



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

July 29, 2019

Kyle Barnes
NCDOT Coordinator-Division 1
United States Army Corps of Engineers
2407 West Fifth Street
Washington, NC 27889-1000

Greg Daisey
NC Div. of Environmental Quality
Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

Subject: **Modification Request of the Section 404 Nationwide Permit 14, Section 10 Permit, Section 401 Water Quality Certification, and CAMA Major Development Permit** for US 17 Business / NC 37 from Hertford to north of NC 37; including replacement of Bridge No. 8 in Perquimans County; TIP Number R-4467.WBS Element 35748.3.2

Reference: SAW-2018-01572; NCDWR Project No. 20181060;
CAMA Permit Number 47-19

Dear Sirs:

The North Carolina Department of Transportation (NCDOT) proposes a modification to the permits for the Subject project. A laydown yard and office site have been identified (Figures 1 and 2). The criteria used in identifying a site included:

- Sufficient area to safely store and protect the piles
- Sufficient water depth for barges to access trestle
- Proximity/ access to job site to minimize impacts/ interaction with the traveling public
- Avoidance/ minimization to jurisdictional resources
- Willing landowner

In order to reach the water, it will be necessary to cross a wetland. This crossing will be via a 30' x 200' steel trestle that will be supported by ten 30" piles. For the first approximately 100' of trestle extending from the upland, the area under the trestle as well as a five-foot swath on either side will be hand cleared. For the next 65' of trestle, there will a five-foot swath on the east side, and a 50' area on the west side that will be hand cleared to allow the crane to unload material from the barge and swing around to load on the trestle. The final 35' of trestle will be in open water. Of the ten 30" support piles, eight will be in wetlands and two in surface waters. Construction of the trestle is proposed to commence upon receipt of the modification, and will be removed upon project completion, estimated at June 2021.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6000
FAX: 919-212-5785
WEBSITE: NCDOT.GOV

LOCATION:
CENTURY CENTER, BUILDING A
1000 BIRCH RIDGE DRIVE
RALEIGH NC, 27610-4328

The trestle would result in the followings impacts:

- 0.20 ac hand clearing in wetlands
- <0.01 ac temporary fill in wetlands
- <0.01 ac temporary fill in surface waters

Due the minimal amount of increase in temporary fill from the piles, the rounded amounts authorized in the initial permits do not increase.

The laydown yard and office site were in the original project study area, as such the findings in the NEPA documents are valid for this modification.

Barge Access Sites Considered

Barge access site options are limited as most of the shoreline is either wetlands or small single-family lots that wouldn't provide sufficient room for the laydown yard. Four alternative sites were investigated, and they are noted on Figure 3 and discussed below:

1. Site 1 would have minimal jurisdictional impacts. Water depths in this area are shallow (< 3ft) for several hundred feet off the shoreline, which would have required a significant amount of trestle. Each barge would require maneuvering through the single navigational channel under the US 17 bridge, which poses safety hazard to the boating public and the US 17 bridge, particularly with tugboats sized small enough that they can fit under the bridge and maneuver throughout the jobsite. Site 1 is a relatively long distance from the project site, which would prove difficult in the transport of concrete (one of the primary needs for having a water access site) due to the length of time the concrete would be in transport without agitation. Additionally, the long distance of Site 1 from the work site would introduce more boat traffic. Another factor considered (but not verified) was reports from locals that this area is often used for swimming due to the shallow water, a large potential safety hazard. For these reasons, the use of this site was not considered and therefore the property owner was not contacted.
2. Sites 2 is upstream of the existing swing bridge. At this site, barges would have to navigate the existing swing span bridge and a significant curve in the waterway, both of which would be difficult for the smaller sized tugs to which these areas are accessible. The site is also a significant distance from the bridge site, which would pose the same impediments as for Site 1 due to distance tugs and barges would need to travel. The use of this site would require frequent opening of the existing swing span bridge. In addition to traffic nuisances this would cause, the potential for bridge malfunction increases each time the span is opened.
3. Site 3, the vacant Feed & Seed property located in Hertford would introduce multiple trucks both large in size and weight onto smaller town roads. This site would also have all of the same issues as Site 2 related to opening and closing of the swing span, as well as navigating through the bridge.

Additional note on Sites 2 & 3: A factor which was not considered during the selection of an access site, which later became an issue was the size of the barge required for the crane. In performing stability analyses for the barge on which the crane would be mounted, it was determined that a 50ft wide barge would be the minimum size required. The published width of the fender system on the swing span is also 50ft, leaving significant uncertainty if the crane barge would be able to access either of these sites if necessary, for loading of materials from the access site.

4. Site 4, located in the Industrial Park on the East side of US 17, is the furthest from the work area of all sites considered. This site has all the same issues as Site 1 with the

exception of the water depth. When considering these issues, along with the extended distance from the work site, which would make concrete delivery nearly impossible, it was determined that this site was not a viable option.

