



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

May 3, 2017

MEMORANDUM TO: Mr. John Rouse, P.E.
Division 2 Engineer

FROM: Philip S. Harris, III, P.E., C.P.M, Manager
Natural Environment Section

SUBJECT: Pamlico County; Replacement of Bridge No. 16 on SR 1324 (Florence Rd.) over Mason Creek ; Federal Aid No. BRZ-1324(5); WBS 38426.1.1; **TIP B-4598.**

Attached are the U.S. Army Corps of Engineers Nationwide Permits, N.C. Division of Water Resources (NCDWR) Water Quality Certifications, N.C. Division of Coastal Management Major Development Permit, and the U.S. Coast Guard Advance Approval. All environmental permits have been received for the construction of this project.

A copy of this permit package will be posted on the NCDOT website at:
<https://connect.ncdot.gov/resources/Environmental/Pages/default.aspx>
Quick Links>Permit Documents> Issued Permits.

cc: w/o attachment (see website for attachments)

Mr. Andy Gay, P.E. Contracts Management
Mr. Jay Johnson, Division Environmental Officer
Dr. Majed Al-Ghandour, P.E., Programming and TIP
Mr. Glenn Mumford, P.E., Roadway Design
Mr. Bo Hemphill, P.E., Utilities
Mr. Jay Twisdale, P.E., Hydraulics
Mr. Brian Hanks, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. Ron Hancock, P.E., State Roadway Construction Engineer
Mr. Jay McInnis, P.E., Project Development
Ms. Leilani Paugh, Natural Environment Section
Mr. Randy Griffin, P.E., Natural Environment Section

PROJECT COMMITMENTS

**Proposed Replacement of Bridge Number 16
On SR 1324 (Florence Road)
Over a Fork of the Bay River (Mason Creek)
Pamlico County, North Carolina
Federal Aid Project No. BRZ-1324(5)
WBS No. 38426.1.2
TIP Project No. B-4598**

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

Division 2 Construction, Resident Engineer's Office – Offsite Detour

In order to have time to adequately reroute school busses, Pamlico County Schools will be contacted at (252) 745-4171 at least one month prior to road closure.

Pamlico County Emergency Services will be contacted at (252) 745-4131 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

Project Development and Environmental Analysis Unit – NES, Division 2

Suitable habitat for West Indian manatee exists in the study area. A review of NCNHP records, updated October 2015, indicates there are known West Indian manatee occurrences within 1.0 mile of the study area. Construction activities will adhere to the recommendations outlined in *Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters (2003 USFWS)*.

Project Development and Environmental Analysis Unit – NES, Division 2

Two Coastal Area Management Act (CAMA) Areas of Environmental Concern (AEC) were identified in the study area. Mason Creek is a designated Estuarine Water and Public Trust Water, and a CAMA coastal marsh is present at wetland site WA. A CAMA major development permit from the NC Division of Coastal Management (NCDCM) will be required for all impacts to designated AECs within the study area. A CAMA major development permit will be acquired prior to construction.

This commitment was implemented during design.

All Design Groups, Division 2 Construction

Mason Creek has been identified by the NC Division of Marine Fisheries (NCDMF) as a Primary Nursery Area. As a result, an in-water construction moratorium will be in effect from April 1 to September 30 of any given year.

Contracts Unit

In order to address specific requests from the School Transportation Director and EM Coordinator/Fire Marshal for Pamlico County, NCDOT will set the **minimum** reasonable contract time to reduce the period of road closure.

Roadside Environmental Unit, Division 2 Construction

Mason Creek is classified as a Primary Nursery Area (PNA) and High Quality Waters (HQW), and is subject to the NCDWQ Neuse River Basin riparian buffer rules. Therefore, *Design Standards in Sensitive Watersheds* will be implemented during project construction.

Roadway Design Unit, Division 2 Construction

All remnant piles from the existing bridge or any previous bridges will be removed from Mason Creek during construction of this project. In the event that a pile cannot be removed completely, the pile will be cutoff at the mud line.

Roadway Design Unit, Bicycle and Pedestrian Division

The current Pamlico County Comprehensive Transportation Plan does not specify planned bicycle improvements along Florence Road. However, Florence Road is listed within the Croatan Regional Bicycle Plan as a local bike route and a shared use facility. Per request of the NCDOT Bicycle and Pedestrian Transportation Division, design plans include a 3 foot 6 inch minimum offset, between the outside of the travel lane and the bridge rail parapet, on the bridge structure. A variable width (2-foot to 7-foot) paved shoulder, which extends approximately 210 feet from the end of the west approach slab and approximately 250 feet from the end of the east approach slab, also can accommodate bicycles. The structure will provide 2 bar metal railing, as appropriate for bicycle use.

This commitment was implemented during design.

COMMITMENTS FROM PERMITTING

Unless specifically altered herein, all work authorized by the CAMA Major Permit shall be carried out in accordance with the following permit drawings (15), except as modified herein: four dated 2/25/17, eight dated 2/24/17, two dated 7/21/16, and one dated received 1/17/17.

UTILITY CROSSINGS: Prior to construction within any jurisdictional areas, the permittee must correctly install silt fencing (with or without safety fencing) parallel with the utility line corridor, on both sides of the jurisdictional crossing. This barrier is to serve both as an erosion control measure and a visual identifier of the limits of construction within any jurisdictional area. The permittee must maintain the fencing, at minimum, until the wetlands have re-vegetated and stabilized.

MITIGATION: The permittee will provide compensatory mitigation for the impacts to jurisdictional wetlands associated with this project utilizing the Lengyel Site is located in Craven County within the USGS hydrologic unit 03020202 of the Neuse River. NCDOT acquired the 11.9 acre brackish marsh site to mitigate for unavoidable, jurisdictional impacts associated with TIP B-2531. Monitoring requirements were performed from 1999 to 2003 and the site was closed out in 2004. The site has been placed on the NCDOT On-site Debit Ledger for use within HUC 03020202. In order to offset 0.09 acres of unavoidable brackish marsh impacts, the Lengyel Mitigation Site will be debited at a 2:1 ratio, totaling 0.18 acres of brackish marsh mitigation.

**U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT**

Action Id. SAW-2017-00154 County: Pamlico U.S.G.S. Quad: NC-VANDEMERE

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Permittee: NC Department of Transportation

Phil Harris

Address: 1598 Mail Service Center

Raleigh, NC, 27699-1598

Telephone Number:

Size (acres) 2.0

Nearest Town Florence

Nearest Waterway Pamlico Sound

River Basin Neuse

USGS HUC 03020204

Coordinates Latitude: 35.1318742253185

Longitude: -76.6845070407986

Location description: Bridge 16 over Mason Creek on SR 1324 near Florence, Pamlico County, NC.

Description of projects area and activity: Applicant proposes to replace structurally deficient and functionally obsolete 61' bridge with a 100' x 34' new bridge on existing location utilizing an offsite detour. Zero stream impacts and 0.09 acres of estuarine coastal marsh fill is authorized by this verification.

Applicable Law: Section 404 (Clean Water Act, 33 USC 1344)
 Sections 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: Regional General Permit Number or Nationwide Permit Number: NWP 23 Approved Categorical Exclusions, NWP 12 Utility Line Activities, NWP 33 Temporary Access and Dewatering.

SEE ATTACHED RGP or NWP GENERAL, REGIONAL AND SPECIAL CONDITIONS

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted application and attached information dated 03/06/2017. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.

This verification will remain valid until the expiration date identified below unless the nationwide authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Resources (telephone 919-807-6300) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management in Elizabeth City, NC, at (252) 264-3901.

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact Thomas Steffens at (910) 251-4615 or Thomas.A.Steffens@usace.army.mil.

Corps Regulatory Official: STEFFENS.THOMAS.ANCRUM.128470
6273

Expiration Date of Verification: 03/18/2022

Digitally signed by STEFFENS.THOMAS.ANCRUM.1284706273
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA,
Date: April 26, 2017
Date: 2017.04.26 09:14:58 -04'00'

Determination of Jurisdiction:

- A. There are waters, including wetlands, on the above described project area that may be subject to Section 404 of the Clean Water Act (CWA) (33 USC § 1344) and/or Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403). This preliminary determination is not an appealable action under the Regulatory Program Administrative Appeal Process (Reference 33 CFR Part 331). However, you may request an approved JD, which is an appealable action, by contacting the Corps district for further instruction. Please note, if work is authorized by either a general or nationwide permit, and you wish to request an appeal of an approved JD, the appeal must be received by the Corps and the appeal process concluded prior to the commencement of any work in waters of the United States and prior to any work that could alter the hydrology of waters of the United States.
- B. There are Navigable Waters of the United States within the above described project area subject to the permit requirements of Section 10 of the Rivers and Harbors Act (RHA) (33 USC § 403) and Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- C. There are waters, including wetlands, within the above described project area that are subject to the permit requirements of Section 404 of the Clean Water Act (CWA) (33 USC § 1344). Unless there is a change in the law or our published regulations, this determination may be relied upon for a period not to exceed five years from the date of this notification.
- D. The jurisdictional areas within the above described project area have been identified under a previous action. Please reference jurisdictional determination issued . Action ID: SAW- .

Basis For Determination: This area exhibits a High Tide Line as indicated by physical markings on structures and is part of the Pamlico Sound.

E. Attention USDA Program Participants

This delineation/determination has been conducted to identify the limits of Corps' Clean Water Act jurisdiction for the particular site identified in this request. The delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA Program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

F. Appeals Information (This information applies only to approved jurisdiction determinations as indicated in B and C above).

This correspondence constitutes an approved jurisdiction determination for the above described site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the following address:

US Army Corps of Engineers
South Atlantic Division
Attn: Jason Steele, Review Officer
60 Forsyth Street SW, Room 10M15
Atlanta, Georgia 30303-8801
Phone: (404) 562-5137

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by _____.

****It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this correspondence.****

Corps Regulatory Official: 706273 Thomas Steffens
STEFFENS.THOMAS.ANCRUM.1284
Digitally signed by STEFFENS.THOMAS.ANCRUM.1284706273
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA,
cn=STEFFENS.THOMAS.ANCRUM.1284706273
Date: 2017.04.26 09:14:30 -04'00'

Date of JD: **04/26/2017**

Expiration Date of JD:

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete our Customer Satisfaction Survey, located online at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0.

SAW-2017-00154

SPECIAL CONDITIONS

1. SILT-FENCING: The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

2. ANADROMOUS FISH: To avoid adverse impacts to spawning populations of fish species at this project site, no in-water work will be conducted between April 01 and Sept 30 at Mason Creek, and its associated perennial tributaries. For the purpose of this moratorium, in water is defined as those waters within Mason Creek, and its associated perennial tributaries, and its adjacent wetlands that during periods of inundation have an active connection to these tributaries.

3. MANATEE CONDITION: In order to further protect the endangered West Indian Manatee, *Trichechus manatus*, the applicant must implement the U.S. Fish and Wildlife Service's Manatee Guidelines, and strictly adhere to all requirements therein. The guidelines can be found at http://www.fws.gov/nc-es/mammal/manatee_guidelines.pdf.

NCDOT will implement "Guidelines for Avoiding Impacts to the West Indian Manatee, Precautionary Measures for Construction Activities in North Carolina Waters," during work for this project. Design Standards in Sensitive Watersheds will be implemented during construction.

4. NAVIGATION: No attempt will be made by the Permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work. Use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.

5. UTILTIY CROSSINGS: Prior to construction within any jurisdictional areas, the permittee must correctly install silt fencing (with or without safety fencing) parallel with the utility line corridor, on both sides of the jurisdictional crossing. This barrier is to serve both as an erosion control measure and a visual identifier of the limits of construction within any jurisdictional area. The permittee must maintain the fencing, at minimum, until the wetlands have re-vegetated and stabilized.

6. TEMPORARY FILLS: Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

7. MITIGATION: The permittee will provide compensatory mitigation for the impacts to jurisdictional wetlands associated with this project utilizing the Lengyel Site is located in Craven County within the USGS hydrologic unit 03020202 of the Neuse River.

NCDOT acquired the 11.9 acre brackish marsh site to mitigate for unavoidable, jurisdictional impacts associated with TIP B-2531. Monitoring requirements were performed from 1999 to 2003 and the site was closed out in 2004. The site has been placed on the NCDOT On-site Debit Ledger for use within HUC 03020202.

In order to offset 0.09 acres of unavoidable brackish marsh impacts, the Lengyel Mitigation Site will be debited at a 2:1 ratio, totaling 0.18 acres of brackish marsh mitigation.

Action ID Number: SAW-2017-00154

County: Pamlico

Permittee: NC Department of Transportation
Phil Harris

Project Name: NCDOT B-4598 Bridge 16 SR 1324 Florence Road

Date Verification Issued: April 26, 2017

Project Manager: Thomas Steffens

STEFFENS.THOMAS.ANCRUM.128
4706273

Digitally signed by STEFFENS.THOMAS.ANCRUM.1284706273
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA,
cn=STEFFENS.THOMAS.ANCRUM.1284706273
Date: 2017.04.26 09:13:58 -04'00'

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
Attn: Thomas Steffens
Washington Regulatory Field Office
2407 West 5th Street
Washington, North Carolina
27889

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. Failure to comply with any terms or conditions of this authorization may result in the Corps suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

NATIONWIDE PERMIT 23
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS
FEDERAL REGISTER
AUTHORIZED MARCH 19, 2017

Approved Categorical Exclusions. Activities undertaken, assisted, authorized, regulated, funded, or financed, in whole or in part, by another Federal agency or department where:

(a) That agency or department has determined, pursuant to the Council on Environmental Quality's implementing regulations for the National Environmental Policy Act (40 CFR part 1500 et seq.), that the activity is categorically excluded from environmental documentation, because it is included within a category of actions which neither individually nor cumulatively have a significant effect on the human environment; and

(b) The Office of the Chief of Engineers (Attn: CECW-CO) has concurred with that agency's or department's determination that the activity is categorically excluded and approved the activity for authorization under NWP 23.

The Office of the Chief of Engineers may require additional conditions, including pre-construction notification, for authorization of an agency's categorical exclusions under this NWP.

Notification: Certain categorical exclusions approved for authorization under this NWP require the permittee to submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 31). The activities that require pre-construction notification are listed in the appropriate Regulatory Guidance Letters. (Sections 10 and 404)

Note: The agency or department may submit an application for an activity believed to be categorically excluded to the Office of the Chief of Engineers (Attn: CECW-CO). Prior to approval for authorization under this NWP of any agency's activity, the Office of the Chief of Engineers will solicit public comment. As of the date of issuance of this NWP, agencies with approved categorical exclusions are the: Bureau of Reclamation, Federal Highway Administration, and U.S. Coast Guard. Activities approved for authorization under this NWP as of the date of this notice are found in Corps Regulatory Guidance Letter 05-07, which is available at: <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/GuidanceLetters.aspx>. Any future approved categorical exclusions will be announced in Regulatory Guidance Letters and posted on this same web site.

NATIONWIDE PERMIT 12
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS
FEDERAL REGISTER
AUTHORIZED MARCH 19, 2017

Utility Line Activities. Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

Utility lines: This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A “utility line” is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term “utility line” does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads).

Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) the activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to or along a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (See general condition 31.) (Sections 10 and 404)

Note 1: Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, in accordance with the requirements for temporary fills.

Note 3: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

Note 4: For overhead utility lines authorized by this NWP, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

NATIONWIDE PERMIT 33
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS
FEDERAL REGISTER
AUTHORIZED MARCH 19, 2017

Temporary Construction, Access, and Dewatering. Temporary structures, work, and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps of Engineers or the U.S. Coast Guard. This NWP also authorizes temporary structures, work, and discharges, including cofferdams, necessary for construction activities not otherwise subject to the Corps or U.S. Coast Guard permit requirements. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. The use of dredged material may be allowed if the district engineer determines that it will not cause more than minimal adverse effects on aquatic resources. Following completion of construction, temporary fill must be entirely removed to an area that has no waters of the United States, dredged material must be returned to its original location, and the affected areas must be restored to pre-construction elevations. The affected areas must also be revegetated, as appropriate. This permit does not authorize the use of cofferdams to dewater wetlands or other aquatic areas to change their use. Structures left in place after construction is completed require a separate section 10 permit if located in navigable waters of the United States. (See 33 CFR part 322.)

