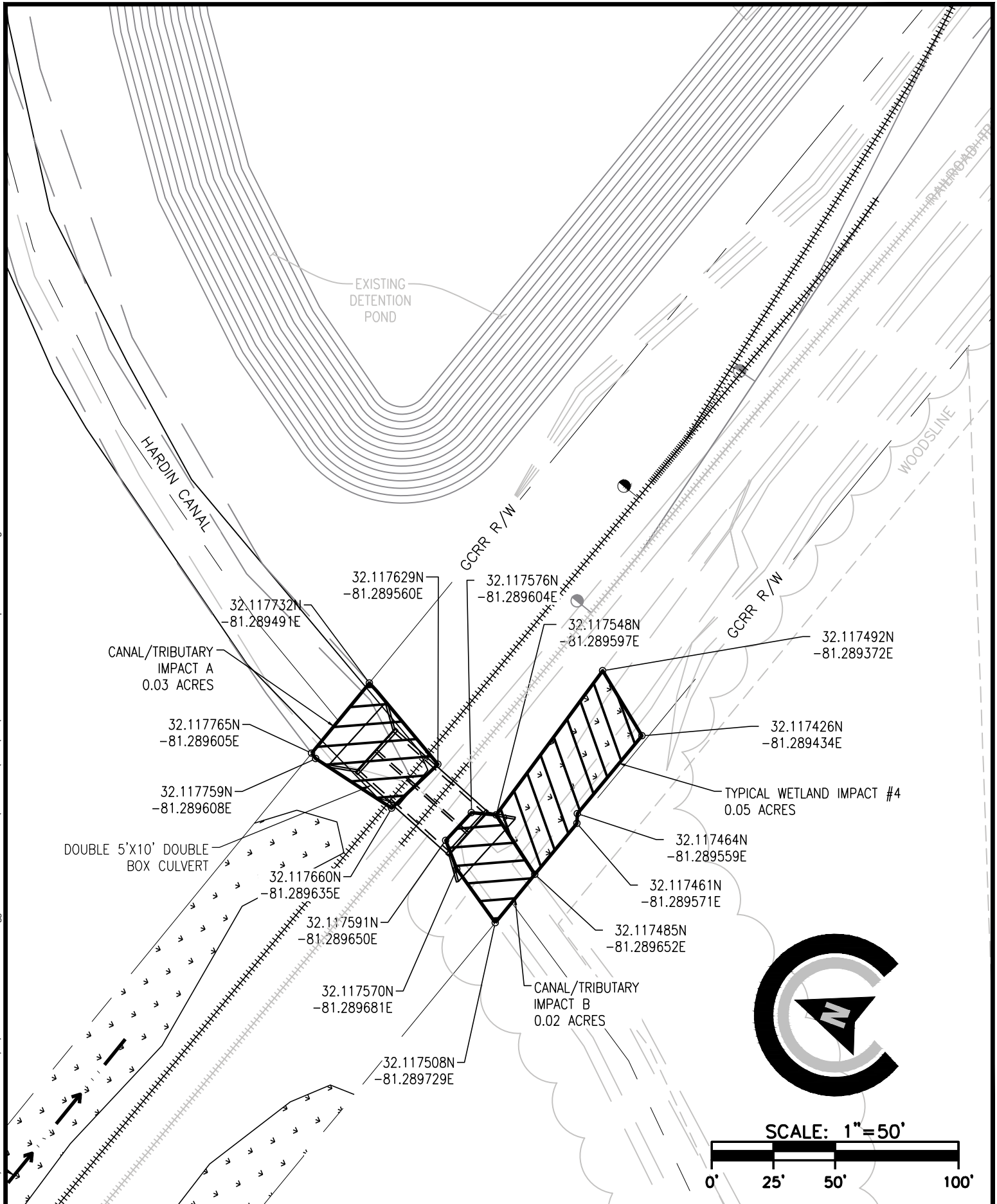


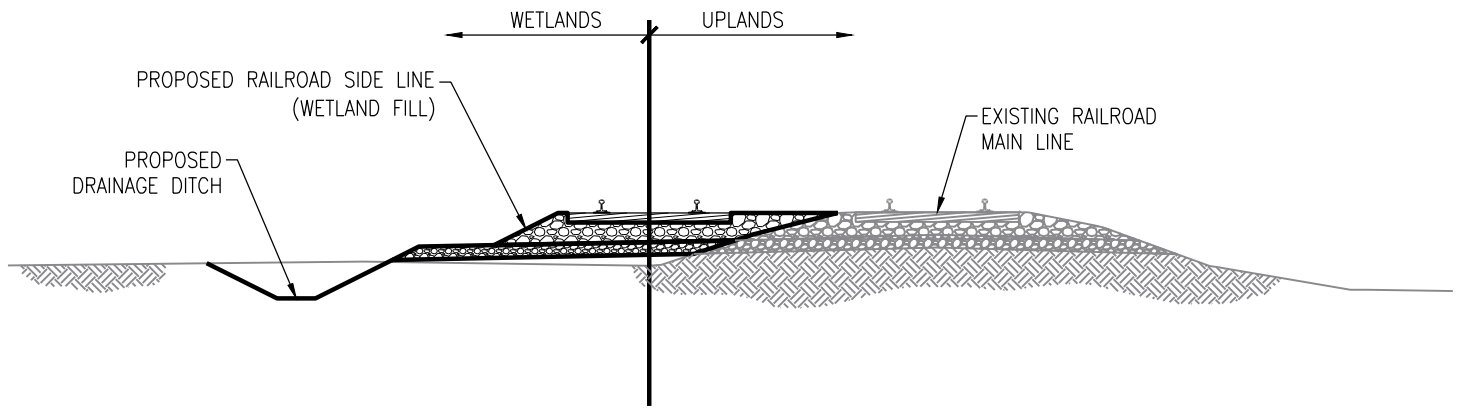


DATE: 10/11/2019, 10:00 AM, BY: MEL, CHECKED BY: WRG, SCALE: AS NOTED, JOB NUMBER: 19-587, SHEET: 3 of 6, SAVANNAH PORTS LOGISTICS CENTER - GWRR SIDE LINE, WETLAND IMPACTS, PREPARED FOR GEORGIA CENTRAL RAILWAY, L.P., COLEMAN COMPANY, INC.



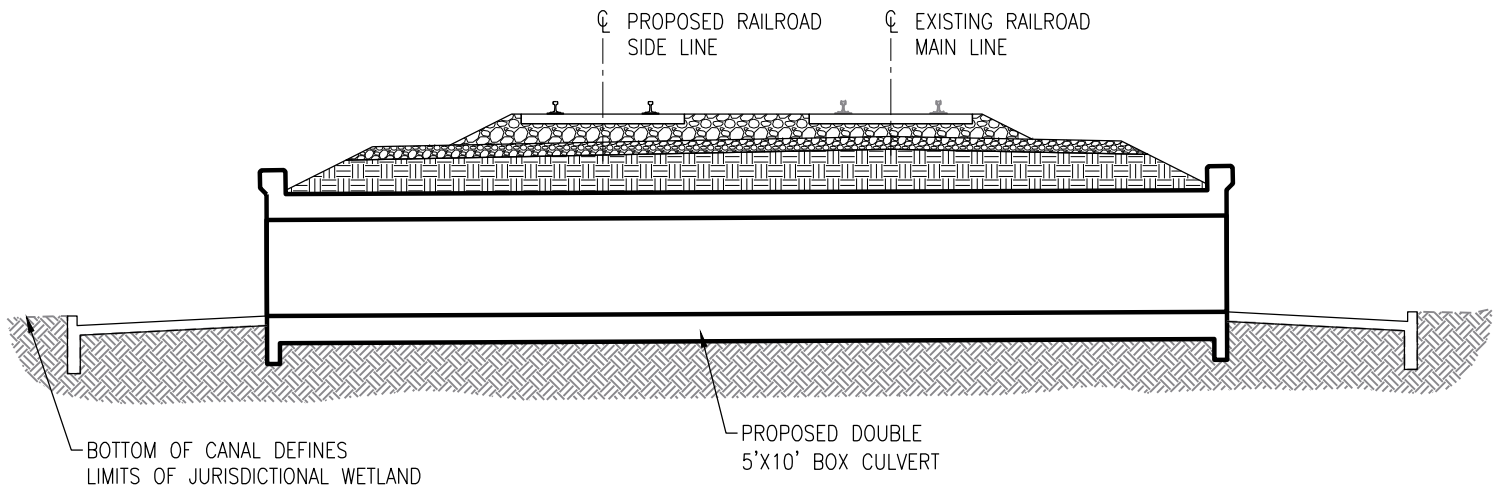






TYPICAL WETLAND IMPACT SECTION

NOT TO SCALE



BOX CULVERT SECTION

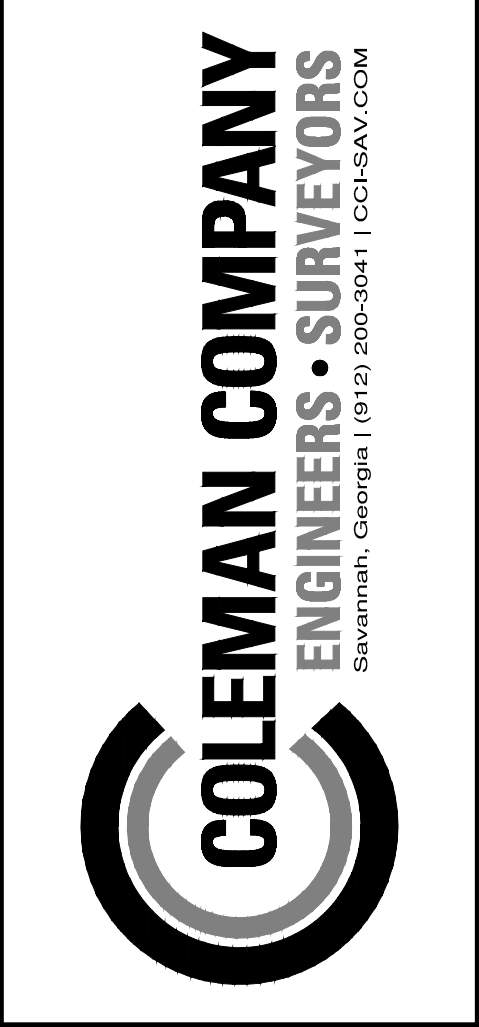
NOT TO SCALE

WETLAND IMPACTS SUMMERY

WETLAND IMPACT #1:	0.09 ACRE
WETLAND IMPACT #2:	0.32 ACRE
WETLAND IMPACT #3:	0.35 ACRE
WETLAND IMPACT #4:	0.05 ACRE
TOTAL WETLAND IMPACTS:	0.81 ACRE

CONSTRUCTION PLANS FOR SAVANNAH PORTS LOGISTECS CENTER - GWRR SIDE LINE

PREPARED FOR
GENESEE & WYOMING RAILROAD SERVICES, INC



NOT FOR CONSTRUCTION

REVISIONS:

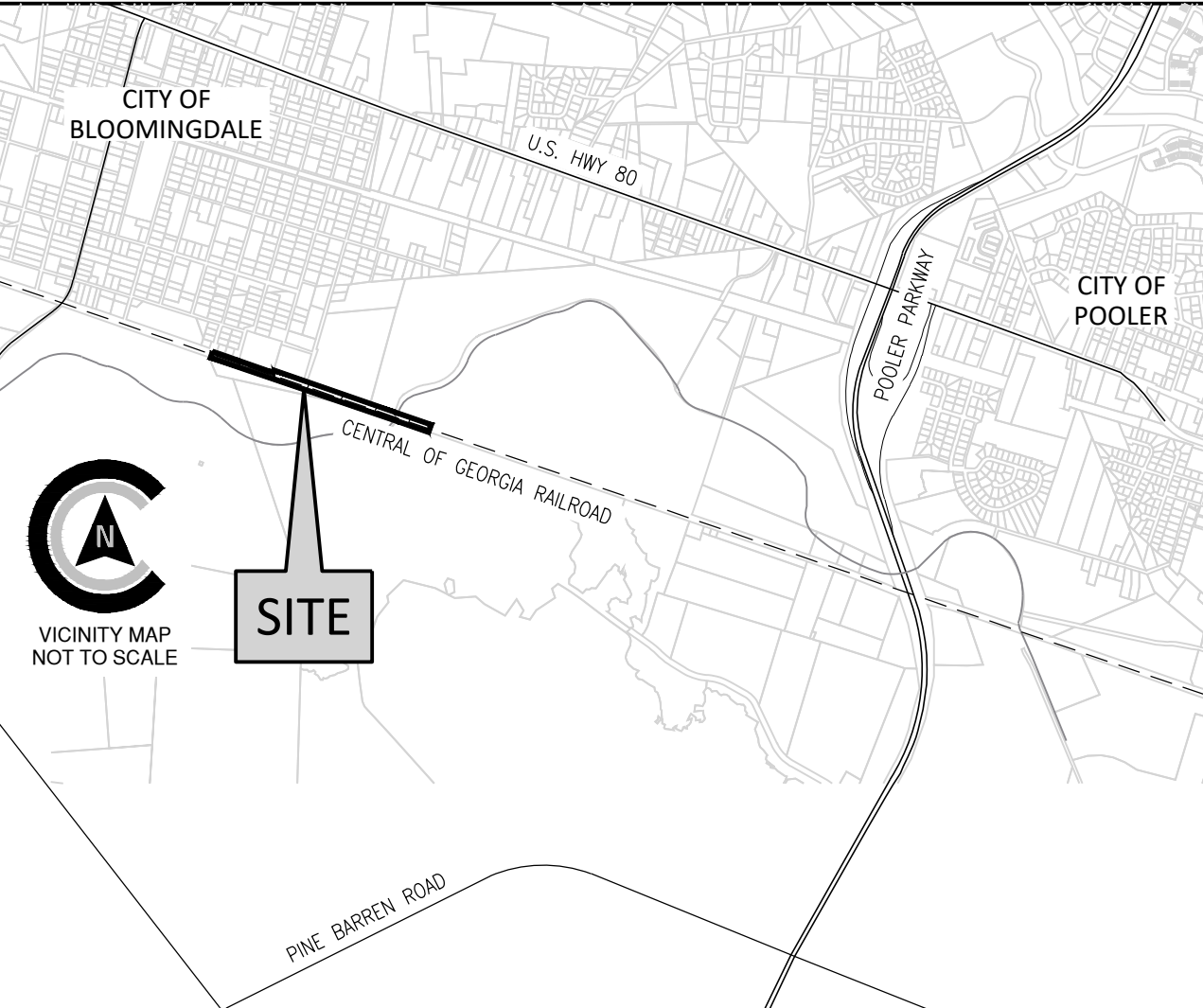
CIVIL CONSTRUCTION PLANS FOR
SAVANNAH PORTS LOGISTECS CENTER -
GWRR SIDE LINE
LOCATED IN POOLER, GEORGIA
PREPARED FOR GENESEE & WYOMING RAILROAD SERVICES, INC

JOB NUMBER:	19-587
DATE:	??/??/??
DRAWN BY:	MEL
CHECKED BY:	WRG
SCALE:	AS NOTED

COVER

SHEET:
COV

© 2018 COLEMAN COMPANY, INC. DATE PLOTTED: 12/29/2018 10:38 AM BY: AMK (jaght) DRAWING PATH: P:\19-587\200\DWG\Civil\19-587 Main Project 2018.11.04.dwg

VICINITY MAP (N.T.S.)	REVISIONS	PROJECT SITE DATA	SHEET INDEX
		<p>PROJECT ADDRESS:</p> <p>PROJECT CITY, STATE: POOLER, GEORGIA</p> <p>OWNER/REPRESENTATIVE: GENESEE & WYOMING RAILROAD SERVICES, INC</p> <p>PROPERTY AREA: N/A</p> <p>DISTURBED AREA: 3.16 ACRES</p> <p>ZONING: N/A</p> <p>VERTICAL DATUM: NAVD 88</p> <p>HORIZONTAL DATUM: NAD 83</p> <p>FLOOD ZONE: X, AE</p> <p>WATER & SEWER PROVIDER: N/A</p> <p>PINS: N/A</p> <p>SURVEY PREPARED BY: COLEMAN COMPANY, INC.</p> <p>GEOTECHNICAL BY:</p> <p>ARCHITECT: N/A</p>	

GENERAL NOTES:

