



Memo

Date: Tuesday, May 15, 2018
Project: CSXT Bridge Replacement at MP A 448.6, Yemassee, South Carolina
To: USACE, Charleston District, Elizabeth Williams
From: Kathryn Plimpton, Architectural Historian, HDR
Subject: Section 106 – Area of Potential Effects, National Register Evaluation of Bridge, Assessment of Effects

For this Project, the recommended Area of Potential Effects (APE) includes the extent of ground disturbance and is limited to the length of the bridge across Tulifiny Creek and an additional 145 feet north and 230 feet south from the edge of the creek. The width of the APE includes the bridge, both tracks, and the ballast on either side. Overall the APE measures approximately 470 feet in length and 55 feet in width.

The bridge is a 210-foot long timber trestle with 20 ten-foot timber stringer spans, constructed ca. 1915 and extensively rehabilitated in 1968. It will be replaced with steel rolled beams and precast-concrete box beams consistent with CSX standards. Ground disturbance will be limited to the removal and replacement of 49 timber piles and will result in a reduction of materials and overall footprint. To minimize ground disturbance, construction will utilize rail-mounted equipment. The ballast northwest of the creek will be used as a temporary crane pad and the ballast east of the tracks will be used as a temporary access road.

The bridge is the only property located within the APE that is 50 years of age or older. Based on a review of ArchSite, the South Carolina State Historic Preservation Office's (SHPO) GIS, there are no historic properties in the vicinity of the bridge and the bridge itself does not appear to have been previously evaluated for National Register of Historic Places (NRHP) eligibility. Further, the bridge is not mentioned in a 1996 Architectural and Historical Survey of Jasper County. The timber bridge over Tulifiny Creek is aligned roughly north-south and consists of two tracks: one deteriorated and out of service (east track), and one track in current use (west track). The 21-span timber bridge is supported by a combination of 12" diameter round wood piles and newer square-cut replacement timbers, all 10' in height. Twelve wood posts support the width of the double-track structure between spans, capped by historic square wood beams, interspersed with replacement concrete beams on the west (in-use) side. Diagonal wood plank braces are bolted to the piles and cross beams. Wood girders are a combination of original (east side) and replacement (west). Wingwalls are horizontally stacked square wood beams, bolted together and bracketed by round wood posts. The west track is topped with stone ballast, wood ties, and steel rails. The west track was rehabilitated and partially rebuilt with replacement wood piles, girders, and concrete caps in 1968.

The CSX line at MP A 448.6 is visible on an 1896 Seaboard Air-Line System map and references to the rail line go as far back as the Civil War. Historic maps indicate the tracks originally supported a logging railroad spur off the main line. The spur linked the main line to a railroad northwest of a logging operation in Gilmania. Although the railroad line dates back to the 1860s, the historic materials and structural design indicate that the original bridge over the Tulifiny Creek supporting the out of service track was constructed c. 1915. There have been significant modifications to the bridge including the addition of a second track c. 1942 and considerable replacement of materials in 1968, which reflects the given



construction date of the bridge by CSX. Based on the significant replacement of wood piles, girders, and concrete caps, it is clear that little historic material remains.

