Public Notice

U.S. Army Corps of Engineers, Norfolk District

February 19, 2016

CENAO-WR-R
NAO-2015-2095

FEDERAL PUBLIC NOTICE

The District Commander has received a joint application for Federal and State permits as described below:

APPLICANT

CSX Transportation, Inc.

WATERWAY AND LOCATION OF THE PROPOSED WORK: The project is located in the Buckhorn Swamp a tributary to Meherrin River, along an existing rail line parallel to Hugo Road in Branchville, Southampton County, Virginia.

PROPOSED WORK AND PURPOSE: The applicant proposes to extend an existing siding track within the current railroad right-of-way between mileposts SA 55.3 and SA 59.7 in Branchville, Virginia. The work will involve widening the existing rail bed to accommodate the second track where two tracks do not already exist. This project will impact approximately 0.15 acres of palustrine emergent wetlands, and 0.94 acres of palustrine forested wetlands. The applicant has avoided and minimized wetland impacts by altering the alignment of the second track. Remaining unavoidable impacts will be compensated for through the purchase of 2.03 wetland credits from a mitigation bank. The purpose of this project is to improve rail capacity and fluidity of rail service along this coordidor.

In addition to the required Department of the Army permit, the applicant must obtain a Virginia Water Protection Permit from the Virginia Department of Environmental Quality (DEQ) assuring that applicable laws and regulations pertaining to water quality are not violated and any local authorizations. Project drawings are attached.

AUTHORITY: Permits are required pursuant to Sections 401 and 404 of the Clean Water Act (Public Law 95-217) and Title 62.1 of the Code of Virginia.

FEDERAL EVALUATION OF APPLICATION: 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. The decision will reflect the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected from the proposal must be balanced against its reasonably foreseeable detriments. All of the proposal's relevant factors will be considered, including conservation, economics, aesthetics, general environmental

concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use classification, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people. The Environmental Protection Agency's "Guidelines for Specification of Disposal Sites for Dredged or Fill Material" will also be applied (Section 404(b)(1) of the Clean Water Act).

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the direct, indirect, and cumulative impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers 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. Anyone may request a public hearing to consider this permit application by writing to the District Commander within 30 days of the date of this notice, stating specific reasons for holding the public hearing. The District Commander will then decide if a hearing should be held.

Preliminary review indicates that: (1) no environmental impact statement will be required; (2) after conducting the NAO ESA Project Review Process, there may be an effect to listed species under the Endangered Species Act of 1973 and the Official Species List and Species Conclusion Table is attached for review and comment by Fish and Wildlife Service; and (3) no known properties eligible for inclusion or included in the National Register of Historic Places are in or near the permit area, or would likely be affected by the proposal. Additional information might change any of these findings.

For compliance with the Coastal Zone Management Act of 1972, as amended for projects located in Tidewater, the applicant must certify that federally licensed or permitted activities affecting Virginia's coastal uses or resources will be conducted in a manner consistent with the Virginia Coastal Zone Management Program (VCP) and obtain concurrence from the Department of Environmental Quality (DEQ), Office of Environmental Impact Review (OEIR). We have not received a certification from the applicant prior to publication of this public notice. It is the applicant's responsibility to submit a consistency certification to the Office of Environmental Impact Review for concurrence or objection and proof of concurrence must be submitted to the Corps prior to final permit issuance. A template federal consistency certification can be found here: http://www.deq.virginia.gov/Programs/EnvironmentalImpactReview/FederalConsistencyReviews.aspx#cert . For more information or to obtain a list of the enforceable policies of the VCP, contact the Department of Environmental Quality, Office of Environmental Impact Review at (804) 698-4330 or e-mail: bettina.sullivan@deq.virginia.gov or john.fisher@deq.virginia.gov.

COMMENT PERIOD: Comments on this project should be made in writing, addressed to the Norfolk District, Corps of Engineers (ATTN: CENAO-WR-R), 803 Front Street, Norfolk, Virginia 23510-1096, and should be received by the close of business on March 21, 2016.

PRIVACY & CONFIDENTIALITY: Comments and information, including the identity of the submitter, submitted in response to this Public Notice may be disclosed, reproduced, and distributed at the discretion of the U.S. Army Corps of Engineers. Information that is submitted in connection with this Public Notice cannot be maintained as confidential by the U.S. Army Corps of Engineers. Submissions should not include any information that the submitter seeks to preserve as confidential.

If you have any questions about this project or the permit process, contact Daniel Krenz at (757) 201-7029 or daniel.a.krenz@usace.army.mil.

Attachment: Drawings
Species Conclusion Table

Species Conclusions Table

Project Manager: Dan Krenz	Project Name: CSXT Branchville Siding Extension
Date: February 1, 2016	Project Number: NAO-2015-2095 / 15-V1696

Project Description: The applicant proposes to extend an existing siding track within the current railroad right-of-way between mileposts SA 55.3 and SA 59.7 in Branchville, Virginia. The work will involve widening the existing rail bed to accommodate the second track where two tracks do not already exist. This project will impact approximately 0.15 acres of palustrine emergent wetlands, and 0.94 acres of palustrine forested wetlands.

Species Under the Jurisdiction of FWS:

Species/Resource Name	Conclusion	ESA Section 7 / Eagle Act Determination	Species Info / Habitat Description	Notes / Determination
Northern long-eared bat (Myotis septentrionalis)	No suitable habitat present	No effect	"Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. They typically use large caves or mines with large passages and entrances; constant temperatures; and high humidity with no air currents. Specific areas where they hibernate have very high humidity, so much so that droplets of water are often seen on their fur. Within hibernacula, surveyors find them in small crevices or cracks, often with only the nose and ears visible. During summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. Males and non-reproductive females may also roost in cooler places, like caves and mines. This bat seems opportunistic in selecting roosts, using tree species based on suitability to retain bark or provide cavities or crevices. It has also been found, rarely, roosting in structures like barns and sheds."	There are no known roost trees or hibernacula within the project area. Additional information from the Service may change this determination.

Species Conclusions Table

Date: February 1, 2016	Project Number: NAO-2015-2095 / 15-V1696

Red-cockaded woodpecker (Picoides borealis)	No suitable habitat present	No effect	"The red-cockaded woodpecker occurs in open, mature pine forests of the southeastern United States. It presently is found in the coastal states from Texas to Virginia and in the interior states of Oklahoma, Arkansas, Tennessee, and Kentucky. This woodpecker is currently known from only one county in Virginia." "This woodpecker lives in groups of two to six birds called a clan. These clans maintain year-round territories around their nesting and roost trees. The group of cavity trees where the red-cockaded roosts and nests is called a colony. Each colony is used by only one clan and each clan has only one breeding pair. Other birds in the clan are either offspring or helpers. The helpers are usually males and assist in incubating eggs, feeding young, making new cavities, and defending the clan's territory. Cavities are made in live pine trees and each bird roosts in its own cavity. Cavity trees in Virginia are usually in loblolly pines. The red-cockaded selects mature loblolly trees that are 70 to 90 years of age. The roosting chamber is in the heartwood of the tree which is very hard. However, many cavities are found in trees that are infected by a heart rot fungus that weakens the heartwood."	Forest is dominated by mixed hardwoods and does not generally support pine habitats ideal for roosting.
Eagles (Haliaeetus leucocephalus)				

Species Conclusions Table

Date: February 1, 2016	Project Number: NAO-2015-2095 / 15-V1696

Eagle Nests	Unlikely to disturb nesting bald eagles	No Eagle Act permit required		
Eagle Concentration Areas	Does not intersect with bald eagle concentration area	No Eagle Act permit required		
Critical Habitat				
N/A				
Other (species not listed above)				

Species Under the Jurisdiction of NOAA/NMFS				
Essential Fish Habitat	No habitat present	No Effect		
Anadromous Fish Use Area	No habitat present	No Effect		
Subaquatic Vegetation	No habitat present	No Effect		
HAPC Sandbar Shark	No habitat present	No Effect		
Atlantic Sturgeon	No habitat present	No Effect		

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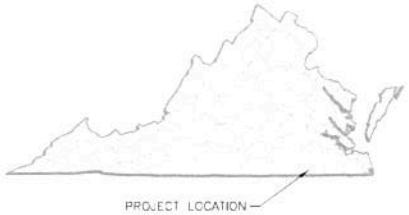
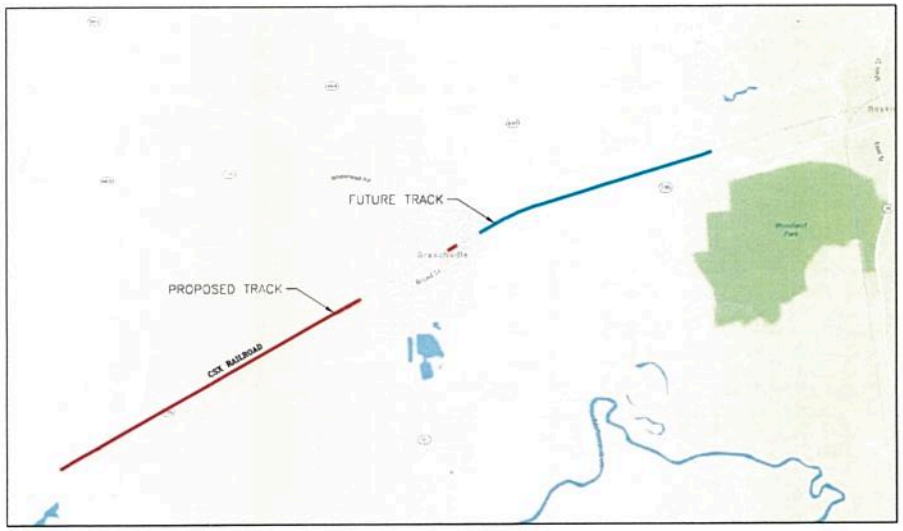
USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK

How tomorrow moves CSX

CSX TRANSPORTATION



BRANCHVILLE SIDING
BRANCHVILLE, SOUTHHAMPTON COUNTY, VIRGINIA
MP SA 55.3 TO SA 59.7



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GRADING AND EROSION CONTROL PLANS

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PHONE: (904) 245-4500
FAX: (904) 245-5810

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA
How tomorrow moves CSX

REVISIONS			
MARK	DATE	DESCRIPTION	

PROJ NO: P304150044
SCALE: N.T.S.
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGB

SHEET TITLE:
COVER SHEET

SHEET NO.
GI-001
SHEET 1 OF 28

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

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INDEX OF SHEETS

SHEET NO.	SHEET NAME	DESCRIPTION
		GENERAL
1	GI-001	COVER SHEET
2	GI-002	INDEX OF SHEETS
3	GI-003	GENERAL NOTES
4	GI-004	ABBREVIATIONS
5	GI-005	LEGENDS AND SYMBOLS
6	GI-006	AREA KEYPLAN
		GRADING - DRAINAGE - EROSION CONTROL PLANS
7	CE-001	EROSION CONTROL GENERAL NOTES
8 TO 26	CE-101 TO CE-119	GRADING - DRAINAGE - EROSION AND SEDIMENT CONTROL PLAN SHEETS
27 TO 28	CE-201 TO CE-202	GRADING - DRAINAGE - EROSION AND SEDIMENT CONTROL DETAILS

TranSystems
4500 BALLBISLEY ROAD
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JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6500
FAX: (904) 245-6510

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves [CSX]

REVISIONS

MARK	DATE	DESCRIPTION

PROJ NO: P304150044
SCALE: N.T.S.
DATE: 8/28/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGB

SHEET TITLE:
INDEX OF SHEETS

SHEET NO.
GI-002
SHEET 2 OF 28

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GENERAL NOTES

1. IN PERFORMING THE WORK, UNDER THIS AGREEMENT, THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH ALL FEDERAL, STATE AND LOCAL STATUTES, ORDINANCES AND DIRECTIVES WITH RESPECT TO THE ELIMINATION OF EXCESSIVE NOISE AND POLLUTION OF AIR AND WATER DUE TO THEIR CONSTRUCTION EQUIPMENT AND OTHER OPERATIONS. ATTENTION SHALL BE GIVEN TO REDUCE THE NOISE OF HEAVY CONSTRUCTION EQUIPMENT AND TO THE CONTROL OF DUST, SMOKE AND FUMES FROM CONSTRUCTION EQUIPMENT AND OTHER OPERATIONS ON THE WORK SITE, AND THE DIRT AND NOISE CREATED BY HEAVY TRUCK OPERATION AREAS AND ADJACENT EXISTING PAVED AREAS. THESE AREAS SHALL BE KEPT FREE FROM DEBRIS AT ALL TIMES. THE DISCHARGE OF OILY, GREASY OR CHEMICAL WASTES INTO WATERWAYS AND TRIBUTARY SEWERS WILL NOT BE PERMITTED.
2. THIS AGREEMENT IS MADE UP OF SEVERAL PARTS. TO ESTABLISH AN ORDER OF PRECEDENCE, THE AGREEMENT WITH THE CONTRACTOR WILL HOLD OVER ALL OTHER PARTS OF THE CONSTRUCTION DOCUMENTS, NOT WITHSTANDING PERMITTING REQUIREMENTS AND GOVERNMENTAL AGENCY REGULATIONS. THE PLAN NOTES AND DETAILS WILL HOLD OVER PLAN DRAWING INFORMATION AND THE PLANS WILL HOLD OVER THE PROJECT SPECIFICATIONS, THE CSX STANDARD SPECIFICATIONS AND THE VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (2012 EDITION). OTHER FEDERAL, STATE AND LOCAL REGULATIONS AND REQUIREMENTS ARE TO BE INCORPORATED IN THE CONSTRUCTION, WHEN IN CONFLICT WITH THE PLANS OR SPECIFICATIONS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN.
3. THE OWNER REQUIRES THAT ALL CONTRACTORS BE QUALIFIED FOR THE WORK THEY ARE PERFORMING. IT IS PRESUMED THAT CONTRACTORS PERFORMING WORK ARE EXPERIENCED AND KNOWLEDGEABLE ABOUT THE WORK (INCLUDING GOVERNMENTAL REGULATIONS), AND THAT QUALITY PRODUCTS, APPROPRIATE FOR THE APPLICATION, WILL BE USED AND THAT ALL WORK WILL BE INSTALLED IN A PROFESSIONAL WORKMANLIKE MANNER. THE PLANS SHOW LOCATIONS, RELATIONSHIPS, MAGNITUDE AND GENERAL SPECIFICATIONS OF THE WORK REQUIRED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT ALL COMPONENTS INSTALLED FUNCTION PROPERLY AND THAT ALL HARDWARE, FITTINGS, CABLING, CONNECTIONS, SUPPLY LINES, ETC. ARE SUPPLIED AND PROPERLY FITTED, WHETHER DETAILED ON THE PLANS OR NOT. THE CONTRACTOR SHALL ASSURE THAT ALL COMPONENTS AND WORK ARE INSTALLED, COMPLETE IN PLACE, AND OPERATIONAL TO THE SATISFACTION OF THE CSX CORPORATION.
4. ALL WORKERS AND VISITORS TO THE SITE SHALL BE REQUIRED TO BE ROADWAY WORKER SAFETY TRAINED IN ACCORDING WITH CSX REGULATIONS, AND SHALL HAVE COMPLETED THE SITE SPECIAL SAFETY COURSE. THE ONLY EXCEPTIONS SHALL BE MATERIAL DELIVERY, TRUCK DRIVERS, BUT ONLY WHEN THEY ARE DIRECTED IN AND OUT OF THE SITE BY A TRAINED WORKER. TRUCK DRIVERS SHALL BE GROUND GUIDED WHEN BACKING OUT OF THE PROJECT SITE.
5. THE CONTRACTOR SHALL PROVIDE FULL TIME SUPERVISION OF IT'S WORK WITH EXPERIENCED PERSONNEL. EACH CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS, METHODS AND SAFETY OF IT'S CONSTRUCTION OPERATIONS.
6. THE CONTRACTOR SHALL SWEEP AND WASH DOWN ALL HAUL ROUTES OVER CITY/STATE/COUNTY ROADS TO/FROM THE CONSTRUCTION AREA, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY PERMITS REQUIRED FOR THE WORK. THE CONTRACTOR SHALL PROVIDE WHATEVER MEANS NECESSARY TO ALLEVIATE OR PREVENT DUST NUISANCE AT ALL TIMES. A SWEEPER SHALL BE PROVIDED AS NECESSARY TO KEEP STREETS CLEAN. THE COST OF THIS ITEM IS INCIDENTAL TO THE PROJECT.
7. ALL MAINTENANCE OF TRAFFIC REQUIRED SHALL CONFORM TO STATE, COUNTY, AND TOWNSHIP STANDARDS AND BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
9. THE CONTRACTOR SHALL INSPECT THE SITE OF THE PROJECT AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS, TRAFFIC, OTHER ITEMS THAT AFFECT THE CONTRACT AND THE DETAILED REQUIREMENTS OF CONSTRUCTION.
10. ALL CATCH BASINS, MANHOLES, POLLUTION CONTROL BASINS, AND SIMILAR STRUCTURES NEWLY CONSTRUCTED, ADJUSTED OR RECONSTRUCTED UNDER THE CONTRACT SHALL BE CLEANED OF ANY ACCUMULATION OF SILT, DEBRIS OR ANY FOREIGN MATTER OF ANY KIND AND SHALL BE FREE OF SUCH ACCUMULATION AT THE TIME OF FINAL INSPECTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THIS CONTRACT.
11. LOCATION OF CONSTRUCTION STAGING AREA IS TO BE COORDINATED WITH THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION.
12. ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT WORK AREAS FROM A LOCATION DESIGNATED BY THE OWNER'S REPRESENTATIVE OR AS SHOWN ON THE PLANS.

GEOMETRIC CONTROL AND EXISTING CONDITIONS

1. EXISTING CONDITIONS WERE TAKEN FROM GROUND AND/OR AERIAL SURVEYS. INFORMATION SHOWN CONCERNING FEATURES AND UTILITES ARE NOT GUARANTEED ALL INCLUSIVE OR CORRECT. THE LOCATION, MATERIAL AND DIMENSIONS OF EXISTING FACILITIES AND OBSTRUCTIONS ARE BASED UPON AVAILABLE RECORDS AND ARE SHOWN ON THE PLANS STRICTLY AS AN AID TO THE CONTRACTOR, BUT MUST NOT BE CONSTRUED AS BEING ACCURATE, CORRECT OR COMPLETE. IT SHALL BE NOTED THAT EXISTING ELECTRIC LINES AND APPURTENANCES ARE NOT SHOWN HEREON DUE TO UTILITY COMPANY RESTRICTIONS OF RELEASING SUCH INFORMATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH AND FAMILIARIZE THEMSELVES WITH ALL EXISTING UTILITIES WHETHER SHOWN ON THE PLANS OR NOT.

RAILROAD OPERATIONS

THE CONTRACTOR SHALL NOT PERFORM ANY WORK ON ACTIVE CSX TRACKS, UTILITIES OR FACILITIES, UNLESS DIRECTED IN WRITING BY THE CSX REPRESENTATIVE.

THE CONTRACTOR'S WORK SHALL NOT INTERRUPT THE OPERATIONS OF THE RAILROAD WITHOUT PRIOR APPROVAL OF THE CSX REPRESENTATIVE.

THE CONTRACTOR SHALL NOT ENTER ONTO CSX RIGHT-OF-WAY WITHOUT PERMISSION OF THE CSX FLAGMAN ON-DUTY.

SITE ACCESS AND MAINTENANCE OF EXISTING ROADWAYS

THE CONTRACTOR MUST SUBMIT TO CSX AND THE APPROPRIATE LOCAL AGENCIES A PLAN THAT SHOWS THE PROPOSED HAUL ROUTES FOR THE CONSTRUCTION OF THE FACILITY, AND OBTAIN ANY NECESSARY APPROVALS OR PERMITS FROM THE LOCAL ENTITY WITH JURISDICTION OVER THE ROADS PROPOSED TO BE USED. AT ALL TIMES THE CONTRACTOR SHALL RESPECT POSTED LOAD LIMITS AND SPEED LIMITS OF ALL PUBLIC ROADWAYS.