Permits Requested

Section 404: Request is hereby made for a modification of the Section 404 Nationwide Permit No. 14 and Section 10 Permit as required for the above-described activities.

Section 401: Request is hereby made for a modification to the associated 401 Water Quality Certification from the NC Division of Water Resources. In compliance with Section 143-215.3D (e) of the NCAC, please debit \$240 from WBS Element 35748.3.2 as payment for processing the Section 401 modification.

CAMA Major Development Permit: A Minor Modification request is hereby made for the CAMA Major Development Permit as required for the above-described activities. Please debit \$100 as payment for processing the Minor Modification.

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Jason Dilday at either jldilday@ncdot.gov or (919) 707-6111. A copy of this permit modification request and its distribution list will also be posted on the NCDOT website at <https://xfer.services.ncdot.gov/pdea/PermApps/>.

Sincerely,

A handwritten signature in black ink, appearing to read 'Philip S. Harris, III', with a horizontal line extending to the right.

Philip S. Harris, III, P.E., C.P.M.
Environmental Analysis Unit Head

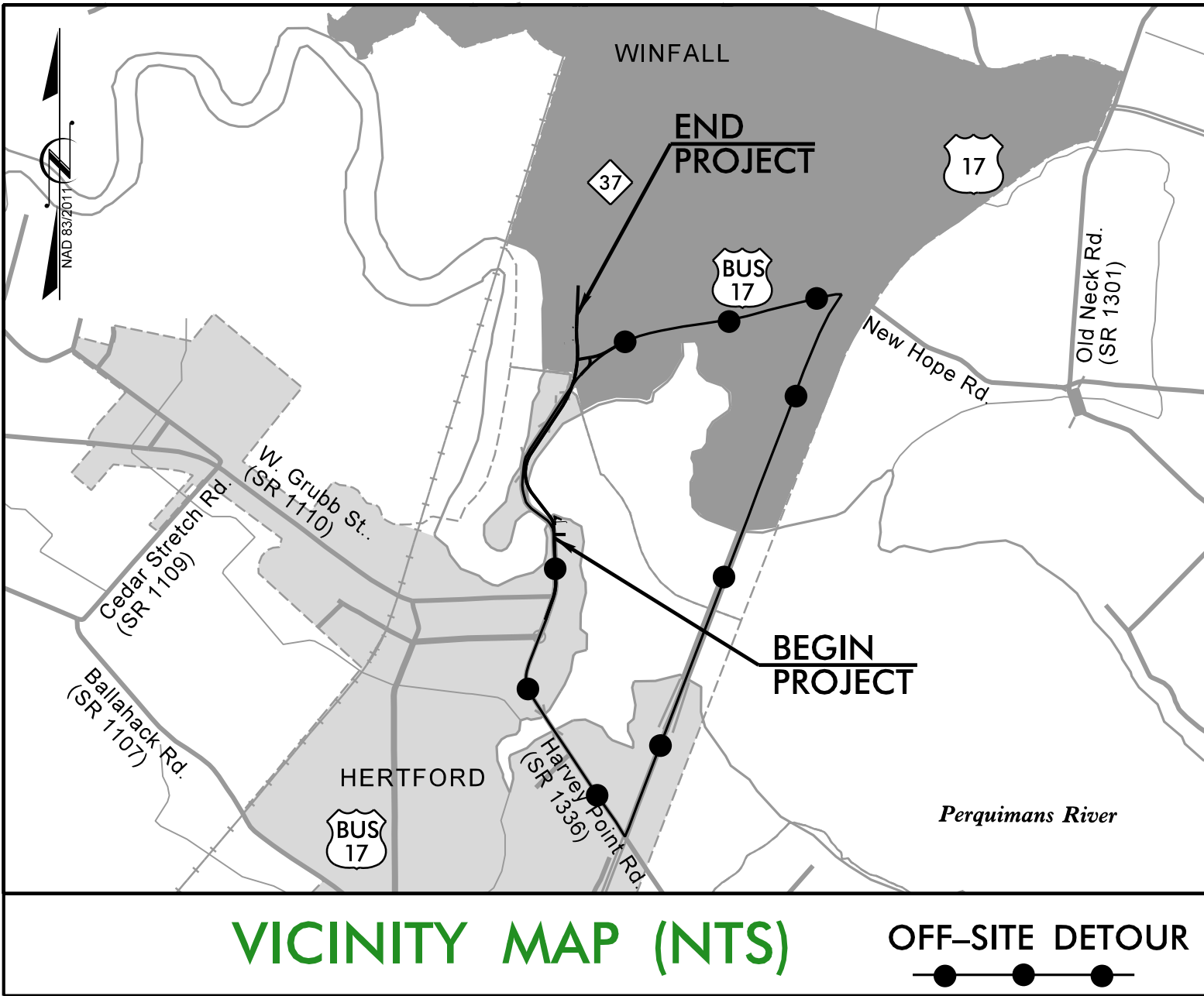
cc: NCDOT Permit Application Standard Distribution List