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 31). The pre-construction notification must include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. (Sections 10 and 404)

The following list of General Conditions has been adapted for work in North Carolina for NCDOT projects. Information related to USACE notification requirements has been removed. Therefore, numbering and lettering below may not be consecutive. Please refer to <http://saw-reg.usace.army.mil/NWP2017/2017NWP14.pdf> for the complete reference.

NATIONWIDE PERMIT GENERAL CONDITIONS

The following General Conditions must be followed in order for any authorization by a NWP to be valid:

1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.
(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.
3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).
7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre- construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre- construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA- approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether “incidental take” permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

FINAL REGIONAL CONDITIONS 2017

Final 2017 Regional Conditions for Nationwide Permits (NWP) in the Wilmington District

1.0 Excluded Waters

The Corps has identified waters that will be excluded from the use of all NWP's during certain timeframes. These waters are:

1.1 Anadromous Fish Spawning Areas

Waters of the United States identified by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are excluded during the period between February 15 and June 30, without prior written approval from the Corps and either NCDMF or NCWRC.

1.2 Trout Waters Moratorium

Waters of the United States in the designated trout watersheds of North Carolina are excluded during the period between October 15 and April 15 without prior written approval from the NCWRC, or from the Eastern Band of Cherokee Indians (EBCI) Fisheries and Wildlife Management (FWM) office if the project is located on EBCI trust land. (See Section 2.7 for information on the designated trout watersheds).

1.3 Sturgeon Spawning Areas as Designated by the National Marine Fisheries Service (NMFS)

Waters of the United States designated as sturgeon spawning areas are excluded during the period between February 1 and June 30, without prior written approval from the NMFS.

3.0 List of Corps Regional Conditions for All Nationwide Permits

The following conditions apply to all Nationwide Permits in the Wilmington District:

3.1 Limitation of Loss of Stream Bed

NWPs may not be used for activities that may result in the loss or degradation of more than 300 total linear feet of stream bed, unless the District Engineer has waived the 300 linear foot limit for ephemeral and intermittent streams on a case-by-case basis and has determined that the proposed activity will result in minimal individual and cumulative adverse impacts to the aquatic environment. Waivers for the loss of ephemeral and intermittent streams must be in writing and documented by appropriate/accepted stream quality assessments*. This waiver only applies to the 300 linear feet threshold for NWPs.

This Regional Condition does not apply to NWP 23 (Approved Categorical Exclusions).

*NOTE: Permittees should utilize the most current methodology prescribed by Wilmington District to assess stream function and quality. Information can be found at:

https://ribits.usace.army.mil/ribits_apex/f?p=107:27:0::NO

3.2 Mitigation for Loss of Stream Bed

For any NWP that results in a loss of more than 150 linear feet of stream, the permittee shall provide a mitigation proposal to compensate for more than minimal individual and cumulative adverse impacts to the aquatic environment. For stream losses of 150 linear feet or less that require a PCN, the District Engineer may determine, on a case-by-case basis, that compensatory mitigation is required to ensure that the activity results in minimal adverse effect on the aquatic environment.

3.3 Pre-construction Notification for Loss of Streambed Exceeding 150 Feet

Prior to use of any NWP for any activity which impacts more than 150 total linear feet of perennial stream, intermittent or ephemeral stream, the permittee shall submit a PCN to the District Engineer prior to commencing the activity (see General Condition 32). This applies to NWPs that do not have specific notification requirements. If a NWP has specific notification requirements, the requirements of the NWP should be followed.

3.4 Restriction on Use of Live Concrete

For all NWPs which allow the use of concrete as a building material, live or fresh concrete, including bags of uncured concrete, may not come into contact with the water in or entering into waters of the United States. Water inside coffer dams or casings that has been in contact with wet concrete shall only be returned to waters of the United States after the concrete is set and cured and when it no longer poses a threat to aquatic organisms.

3.5 Requirements for Using Riprap for Bank Stabilization

For all NWPs that allow for the use of riprap material for bank stabilization, the following measures shall be applied:

3.5.1. Where bank stabilization is conducted as part of an activity, natural design, bioengineering and/or geoen지니어ing methods that incorporate natural durable materials, native seed mixes, and native plants and shrubs are to be utilized to the maximum extent practicable.

3.5.2. Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters. The placement of filter fabric is not required if the riprap will be pushed or “keyed” into the bank of the waterbody. A waiver from the specifications in this Regional Condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this Regional Condition would result in greater adverse impacts to the aquatic environment.

3.5.3. The placement of riprap shall be limited to the areas depicted on submitted work plan drawings.

3.5.4. The riprap material shall be clean and free from loose dirt or any pollutant except in trace quantities that would not have an adverse environmental effect.

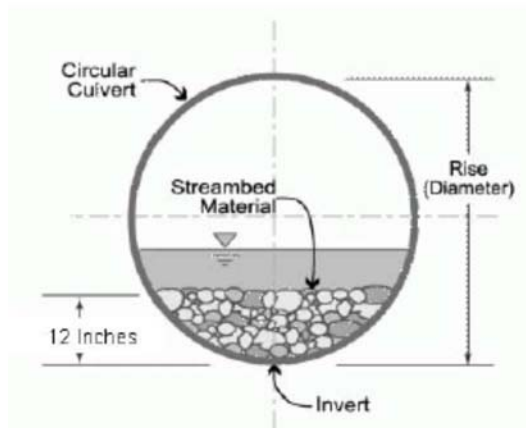
3.5.5. It shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions.

3.5.6. The riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete.

3.6 Requirements for Culvert Placement

3.6.1 For all NWP’s that involve the construction/installation of culverts, measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by altering the width or depth of the stream profile in connection with the construction activity. The width, height, and gradient of a proposed culvert should be sufficient to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow is the seasonal sustained high flow that typically occurs in the spring. Spring flows should be determined from gage data, if available. In the absence of such data, bank-full flow can be used as a comparable indicator.

In Public Trust Areas of Environmental Concern (AEC) and/or the Estuarine Waters AEC as designated by the Coastal Area Management Act (CAMA): All pipes/culverts must be sufficiently sized to allow for the burial of the bottom of the culvert at least one foot below normal bed elevation.



In all other areas: Culverts greater than 48 inches in diameter will be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter or less shall be buried to maintain aquatic passage and to maintain passage during drought or low flow conditions, and every effort shall be made to maintain the existing channel slope.

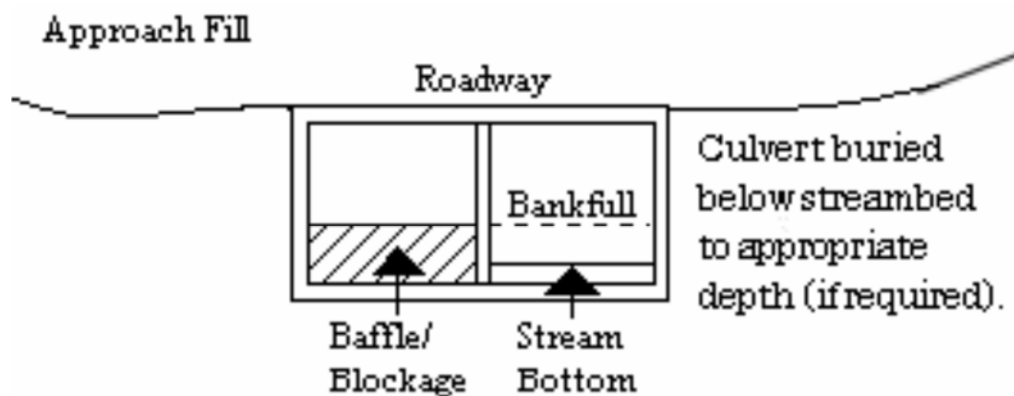
Culverts must be designed and constructed in a manner that minimizes destabilization and head cutting. Destabilizing the channel and head cutting upstream should be considered and appropriate actions incorporated in the design and placement of the culvert.

A waiver from the depth specifications in this condition may be requested, in writing, by the permittee and issued by the Corp; this request must be specific as to the reasons(s) for the request. The waiver will be issued if it can be demonstrated that the proposed design would result in less impacts to the aquatic environment.

All counties: Culverts placed within riparian and/or riverine wetlands must be installed in a manner that does not restrict the flow and circulation patterns of waters of the United States.

Culverts placed across wetland fills purely for the purposes of equalizing surface water do not have to be buried, but the culverts must be of adequate size and/or number to ensure unrestricted transmission of water.

3.6.2 Bank-full flows (or less) shall be accommodated through maintenance of the existing bank- full channel cross sectional area. Additional culverts or culvert barrels at such crossings shall be allowed only to receive bank-full flows.



3.6.3 Where adjacent floodplain is available, flows exceeding bank-full should be accommodated by installing culverts at the floodplain elevation. Additional culverts or culvert barrels at such crossings should not be buried, or if buried, must have sills at the inlets to ensure that they only receive flows exceeding bank-full.

3.6.4 Excavation of existing stream channels shall be limited to the minimum necessary to construct or install the proposed culvert. The final width of the impacted stream at the culvert inlet and outlet should be no greater than the original stream width. A waiver from this condition may be requested in writing; this request must be specific as to the reason(s) for the request. The waiver will be issued if the proposed design would result in less impacts to the aquatic environment and/or if it can be demonstrated that it is not practicable to restore the final width of the impacted stream at the culvert inlet and outlet to the width of the original stream channel.

3.6.5 The width of the culvert shall be comparable to the width of the stream channel. If the width of the culvert is wider than the stream channel, the culvert shall include baffles, benches and/or sills to maintain the width of the stream channel. A waiver from this condition may be requested in writing; this request must be specific as to the reason(s) for the request. The waiver will be issued if it can be demonstrated that it is not practicable or necessary to include baffles, benches or sills and the design would result in less impacts to the aquatic environment.

3.7 Notification to NCDEQ Shellfish Sanitation Section

Permittees shall notify the NCDEQ Shellfish Sanitation Section prior to dredging in or removing sediment from an area closed to shell fishing where the effluent may be released to an area open for shell fishing or swimming in order to avoid contamination from the disposal area and cause a temporary shellfish closure to be made. Such notification shall also be provided to the appropriate Corps Regulatory Field Office. Any disposal of sand to the ocean beach should occur between November 1 and April 30 when recreational usage is low. Only clean sand should be used and no dredged sand from closed shell fishing areas may be used. If beach disposal were to occur at times other than stated above or if sand from a closed shell fishing area is to be used, a swimming advisory shall be posted, and a press release shall be issued by the permittee.

3.8 Submerged Aquatic Vegetation

Impacts to Submerged Aquatic Vegetation (SAV) are not authorized by any NWP, except NWP 48, unless EFH Consultation has been completed pursuant to the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act). Permittees shall submit a PCN (See NWP General Condition 32) to the District Engineer prior to commencing the activity if the project would affect SAV. The permittee may not begin work until notified by the Corps that the requirements of the Magnuson-Stevens Act have been satisfied and that the activity is authorized.

3.9 Sedimentation and Erosion Control Structures and Measures

All PCNs will identify and describe sedimentation and erosion control structures and measures proposed for placement in waters of the United States. The structures and measures should be depicted on maps, surveys or drawings showing location and impacts to jurisdictional wetlands and streams.

3.10 Restoration of Temporary Impacts to Stream Beds

Upon completion of work that involves temporary stream impacts, streambeds are to be restored to pre-project elevations and widths using natural streambed material such that the impacted stream reach mimics the adjacent upstream and downstream reach. The impacted area shall be backfilled with natural streambed material to a depth of at least 12 inches or to the bottom depth of the impacted area if shallower than 12 inches. An engineered in-stream structure or material can be used to provide protection of a buried structure if it provides benefits to the aquatic environment and can be accomplished by a natural streambed design. A permittee may request a waiver of this condition if it is determined a buried structure needs significant physical protection beyond those provided in this condition. This condition does not apply to NWP 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities.

3.11 Restoration of Temporary Impacts to Stream Banks

Upon completion of work involving temporary stream bank impacts, stream banks are to be restored to pre-project grade and contours or beneficial grade and contours if the original bank slope is steep and unstable. Natural durable materials, native seed mixes, and native plants and shrubs are to be utilized in the restoration. Natural designs which use bioengineered and/or geo-engineered methods are to be applied. An engineered structure or material can be used to provide protection of a buried structure if it provides benefits to the stream bank environment, provided it is not in excess of the minimum amount needed for protection and does not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark. A permittee may request a waiver of this condition if it is determined a buried structure needs significant physical protection beyond those provided in this condition. This condition does not apply to NWP 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities.



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

S. JAY ZIMMERMAN
Director

March 31, 2017
Pamlico County
NCDWR Project No. 20170057
Bridge No. 16 on SR 1324
TIP B-4598

APPROVAL of 401 WATER QUALITY CERTIFICATION and NEUSE BUFFER AUTHORIZATION with ADDITIONAL CONDITIONS

Mr. Philip S. Harris, III, P.E., CPM
Natural Environment Section Head
Project Development and Environmental Analysis
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Dear Mr. Harris:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge No. 16 over Mason Creek on SR 1324 (Florence Rd) in Pamlico County:

Neuse Riparian Buffer and Coastal Wetland Impacts

| Site | Buffer Zone 1 (sq ft) | Buffer Zone 2 (sq ft) | Wetlands Fill (ac) | Wetlands Excavation (ac) | Wetlands Hand Clearing (ac) | Open Water (ac) |
|-----------|-----------------------|-----------------------|--------------------|--------------------------|-----------------------------|-----------------|
| Bridge 16 | 2526 | 1182 | 0.09 | 0.01 | 0.20 | <.01 |
| Total | 3,708 | | 0.30 | | | <.01 |

The project shall be constructed in accordance with your revised application dated received March 7, 2017. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Numbers 3891, 3893, and 3884. These certifications correspond to the Nationwide Permits 23, 33, and 12 respectively issued by the Corps of Engineers. This approval is also valid for the Neuse Riparian Buffer Rules (15A NCAC 2B.0233). In addition, you should acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire with the accompanying 404 permit.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If total wetland fills for this project (now or in the future) exceed one acre, or of total impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). Additional buffer impacts may require compensatory mitigation as described in 15A NCAC 2B.0259. For this approval to remain valid, you must adhere to the conditions listed in the attached certification(s) and any additional conditions listed below.