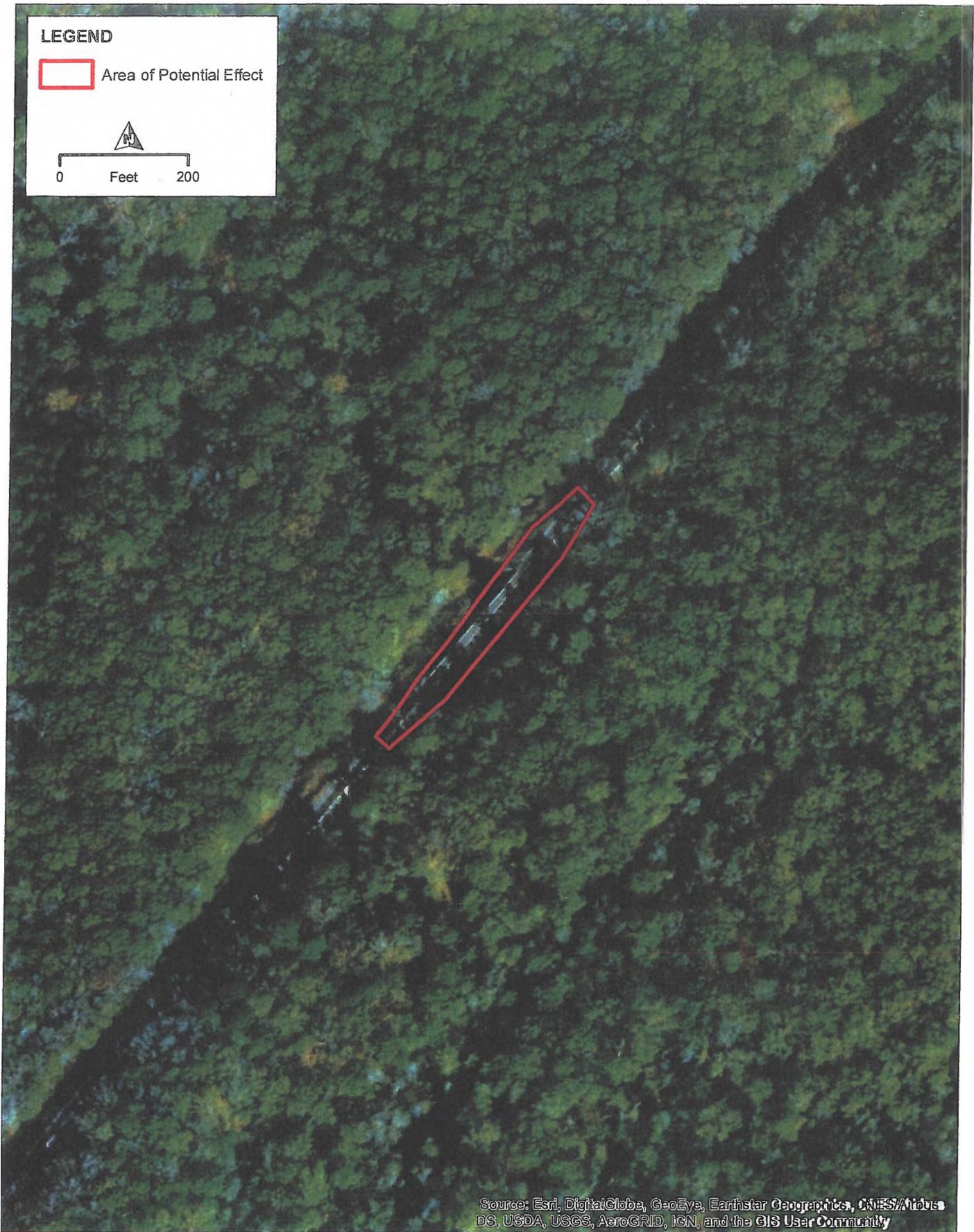
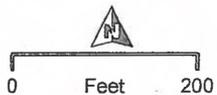
Materials and structural design indicate that the existing bridge likely dates to c. 1915 but has undergone significant if not total reconstruction in c. 1942 and 1968. The existing bridge is not associated with the development of the Low Country in South Carolina. It is not associated with any other events, themes or person significant in local, state, or national history (NRHP Criteria A and B). The extensive repairs and modifications to the bridge in the 1940s and again in the 1960s prevent it from NRHP eligibility under Criterion C. The bridge might have been a contributing element of a larger historic railroad alignment; however it no longer retains integrity of design, materials, workmanship, or feeling. The CSXT bridge at MP A 448.6 is therefore recommended not eligible for listing in the NRHP. The proposed Project will have no effect on any historic properties as there are none in the APE.

Enclosures:

- South Carolina Department of Archives & History State Historic Preservation Office Section 106 Project Review Form
 - ArchSite GIS map
 - USGS map
 - Aerial map
 - Original Photographs
 - Site Plan
- SHPO Statewide Survey of Historic Properties Form