1. CONTRACTOR WILL BE REQUIRED TO ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE GOVERNMENTAL AGENCY IN CHARGE OF THE PROJECT.
2. CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND INSPECTIONS AS REQUIRED FOR APPROVAL OF THE WORK WITH THE GOVERNMENTAL AGENCY WITH JURISDICTION.
3. CONTRACTOR WILL BE RESPONSIBLE FOR COST OF AND COORDINATION WITH LOCAL UTILITY COMPANIES OR AGENCIES FOR RELOCATION OF, OR CONNECTION TO, ALL EXISTING UTILITIES INCLUDING POWER AND TELEPHONE POLES AND WIRES.
4. ALL ELEVATIONS ARE BASED ON MEAN SEA LEVEL DATUM, NAVD 88.
5. MAXIMUM EARTH SLOPES WILL BE 3:1.
6. REMOVAL AND REPLACEMENT OF UNSUITABLE SUBGRADE MATERIAL WILL BE PAID FOR ON A CUBIC YARD BASIS IN PLACE MEASUREMENT, AT SUCH AUTHORIZED PRICE PER CUBIC YARD, AS AUTHORIZED BY THE ENGINEER.
7. PROVIDE 1/2" EXPANSION JOINT IN NEW WALKS FOR DEPTH OF CONCRETE, WITH BITUMINOUS SEAL FOR TOP 1" INCH MINIMUM DEPTH AT ABUTMENTS WITH BUILDINGS OR OTHER CONCRETE STRUCTURES.
8. SAW-CUT CONTRACTION JOINTS WILL BE PROVIDED IN ACCORDANCE WITH DETAILS, CUT TO BE 1/4 DEPTH OF CONCRETE MINIMUM.
9. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.
10. THE CONTRACTOR SHALL KEEP ACCURATE RECORDS FOR "AS BUILT" PURPOSES AND PROVIDE THIS INFORMATION TO THE ENGINEER AT THE COMPLETION OF THE PROJECT. IF THE CONTRACTOR FAILS TO FURNISH THIS INFORMATION, THE ENGINEER WILL OBTAIN THE NECESSARY INFORMATION AND CHARGE THE CONTRACTOR FOR THE SERVICES. THE ENGINEER WILL CHECK INFORMATION PROVIDED BY THE CONTRACTOR FOR ACCURACY. AS BUILT INFORMATION INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING: ALL UTILITIES INCLUDING INVERTS, TOP ELEVATIONS, PIPE LENGTHS AND TYPE OF CONSTRUCTION MATERIAL, SPOT ELEVATIONS ON FORCE MAINS AND WATER LINES, THE DISTANCE OF THE CENTERLINE OF UTILITIES FROM A PERMANENT STRUCTURE. ALL VALVE MANHOLES AND VALVE BOXES SHALL BE LOCATED WITH RESPECT TO A PERMANENT STRUCTURE. GRADES SHALL BE CONFIRMED IN ROADS AND PARKING AREAS AS WELL AS SWALES TO SHOW DIRECTION OF STORMWATER FLOW. THE FINISHED FLOOR ELEVATION SHALL BE SHOWN ON ALL BUILDINGS. IF THE LANDSCAPING IS CHANGED IN ANY WAY AS AS BUILT OF THE LANDSCAPE PLAN IS TO BE SUBMITTED TO THE ENGINEER; AND ANY OTHER REQUIREMENT MADE BY COUNTY OF CHATHAM.
11. ALL NEW DISTURBED AREAS WILL BE GRASSED BY SEEDING OR SPRIGGING IN ACCORDANCE WITH GA. D.O.T. STANDARD SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
13. CONTRACTOR SHALL PROVIDE DUST CONTROL OF ALL DISTURBED AREAS BY THE USE OF WATER AND FAST GROWING, TEMPORARY VEGETATION ON ALL STOCKPILED SOILS.
14. CONTRACTOR WILL PROVIDE A CONSTRUCTION SCHEDULE INCLUDING ALL EROSION AND SEDIMENT CONTROL MEASURES.
15. CONTRACTOR SHALL PROVIDE CRUSHED STONE 6" THICK, 50" MIN. LONG BY 20" MIN. WIDE AT ALL CONSTRUCTION EXITS TO MINIMIZE TRANSPORT OF SOIL FROM SITE BY VEHICLE WHEELS.
16. ALL EXISTING INLETS AND DITCHES SUBJECT TO STORM WATER RUNOFF FROM THE SITE AND ALL NEW INLETS SHALL BE PROVIDED WITH INLET PROTECTOR TO MINIMIZE SOIL TRANSPORT OFF SITE BY STORM WATERS.
17. ALL MATERIAL AND INSTALLATION PRACTICES ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT SHALL MEET THE CURRENT REQUIREMENTS OF THE COUNTY OF CHATHAM DEVELOPMENT REGULATIONS AND SPECIFICATIONS.
18. TESTING - PROVIDE ALL TESTING AS REQUIRED IN THE SPECIFICATIONS. PROVIDE ENGINEER WITH COPY DIRECT FROM TESTING LAB.
19. CONTRACTOR SHALL MAINTAIN SITE ON A DAILY BASIS TO PROVIDE FOR POSITIVE DRAINAGE. CONTRACTOR, AT HIS COST, SHALL GRADE SITE AND PROVIDE NECESSARY TEMPORARY DRAINAGE SWALES TO INSURE STORM WATER DOES NOT POND ON SITE OR ADJACENT PROPERTIES.
20. ANY DETENTION BASINS SHALL BE CONSTRUCTED IN CONJUNCTION WITH CLEARING AND GRADING TO HELP PREVENT THE LOSS OF SEDIMENT FROM THE SITE. THE CONTRACTOR SHALL CLEAN OUT ANY SEDIMENT DEPOSITED IN THE BASINS DURING THE CONSTRUCTION PERIOD SO THAT THE SPECIFIED WATER DEPTH AT NORMAL POOL IS MAINTAINED. THE CONTRACTOR MAY OVER EXCAVATE THE BASINS TO ACCOMPLISH THIS, IF DESIRED, AT HIS OWN EXPENSE AND WITH THE CONCURRENCE OF THE ENGINEER.
21. PRIOR TO CONSTRUCTION, ALL BUILDING AREAS, PLUS 10 FEET ON EACH SIDE AND ALL AREAS TO BE PAVED, SHOULD BE STRIPPED OF ALL VEGETATION, TOP SOIL AND ROOT SYSTEMS.
22. SITE DRAINAGE SHOULD BE ESTABLISHED TO PREVENT ANY PONDED WATER CONDITIONS WITHIN THE CONSTRUCTION AREA AND TO FACILITATE THE RAPID RUN-OFF OF STORM WATER.
23. ANY STUMP HOLES OR OTHER DEPRESSIONS SHOULD BE CLEARED OF LOOSE MATERIAL AND DEBRIS AND SHOULD THEN BE BACKFILLED WITH APPROVED FILL. THE BACKFILL SHOULD BE PLACED IN SIX INCH MAXIMUM LIFTS AND COMPACTED TO 95% DENSITY IN ACCORDANCE WITH ASTM-D-1557.
24. BACKFILL SHOULD BE PLACED IN SIX INCH MAXIMUM LIFTS AND COMPACTED TO 95% DENSITY IN ACCORDANCE WITH ASTM-D-1557.
25. THE SUBGRADE SHOULD BE PROOFROLLED WITH A LOADED DUMP TRUCK TO LOCATE UNSTABLE OR SOFT AREAS. THESE AREAS SHOULD THEN BE INVESTIGATED TO DETERMINE THE CAUSE OF THE INSTABILITY. IF DUE TO UNSUITABLE SOIL, SUCH AS HIGHLY ORGANIC SOILS OR SOFT CLAYS, THE AREA SHOULD BE UNDERCUT TO A FIRM SOIL AND REPLACED WITH APPROVED FILL COMPACTED IN SIX INCH LIFTS TO MINIMUM DENSITY OF 95% IN ACCORDANCE WITH ASTM-D-1557. IF THE INSTABILITY IS DUE TO EXCESS MOISTURE IN OTHERWISE SUITABLE SOIL, THE AREA SHOULD BE DRAINED AND COMPACTED TO 95% DENSITY. ANY FILL REQUIRED TO LEVEL OR RAISE THE SITE SHOULD THAN BE PLACED IN 6" THICK LOOSE LIFTS AND COMPACTED TO 95% DENSITY IN ACCORDANCE WITH ASTM-D-1557.
26. ALL OF THE FILL FOR THIS PROJECT SHOULD CONSIST OF A CLEAN, FREE DRAINING SAND WITH A MAXIMUM OF 15% FINES. THE FILL SHOULD BE FREE OF OBJECTIONABLE ROOTS, CLAY LUMPS AND DEBRIS.
27. MOISTURE CONTENT SHALL BE AT OR BELOW OPTIMUM.
28. ALL WATER USED FOR CONSTRUCTION SHALL BE METERED THROUGH AND APPROVED BACKFLOW PREVENTION DEVICE AND FIRE HYDRANT METER OBTAINED FROM THE COUNTY OF CHATHAM CONVEYANCE AND DISTRIBUTION DEPARTMENT.
29. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO FOLLOW THE COMPREHENSIVE MONITORING PLAN PREPARED FOR THE DEVELOPER BY COLEMAN COMPANY, INC.
30. ALL TAPS ON A MAIN FOR SERVICE LATERALS SHALL BE MADE WITH AN ALL STAINLESS STEEL DOUBLE STRAP EPOXY COATED TAPPING SADDLE. THE SIZE OF THE SADDLE SHALL BE WATER MAIN DIAMETER C-900 + 1" c.c. THREAD".
30. ALL FIRE HYDRANTS AND VALVES SHALL BE MANUFACTURED BY AMERICAN, DARLING, MUELLER OR M&H.
31. 50 L.F. OF 6" UNDERDRAIN AND ROCK SHALL BE INSTALLED FROM EACH INLET LOCATED IN OR ADJACENT TO POND SURFACES. CONTRACTOR SHALL VERIFY THE STATIC WATER ELEVATION OF THE PROPOSED EXISTING DRAINAGE SYSTEM EACH ROADSIDE INLET IS A COMPONENT OF AND NOT INSTALL THE UNDERDRAIN BELOW THAT STATIC ELEVATION.
32. ANY AND ALL UTILITY CROSSINGS FOR WATER MAINS BETWEEN STORM OR SEWER PIPING SHOULD BE ACCOMPLISHED BY USING OF 45° BENDS BOTH DOWN AND UP.
33. ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY ON THE PLANS AND ARE NOT NECESSARILY ACCURATE AS TO PLAN OR ELEVATION. UTILITY FACILITIES SUCH AS SERVICE LINES OR UNKNOWN FACILITIES NOT SHOWN ON THE PLANS WILL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES, EXCEPT AS NOTED BELOW. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGED UTILITY FACILITIES OTHER THAN SERVICE LINES FROM STREET MAINS TO ADJUTING PROPERTY WHEN SUCH FACILITIES ARE NOT SHOWN ON THE PLANS AND THEIR EXISTENCE IS UNKNOWN TO THE CONTRACTOR PRIOR TO THE DAMAGES OCCURRING PROVIDING THE ENGINEER DETERMINES THE CONTRACTOR HAS OTHERWISE FULLY COMPLIED WITH THE SPECIFICATIONS.
34. CONTRACTOR(S) SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES. CONTRACTOR(S) ARE RESPONSIBLE FOR LOCATING, PROTECTING, REPAIRING, AND REPLACING ANY AND ALL UNDERGROUND UTILITIES DURING ALL PHASES OF CONSTRUCTION. COLEMAN COMPANY, INC. HAS MADE A DILIGENT EFFORT TO LOCATE ALL ABOVE AND BELOW GROUND UTILITIES BUT CANNOT GUARANTEE THAT ALL PRESENT UTILITIES HAVE BEEN IDENTIFIED. CONTRACTOR SHALL "CALL BEFORE YOU DIG 811" AT LEAST 3 DAYS PRIOR TO DIGGING AND SHALL NOT BEGIN DIGGING UNTIL ALL UNDERGROUND UTILITY LOCATIONS ARE COMPLETE.
35. ALL DEMOLITION DEBRIS SHALL BE PROPERLY DISPOSED AT THE CONTRACTOR'S EXPENSE.
36. A CONTINUOUS RUN OF PLASTICIZED METALLIC TAPE SHALL BE INSTALLED ABOVE THE TOP OF PVC PIPE USED FOR GRAVITY SEWER AND FORCE MAINS AT APPROXIMATELY 36" BELOW FINISHED GRADE. THE TAPE SHALL BE SUITABLE FOR DETECTION WITH METAL PIPE LOCATION EQUIPMENT, COLOR CODED AND LABELED TO IDENTIFY CONTENTS OF THE PIPE AND BRIGHTLY COLORED TO CONTRAST WITH THE SOIL. IN ADDITION TO THE TAPE, A CONTINUOUS RUN OF TRACER WIRE SHALL BE ATTACHED TO THE PIPE AND CONNECTED TO MANHOLE RINGS. ON PIPE RUNS GREATER THAN 500', THE TRACER WIRE SHALL BE ATTACHED TO A 2" GALVANIZED PIPE WITH A 180 DEGREE BEND AT THE TOP, EXTENDING 36" ABOVE GRADE FOR CONNECTION TO LOCATOR EQUIPMENT. THE MAXIMUM DISTANCE BETWEEN 2" PIPE STUBS SHALL BE 500'.
37. ALL SANITARY SEWER LATERALS SHALL BE PROPERLY MARKED AT THE POINT WHERE LATERALS TERMINATE WITH PVC PIPE PAINTED GREEN. ADDITIONAL MARKINGS SHALL BE STAMPED IN THE CURB OR MARKED ON THE EDGE OF PAVING WITH AN APPROVED PERMANENT MARKER CAPABLE OF BEING LOCATED BY A MAGNETIC LOCATOR, SUCH AS A NAIL WITH CAP, IF NO CURB PRESENT. LATERALS SHALL BE MARKED WITH MARKING TAPE AN TRACER WIRE AS DESCRIBED ABOVE.
38. A CONTINUOUS RUN OF PLASTICIZED METALLIC TAPE SHALL BE INSTALLED ABOVE THE TOP OF PVC PIPE USED FOR WATER MAINS AT APPROXIMATELY 18" TO 24" BELOW FINISHED GRADE. THE TAPE SHALL BE SUITABLE FOR DETECTION WITH METAL PIPE LOCATION EQUIPMENT, COLOR CODED AND LABELED TO IDENTIFY CONTENTS OF THE PIPE AND BRIGHTLY COLORED TO CONTRAST WITH THE SOIL. IN ADDITION TO THE TAPE, A CONTINUOUS RUN OF TRACER WIRE SHALL BE ATTACHED TO THE PIPE AND CONNECTED TO CURB STOPS AND BROUGHT TO TOP OF VALVE. ON PIPE RUNS GREATER THAN 500', THE TRACER WIRE SHALL BE ATTACHED TO A 2" GALVANIZED PIPE WITH A 180 DEGREE BEND AT THE TOP, EXTENDING 36" ABOVE GRADE FOR CONNECTION TO LOCATOR EQUIPMENT. THE MAXIMUM DISTANCE BETWEEN 2" PIPE STUBS SHALL BE 500'.
39. ALL WATER SERVICES SHALL BE PROPERLY MARKED ABOVE GROUND WITH PVC PIPE PAINTED BLUE. ADDITIONAL MARKINGS SHALL BE STAMPED IN THE CURB OR MARKED ON THE EDGE OF PAVING WITH AN APPROVED PERMANENT MARKER CAPABLE OF BEING LOCATED BY A MAGNETIC LOCATOR, SUCH AS A NAIL WITH CAP, IF NO CURB PRESENT. SERVICES SHALL BE MARKED WITH MARKING TAPE AN TRACER WIRE AS DESCRIBED ABOVE.
40. TRACER WIRE SHALL BE REQUIRED ON ALL STORM PIPE.
41. THE CONTRACTOR SHALL HAVE APPROVED PLANS ON SITE AT ALL TIMES DURING LAND DISTURBING ACTIVITIES.
42. THE CONTRACTOR SHALL HAVE A CERTIFIED EROSION AND SEDIMENTATION CONTROL INSPECTOR ON SITE AT ALL TIMES DURING LAND DISTURBING ACTIVITIES.
43. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE COUNTY OF CHATHAM'S LATEST CONSTRUCTION SPECIFICATIONS AND DETAILS.

44. AN APPROVED WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON SITE.
45. ALL CURB AND GUTTER TO BE 18" STANDARD CURB UNLESS OTHERWISE NOTED.
46. FOR CITY WATER AND SEWER LINE LOCATIONS, CONTACT THE "CALL BEFORE YOU DIG 811" A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO DIGGING.
47. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE REPORT OF GEOTECHNICAL ENGINEERING REPORT PREPARED FOR THIS PROJECT BY . A COPY CAN BE OBTAINED, AT CONTRACTOR'S EXPENSE, EITHER DIRECTLY FROM OR FROM THE ENGINEER.
48. STORM SEWER SPECIFICATIONS FOR MANHOLE COVER IN STREET:

GENERAL: ALL CASTINGS SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA BY NEENAH FOUNDRY COMPANY, U.S. FOUNDRY & MANUFACTURING CORPORATION, EAST JORDAN IRON WORKS, INC. OR APPROVED EQUAL. THEY SHALL BE OF UNIFORM QUALITY, FREE FROM SAND HOLES, SHRINKAGE, CRACKS, COLD SHUTS OR OTHER DEFECTS. CASTINGS SHALL BE SMOOTH AND WELL CLEANED BY SHOT BLASTING.

MATERIALS: GRAY IRON CASTINGS SHALL BE MANUFACTURED FROM IRON CONFORMING TO ASTM A48 CLASS 35B AND ASTM A48 CLASS 30. DUCTILE IRON CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN AND COMPONENT PARTS SHALL FIT TOGETHER PROPERLY. ROUND MANHOLE FRAMES, COVERS AND GRATES SHALL HAVE MACHINED BEARING SURFACES TO PREVENT ROCKING. TOLERANCES SHALL BE ACCEPTED FOUNDRY STANDARDS AS OUTLINED IN THE IRON CASTINGS HANDBOOK PUBLISHED BY THE AMERICAN FOUNDRYMEN'S SOCIETY, INC. CASTINGS WEIGHTS SHALL NOT VARY MORE THAN 5% ABOVE OR BELOW THOSE VALUES REPRESENTED BY THE MANUFACTURER.

MARKINGS: ALL CASTINGS SHALL BE CLEARLY MARKED WITH THE MANUFACTURER'S NAME, COMPANY LOGO AND "MADE IN USA" IN CAST LETTERS. ADDITIONALLY, THE TOP OR TRAFFIC SIDE OF ALL CASTINGS SHALL BE CLEARLY MARKED "STORM" AND "COUNTY OF CHATHAM" IN FLUSH CAST LETTERS AND THE TOP OR TRAFFIC SIDE OF ALL CASTINGS DESIGNED TO COLLECT WATER, (CATCH BASINS, GRATES, ETC.) SHALL BE CLEARLY MARKED "DRAINS TO RIVER - DO NOT DUMP" OR SIMILAR VERBAIGE THAT ACHIEVES THE SAME MEANING.

49. INTERNATIONAL FIRE CODE, 2012 EDITION:

SECTION 3310
ACCESS FOR FIREFIGHTING
3310.1 REQUIRED ACCESS. APPROVED VEHICLE ACCESS FOR FIREFIGHTING SHALL BE PROVIDED TO ALL CONSTRUCTION OR DEMOLITION SITES. VEHICLE ACCESS SHALL BE PROVIDED TO WITHIN 100 FEET (30.480 MM) OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS. VEHICLE ACCESS SHALL BE PROVIDED BY EITHER TEMPORARY OR PERMANENT ROADS, CAPABLE OF SUPPORTING VEHICLE LOADING UNDER ALL WEATHER CONDITIONS. VEHICLE ACCESS SHALL BE MAINTAINED UNTIL PERMANENT FIRE APPARATUS ACCESS ROADS ARE AVAILABLE.

SECTION 3312
WATER SUPPLY FOR FIRE PROTECTION
3312.1 WHEN REQUIRED. AN APPROVED WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON THE SITE.

50. MAXIMUM BUILDING HEIGHT IS TO BE 45' PER APPENDIX A, ARTICLE III, SECTION 6 OF THE COUNTY OF CHATHAM CODIFIED ORDINANCES.

51. IN THE CASE OF ANY CONFLICT OF THESE CONSTRUCTION DOCUMENTS AND THE COUNTY OF CHATHAM CODIFIED ORDINANCES, STANDARDS, SPECIFICATIONS, OR DETAILS, THE COUNTY OF CHATHAM STANDARDS ARE TO TAKE PRECEDENCE.

EROSION CONTROL NOTES:

1. EROSION CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING BEST MANAGEMENT PRACTICES (BMP'S) ON THE SITE AT ALL TIMES IN ACCORDANCE WITH THESE PLANS AND THE "MANUAL FOR EROSION AND SEDIMENT CONTROL OF GEORGIA".

2. NARRATIVE DESCRIPTION:

LOCATION: POOLER, GEORGIA
PIN#: N/A
NATURE OF WORK: THE OWNER IS PROPOSING TO CONSTRUCT 3,154 LF OF RAILROAD SIDE TRACK AND INSTALL LARGER CULVERT AT THE HARDIN CANAL.
SIZE: TOTAL PROPERTY ACREAGE: N/A
DISTURBED ACREAGE: 3.16 ACRES
ZONING CLASSIFICATION: N/A
MAXIMUM BUILDING HEIGHT: N/A
PHASES: THE WORK WILL BE PERFORMED IN ONE PHASE.

3. THERE ARE APPARENT WATERS OF THE UNITED STATES WITHIN 200 FEET OF THE PROJECT SITE.
4. THERE ARE APPARENT WETLANDS PRESENT ON THE PROPERTY.
5. ALL SUITABLE TOPSOIL WILL BE STOCKPILED BY THE CONTRACTOR AND SPREAD IN PROPOSED VEGETATIVE AREAS PRIOR TO LANDSCAPE INSTALLATION.
6. THE SOILS ON SITE ARE : CAPE FEAR SOILS (C_o); OCILLA COMPLEX (O_o); OGEECHEE LOAMY FINE SAND (O_k); MASCOITTE SCAND (M_n); WAHEE SANDY LOAM (W_{al})
7. THIS SITE IS CURRENTLY DEVELOPED AS RAILROAD RIGHT-OF-WAY
8. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL OF GEORGIA".
9. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TMES THE RESPONSIBILITY OF THE OWNER.
10. THE CONTRACTOR SHALL ENSURE THAT STRUCTURAL EROSION CONTROL MEASURES ARE INSPECTED DAILY. ANY DEFICIENCIES, INCLUDING SILT REMOVAL, OBSERVED SHALL BE REPAIRED BY THE END OF THAT DAY'S WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A DAILY INSPECTION LOG AND NOTIFYING THE OWNER AND ENGINEER OF ANY DEFICIENCIES IDENTIFIED IN THE EROSION CONTROL MEASURES. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS ARE STABILIZED.
11. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.
12. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL WILL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
13. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD OF GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
14. ACCORDING TO THE FLOOD INSURANCE RATE MAPS, AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THIS PROJECT SITE DOES APPEAR TO LIE IN AN FLOOD HAZARD AREA AS DEPICTED ON FIRM PANEL NO. 13051C0109F EFFECTIVE DATE: SEPTEMBER 26, 2008.
15. CONTACT INFORMATION:

CIVIL ENGINEER: TRAVIS BURKE, PE COLEMAN COMPANY, INC. 1480 CHATHAM PARKWAY, SUITE 100 SAVANNAH, GA 31405 P: 912.200.3041 F: 912.200.3056	OWNER/REPRESENTATIVE CONTACT: GENESEE & WYOMING RAILROAD SERVICES, INC ATTN: MR. BRENT AZZO 13501 SUTTON PARK DRIVE SOUTH, SUITE 160 JACKSONVILLE, FL brent.azzo@gwr.com
---	---

16. THE INITIAL RECEIVING WATER FOR THIS PROJECT IS THE PIPEMAKERS CANAL TRIBUTARY. FINAL RECEIVING WATERS ARE THE PIPE MAKERS CANAL.
 17. ANY ON-SITE FUEL STORAGE TANK MUST BE PROTECTED FROM LEAKS, SPILLS, AND RUPTURE AS PER APPLICABLE CODES.
 18. SILT FENCE MUST BE INSPECTED DAILY FOR FAILURES AND CLEANED OUT WHEN SILT REACHES 1/2 THE FENCE HEIGHT.
 19. ALL TEMPORARY BMP'S FOR EROSION & SEDIMENT CONTROL SHALL BE REMOVED ONCE FINAL STABILIZATION IS ACHIEVED.
- | AREA IMPERVIOUS | CN | Q25 | | |
|------------------|--------|--------|----|---------------------------|
| PRE-DEVELOPMENT | 9.17ac | 0.00ac | 80 | (±)36.12 cfs To<-19.4min. |
| POST-DEVELOPMENT | 9.17ac | 4.52ac | 89 | (±)19.30 cfs To<-20.0min. |

SITE INFORMATION:

PARENT PIN: N/A
ZONING DISTRICT: N/A
FLOOD ZONE: X, AE
SIZE: N/A
PROPOSED LAND USE:
PROPOSED RAILROAD LEAD TRACK PROVIDING SERVICE TO THE SAVANNAH PORTS LOGISTECS CENTER



NOT FOR CONSTRUCTION

REVISIONS:

CIVIL CONSTRUCTION PLANS FOR
SAVANNAH PORTS LOGISTECS CENTER -
GWR SIDE LINE
LOCATED IN POOLER, GEORGIA
PREPARED FOR GENESEE & WYOMING RAILROAD SERVICES, INC