State of North Carolina | Environmental Quality

1617 Mail Service Center | Raleigh, North Carolina 27699-1617

Condition(s) of Certification:

1. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
2. The permittee will need to adhere to all appropriate in-water work moratoria (including the use of pile driving or vibration techniques) prescribed by the NC Wildlife Resources Commission and NC Division of Coastal Management. No in-water work is permitted between April 1 and September 30 of any year, without prior approval from the NC Division of Water Resources and the NC Wildlife Resources Commission. In addition, the permittee shall conform to the NCDOT policy entitled "Stream Crossing Guidelines for Anadromous Fish Passage (May 12, 1997) at all times.
3. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
4. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]
5. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0501 and .0502]
6. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
7. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]
8. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]
9. All fill slopes located in jurisdictional wetlands shall be placed at slopes not flatter than 3:1, unless otherwise by this certification. [15A NCAC 02H.0506(b)(2)]
10. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards [15A NCAC 02H.0506(b)(3) and (c)(3)]:
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
11. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [15A NCAC 02H.0506(b)(3) and (c)(3)]

12. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]
13. Pursuant to 15A NCAC 2B.0233(6), sediment and erosion control devices shall not be placed in Zone 1 of any Neuse Buffer without prior approval by the NCDWR. At this time, the NCDWR has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.
14. Erosion control matting in riparian areas shall not contain a nylon mesh grid which can impinge and entrap small animals. Matting should be secured in place by staples, stakes, or wherever possible live stakes of native trees. Riparian areas are defined as a distance 25 feet from top of stream bank. [15A NCAC 02B.0224, .0225]
15. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities. [15A NCAC 02H.0506(b)(3) and (c)(3)]
16. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
17. As a condition of this 401 Water Quality Certification, the bridge demolition and construction must be accomplished in strict compliance with the most recent version of NCDOT's Best Management Practices for Construction and Maintenance Activities. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
18. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. To meet the requirements of NCDOT's NPDES permit NCS0000250, please refer to the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual for approved measures. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]
19. Bridge piles and bents shall be constructed using driven piles (hammer or vibratory) or drilled shaft construction methods. More specifically, jetting or other methods of pile driving are prohibited without prior written approval from the NCDWR first. [15A NCAC 02H.0506(b)(2)]
20. All bridge construction shall be performed from the existing bridge, temporary work bridges, temporary causeways, or floating or sunken barges. If work conditions require barges, they shall be floated into position and then sunk. The barges shall not be sunk and then dragged into position. Under no circumstances should barges be dragged along the bottom of the surface water. [15A NCAC 02H .0506(b)(3)]
21. A turbidity curtain will be installed in the stream if driving or drilling activities occur within the stream channel, on the stream bank, or within 5 feet of the top of bank. This condition can be waived with prior approval from the NCDWR. [15A NCAC 02H .0506(b)(3)]
22. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
23. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]
24. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. Maintained buffers shall be permanently revegetated with non-woody species by the end of the growing season following completion of construction. For the purpose of this condition, maintained buffer areas are defined as areas within the transportation corridor that will be subject to regular NCDOT maintenance activities including mowing. The area with non-maintained buffers shall be permanently revegetated with native woody species before the next growing season following completion of construction. (15A NCAC 2B.0233)

25. All stormwater runoff shall be directed as sheetflow through stream buffers at non-erosive velocities, unless otherwise approved by this certification. (15A NCAC 2B.0233)
26. New roadside ditches that do not control for nitrogen and attenuate flow before discharging through the riparian buffer are prohibited [15A NCAC 2B.0233(6)]
27. Native riparian vegetation must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction. [15A NCAC 02B.0506(b)(2)]
28. For projects impacting waters classified by the NC Environmental Management Commission as Trout (Tr), High Quality Waters (HQW), or Water Supply I or II (WSI, WSII) stormwater shall be directed to vegetated buffer areas, grass-lined ditches or other means appropriate to the site for the purpose of pre-treating storm water runoff prior to discharging directly into streams. Mowing of existing vegetated buffers is strongly discouraged. [15A NCAC 02B.0224 and 0225]
29. The permittee shall use /Design Standards in Sensitive Watersheds/(15A NCAC 4B.0124[a]-[e]) in areas draining to HQW waters.
30. NCDOT shall be in compliance with the NCS00250 permit issued to the NCDOT, including the applicable requirements of the NCG01000. Please note the extra protections for the sensitive watersheds. [15A NCAC 02B.0224 and 0225]
31. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
32. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]
33. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]
34. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]
35. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission.

The mailing address for the Office of Administrative Hearings is:

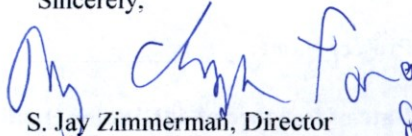
Office of Administrative Hearings
 6714 Mail Service Center
 Raleigh, NC 27699-6714
 Telephone: (919) 431-3000, Facsimile: (919) 431-3100

A copy of the petition must also be served on DEQ as follows:

Mr. Sam M.Hayes, General Counsel
Department of Environmental Quality
1601 Mail Service Center

This letter completes the review of the Division of Water Resources under Section 401 of the Clean Water Act. If you have any questions, please contact Garcy Ward at (252)946-6481 or garcy.ward@ncdenr.gov.

Sincerely,



S. Jay Zimmerman, Director
Division of Water Resources

Electronic copy only distribution:

Tom Steffens, US Army Corps of Engineers, Washington Field Office
Jay Johnson, Division 2 Environmental Officer
Colin Mellor, NC Department of Transportation
Chris Rivenbark, NC Department of Transportation
Stephen Lane, NC Division of Coastal Management
Cathy Brittingham, NC Division of Coastal Management
Garcy Ward, NC Division of Water Resources Washington Regional Office
File Copy



Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

S. JAY ZIMMERMAN
Director

NCDWR Project No.: _____ County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Resources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This form may be returned to NCDWR by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Agent's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature _____ Registration No. _____

Date _____



State of North Carolina | Environmental Quality

1617 Mail Service Center | Raleigh, North Carolina 27699-1617

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER RESOURCES

WATER QUALITY GENERAL CERTIFICATION NO. 4093

GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR US ARMY CORPS OF ENGINEERS

- **NATIONWIDE PERMIT NUMBER 23 (APPROVED CATEGORICAL EXCLUSIONS)**


Water Quality Certification Number 4093 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Regulations in 15A NCAC 02H .0500 and 15A NCAC 02B .0200 for the discharge of fill material to surface waters and wetland areas as described in 33 CFR 330 Appendix A (B) (23) of the US Army Corps of Engineers regulations.

The State of North Carolina certifies that the specified category of activity will not violate applicable portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

Effective date: March 19, 2017

Signed this day March 3, 2017

By

A handwritten signature in blue ink, appearing to read 'S. Jay Zimmerman', is written over a solid horizontal line.

for S. Jay Zimmerman, P.G.
Director

GC4093

Activities meeting any one (1) of the following thresholds or circumstances require written approval for a 401 Water Quality Certification from the Division of Water Resources (DWR):

- a) If any of the conditions of this Certification (listed below) cannot be met; or
- b) Total permanent impacts to streams equal or greater than 40 linear feet; or
- c) Any stream relocation or stream restoration; or
- d) Any impacts to streams from excavation or dredging; or
- e) Total temporary or permanent impacts to wetlands and/or open waters equal to or greater than one-tenth (1/10) acre; or
- f) Any impacts to waters, or wetlands adjacent to waters, designated as: ORW (including SAV), HQW (including PNA), SA, WS-I, WS-II, Trout, or a North Carolina or National Wild and Scenic River; or
- g) Any impacts to coastal wetlands [15A NCAC 7H .0205], or Unique Wetlands (UWL) [15A NCAC 2H .0506]; or
- h) Any impact associated with a Notice of Violation or an enforcement action for violation(s) of NC Wetland Rules (15A NCAC 02H .0500), NC Isolated Wetland Rules (15A NCAC 02H .1300), NC Surface Water or Wetland Standards (15A NCAC 02B .0200), or State Regulated Riparian Buffer Rules (15A NCAC 02B .0200); or
- i) Any impacts to subject water bodies and/or state regulated riparian buffers along subject water bodies in the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman Lake, Jordan Lake or Goose Creek Watersheds (or any other basin or watershed with State Regulated Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) *unless*:
 - i) The activities are listed as "EXEMPT" from these rules; or
 - ii) A Buffer Authorization Certificate is issued by the NC Division of Coastal Management (DCM); or
 - iii) A Buffer Authorization Certificate or a Minor Variance is issued by a delegated or designated local government implementing a state riparian buffer program pursuant to 143-215.23.

Activities included in this General Certification that do not meet one of the thresholds listed above do not require written approval.

I. ACTIVITY SPECIFIC CONDITIONS:

1. For the North Carolina Department of Transportation, compliance with the NCDOT's individual NPDES permit NCS000250 shall serve to satisfy this condition. For all other projects that disturb one acre or more of land (including a project that disturbs less than one acre of land that is part of a larger common plan of development or sale); have permanent wetland, stream, or open water impacts; and are proposing new built-upon area shall comply with the following requirements: [15A NCAC 02H .0506 (b)(5) and (c)(5)]:

GC4093

- a. Stormwater management shall be provided throughout the entire project area in accordance with 15A NCAC 02H .1003. For the purposes of 15A NCAC 02H .1003(2)(a), density thresholds shall be determined in accordance with 15A NCAC 02H .1017.
- b. Projects that have vested rights, exemptions, or grandfathering from state or locally-implemented stormwater programs do not satisfy this condition. Projects that satisfy state or locally-implemented stormwater programs through use of community in-lieu programs do not satisfy this condition.
- c. Projects that require written authorization from DWR shall submit the following with their application for review and approval:
 - i. For projects that have a stormwater management plan (SMP) reviewed under a state stormwater program¹ or a state-approved local government stormwater program² shall submit plans that show the location and approximate size of all proposed stormwater measures;
 - ii. All other low density projects not covered above shall submit a completed low density supplement form with all required items; and
 - iii. All other high density projects not covered above shall submit a completed SMP, including all appropriate stormwater control measure (SCM) supplemental forms and associated items, that complies with the high density development requirements of 15A NCAC 02H .1003.
- d. Projects that do not require written approval from DWR shall obtain approval of the SMP, when required, before any impacts authorized by this Certification occur.
- e. SMPs approved by DWR may be phased on a case-by-case basis. SMPs for each future phase must be approved before construction of that phase commences. Approved SMPs may not be modified without prior written authorization from DWR.

II. GENERAL CONDITIONS:

1. When written authorization is required, the plans and specifications for the project are incorporated into the authorization by reference and are an enforceable part of the Certification. Any modifications to the project require notification to DWR and may require an application submittal to DWR with the appropriate fee. [15A NCAC 02H .0501 and .0502]
2. No waste, spoil, solids, or fill of any kind shall occur in wetlands or waters, beyond the footprint of the impacts (including temporary impacts) as authorized in the written approval from DWR; or beyond the thresholds established for use of this Certification without written authorization. [15A NCAC 02H .0501 and .0502]

¹ e.g. Coastal Counties, HQW, ORW, or state-implemented Phase II NPDES

² e.g. Delegated Phase II NPDES, Water Supply Watershed, Nutrient-Sensitive Waters, or Universal Stormwater Management Program

GC4093

No removal of vegetation or other impacts of any kind shall occur to state regulated riparian buffers beyond the footprint of impacts approved in a Buffer Authorization or Variance or as listed as an exempt activity in the applicable riparian buffer rules. [15A NCAC 02B .0200]

3. In accordance with 15A NCAC 02H .0506(h), compensatory mitigation may be required for losses of greater than 150 linear feet of streams and/or greater than one (1) acre of wetlands. Impacts to isolated and other non-404 jurisdictional wetlands shall not be combined with 404 jurisdictional wetlands for the purpose of determining when impact thresholds trigger a mitigation requirement. For linear publicly owned and maintained transportation projects that are not determined to be part of a larger common plan of development by the US Army Corps of Engineers, compensatory mitigation may be required for losses of greater than 150 linear feet per stream.

Compensatory stream and/or wetland mitigation shall be proposed and completed in compliance with G.S. 143-214.11. For applicants proposing to conduct mitigation within a project site, a complete mitigation proposal developed in accordance with the most recent guidance issued by the US Army Corps of Engineers Wilmington District shall be submitted for review and approval with the application for impacts.

4. All activities shall be in compliance with any applicable State Regulated Riparian Buffer Rules in Chapter 2 of Title 15A.
5. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0200]

Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NCDOT Sediment and Erosion Control Manual*.

All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.

For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.

GC4093

If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-I, WS-II, High Quality Waters (HQW), or Outstanding Resource Waters (ORW), then the sedimentation and erosion control designs shall comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watersheds*.

6. Sediment and erosion control measures shall not be placed in wetlands or waters except within the footprint of temporary or permanent impacts authorized under this Certification. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0501 and .0502]
7. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within wetlands. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02B .0201]
8. An NPDES Construction Stormwater Permit (NCG010000) is required for construction projects that disturb one (1) or more acres of land. The NCG010000 Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If the project is covered by this permit, full compliance with permit conditions including the erosion & sedimentation control plan, inspections and maintenance, self-monitoring, record keeping and reporting requirements is required. [15A NCAC 02H .0506(b)(5) and (c)(5)]

The North Carolina Department of Transportation (NCDOT) shall be required to be in full compliance with the conditions related to construction activities within the most recent version of their individual NPDES (NCS000250) stormwater permit. [15A NCAC 02H .0506(b)(5) and (c)(5)]

9. All work in or adjacent to streams shall be conducted so that the flowing stream does not come in contact with the disturbed area. Approved best management practices from the most current version of the *NC Sediment and Erosion Control Manual*, or the *NC DOT Construction and Maintenance Activities Manual*, such as sandbags, rock berms, cofferdams, and other diversion structures shall be used to minimize excavation in flowing water. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(3) and (c)(3)]
10. If activities must occur during periods of high biological activity (e.g. sea turtle nesting, fish spawning, or bird nesting), then biological monitoring may be required at the request of other state or federal agencies and coordinated with these activities. [15A NCAC 02H .0506 (b)(2) and 15A NCAC 04B .0125]

All moratoriums on construction activities established by the NC Wildlife Resources Commission (WRC), US Fish and Wildlife Service (USFWS), NC Division of Marine Fisheries (DMF), or National Marine Fisheries Service (NMFS) shall be implemented. Exceptions to this condition require written approval by the resource agency responsible for the given moratorium. A copy of the approval from the resource agency shall be forwarded to DWR.

GC4093

Work within a designated trout watershed of North Carolina (as identified by the Wilmington District of the US Army Corps of Engineers), or identified state or federal endangered or threatened species habitat, shall be coordinated with the appropriate WRC, USFWS, NMFS, and/or DMF personnel.

11. Culverts shall be designed and installed in such a manner that the original stream profiles are not altered and allow for aquatic life movement during low flows. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed culvert shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. [15A NCAC 02H .0506(b)(2) and (c)(2)]

Placement of culverts and other structures in streams shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20% of the culvert diameter for culverts having a diameter less than or equal to 48 inches, to allow low flow passage of water and aquatic life.

If multiple pipes or barrels are required, they shall be designed to mimic the existing stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel shall be avoided.

When topographic constraints indicate culvert slopes of greater than 5%, culvert burial is not required, provided that all alternative options for flattening the slope have been investigated and aquatic life movement/connectivity has been provided when possible (e.g. rock ladders, cross vanes, etc.). Notification, including supporting documentation to include a location map of the culvert, culvert profile drawings, and slope calculations, shall be provided to DWR 60 calendar days prior to the installation of the culvert.

When bedrock is present in culvert locations, culvert burial is not required provided that there is sufficient documentation of the presence of bedrock. Notification, including supporting documentation such as, a location map of the culvert, geotechnical reports, photographs, etc. shall be provided to DWR a minimum of 60 calendar days prior to the installation of the culvert. If bedrock is discovered during construction, then DWR shall be notified by phone or email within 24 hours of discovery.

If other site-specific topographic constraints preclude the ability to bury the culverts as described above and/or it can be demonstrated that burying the culvert would result in destabilization of the channel, then exceptions to this condition require application to and written approval from DWR.

GC4093

Installation of culverts in wetlands shall ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. When roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges shall be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.

The establishment of native woody vegetation and other soft stream bank stabilization techniques shall be used where practicable instead of rip-rap or other bank hardening methods.

12. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means to the maximum extent practicable (e.g. grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(5)]
13. Application of fertilizer to establish planted/seeded vegetation within disturbed riparian areas and/or wetlands shall be conducted at agronomic rates and shall comply with all other Federal, State and Local regulations. Fertilizer application shall be accomplished in a manner that minimizes the risk of contact between the fertilizer and surface waters. [15A NCAC 02B .0200 and 15A NCAC 02B .0231]
14. If concrete is used during construction, then all necessary measures shall be taken to prevent direct contact between uncured or curing concrete and waters of the state. Water that inadvertently contacts uncured concrete shall not be discharged to waters of the state. [15A NCAC 02B .0200]
15. All proposed and approved temporary fill and culverts shall be removed and the impacted area shall be returned to natural conditions within 60 calendar days after the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross sectional dimensions, planform pattern, and longitudinal bed profile. For projects that receive written approval, no temporary impacts are allowed beyond those included in the application and authorization. All temporarily impacted sites shall be restored and stabilized with native vegetation. [15A NCAC 02H .0506(b)(2) and (c)(2)]
16. All proposed and approved temporary pipes/culverts/rip-rap pads etc. in streams shall be installed as outlined in the most recent edition of the *North Carolina Sediment and Erosion Control Planning and Design Manual* or the *North Carolina Surface Mining Manual* or the *North Carolina Department of Transportation Best Management Practices for Construction and Maintenance Activities* so as not to restrict stream flow or cause dis-equilibrium during use of this Certification. [15A NCAC 02H .0506(b)(2) and (c)(2)]

GC4093

17. Any rip-rap required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the area directly impacted by the approved construction activity. All rip-rap shall be placed such that the original stream elevation and streambank contours are restored and maintained. Placement of rip-rap or other approved materials shall not result in de-stabilization of the stream bed or banks upstream or downstream of the area or in a manner that precludes aquatic life passage. [15A NCAC 02H .0506(b)(2)]
18. Any rip-rap used for stream or shoreline stabilization shall be of a size and density to prevent movement by wave, current action, or stream flows and shall consist of clean rock or masonry material free of debris or toxic pollutants. Rip-rap shall not be installed in the streambed except in specific areas required for velocity control and to ensure structural integrity of bank stabilization measures. [15A NCAC 02H .0506(b)(2)]
19. Applications for rip-rap groins proposed in accordance with 15A NCAC 07H .1401 (NC Division of Coastal Management General Permit for construction of Wooden and Rip-rap Groins in Estuarine and Public Trust Waters) shall meet all the specific conditions for design and construction specified in 15A NCAC 07H .1405.
20. All mechanized equipment operated near surface waters shall be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids, or other toxic materials. Construction shall be staged in order to minimize the exposure of equipment to surface waters to the maximum extent practicable. Fueling, lubrication and general equipment maintenance shall not take place within 50 feet of a waterbody or wetlands to prevent contamination by fuels and oils. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0211 (12)]
21. Heavy equipment working in wetlands shall be placed on mats or other measures shall be taken to minimize soil disturbance. [15A NCAC 02H .0506(b)(3) and (c)(3)]
22. In accordance with 143-215.85(b), the applicant shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours.
23. If an environmental document is required under the State Environmental Policy Act (SEPA), then this General Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse. If an environmental document is required under the National Environmental Policy Act (NEPA), then this General Certification is not valid until a Categorical Exclusion, the Final Environmental Assessment, or Final Environmental Impact Statement is published by the lead agency. [15A NCAC 01C .0107(a)]

GC4093

24. This General Certification does not relieve the applicant of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.
25. The applicant and their authorized agents shall conduct all activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act), and any other appropriate requirements of State and Federal Law. If DWR determines that such standards or laws are not being met, including failure to sustain a designated or achieved use, or that State or Federal law is being violated, or that further conditions are necessary to assure compliance, then DWR may revoke or modify a written authorization associated with this General Water Quality Certification. [15A NCAC 02H .0507(d)]
26. When written authorization is required for use of this Certification, upon completion of all permitted impacts included within the approval and any subsequent modifications, the applicant shall be required to return a certificate of completion (available on the DWR website <https://edocs.deq.nc.gov/Forms/Certificate-of-Completion>). [15A NCAC 02H .0502(f)]
27. Additional site-specific conditions, including monitoring and/or modeling requirements, may be added to the written approval letter for projects proposed under this Water Quality Certification in order to ensure compliance with all applicable water quality and effluent standards. [15A NCAC 02H .0507(c)]
28. If the property or project is sold or transferred, the new Permittee shall be given a copy of this Certification (and written authorization if applicable) and is responsible for complying with all conditions. [15A NCAC 02H .0501 and .0502]

III. GENERAL CERTIFICATION ADMINISTRATION:

1. In accordance with North Carolina General Statute 143-215.3D(e), written approval for a 401 Water Quality General Certification must include the appropriate fee. An applicant for a CAMA permit under Article 7 of Chapter 113A of the General Statutes for which a Water Quality Certification is required shall only make one payment to satisfy both agencies; the fee shall be as established by the Secretary in accordance with 143-215.3D(e)(7).
2. This Certification neither grants nor affirms any property right, license, or privilege in any waters, or any right of use in any waters. This Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and this Certification does not create any prescriptive right or any right of priority regarding any usage of water. This Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded.

GC4093

3. This Certification grants permission to the Director, an authorized representative of the Director, or DWR staff, upon the presentation of proper credentials, to enter the property during normal business hours. [15A NCAC 02H .0502(e)]
4. This General Certification shall expire on the same day as the expiration date of the corresponding Nationwide Permit and/or Regional General Permit. The conditions in effect on the date of issuance of Certification for a specific project shall remain in effect for the life of the project, regardless of the expiration date of this Certification. This General Certification is rescinded when the US Army Corps of Engineers reauthorizes any of the corresponding Nationwide Permits and/or Regional General Permits or when deemed appropriate by the Director of the Division of Water Resources.
5. Non-compliance with or violation of the conditions herein set forth by a specific project may result in revocation of this General Certification for the project and may also result in criminal and/or civil penalties.
6. The Director of the North Carolina Division of Water Resources may require submission of a formal application for Individual Certification for any project in this category of activity if it is determined that the project is likely to have a significant adverse effect upon water quality, including state or federally listed endangered or threatened aquatic species, or degrade the waters so that existing uses of the water or downstream waters are precluded.
7. Public hearings may be held prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Resources.

History Note: Water Quality Certification (WQC) Number 4093 issued March 3, 2017 replaces WQC 3891 issued March 19, 2012; WQC 3701 issued November 1, 2007; WQC Number 3632 issued March 2007; WQC Number 3403 issued March 2003; WQC Number 3361 issued March 18, 2002; WQC Number 3107 issued February 11, 1997; WQC Number 2734 issued May 1 1993; and WQC Number 2670 issued on January 21, 1992.

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER RESOURCES

WATER QUALITY GENERAL CERTIFICATION NO. 4086

GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR US ARMY CORPS OF ENGINEERS

- **NATIONWIDE PERMIT 12 (UTILITY LINE ACTIVITIES)**

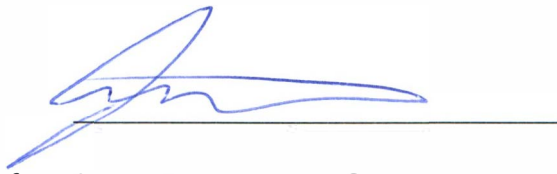
Water Quality Certification Number 4086 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Regulations in 15A NCAC 02H .0500 and 15A NCAC 02B .0200 for the discharge of fill material to surface waters and wetland areas as described in 33 CFR 330 Appendix A (B) (12) of the US Army Corps of Engineers regulations.

The State of North Carolina certifies that the specified category of activity will not violate applicable portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

Effective date: March 19, 2017

Signed this day March 3, 2017

By



for S. Jay Zimmerman, P.G.
Director

GC4086

Activities meeting any one (1) of the following thresholds or circumstances require written approval for a 401 Water Quality Certification from the Division of Water Resources (DWR):

- a) If any of the Conditions of this Certification (listed below) cannot be met; or
- b) Any permanent fill into or modification of wetlands and/or waters; or
- c) Total temporary impacts to streams greater than 500 feet; or
- d) Any stream relocation or stream restoration; or
- e) Any impacts to waters, or to wetlands adjacent to waters, designated as: ORW (including SAV), HQW (including PNA), SA, WS-I, WS-II, Trout, or North Carolina or National Wild and Scenic River; or
- f) Any impacts to coastal wetlands [15A NCAC 07H .0205], or Unique Wetlands (UWL); or
- g) Any impact associated with a Notice of Violation or an enforcement action for violation(s) of NC Wetland Rules (15A NCAC 02H .0500), NC Isolated Wetland Rules (15A NCAC 02H .1300), NC Surface Water or Wetland Standards (15A NCAC 02B .0200), or State Regulated Riparian Buffer Rules (15A NCAC 02B .0200); or
- h) Any impacts to subject water bodies and/or state regulated riparian buffers along subject water bodies in the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman Lake, Jordan Lake or Goose Creek Watersheds (or any other basin or watershed with State Regulated Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) *unless*:
 - i) The activities are listed as "EXEMPT" from these rules; or
 - ii) A Buffer Authorization Certificate is issued by the NC Division of Coastal Management (DCM); or
 - iii) A Buffer Authorization Certificate or a Minor Variance is issued by a delegated or designated local government implementing a state riparian buffer program pursuant to 143-215.23.

Activities included in this General Certification that do not meet one of the thresholds listed above do not require written approval.

I. ACTIVITY SPECIFIC CONDITIONS:

1. All sewer lines shall be designed, constructed and maintained in accordance with Title 15A NCAC Chapter 02T.
2. Any utility construction corridor that is parallel to a stream or open water shall not be closer than 10 feet to the top of bank or ordinary high water mark. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506 (b)(4) and (c)(4)]
3. Utility lines shall cross all stream channels at a near-perpendicular direction (i.e., between 75 degrees and 105 degrees to the stream bank). Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506 (b)(2) and (c)(2)]

GC4086

4. Construction corridors in wetlands and across stream channels shall be minimized to the maximum extent practicable and shall not exceed 50 feet wide for gas utility lines and 40 feet wide for all other utility lines. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506 (b)(2) and (c)(2)]

For construction corridors in wetlands and across stream channels, stumps shall be grubbed only as needed to install the utility and remaining stumps shall be cut off at grade level. The general stripping of topsoil within wetlands along the construction corridor is not permitted.

5. Permanent maintained access corridors in wetlands and across stream channels shall be restricted to the minimum width practicable and shall not exceed 30 feet wide for gas utility lines and 20 feet wide for all other utility lines except at manhole locations. 15-foot by 15-foot perpendicular vehicle turnarounds shall be allowed in access corridors but must be spaced at least 500 feet apart. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506 (b)(2) and (c)(2)]
6. For all utility lines constructed within wetlands, an anti-seep collar shall be placed at the downstream (utility line gradient) wetland boundary and every 150 feet up the gradient until the utility exits the wetland. Anti-seep collars may be constructed with class B concrete, compacted clay, PVC pipe, or metal collars. Wetland crossings that are directionally drilled, and perpendicular wetland crossings that are open cut and less than 150 feet long do not require anti-seep collars. The compacted clay shall have a specific infiltration of 1×10^{-5} cm/sec or less. A section and plan view diagram is attached for the anti-seep collars. [15A NCAC 02H .0506 (b)(4) and (c)(4)]

The following specifications shall apply to class B concrete:

- a. Minimum cement content, sacks per cubic yard with rounded course aggregate 5.0
 - b. Minimum cement content, sacks per cubic yard with angular course aggregate 5.5
 - c. Maximum water-cement ratio gallons per sack 6.8
 - d. Slump range 2" to 4"
 - e. Minimum strength - 28 day psi 2,500
7. The applicant shall have a specific plan for restoring wetland contours. Any excess material will be removed to a high ground disposal area. [15A NCAC 02H .0506 (b)(2) and (c)(2)]

The mixing of topsoil and subsoils within the wetlands along utility corridors shall be minimized to the greatest extent practical. During excavation, the soils shall be placed on fabric to minimize impacts whenever possible. Topsoil excavated from utility trenches will be piled separately from subsoils and will be backfilled into the trench only after the subsoils have been placed and compacted.

GC4086

8. For the North Carolina Department of Transportation, compliance with the NCDOT's individual NPDES permit NCS000250 shall serve to satisfy this condition. For all other utility line and associated facilities projects that disturb one acre or more of land (including a project that disturbs less than one acre of land that is part of a larger common plan of development or sale); have permanent wetland, stream, or open water impacts; and are proposing new built-upon area shall comply with the following requirements: [15A NCAC 02H .0506(b)(5) and (c)(5)]
 - a. Stormwater management shall be provided throughout the entire project area in accordance with 15A NCAC 02H .1003. For the purposes of 15A NCAC 02H .1003(2)(a), density thresholds shall be determined in accordance with 15A NCAC 02H .1017.
 - b. Projects that have vested rights, exemptions, or grandfathering from state or locally-implemented stormwater programs do not satisfy this condition. Projects that satisfy state or locally-implemented stormwater programs through use of community in-lieu programs do not satisfy this condition.
 - c. Projects that require written authorization from DWR shall submit the following with their application for review and approval:
 - i. For projects that have a stormwater management plan (SMP) reviewed under a state stormwater program¹ or a state-approved local government stormwater program² shall submit plans that show the location and approximate size of all proposed stormwater measures;
 - ii. All other low density projects not covered above shall submit a completed low density supplement form with all required items; and
 - iii. All other high density projects not covered above shall submit a completed SMP, including all appropriate stormwater control measure (SCM) supplemental forms and associated items, that complies with the high density development requirements of 15A NCAC 02H .1003.
 - d. Projects that do not require written approval from DWR shall obtain approval of the SMP, when required, before any impacts authorized by this Certification occur.
 - e. SMPs approved by DWR may be phased on a case-by-case basis. SMPs for each future phase must be approved before construction of that phase commences. Approved SMPs may not be modified without prior written authorization from DWR.

¹ e.g. Coastal Counties, HQW, ORW, or state-implemented Phase II NPDES

² e.g. Delegated Phase II NPDES, Water Supply Watershed, Nutrient-Sensitive Waters, or Universal Stormwater Management Program

GC4086

II. GENERAL CONDITIONS:

1. When written authorization is required, the plans and specifications for the project are incorporated into the authorization by reference and are an enforceable part of the Certification. Any modifications to the project require notification to DWR and may require an application submittal to DWR with the appropriate fee. [15A NCAC 02H .0501 and .0502]
2. No waste, spoil, solids, or fill of any kind shall occur in wetlands or waters beyond the footprint of the impacts (including temporary impacts) as authorized in the written approval from DWR; or beyond the thresholds established for use of this Certification without written authorization. [15A NCAC 02H .0501 and .0502]

No removal of vegetation or other impacts of any kind shall occur to state regulated riparian buffers beyond the footprint of impacts approved in a Buffer Authorization or Variance or as listed as an exempt activity in the applicable riparian buffer rules. [15A NCAC 02B .0200]

3. In accordance with 15A NCAC 02H .0506(h), compensatory mitigation may be required for losses of greater than 150 linear feet of streams and/or greater than one (1) acre of wetlands. Impacts to isolated and other non-404 jurisdictional wetlands shall not be combined with 404 jurisdictional wetlands for the purpose of determining when impact thresholds trigger a mitigation requirement. For linear publicly owned and maintained transportation projects that are not determined to be part of a larger common plan of development by the US Army Corps of Engineers, compensatory mitigation may be required for losses of greater than 150 linear feet per stream.

Compensatory stream and/or wetland mitigation shall be proposed and completed in compliance with G.S. 143-214.11. For applicants proposing to conduct mitigation within a project site, a complete mitigation proposal developed in accordance with the most recent guidance issued by the US Army Corps of Engineers Wilmington District shall be submitted for review and approval with the application for impacts.

4. All activities shall be in compliance with any applicable State Regulated Riparian Buffer Rules in Chapter 2 of Title 15A.
5. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506 (b)(3) and (c)(3) and 15A NCAC 02B .0200]

Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NCDOT Sediment and Erosion Control Manual*.

GC4086

All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.

For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.

If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-I, WS-II, High Quality Waters (HQW), or Outstanding Resource Waters (ORW), then the sedimentation and erosion control designs shall comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watersheds*.