DUE TO THE AMOUNT OF CONSTRUCTION TRAFFIC ANTICIPATED ON THE DESIGNATED HAUL ROUTE, THE CONTRACTOR MUST MAINTAIN THE ROADWAYS (EXCEPT SNOW PLOWING) FOR THE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL PRESUME THAT IT WILL HAVE TO PATCH AND REPAIR A PORTION OF THE DESIGNATED HAUL ROUTE AT THE END OF THE PROJECT AND AT OTHER INTERMEDIATE TIMES AS NECESSARY TO MAINTAIN A DRIVABLE SURFACE.

STANDARD SPECIFICATIONS

THE FOLLOWING REQUIREMENTS, INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL MATERIALS AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THESE PLANS, UNLESS OTHERWISE NOTED.

TECHNICAL PROJECT SPECIFICATIONS DATED JUNE 15, 2015.

GENERAL UTILITIES

1. THE CONTRACTOR SHALL GIVE A 2-WORKING DAYS NOTICE TO THE STATE ONE CALL BY CALLING 811 OR (800) 552-7001, 2-WORKING DAYS NOTICE SHALL ALSO BE GIVEN TO THE OWNERS OF UNDERGROUND UTILITIES SHOWN ON THE PLANS WHO ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE.
2. ALL UNSUITABLE MATERIALS RESULTING FROM DEMOLITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OFF THE SITE. STOCKPILING OF THESE MATERIALS MAY BE ALLOWED ON THE PROPERTY OR WITHIN THE PROJECT AREA. IN THE EVENT THAT UNEXPECTED REGULATED SUBSTANCES ARE ENCOUNTERED DURING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL STATUTES, ORDINANCES AND DIRECTIVES WITH RESPECT TO HANDLING AND DISPOSAL OF SUCH SUBSTANCES.
3. ALL EXISTING UTILITIES SHALL REMAIN IN CONTINUOUS OPERATION DURING THE EXECUTION OF THE WORK. THESE UTILITIES INCLUDE, BUT ARE NOT LIMITED TO WATER, SEWER, COMMUNICATIONS, STEAM, POWER, COMPRESSED AIR AND GAS LINES. THE CONTRACTOR SHALL CONTACT THE OWNERS OF ALL UTILITIES PRIOR TO THE START OF THE WORK SO THAT THE OWNERS MAY LOCATE AND STAKE THEIR UTILITIES. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE, IN WRITING, 48 HOURS PRIOR TO UTILITY OWNER LOCATING THE UTILITY.
4. ALL UTILITIES TO BE ABANDONED SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO ABANDONING. ALL OPENINGS ON ABANDONED PIPE OR CONDUIT ARE TO BE SEALED WITH A GROUT PLUG, MINIMUM 1 FOOT THICK, UNLESS UNDER EXISTING OR FUTURE TRACK. IF UNDER TRACKS, REMOVE OR GROUT FULL. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.
5. ALL EXCAVATION NEAR EXISTING CABLES OR OTHER EXISTING UTILITY LINES SHALL BE PERFORMED BY HAND. ANY CABLE OR OTHER EXISTING UTILITY LINE THAT IS DAMAGED DURING THE PERFORMANCE OF THIS CONTRACT SHALL BE REPAIRED IMMEDIATELY, UNDER THE UTILITY OWNER'S DIRECTION AND AT THE CONTRACTOR'S EXPENSE, DURING THE PERIOD OF TIME THAT THE ABOVE TYPES OF CABLES OR UTILITES ARE OUT OF SERVICE, DUE TO THE CONTRACTOR'S OPERATIONS, ALL CONTRACT WORK SHALL BE SUSPENDED UNLESS OTHERWISE DIRECTED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR WILL NOT BE ALLOWED TO MAKE CLAIMS FOR EXTRA COSTS OR TIME EXTENSIONS DUE TO SUCH STOPPAGES OF WORK.
6. IF APPLICABLE, THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP AND CONSTRUCTION DRAWINGS, CERTIFIED BY A STRUCTURAL ENGINEER LICENSED BY THE STATE, TO THE OWNER'S REPRESENTATIVE WHICH CLEARLY AND ACCURATELY DEPICT THE METHODS AND MEANS BY WHICH THE CONTRACTOR INTENDS TO PROTECT, SHORE, SUPPORT, BRACE, ETC., EXISTING UTILITIES WHEN THE WORK AFFECTS A CABLE, SEWER OR OTHER UTILITY WITHIN THE CONTRACT LIMIT LINES. THIS PROCESS IS ALSO APPLICABLE FOR THE INSTALLATION OF NEW SEWERS AND UTILITIES WITHIN THE CONTRACT LIMIT LINES THAT REQUIRE SHORING AND BRACING.
7. EXISTING CONDITIONS WERE TAKEN FROM THE BEST MAPPING/DRAWING. INFORMATION SHOWN CONCERNING FEATURES AND UTILITIES IS NOT GUARANTEED, ALL INCLUSIVE OR CORRECT. THE CONTRACTOR SHALL VERIFY THE FEATURES PRIOR TO CONSTRUCTION. EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE AT ALL TIMES, UNLESS NOTED OTHERWISE ON THE PLANS. THE LOCATION, MATERIAL AND DIMENSIONS OF EXISTING FACILITIES AND OBSTRUCTIONS ARE BASED UPON AVAILABLE RECORDS AND ARE SHOWN ON THE PLANS STRICTLY AS AN AID TO THE CONTRACTOR, BUT MUST NOT BE CONSTRUED AS BEING ACCURATE, CORRECT OR COMPLETE. ALL STRUCTURES ABOVE OR BELOW GROUND THAT ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE PROPERLY SUPPORTED AND MAINTAINED. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS WITH THE OWNER'S REPRESENTATIVE FOR THE PROTECTION, RELOCATION, RECONSTRUCTION OR ADJUSTMENT OF SUCH STRUCTURES AS REQUIRED IN FIELD. IF DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL MAKE REPAIRS OR PAY FOR REPAIRS TO THE STRUCTURE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AND AT THE EXPENSE OF THE CONTRACTOR.
8. IF DURING STORM SEWER OR DITCHING EXCAVATION THE CONTRACTOR DISCOVERS A FIELD TILE ABOVE THE INVERT OF THE PROPOSED FACILITY, THE CONTRACTOR SHALL RECORD ITS LOCATION AND CONNECT SAID FIELD TILE TO THE PROPOSED STORM WATER SYSTEM AND/OR DITCH. IF THE FIELD TILE IS BELOW THE INVERT OF THE PROPOSED FACILITY, THE CONTRACTOR SHALL RECORD ITS LOCATION, REPAIR ANY DAMAGE TO THE TILE AND BACKFILL THE TILE ACROSS THE FULL WIDTH OF THE TRENCH WITH COMPACTED COARSE AGGREGATE STONE.
9. MOVING PUBLIC UTILITIES SHALL BE THE RESPONSIBILITY OF THE UTILITY OWNERS AS NOTED ON THE PLANS, IN THE GENERAL NOTES AND IN THE SPECIFICATIONS. THE CONTRACTOR IS TO NOTIFY THE UTILITY OWNER SUFFICIENTLY IN ADVANCE OF THE SCHEDULE FOR SUCH REMOVALS AND RELOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREMIUM COSTS WHICH BECOME NECESSARY AS A RESULT OF THE CONTRACTOR'S FAILURE TO NOTIFY THE UTILITY OWNER. ALL OTHER UTILITIES NOTED ON THE PLANS TO BE RELOCATED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
10. ALL ITEMS PROPOSED FOR ABANDONMENT, RELOCATION OR DEMOLITION SHALL BE MARKED BY THE CONTRACTOR FOR REVIEW BY THE OWNER'S REPRESENTATIVE. NO ITEM SHALL BE ABANDONED, RELOCATED OR DEMOLISHED UNTIL APPROVED BY THE OWNER'S REPRESENTATIVE.
11. THE OWNER'S REPRESENTATIVE WILL REVIEW THE SHOP DRAWINGS AND PROCEDURES IN ACCORDANCE WITH THE PROVISIONS OF THE APPROPRIATE SECTION OF THE SPECIFICATIONS.
12. THE CONTRACTOR SHALL NOT START ANY WORK WHICH MAY AFFECT EXISTING WATER, STEAM, SEWER, COMPRESSED AIR, COMMUNICATIONS, POWER, GAS, OR OTHER UTILITY CABLES, PIPELINES OR SEWERS UNTIL THE OWNER'S REPRESENTATIVE HAS REVIEWED AND APPROVED THE SHOP DRAWINGS AND PROCEDURES FOR PROTECTION OF THE UTILITY.
13. IN THE EVENT OF THE CONTRACTOR ENCOUNTERING EXISTING SUBSURFACE DRAINAGE SYSTEMS THAT WERE NOT SHOWN ON PLANS, THE CONTRACTOR SHALL MAINTAIN AND PRESERVE THE SUBSURFACE DRAINAGE SYSTEMS OR CONNECT THE SYSTEMS TO THE NEAREST DRAINAGE SYSTEMS AS DIRECTED BY THE ENGINEER.
14. ALL SEWERS TO BE ABANDONED SHALL BE BULKHEADED AT BOTH ENDS AND FILLED WITH GROUT AS DIRECTED BY THE OWNER'S REPRESENTATIVE UNLESS OTHERWISE NOTED ON THE PLANS. ALL SEWERS AND SEWER STRUCTURES TO BE PLUGGED, BULKHEADED, REMOVED AND/OR FILLED WITH GROUT SHALL BE INCIDENTAL TO THE SEWER AND WATER ITEMS.
15. WHEREVER ANY ABANDONED CONDUITS OR PIPES ARE CUT OR BROKEN BY SEWER CONSTRUCTION, SUITABLE BULKHEADS, AS DETERMINED BY THE OWNER'S REPRESENTATIVE, SHALL BE INSTALLED SO THAT NO LOSS OF BACKFILL MATERIAL SHALL OCCUR. ALL COSTS TO PERFORM SUCH WORK SHALL BE INCIDENTAL TO THE CONTRACT.
16. THE CONTRACTOR MUST CONNECT ALL EXISTING LIVE DRAINS TO SEWERS WHETHER SHOWN ON THE PLANS OR NOT.
17. THE CONTRACTOR SHALL AT ALL TIMES DURING CONSTRUCTION PROVIDE AND MAINTAIN AMPLE MEANS AND DEVICES FOR THE TEMPORARY DIVERSION OF FLOW IN EXISTING SEWERS AND DRAINS AND THE PROMPT REMOVAL AND PROPER DISPOSAL OF ALL WATER OR SEWAGE ENTERING THE TRENCHES OR OTHER PARTS OF THE WORK, AND SHALL KEEP SAID EXCAVATIONS AS DRY AS PRACTICABLE UNTIL THE STRUCTURES TO BE BUILT THEREIN ARE COMPLETED. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.
18. THE LOCATIONS AND ELEVATIONS OF EXISTING SEWERS AND SEWER STRUCTURES SHOWN ON THE PLANS AND PROFILES HAVE BEEN OBTAINED FROM AERIAL/GROUND SURVEY AND ATLASES AND THE INFORMATION IS NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING AND PROTECTING ALL SEWERS AND STRUCTURES.
19. IN LOCATIONS WHERE THE EXISTING DRAINAGE FACILITIES ARE TO REMAIN AND ARE DISTURBED OR DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO RESTORE AND REPLACE THE DAMAGED FACILITIES AT HIS EXPENSE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. THE SEWER FLOW MUST BE MAINTAINED AT ALL TIMES.

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CSX
How tomorrow moves

REVISIONS			
MARK	DATE	DESCRIPTION	

PROJ NO: P304150044
SCALE: N.T.S.
DATE: 8/28/2015
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SHEET TITLE:
GENERAL NOTES

SHEET NO.
GI-003
SHEET 2 OF 28

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
ABV	ABOVE
ABUT	ABUTMENT
AC	ACRE
ADJ	ADJUST
AGG	AGGREGATE
AH	AHEAD
APPROX	APPROXIMATE
AREMA	AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION
AS	AERIAL SURVEY
ASPH	ASPHALT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATS	AUTOMATIC TRANSFER SWITCH
AVE	AVENUE
BARR	BARRICADE
B&B	BRIDGE & BUILDING
B-B	BACK TO BACK
BBOX	BUFFALO BOX
B/C	BACK OF CURB
BCCMP	BITUMINOUS COATED CORRUGATED METAL PIPE
BGN	BEGIN
BIND	BINDER
BIT	BITUMINOUS
BK	BACK
B.L.	BASE LINE
BLDG.	BUILDING
BLVD	BOULEVARD
BM	BENCHMARK
BPH	BRIDGE PLATE HOLDER
BRK	BRICK
BTM	BOTTOM
BVC	BEGIN VERTICAL CURVE
BW	BACKWALL
B/W	BASE OF WALL
C	TRACK CURVE NUMBER (C-4)
CA	COARSE AGGREGATE
CALC	CALCULATION
CB	CATCH BASIN
C-C	CENTER-CENTER
CEM	CEMETERY
CERT	CERTIFIED
CFS	CUBIC FEET PER SECOND
C&G	CURB & GUTTER
CHSLD	CHISELED
CIP	CAST IRON PIPE
C.I.P.	CAST IN PLACE
C.J.	CONTROL JOINT OR CONSTRUCTION JOINT
CL	CENTERLINE
CL-E	CENTERLINE TO EDGE
CL-F	CENTERLINE TO FACE
CLID	CLOSED LID
CL PT	CLEARANCE POINT
CLR	CLEARANCE
CLSD	CLOSED
CMP	CORRUGATED METAL PIPE
CNTY	COUNTY
CO	CLEANOUT
COMB	COMBINATION
COMP	COMPRESSOR
CONC	CONCRETE
CONST	CONSTRUCT
CONT	CONTINUOUS
CONTD	CONTINUED
COR	CORNER
CORPS	CORPS OF ENGINEERS (ARMY)
CORR	CORRUGATED
CP	CONTROL POINT
CPT	CONTROL POWER TRANSFORMER
CS	CURVE TO SPIRAL
CSX	CSX CORPORATION
CTS	CENTERS
CULV	CULVERT
CU YD	CUBIC YARD
CWR	CONTINUOUS WELDED RAIL
C-(X)	CURVE DESIGNATION (C-4)
Dc	DEGREE OF CURVE
D/S	DOWNSTREAM
DBL	DOUBLE
DC	DEPRESSED CURB
DEPT	DEPARTMENT
DET	DETECTOR
DG	DIESEL GENERATOR
DIA	DIAMETER
DIST	DISTRICT
DIVN	DIVISION
DOM	DOMESTIC
DR	DRAINAGE
DRV	DRIVEWAY
DSEL	DOWNSTREAM ELEVATION
DSFL	DOWNSTREAM FLOWLINE
DWG	DRAWING

E	EAST
Ec	EXTERNAL DISTANCE OF HORIZONTAL CURVE
Ea	ACTUAL SUPERELEVATION
Ee	EQUILIBRIUM ELEVATION
Eu	UNBALANCED SUPERELEVATION
EA	EACH
EB	EASTBOUND
E-CL	EDGE TO CENTERLINE
E-E	EDGE TO EDGE
EL	ELEVATION
ENTR	ENTRANCE
EOP	EDGE OF PAVEMENT
EQ	EQUAL
EQPT	EQUIPMENT
Es	EXTERNAL DISTANCE OF HORIZONTAL CURVE OR SPIRAL
EST	ESTIMATE
EVC	END VERTICAL CURVE
EX	EXISTING
EXC	EXCAVATION
fc'	COMPRESSIVE STRESS IN CONCRETE
fy	YIELD STRENGTH
F&G	FRAME & GRATE
F-F	FACE TO FACE
FDN	FOUNDATION
FH	FIRE HYDRANT
FHWA	FEDERAL HIGHWAY ADMINISTRATION
FED	FEDERAL
FES	FLARED END SECTION
FL	FLOW LINE
FP	FENCE POST
FR	FRAME
FT	FOOT OR FEET
FTG	FOOTING
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GM	GAS METER
GND	GROUND
GR	GRATE
GRAN	GRANULAR
GRVL	GRAVEL
GUT	GUTTER
GV	GAS VALVE
ha	HECTARE
HAB	HOT AIR BLOWER
HD	HEAD
HDUTY	HEAVY DUTY
HDW	HEADWALL
HF	HEEL OF FROG
HH	HANDHOLE
HML	HIGH MAST LIGHT
HORIZ	HORIZONTAL
HSE	HOUSE
HWE	HIGH WATER ELEVATION
HWL	HIGH WATER LEVEL
HPS	HIGH PRESSURE SODIUM
I	TOTAL CENTRAL ANGLE OF CIRCULAR CURVE AND SPIRALS
IMF	INTERMODAL FACILITY
IMP	IMPROVEMENT
IN	INCH
INL	INLET
INS JNT	INSULATED JOINT
INST	INSTALL
INV.	INVERT
IP	IRON PIPE
IR	IRON ROD
J-BOX	JUNCTION BOX
JT	JOINT
K	ABSCISSA OF THE SHIFTED PC REFERRED TO THE TS
kg	KILOGRAM
K SI	1000 POUNDS PER SQUARE INCH
Lc	LENGTH OF CURVE
Ls	LENGTH OF SPIRAL
LBS	POUNDS
LC	LONG CHORD
LF	LINEAR FEET
LGT	LIGHTING
LGTH	LENGTH
LH	LEFT HAND
LN	LANE
LNG	LONGITUDINAL
LP	LIGHT POLE
L SUM	LUMP SUM
LT	LEFT

m	METER
m²	SQUARE METER
m³	CUBIC METER
mm	MILLIMETER
M	MID-ORDINATE
MACH	MACHINE
MATL	MATERIAL
MAX	MAXIMUM
MB	MAIL BOX
MBH	MOBILE HOME
METH	METHOD
MFT	MOTOR FUEL TAX
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MIX	MIXTURE
MOD	MODIFIED
MOW	MAINTENANCE-OF-WAY
MPH	MILES PER HOUR
MSG	MAIN SWITCH GEAR
MTCE	MAINTENANCE
MW	MONITORING WELL
N	NORTH
N & BC	NAIL & BOTTLE CAP
N & C	NAIL & CAP
N & W	NAIL & WASHER
NAT	NATURAL
NB	NORTHBOUND
NC	NORMAL CROWN
NE	NORTHEAST
N.I.C.	NOT IN CONTRACT
NOAA	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NO.	ADMINISTRATION NUMBER
NOI	NOTICE OF INTENT
NOT	NOTICE OF TERMINATION
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NTS	NOT TO SCALE
NW	NORTHWEST
NWL	NORMAL WATER LEVEL
OD	OUTSIDE DIAMETER
OLID	OPEN LID
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OWS	OIL WATER SEPARATOR
P	OFFSET FROM THE INITIAL TANGENT TO THE PC OF THE SHIFTED CIRCLE
Px	POINT LOCATION (P4)
PAT	PATTERN
PC	POINT OF CURVATURE
P.C.	PROPERTY CORNER
PCC	PORTLAND CEMENT CONCRETE
PED	PEDESTAL/PEDESTRIAN
PERF.	PERFORATED
PF	POINT OF FROG
PGL	PROPOSED GRADE LINE
PI	POINT OF INTERSECTION OF HORIZONTAL CURVATURE
PITO	POINT OF INTERSECTION-TURNOUT
PJF	PREFORMED JOINT FILLER
PL	PROPERTY LINE
PM	PAVEMENT MARKING
PMS	PAD MOUNTED SWITCH
PNT	POINT
PP	POWER POLE
PROP	PROPOSED
PR	PAIR
PRC	PRECAST REINFORCED CONCRETE
PRC FES	PRECAST FLARED END SECTION
PROF	PROFILE
PROJ	PROJECT
PS	POINT OF SWITCH
PSF	POUND PER SQUARE FOOT
PSI	POUND PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PIPE
PVD	PAVED
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PWR	POWER