JOB NUMBER: 19-587
DATE: ??/??/??
DRAWN BY: MEL
CHECKED BY: WRG
SCALE: AS NOTED

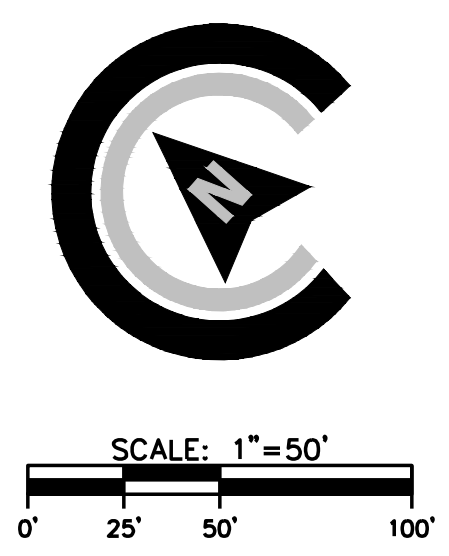
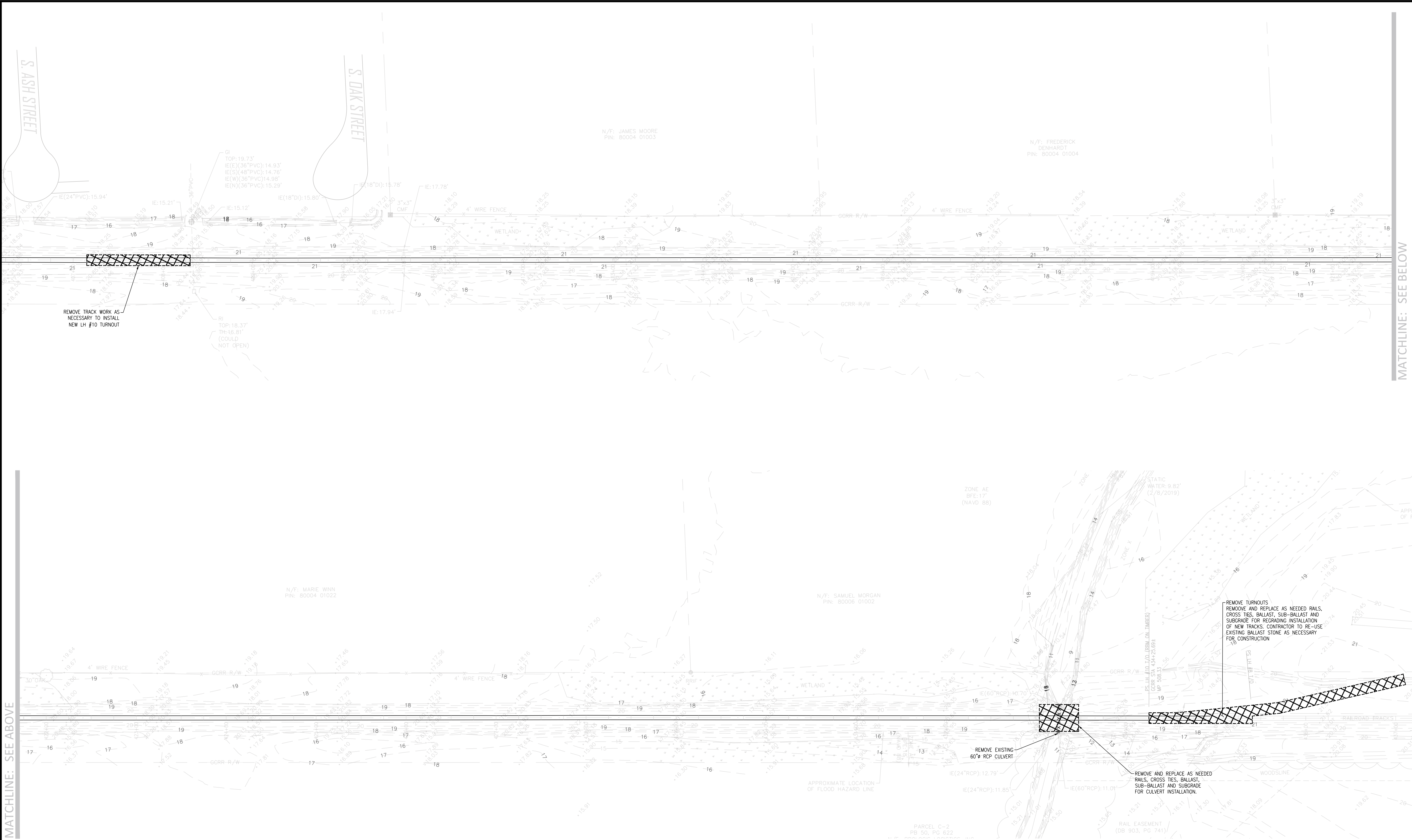
CONSTRUCTION
NOTES

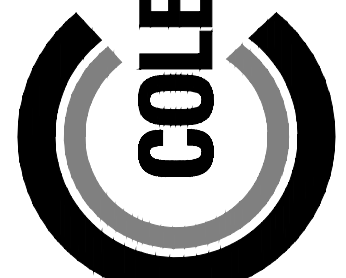
SHEET:

C0.0



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NOT FOR CONSTRUCTION

REVISIONS:

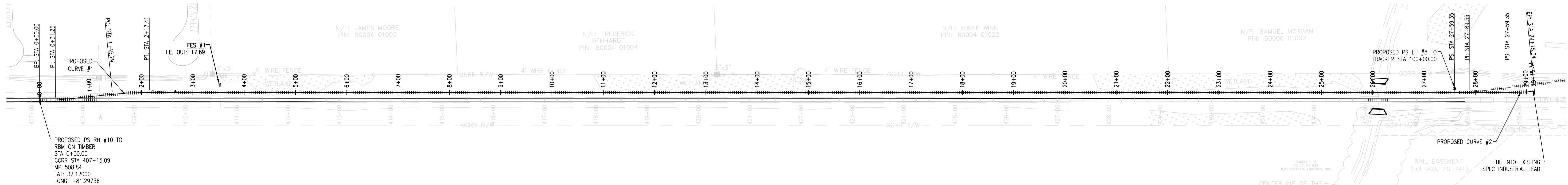
CIVIL CONSTRUCTION PLANS FOR
SAVANNAH PORTS LOGISTICS CENTER -
GWRR SIDE LINE
LOCATED IN POOLER, GEORGIA
PREPARED FOR GENESEE & WYOMING RAILROAD SERVICES, INC

JOB NUMBER:	19-587
DATE:	??/??/??
DRAWN BY:	MEL
CHECKED BY:	WRG
SCALE:	AS NOTED

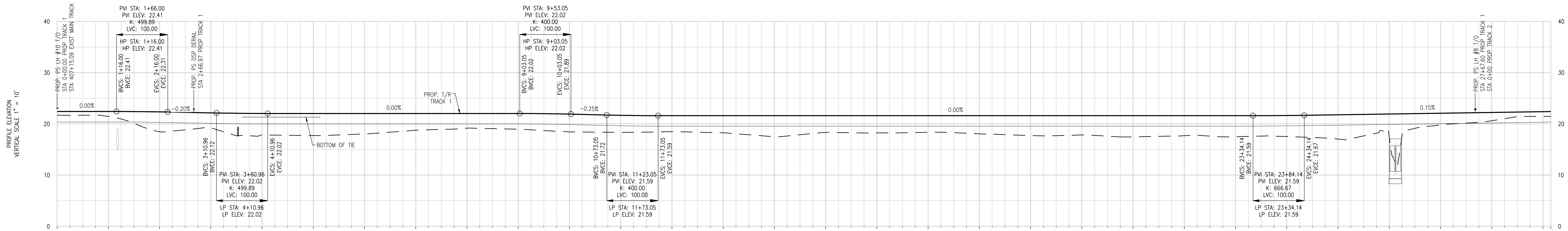
DEMOLITION PLAN

SHEET:

C1.0

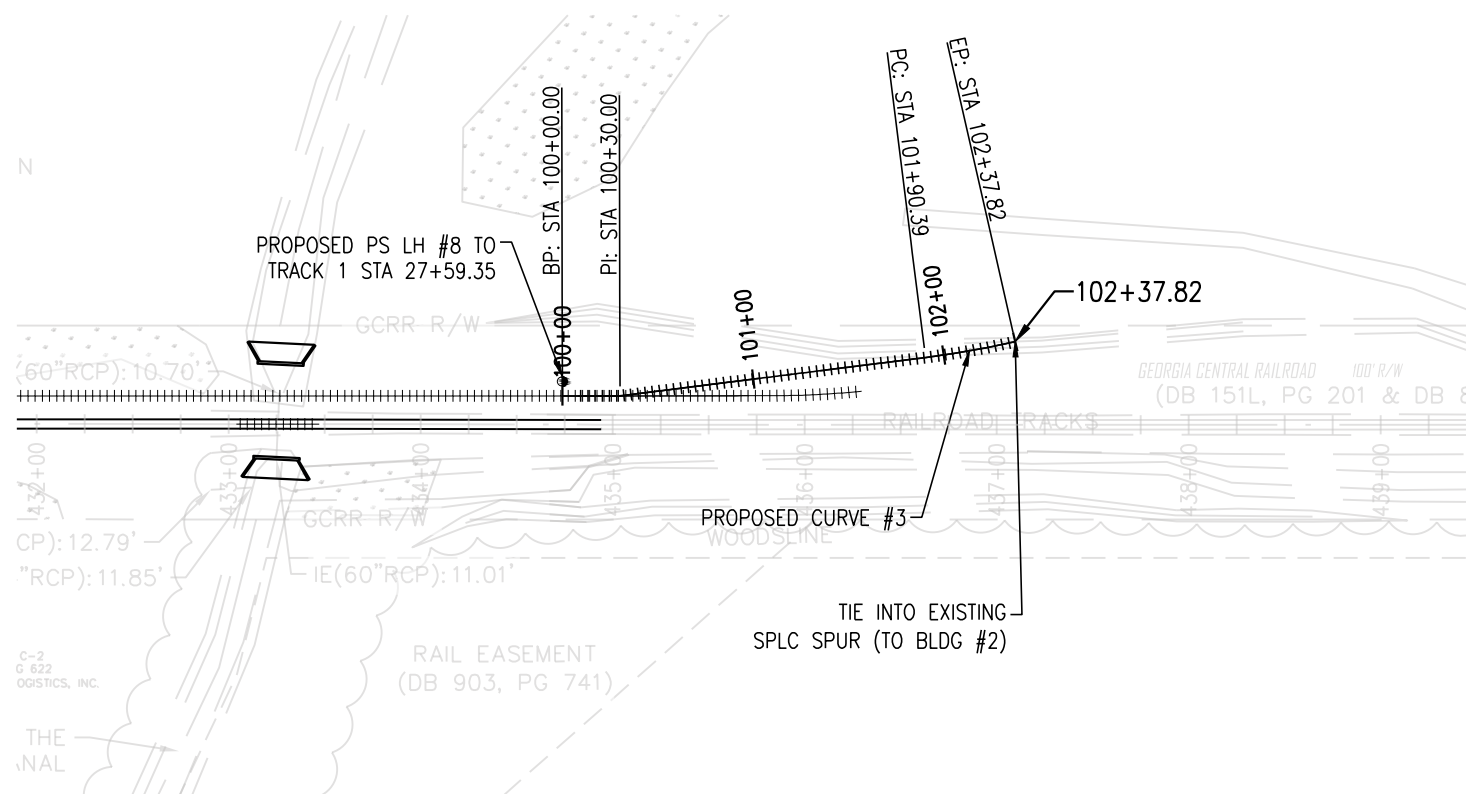


PLAN - TRACK 1

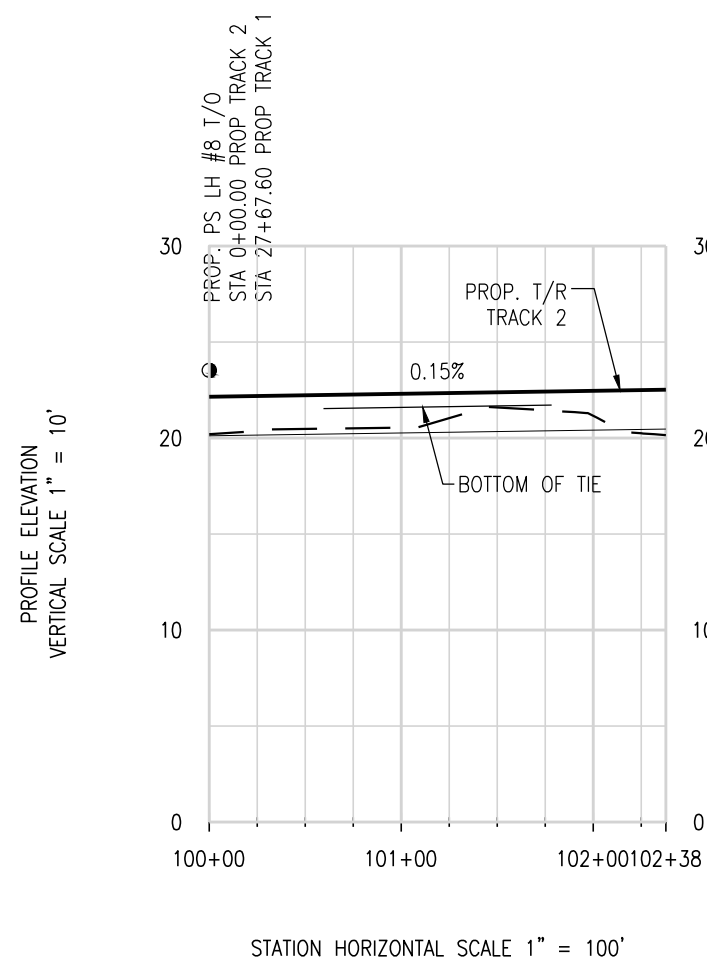


STATION HORIZONTAL SCALE 1" = 100'

TRACK 1 CENTERLINE PROFILE
STA. 0+00.00 TO STA. 29+15.34



PLAN - TRACK 2



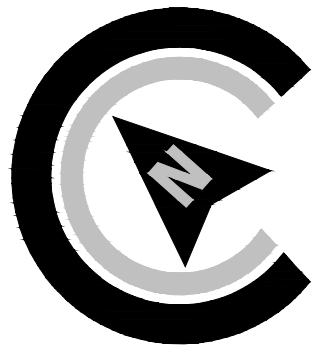
TRACK 2 CENTERLINE PROFILE
STA. 100+00.00 TO STA. 102+37.82

CURVE DATA									
TRACK NO.	CURVE NO.	Δ	Dc	R	T	LENGTH (CHORD)	LENGTH (ARC)	PC STA	PT STA
TRACK 1	CURVE# 1	05° 43' 29"	8' 00' 00"	716.78	35.84	71.56	71.62	01+45.79	02+17.41
TRACK 1	CURVE# 2	05° 40' 56"	12' 00' 00"	478.34	23.74	47.35	47.44	28+67.90	29+15.34
TRACK 2	CURVE# 3	05° 40' 53"	12' 00' 00"	478.34	23.74	47.34	47.43	101+90.39	102+37.82

* CHORD DEFINITION USED FOR DEGREE OF CURVE
PC AND PT STATIONS ARE BASED ON LENGTH OF CURVE
AS MEASURED ALONG ARC.

ABBREVIATIONS

Δ	ANGLE OF INTERSECTION
BP	BEGINNING POINT
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
CL	CENTERLINE
Dc	DEGREE OF CURVE
DSP	DOUBLE SWITCH POINT
EP	ENDING POINT
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
GRRR	GEORGIA CENTRAL RAILROAD
GWRR	GENESEE & WYOMING RAILROAD
K	LENGTH OF VERTICAL CURVE (m) FOR 1% GRADE CHANGE
L	LENGTH
LH	LEFT HAND
LVC	LENGTH OF VERTICAL CURVE
NO.	NUMBER
PC	POINT OF CURVE
PI	POINT OF INTERSECTION
PS	POINT OF SWITCH
PT	POINT OF TANGENT
PVI	POINT OF VERTICAL CURVE
R	RADIUS
RH	RIGHT HAND
R/W	RIGHT OF WAY
STA	STATION
T	TANGENT
TO	TURNOUT
T/R	TOP RAIL



SCALE: 1"=100'
0' 50' 100' 200'



NOT FOR CONSTRUCTION

REVISIONS:

CIVIL CONSTRUCTION PLANS FOR
SAVANNAH PORTS LOGISTICS CENTER -
GWRR SIDE LINE
LOCATED IN POOLER, GEORGIA
PREPARED FOR GENESEE & WYOMING RAILROAD SERVICES, INC

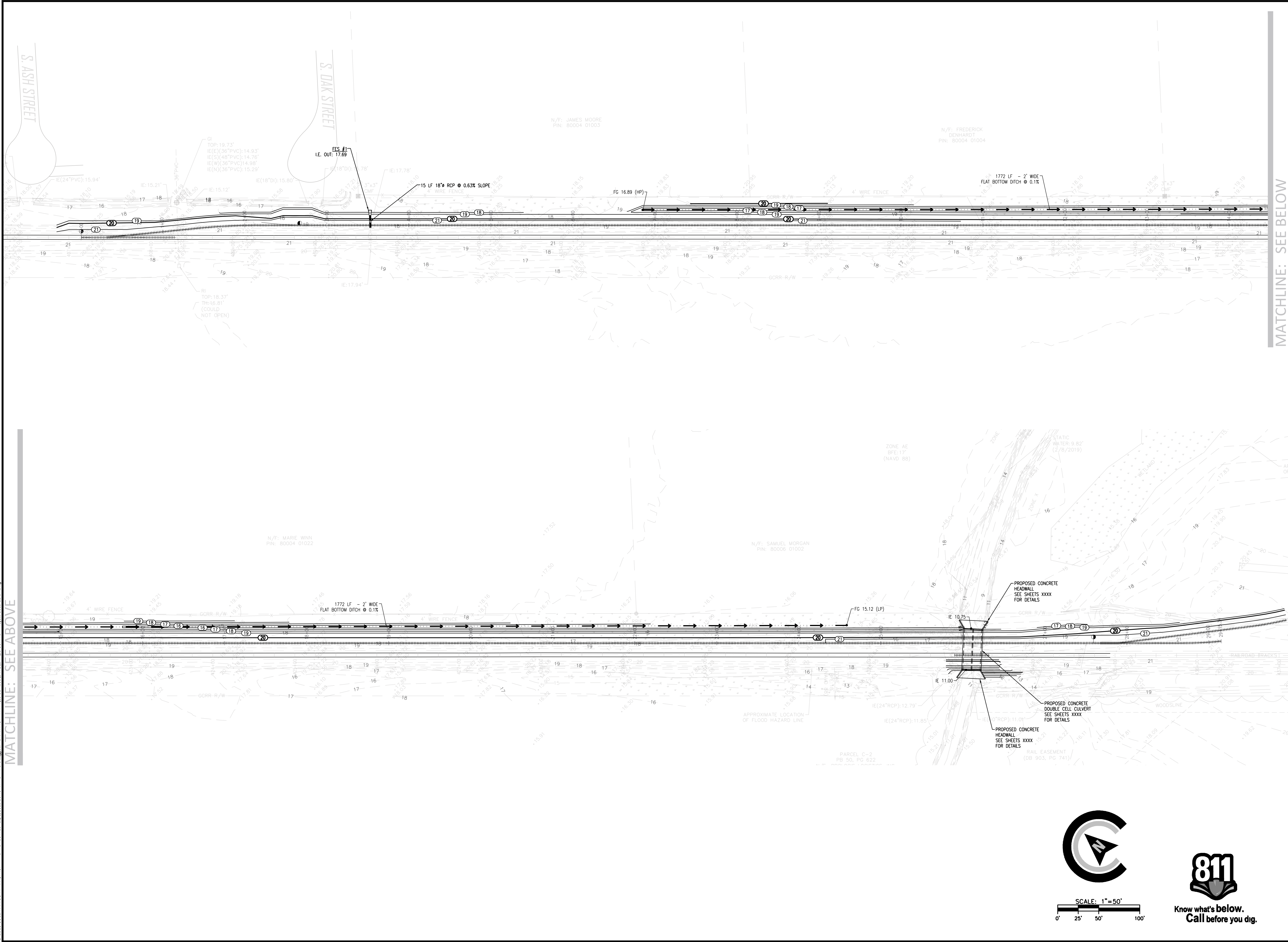
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DATE: ??/??/??
DRAWN BY: MEL
CHECKED BY: WRG
SCALE: AS NOTED

STAKING PLAN

SHEET:

C2.0





MATCHLINE: SEE ABOVE

MATCHLINE: SEE BELOW

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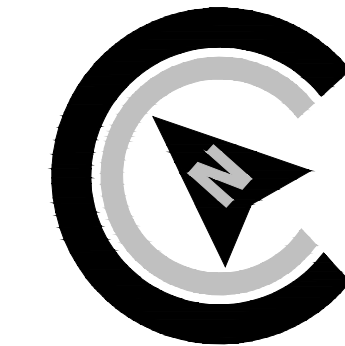
REVISIONS:

CIVIL CONSTRUCTION PLANS FOR
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JOB NUMBER: 19-587
DATE: ??/??/??
DRAWN BY: MEL
CHECKED BY: WRG
SCALE: AS NOTED