6. Sediment and erosion control measures shall not be placed in wetlands or waters except within the footprint of temporary or permanent impacts authorized under this Certification. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0501 and .0502]
7. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within wetlands. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02B .0201]
8. An NPDES Construction Stormwater Permit (NCG010000) is required for construction projects that disturb one (1) or more acres of land. The NCG010000 Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If the project is covered by this permit, full compliance with permit conditions including the erosion & sedimentation control plan, inspections and maintenance, self-monitoring, record keeping and reporting requirements is required. [15A NCAC 02H .0506(b)(5) and (c)(5)]

The North Carolina Department of Transportation (NCDOT) shall be required to be in full compliance with the conditions related to construction activities within the most recent version of their individual NPDES (NCS000250) stormwater permit. [15A NCAC 02H .0506(b)(5) and (c)(5)]

9. All work in or adjacent to streams shall be conducted so that the flowing stream does not come in contact with the disturbed area. Approved best management practices from the most current version of the *NC Sediment and Erosion Control Manual*, or the *NC DOT Construction and Maintenance Activities Manual*, such as sandbags, rock berms, cofferdams, and other diversion structures shall be used to minimize excavation in flowing water. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(3) and (c)(3)]

GC4086

10. If activities must occur during periods of high biological activity (e.g. sea turtle nesting, fish spawning, or bird nesting), then biological monitoring may be required at the request of other state or federal agencies and coordinated with these activities. [15A NCAC 02H .0506 (b)(2) and 15A NCAC 04B .0125]

All moratoriums on construction activities established by the NC Wildlife Resources Commission (WRC), US Fish and Wildlife Service (USFWS), NC Division of Marine Fisheries (DMF), or National Marine Fisheries Service (NMFS) shall be implemented. Exceptions to this condition require written approval by the resource agency responsible for the given moratorium. A copy of the approval from the resource agency shall be forwarded to DWR.

Work within a designated trout watershed of North Carolina (as identified by the Wilmington District of the US Army Corps of Engineers), or identified state or federal endangered or threatened species habitat, shall be coordinated with the appropriate WRC, USFWS, NMFS, and/or DMF personnel.

11. Culverts shall be designed and installed in such a manner that the original stream profiles are not altered and allow for aquatic life movement during low flows. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed culvert shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. [15A NCAC 02H .0506(b)(2) and (c)(2)]

Placement of culverts and other structures in streams shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20% of the culvert diameter for culverts having a diameter less than or equal to 48 inches, to allow low flow passage of water and aquatic life.

If multiple pipes or barrels are required, they shall be designed to mimic the existing stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel shall be avoided.

When topographic constraints indicate culvert slopes of greater than 5%, culvert burial is not required, provided that all alternative options for flattening the slope have been investigated and aquatic life movement/connectivity has been provided when possible (e.g. rock ladders, cross vanes, etc.). Notification, including supporting documentation to include a location map of the culvert, culvert profile drawings, and slope calculations, shall be provided to DWR 60 calendar days prior to the installation of the culvert.

When bedrock is present in culvert locations, culvert burial is not required provided that there is sufficient documentation of the presence of bedrock. Notification, including supporting documentation such as a location map of the culvert, geotechnical reports, photographs, etc. shall be provided to DWR a minimum of 60 calendar days prior to the installation of the culvert. If bedrock is discovered during construction, then DWR shall be notified by phone or email within 24 hours of discovery.

GC4086

If other site-specific topographic constraints preclude the ability to bury the culverts as described above and/or it can be demonstrated that burying the culvert would result in destabilization of the channel, then exceptions to this condition require application to and written approval from DWR.

Installation of culverts in wetlands shall ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. When roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges shall be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.

The establishment of native woody vegetation and other soft stream bank stabilization techniques shall be used where practicable instead of rip-rap or other bank hardening methods.

12. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means to the maximum extent practicable (e.g. grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(5)]
13. Application of fertilizer to establish planted/seeded vegetation within disturbed riparian areas and/or wetlands shall be conducted at agronomic rates and shall comply with all other Federal, State and Local regulations. Fertilizer application shall be accomplished in a manner that minimizes the risk of contact between the fertilizer and surface waters. [15A NCAC 02B .0200 and 15A NCAC 02B .0231]
14. If concrete is used during construction, then all necessary measures shall be taken to prevent direct contact between uncured or curing concrete and waters of the state. Water that inadvertently contacts uncured concrete shall not be discharged to waters of the state. [15A NCAC 02B .0200]
15. All proposed and approved temporary fill and culverts shall be removed and the impacted area shall be returned to natural conditions within 60 calendar days after the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross sectional dimensions, planform pattern, and longitudinal bed profile. For projects that receive written approval, no temporary impacts are allowed beyond those included in the application and authorization. All temporarily impacted sites shall be restored and stabilized with native vegetation. [15A NCAC 02H .0506(b)(2) and (c)(2)]

GC4086

16. All proposed and approved temporary pipes/culverts/rip-rap pads etc. in streams shall be installed as outlined in the most recent edition of the *North Carolina Sediment and Erosion Control Planning and Design Manual* or the *North Carolina Surface Mining Manual* or the *North Carolina Department of Transportation Best Management Practices for Construction and Maintenance Activities* so as not to restrict stream flow or cause dis-equilibrium during use of this Certification. [15A NCAC 02H .0506(b)(2) and (c)(2)]
17. Any rip-rap required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the area directly impacted by the approved construction activity. All rip-rap shall be placed such that the original stream elevation and streambank contours are restored and maintained. Placement of rip-rap or other approved materials shall not result in de-stabilization of the stream bed or banks upstream or downstream of the area or in a manner that precludes aquatic life passage. [15A NCAC 02H .0506(b)(2)]
18. Any rip-rap used for stream or shoreline stabilization shall be of a size and density to prevent movement by wave, current action, or stream flows and shall consist of clean rock or masonry material free of debris or toxic pollutants. Rip-rap shall not be installed in the streambed except in specific areas required for velocity control and to ensure structural integrity of bank stabilization measures. [15A NCAC 02H .0506(b)(2)]
19. Applications for rip-rap groins proposed in accordance with 15A NCAC 07H .1401 (NC Division of Coastal Management General Permit for construction of Wooden and Rip-rap Groins in Estuarine and Public Trust Waters) shall meet all the specific conditions for design and construction specified in 15A NCAC 07H .1405.
20. All mechanized equipment operated near surface waters shall be inspected and maintained regularly to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. Construction shall be staged in order to minimize the exposure of equipment to surface waters to the maximum extent practicable. Fueling, lubrication and general equipment maintenance shall not take place within 50 feet of a waterbody or wetlands to prevent contamination by fuels and oils. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0211 (12)]
21. Heavy equipment working in wetlands shall be placed on mats or other measures shall be taken to minimize soil disturbance. [15A NCAC 02H .0506(b)(3) and (c)(3)]
22. In accordance with 143-215.85(b), the applicant shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours.

GC4086

23. If an environmental document is required under the State Environmental Policy Act (SEPA), then this General Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse. If an environmental document is required under the National Environmental Policy Act (NEPA), then this General Certification is not valid until a Categorical Exclusion, the Final Environmental Assessment, or Final Environmental Impact Statement is published by the lead agency. [15A NCAC 01C .0107(a)]
24. This General Certification does not relieve the applicant of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.
25. The applicant and their authorized agents shall conduct all activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act), and any other appropriate requirements of State and Federal Law. If DWR determines that such standards or laws are not being met, including failure to sustain a designated or achieved use, or that State or Federal law is being violated, or that further conditions are necessary to assure compliance, then DWR may revoke or modify a written authorization associated with this General Water Quality Certification. [15A NCAC 02H .0507(d)]
26. When written authorization is required for use of this Certification, upon completion of all permitted impacts included within the approval and any subsequent modifications, the applicant shall be required to return a certificate of completion (available on the DWR website: <https://edocs.deq.nc.gov/Forms/Certificate-of-Completion>). [15A NCAC 02H .0502(f)]
27. Additional site-specific conditions, including monitoring and/or modeling requirements, may be added to the written approval letter for projects proposed under this Water Quality Certification in order to ensure compliance with all applicable water quality and effluent standards. [15A NCAC 02H .0507(c)]
28. If the property or project is sold or transferred, the new Permittee shall be given a copy of this Certification (and written authorization if applicable) and is responsible for complying with all conditions. [15A NCAC 02H .0501 and .0502]

III. GENERAL CERTIFICATION ADMINISTRATION:

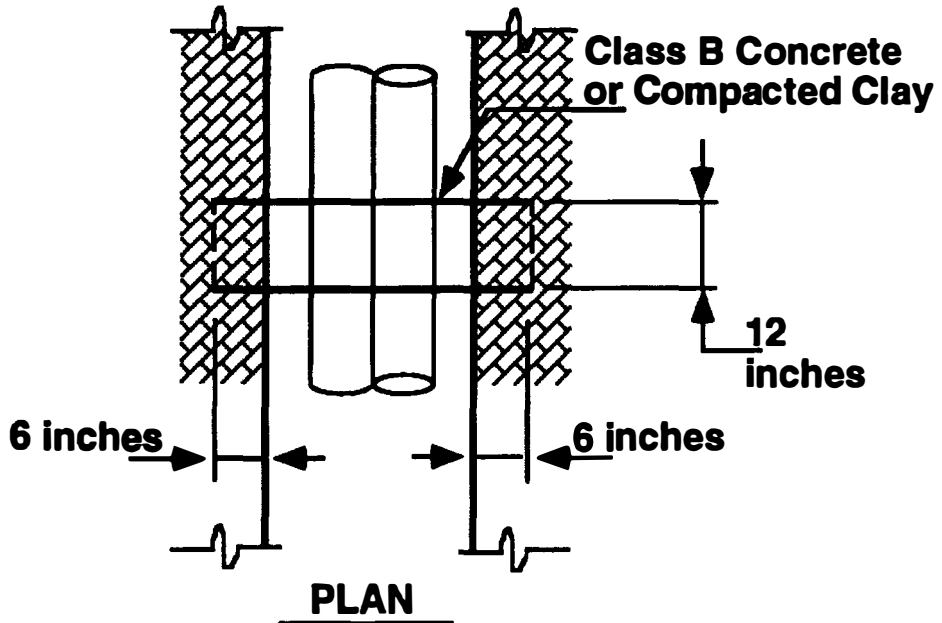
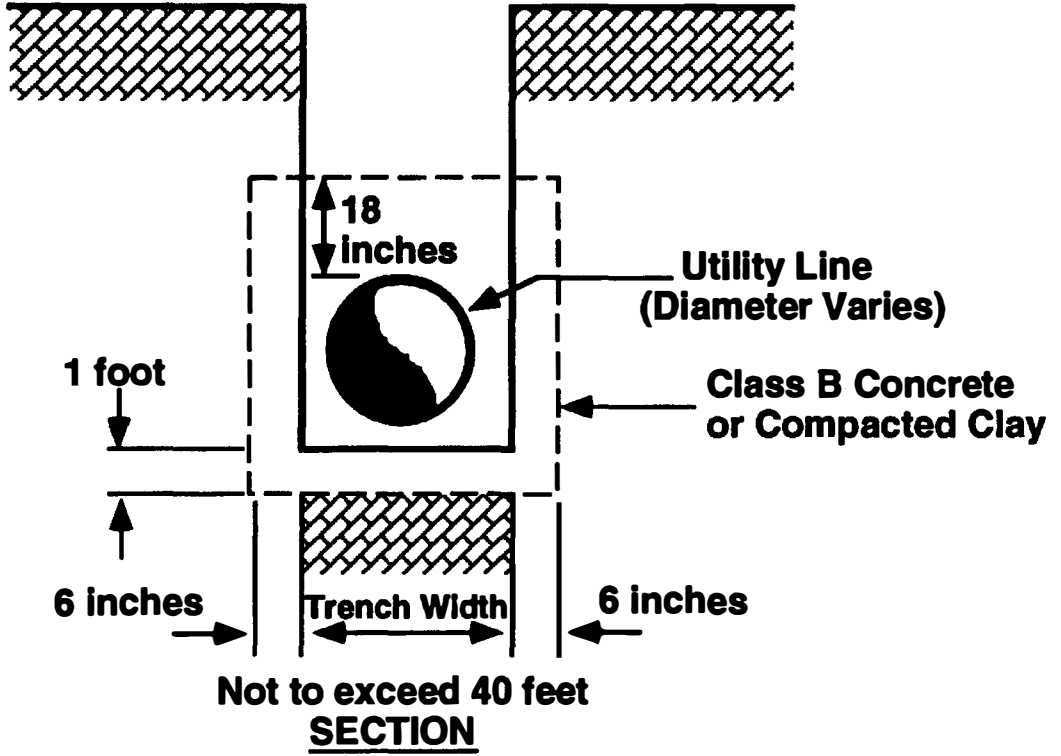
1. In accordance with North Carolina General Statute 143-215.3D(e), written approval for a 401 Water Quality General Certification must include the appropriate fee. An applicant for a CAMA permit under Article 7 of Chapter 113A of the General Statutes for which a Water Quality Certification is required shall only make one payment to satisfy both agencies; the fee shall be as established by the Secretary in accordance with 143-215.3D(e)(7).

GC4086

2. This Certification neither grants nor affirms any property right, license, or privilege in any waters, or any right of use in any waters. This Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and this Certification does not create any prescriptive right or any right of priority regarding any usage of water. This Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded.
3. This Certification grants permission to the Director, an authorized representative of the Director, or DWR staff, upon the presentation of proper credentials, to enter the property during normal business hours. [15A NCAC 02H .0502(e)]
4. This General Certification shall expire on the same day as the expiration date of the corresponding Nationwide Permit and/or Regional General Permit. The conditions in effect on the date of issuance of Certification for a specific project shall remain in effect for the life of the project, regardless of the expiration date of this Certification. This General Certification is rescinded when the US Army Corps of Engineers reauthorizes any of the corresponding Nationwide Permits and/or Regional General Permits or when deemed appropriate by the Director of the Division of Water Resources.
5. Non-compliance with or violation of the conditions herein set forth by a specific project may result in revocation of this General Certification for the project and may also result in criminal and/or civil penalties.
6. The Director of the North Carolina Division of Water Resources may require submission of a formal application for Individual Certification for any project in this category of activity if it is determined that the project is likely to have a significant adverse effect upon water quality, including state or federally listed endangered or threatened aquatic species, or degrade the waters so that existing uses of the water or downstream waters are precluded.
7. Public hearings may be held prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Resources.

History Note: Water Quality Certification (WQC) Number 4806 issued March 3, 2017 replaces WQC 3884 issued March 19, 2012; WQC Number 3819 issued March 19, 2010; WQC Number 3699 issued November 1, 2007; WQC Number 3625 issued March 19, 2007; WQC Number 3374 issued March 18, 2002; WQC Number 3288 issued June 1, 2000; WQC Number 3101 issued February 11, 1997; WQC Number 3022 issued September 6, 1995, WQC Number 2664 issued January 21, 1992.

ANTI -SEEP COLLAR



STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER RESOURCES

WATER QUALITY GENERAL CERTIFICATION NO. 4094

GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR US ARMY CORPS OF ENGINEERS

- **NATIONWIDE PERMIT NUMBER 33 (TEMPORARY CONSTRUCTION, ACCESS AND DEWATERING)**

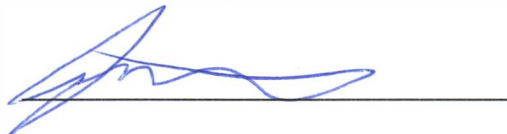
Water Quality Certification Number 4094 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Regulations in 15A NCAC 02H .0500 and 15A NCAC 02B .0200 for the discharge of fill material to surface waters and wetland areas as described in 33 CFR 330 Appendix A (B) (33) of the US Army Corps of Engineers regulations.