QTY	QUANTITY
r	RATE OF CHANGE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RCCP	REINFORCED CONCRETE CULVERT PIPE
RD	ROAD
RDWY	ROADWAY
REINF	REINFORCED
REM	REMOVAL
REP	REPLACEMENT
RESURF	RESURFACING
RET	RETAINING
RH	RIGHT HAND
ROW	RIGHT-OF-WAY
RR	RAILROAD
RT	RIGHT
RTE	ROUTE
RTG	RUBBER TIRED GANTRY CRANE
RW	RETAINING WALL
S	SOUTH
SAN	SANITARY
SANS	SANITARY SEWER
SB	SOUTHBOUND
SC	SPIRAL TO CURVE
SDR	STANDARD DIMENSION RATIO
SE	SOUTHEAST
S.E.	SUPERELEVATION ACTUAL
SEC	SECTION
SEED	SEEDING
SF	SQUARE FOOT
SH	SECOND HAND
SHT	SHEET
SHAP	SHAPING
SHLD	SHOULDER
SIG	SIGNAL
SM	SOLID MEDIAN
SOD	SODDING
SP	SPIRAL
SPBGR	STEEL PLATE BEAM GUARDRAIL
SPCY	SEISMIC PERFORMANCE CATEGORY
SPL	SPECIAL
SQ	SQUARE
SQ FT	SQUARE FEET
SQ YD	SQUARE YARD
SR	STATE ROUTE
SS	STORM SEWER
ST	SPIRAL TO TANGENT/STREET
STA.	STATION
STB	STABILIZED
STD	STANDARD
STR	STRUCTURE
SURF	SURFACE
SW	SWITCH
T	TANGENT
T.C.	TOP OF CASTING
T/	TOP OF
TB	TELEPHONE BOX
TBD	TO BE DETERMINED
TCE	TERRACE
TDPU	TIME DELAY PICKUP
TEL	TELEPHONE
TEMP	TEMPORARY
TF	TRACK FEET
TMR	TIME DELAY RELAY
T.O.	TURNOUT
TP	TELEPHONE POLE
T/P	TOP OF PIPE
T/R	TOP OF RAIL
TRF	TRANSFORMER
TRK	TRACK
TRVL	TRAVEL
TRVS	TRANSVERSE
TS	TANGENT TO SPIRAL
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
T/W	TOP OF WALL TYPE
TY	TYPE
TYP	TYPICAL
UD	UNDERDRAIN
UNDGND	UNDERGROUND
UPS	UNINTERRUPTED POWER SUPPLY
U/S	UPSTREAM
USGS	U.S. GEOLOGICAL SURVEY
UTL	UTILITY

V	VELOCITY
V:H	VERTICAL:HORIZONTAL
VAR	VARIANCE
VBOX	VALVE BOX
VCL	VERTICAL CURVE LENGTH
VEH	VEHICLE
VERT	VERTICAL
VLT	VAULT
VPC	VERTICAL POINT OF CURVATURE
VP	VENT PIPE
VPT	VERTICAL POINT OF TANGENCY
W	WEST
W/	WITH
WB	WESTBOUND
WETL	WETLANDS
WM	WATER MAIN
W/O	WITHOUT
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
WQv	WATER QUALITY VOLUME
X-ING	CROSSING
X-OVER	CROSSOVER

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

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CSX
How tomorrow moves

REVISIONS			
MARK	DATE	DESCRIPTION	

PROJ NO: P304150044
SCALE: N.T.S.
DATE: 8/28/2015
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CHECKED BY: MGB

SHEET TITLE:
ABBREVIATIONS

SHEET NO.
GI-004
SHEET 4 OF 19

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK

LEGEND AND SYMBOLS

EXISTING	PROPOSED		EXISTING	PROPOSED	
		EDGE OF CONCRETE	SS	SS	SANITARY SEWER
		EDGE OF ASPHALT			SANITARY SEWER
		EDGE OF GRAVEL	FM	FM	SANITARY FORCE LINE
		EDGE OF PAVER			SANITARY FORCE LINE
		EDGE OF SIDEWALK	W	W	WATER LINE
		EDGE OF CURB	NG	NG	NATURAL GAS LINE
		PAVEMENT MARKING	E	E	ELECTRIC LINE
		FENCE/ BARBED WIRE	OE	OE	OVERHEAD ELECTRIC LINE
		HIGH VISIBILITY FENCE	FO	FO	FIBER OPTIC LINE
		SIGN	SD	SD	STORM SEWER LINE
		CENTERLINE OF TRACK			
10	10	POINT OF SWITCH – T.O. SIZE			
	0	DERAIL			
		RIGHT OF WAY			
		EASEMENT			
		CONTROL POINT			
100	100	MAJOR CONTOUR			
99	99	MINOR CONTOUR			
		FLOW LINE			
		WETLAND			
		TREE LINE			
		SILT FENCE			
		RIPRAP PROTECTION			
		CONSTRUCTION ENTRANCE			
		ROCK CHECK DAM			
		CULVERT PROTECTION			
		TEMPORARY STREAM CROSSING			
		HEADWALL			
		INLET			
		CONCRETE END SECTION			
		RAILROAD GRADE CROSSING			

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How tomorrow moves

CSX

REVISIONS:			
MARK	DATE	DESCRIPTION	

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SCALE: N.T.S.
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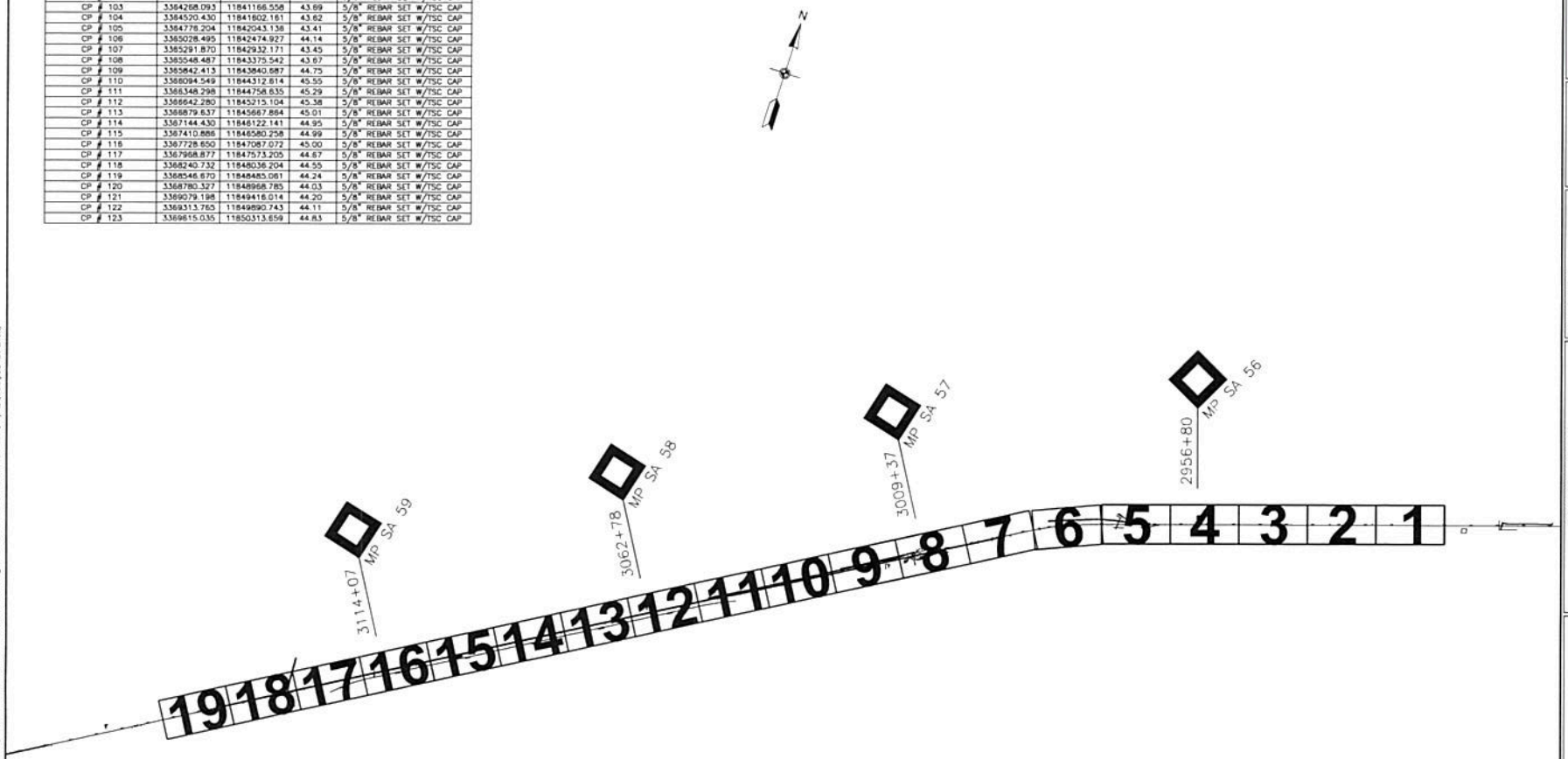
SHEET TITLE:
LEGEND AND SYMBOLS

SHEET NO.
GI-005
SHEET 5 OF 28

USACE Norfolk Distnct Regulatory
2/9/2016 - Rcv'd by DK

CONTROL POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP # 100	3383508.521	11839863.863	44.70	5/8" REBAR SET W/TSC CAP
CP # 101	3383781.515	11840288.762	42.11	5/8" REBAR SET W/TSC CAP
CP # 102	3384018.250	11840735.198	42.88	5/8" REBAR SET W/TSC CAP
CP # 103	3384268.093	11841166.558	43.69	5/8" REBAR SET W/TSC CAP
CP # 104	3384520.430	11841602.161	43.62	5/8" REBAR SET W/TSC CAP
CP # 105	3384776.204	11842043.138	43.41	5/8" REBAR SET W/TSC CAP
CP # 106	3385028.495	11842474.927	44.14	5/8" REBAR SET W/TSC CAP
CP # 107	3385291.870	11842932.171	43.45	5/8" REBAR SET W/TSC CAP
CP # 108	3385548.487	11843375.542	43.67	5/8" REBAR SET W/TSC CAP
CP # 109	3385842.413	11843840.687	44.75	5/8" REBAR SET W/TSC CAP
CP # 110	3386094.549	11844312.614	45.55	5/8" REBAR SET W/TSC CAP
CP # 111	3386348.298	11844758.635	45.29	5/8" REBAR SET W/TSC CAP
CP # 112	3386642.280	11845215.104	45.38	5/8" REBAR SET W/TSC CAP
CP # 113	3386879.637	11845667.884	45.01	5/8" REBAR SET W/TSC CAP
CP # 114	3367144.430	11846122.141	44.95	5/8" REBAR SET W/TSC CAP
CP # 115	3367410.886	11846580.258	44.99	5/8" REBAR SET W/TSC CAP
CP # 116	3367728.650	11847087.072	45.00	5/8" REBAR SET W/TSC CAP
CP # 117	3367968.877	11847573.205	44.67	5/8" REBAR SET W/TSC CAP
CP # 118	3368240.732	11848036.204	44.55	5/8" REBAR SET W/TSC CAP
CP # 119	3368546.670	11848485.061	44.24	5/8" REBAR SET W/TSC CAP
CP # 120	3368780.327	11848968.785	44.03	5/8" REBAR SET W/TSC CAP
CP # 121	3369079.198	11849416.014	44.20	5/8" REBAR SET W/TSC CAP
CP # 122	3369313.765	11849890.743	44.11	5/8" REBAR SET W/TSC CAP
CP # 123	3369615.035	11850313.659	44.83	5/8" REBAR SET W/TSC CAP



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BRANCHVILLE, VIRGINIA

How tomorrow moves

CSX

REVISIONS

MARK	DATE	DESCRIPTION

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SHEET TITLE:
AREA KEY PLAN

SHEET NO.
GI-006
SHEET 8 OF 38

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USACE Norfolk Distrct Regulatory
2/9/2016 - Rcv'd by DK

STANDARD EROSION AND SEDIMENT CONTROL NOTES

1. UNLESS OTHERWISE NOTED, ALLVEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE CURRENT APPROVED CSXT ANNUAL EROSION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS.

2. THE CONTRACTOR SHALL INSTALL, IMPLEMENT AND MAINTAIN CONTROL MEASURES, AS IDENTIFIED IN THIS PLAN AT THE CONSTRUCTION SITE, THAT MINIMIZE POLLUTANTS IN THE STORMWATER DISCHARGE AS NECESSARY TO ENSURE THAT THE PROJECT SITE DISCHARGE DOES NOT CAUSE OR CONTRIBUTE TO AN EXCURSION ABOVE ANY APPLICABLE WATER QUALITY STANDARD.

3. ALL IMPLEMENTED EROSION AND SEDIMENT CONTROLS ON THIS PLAN SHALL ADEQUATELY:

   A. CONTROL THE VOLUME AND VELOCITY OF STORMWATER RUNOFF WITHIN THE SITE TO MINIMIZE SOIL EROSION;

   B. CONTROL STORMWATER DISCHARGES, INCLUDING PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND TO MINIMIZE DOWNSTREAM CHANNEL AND STREAM BANK EROSION;

   C. MINIMIZE THE AMOUNT OF SOIL EXPOSED DURING THE CONSTRUCTION ACTIVITY;

   D. MINIMIZE THE DISTURBANCE OF STEEP SLOPES;

   E. MINIMIZE SEDIMENT DISCHARGES FROM THE SITE IN A MANNER THAT ADDRESSES (I) THE AMOUNT, FREQUENCY, INTENSITY, AND DURATION OF PRECIPITATION; (II) THE NATURE OF RESULTING STORMWATER RUNOFF; AND (III) SOIL CHARACTERISTICS, INCLUDING THE RANGE OF SOIL PARTICLE SIZES PRESENT ON THE SITE;

   F. PROVIDE AND MAINTAIN NATURAL BUFFERS AROUND SURFACE WATERS, DIRECTS STORMWATER TO VEGETATED AREAS TO INCREASE SEDIMENT REMOVAL, AND MAXIMIZES STORMWATER INFILTRATION, UNLESS INFEASIBLE;

   G. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVES TOPSOIL.

   H. ENSURE THAT STABILIZATION OF DISTURBED AREAS WILL BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING, OR OTHER LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 DAYS; AND

   I. UTILIZE OUTLET STRUCTURES THAT WITHDRAW STORMWATER FROM THE SURFACE (I.E., ABOVE THE PERMANENT POOL OR WET STORAGE WATER SURFACE ELEVATION), UNLESS INFEASIBLE, WHEN DISCHARGING FROM SEDIMENT BASINS OR SEDIMENT TRAPS.

4. IF SITE INSPECTIONS IDENTIFY AN EXISTING CONTROL MEASURE THAT NEEDS TO BE MODIFIED OR IF AN ADDITIONAL CONTROL MEASURE IS NECESSARY FOR ANY REASON, IMPLEMENTATION SHALL BE COMPLETED PRIOR TO THE NEXT ANTICIPATED MEASURABLE STORM EVENT. IF IMPLEMENTATION PRIOR TO THE NEXT ANTICIPATED MEASURABLE STORM EVENT IS IMPRACTICABLE, THEN ALTERNATIVE CONTROL MEASURES SHALL BE IMPLEMENTED AS SOON AS PRACTICABLE, BUT NO LATER THAN SEVEN (7) DAYS AFTER DISCOVERY OR A LONGER PERIOD AS ESTABLISHED BY THE VIRGINIA STORMWATER MANAGEMENT PRPOGRAM (VMSP) AUTHORITY.

5. THE CONTRACTOR MUST PERFORM EROSION AND SEDIMENT CONTROL INSPECTIONS AS DESRIBED IN THE PROJECT STORMWATER POLLUTION PREVENTION PLAN.

6. THE CONTRACTOR SHALL IMPLEMENT ALL CORRECTIVE ACTION(S) IDENTIFIED AS A RESULT OF AN INSPECTION AS SOON AS PRACTICABLE BUT NO LATER THAN SEVEN (7) DAYS AFTER DISCOVERY OR A LONGER PERIOD AS APPROVED BY THE VSMP AUTHORITY. IF APPROVAL OF A CORRECTIVE ACTION BY A REGULATORY AUTHORITY (E.G., VSMP AUTHORITY, VESCP AUTHORITY, OR THE DEPARTMENT) IS NECESSARY, ADDITIONAL CONTROL MEASURES SHALL BE IMPLEMENTED TO MINIMIZE POLLUTANTS IN STORMWATER DISCHARGES UNTIL SUCH APPROVALS CAN BE OBTAINED.

7. REPORTS OF UNUSUAL OR EXTRAORDINARY DISCHARGES. IF ANY UNUSUAL OR EXTRAORDINARY DISCHARGE INCLUDING A "BYPASS" OR "UPSET " SHOULD OCCUR FROM A FACILITY AND THE DISCHARGE ENTERS OR COULD BE EXPECTED TO ENTER SURFACE WATERS, THE CONTRACTOR SHALL PROMPTLY NOTIFY, IN NO CASE LATER THAN WITHIN 24 HOURS, CSXT BY TELEPHONE AFTER THE DISCOVERY OF THE DISCHARGE. THIS NOTIFICATION SHALL PROVIDE ALL AVAILABLE DETAILS OF THE INCIDENT, INCLUDING ANY ADVERSE EFFECTS ON AQUATIC LIFE.

8. ALL APPLICABLE STATE, FEDERAL, AND LOCAL APPROVALS ARE REQUIRED TO BE OBTAINED PRIOR TO CONDUCTING ANY SOIL DISTURBING ACTIVITIES.

9. A COPY OF THIS PLAN SHALL BE MAINTAINED AT A CENTRAL LOCATION ON SITE DURING CONSTRUCTION.

10. THE PLAN LOCATION MUST BE POSTED AT OR NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE.

11. THE CONTRACTOR SHALL CONFINE OPERATIONS TO WITHIN THE LIMITS OF DISTURBANCE NOTED ON THE PLAN. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED ON SITE BY BARRIERS, FLAGGING OR SIGNAGE.

12. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY.

13. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE CONTRACTOR SHALL STABILIZE AND HAVE ESTABLISHED PERMANENT STABILIZATION FOR ALL CONTRIBUTORY DISTURBED AREAS.

14. SEDIMENT SHALL BE REMOVED FROM PLAN CONTROL MEASURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.

15. SEDIMENT REMOVED FROM PLAN CONTROL MEASURES SHALL BE PLACED AND STABILIZED IN SUITABLE UP-GRADIENT AREAS, BUT NOT WITHIN A FLOODPLAIN, WETLAND, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS.

16. TRASH OR CONSTRUCTION DEBRIS GENERATED DURING CONSTRUCTION SHALL BE DISPOSED OF IN A MANNER SO AS TO PREVENT ANY POLLUTANT(S) FROM ENTERING SURFACE WATERS AND IN COMPLYANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS.

17. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS PERMANENTLY CEASED. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED, THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH DAY AFTER CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED.

18. SITE INFORMATION
    TOTAL PROJECT AREA: 53.9 ACRES
    TOTAL DISTURBED AREA: 18.3 ACRES
    EXCESS MATERIAL PLACEMENT AREA (EMPA)

    NRCS SOILS DESCRIPTION
    SEE THE PROJECT STORMWATER POLLUTION PREVENTION PLAN FOR A DESCRIPTION OF SOILS AT THE SITE

    SEQUENCE OF CONSTRUCTION REPLACEMENT / INSTALLATION OF RAILROAD CROSS OVERS

    1.INSTALL STABILIZED CONSTRUCTION ENTRANCES (SCE) AS SHOWN ON PLANS AND AT OTHER LOCATIONS IF NEEDED. CONTRACTOR IS RESPONSIBLE FOR VERIFYING IF ALTERNATE ACCESS ROUTES ARE NEEDED AND ALL ROUTES WILL REQUIRE AN SCE. SUBMIT LAYOUT OF ALTERNATE SCE LOCATIONS, FOR REVIEW.