GRADING &
DRAINAGE

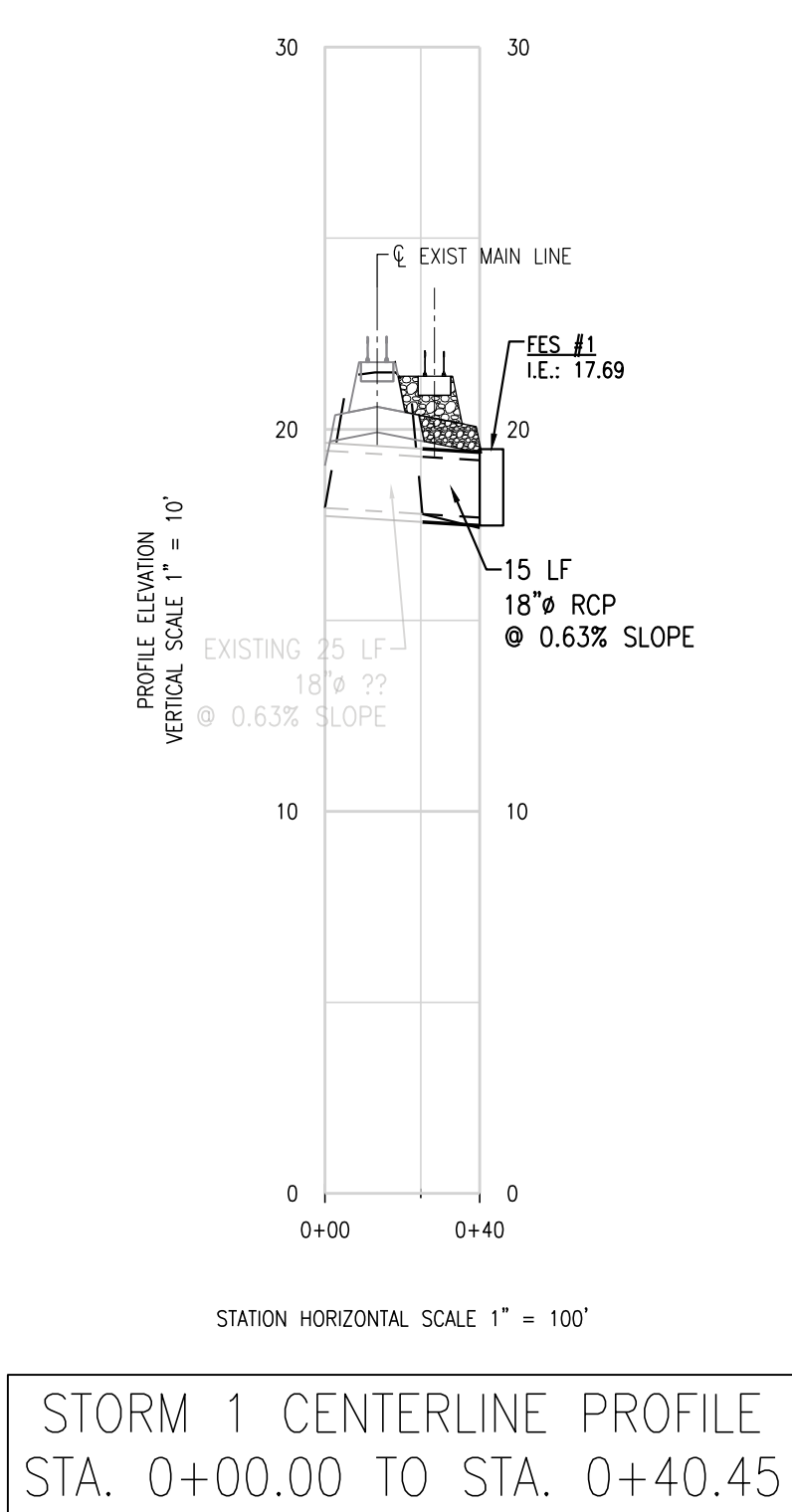
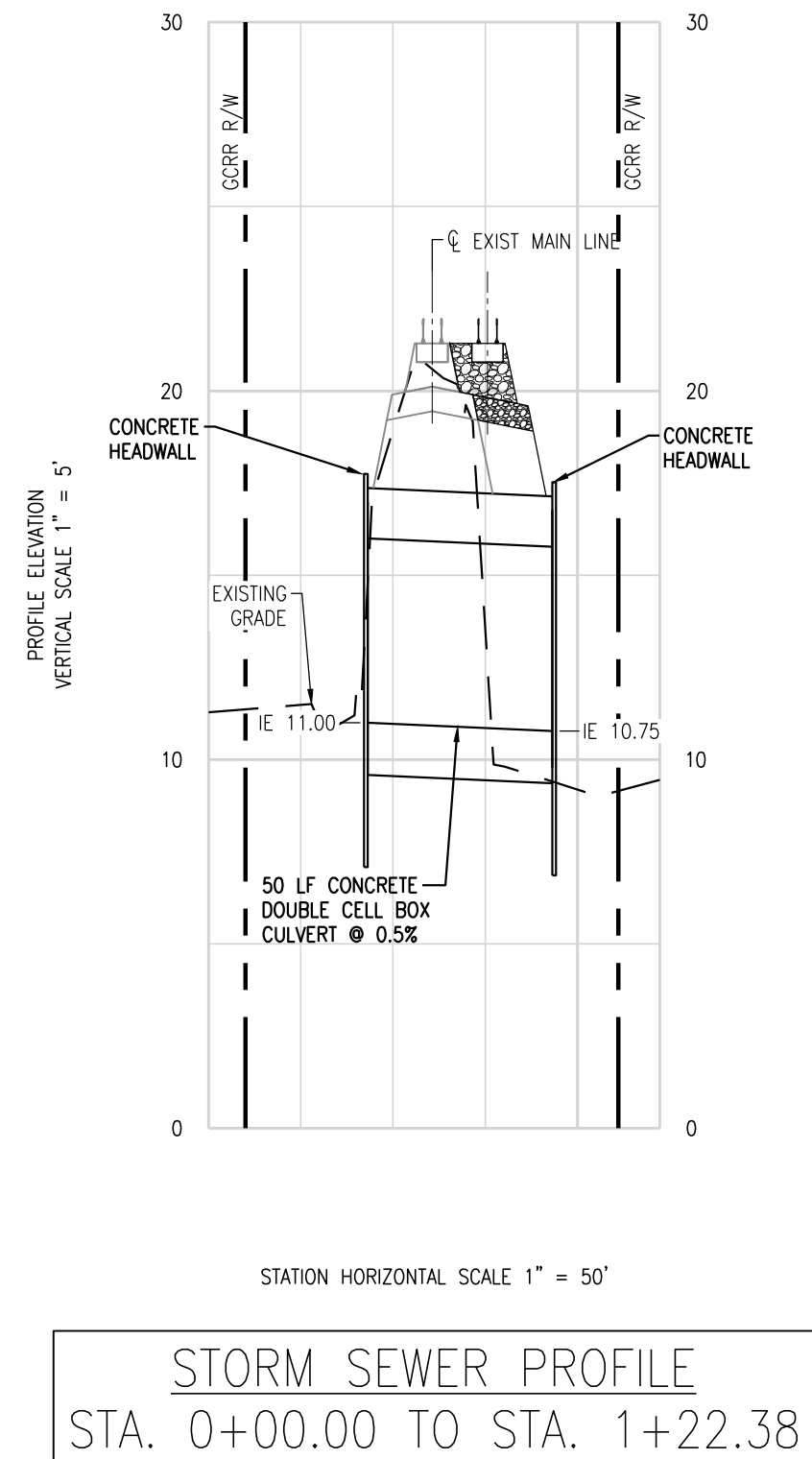
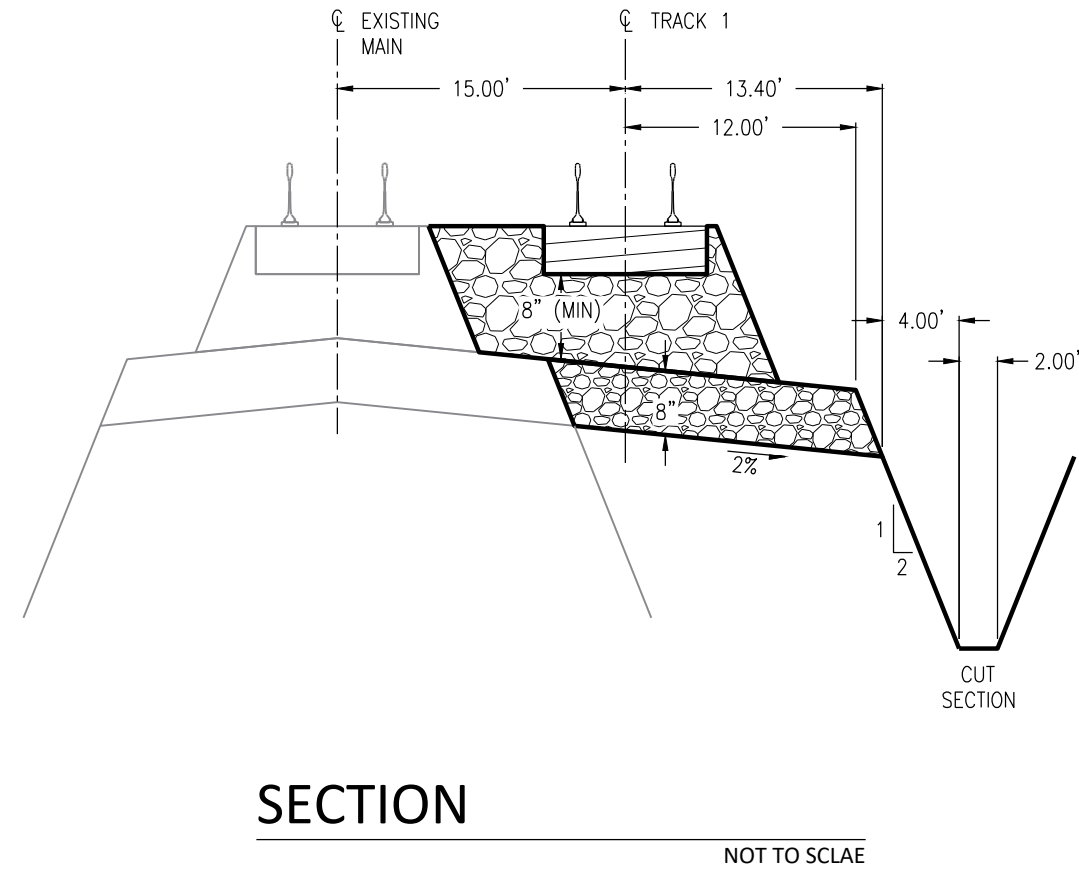
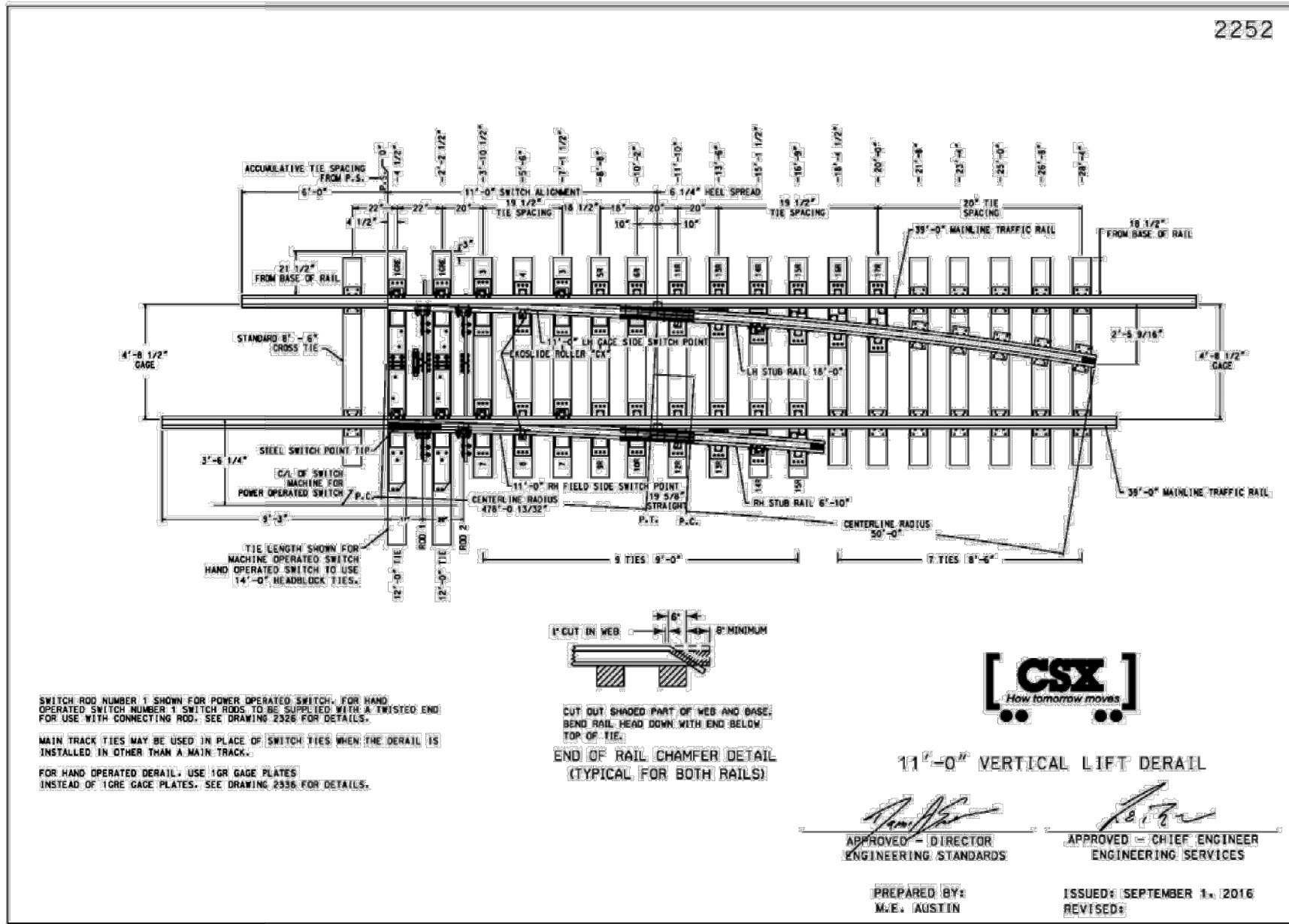
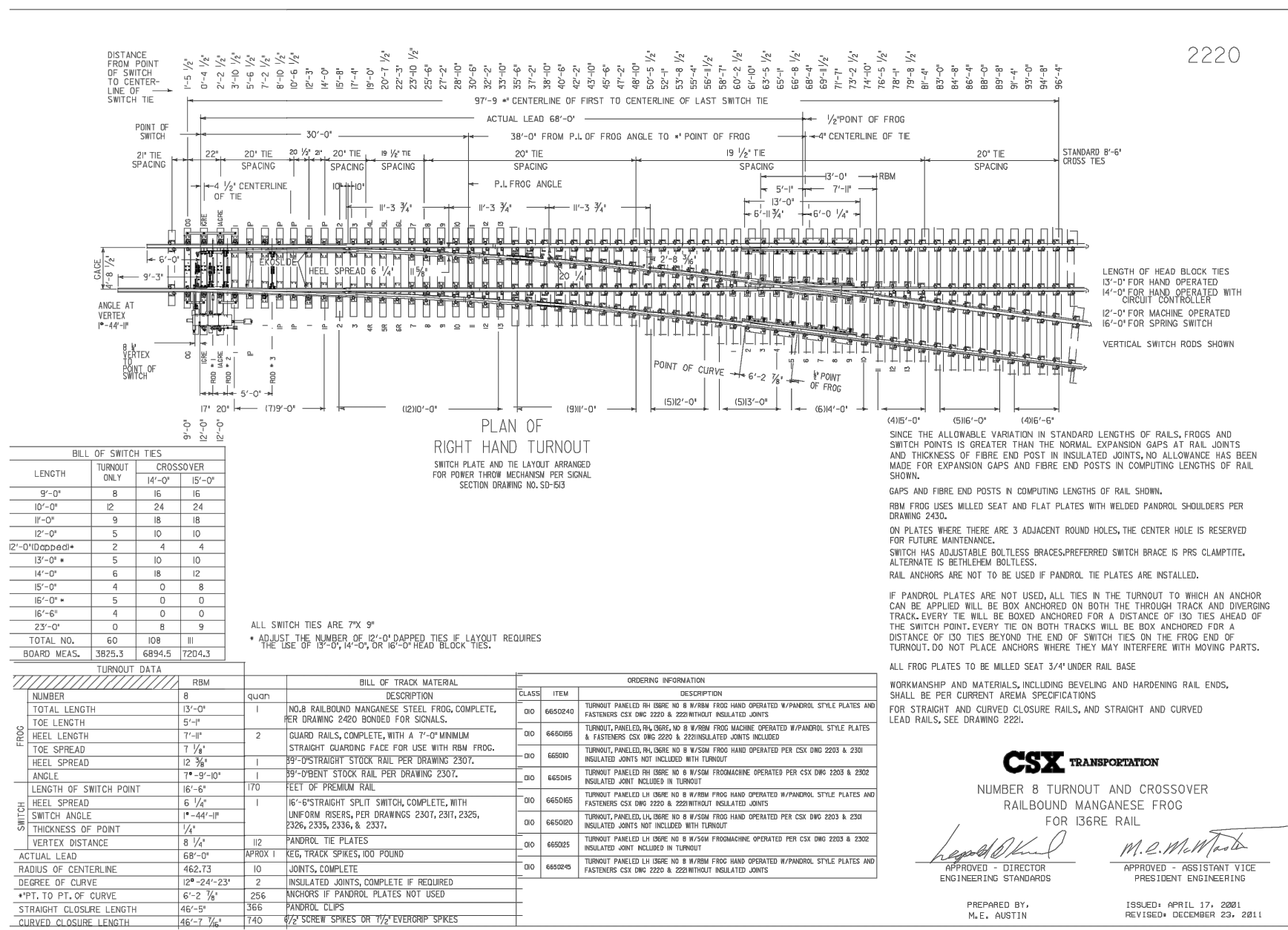
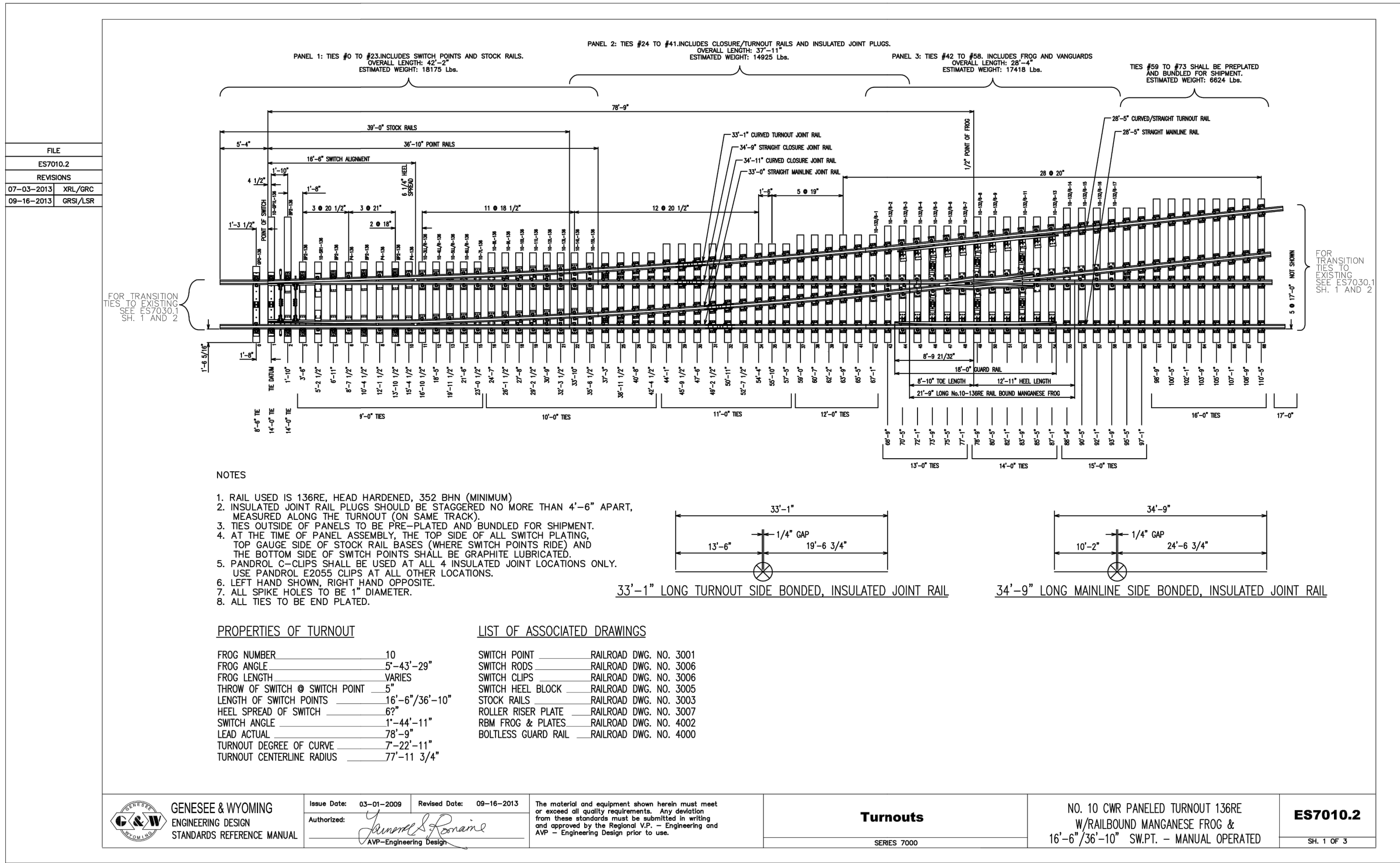
SHEET:
C3.0