The State of North Carolina certifies that the specified category of activity will not violate applicable portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

Effective date: March 19, 2017

Signed this day March 3, 2017

By



for S. Jay Zimmerman, P.G.
Director

GC4094

Activities meeting any one (1) of the following thresholds or circumstances require written approval for a 401 Water Quality Certification from the Division of Water Resources (DWR):

- a) If any of the conditions of this Certification (listed below) cannot be met; or
- b) Any permanent fill into or modification of wetlands and/or waters; or
- c) Total temporary impacts to streams greater than 150 feet; or
- d) Total temporary impacts to wetlands greater than 0.10 acre; or
- e) Any stream relocation or stream restoration; or
- f) Any dewatering activity related to dam maintenance or removal; or
- g) Any impacts to waters, or to wetlands adjacent to waters, designated as: ORW (including SAV), HQW (including PNA), SA, WS-I, WS-II, Trout, or North Carolina or National Wild and Scenic River; or
- h) Any impacts to coastal wetlands [15A NCAC 07H .0205], or Unique Wetlands (UWL); or
- i) Any impact associated with a Notice of Violation or an enforcement action for violation(s) of NC Wetland Rules (15A NCAC 02H .0500), NC Isolated Wetland Rules (15A NCAC 02H .1300), NC Surface Water or Wetland Standards (15A NCAC 02B .0200), or State Regulated Riparian Buffer Rules (15A NCAC 02B .0200); or
- j) Any impacts to subject water bodies and/or state regulated riparian buffers along subject water bodies in the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman Lake, Jordan Lake or Goose Creek Watersheds (or any other basin or watershed with State Regulated Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) *unless*:
 - i) The activities are listed as "EXEMPT" from these rules; or
 - ii) A Buffer Authorization Certificate is issued by the NC Division of Coastal Management (DCM); or
 - iii) A Buffer Authorization Certificate or a Minor Variance is issued by a delegated or designated local government implementing a state riparian buffer program pursuant to 143-215.23.

Activities included in this General Certification that do not meet one of the thresholds listed above do not require written approval.

I. GENERAL CONDITIONS:

1. When written authorization is required, the plans and specifications for the project are incorporated into the authorization by reference and are an enforceable part of the Certification. Any modifications to the project require notification to DWR and may require an application submittal to DWR with the appropriate fee. [15A NCAC 02H .0501 and .0502]
2. No waste, spoil, solids, or fill of any kind shall occur in wetlands or waters beyond the footprint of the impacts (including temporary impacts) as authorized in the written approval from DWR; or beyond the thresholds established for use of this Certification without written authorization. [15A NCAC 02H .0501 and .0502]

GC4094

No removal of vegetation or other impacts of any kind shall occur to state regulated riparian buffers beyond the footprint of impacts approved in a Buffer Authorization or Variance or as listed as an exempt activity in the applicable riparian buffer rules. [15A NCAC 02B .0200]

3. In accordance with 15A NCAC 02H .0506(h), compensatory mitigation may be required for losses of greater than 150 linear feet of streams and/or greater than one (1) acre of wetlands. Impacts to isolated and other non-404 jurisdictional wetlands shall not be combined with 404 jurisdictional wetlands for the purpose of determining when impact thresholds trigger a mitigation requirement. For linear publicly owned and maintained transportation projects that are not determined to be part of a larger common plan of development by the US Army Corps of Engineers, compensatory mitigation may be required for losses of greater than 150 linear feet per stream.

Compensatory stream and/or wetland mitigation shall be proposed and completed in compliance with G.S. 143-214.11. For applicants proposing to conduct mitigation within a project site, a complete mitigation proposal developed in accordance with the most recent guidance issued by the US Army Corps of Engineers Wilmington District shall be submitted for review and approval with the application for impacts.

4. All activities shall be in compliance with any applicable State Regulated Riparian Buffer Rules in Chapter 2 of Title 15A.
5. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506 (b)(3) and (c)(3) and 15A NCAC 02B .0200].

Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NCDOT Sediment and Erosion Control Manual*.

All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.

For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.

GC4094

If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-I, WS-II, High Quality (HQW), or Outstanding Resource waters (ORW), then the sedimentation and erosion control designs shall comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watersheds*.

6. Sediment and erosion control measures shall not be placed in wetlands or waters except within the footprint of temporary or permanent impacts authorized under this Certification. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0501 and .0502]
7. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within wetlands. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02B .0201]
8. An NPDES Construction Stormwater Permit (NCG010000) is required for construction projects that disturb one (1) or more acres of land. The NCG010000 Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If the project is covered by this permit, full compliance with permit conditions including the erosion & sedimentation control plan, inspections and maintenance, self-monitoring, record keeping and reporting requirements is required. [15A NCAC 02H .0506(b)(5) and (c)(5)]

The North Carolina Department of Transportation (NCDOT) shall be required to be in full compliance with the conditions related to construction activities within the most recent version of their individual NPDES (NCS000250) stormwater permit. [15A NCAC 02H .0506(b)(5) and (c)(5)]

9. All work in or adjacent to streams shall be conducted so that the flowing stream does not come in contact with the disturbed area. Approved best management practices from the most current version of the *NC Sediment and Erosion Control Manual*, or the *NC DOT Construction and Maintenance Activities Manual*, such as sandbags, rock berms, cofferdams, and other diversion structures shall be used to minimize excavation in flowing water. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(3) and (c)(3)]
10. If activities must occur during periods of high biological activity (e.g. sea turtle nesting, fish spawning, or bird nesting), then biological monitoring may be required at the request of other state or federal agencies and coordinated with these activities. [15A NCAC 02H .0506 (b)(2) and 15A NCAC 04B .0125]

All moratoriums on construction activities established by the NC Wildlife Resources Commission (WRC), US Fish and Wildlife Service (USFWS), NC Division of Marine Fisheries (DMF), or National Marine Fisheries Service (NMFS) shall be implemented. Exceptions to this condition require written approval by the resource agency responsible for the given moratorium. A copy of the approval from the resource agency shall be forwarded to DWR.

GC4094

Work within a designated trout watershed of North Carolina (as identified by the Wilmington District of the US Army Corps of Engineers), or identified state or federal endangered or threatened species habitat, shall be coordinated with the appropriate WRC, USFWS, NMFS, and/or DMF personnel.

11. Culverts shall be designed and installed in such a manner that the original stream profiles are not altered and allow for aquatic life movement during low flows. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed culvert shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. [15A NCAC 02H .0506(b)(2) and (c)(2)]

Placement of culverts and other structures in streams shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20% of the culvert diameter for culverts having a diameter less than or equal to 48 inches, to allow low flow passage of water and aquatic life.

If multiple pipes or barrels are required, they shall be designed to mimic the existing stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel shall be avoided.

When topographic constraints indicate culvert slopes of greater than 5%, culvert burial is not required, provided that all alternative options for flattening the slope have been investigated and aquatic life movement/connectivity has been provided when possible (e.g. rock ladders, cross vanes, etc.). Notification, including supporting documentation to include a location map of the culvert, culvert profile drawings, and slope calculations, shall be provided to DWR 60 calendar days prior to the installation of the culvert.

When bedrock is present in culvert locations, culvert burial is not required provided that there is sufficient documentation of the presence of bedrock. Notification, including supporting documentation such as, a location map of the culvert, geotechnical reports, photographs, etc. shall be provided to DWR a minimum of 60 calendar days prior to the installation of the culvert. If bedrock is discovered during construction, then DWR shall be notified by phone or email within 24 hours of discovery.

If other site-specific topographic constraints preclude the ability to bury the culverts as described above and/or it can be demonstrated that burying the culvert would result in destabilization of the channel, then exceptions to this condition require application to and written approval from DWR.

GC4094

Installation of culverts in wetlands shall ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. When roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges shall be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.

The establishment of native woody vegetation and other soft stream bank stabilization techniques shall be used where practicable instead of rip-rap or other bank hardening methods.

12. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means to the maximum extent practicable (e.g. grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(5)]
13. Application of fertilizer to establish planted/seeded vegetation within disturbed riparian areas and/or wetlands shall be conducted at agronomic rates and shall comply with all other Federal, State and Local regulations. Fertilizer application shall be accomplished in a manner that minimizes the risk of contact between the fertilizer and surface waters. [15A NCAC 02B .0200 and 15A NCAC 02B .0231]
14. If concrete is used during construction, then all necessary measures shall be taken to prevent direct contact between uncured or curing concrete and waters of the state. Water that inadvertently contacts uncured concrete shall not be discharged to waters of the state. [15A NCAC 02B .0200]
15. All proposed and approved temporary fill and culverts shall be removed and the impacted area shall be returned to natural conditions within 60 calendar days after the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross sectional dimensions, planform pattern, and longitudinal bed profile. For projects that receive written approval, no temporary impacts are allowed beyond those included in the application and authorization. All temporarily impacted sites shall be restored and stabilized with native vegetation. [15A NCAC 02H .0506(b)(2) and (c)(2)]
16. All proposed and approved temporary pipes/culverts/rip-rap pads etc. in streams shall be installed as outlined in the most recent edition of the *North Carolina Sediment and Erosion Control Planning and Design Manual* or the *North Carolina Surface Mining Manual* or the *North Carolina Department of Transportation Best Management Practices for Construction and Maintenance Activities* so as not to restrict stream flow or cause dis-equilibrium during use of this Certification. [15A NCAC 02H .0506(b)(2) and (c)(2)]

GC4094

17. Any rip-rap required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the area directly impacted by the approved construction activity. All rip-rap shall be placed such that the original stream elevation and streambank contours are restored and maintained. Placement of rip-rap or other approved materials shall not result in de-stabilization of the stream bed or banks upstream or downstream of the area or in a manner that precludes aquatic life passage. [15A NCAC 02H .0506(b)(2)]
18. Any rip-rap used for stream or shoreline stabilization shall be of a size and density to prevent movement by wave, current action, or stream flows and shall consist of clean rock or masonry material free of debris or toxic pollutants. Rip-rap shall not be installed in the streambed except in specific areas required for velocity control and to ensure structural integrity of bank stabilization measures. [15A NCAC 02H .0506(b)(2)]
19. Applications for rip-rap groins proposed in accordance with 15A NCAC 07H .1401 (NC Division of Coastal Management General Permit for construction of Wooden and Rip-rap Groins in Estuarine and Public Trust Waters) shall meet all the specific conditions for design and construction specified in 15A NCAC 07H .1405.
20. All mechanized equipment operated near surface waters shall be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids, or other toxic materials. Construction shall be staged in order to minimize the exposure of equipment to surface waters to the maximum extent practicable. Fueling, lubrication and general equipment maintenance shall not take place within 50 feet of a waterbody or wetlands to prevent contamination by fuels and oils. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0211 (12)]
21. Heavy equipment working in wetlands shall be placed on mats or other measures shall be taken to minimize soil disturbance. [15A NCAC 02H .0506(b)(3) and (c)(3)]
22. In accordance with 143-215.85(b), the applicant shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours.
23. If an environmental document is required under the State Environmental Policy Act (SEPA), then this General Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse. If an environmental document is required under the National Environmental Policy Act (NEPA), then this General Certification is not valid until a Categorical Exclusion, the Final Environmental Assessment, or Final Environmental Impact Statement is published by the lead agency. [15A NCAC 01C .0107(a)]

GC4094

24. This General Certification does not relieve the applicant of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with your project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.
25. The applicant and their authorized agents shall conduct all activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act), and any other appropriate requirements of State and Federal Law. If DWR determines that such standards or laws are not being met, including failure to sustain a designated or achieved use, or that State or Federal law is being violated, or that further conditions are necessary to assure compliance, then DWR may revoke or modify a written authorization associated with this General Water Quality Certification. [15A NCAC 02H .0507(d)]
26. When written authorization is required for use of this Certification, upon completion of all permitted impacts included within the approval and any subsequent modifications, the applicant shall be required to return a certificate of completion (available on the DWR website <https://edocs.deq.nc.gov/Forms/Certificate-of-Completion>). [15A NCAC 02H .0502(f)]
27. Additional site-specific conditions, including monitoring and/or modeling requirements, may be added to the written approval letter for projects proposed under this Water Quality Certification in order to ensure compliance with all applicable water quality and effluent standards. [15A NCAC 02H .0507(c)]
28. If the property or project is sold or transferred, the new Permittee shall be given a copy of this Certification (and written authorization if applicable) and is responsible for complying with all conditions. [15A NCAC 02H .0501 and .0502]

II. GENERAL CERTIFICATION ADMINISTRATION:

1. In accordance with North Carolina General Statute 143-215.3D(e), written approval for a 401 Water Quality General Certification must include the appropriate fee. An applicant for a CAMA permit under Article 7 of Chapter 113A of the General Statutes for which a Water Quality Certification is required shall only make one payment to satisfy both agencies; the fee shall be as established by the Secretary in accordance with 143-215.3D(e)(7).
2. This Certification neither grants nor affirms any property right, license, or privilege in any waters, or any right of use in any waters. This Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and this Certification does not create any prescriptive right or any right of priority regarding any usage of water. This Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded.

GC4094

3. This Certification grants permission to the Director, an authorized representative of the Director, or DWR staff, upon the presentation of proper credentials, to enter the property during normal business hours. [15A NCAC 02H .0502(e)]
4. This General Certification shall expire on the same day as the expiration date of the corresponding Nationwide Permit and/or Regional General Permit. The conditions in effect on the date of issuance of Certification for a specific project shall remain in effect for the life of the project, regardless of the expiration date of this Certification. This General Certification is rescinded when the US Army Corps of Engineers reauthorizes any of the corresponding Nationwide Permits and/or Regional General Permits or when deemed appropriate by the Director of the Division of Water Resources.
5. Non-compliance with or violation of the conditions herein set forth by a specific project may result in revocation of this General Certification for the project and may also result in criminal and/or civil penalties.
6. The Director of the North Carolina Division of Water Resources may require submission of a formal application for Individual Certification for any project in this category of activity if it is determined that the project is likely to have a significant adverse effect upon water quality, including state or federally listed endangered or threatened aquatic species, or degrade the waters so that existing uses of the water or downstream waters are precluded.
7. Public hearings may be held prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Resources.

History Note: Water Quality Certification (WQC) Number 4094 issued March 3, 2017 replaces WQC 3893 issued March 19, 2012; WQC Number 3688 issued November 1, 2007; WQC Number 3634 issued March 19, 2007; WQC Number 3366 issued March 18, 2002; WQC Number 3114 issued February 11, 1997; and WQC Number 2727 issued May 1, 1992.



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

BRAXTON C. DAVIS
Director

April 18, 2017

N.C. Department of Transportation
1598 Mail Service Center
Raleigh, N.C. 27699-1598

Dear Sir or Madam:

The enclosed permit constitutes authorization under the Coastal Area Management Act, and where applicable, the State Dredge and Fill Law, for you to proceed with your project proposal. The original (buff-colored form) is retained by you and it must be available on site when the project is inspected for compliance. Please sign both the original and the copy and return the copy to this office in the enclosed envelope. Signing the permit and proceeding means you have waived your right of appeal described below.

If you object to the permit or any of the conditions, you may request a hearing pursuant to NCGS 113A-121.1 or 113-229. Your petition for a hearing must be filed in accordance with NCGS Chapter 150B with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27611-6714, (919) 733-2698 within twenty (20) days of this decision on your permit. You should also be aware that another qualified party may submit an objection to the issuance of this permit within twenty (20) days.

The project plan is subject to those conditions appearing on the permit form. Otherwise, all work must be carried out in accordance with your application. Modifications, time extensions, and future maintenance requires additional approval. Please read your permit carefully prior to starting work and review all project plans, as approved. If you are having the work done by a contractor, it would be to your benefit to be sure that he fully understands all permit requirements.

From time to time, Department personnel will visit the project site. To facilitate this review, we request that you complete and mail the enclosed Notice Card just prior to work initiation. However, if questions arise concerning permit conditions, environmental safeguards, or problem areas, you may contact Department personnel at any time for assistance. By working in accordance with the permit, you will be helping to protect our vitally important coastal resources.

Sincerely,

A handwritten signature in black ink that reads 'Douglas V. Huggett'.

Douglas V. Huggett
Major Permits Manager
N.C. Division of Coastal Management

Enclosure

Permit Class
NEW

Permit Number
50-17

STATE OF NORTH CAROLINA
Department of Environmental Quality
and
Coastal Resources Commission

Permit

for

Major Development in an Area of Environmental Concern
pursuant to NCGS 113A-118

Excavation and/or filling pursuant to NCGS 113-229

Issued to N.C. Department of Transportation, 1598 Mail Service Center, Raleigh, NC 27699-1598

Authorizing development in Pamlico County at Mason Creek, Bridge No. 16 on SR 1324
(Florence Road), as requested in the permittee's application dated 3/6/17 (MP-1), and 1/5/17
(MP-5), including the attached workplan drawings (15) as referenced in Condition No. 1 of this permit.