LEGEND

 Area of Potential Effect



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

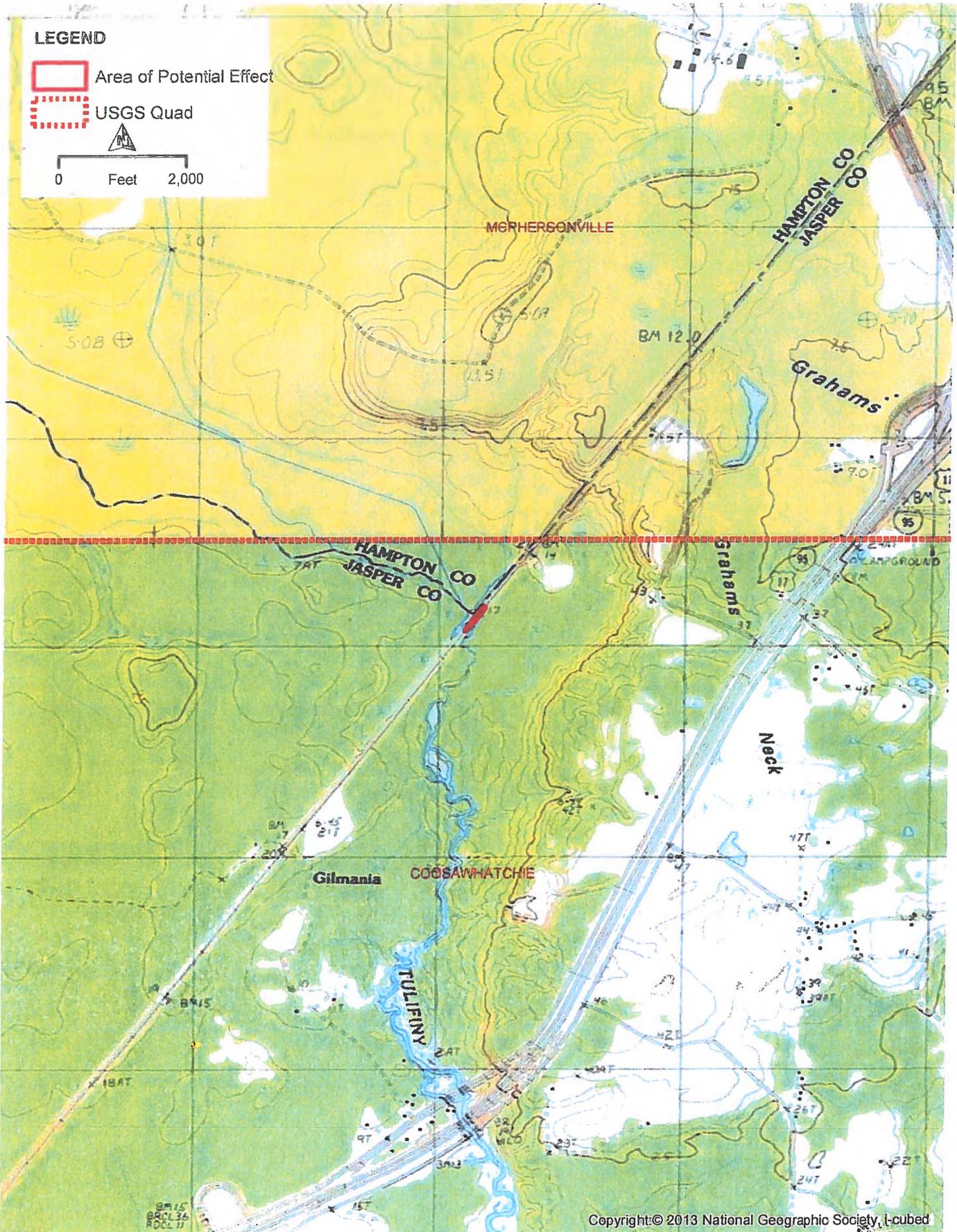
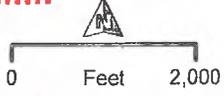