SCALE: 1"=50'
0' 25' 50' 100'



Know what's below.
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WINGWALLS, TOEWALLS AND PARAPETS																				
N BARS AT 1'-0" C. TO C.										P BARS AT 1'-0" C. TO C.										
CLEAR HEIGHT	SIZE	NO. OF BARS	LENGTH	NO. OF BARS	LENGTH	LENGTH *		SIZE	NO. OF BARS	LENGTH	NO. OF BARS	LENGTH	LENGTH		SIZE	NO. OF BARS	LENGTH	NO. OF BARS	LENGTH	CLEAR HEIGHT
						SHORTEST	LONGEST						SHORTEST	LONGEST						
2'	#4	4	5'-4"	12	4'-4"	5'-2"	#4	20	3'-5"	4	1'-2"	1'-2"	#6	32	3'-6"	3'-6"	#6	14	X+2"	2'
3'	#4	4	6'-7"	24	4'-4"	6'-5"	#4	20	6'-4"	8	1'-9"	4'-2"	#6	56	3'-6"	3'-6"	#6	14	X+2"	3'
4'	#5	4	8'-2"	40	4'-5"	8'-2"	#4	20	9'-10"	12	2'-11"	7'-9"	#6	88	3'-6"	3'-6"	#6	14	X+2"	4'
5'	#5	4	9'-1"	44	4'-11"	9'-0"	#4	20	11'-3"	16	2'-11"	10'-4"	#6	96	3'-6"	3'-6"	#6	14	X+2"	5'
6'	#5	4	10'-2"	48	5'-5"	9'-11"	#4	24	12'-7"	16	2'-11"	10'-5"	#6	104	3'-6"	3'-6"	#6	14	X+2"	6'
7'	#5	4	11'-2"	56	5'-11"	11'-2"	#4	24	13'-11"	20	3'-0"	13'-0"	#6	120	3'-6"	3'-6"	#6	14	X+2"	7'
8'	#6	4	12'-4"	60	6'-6"	12'-3"	#4	28	15'-2"	24	3'-2"	13'-0"	#6	128	3'-8"	3'-8"	#6	14	X+2"	8'
9'	#6	4	13'-5"	64	7'-0"	13'-2"	#4	28	16'-6"	24	3'-4"	15'-7"	#6	136	3'-8"	3'-8"	#6	14	X+2"	9'
10'	#7	4	14'-7"	72	7'-8"	14'-7"	#4	32	17'-9"	24	3'-4"	15'-7"	#6	152	3'-8"	5'-0"	#6	14	X+2"	10'
11'	#7	4	15'-7"	76	8'-2"	15'-6"	#4	32	19'-1"	28	3'-4"	18'-2"	#6	160	3'-8"	5'-6"	#6	14	X+2"	11'
12'	#8	4	16'-8"	80	8'-9"	16'-6"	#4	36	20'-5"	28	3'-5"	18'-3"	#6	168	3'-8"	5'-6"	#6	14	X+2"	12'

* LENGTH INCLUDES VERGICAL LEG, HORIZONTAL LEG AND 180° STANDARD HOOK.

* LENGTH INCLUDES 2 STANDARD 180° HOOKS.

X = TOTAL BARREL WIDTH OUT TO OUT DIMENSION **FROM CURVLET SHEET)

Y = TOTAL BARREL HEIGHT OUT TO OUT DIMENSION ***FROM CURVLET SHEET)

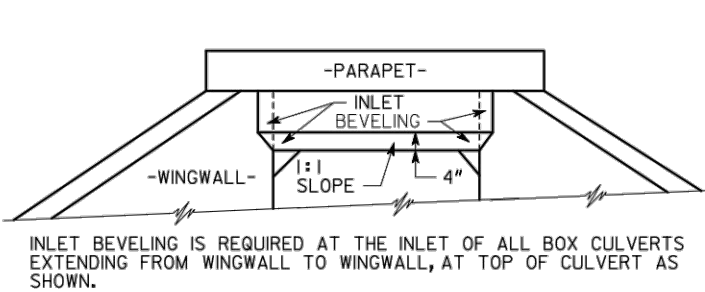
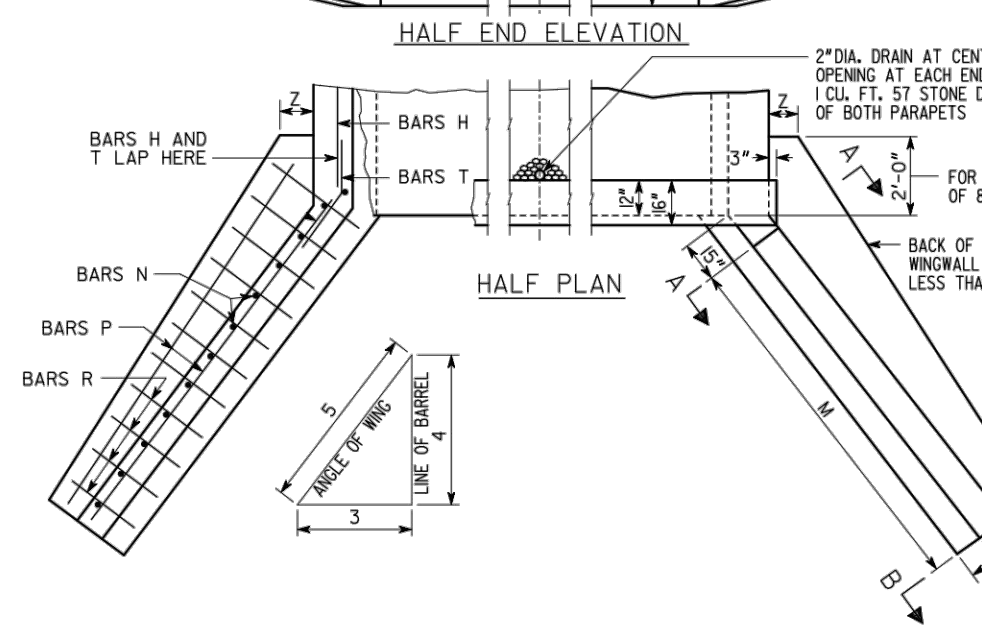
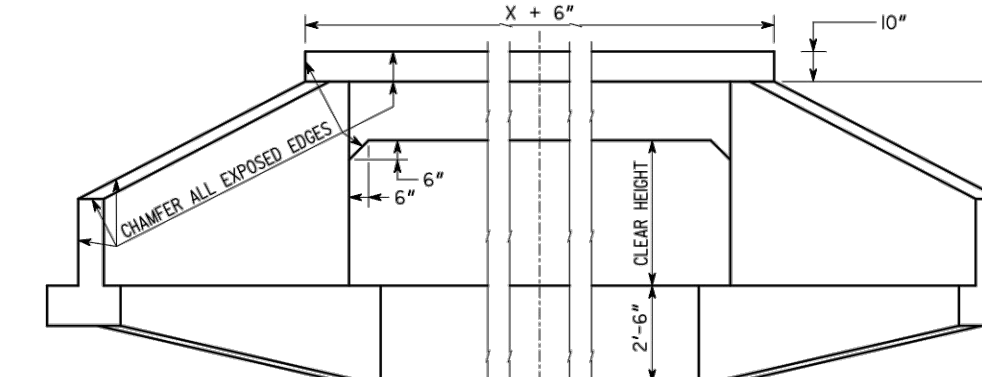
* LENGTH INCLUDES VERTICAL LEG, HORIZONTAL LEG AND 180° STANDARD HOOK.
** LENGTH INCLUDES 2 STANDARD 180° HOOKS.

X = TOTAL BARREL WIDTH OUT TO OUT (DIMENSION "X" FROM CULVERT SHEET)
Y = TOTAL BARREL HEIGHT OUT TO OUT (DIMENSION "Y" FROM CULVERT SHEET)

DIMENSIONS AND QUANTITIES									
CLEAR HEIGHT	H	W ₁	W ₂	S	M	T ₁	Z	CY CLASS AA CONCRETE	LBS. BAR REINF. STEEL
2'	3'-1"	1'-4"	2'-0"	1'-1"	2'-8"	10"	-	3.3	270
3'	4'-3 1/2"	2'-0 1/2"	2'-0"	2'-1 1/2"	5'-7"	10"	-	6.0	499
4'	5'-5"	3'-5"	2'-0"	2'-1"	9'-2"	10"	-	9.2	795
5'	6'-9"	4'-3"	2'-6"	2'-7"	10'-6"	10"	-	12.4	1083
6'	7'-9"	4'-9"	3'-0"	2'-7"	11'-10"	10"	-	15.0	1246
7'	8'-10 1/2"	5'-3 1/2"	3'-6"	2'-7 1/2"	13'-2"	10"	-	17.8	1507
8'	9'-10 1/2"	5'-10 1/2"	4'-0"	2'-8 1/2"	14'-5"	12"	1'-0"	25.3	2070
9'	10'-11"	6'-5"	4'-6"	2'-9"	15'-9"	12"	1'-6"	29.9	2345
10'	11'-11"	6'-11"	5'-0"	2'-9"	17'-0"	12"	2'-0"	34.7	3277
11'	12'-11"	7'-5"	5'-6"	2'-9"	18'-4"	12"	2'-6"	40.0	3676
12'	13'-10 1/2"	7'-10 1/2"	6'-0"	2'-9 1/2"	19'-8"	12"	3'-0"	45.8	4788

QUANTITIES GIVEN INCLUDE WINGWALL, WINGWALL FOOTING, AND WINGWALL TOEWALL FOR BOTH ENDS.

SYMMETRICAL ABOUT CULVERT



INLET BEVELING IS REQUIRED AT THE INLET OF ALL BOX CULVERTS EXTENDING FROM WINGWALL TO WINGWALL, AT TOP OF CULVERT AS SHOWN.

LINE OF CONSTRUCTION FOR INLET BEVELING

NORMAL LINE OF CONSTR. FOR OUTLETS

WINGWALL

BOX CULVERT

PARAPET

WINGWALL

INLET BEVELING

WINGWALL

BOX CULVERT

PARAPET

WINGWALL

INLET BEVELING

WINGWALL

BOX CULVERT

PARAPET

WINGWALL

INLET BEVELING

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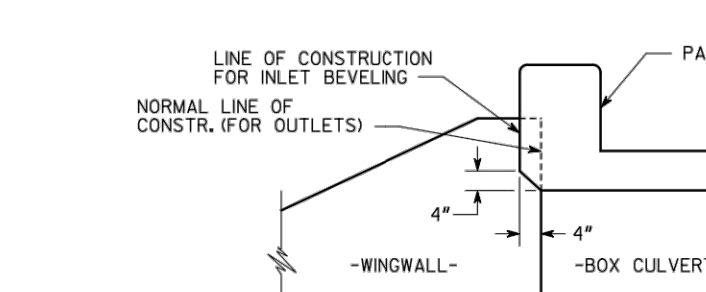
WINGWALL

INLET BEVELING

WINGWALL

BOX CULVERT

PARAPET



INLET BEVELING IS REQUIRED AT THE INLET OF ALL BOX CULVERTS EXTENDING FROM WINGWALL TO WINGWALL, AT TOP OF CULVERT AS SHOWN.

LINE OF CONSTRUCTION FOR INLET BEVELING

NORMAL LINE OF CONSTR. FOR OUTLETS

WINGWALL

BOX CULVERT

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WINGWALL

INLET BEVELING

WINGWALL

BOX CULVERT

PARAPET

WINGWALL

INITIAL PHASE:

1. INSTALL PERIMETER CONTROLS TO INCLUDE SIL FENCING AND CONSTRUCTION EXIT.
2. REMOVE DESIGNATED TREES AND CLUMP, GRUB AND GRADE SITE.
3. LIMIT CLEARING AND GRUBBING OF SITE TO ONLY AREAS NECESSARY FOR CONSTRUCTION AS SHOWN.

INTERMEDIATE PHASE:

1. MASS GRADE SITE TO FINAL ELEVATIONS.
2. INSTALL UNDERGROUND UTILITIES INCLUDING WATER LINES, SANITARY SEWER AND STORM SYSTEMS.

FINAL PHASE:

1. STABILIZE ALL REMAINING DISTURBED AREAS.
2. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND STABILIZE DISTURBED AREAS ACCORDING TO THE EROSION CONTROL PLAN.

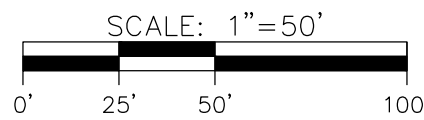


THE ONLY LAND THAT IS BEING DISTURBED IN THE INITIAL PHASE IS THE SILT FENCE AREA AND CONSTRUCTION EVID. THUS THE INITIAL PHASE IS A LINEAR PROJECT AS DEFINED BY THE EROSION CONTROL MANUAL. LINEAR PROJECTS CAN UTILIZE SILT FENCE FOR SEDIMENT STORAGE. ALSO, THE DISTURBED AREA IN THE INITIAL PHASE IS LESS THAN 1 ACRE. FINALLY, THE WAY THE EXISTING SITE IS CONFIGURED, MUCH MORE AREA WOULD NEED TO BE DISTURBED IN THE INITIAL PHASE TO INCLUDE SEDIMENT BASINS AND DIVERSION SWALES TO CONVEY WATER AND SEDIMENT TO SAID BASINS. THUS, SEDIMENT STORAGE IN SILT FENCE IS THE BEST OPTION FOR SEDIMENT STORAGE IN THE INITIAL PHASE.

DISTURBED AREA (INITIAL): 3,267 LF SILT FENCE X 4 FT WIDE DISTURBANCE + $C_{\alpha}(2,500 \text{ SF}) = 15,568 \text{ SF}$ (0.36 AC)
 REQUIRED STORAGE (INITIAL): 0.36 AC X 67 CY/AC X 24.12 CY = 652 CF
 STORAGE PROVIDED (INITIAL): SILT FENCE STORAGE: $BH/2 \times \text{LENGTH}$
 LENGTH: 3,267; B: 1.5'; H: 1.5'; $((1.5)(1.5)/2) \times 3,267 = 3,675 \text{ CF}$
 STORAGE PROVIDED > REQUIRED STORAGE
 3,675 CF > 652 CF; THEREFORE ADEQUATE STORAGE IS PROVIDED IN THE INITIAL PHASE

DESIGN PROFESSIONAL'S CREDENTIALS:

NRCS ORIGINAL SUBMITTAL:



REVISIONS:

PREPARED FOR GENESEE & WYOMING RAILROAD SERVICES, INC

INITIAL ES&PC PLAN

CE1.0



INITIAL PHASE:

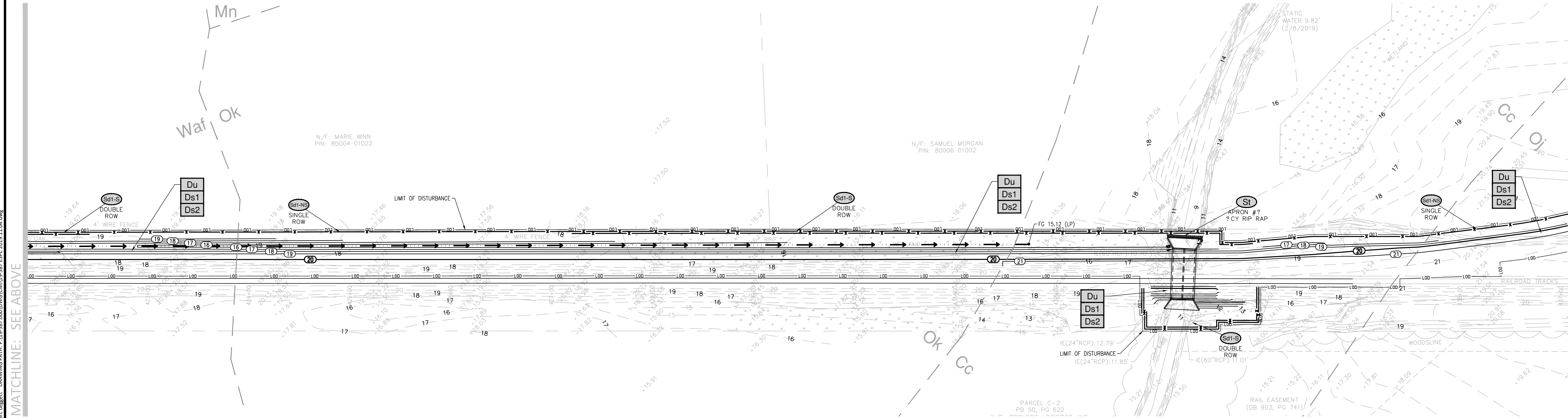
1. INSTALL PERIMETER CONTROLS TO INCLUDE SIL FENCING AND CONSTRUCTION EXIT.
2. REMOVE DESIGNATED TREES AND CLUMP, GRUB AND GRADE SITE.
3. LIMIT CLEARING AND GRUBBING OF SITE TO ONLY AREAS NECESSARY FOR CONSTRUCTION AS SHOWN.

INTERMEDIATE PHASE:

1. MASS GRADE SITE TO FINAL ELEVATIONS.
2. INSTALL UNDERGROUND UTILITIES INCLUDING WATER LINES, SANITARY SEWER AND STORM SYSTEMS.

FINAL PHASE:

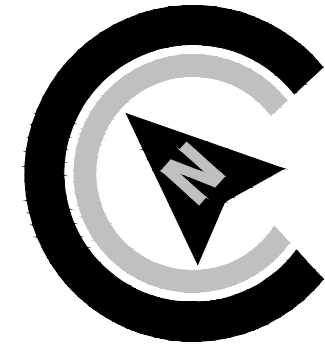
1. STABILIZE ALL REMAINING DISTURBED AREAS.
2. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND STABILIZE DISTURBED AREAS ACCORDING TO PERMITS.



SOILS LEGEND	
Cc	CAPE FEAR SOILS
Oj	OCILLA COMPLEX
Ok	OGEECHEE LOAMY FINE SAND
Mn	MASCOTTE SAND, 0 TO 2 PERCENT SLOPES
Waf	Wahee Sandy Loam

DESIGN PROFESSIONAL'S CREDENTIALS:
ENGINEER'S NAME (PRINTED):
GEORGIA PE NUMBER:
GSWCC LEVEL II CERTIFICATION NUMBER:

NRCS ORIGINAL SUBMITTAL:



SCALE: 1"=50'

A horizontal scale bar with a black and white alternating pattern. It is marked with 0', 25', 50', and 100'.