This permit, issued on April 18, 2017, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

TIP No. B-4598, Bridge Replacement

- 1) Unless specifically altered herein, all work authorized by this permit shall be carried out in accordance with the following attached workplan drawings (15), except as modified herein: 4 dated 2/25/17, 8 dated 2/24/17, 2 dated 7/21/16, and 1 dated received 1/17/17.
- 2) In accordance with commitments made by the permittee, and due to the classification of Mason Creek as a Primary Nursery Area, no in-water work shall be conducted from April 1 through September 30 of any year without prior approval of the N.C. Division of Coastal Management (DCM), in consultation with the appropriate resource agencies.

(See attached sheets for Additional Conditions)

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date.

Signed by the authority of the Secretary of DEQ and the Chairman of the Coastal Resources Commission.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

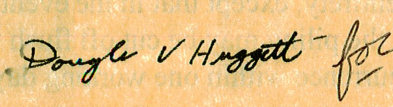
Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on

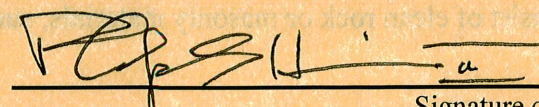
This permit and its conditions are hereby accepted.

No expiration date, pursuant to GS 136-44.7B

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.



Braxton C. Davis, Director
Division of Coastal Management



Signature of Permittee

ADDITIONAL CONDITIONS

- 3) Turbidity curtains shall be used to isolate all in-water work areas from the adjacent waters of Mason Creek, including but not limited to the existing bridge removal, pile installation, pile removal, placement of riprap and fill material within or adjacent to surface waters. The turbidity curtains shall encircle the immediate work area, however they shall not impede navigation. The turbidity curtains shall be properly maintained and retained in the water until construction is complete, and shall only be removed when turbidity within the curtains reaches ambient levels.
- 4) No excavation or filling shall take place at any time in any vegetated wetlands or surrounding waters outside of the alignment of the areas indicated on the attached workplan drawings, without permit modification.
- 5) All fill material shall be clean and free of any pollutants except in trace quantities.
- 6) Material excavated at the project site may be used in fill areas associated with the project or shall be removed from the site and taken to a high ground location.
- 7) All excavated materials shall be confined above normal water level and landward of regularly or irregularly flooded wetlands behind adequate dikes or other retaining structures to prevent spillover of solids into any wetlands or surrounding waters.
- 8) The temporary placement and double handling of any excavated or fill material within waters or vegetated wetlands is not authorized.
- 9) The bridge shall be constructed using top down construction with an offsite detour. Any other construction method may require additional authorization from DCM.
- 10) Construction staging areas shall be located only in upland areas, and not in wetlands or waters of the State.
- 11) The installation of the bridge piles shall be accomplished by pile driving and/or the use of a vibratory hammer. Should the permittee and/or its contractor propose to utilize another type of installation, such as jetting or drilled shaft construction, additional authorization from DCM shall be required.
- 12) Pilings from the existing bridge, as well as any remnant pilings from previous bridges, shall be removed in their entirety, except that in the event that a piling breaks during removal and cannot be removed in its entirety, the piling may be cut off flush with the bed of the water body, and DCM shall be notified of each occurrence within one working day.
- 13) In accordance with commitments made by the permittee, the permittee shall completely remove the existing timber abutments (headwalls) from a previous bridge.
- 14) The placement of riprap shall be limited to the areas as depicted on the attached workplan drawings. The riprap material shall be clean and free from loose dirt or any pollutant. The riprap material shall consist of clean rock or masonry materials, such as but not limited to, granite, marl, or broken concrete.

ADDITIONAL CONDITIONS

- 15) All reasonable efforts shall be made to contain all debris and excess materials associated with the removal of the existing bridge and construction of the new bridge, with the intent that materials/debris do not enter wetlands or waters of the State, even temporarily.
- 16) Any waste materials or debris generated in the demolition and removal of the existing bridge and/or construction of the new bridge or roadway shall be disposed of at an approved upland site or shall be recycled in an environmentally appropriate manner provided appropriate authorizations are obtained from any relevant state, federal, or local authorities.
- 17) Uncured concrete shall not be allowed to contact waters of the State, or water that will enter waters of the State.

Utility Impacts

NOTE: The construction of the new bridge will also require the relocation of water, power, fiber optic, and telecommunication lines. Wetland impacts resulting from the utility relocations have been included in the total wetland impacts for this project.

- 18) Any utility work associated with this project that is not specifically depicted on the attached workplan drawings, or described within the attached permit application, shall require approval from DCM, either under the authority of this permit, or by the utility company obtaining separate authorization.

NOTE: Plans and specifications for the relocation and/or replacement of water mains must be submitted to the N.C. Division of Water Resources, Public Water Supply Plan Review Section, for approval prior to construction. Final approval must be issued before water mains are placed into service.

Sedimentation and Erosion Control

- 19) This project shall conform to all requirements of the N.C. Sedimentation Pollution Control Act and the N.C. Department of Transportation's (NCDOT's) Memorandum of Agreement with the N.C. Division of Energy, Mineral and Land Resources.

Impacts to Wetlands and Waters of the State and Compensatory Mitigation

NOTE: This project will impact approximately 4,125 square feet of Coastal Wetlands due to permanent fill, approximately 259 square feet of Coastal Wetlands due to excavation, approximately 436 square feet of Coastal Wetlands due to temporary fill, approximately 6,969 square feet of Coastal Wetlands due to temporary hand clearing, and approximately 1,742 square feet of 404 Wetlands due to hand clearing.

NOTE: This project will shade approximately 125 square feet of submerged aquatic vegetation.

ADDITIONAL CONDITIONS

- 20) In accordance with commitments made by the permittee, compensatory mitigation for permanent impacts to Coastal Wetlands shall be provided with Coastal Wetland credits located at the Lengyel Mitigation Site in Craven County. A revised debit ledger for the Lengyel Mitigation Site that reflects the debited amount of 0.18 acres shall be provided to DCM prior to the initiation of construction.
- 21) There shall be no clearing of wetlands outside of the areas indicated on the attached workplan drawings without prior approval from DCM. Within Coastal Wetland areas that are approved for hand clearing, the extent of hand clearing shall be minimized to the maximum extent practicable.
- 22) Wetland areas to be temporarily impacted by clearing shall not be grubbed.
- 23) No temporary impacts to wetlands or waters of the State due to mechanized clearing are authorized by this permit without prior approval from DCM.
- 24) The permittee shall implement appropriate measures, including but not necessarily limited to, appropriate cleaning of equipment prior to its arrival on the project site in order to prevent any introduction of invasive species such as *Phragmites* from construction equipment into the project area.
- 25) Construction mats shall be utilized to support equipment within wetland areas to minimize temporary wetland impacts. These mats shall be removed immediately following project completion.
- 26) The permittee shall minimize the need to cross wetlands in transporting equipment to the maximum extent practicable.
- 27) Due to the possibility that compaction, hand clearing, temporary fill, and/or other site alterations might prevent the temporary Coastal Wetland impact areas from re-attaining pre-project wetland functions, the permittee shall provide an annual update on the Coastal Wetland areas temporarily impacted by this project. This annual update shall consist of photographs and a brief written report on the progress of these temporarily impacted areas in re-attaining their pre-project wetland functions. The permittee shall schedule a meeting with DCM to verify the extent and location of temporary impacts upon project completion. Within three years after project completion, the permittee shall hold another agency field meeting with DCM to determine if the Coastal Wetland areas temporarily impacted by this project have re-attained pre-project wetland functions. If at the end of three years DCM determines that the Coastal Wetland areas temporarily impacted by the project have not re-attained pre-project wetland functions, DCM will determine whether compensatory wetland mitigation shall be required.

General

- 28) In order to protect the West Indian Manatee, *Trichechus manatus*, the applicant shall implement the U.S. Fish & Wildlife Service's Guidelines, and strictly adhere to all requirements therein. The guidelines can be found at http://www.fws.gov/nc-es/mammal/manatee_guidelines.pdf.
- 29) No attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work following completion of construction.

ADDITIONAL CONDITIONS

- 30) The permittee shall exercise all available precautions in the day-to-day operation of the facility to prevent waste from entering the adjacent waters and wetlands.
- 31) If it is determined that additional permanent and/or temporary impacts are necessary that are not shown on the attached workplan drawings or described in the authorized permit application, a permit modification and/or additional authorization from DCM may be required. In addition, any changes in the approved plan may also require a permit modification and/or additional authorization from DCM. The permittee shall contact a representative of DCM prior to commencement of any such activity for this determination and any permit modification.
- 32) Development authorized by this permit shall only be conducted on lands owned by NCDOT and/or its Right-of-Ways and/or easements.
- 33) The permittee and/or its contractor shall contact the DCM Transportation Project Field Representative in Morehead City at (252) 808-2808 ext. 208 to request a preconstruction conference prior to project initiation.
- 34) The N.C. Division of Water Resources (DWR) authorized the proposed project on 3/31/17 (DWR Project No. 20170057) under General Water Quality Certification Nos. 3884, 3891 and 3893 and under the Neuse Riparian Buffer Rules. Any violation of the Certifications approved by DWR shall be considered a violation of this CAMA permit.
- 35) The permittee shall coordinate with the U.S. Army Corps of Engineers (USACE) regarding the project. The permittee shall provide any permits issued by USACE to DCM prior to initiating construction activities.

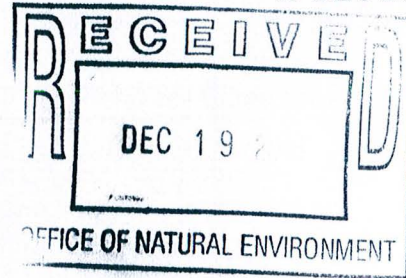
NOTE: This permit does not eliminate the need to obtain any additional permits, approvals or authorizations that may be required.

NOTE: An application processing fee of \$475 was received by DCM for this project. This fee also satisfied the Section 401 application processing fee requirements of DWR.



16590
13 DEC 2016

Mr. Phil S. Harris, III, P.E.
North Carolina Department of Transportation
Natural Environment Section
1598 Mail Service Center
Raleigh, NC 27699-1598



Dear Mr. Harris:

Coast Guard review of your proposed project as provided in your email dated November 17, 2016, is complete.

Based on the documentation provided and our research, it is determined that a Coast Guard bridge permit will not be required for the proposed new bridge construction on S.R. 1324 (Florence Road) across Mason Creek, at Pamlico, NC.

The project will be placed in our Advance Approval category as per Title 33 Code of Federal Regulations Part 115.70. This Advance Approval determination is for the location and structure described above and **is valid for five years from the date of this letter**. If the construction project does not commence within this time period, you must contact this office for reaffirmation of this authorization. Future bridge projects along the same waterway will have to be independently evaluated before they may be considered for placement in the Advance Approval category.

The fact that a Coast Guard bridge permit is not required does not relieve you of the responsibility for compliance with the requirements of any other Federal, State, or local agency who may have jurisdiction over any aspect of the project. Although the project will not require a bridge permit, other areas of Coast Guard jurisdiction apply. The following must be met:

- a. You or your contractor must notify this office at least 30 days in advance of the start of construction and any other work which may be an obstruction to navigation, so we may issue and update the information in our Local Notice to Mariners and monitor the project.
- b. At no time during the project will the waterway be closed to navigation without the prior notification and approval of the Coast Guard.
- c. The lowest portion of the superstructure of the bridge across the waterway should clear the 100-year flood height elevation, if feasible.
- d. In addition, the requirement to display navigational lighting at the aforementioned bridge is hereby waived, as per Title 33 Code of Federal Regulations, Part 118.40(b). This waiver may be rescinded at anytime in the future should nighttime navigation through the proposed bridge be increased to a level determined by the District Commander to warrant lighting.

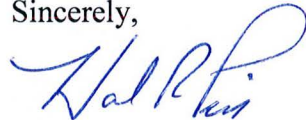
The National Ocean Service (NOS) of the National Oceanic and Atmosphere Administration (NOAA) is responsible for maintaining the charts of U.S. waters; therefore, they must be notified of this proposed work. You must notify our office and the NOS at the address below upon completion of the activity approved in this letter. Your notification of project completion must include as-built drawings or certification of the following:

- a. Bridge name
- b. Action type (new construction, modification, relocation, conversion (fixed/draw), etc.)
- c. Dates (commenced and completed)
- d. Location (latitude and longitude at bridge center and centerline of channel, statute miles above mouth of waterway, and bridge or causeway orientation or geographic positions of approaches)
- e. Type of bridge (fixed, vertical lift, bascule, suspension, swing, trestle, pontoon, etc.)
- f. Navigation clearances (vertical at mean high water and horizontal)
(Moveable – vertical at mean high water in open and closed positions)
- g. Whether or not the bridge is fitted with clearance gauges
- h. Whether or not the bridge has pier protection and/or fender system.
- i. Type of land traffic (highway, railroad, pedestrian, pipeline, etc.)

Mr. Chris Libeau
National Ocean Service
N/CS26, Room 7317
1315 East-West Highway
Silver Spring, MD 20910-3282

If you have any further questions, please contact Mr. Mickey Sanders at the above listed address or telephone number.

Sincerely,

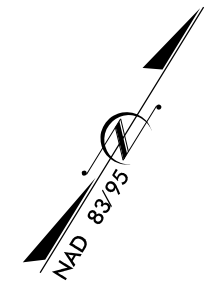


HAL R. PITTS
Bridge Program Manager
By direction of the Commander
Fifth Coast Guard District

Copy: Chris Libeau, NOS
CG Sector North Carolina, Waterways Management
U. S. Army Corps of Engineers, Wilmington District

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C. | B-4598 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 38426.1.2 | BRZ-1324(5) | PE | |
| 38426.2.1 | | RW, UTL. | |
| | | | |
| | | | |
| | | | |

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



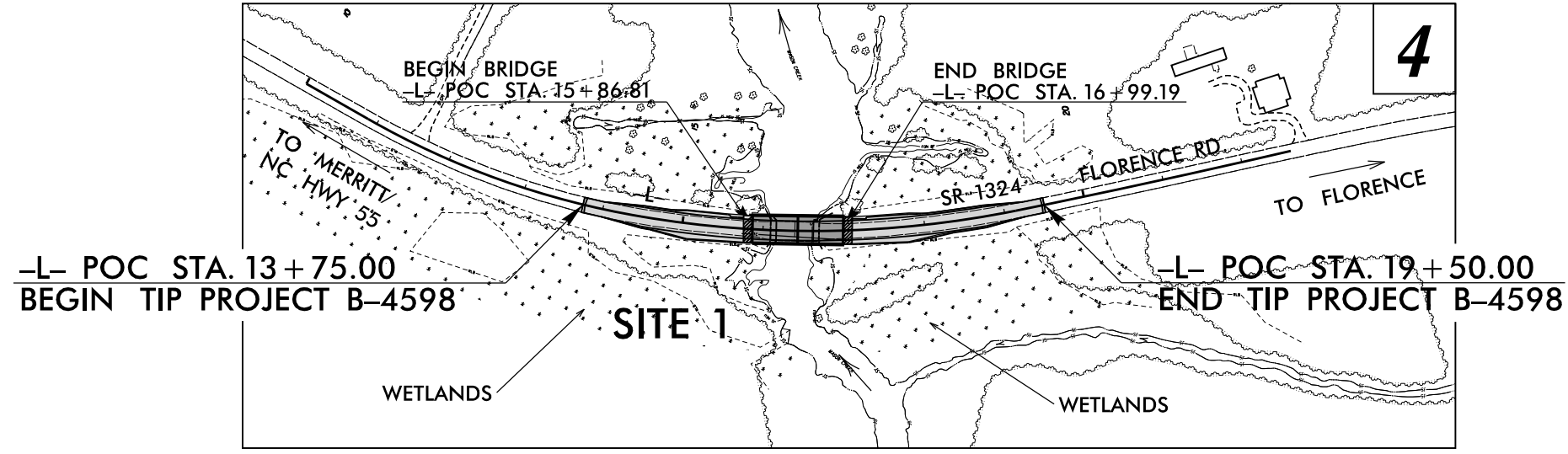
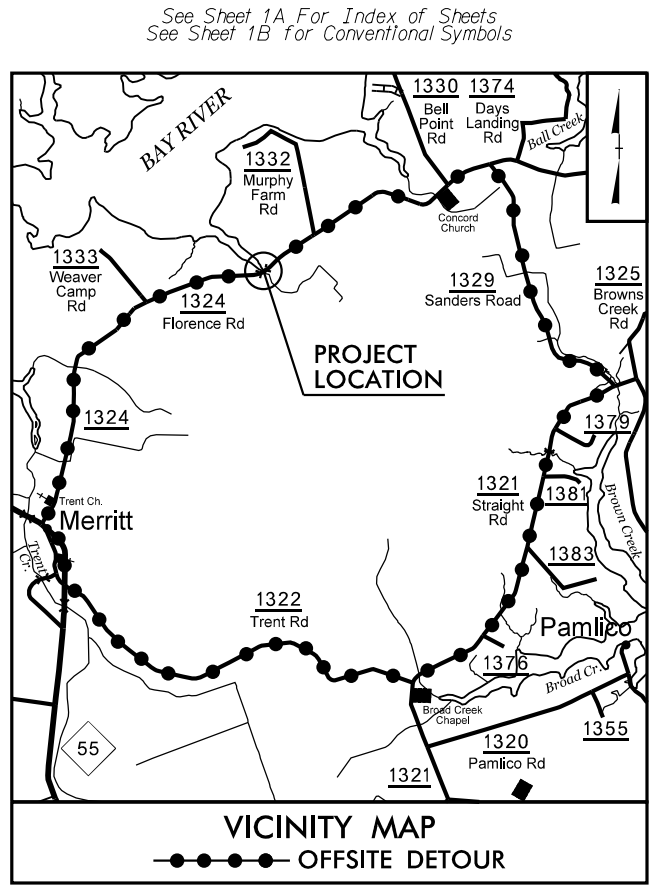
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PAMLICO COUNTY

LOCATION: REPLACE BRIDGE 16 OVER MASON CREEK
ON SR 1324 (FLORENCE RD.)