7/23/2019 R:\Hydraulics\PERMITS_Environmental\Drawings\Staging\R-4467_PRM_staging_wet_tsh.dgn anetier

TIP PROJECT: R-4467

CONTRACT: C204003

See Sheet 1-B For Conventional Symbols



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

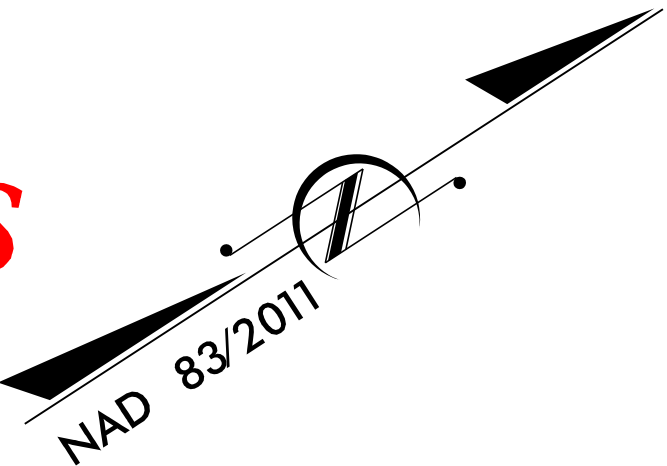
PERQUIMANS COUNTY

LOCATION: US 17 BUSINESS /NC 37 (NORTH CHURCH STREET)
FROM SOUTH OF THE PERQUIMANS RIVER BRIDGE TO
NORTH OF NC 37 (WINFALL BOULEVARD)

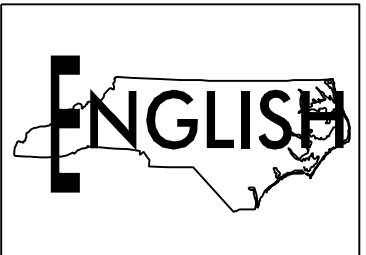
TYPE OF WORK: GRADING, DRAINAGE, PAVING, LIGHTING
SIGNALS, SIGNING, ITS & STRUCTURES

STAGING WETLAND AND STREAM IMPACTS

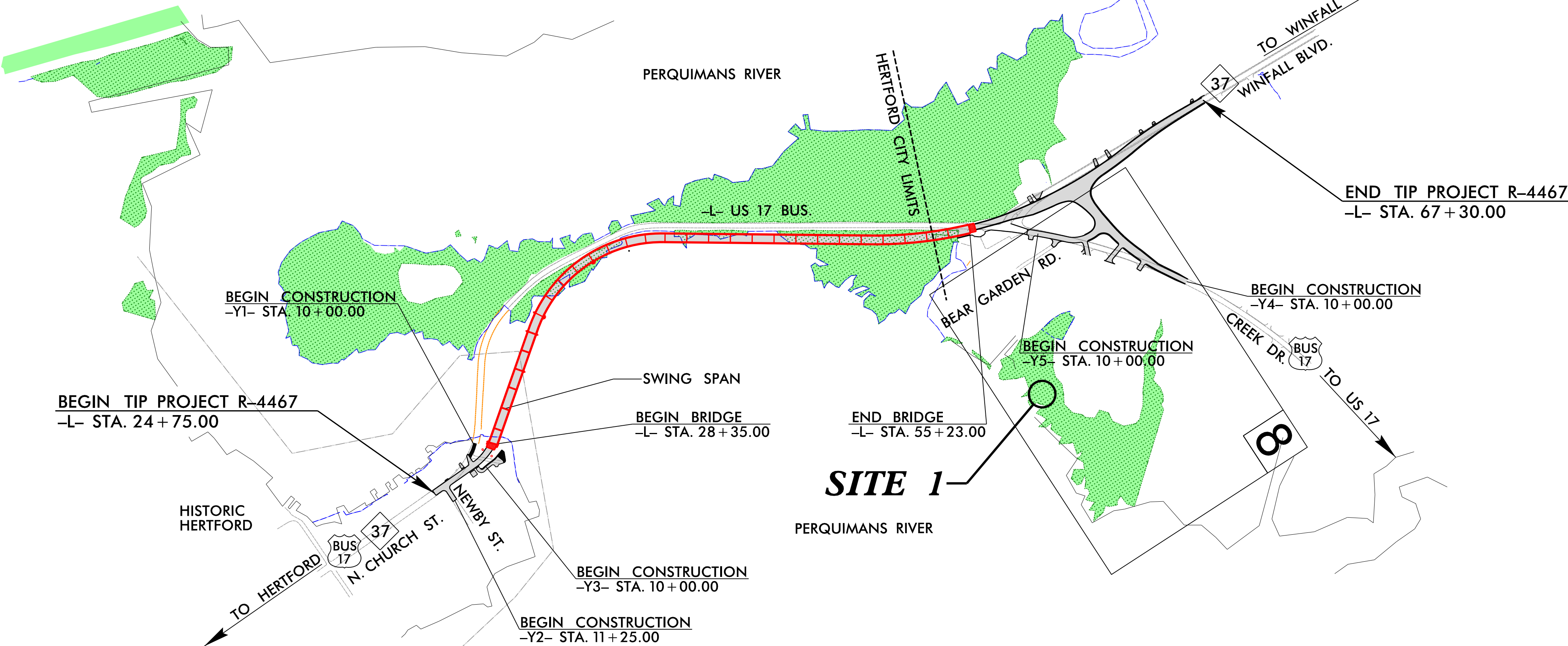
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-4467	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
35748.3.2	N/A		