**Know what's below.
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REVISIONS:

CIVIL CONSTRUCTION PLANS FOR
SAVANNAH PORTS LOGISTECS CENTER -
GWRR SIDE LINE
LOCATED IN POOLER, GEORGIA
PREPARED FOR GENESEE & WYOMING RAILROAD SERVICES, INC

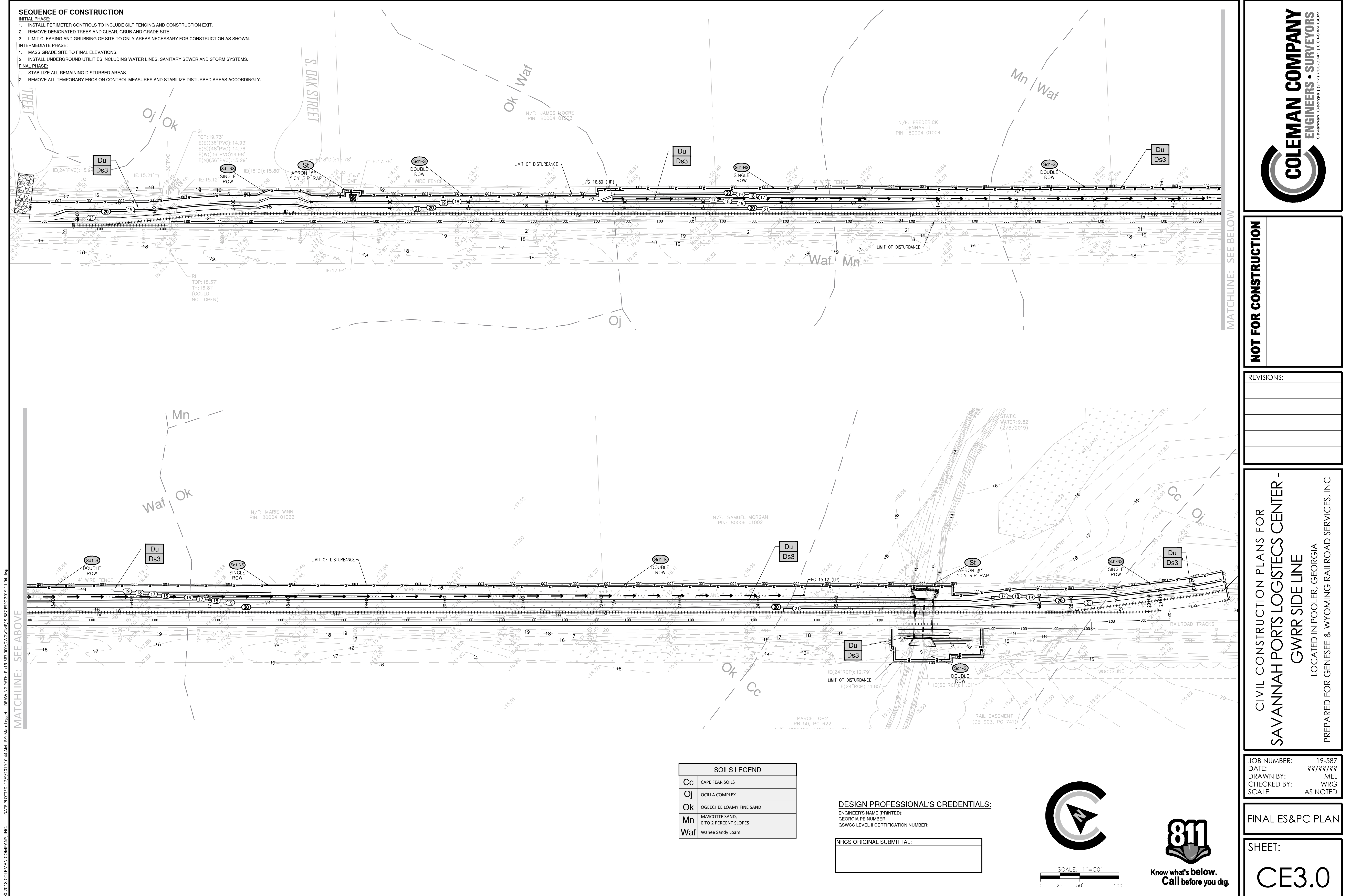
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INTERM ES&PC PLAN

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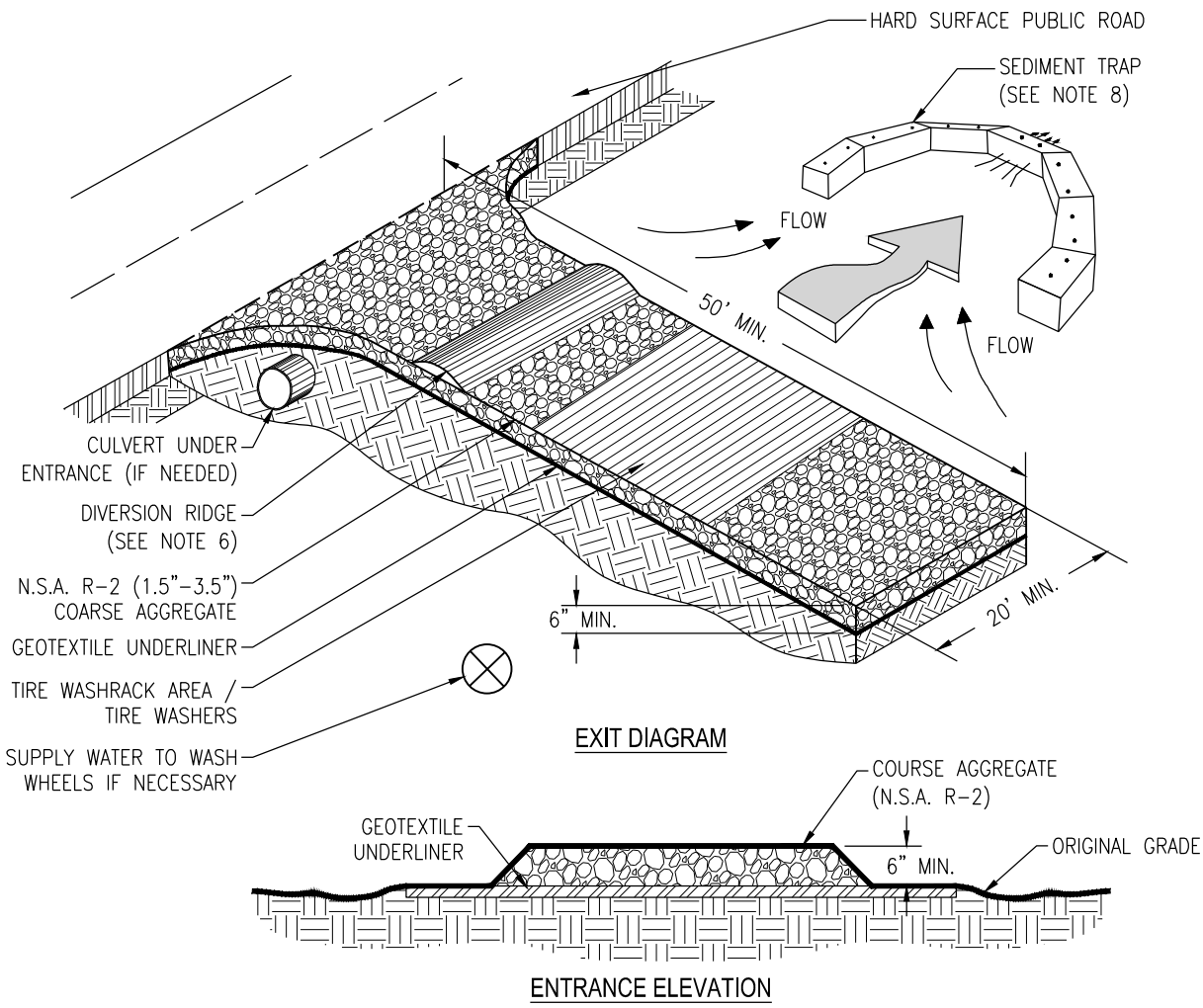
REVISIONS:

CIVIL CONSTRUCTION PLANS FOR
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SCALE:	AS NOTED

FINAL ES&PC PLAN

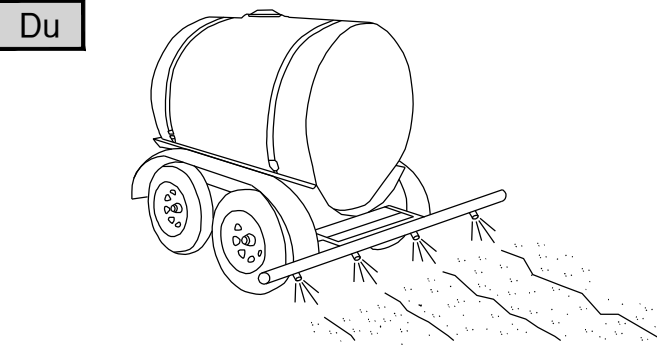
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- NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
 2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
 3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"–3.5" STONE).
 4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
 5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
 6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
 7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
 8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
 9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
 10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

Co CRUSHED STONE CONSTRUCTION EXIT
NOT TO SCALE

Du DUST CONTROL ON DISTURBED AREAS



CONTRACTOR SHALL EMPLOY THE FOLLOWING TEMPORARY METHODS TO LIMIT THE SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES:

- *TEMPORARY METHODS:
- MULCHES
 - SPRAY ON ADHESIVES
 - TILLING
 - IRRIGATION
 - BARRIERS
 - CALCIUM CHLORIDE

- *PERMANENT METHODS
- PERMANENT VEGETATION
 - TOPSOIL
 - STONE COVER

*CHEMICAL CONTROL

ADHESIVE	WATER DILUTION	TYPE OF NOZZLE	APPLICATION RATE (GAL/AC)
ANIONIC ASPHALT EMULSION	7:1	SPRAY	1200
LATEX EMULSION	12 1/2:1	FINE SPRAY	235
RESIN-IN-WATER EMULSION	4:1	FINE SPRAY	300

Ds1

MULCHING WITHOUT TEMPORARY GRASSING:
WOOD MULCH SHALL BE PLACED AT A RATE OF 140 TONS PER ACRE AND APPLIED TO A DEPTH OF 2 TO 3 INCHES.

TEMPORARY GRASSING:
AGRICULTURAL LIME: APPLY 1 TON/ACRE
FERTILIZER: FOR SOILS WITH VERY LOW FERTILITY, APPLY 500–700 LBS. 10–10–10 PER ACRE FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER OR CHISEL.

PERMANENT GRASSING:
AGRICULTURAL LIME IS REQUIRED AT THE RATE OF ONE TO TWO TONS PER ACRE UNLESS SOIL TESTS INDICATE OTHERWISE. GRADED AREAS REQUIRE LIME APPLICATION. IF LIME IS APPLIED WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION, ADDITIONAL LIME IS NOT REQUIRED. SOIL TEST ARE REQUIRED PRIOR TO PERMANENT VEGETATION. PERMANENT GRASSING SHALL BE SOD.

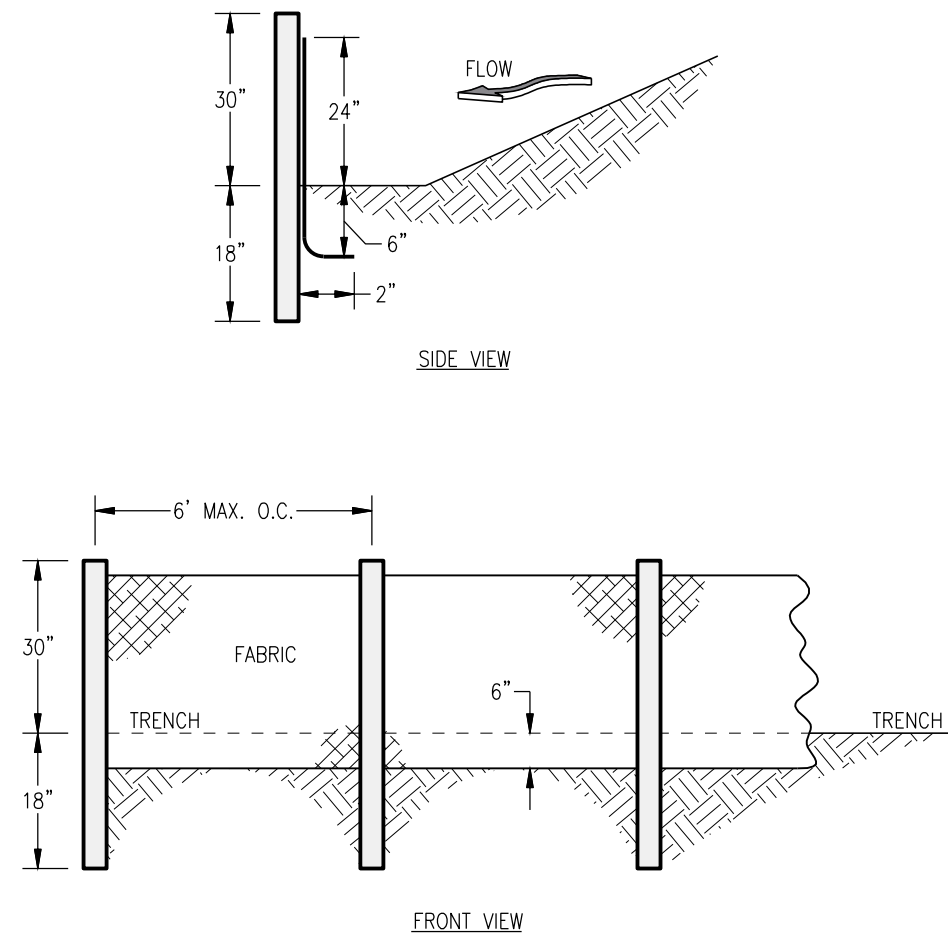
HYDRAULIC SEEDING:
MIX THE SEED (INOCULATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE.

MULCHING
MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED:

1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2–1/2 TONS PER ACRE.
2. WOOD CELLULOSE MULCH OR WOOD PULP FIBER WILL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.
3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER.
4. SERICIA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUALITY MAY BE USED WHERE ORNAMENTALS OR OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDED AREAS.
6. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.
7. BITUMINOUS TREATED ROWING MAY BE APPLIED ON PLANTED AREAS ON SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROWING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

- * WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVENLY DISPERSED WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.

APPLYING MULCH:
STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING. THE MULCH MAY BE SPREAD BY BLOWER-TYPE SPREADING EQUIPMENT, OTHER SPREADING EQUIPMENT OR BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE. WOOD CELLULOSE OR WOOD PULP FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.



NOTE:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

Sd1-NS SILT FENCE - TYPE NON-SENSITIVE
NOT TO SCALE

Ds2

DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

DEFINITION

THE ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS FOR SEASONAL PROTECTION ON DISTURBED OR DENuded AREAS.

CONDITIONS

TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL AND EFFECTIVE STABILIZATION. MOST TYPES OF TEMPORARY VEGETATION ARE IDEAL TO USE AS COMPANION CROPS UNTIL THE PERMANENT VEGETATION IS ESTABLISHED.

SPECIFICATIONS

GRADING AND SHAPING

EXCESSIVE WATER RUN-OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS.

NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

SEEDBED PREPARATION

WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HANDSEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.

WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

LIME AND FERTILIZER

AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE. GRADED AREAS REQUIRE LIME APPLICATION. SOILS CAN BE TESTED TO DETERMINE IF FERTILIZER IS NEEDED. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED. FOR SOILS WITH VERY LOW FERTILITY, 500 TO 700 POUNDS OF 10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (12-16 LBS./1,000 SQ. FT.) SHALL BE APPLIED. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER OR CHISEL.

SEEDING

SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULPACKER SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). DRILL OR CULPACKER SEEDERS SHOULD NORMALLY PLACE SEED ONE-QUARTER TO ONE-HALF INCH APPROPRIATE DEPTH OF PLANTING IS TEN TIMES THE SEED DIAMETER. SOIL SHOULD BE "RAKED" LIGHTLY TO COVER SEED WITH SOIL IF SEEDING BY HAND.

MULCHING

TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION. REFER TO DS1 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).

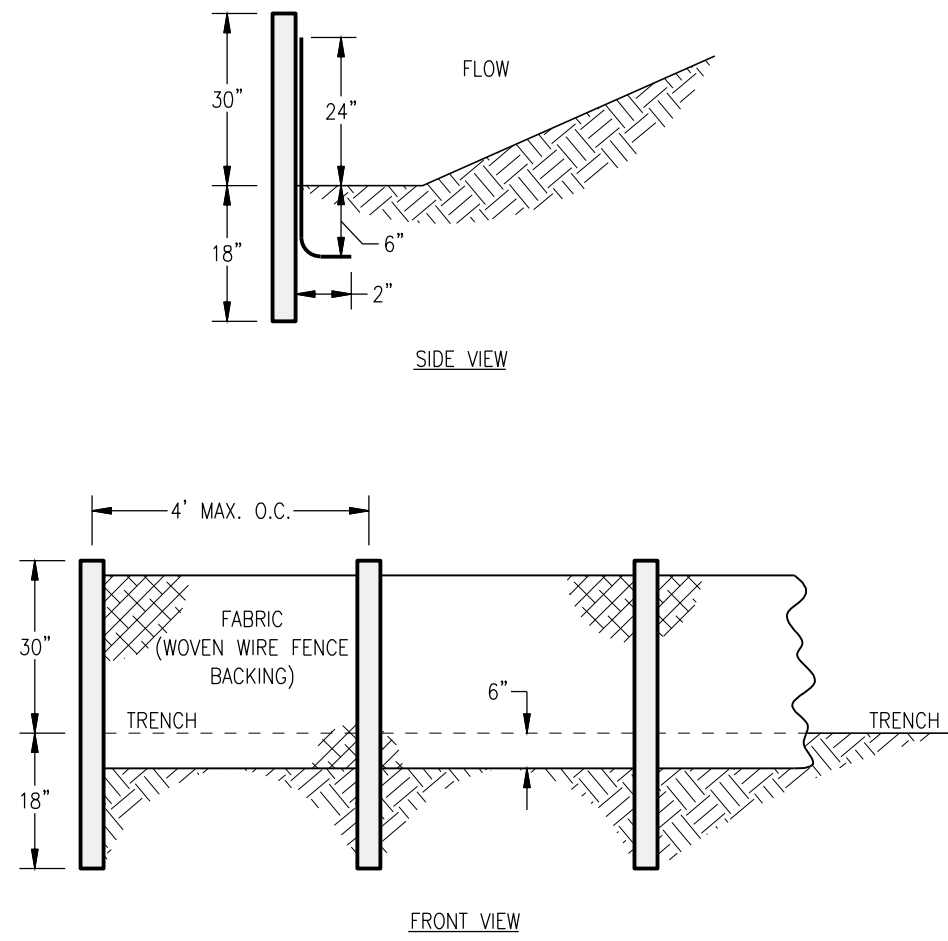
IRRIGATION

DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

SEEDING RATES FOR TEMPORARY SEEDING

SPECIES	RATE PER 1,000 SF	RATE PER ACRE*	PLANTING DATES**
RYE	3.9 LBS	3 BU	9/1–3/1
RYEGRASS	0.9 LB	40 LBS	8/15–4/1
ANNUAL LESPEDEZA	0.9 LB	40 LBS	1/15–3/15
WEeping LOVEGRASS	0.1 LB	4 LBS	2/15–6/15
SUDANGRASS	1.4 LBS	60 LBS	3/1–8–1
BROWNTOP MILLET	0.9 LB	40 LBS	4/1–7/15
WHEAT	4.1 LBS	3 BU	9/15–2/1

- * UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES
- ** SEEDING DATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS AND CONDITIONS.



NOTE:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

Sd1-S SILT FENCE - TYPE SENSITIVE
NOT TO SCALE

Ds3

DISTURBED AREA STABILIZATION (With Permanent Vegetation)

DEFINITION

THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION. PERMANENT PERENNIAL VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION.

CONDITIONS

PERMANENT PERENNIAL VEGETATION IS USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENuded AREAS.

SPECIFICATIONS

GRADING AND SHAPING

GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT.

WHEN CONVENTIONAL SEEDING AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND PRACTICAL, SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING AND MAINTENANCE OF THE VEGETATION.

CONCENTRATIONS OF WATER THAT WILL CAUSE EXCESSIVE SOIL EROSION SHALL BE DIVERTED TO A SAFE OUTLET. DIVERSIONS AND OTHER TREATMENT PRACTICES SHALL CONFORM WITH THE APPROPRIATE STANDARDS AND SPECIFICATIONS.

SEEDBED PREPARATION

SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDBED PREPARATION WILL BE DONE AS FOLLOWS:

BROADCAST PLANTINGS

1. TILLAGE AT A MINIMUM, SHALL ADEQUATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 6 INCHES; ALLEVATE COMPACTION; INCORPORATE LIME AND FERTILIZER; SMOOTH AND FIRM THE SOIL; ALLOW FOR THE PROPER PLACEMENT OF SEED, SPRIGS, OR PLANTS; AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS TO BE USED.
2. TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT.
3. TILLAGE SHOULD BE DONE ON THE CONTOUR WHERE FEASIBLE.
4. ON SLOPES TOO STEEP FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 INCHES APART IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED.

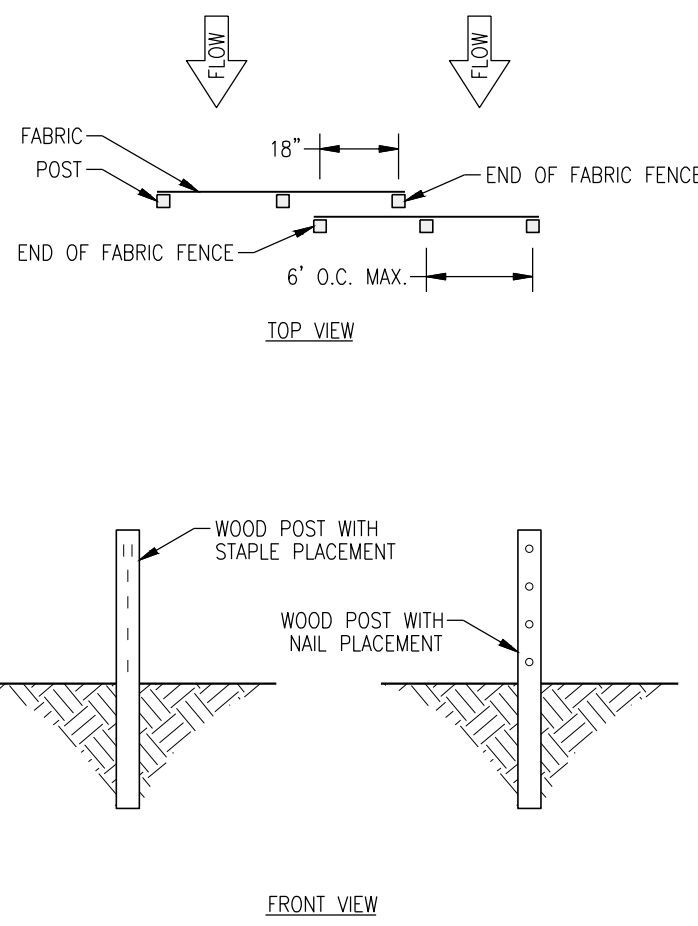
INDIVIDUAL PLANTS

1. WHERE INDIVIDUAL PLANTS ARE TO BE SET, THE SOIL SHALL BE PREPARED BY EXCAVATING HOLES, OPENING FURROWS, OR DIBBLE PLANTING.
2. FOR NURSERY STOCK PLANTS, HOLES SHALL BE LARGE ENOUGH TO ACCOMMODATE ROOTS WITHOUT CROWDING.
3. WHERE PINE SEEDLINGS ARE TO BE PLANTED, SUBSOIL UNDER THE ROW 36 INCHES DEEP ON THE CONTOUR FOUR TO SIX MONTHS PRIOR TO PLANTING. SUBSOILING SHOULD BE DONE WHEN THE SOIL IS DRY, PREFERABLY IN AUGUST OR SEPTEMBER.