    2.INSTALL INLET PROTECTIONS, PERIMETER SILT FENCES

    3.CLEAR AND GRUB AREAS INSIDE THE LIMIT OF DISTURBANCE.

    4.CONDUCT GRADING AND TRACKWORK. IN AREAS OF TEMPORARY SITE ACCESS ROADS, ADJUST SEDIMENT CONTROLS AS REQUIRED WHILE PREVENTING SEDIMENT FROM LEAVING THE LIMIT OF DISTURBANCE. STABILIZE GRADED SURFACES WITH BALLAST, SUBBALLAST, OR TOPSOIL/PERMANENT SEEING AS APPLICABLE.

    5.UPON STABILIZATION OF CONTRIBUTORY DRAINAGE AREAS, REMOVE SEDIMENT AND EROSION CONTROLS, AND STABILIZE ANY AREAS DISTURBED BY THIS PROCESS.

19. DUE TO THE POTENTIAL PRESENCE OF FEDERALLY PROTECTED BATS, TREE CLEARING MUST OCCUR BETWEEN SEPTEMBER 15 AND APRIL 15.

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TranSystems
4108 SALISBURY ROAD
SUITE 440
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6300
FAX: (904) 245-8516

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves

CSX

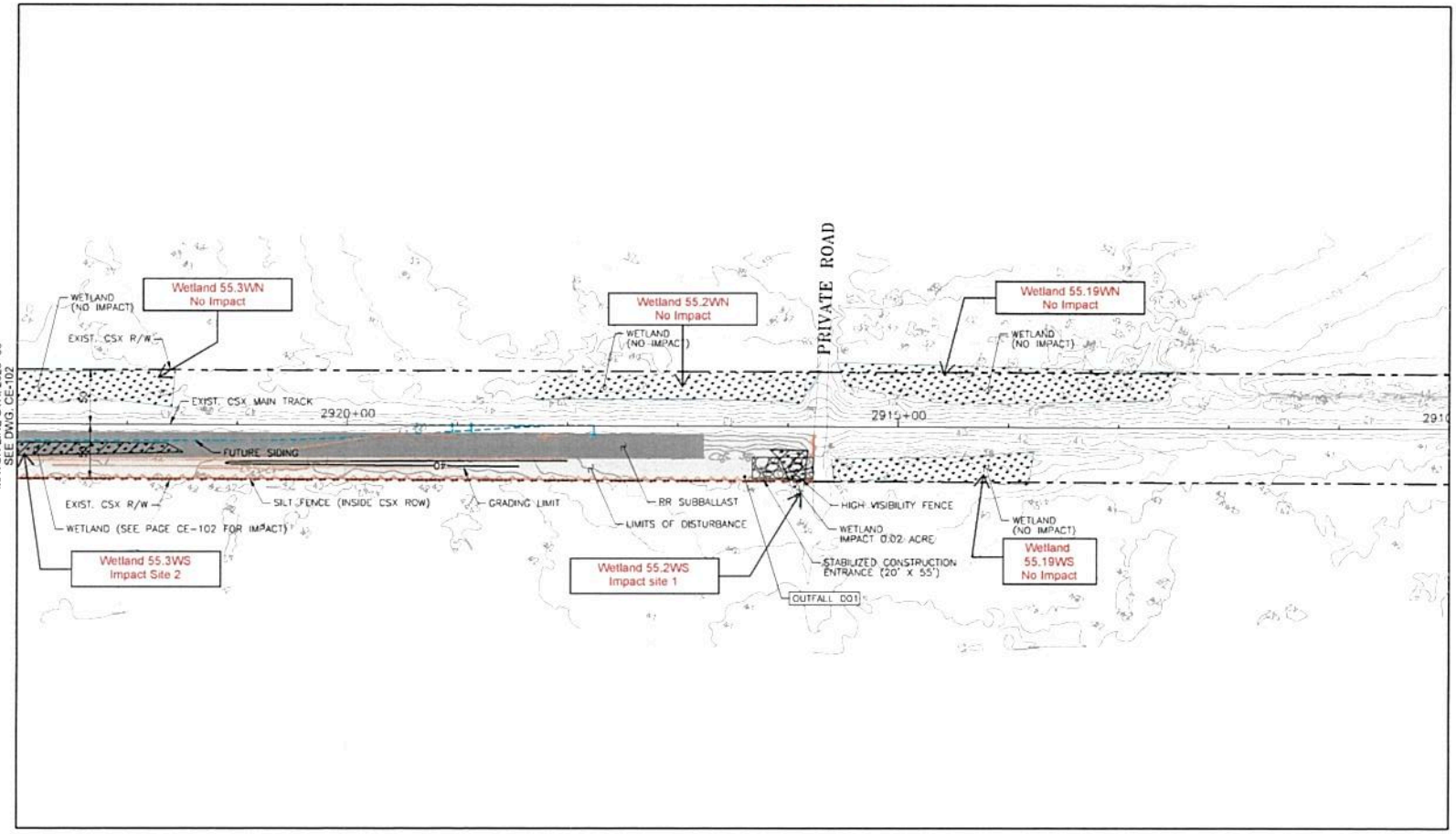
REVISIONS		
MARK	DATE	DESCRIPTION

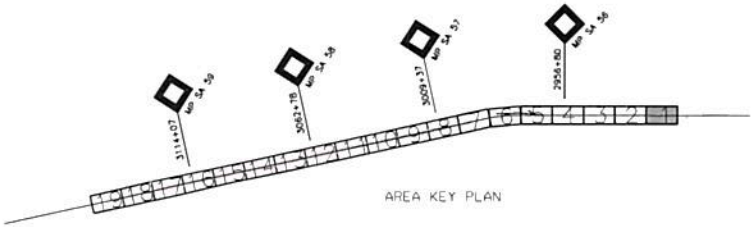
PROJ NO: P304150044
SCALE: N.T.S.
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGB

SHEET TITLE:
EROSION CONTROL NOTES

SHEET NO.
CE-001
SHEET 7 OF 29

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
- CSX ROW
- PROPOSED TRACK
- FUTURE TRACK
- SUBBALLAST
- SEEDING / LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

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CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves

CSX

REVISIONS			
MARK	DATE	DESCRIPTION	

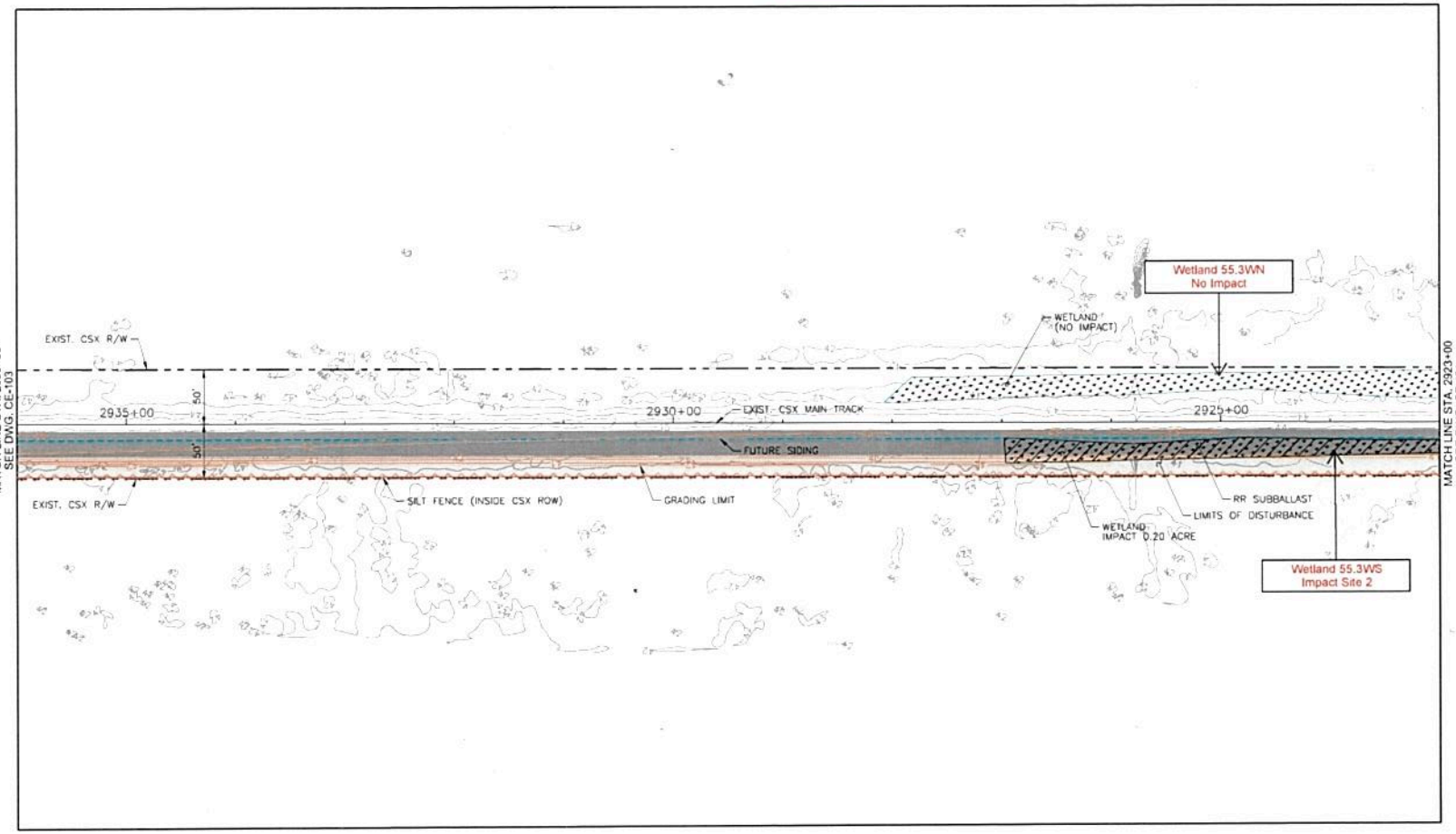
PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGB

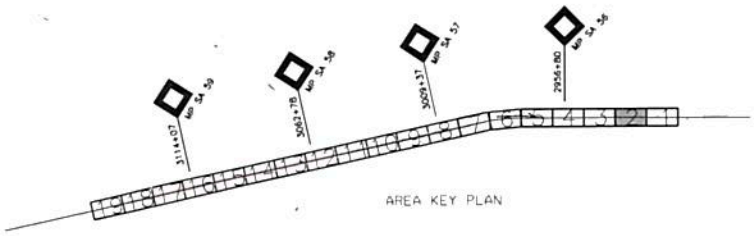
SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-101

SHEET 8 OF 29

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
- CSX ROW
- PROPOSED TRACK
- FUTURE TRACK
- SUBBALLAST
- SEEDING / LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

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FAX: (904) 243-8510

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

CSX
How tomorrow moves

REVISIONS			
MARK	DATE	DESCRIPTION	

PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
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SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-102
SHEET 3 OF 28

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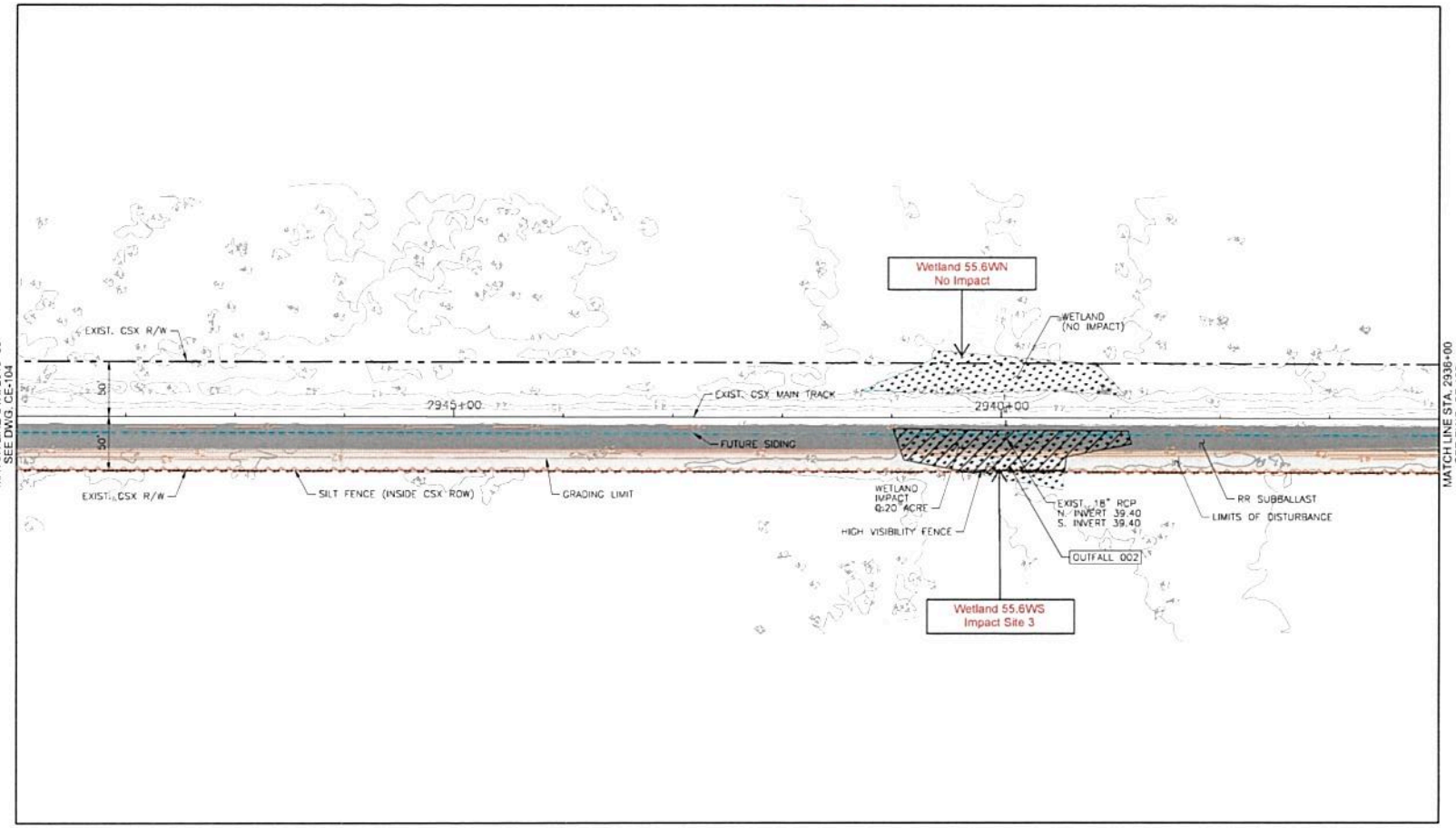

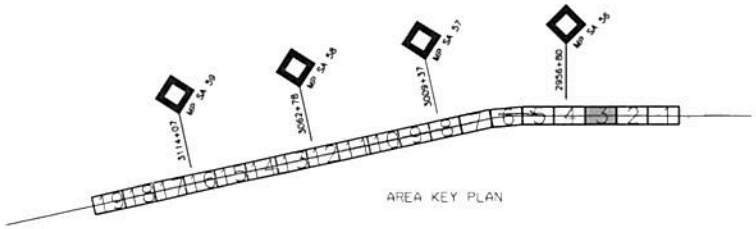

LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
- CSX ROW
- PROPOSED TRACK
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- SUBBALLAST
- SEEDING / LIMITS OF DISTURBANCE
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- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

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CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves [CSX]

REVISIONS

MARK	DATE	DESCRIPTION

PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
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SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-103
SHEET 18 OF 28

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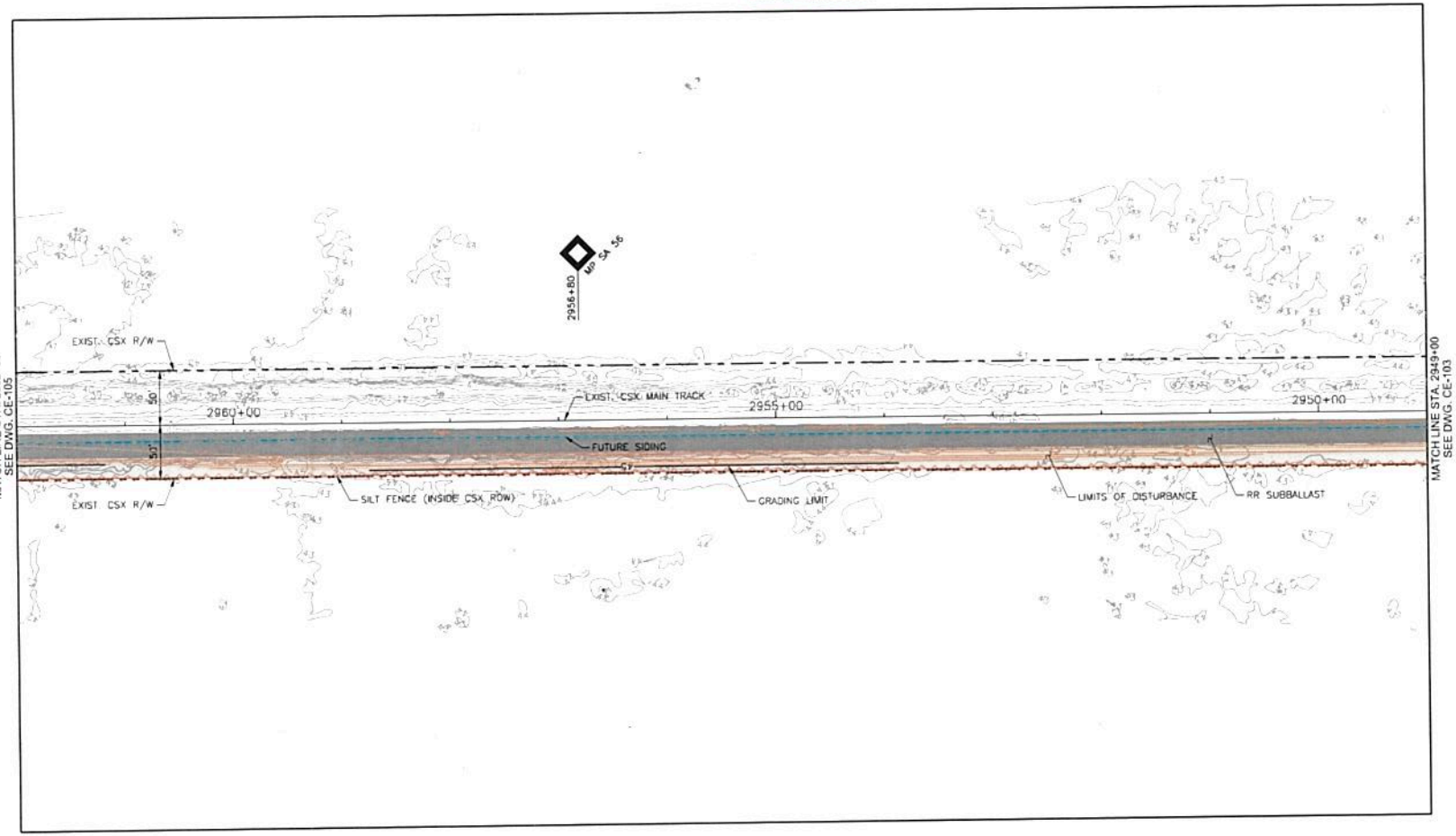