**AREA OF POTENTIAL EFFECT - AERIAL
YEMASSEE CSX BRIDGE REPLACEMENT**

DATE PRINTED: MAY 9, 2018

LEGEND

-  Area of Potential Effect
-  USGS Quad



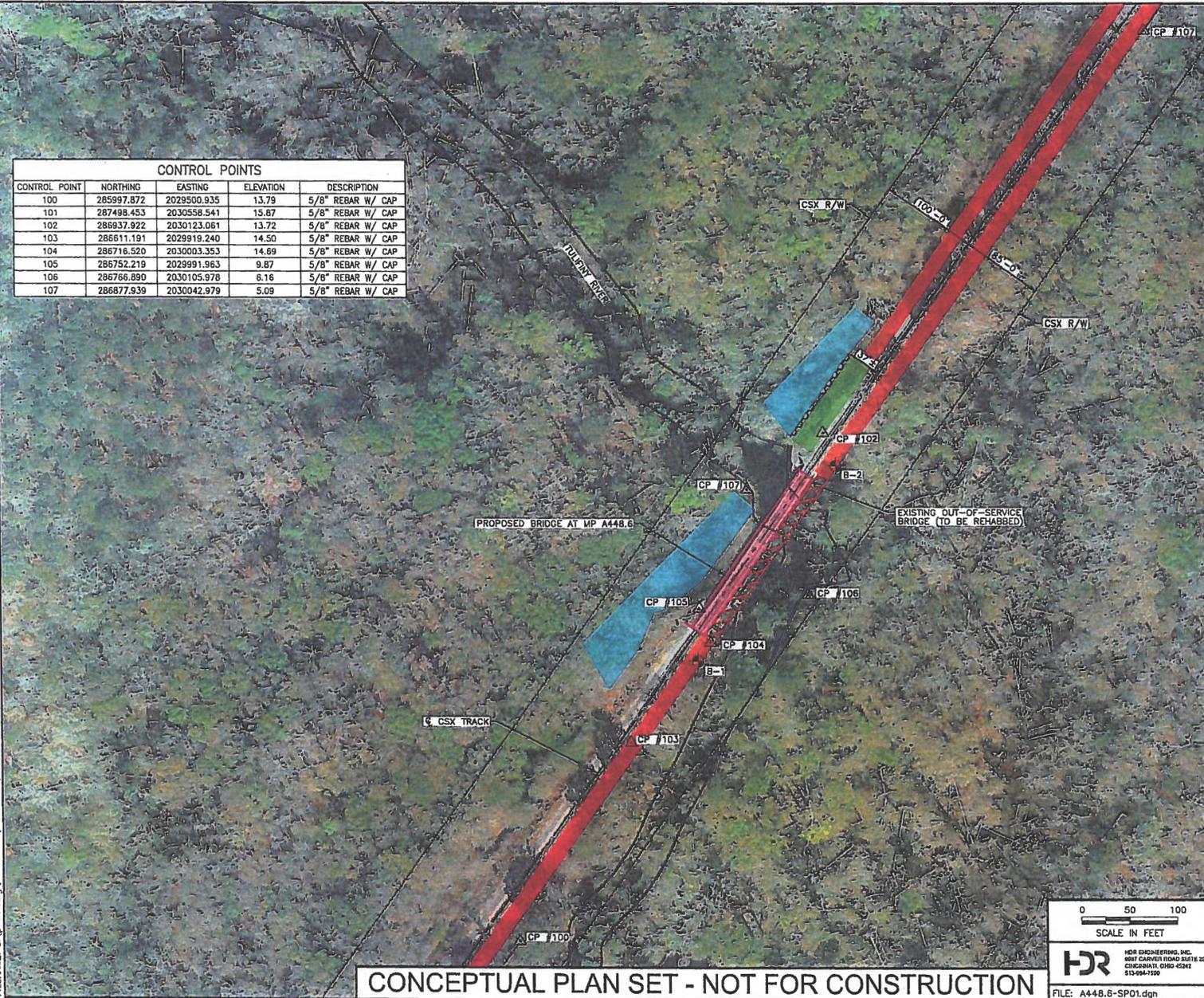
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**AREA OF POTENTIAL EFFECT - USGS TOPOGRAPHIC MAP,
COOSAWHATCHIE QUAD
YEMASSEE CSX BRIDGE REPLACEMENT
DATE PRINTED: MAY 9, 2018**



FILENAME: c:\pwworking\jnt\hona01\jms68783\A448.6-SP01.dgn
 USER: jwanstra
 SCALE FACTORS CORRESPOND WITH FULL SIZE (22" x 34") DRAWINGS

CONTROL POINTS				
CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	285997.872	2029500.935	13.79	5/8" REBAR W/ CAP
101	287498.453	2030558.541	15.87	5/8" REBAR W/ CAP
102	286937.922	2030123.061	13.72	5/8" REBAR W/ CAP
103	286611.191	2029919.240	14.50	5/8" REBAR W/ CAP
104	286716.520	2030003.353	14.69	5/8" REBAR W/ CAP
105	286752.219	2029991.963	9.87	5/8" REBAR W/ CAP
106	286766.890	2030105.978	6.16	5/8" REBAR W/ CAP
107	286877.939	2030042.979	5.09	5/8" REBAR W/ CAP



NOTES

- ACCESS ROAD SHALL UTILIZE EXISTING BALLASTED ROADBED.
- WETLANDS ARE NOT IMPACTED.
- TOTAL OF 4.9 C.Y. OF TIMBER PILE REMOVED FROM BELOW ORDINARY HIGH WATER MARK
- TOTAL OF 1.1 C.Y. OF CONCRETE PILE ADDED FROM BELOW ORDINARY HIGH WATER MARK.

LEGEND

- WETLAND LIMITS
- TEMPORARY ACCESS ROAD
- TEMPORARY CRANE PAD
- APPX. STREAM LIMITS
- TEMPORARY SHEET PILE RETAINING WALL

AFE XXXXXX

CSX ENGINEERING DEPARTMENT
 JACKSONVILLE, FLORIDA

BRIDGE CROSSING
 TULIFINY RIVER
 SITE PLAN

JASPER COUNTY YEMASSEE, SC
 DIVISION: FLORENCE SUBDIVISION: CHARLESTON

REVISIONS

SCALE: AS SHOWN
 DATE: 5/1/2018
 DESIGN: MLF
 DRAWN: JAH
 CHECKED: XXX

VAL. SEC. V-X
 X

DRAWING NO. A448.6-02

0 50 100
 SCALE IN FEET

HDR HDR ENGINEERING, INC.
 8801 CARVER ROAD SUITE 200
 CINCINNATI, OHIO 45242
 513-994-7500

FILE: A448.6-SP01.dgn

CONCEPTUAL PLAN SET - NOT FOR CONSTRUCTION