SEEDING RATES FOR PERMANENT SEEDING

SPECIES	RATE PER 1,000 SF	RATE PER ACRE*	PLANTING DATES**
BAHIA	1.4 LBS	60 LBS	1/1–12/31
BERMUDA	0.2 LB	10 LBS	2/15–7/1
CENTPEDE	BLOCK SOD ONLY	BLOCK SOD ONLY	4/1–7/1
LESPEDEZA	1.7 LB	75 LBS	1/1–12/31
WEeping LOVE GRASS	0.1 LB	4 LBS	2/1–6/15
SWITCHGRASS	0.9 LBS	40 LBS	3/15–6/1

- * UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES
- ** SEEDING DATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS AND CONDITIONS.



NOTE:
1. THE FABRIC AND WIRE SHOULD BE SECURELY FASTENED TO POSTS AND FABRIC ENDS MUST BE OVERLAPPED A MINIMUM OF 18" OR WRAPPED TOGETHER AROUND A POST TO PROVIDE A CONTINUOUS FABRIC BARRIER AROUND THE INLET.

FASTENERS FOR SILT FENCES OVERLAP AT FABRIC ENDS
NOT TO SCALE

7. BITUMINOUS TREATED ROWING MAY BE APPLIED ON PLANTED AREAS ON SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROWING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVENLY DISPERSED WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.

APPLYING MULCH

STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING. THE MULCH MAY BE SPREAD BY BLOWER-TYPE SPREADING EQUIPMENT, OTHER SPREADING EQUIPMENT OR BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE.

WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.

ANCHORING MULCH

ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION BY ONE OF THE FOLLOWING METHODS:

1. EMULSIFIED ASPHALT CAN BE (A) SPRAYED UNIFORMLY ONTO THE MULCH AS IT IS EJECTED FROM THE BLOWER MACHINE OR (B) SPRAYED ON THE MULCH IMMEDIATELY FOLLOWING MULCH APPLICATION WHEN STRAW OR HAY IS SPREAD BY METHODS OTHER THAN SPECIAL BLOWER EQUIPMENT.

THE COMBINATION OF ASPHALT EMULSION AND WATER SHALL CONSIST OF A HOMOGENEOUS MIXTURE SATISFACTORY FOR SPRAYING. THE MIXTURE SHALL CONSIST OF 100 GALLONS OF GRADE SS-1H OR CSS-1H EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH.

CARE SHALL BE TAKEN AT ALL TIMES TO PROTECT STATE WATERS, THE PUBLIC, ADJACENT PROPERTY, PAVEMENTS, CURBS, SIDEWALKS, AND ALL OTHER STRUCTURES FROM ASPHALT DISCOLORATION.

2. HAY AND STRAW MULCH SHALL BE PRESSED INTO THE SOIL IMMEDIATELY AFTER THE MULCH IS SPREAD. A SPECIAL "PACKER DISK" OR DISK HARROW WITH THE DISKS SET STRAIGHT MAY BE USED. THE DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISKS SHALL BE DULL ENOUGH TO PRESS THE MULCH INTO THE GROUND WITHOUT CUTTING IT, LEAVING MUCH OF IT IN AN ERECT POSITION. MULCH SHALL NOT BE PLOWED INTO THE SOIL.
3. SYNTHETIC TACKIFIERS OR BINDERS APPROVED BY GDOT SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. REFER TO TB – TACKIFIERS AND BINDERS.
4. RYE OR WHEAT CAN BE INCLUDED WITH FALL AND WINTER PLANTINGS TO STABILIZE THE THEY SHALL BE APPLIED AT A RATE OF ONE-QUARTER TO ONE HALF BUSHEL PER ACRE.
5. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW THESE MATERIALS SHALL BE INSTALLED AND ANCHORED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

IRRIGATION

IRRIGATION SHALL BE APPLIED AT A RATE THAT WILL NOT CAUSE RUNOFF.

NOT FOR CONSTRUCTION

REVISIONS:

CIVIL CONSTRUCTION PLANS FOR
SAVANNAH PORTS LOGISTICS CENTER -
GWRR SIDE LINE
LOCATED IN POOLER, GEORGIA
PREPARED FOR GENESEE & WYOMING RAILROAD SERVICES, INC

JOB NUMBER: 19-587
DATE: ??/??/??
DRAWN BY: MEL
CHECKED BY: WRG
SCALE: AS NOTED

EROSION CONTROL
DETAILS

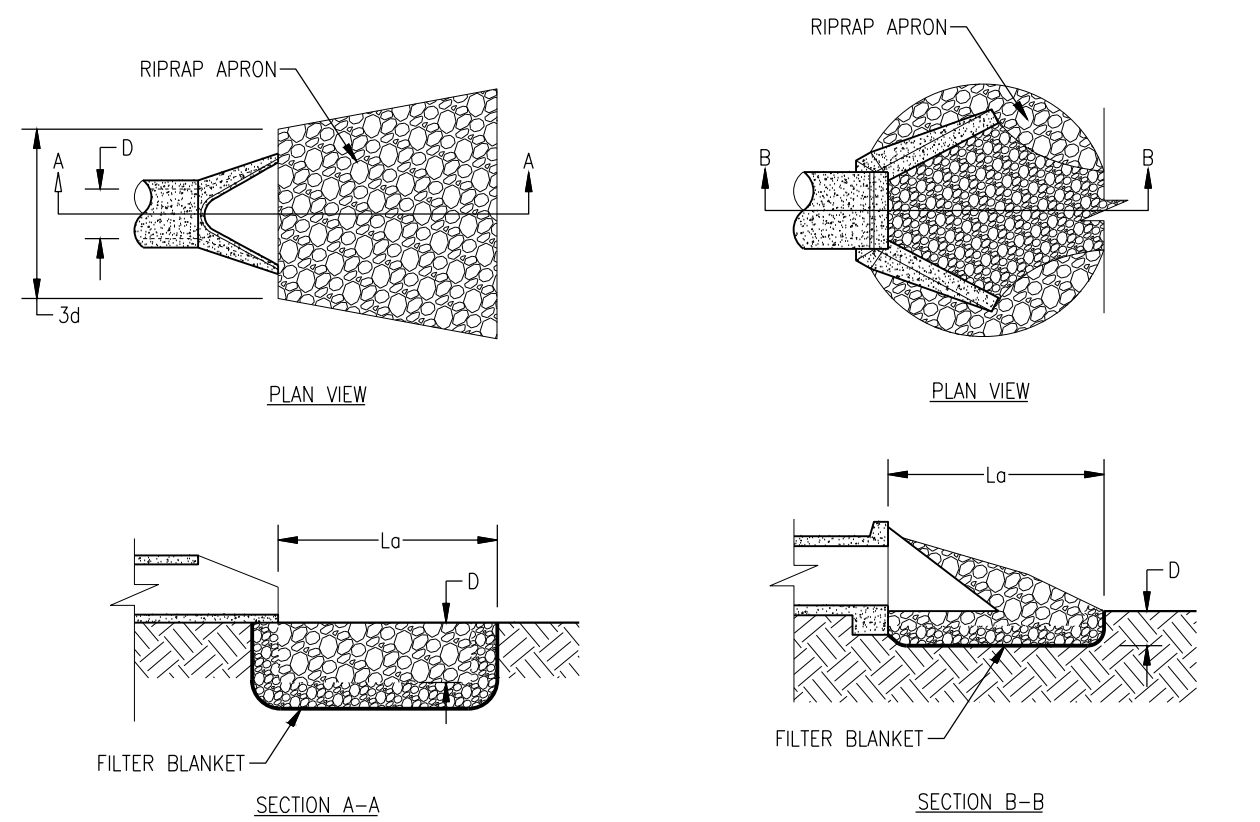
SHEET:

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Know what's below.
Call before you dig.

- NOTE:
1. L_o IS THE LENGTH OF THE RIPRAP APRON.
 2. $D = 1.5$ TIMES THE MAXIMUM STONE DIAMETER.
 3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
 4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.

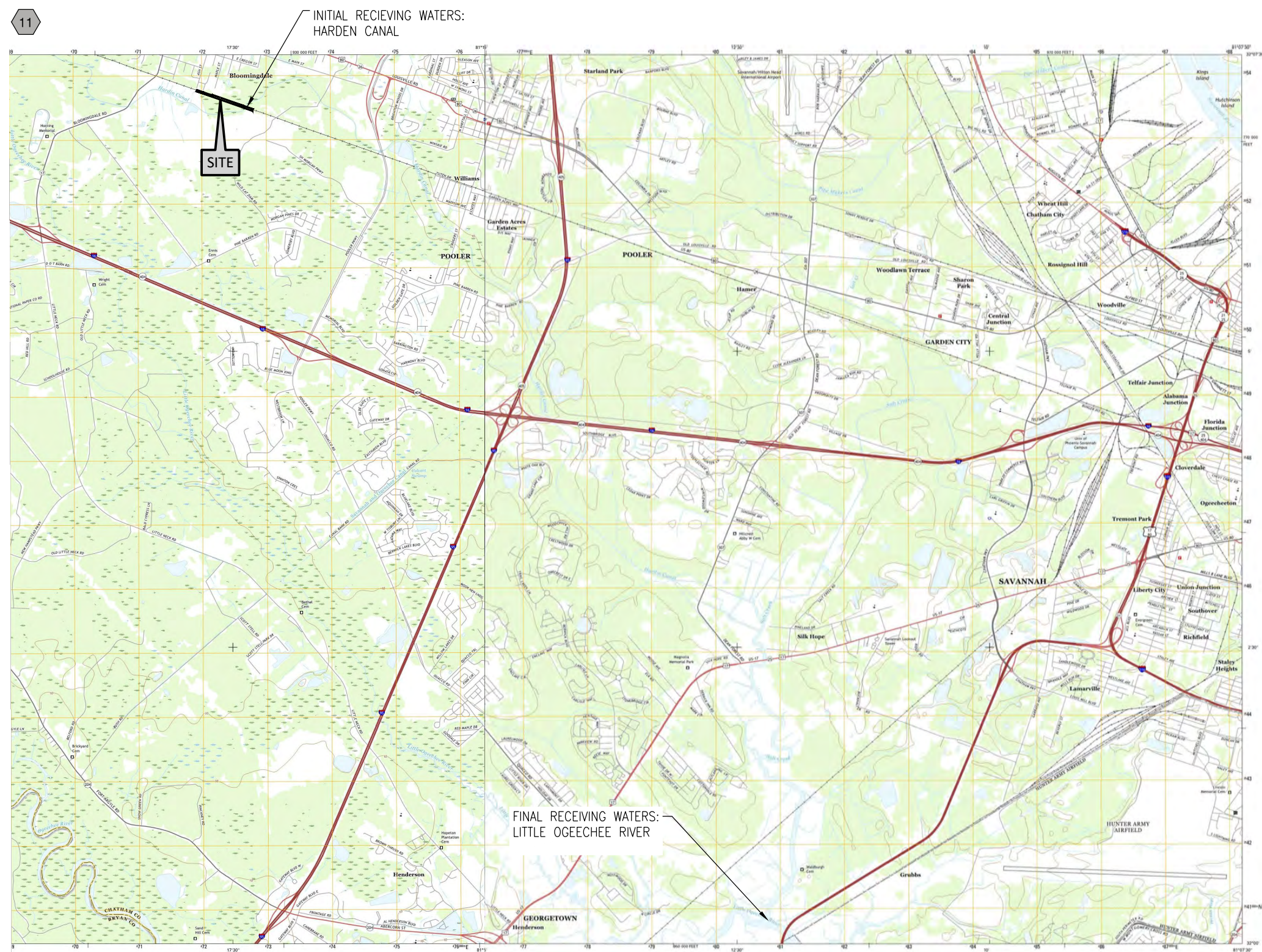


PIPE OUTLET TO FLAT AREA
NO WELL DEFINED CHANNEL

PIPE OUTLET TO WELL DEFINED CHANNEL

St RIPRAP OUTLET PROTECTION

NOT TO SCALE



NOT FOR CONSTRUCTION

REVISIONS:

CIVIL CONSTRUCTION PLANS FOR
SAVANNAH PORTS LOGISTECS CENTER -
GWRR SIDE LINE
LOCATED IN POOLER, GEORGIA
PREPARED FOR GENESEE & WYOMING RAILROAD SERVICES, INC

JOB NUMBER: 19-587
DATE: ??/??/??
DRAWN BY: MEL
CHECKED BY: WRG
SCALE: AS NOTED

EROSION CONTROL
DETAILS

SHEET:

CE4.1

CLEARING PHASE
PRIOR TO THE LAND DISTURBING CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE AREA SITE DEVELOPMENT INSPECTOR.

THE CONTRACTOR SHALL OBSERVE THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPING OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL QUANTITIES.

THE OWNER AGREES TO PROVIDE AND MAINTAIN OFF-STREET PARKING ON THE SUBJECT PROPERTY DURING THE ENTIRE CONSTRUCTION PERIOD.

NO STAGING AREAS, MATERIAL STORAGE, CONCRETE WASH OUT AREAS, OR DEBRIS BURN AND BURIAL HOLES SHALL BE LOCATED WITHIN 500 FEET OF DESIGNATED TREE PROTECTION AREAS.

A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.

PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE AND ALL STREAM BUFFERS SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.

PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY.

THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY.

1. THE CONSTRUCTION EXIT, CONSISTING OF A MINIMUM PAD SIZE OF 20 FEET BY 50 FEET WITH A MINIMUM 6" THICK STONE, SHALL BE PLACED AS SHOWN ON THE PLAN. THE STONE SIZE SHOULD CONSIST OF COURSE AGGREGATE BETWEEN 1-1/2" & 3-1/2" IN DIAMETER AND OVERLAP ON A GEOTEXTILE UNDERLINER. THE GEOTEXTILE UNDERLINER SHALL MEET THE REQUIREMENTS OF AASHTO M288-96, SECTION 7.5 SEPARATION REQUIREMENTS.

2. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE CLEARING PHASE EROSION CONTROL PLAN.

3. TYPE "NS" SILT FENCE SHOULD BE INSTALLED AT THE PERIMETER OF THE DISTURBED AREA AS SHOWN ON THE PLAN. THE SILT FENCE SHOULD BE PLACED IN ACCORDANCE WITH THE MANUAL FOR EROSION CONTROL IN GEORGIA, TABLE 6-20.2. THE SILT FENCE SHOULD BE KEPT ERECT AT ALL TIMES AND REPAIRED WHEN REQUESTED BY THE INSPECTOR OR THE PROJECT DESIGN PROFESSIONAL OF RECORD. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHED 1/2 THE HEIGHT OF THE BARRIER. THE PERIMETER SILT FENCE SHOULD BE INSPECTED DAILY FOR ANY FAILURES. ANY FAILURES OF SAIL FENCING SHOULD BE REPAIRED IMMEDIATELY.

4. INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL EXISTING STORM STRUCTURES AS SHOWN ON THE PLAN. SEE SEPARATE DETAILS FOR SPECIFICS ON TYPE OF INLET PROTECTION SPECIFIED.

5. STONE CHECK DAMS SHALL BE INSTALLED IN AREAS OF CONCENTRATED FLOWS AS SHOWN ON THE PLAN.

6. TREE PROTECTION FENCING SHOULD BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBANCE ACTIVITY AND MAINTAINED UNTIL FINAL LANDSCAPE IS INSTALLED. THE TREE PROTECTION FENCING SHOULD BE INSPECTED DAILY. ANY FAILURES OF SAIL FENCING SHOULD BE REPAIRED IMMEDIATELY.

GRADING PHASE
THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING THE PRELIMINARY GRADING PHASE OR CONSTRUCTION.

DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPING OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED. NOTE SUB PHASES SHOWN ON PLANS.

EARTHWORK OPERATIONS IN THE VICINITY OF STREAM BUFFERS SHALL BE CAREFULLY CONTROLLED TO AVOID DUMPING OR SLOUGHING INTO THE BUFFER AREAS.

SEDIMENT SHALL NOT BE WASHED INTO INLETS. IT SHALL BE REMOVED FROM THE SEDIMENT TRAPS AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLETS AGAIN.

EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.

THE CONTRACTOR SHALL FURNISH AND MAINTAIN NECESSARY BARRICADES WHILE ROADWAY FRONTAGE IMPROVEMENTS ARE BEING MADE.

TYPE " NS" SILT FENCE SHOULD BE INSTALLED AT THE TOE OF ALL FILL SLOPES 10 FEET OR GREATER IN HEIGHT. THE SILT FENCE SHOULD BE PLACED IN ACCORDANCE WITH THE MANUAL FOR EROSION CONTROL IN GEORGIA, TABLE 6-20.2. THE SILT FENCE SHALL BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED ON THE SLOPE. SILT FENCE SHALL BE REMOVED WHEN ACCUMULATION REACHES 1/2 THE HEIGHT OF THE BARRIER. ADDITIONALLY, DIVERSION DIKES SHALL BE CONSTRUCTED ALONG THE TOP OF ALL SAIL FILL SLOPES WITH THE USE OF TEMPORARY DOWN DRAINS TO CONTROL STORM WATER RUN OFF AS SHOWN ON THE PLANS. SEE SEPARATE DETAILS FOR ADDITIONAL INFORMATION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING BARRIERS AT THE TOE OF SLOPES UNDER CONSTRUCTION. THESE BARRIERS SHALL BE AS SHOWN IN THE PLANS. THESE BARRIERS MAY BE RELOCATED AND REUSED AFTER PERMANENT SLOPE STABILIZATION BECOMES ESTABLISHED. ANY DEBRIS LOCATED, ANY DEBRIS MATERIALS IN THE BARRIERS SHALL BE REPLACED. IN ADDITION, ALL DEBRIS AND SILT AT THE PREVIOUS LOCATION SHALL BE REMOVED.

CUT AND FILL SLOPES ARE NOT TO EXCEED " 3H:1V"

AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT DESIGN PROFESSIONAL APPROVES THE INITIAL EROSION CONTROL MEASURES. IF UNDESIRABLE CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION.

AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. AS CLEARING PERMITS THE CONTRACTOR SHALL CONSTRUCT INLET PROTECTION AS SHOWN ON THE CLEARING PHASE PLAN TO CONTROL EROSION AND STORM WATER RUN OFF.

THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION CONTROL INSTALLATION PLAN WILL INSPECT THE INSTALLATION OF THE BMPs WITHIN SEVEN DAYS AFTER INITIAL CONSTRUCTION ACTIVITY BEGINS.

THE CONTRACTOR CAN UTILIZE CLEARED TREES AS BARRIER BRUSH SEDIMENT CONTROL IN AREAS SHOWN ON THE PLAN WHERE INITIAL GRADING ACTIVITIES WILL NOT OCCUR.

NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION BY THE OWNER AND/OR THE ENGINEER OF RECORD.

ADDITIONAL SILT BARRIERS MUST BE PLACED AS SHOWN ON THE PLAN AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL TAKE PLACE UNTIL SILT BARRIER INSTALLATION AND INLET PROTECTION ARE CONSTRUCTED AS SHOWN ON THE CLEARING PHASE EROSION CONTROL PLAN.

ALL SILT FENCE MUST MEET THE REQUIREMENTS OF SECTION 1171, TEMPORARY SILT FENCE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA, STANDARD SPECIFICATIONS, 1983 EDITION.

ALL ITEMS IN THIS SECTION OF THE SPECIFICATIONS SHALL MEET THE REQUIREMENTS AS SET FORTH IN SECTION 161, 162, 163, AND 164 OF THE GEORGIA D.O.T. STANDARD SPECIFICATION, FOR ROADS AND BRIDGES.

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF LAND DISTURBANCE.

ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION.

SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1"-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED AS DIRECTED BY THE ON SITE INSPECTOR OR THE CIVIL ENGINEER.

FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES INCLUDING REPLACING OR REPAIRING ANY DAMAGED DEVICES DUE TO ANY CONSTRUCTION ACTIVITY BY OTHERS.

TYPE " NS" SILT FENCE SHALL BE PLACED AT THE TOE OF ALL DIRT STOCK PILE AREAS. SEE SEPARATE DETAILS FOR ADDITIONAL INFORMATION.

INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL STORM STRUCTURES AS THEY ARE CONSTRUCTED. SEE PLAN VIEW FOR SPECIFIC TYPE AND SEPARATE DETAILS FOR ADDITIONAL INFORMATION.