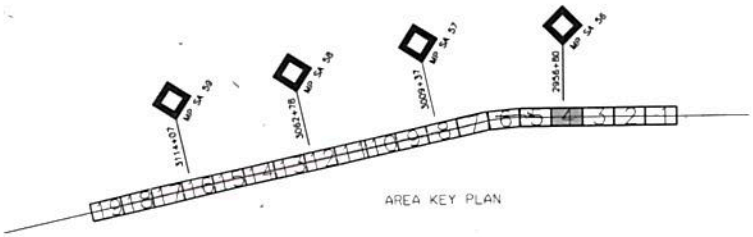

LEGEND

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- SILT FENCE
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- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

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PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

CSX
How tomorrow moves

REVISIONS		
MARK	DATE	DESCRIPTION

PROJ NO: P304150044
SCALE: AS NOTED
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SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-104

SHEET 11 OF 28

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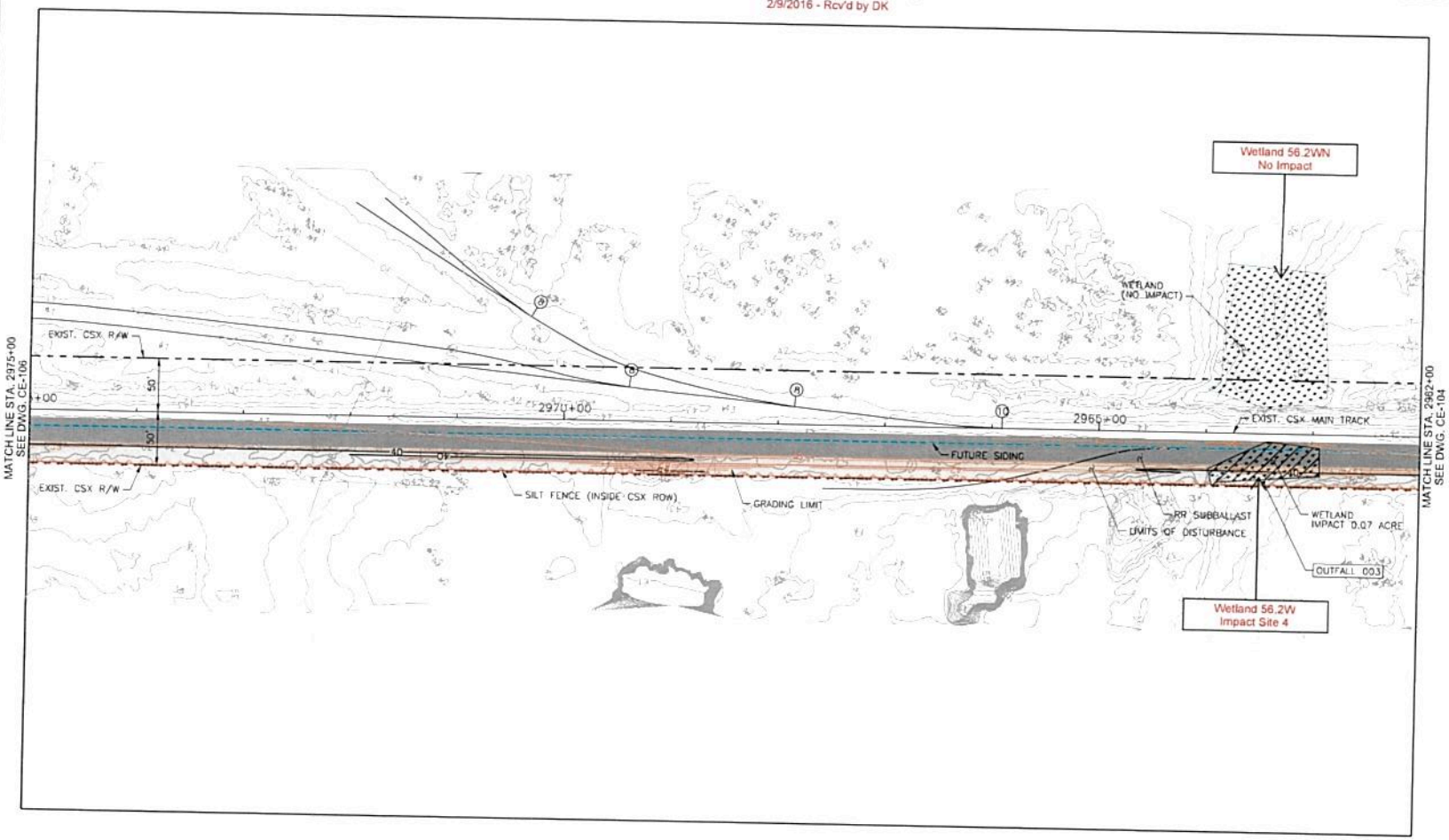

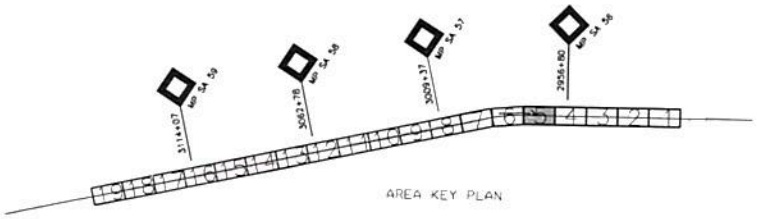

LEGEND

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- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

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FAX: (904) 281-9919

CONSULTANTS:

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PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves

CSX

REVISIONS			
MARK	DATE	DESCRIPTION	

PROJ NO: P304150644
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
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SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-105

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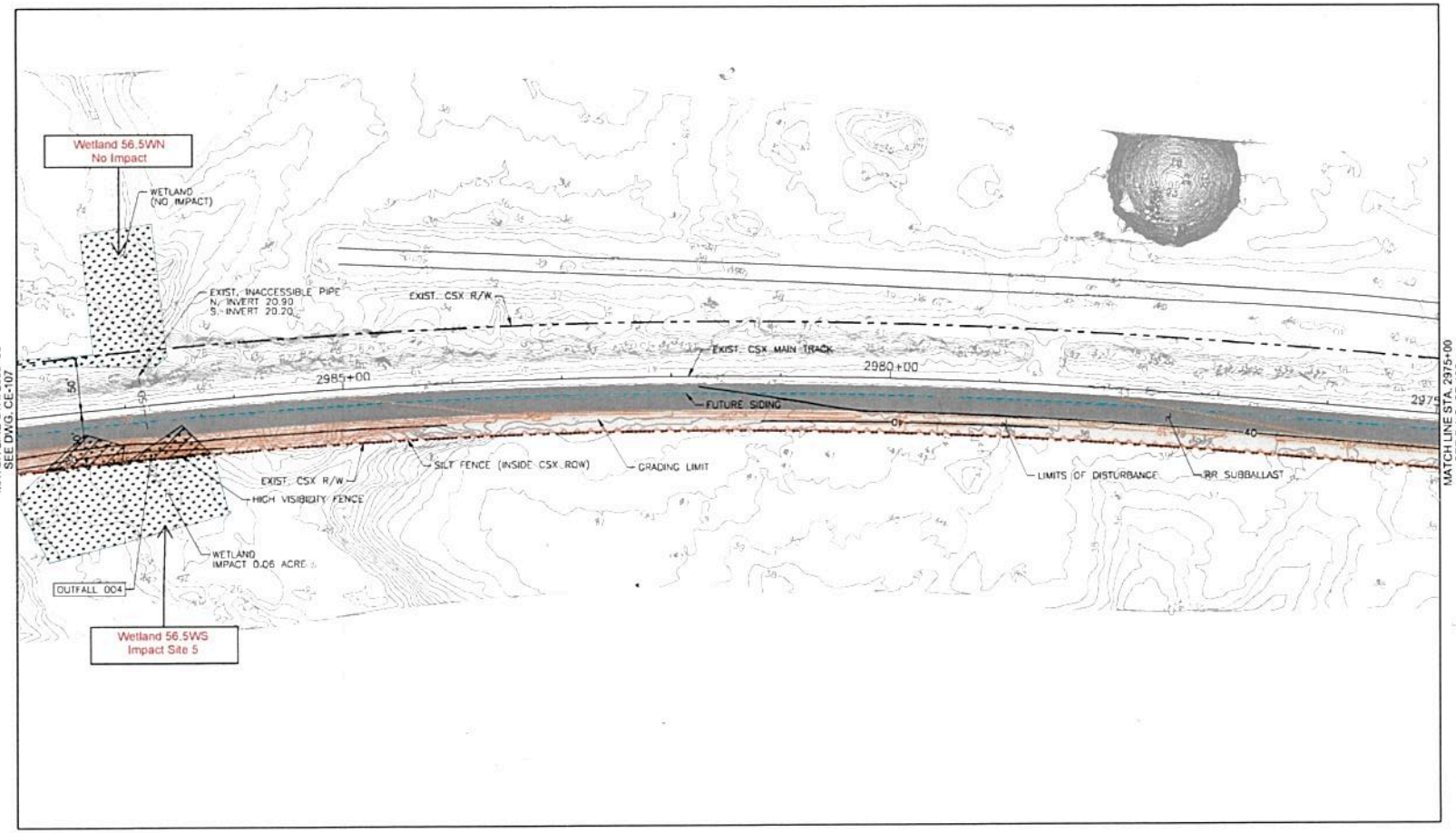

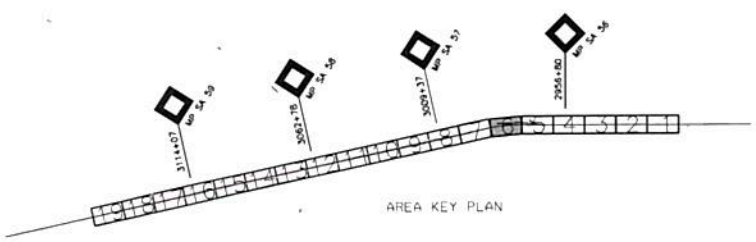

LEGEND

- GRADING LIMITS
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- WETLAND IMPACT AREA

N

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SCALE FEET

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FAX: (904) 245-6310

CONSULTANTS:

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PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves

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REVISIONS

MARK	DATE	DESCRIPTION

PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
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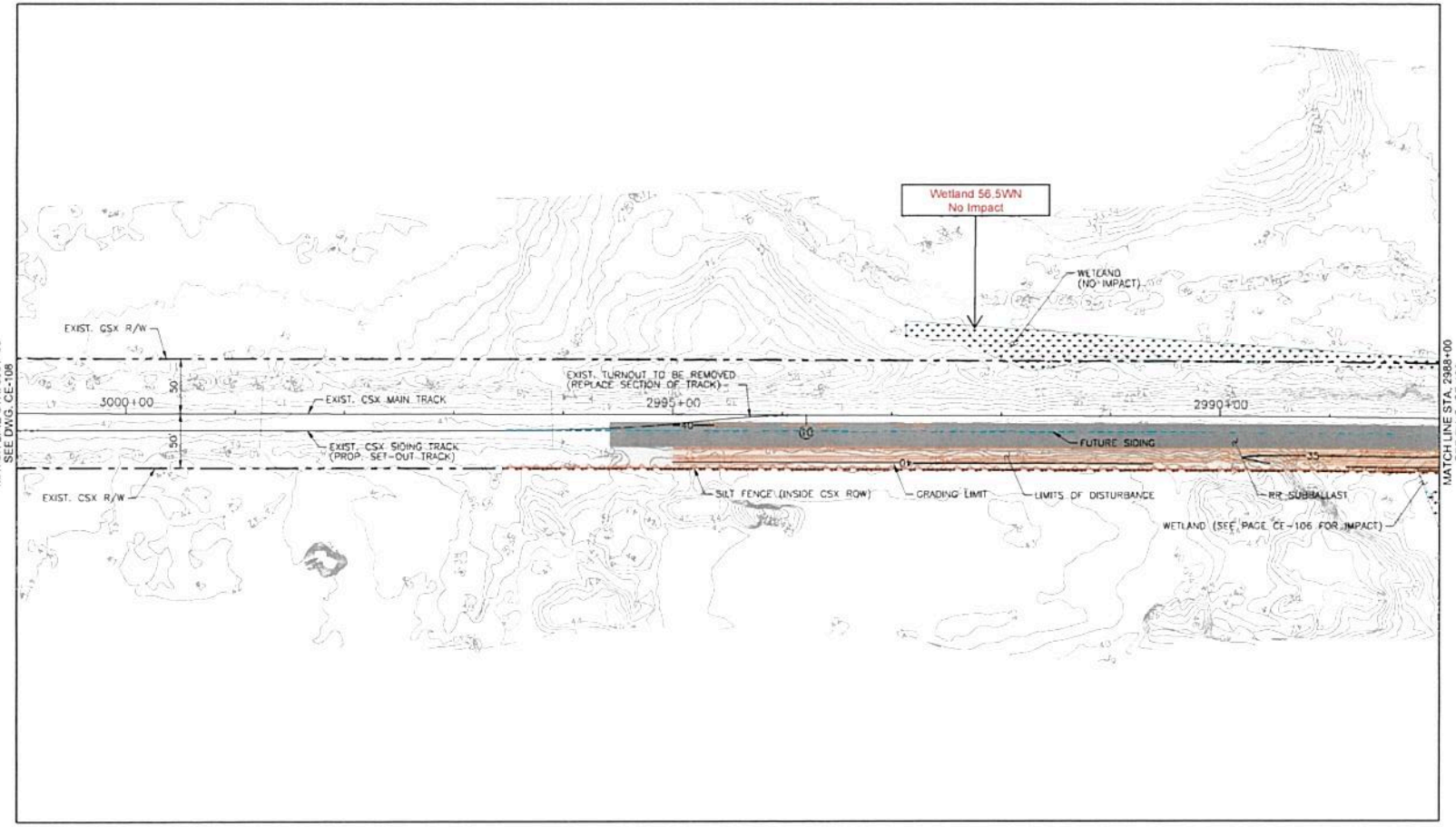
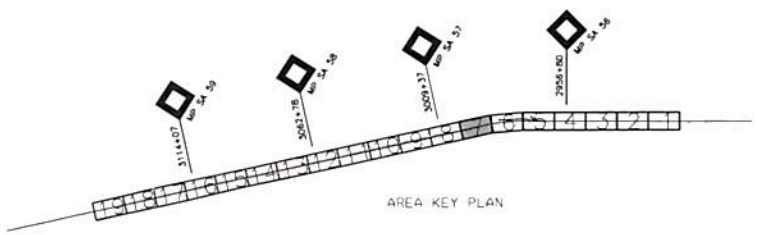
SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-106

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
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- PROPOSED TRACK
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- SUBBALLAST
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- CONSTRUCTION ENTRANCE
- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

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FAX: (904) 246-8016

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves

CSX

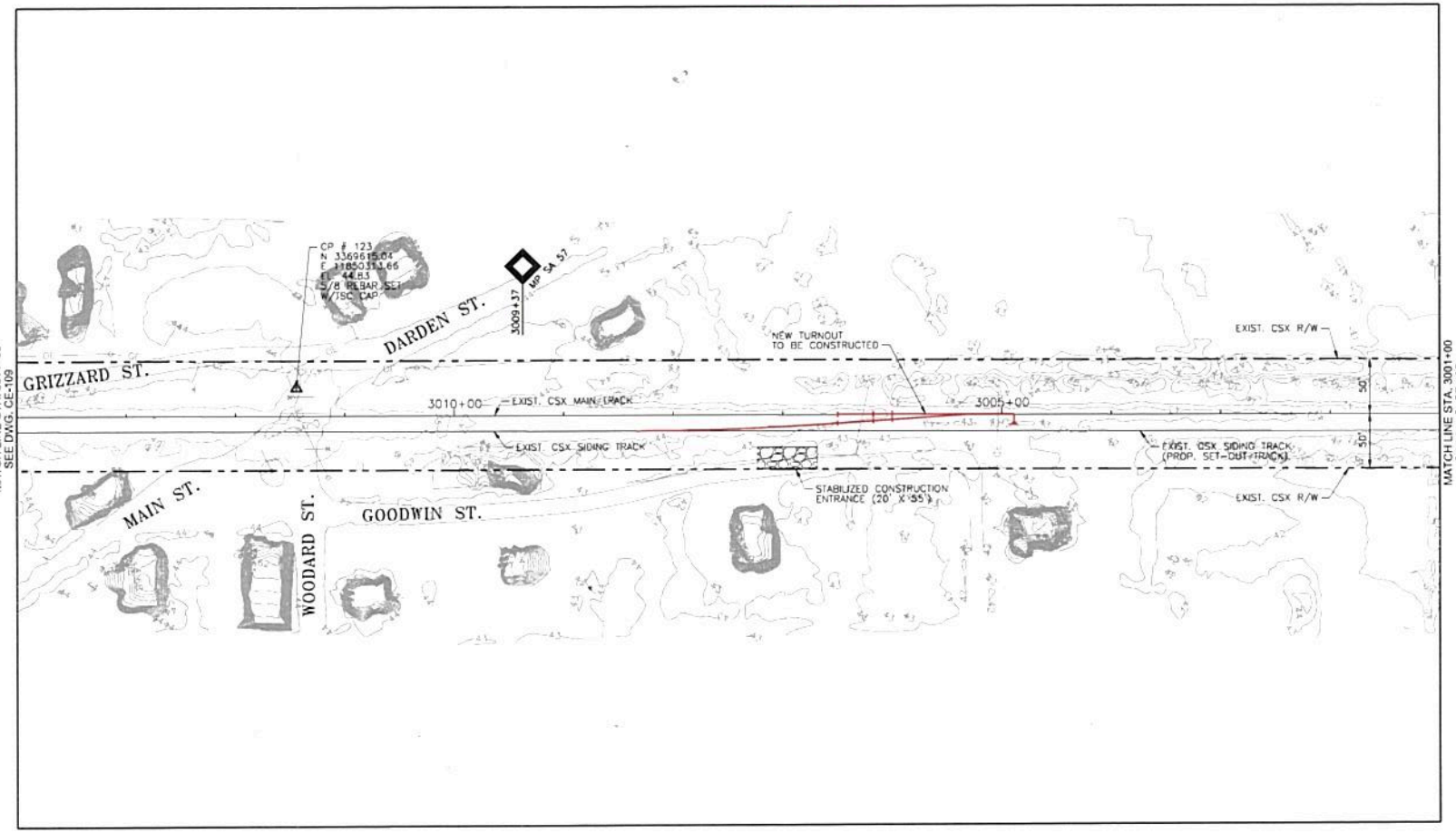
REVISIONS			
MARK	DATE	DESCRIPTION	

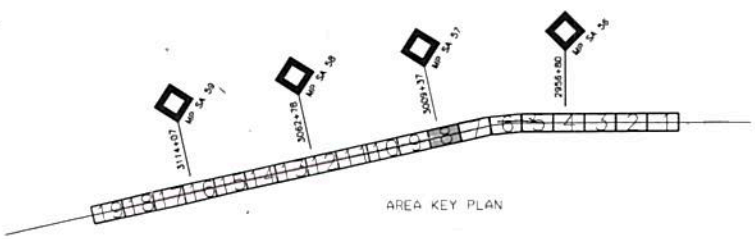
PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGB

SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-107
SHEET 14 OF 28

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
- CSX ROW
- PROPOSED TRACK
- FUTURE TRACK
- SUBBALLAST
- SEEDING / LIMITS OF DISTURBANCE
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- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

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CONSULTANTS:

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PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves [CSX]