PERMIT DRAWING
SHEET 1 OF 4

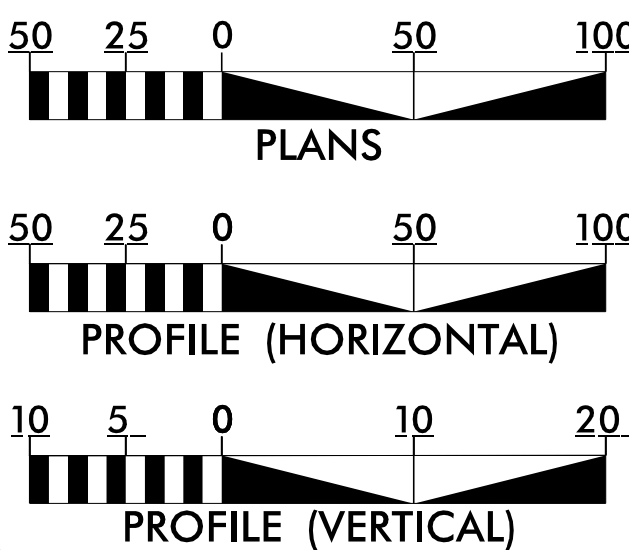


PREPARED ON: 7-23-2019
REVISED: 7-23-2019



- NOTES:
1. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
 2. THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE TOWN OF HERTFORD AND THE TOWN OF WINFALL.
 3. DESIGN EXCEPTION REQUIRED FOR HORIZONTAL STOPPING SIGHT DISTANCE AND SUPERELEVATION AT -L- PI STATION 28+26.83.

GRAPHIC SCALES



DESIGN DATA

ADT 2017 = 10,100
ADT 2037 = 16,500

SOUTH APPROACH & BRIDGE
V = 30 MPH
FUNC. CLASS. = URBAN COLLECTOR
NORTH OF BRIDGE
V = 50 MPH
FUNC. CLASS. = RURAL COLLECTOR

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-4467.....0.296 mi
LENGTH STRUCTURE TIP PROJECT R-4467.....0.509 mi
TOTAL LENGTH TIP PROJECT R-4467.....0.805 mi

NCDOT CONTACT

K. Zak Hamidi, P.E.
PROJECT ENGINEER - DESIGN-BUILD GROUP

PLANS PREPARED BY:

RK&K RUMMEL, KLEPPER & KAHN, LLP
900 RIDGEFIELD DRIVE, SUITE 350
RALEIGH, NORTH CAROLINA 27609
NC LICENSE NO. F-0112

FOR NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

2012 STANDARD SPECIFICATIONS



Michael T. Merritt, P.E.
PROJECT ENGINEER

Anthony A. Houser, P.E.
PROJECT DESIGN ENGINEER

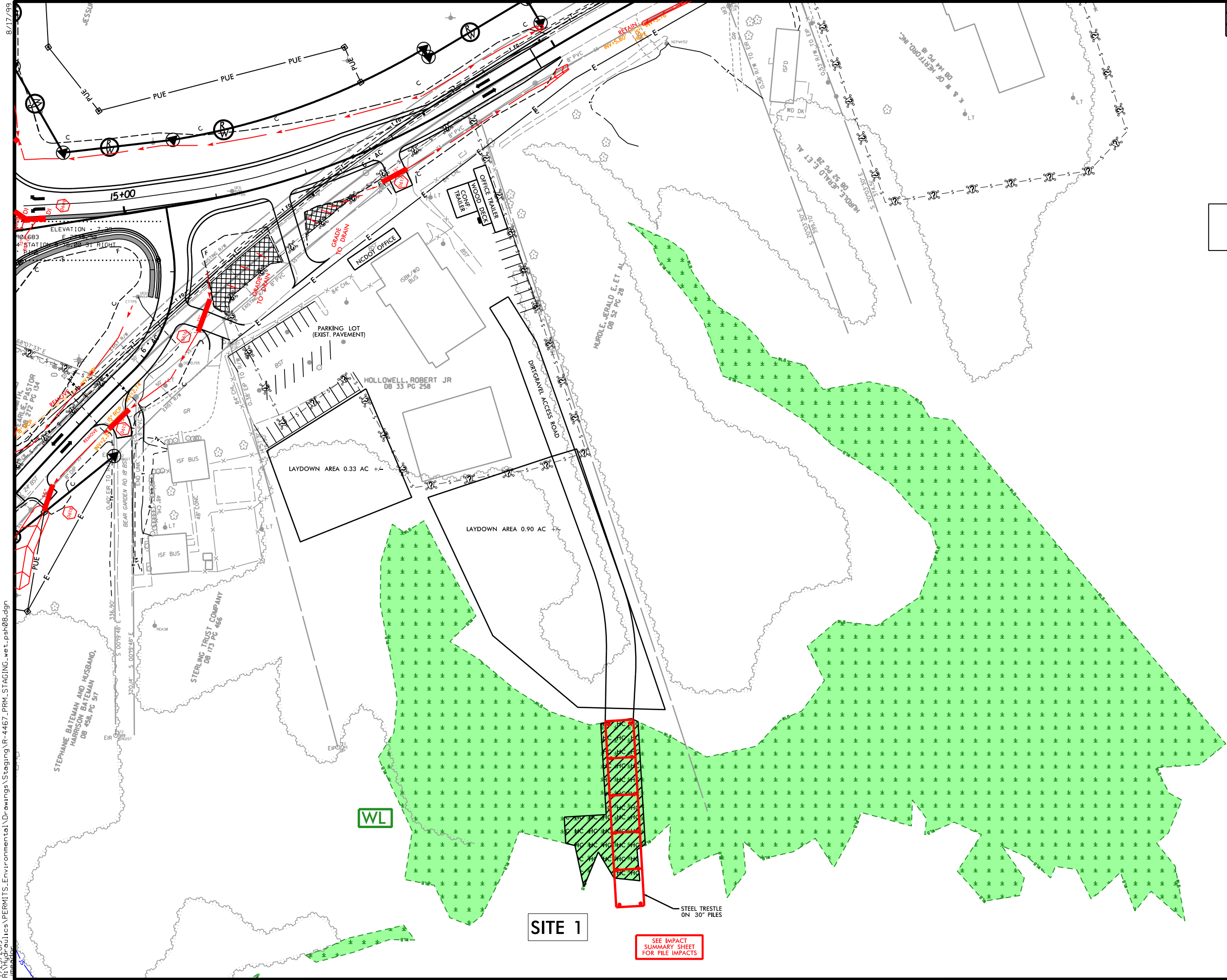
LETTING DATE:
JANUARY 2, 2018

HYDRAULICS
ENGINEER

SIGNATURE: _____ P.E.
ROADWAY
DESIGN
ENGINEER
SIGNATURE: _____ P.E.



7/23/2019 R:\Hupolitics\PERMITS\Environmental\Drawings\Staging\R-4467_PRM_STAGING_wet.psh08.dgn



PROJECT REFERENCE NO.	SHEET NO.
R-4467	8
RW SHEET NO.	

50 25 0 50 100

SCALE

ENGLISH

NAD 832011

PERMIT DRAWING

SHEET 2 OF 4

DENOTES HAND CLEARING

PREPARED ON: 7-23-2019

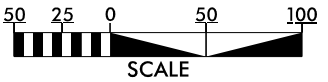
REVISED: 7-23-2019

RK&K

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900 Ridgefield Drive Suite 350 | Raleigh, North Carolina 27609-3960
NC License No. F-0112