STONE CHECK DAMS SHALL BE INSTALLED IN AREAS OF CONCENTRATED FLOWS, AS SHOWN ON THE PLAN. SEE SEPARATE DETAIL FOR ADDITIONAL INFORMATION.

ALL DRAINAGE SWALES SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.

ALL GRADED AREAS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.

AFTER PRELIMINARY GRADING ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT INLET PROTECTIONS AS SHOWN ON PLAN. THE CONTRACTOR SHALL MAINTAIN THE INLET PROTECTIONS AS SHOWN UNTIL PERMANENT GRADING COVER IS ESTABLISHED.

FINAL PHASE
THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING THE FINAL EROSION CONTROL PHASE OF CONSTRUCTION.

SEDIMENT SHALL NOT BE WASHED INTO INLETS. IT SHALL BE REMOVED FROM THE SEDIMENT TRAPS AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLETS AGAIN.

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF LAND DISTURBANCE.

ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING.

THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE PONDS WHEN IT REACHES THE HALF WAY POINT ON THE RISER.

AFTER CURBING, GRADED AGGREGATE BASE, AND PAVEMENT HAS BEEN INSTALLED, ALL INLET SEDIMENT TRAPS ON SINGLE AND DOUBLE WING CATCH BASINS ALONG WITH ANY CURB INLETS SHALL BE REMOVED AND REPLACED WITH CURB FILTER PROTECTION. SEE SEPARATE DETAIL FOR ADDITIONAL INFORMATION.

ALL AREAS ADJACENT TO ROADWAY AND PARKING AREAS SHOULD HAVE A VEGETATIVE COVER APPLIED AS SOON AS FINAL GRADE IS ACHIEVED BEHIND CURBS.

SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OR THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1"-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED AS DIRECTED BY THE ON SITE INSPECTOR OR THE CIVIL ENGINEER.

FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES INCLUDING REPLACING OR REPAIRING ANY DAMAGED DEVICES DUE TO ANY CONSTRUCTION ACTIVITY BY OTHERS.

UPON COMPLETION OF THE PROJECT AND RECEIPT OF CERTIFICATION OF OCCUPANCY, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED ON PLANS.

PERMIT COVERAGE
THIS PLAN HAS BEEN PREPARED TO MEET THE REQUIREMENTS UNDER THE STATE OF GEORGIA, DEPARTMENT OR NATURAL RESOURCES, ENVIRONMENTAL PROTECTION DIVISION (EPD), FOR AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FOR INFRASTRUCTURE.

- AUTHORIZED DISCHARGES**
1. ALL DISCHARGES OF STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE ACRE, PART I.C.1.4.C
2. ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORM WATER EXCEPT AS PROVIDED IN PART 1.C.2 AND PART III.A.2 OF THE PERMIT. PART III.A.1
3. AUTHORIZED MIXED STORM WATER DISCHARGES: PART 1.C.2
- A. THE INDUSTRIAL SOURCE OF ACTIVITY OTHER THAN CONSTRUCTION IS LOCATED ON THE SAME SITE AS THE CONSTRUCTION ACTIVITY AND IS AN INTEGRAL PART OF THE CONSTRUCTION ACTIVITY.
- B. THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES ARE OCCURRING ARE IN COMPLIANCE WITH THE TERMS OF THIS PERMIT.
- C. STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE INDUSTRIAL ACTIVITY OTHER THAN CONSTRUCTION ARE OCCURRING ARE COVERED BY DIFFERENT NPDES GENERAL PERMIT OR INDIVIDUAL PERMIT AUTHORIZING SUCH DISCHARGES AND THE DISCHARGES ARE IN COMPLIANCE WITH A DIFFERENT NPDES PERMIT.
4. AUTHORIZED NON-STORMWATER DISCHARGES: PART III.A.2
- A. FIRE FIGHTING ACTIVITIES
- B. FIRE HYDRANT FLUSHING
- C. POTABLE WATER SOURCES INCLUDING WATER LINE FLUSHING
- D. IRRIGATION DRAINAGE
- E. AIR CONDITIONING CONDENSATE
- F. SPRINGS
- G. UNCONTAMINATED GROUND WATER
- H. FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS OR POLLUTANTS.

- LIMITATIONS ON COVERAGE PART 1.C.3**
- THE FOLLOWING STORM WATER DISCHARGES FROM CONSTRUCTION SITES ARE NOT AUTHORIZED BY THIS PERMIT:
- A. STORM WATER DISCHARGES ASSOCIATED WITH AN INDUSTRIAL ACTIVITY THAT ORIGINATES FROM THE SITE AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS UNDERGONE FINAL STABILIZATION.
- B. DISCHARGES THAT ARE MIXED WITH SOURCES OF NON-STORMWATER OTHER THAN DISCHARGES WHICH ARE IDENTIFIED IN PART 111.A.2 OF THIS PERMIT AND WHICH ARE IN COMPLIANCE WITH PART IV.D.6 (NON-STORMWATER DISCHARGES) OF THIS PERMIT.
- C. STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY THAT ARE SUBJECT TO AN EXISTING NPDES INDIVIDUAL OR GENERAL PERMIT. SUCH DISCHARGES MAY AUTHORIZED UNDER THIS PERMIT AFTER AN EXISTING PERMIT EXPIRES PROVIDED THE EXISTING PERMIT DID NOT ESTABLISH NUMERIC LIMITATIONS FOR SUCH DISCHARGES.
- D. STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT THE DIRECTOR (EPD) HAS DETERMINED TO BE OR MAY REASONABLY BE EXPECTED TO BE CONTRIBUTING TO A VIOLATION OF A WATER QUALITY STANDARD.
2. WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR IN EXCESS OF A REPORTING QUANTITY ESTABLISHED UNDER EITHER GEORGIA'S OIL OR HAZARDOUS MATERIAL SPILLS OR RELEASES ACT (O.C.G.A. 12-14-2, ET SEQ.), 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24-HOUR PERIOD, THE PERMITTEE IS REQUIRED TO NOTIFY THE FOLLOWING AGENCIES IN ACCORDANCE WITH THE ABOVE-MENTIONED REGULATIONS AS SOON AS HE HAS KNOWLEDGE OF THE DISCHARGE: EPD AT (404) 656-4883 OR (800) 241-4113, OR THE NATIONAL RESPONSE CENTER (NRC) AT (800) 424-8802. PART III.B.1
3. THIS PERMIT DOES NOT AUTHORIZE THE DISCHARGE OF HAZARDOUS SUBSTANCES OR OIL RESULTING FROM AN ONSITE SPILL. PART 111.B.2
- WATER QUALITY COMPLIANCE PART 1.C.4**
- ALL DISCHARGES AUTHORIZED BY THIS PERMIT SHALL NOT CAUSE VIOLATIONS OF GEORGIA'S IN-STREAM WATER QUALITY STANDARDS AS PROVIDED BY THE RULES AND REGULATIONS FOR WATER QUALITY CONTROL, CHAPTER 391-3-6-03.

DESIGN PROFESSIONAL'S CREDENTIALS:

ENGINEER'S NAME (PRINTED): TRAVIS BURKE, PE
GEORGIA PE NUMBER: 31215
GSWCC LEVEL II CERTIFICATION NUMBER: 8134

TENTATIVE ACTIVITY SCHEDULE						
CONSTRUCTION DATES: June 26, 2020 - Dec. 26,2020						
	MONTH 1	MONTH 2	MONTH 3	MONTH 4	MONTH 5	MONTH 6
CONSTRUCTION EXIT						
SILT FENCE AND OTHER ES&PC PRACTICES						
CLEARING AND GRUBBING						
GRADING / UTILITY						
DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)						
FINE GRADING						
RAILROAD CONSTRUCTION						
DISTURBED AREA STABILIZATION (WITH TEMPORARY VEGETATION)						
LANDSCAPE INSTALLATION						
MAINTENANCE OF ES&PC BMPs						
THE ESCAPE OF SEDIMENTS FROM THE SITE SHALL BE PREVENTED BY THE INSTELATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.						

- SAMPLING METHODOLOGY PART IV.D.5**
- ALL SAMPLING SHALL BE COLLECTED BY " GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 135 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED), THE GUIDANCE DOCUMENT TITLES " NPDES STORMWATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.
1. SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.
2. LARGE MOUTH, CLEAN AND RINSED GLASS OR PLASTIC JARS WITH A MINIMUM SAMPLE SIZE OF 200 MILLILITERS SHOULD BE USED FOR COLLECTING SAMPLES.
3. SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORMWATER OUTFALL CHANNEL(S).
4. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.
5. MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED.
6. IF MANUAL SAMPLING IS EMPLOYED, THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM, THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS, AND CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORMWATER CHANNEL.
7. THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN AT THE DISCHARGE FARTESTH UPSTREAM AT THE SITE BUT DOWNSTREAM OF ANY OTHER STORMWATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY, WHERE APPROPRIATE. SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.
8. THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN AT THE DISCHARGE FARTESTH DOWNSTREAM AT THE SITE BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY, WHERE APPROPRIATE. SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.
9. PERMITTEES DO NOT HAVE TO SAMPLE SHEET FLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT.
10. DILUTION OF SAMPLES IS NOT REQUIRED.
11. SAMPLES MAY BE ANALYZED USING A DIRECT READING, PROPERLY CALIBRATED TURBIDIMETER.
12. SAMPLES ARE NOT REQUIRED TO BE COOLED.
13. SAMPLES AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED THE PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E OF THE PERMIT.
14. TURBIDITY RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS " EXCEEDS 1000 NTU."

- SAMPLING FREQUENCY PART IV.D.5.D**
1. SAMPLING FREQUENCY SHALL OCCUR IN ACCORDANCE WITH PART IV.D.5.D OF THE PERMIT.
2. FOR A QUALIFYING EVENT, SAMPLES MUST BE TAKEN WITHIN FORTY-FIVE (45) MINUTES OF:
- A. THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE QUALIFYING EVENT, IF THE STORMWATER DISCHARGE TO A MONITORED RECEIVING WATER OR FROM A MONITORED OUTFALL HAS BEGUN PRIOR TO THE ACCUMULATION.
- B. THE BEGINNING OF ANY STORMWATER DISCHARGE TO A MONITORED RECEIVING WATER OR FROM A MONITORED OUTFALL, IF THE DISCHARGE BEGINS AFTER THE ACCUMULATION OF THE MINIMUM AMOUNT OF RAINFALL FOR THE QUALIFYING EVENT.
- C. WHERE MANUAL AND AUTOMATIC SAMPLING ARE NOT POSSIBLE (AS DEFINES IN THE PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORMWATER DISCHARGE.
- D. NORMAL BUSINESS HOURS, AS DEFINES BY THE PERMIT, ARE MONDAY THROUGH FRIDAY, 8:00 AM TO 5:00 PM AND SATURDAY 8:00AM TO 5:00 PM WHEN CONSTRUCTION ACTIVITY IS BEING CONDUCTED BY THE PRIMARY PERMITTEE.
3. SAMPLING SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM:
- A. THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS THAT OCCURS AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE REPRESENTATIVE SAMPLING LOCATION.
- B. THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING DURING NORMAL BUSINESS HOURS THAT OCCURS EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADINGS OPERATIONS HAVE BEEN COMPLETED IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE REPRESENTATIVE SAMPLING LOCATION.
4. IF BMPs IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING STREAM ARE NOT PROPERTY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN 3 BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINES THAT BMPs ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED.
5. THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF NO. 3.A AND NO. 3.B BY COLLECTING TURBIDITY SAMPLES FROM RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR MONITORING AT ANY TIME OF THE DAY OR WEEK SUPERVISION."

15 "NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25 FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS."

GEORGIA UNIFORM CODING SYSTEM FOR SOIL AND SEDIMENT CONTROL PRACTICES				
STRUCTURAL PRACTICES				
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECK DAM			A SMALL TEMPORARY BARRIER OR DAM CONSTRUCTED ACROSS A SWALE, DRAINAGE DITCH OR AREA OF CONCENTRATED FLOW.
Ch	CHANNEL STABILIZATION			IMPROVING, CONSTRUCTING OR STABILIZING AN OPEN CHANNEL, EXISTING STREAM, OR DITCH.
Co	CONSTRUCTION EXIT			A CRUSHED STONE PAD LOCATED AT THE CONSTRUCTION SITE EXIT TO PROVIDE A PLACE FOR REMOVING MUD FROM TIRES THEREBY PROTECTING PUBLIC STREETS.
Cr	CONSTRUCTION ROAD STABILIZATION			A TRAVELWAY CONSTRUCTED AS PART OF A CONSTRUCTION PLAN INCLUDING ACCESS READS, SUBDIVISION ROADS, PARKING AREAS, AND OTHER ON-SITE VEHICLE TRANSPORTATION ROUTES.
Dc	STREAM DIVERSION CHANNEL			A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT STRUCTURE IS BEING CONSTRUCTED.
Di	DIVERSION			AN EARTH CHANNEL OR DIKE LOCATED ABOVE, BELOW, OR ACROSS A SLOPE TO DIVERT RUNOFF. THIS MAY BE A TEMPORARY OR PERMANENT STRUCTURE.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE			A FLEXIBLE CONDUIT OF HEAVY-DUTY FABRIC OR OTHER MATERIAL DESIGNED TO SAFELY CONDUCT SURFACE RUNOFF DOWN A SLOPE. THIS IS TEMPORARY AND INEXPENSIVE.
Dn2	PERMANENT DOWNDRAIN STRUCTURE			A PAVED CHUTE, PIPE, SECTIONAL CONDUIT OR SIMILAR MATERIAL DESIGNED TO SAFELY CONDUCT SURFACE RUNOFF DOWN A SLOPE.
Fr	FILTER RING			A TEMPORARY STONE BARRIER CONSTRUCTED AT STORM DRAIN INLETS AND POND OUTLETS.
Ga	GABIONS			ROCK FILTER BASKETS WHICH ARE HAND-PLACED INTO POSITION FORMING SOIL STABILIZING STRUCTURES.
Gr	GRADE STABILIZATION STRUCTURE			PERMANENT STRUCTURES INSTALLED TO PROTECT NATURAL OR ARTIFICIAL CHANNELS OR WATERWAYS WHERE OTHERWISE THE SLOPE WOULD BE SUFFICIENT FOR THE RUNNING WATER TO FORM GULLIES.
Lv	LEVEL SPREADER			A STRUCTURE TO CONVERT CONCENTRATED FLOW OF WATER INTO LESS EROSION SHEET FLOW. THIS SHOULD BE CONSTRUCTED ONLY ON UNDISTURBED SOIL.
Rd	ROCK FILTER DAM			A PERMANENT OR TEMPORARY STONE FILTER DAM INSTALLED ACROSS SMALL STREAMS OR DRAINAGEWAYS.
Re	RETAINING WALL			A WALL INSTALLED TO STABILIZE CUT AND FILL SLOPES WHERE MAXIMUM PERMISSIBLE SLOPES ARE NOT OBTAINABLE. EACH SITUATION WILL REQUIRE SPECIAL DESIGN.
Rt	RETROFITTING			A DEVICE OR STRUCTURE PLACED IN FRONT OF A PERMANENT STORMWATER DETENTION FLOW OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEDIMENT FILTER.
Sd1	SEDIMENT BARRIER			A BARRIER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. IT MAY BE SANDBAGS, BALES OF STRAW OR HAY, BRUSH, LOGS AND POLES, GRAVEL, OR A SEDIMENT FENCE.
Sd2	INLET SEDIMENT TRAP			AN IMPOUNDING AREA CREATED BY EXCAVATING AROUND A STORM DRAIN DROP INLET. THE EXCAVATED AREA WILL BE FILLED AND STABILIZED ON FILLED AND STABILIZED ON COMPLETION OF CONSTRUCTION ACTIVITIES.
Sd3	TEMPORARY SEDIMENT BASIN			A BASIN CREATED BY EXCAVATION OR A DAM ACROSS A WATERWAY. THE SURFACE WATER RUNOFF IS TEMPORARILY STORED ALLOWING THE BULK OF THE SEDIMENT TO DROP OUT.
Sd4	TEMPORARY SEDIMENT TRAP			A SMALL TEMPORARY POND THAT DRAINS A DISTURBED AREA SO THAT SEDIMENT CAN SETTLE OUT. THE PRINCIPLE FEATURE DISTINGUISHING A TEMPORARY SEDIMENT TRAP FROM A TEMPORARY SEDIMENT BASIN IS THE LACK OF A PIPE OF RISER.
Sk	FLOATING SURFACE SKIMMER			A BUOYANT DEVICE THAT RELEASES/DRAINS WATER FROM THE SURFACE OF SEDIMENT PONES, TRAPS OR BASINS AT A CONTROLLED RATE OF FLOW.
SpB	SEEP BERM			A LEAK CONTROL DEVICE CONSTRUCTED AS A DIVERSION PERPENDICULAR TO THE DIRECTION OF THE RUNOFF TO ENHANCE DISPERSION AND MITIGATION OF RUNOFF, WHILE CREATING MULTIPLE SEDIMENTATION CHAMBERS WITH THE EMPLOYMENT OF INTERMEDIATE DIKES.
Sr	TEMPORARY STREAM CROSSING			A TEMPORARY BRIDGE OR CULVERT-TYPE STRUCTURE PROTECTING A STREAM OR WATER COURSE FROM DAMAGE BY CROSSING CONSTRUCTION EQUIPMENT.
Sl	STORM DRAIN OUTLET PROTECTION			A PAVED OR SHORT SECTION OF RIPRAP CHANNEL AT THE OUTLET OF A STORM DRAIN SYSTEM PREVENTING EROSION FROM THE CONCENTRATED RUNOFF.
Su	SURFACE ROUGHENING			A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS ON A CONTOUR OR SLOPES LEFT IN A ROUGHENED CONDITION AFTER GRADING.
Tp	TOPSOILING			THE PRACTICE OF STRIPPING OFF THE MORE FERTILE SOIL, STORING IT, THEN SPREADING IT OVER THE DISTURBED AREA AFTER COMPLETION OF CONSTRUCTION ACTIVITIES.
Wt	VEGETATED WATERWAY OR STORMWATER CONDUITANCE CHANNEL			PAVED OR VEGETATIVE WATER OUTLETS FOR DIVERSIONS, TERRACES, BERMS, DIKES OR SIMILAR STRUCTURES.
VEGETATIVE MEASURES				
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE			A STRIP OF UNDISTURBED ORIGINAL VEGETATION, ENHANCED OR RESTORED EXISTING VEGETATION OR THE REESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR BORDERING STREAMS.
Cs	COASTAL DUNE STABILIZATION (WITH MULCHING ONLY)			PLANTING VEGETATION ON DUNES THAT ARE DENIED, ARTIFICIALLY CONSTRUCTED, OR RE-NOURISHED.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)			ESTABLISHING TEMPORARY PROTECTION FOR DISTURBED AREAS WHERE SEEDING MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDING COVER.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)			ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDING ON DISTURBED AREAS.
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)			ESTABLISHING PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD, OR LEGUMES ON DISTURBED AREAS.
Ds4	DISTURBED AREA STABILIZATION (WITH SODDING)			A PERMANENT VEGETATIVE COVER USING SODS ON HIGHLY ERODIBLE OR CRITICALLY ERODED LANDS.
Du	DUST CONTROL ON DISTURBED AREAS			CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITE, ROADWAYS AND SIMILAR SITES.
Mb	EROSION CONTROL MATTING AND BLANKETS			THE INSTALLATION OF A PROTECTIVE COVERING (BLANKET) OR SOIL STABILIZATION MAT ON A PREPARED PLANTING AREA OF A STEEP SLOPE, CHANNEL, OR SHORELINE.
Pm	POLYACRYLAMIDE (PAM)			THE LAND APPLICATION OF PRODUCT CONTAINING ANIONIC POLYACRYLAMIDE (PAM) AS TEMPORARY SOIL BINDING AGENTS TO REDUCE SOIL EROSION.
Sb	STREAM BANK STABILIZATION (WITH PERMANENT VEGETATION)			THE USE OF READILY AVAILABLE NATIVE PLANT MATERIALS TO MAINTAIN AND ENHANCE STREAM BANKS, OR TO PREVENT, OR RESTORE AND REPAIR SMALL STREAM BANK EROSION PROBLEMS.
Tb	TACKIFIERS AND BINDERS			SUBSTANCE USED TO ANCHOR STRAW OR HAY MULCH BY CAUSING THE ORGANIC MATERIAL TO BIND TOGETHER.

EXX ES&PC PLAN CHECKLIST NO.

NRCS ORIGINAL SUBMITTAL:



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REVISIONS:

CIVIL CONSTRUCTION PLANS FOR
SAVANNAH PORTS LOGISTICS CENTER -
GWR SIDE LINE
LOCATED IN POOLER, GEORGIA
PREPARED FOR GENESEE & WYOMING RAILROAD SERVICES, INC

JOB NUMBER: 19-587
DATE: ??/??/??
DRAWN BY: MEL
CHECKED BY: WRG
SCALE: AS NOTED

NPDES PERMIT
NOTES

SHEET:

CE5.0