REVISIONS		
MARK	DATE	DESCRIPTION

PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
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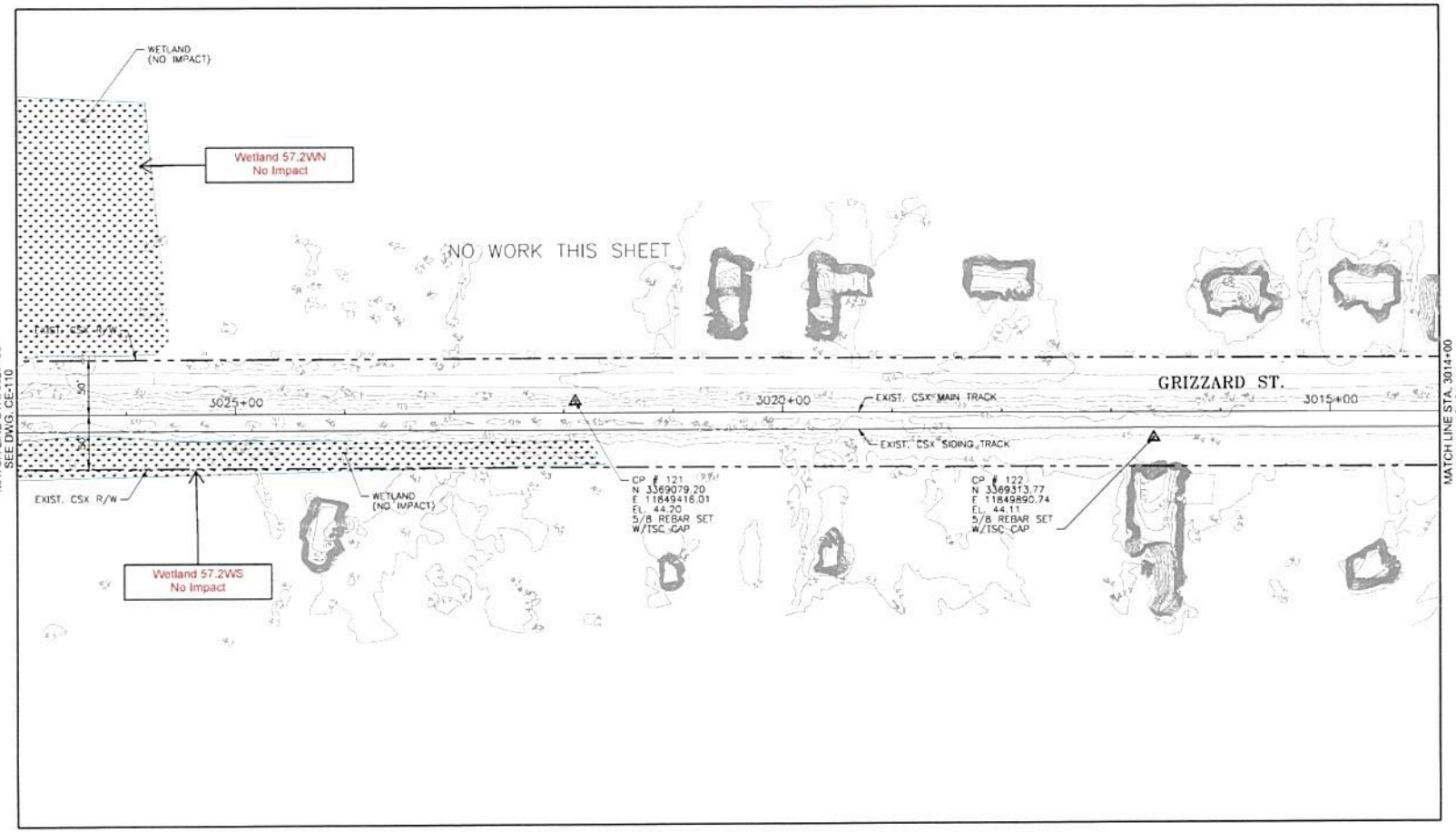
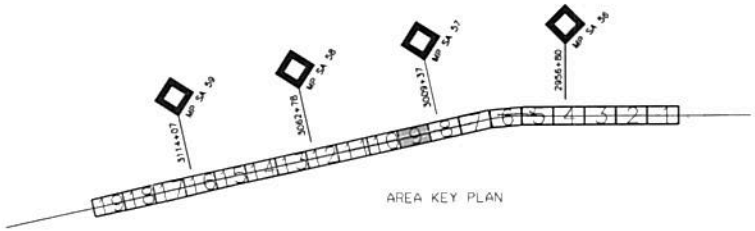
SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-108
SHEET 15 OF 28

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
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- SUBBALLAST
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- CONSTRUCTION ENTRANCE
- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

0 50 100 150
SCALE FEET

N

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SUITE 440
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6500
FAX: (904) 245-6518

CONSULTANTS:

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BRANCHVILLE, VIRGINIA

How tomorrow moves [CSX]

REVISIONS		
MARK	DATE	DESCRIPTION

PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2018
DESIGNED BY: MEW
DRAWN BY: MEW
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SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-109
SHEET 16 OF 28

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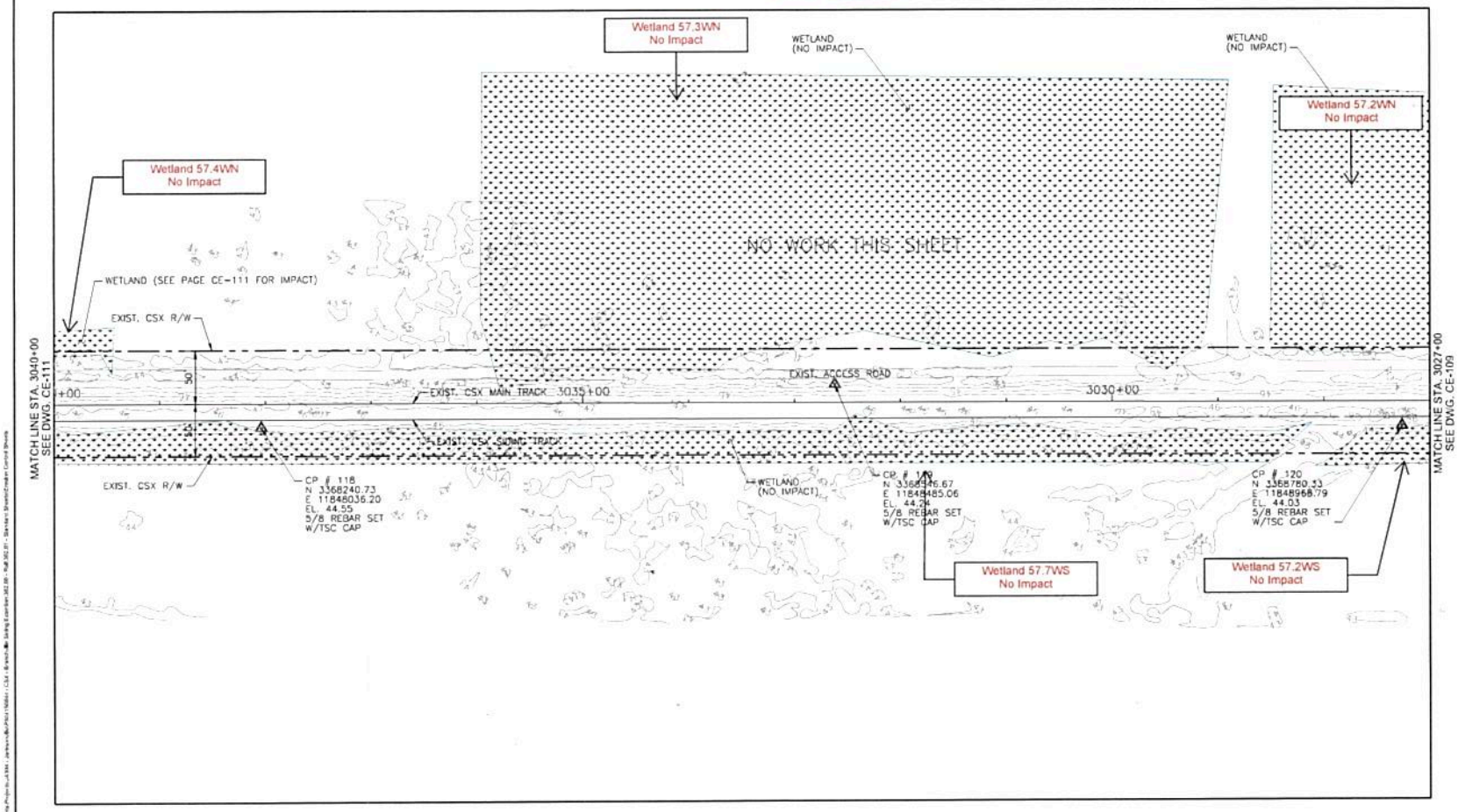
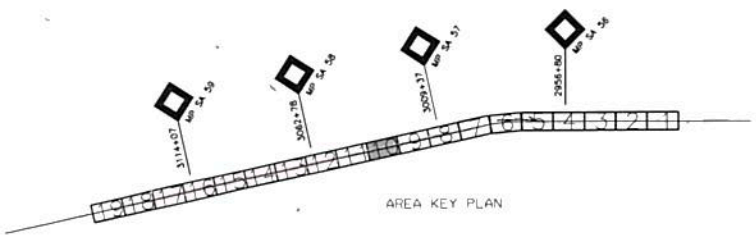
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
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- CSX ROW
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- SUBBALLAST
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- CONSTRUCTION ENTRANCE
- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

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4200 SALISBURY ROAD
SUITE 440
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6500
FAX: (904) 245-6810

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves [CSX]

REVISIONS

MARK	DATE	DESCRIPTION

PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
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CHECKED BY: MGB

SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-110
SHEET 17 OF 28

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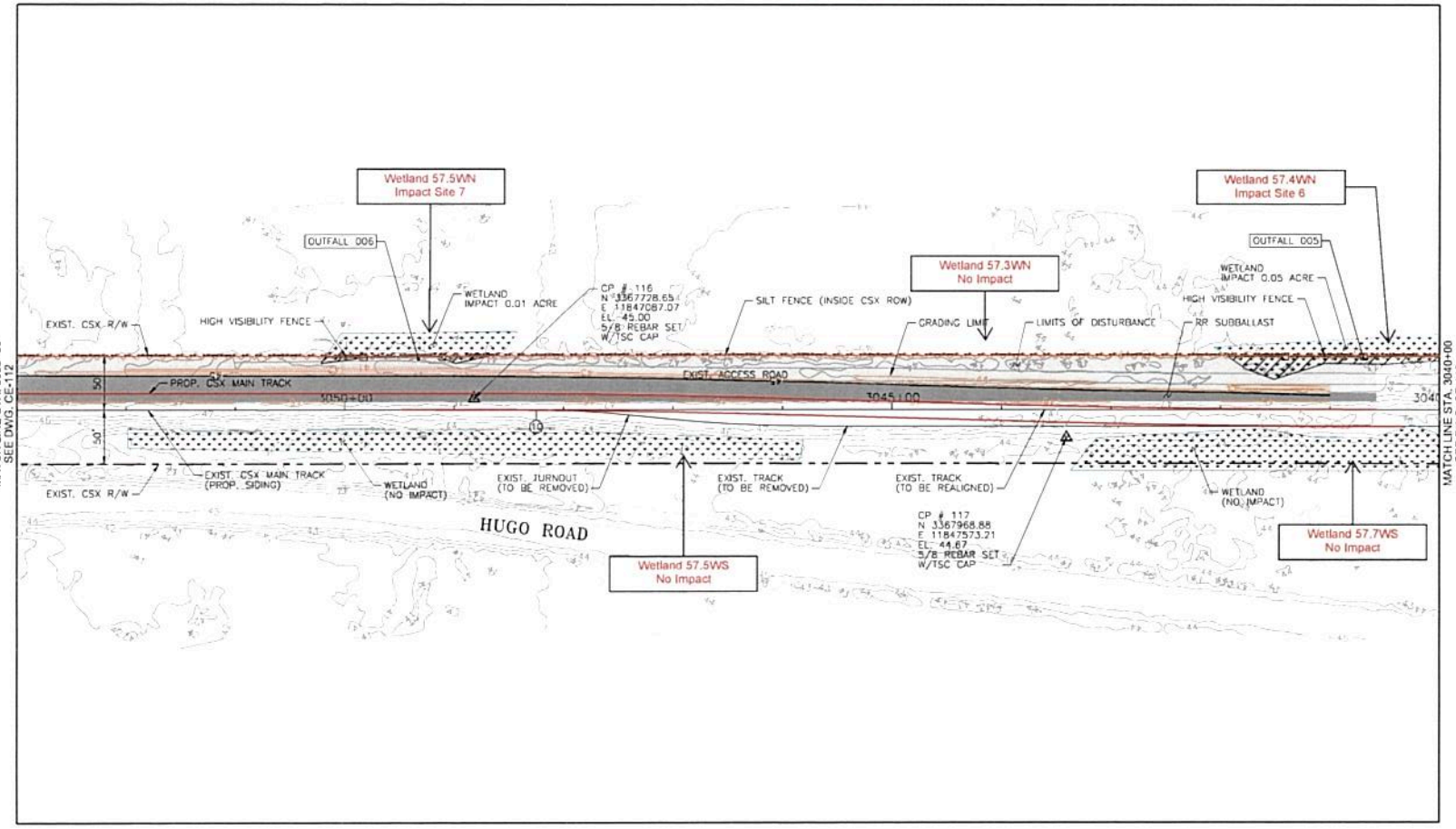
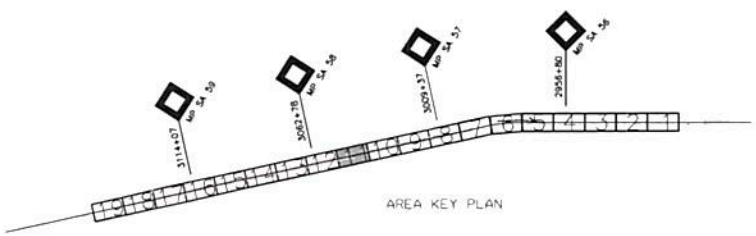
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
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- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

0 50 100 150
SCALE FEET

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CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves [CSX]

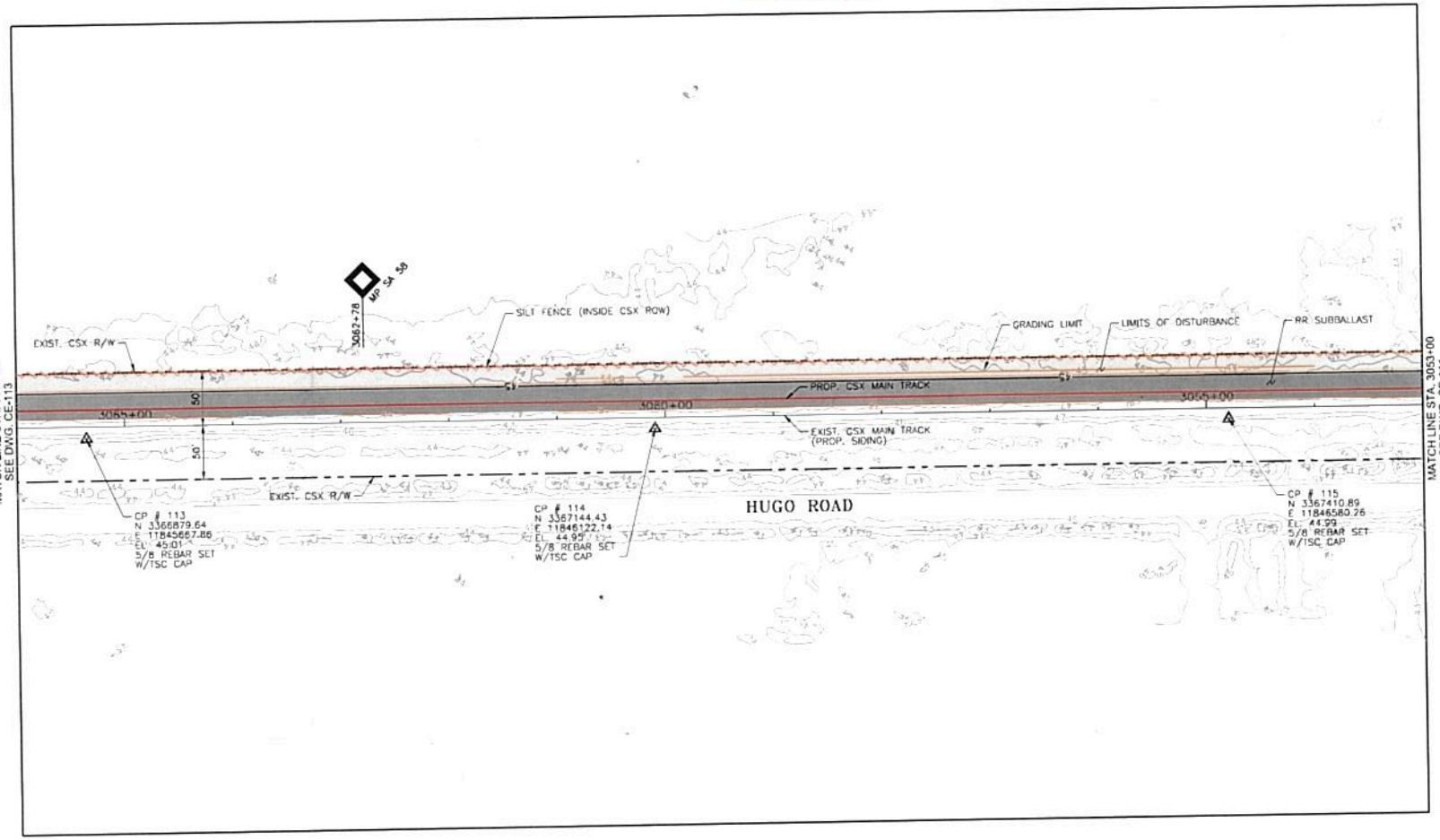
REVISIONS		
MARK	DATE	DESCRIPTION

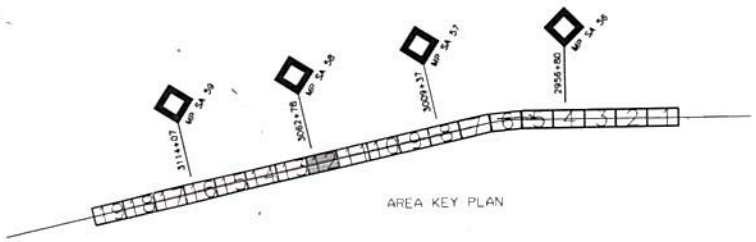
PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGB

SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-111

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
- CSX ROW
- PROPOSED TRACK
- FUTURE TRACK
- SUBBALLAST
- SEEDING / LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

0 50 100 150
SCALE FEET

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

TranSystems
4309 SALISBURY ROAD
SUITE 440
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6900
FAX: (904) 245-6910