Engineers | Construction Managers | Planners | Scientists
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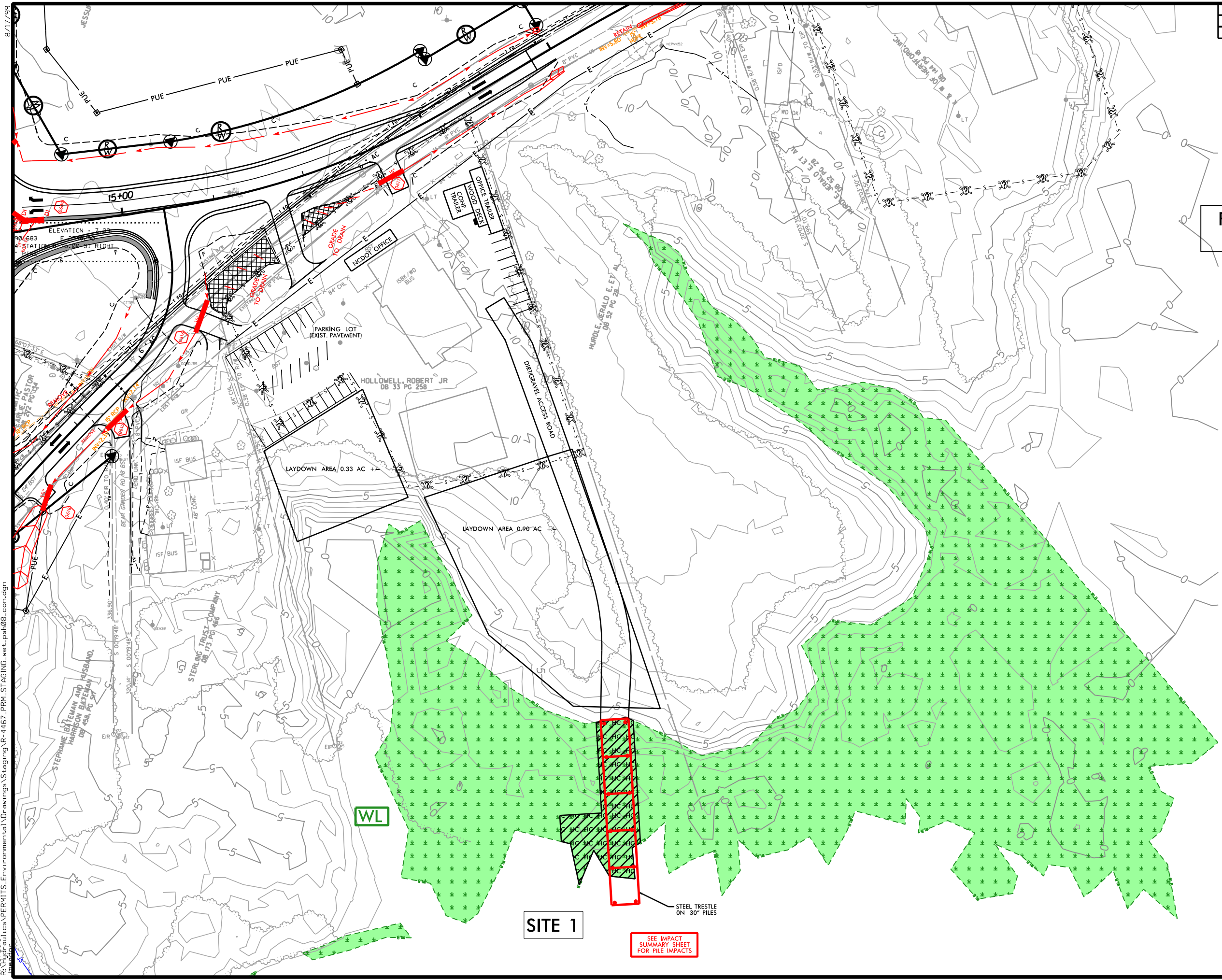
Responsive People | Creative Solutions