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves

CSX

REVISIONS		
MARK	DATE	DESCRIPTION

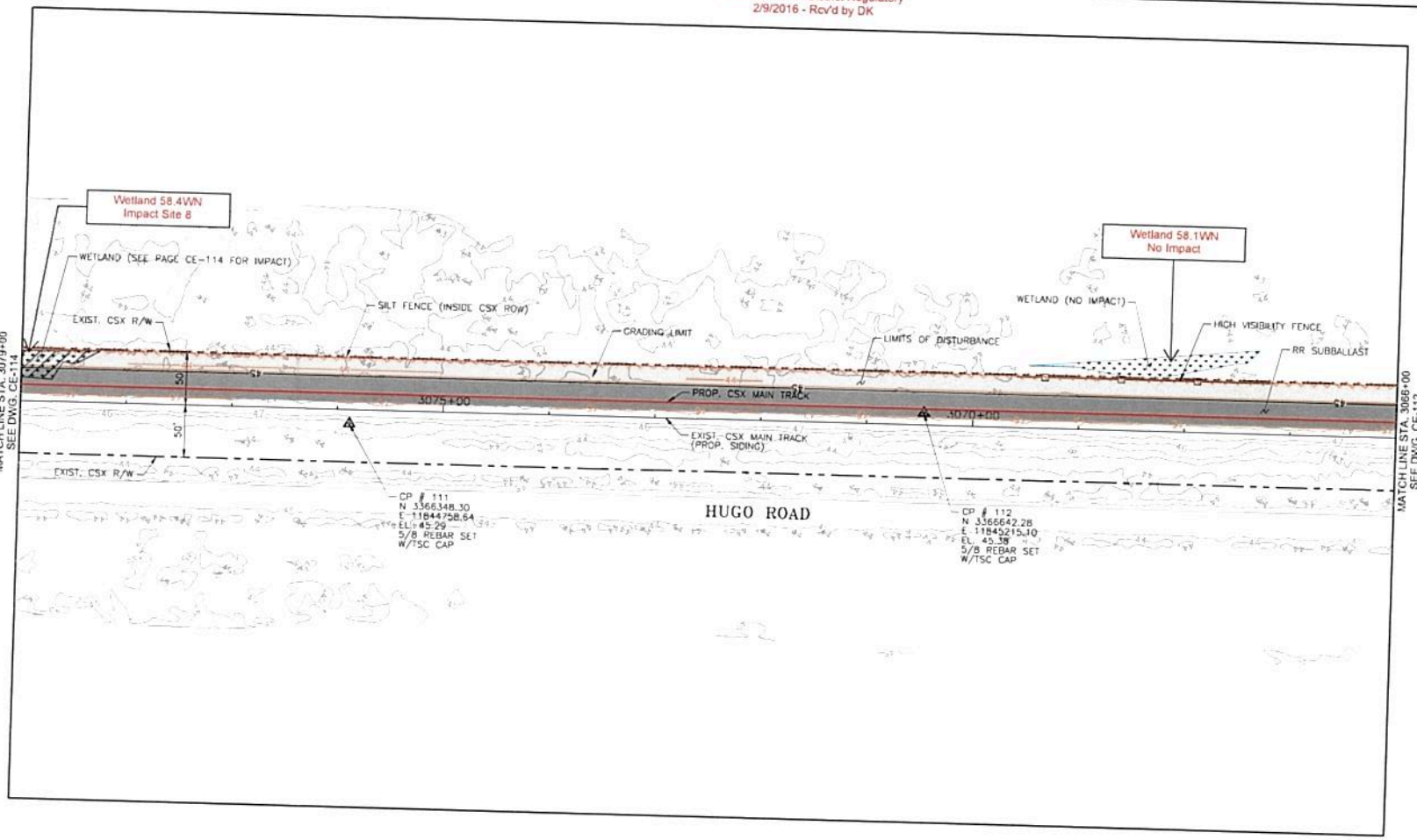
PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGR

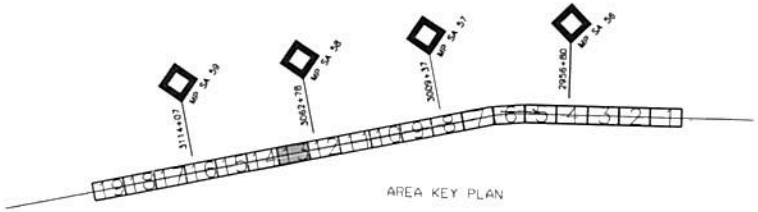
SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-112

SHEET 18 OF 28

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
- CSX ROW
- PROPOSED TRACK
- FUTURE TRACK
- SUBBALLAST
- SEEDING / LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

SCALE 0 50 100 150 FEET

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

TranSystems
4308 SALISBURY ROAD
SUITE 440
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6000
FAX: (904) 245-6518

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves [CSX]

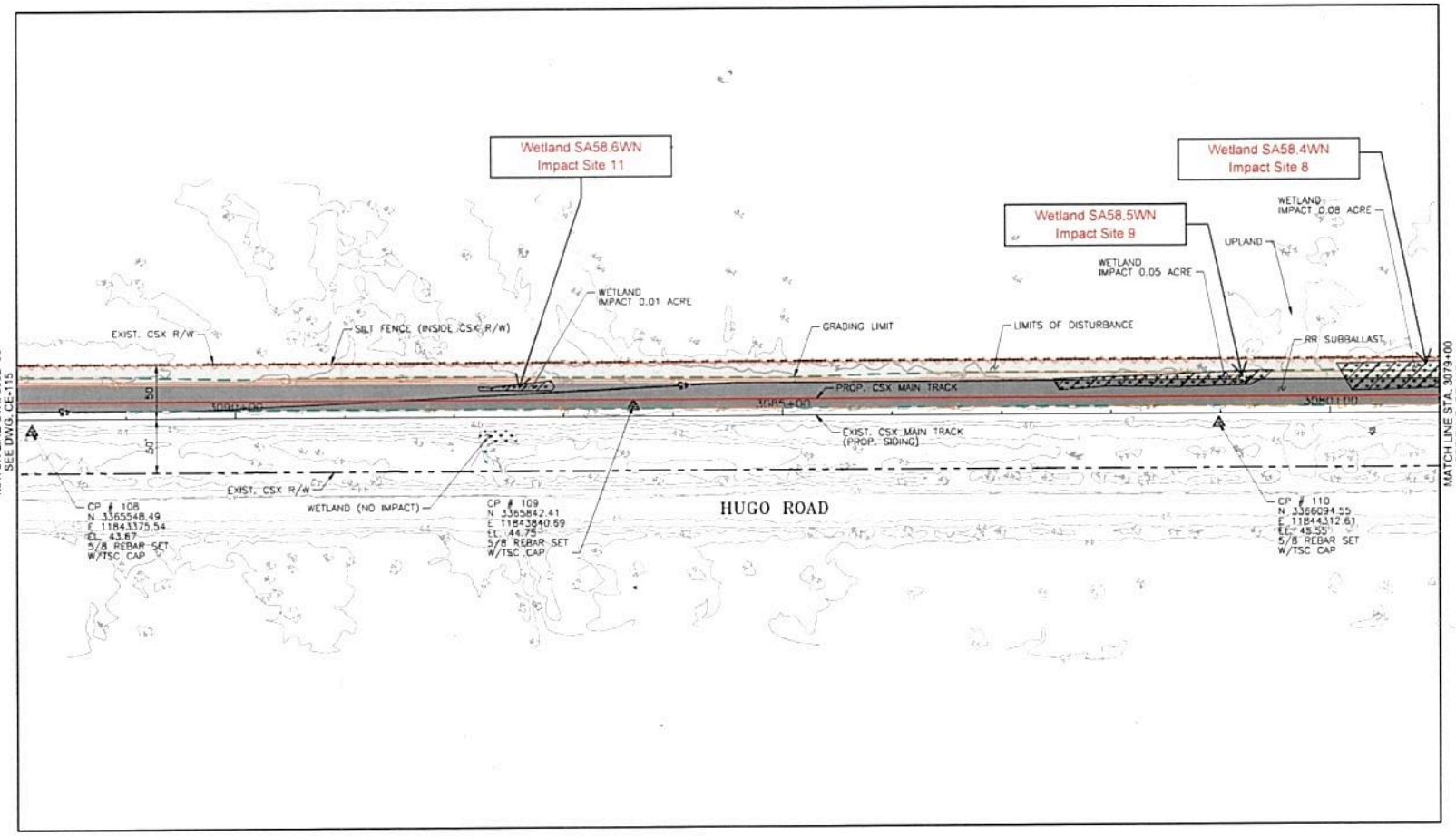
REVISIONS		
MARK	DATE	DESCRIPTION

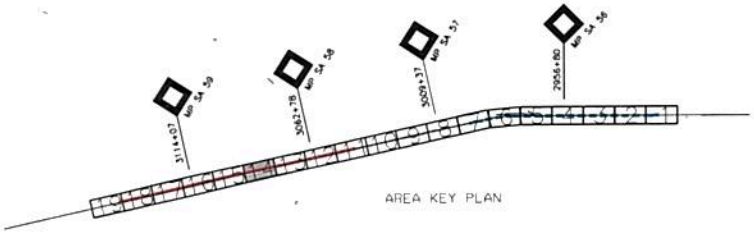
PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGB

SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-113

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
- CSX ROW
- PROPOSED TRACK
- FUTURE TRACK
- SUBBALLAST
- SEEDING / LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

Trail Systems
4308 SHUBURY ROAD
SUITE 140
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6300
FAX: (904) 245-6318

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves

CSX

REVISIONS			
MARK	DATE	DESCRIPTION	

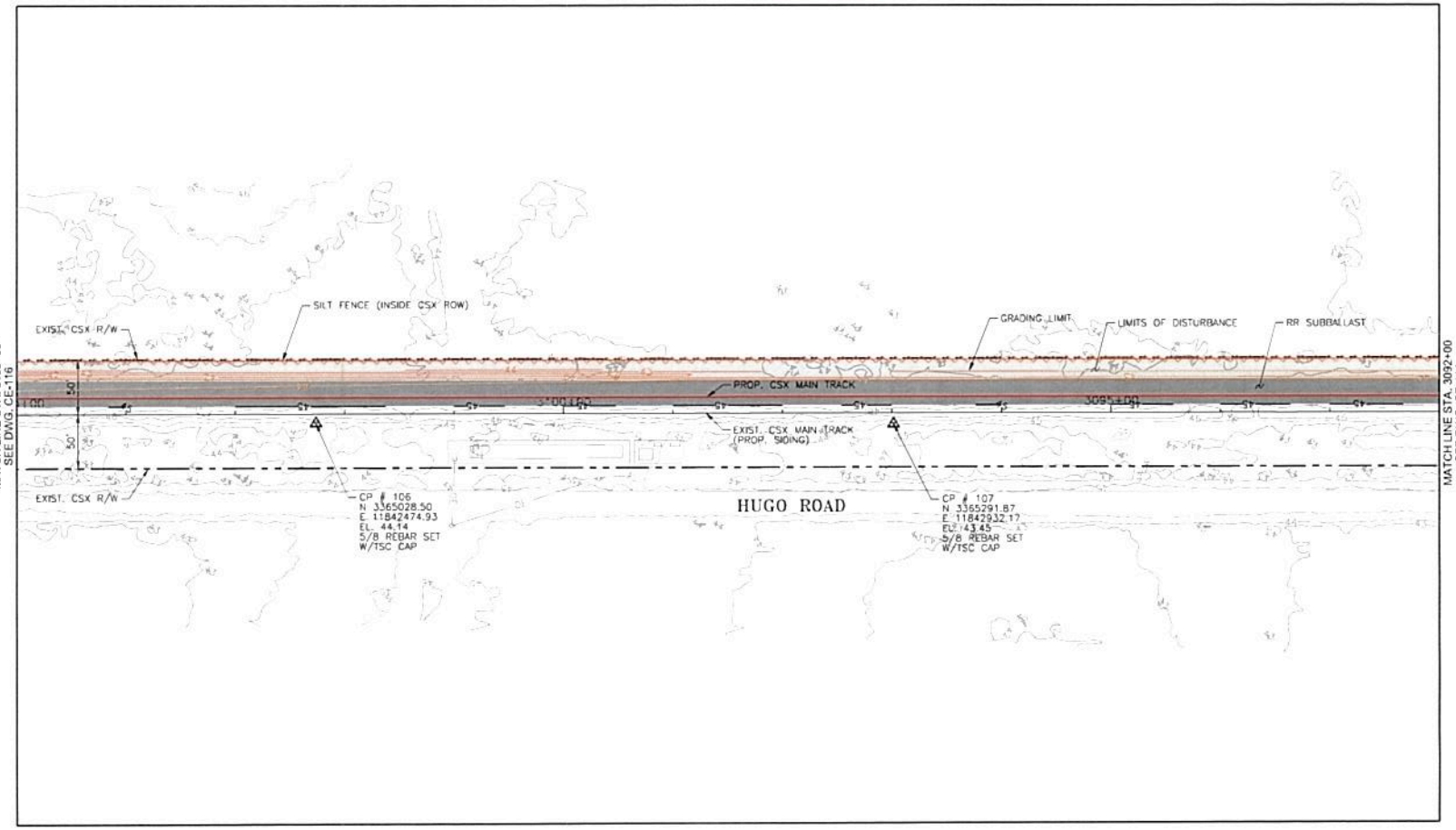
PROJ NO: P304150044
SCALE: AS NOTED
DATE: 1/21/2016
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGR

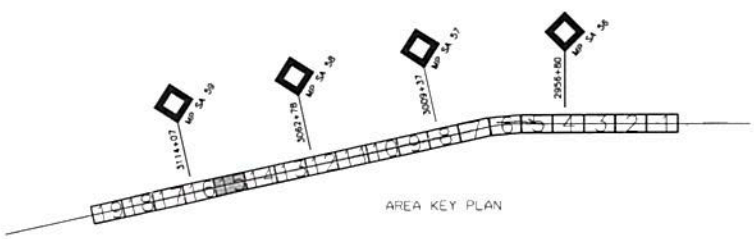
SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-114

SHEET 21 OF 28

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
- CSX ROW
- PROPOSED TRACK
- FUTURE TRACK
- SUBBALLAST
- SEEDING / LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE
- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

SCALE 0 50 100 150 FEET

* THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

TranSystems
1128 SALISBURY ROAD
SUITE 440
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6500
FAX: (904) 245-6518

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves

CSX

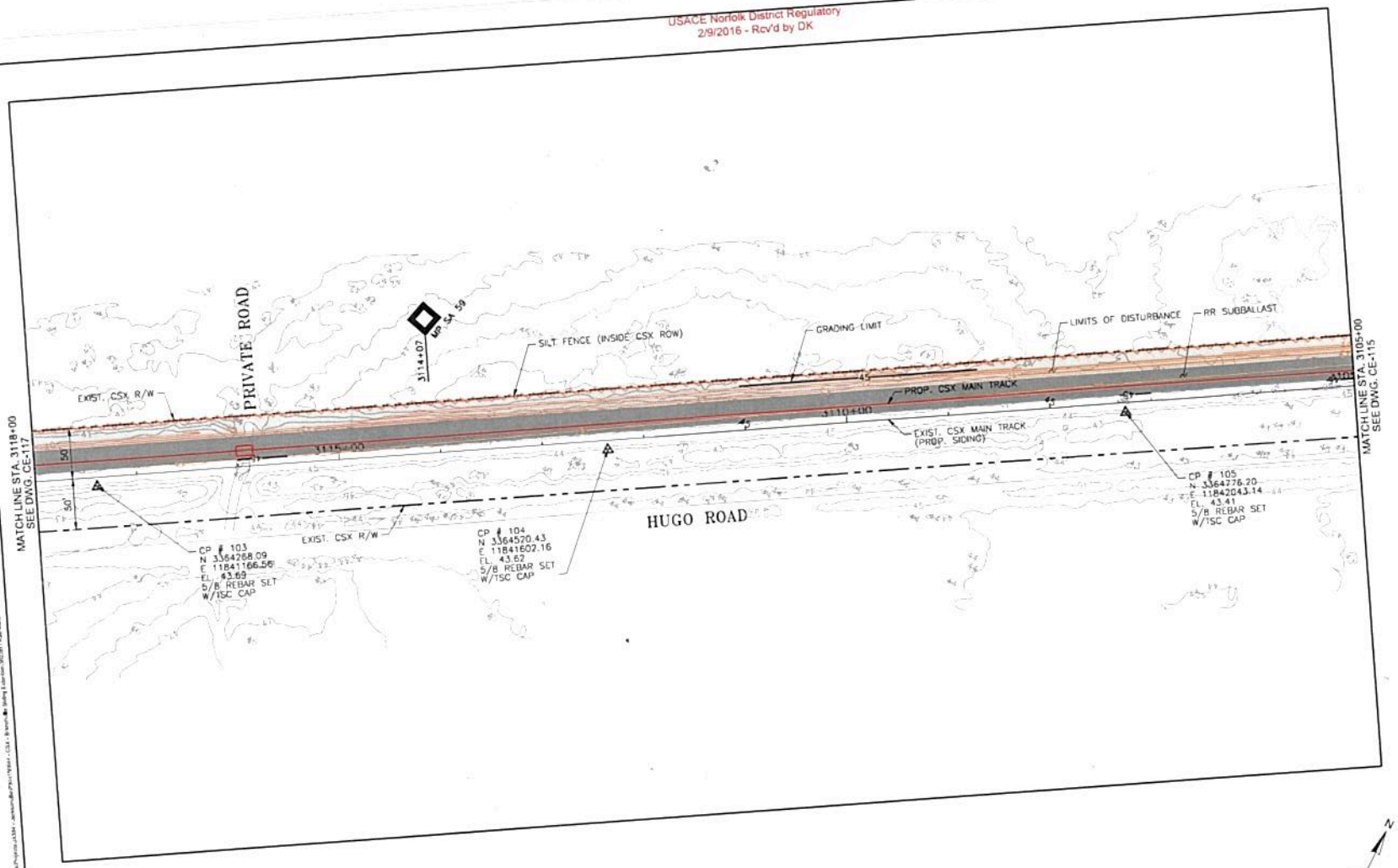
REVISIONS			
MARK	DATE	DESCRIPTION	

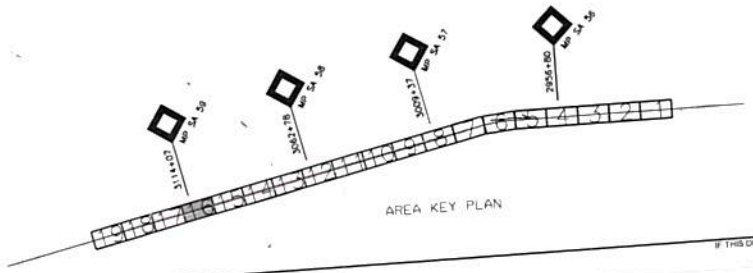
PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGB

SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-115

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
- CSX ROW
- PROPOSED TRACK
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- CONSTRUCTION ENTRANCE
- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

Tran Systems
4109 SALISBURY ROAD
SUITE 449
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6900
FAX: (904) 245-6910

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

CSX
How tomorrow moves

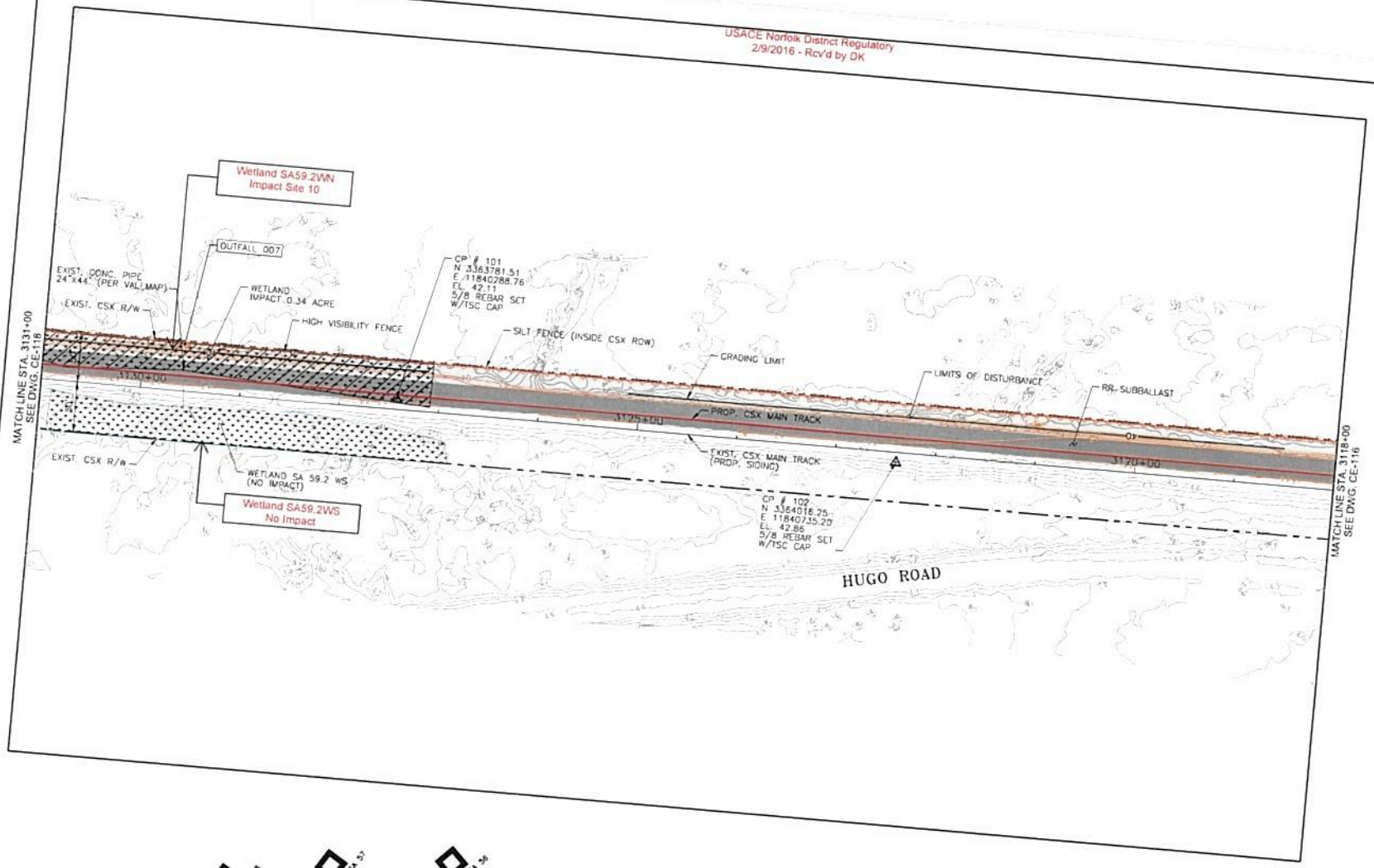
REVISIONS			
MARK	DATE	DESCRIPTION	

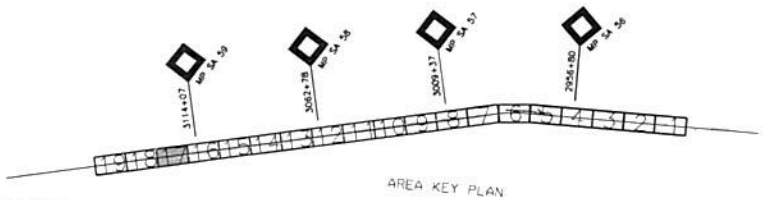
PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGB

SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-116
SHEET 23 OF 28

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
- CSX ROW
- PROPOSED TRACK
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- WETLAND DESIGNATION
- WETLAND IMPACT AREA

SCALE 0 50 100 150 FEET

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

TranSystems
4200 SALISBURY ROAD
SUITE 440
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6200
FAX: (904) 245-6018

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves CSX

REVISIONS			
		MARK	DATE	DESCRIPTION

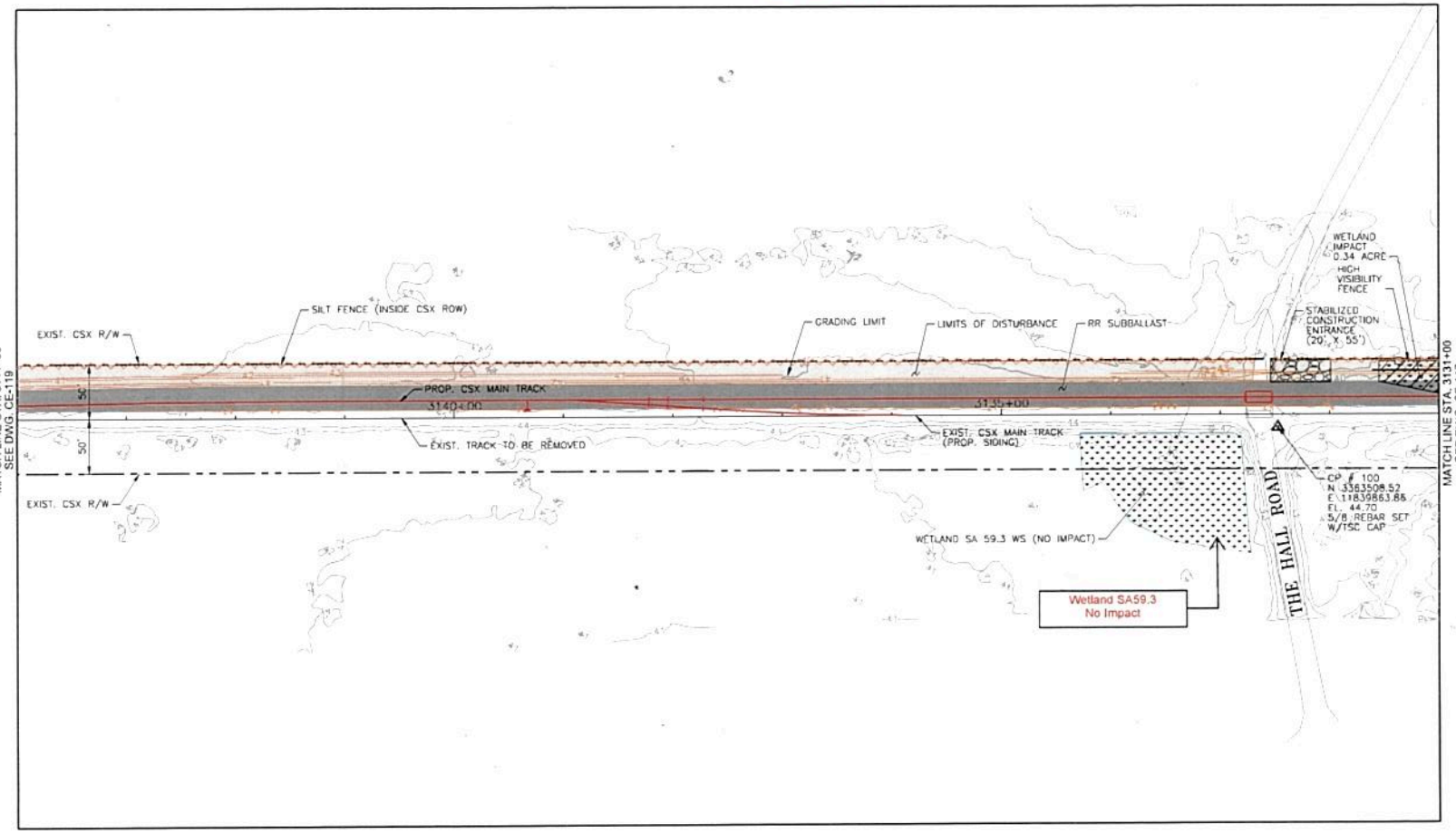
PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGR

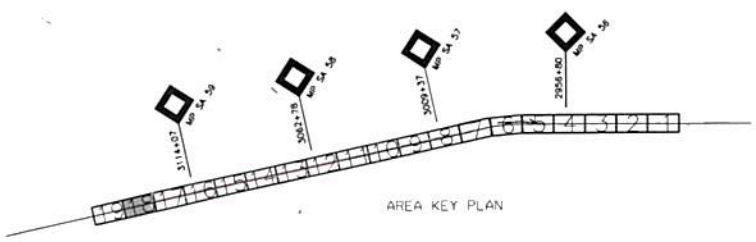
SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-117

SHEET 24 OF 28

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
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- CSX ROW
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- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

TranSystems
4300 SALISBURY ROAD
SUITE 440
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6300
FAX: (904) 245-6310

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves

CSX

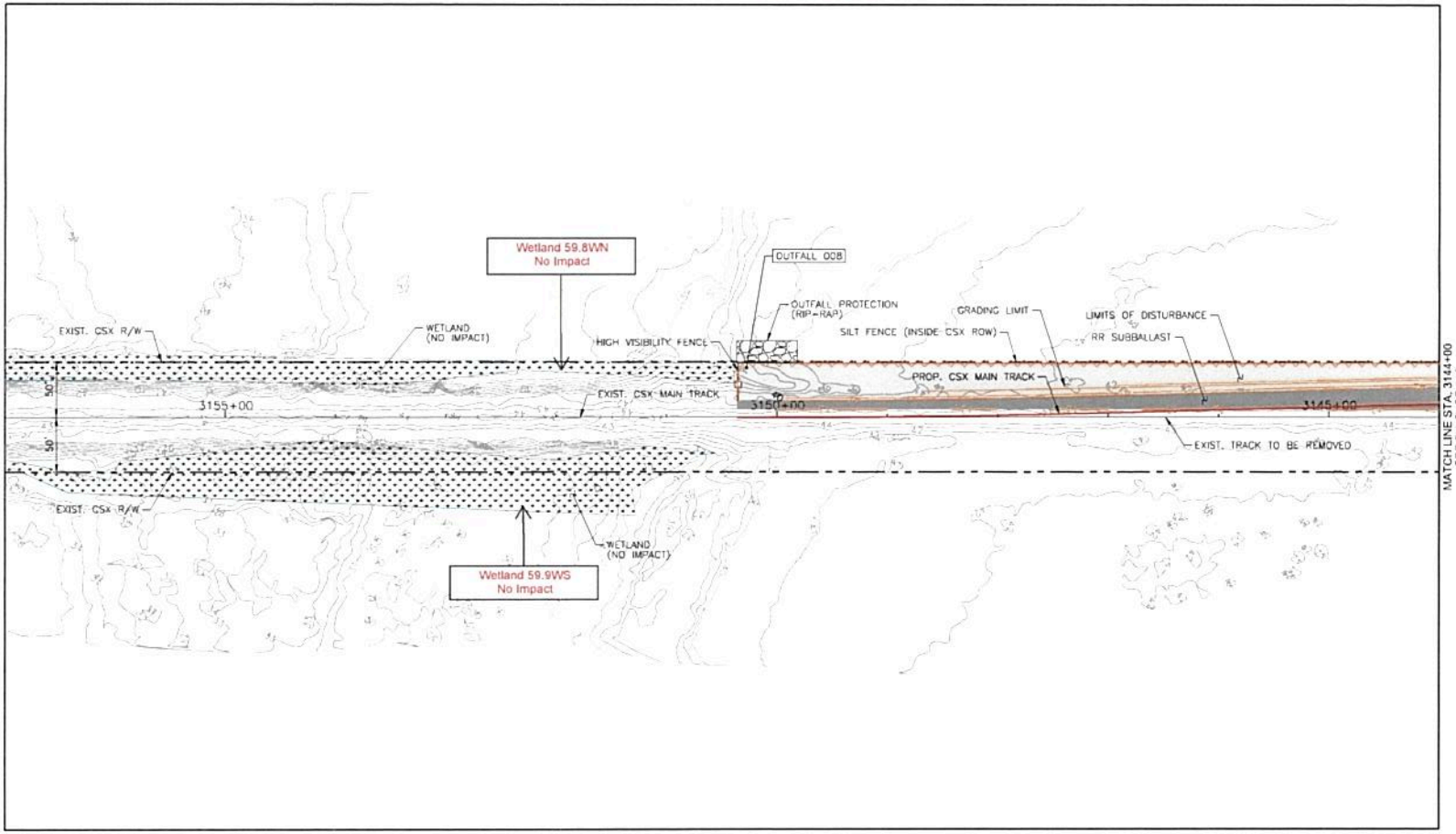
REVISIONS			
MARK	DATE	DESCRIPTION	

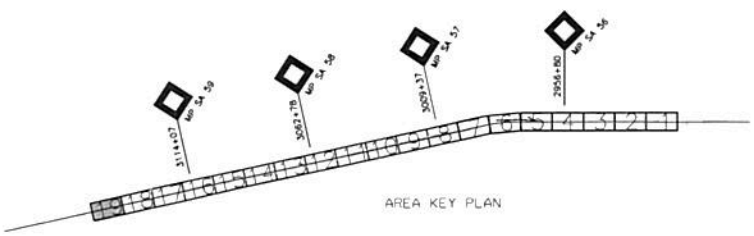
PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
DRAWN BY: MEW
CHECKED BY: MGB

SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

SHEET NO.
CE-118
SHEET 23 OF 28

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK





LEGEND

- GRADING LIMITS
- SILT FENCE
- HIGH VISIBILITY FENCE
- CSX ROW
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- CONCRETE WASH OUT
- WETLAND DESIGNATION
- WETLAND IMPACT AREA

N

0 50 100 150
SCALE FEET

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

TranSystems
4300 SALISBURY ROAD
SUITE 440
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6300
FAX: (904) 245-6510

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves

CSX

REVISIONS			
MARK	DATE	DESCRIPTION	

PROJ NO: P304150044
SCALE: AS NOTED
DATE: 11/12/2015
DESIGNED BY: MEW
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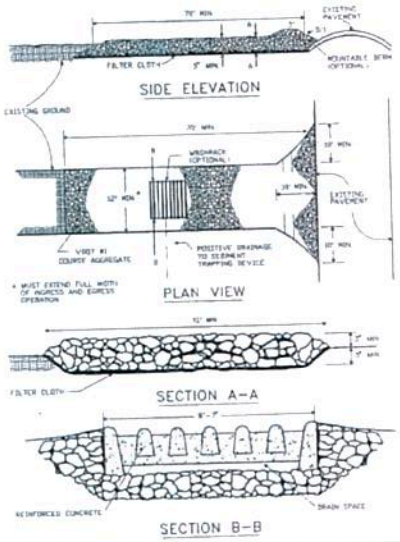
CHECKED BY: MGB

SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN

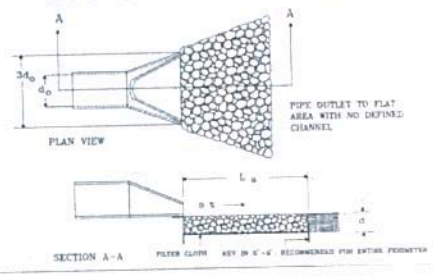
SHEET NO.
CE-119
SHEET 28 OF 29

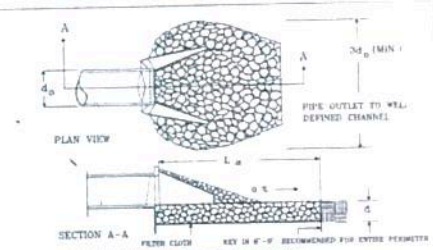
USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK

STONE CONSTRUCTION ENTRANCE



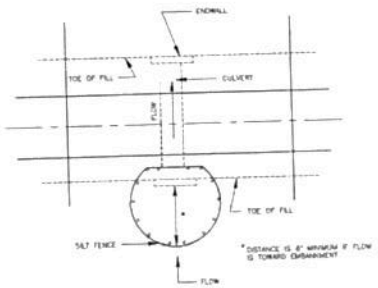
PIPE OUTLET CONDITIONS



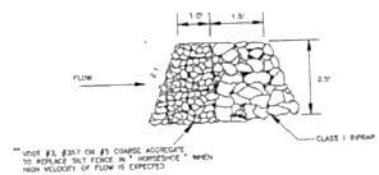


NOTES: 1. APRON LINING MAY BE RIPRAP, GROUTED RIPRAP, GABION BASKET, OR CONCRETE.
2. La IS THE LENGTH OF THE RIPRAP APRON AS CALCULATED USING PLATES 3.18-3 AND 3.18-4.
3. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER, BUT NOT LESS THAN 6 INCHES.

SILT FENCE CULVERT INLET PROTECTION

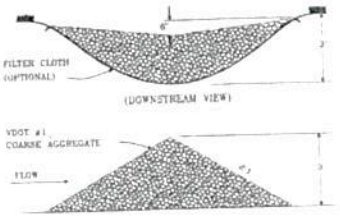


OPTIONAL STONE COMBINATION**

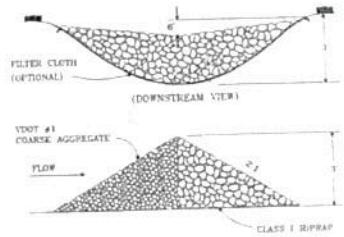


ROCK CHECK DAM

2 ACRES OR LESS OF DRAINAGE AREA



2-10 ACRES OF DRAINAGE AREA



IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING

TranSystems
4500 SALISBURY ROAD
SUITE 440
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-6500
FAX: (904) 245-6510

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves [CSX]

REVISIONS:		
MARK	DATE	DESCRIPTION

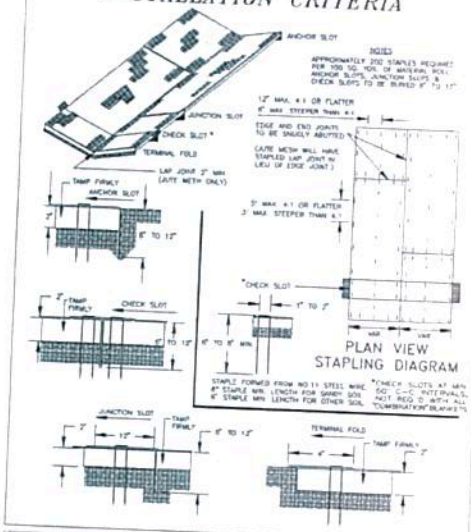
PROJ NO: P304150044
SCALE: AS NOTED
DATE: 8/28/2015
DESIGNED BY: PWD
DRAWN BY: PWD
CHECKED BY: MGB

SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL DETAILS

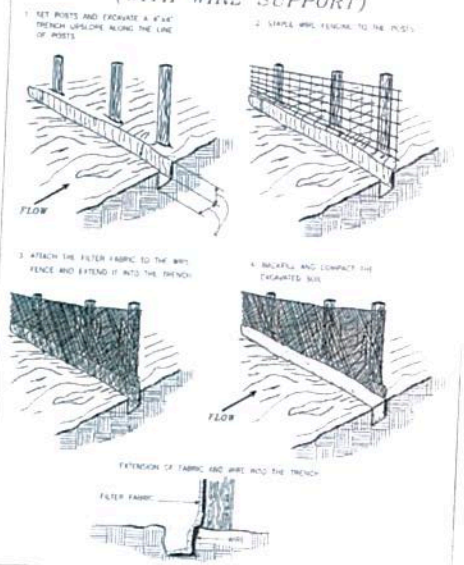
SHEET NO.
CE-201
SHEET 27 OF 28

USACE Norfolk District Regulatory
2/9/2016 - Rcv'd by DK

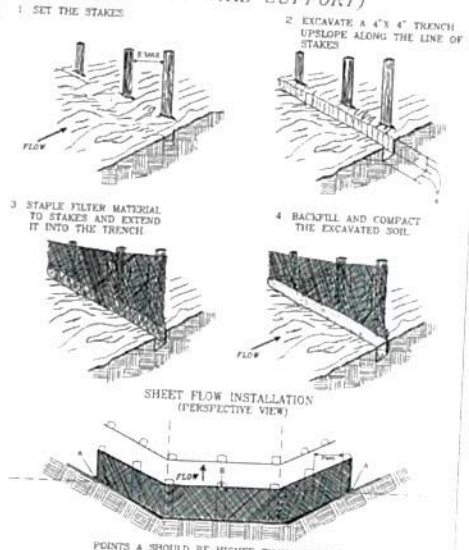
TYPICAL TREATMENT – 1 (SOIL STABILIZATION BLANKET) INSTALLATION CRITERIA



CONSTRUCTION OF A SILT FENCE (WITH WIRE SUPPORT)



CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)



TranSystems
4300 SALISBURY ROAD
SUITE 440
JACKSONVILLE, FLORIDA 32216
PHONE: (904) 245-4500
FAX: (904) 245-8516

CONSULTANTS:

BRANCHVILLE
PROPOSED SIDING EXTENSION
BRANCHVILLE, VIRGINIA

How tomorrow moves

CSX

REVISIONS			
MARK	DATE	DESCRIPTION	

PROJ.NO: P304150044
SCALE: AS NOTED
DATE: 8/28/2015
DESIGNED BY: PWD
DRAWN BY: PWD
CHECKED BY: MGB

SHEET TITLE:
GRADING, DRAINAGE, EROSION AND SEDIMENT CONTROL DETAILS

SHEET NO.
CE-202

SHEET 28 OF 28

IF THIS DRAWING IS LESS THAN 22" X 34" IT IS A REDUCED SIZE DRAWING