PERMIT DRAWING SHEET 3 OF 4

 DENOTES HAND CLEARING

PREPARED ON: 7-23-2019
REVISED: 7-23-2019



SITE 1

SEE IMPACT
SUMMARY SHEET
FOR PILE IMPACTS

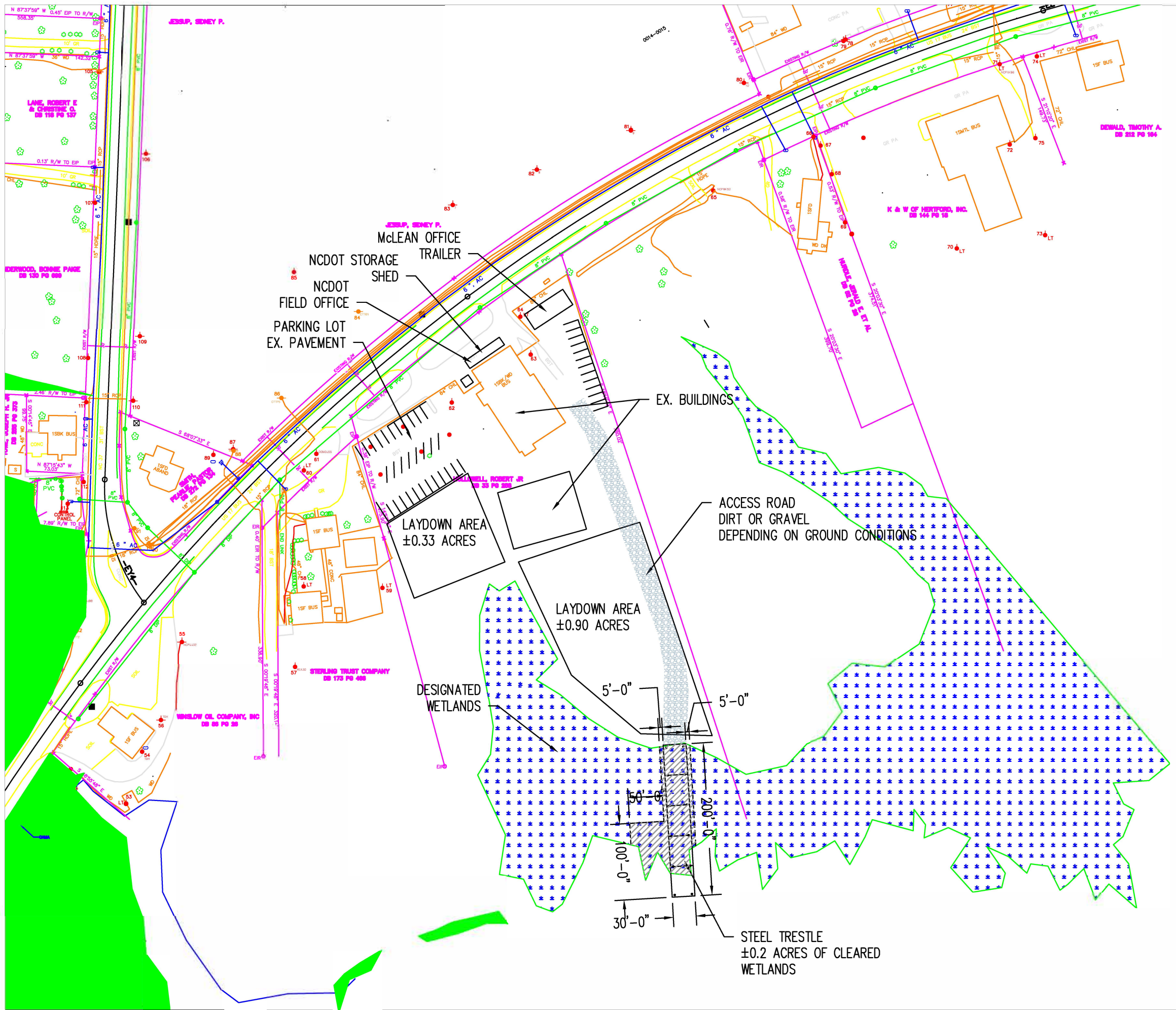


Figure 1

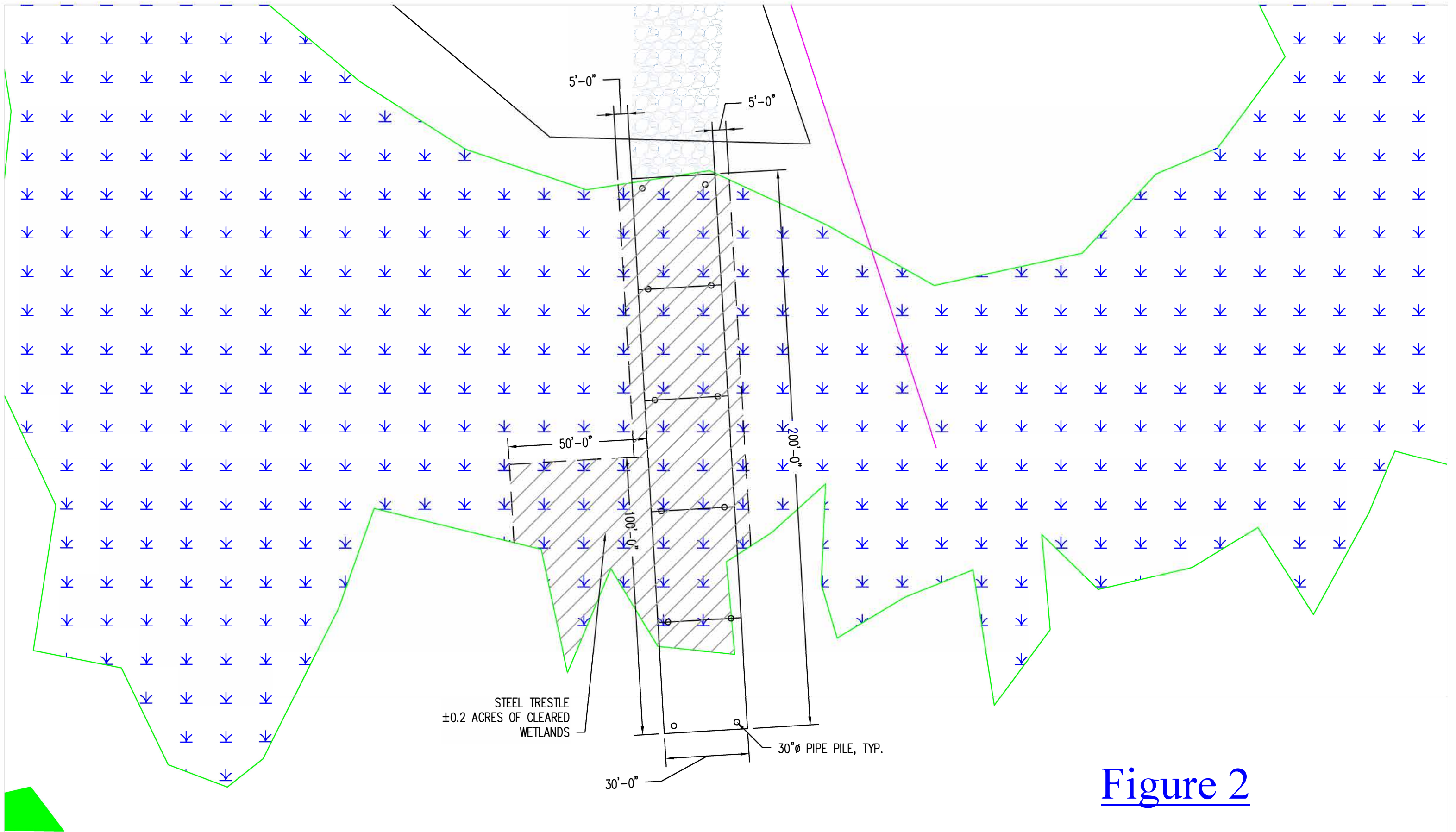
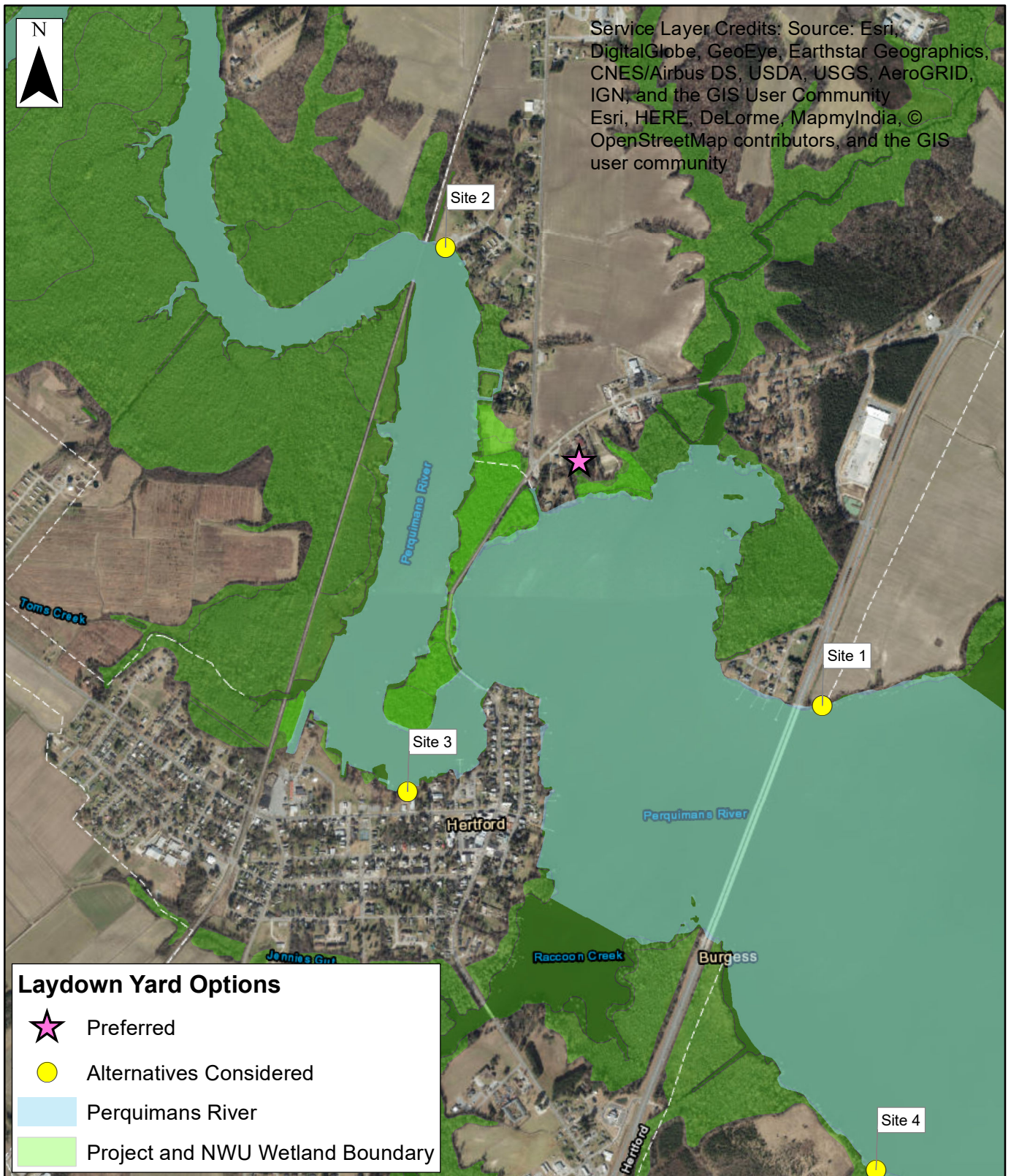


Figure 2



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community



Laydown Yard Options



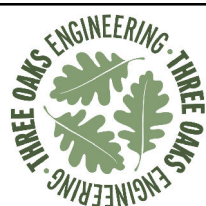
Preferred



Alternatives Considered

Perquimans River

Project and NWU Wetland Boundary



Prepared For:



US 17 Business / NC 37
Replacement of Bridge No. 8
TIP No. R-4467

Laydown Yard Location Analysis
Perquimans County, North Carolina

Date:

July 2019

Scale:

0 500 1,000 Feet

Job No.:

17-107

Drawn By:

NMS

Checked By:

MGW

Figure

3