TYPE OF WORK: GRADING, DRAINAGE, STRUCTURE AND PAVING

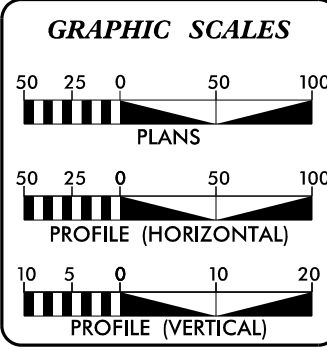
PERMIT DRAWINGS
STREAM AND WETLAND IMPACTS
DUE TO ROADWAY/BRIDGE
FEBRUARY 25, 2017



PERMIT DRAWING
SHEET 1 OF 7

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

DESIGN EXCEPTIONS
-L- Horizontal SSD, Sta. 13+75 to Sta. 19+50
Superelevation, Sta. 13+75 to Sta. 19+50



DESIGN DATA

| | |
|--------------------------|-------------|
| ADT 2017 = | 1065 |
| ADT 2037 = | 1326 |
| DHV = | 10 % |
| D = | 55 % |
| T = | 10 % * |
| V = | 60 MPH |
| * (TTST 1% + DUAL 9%) | |
| FUNCT CLASS = | RURAL LOCAL |
| SUB-REGIONAL TIER DESIGN | |

PROJECT LENGTH

| | | |
|--------------------------------------|---|-------------|
| LENGTH ROADWAY TIP PROJECT B-4598 | = | 0.088 miles |
| LENGTH STRUCTURES TIP PROJECT B-4598 | = | 0.021 miles |
| TOTAL LENGTH TIP PROJECT B-4598 | = | 0.109 miles |

Prepared For:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

By:
TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150

PH (704) 476-0003
CORP. LICENSE NO.: C-0275

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY 16, 2016

LETTING DATE:
JUNE 20, 2017

JIMMY TERRY, P.E.
PROJECT ENGINEER

BURKE EVANS, P.E.
PROJECT DESIGN ENGINEER

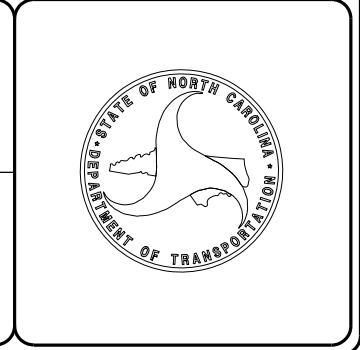
GARY LOVERING, PE
PROJECT ENGINEER
NCDOT ROADWAY DESIGN

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



TIP PROJECT: B-4598

CONTRACT:

09/08/99
2/25/2017
X:\NCDOT\B-4598\Hydraulics\PERMITS_Environmental\Drawings\Permit Package(Roadway)_20170225\B-4598_Hyd_prm_wet_tsh.dgn
User:dperry

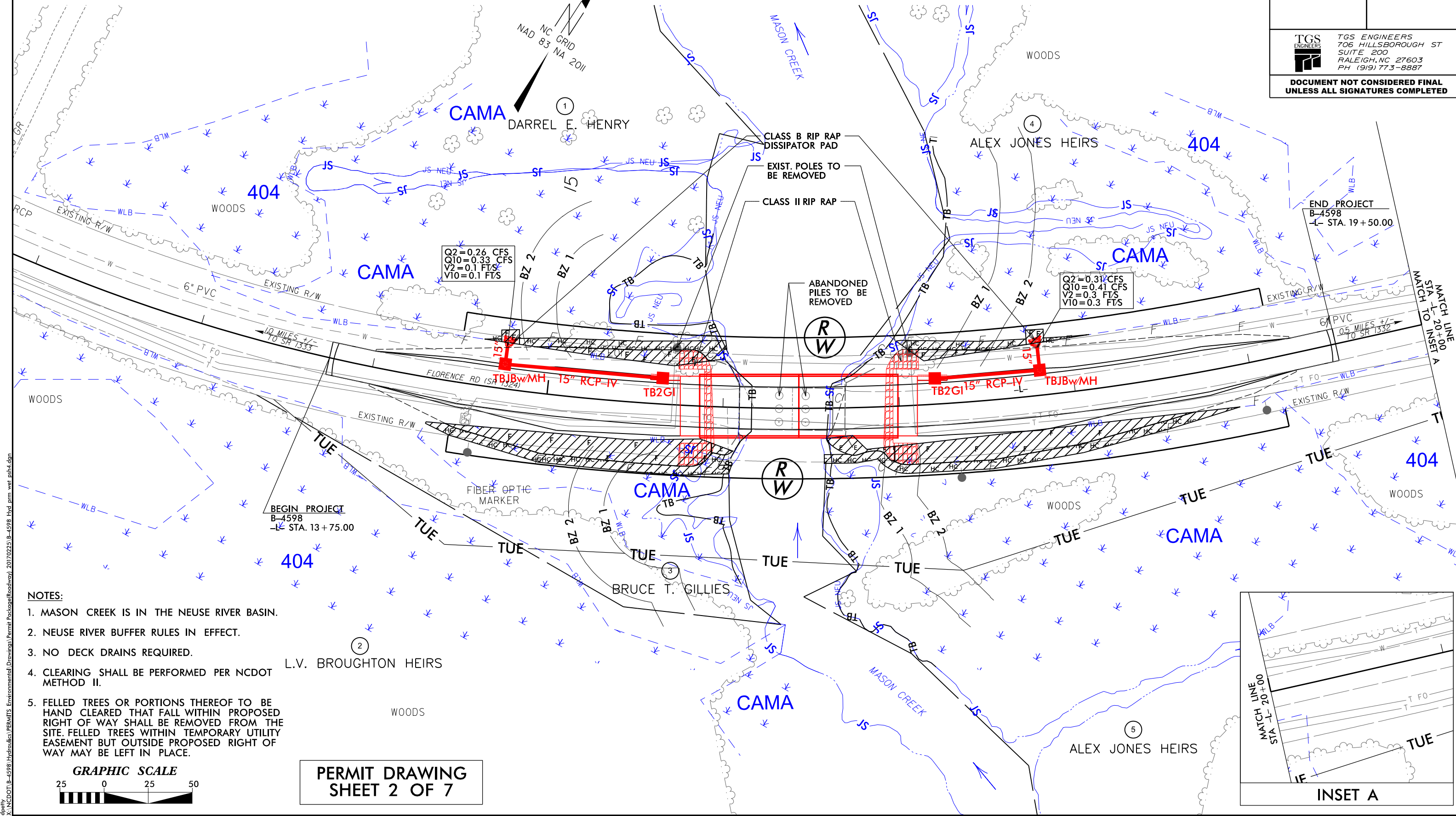
| WETLAND IMPACTS | | |
|------------------------|----------------------------|---------------------------|
| Excavation in Wetlands | Permanent Fill in Wetlands | Hand Clearing in Wetlands |
| | | |

EXISTING BRIDGE DIMENSIONS 60'X26' (DOUBLE-SPAN), 90 DEG. SKEW
 PROPOSED BRIDGE DIMENSIONS 110'X36' (DOUBLE-SPAN), 90 DEG. SKEW
 TOTAL PROJECT LENGTH - 575'

**PERMIT DRAWINGS
 FOR B-4598
 PAMLICO COUNTY
 BRIDGE #680016**

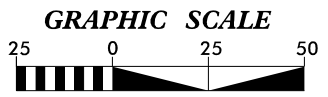
| | |
|---|---------------------|
| PROJECT REFERENCE NO. B-4598 | SHEET NO. 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| TGS ENGINEERS 706 HILLSBOROUGH ST SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

STREAM AND WETLAND IMPACTS

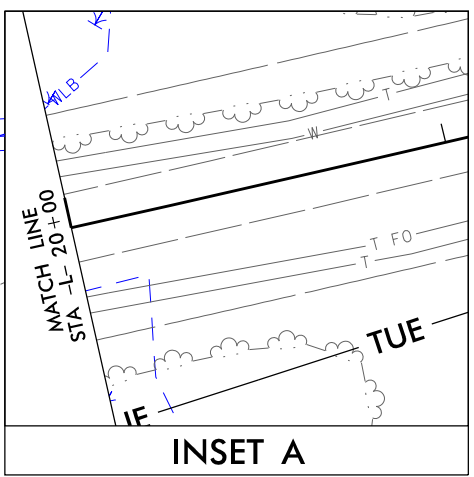


2/25/2017 10:41 AM C:\NGDOT\B-4598\Hydraulics\PERMITS Environmental Drawings\Permit Pack\Roadway\20170223_B-4598_Hyd_perm_wet_permit.dgn

- NOTES:**
1. MASON CREEK IS IN THE NEUSE RIVER BASIN.
 2. NEUSE RIVER BUFFER RULES IN EFFECT.
 3. NO DECK DRAINS REQUIRED.
 4. CLEARING SHALL BE PERFORMED PER NCDOT METHOD II.
 5. FELLED TREES OR PORTIONS THEREOF TO BE HAND CLEARED THAT FALL WITHIN PROPOSED RIGHT OF WAY SHALL BE REMOVED FROM THE SITE. FELLED TREES WITHIN TEMPORARY UTILITY EASEMENT BUT OUTSIDE PROPOSED RIGHT OF WAY MAY BE LEFT IN PLACE.



**PERMIT DRAWING
 SHEET 2 OF 7**



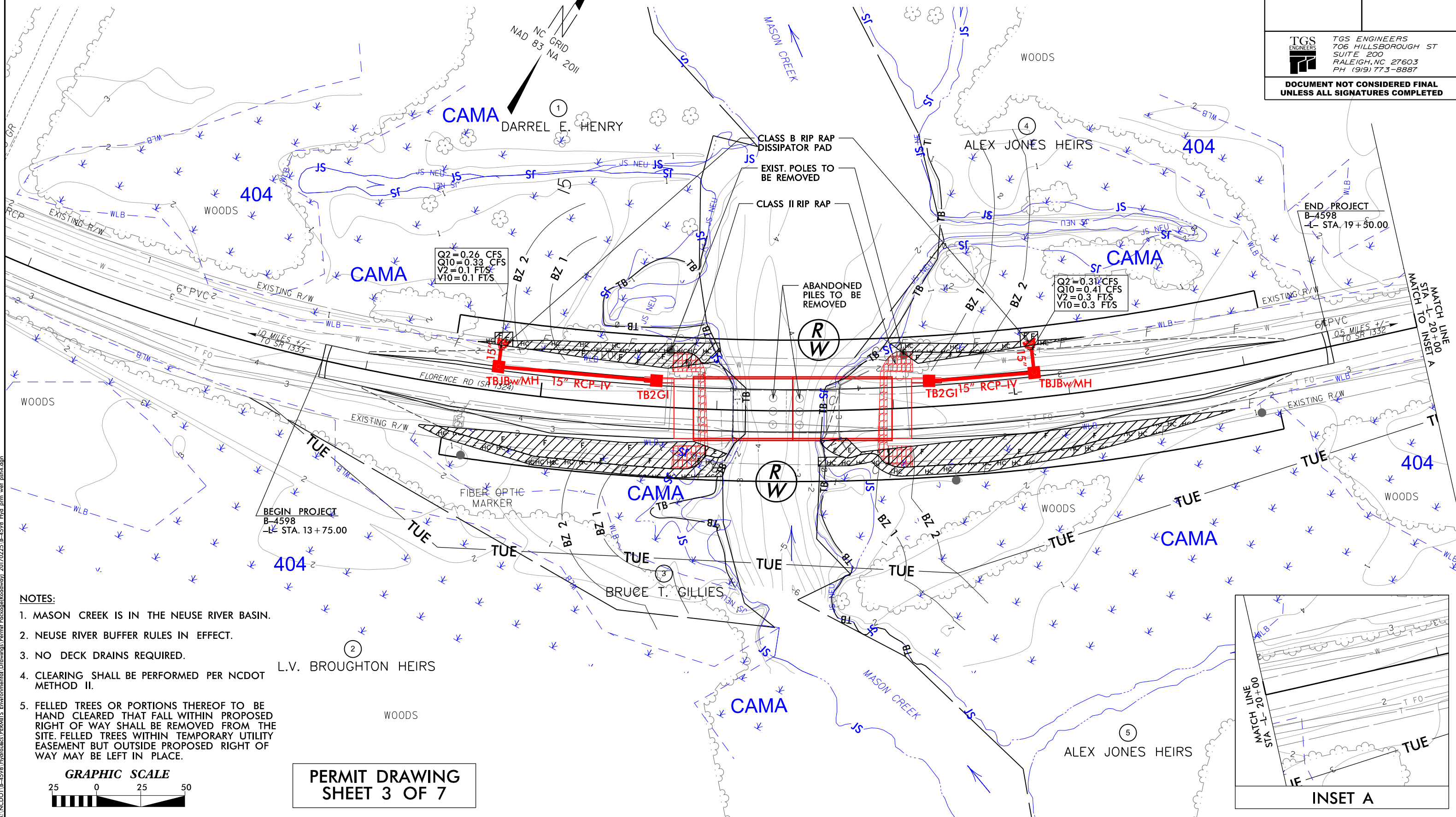
| WETLAND IMPACTS | | |
|------------------------|----------------------------|---------------------------|
| Excavation in Wetlands | Permanent Fill in Wetlands | Hand Clearing in Wetlands |
| | | |

EXISTING BRIDGE DIMENSIONS 60'X26' (DOUBLE-SPAN), 90 DEG. SKEW
 PROPOSED BRIDGE DIMENSIONS 110'X36' (DOUBLE-SPAN), 90 DEG. SKEW
 TOTAL PROJECT LENGTH - 575'

**PERMIT DRAWINGS
 FOR B-4598
 PAMLICO COUNTY
 BRIDGE #680016**

| | |
|---|---------------------|
| PROJECT REFERENCE NO. B-4598 | SHEET NO. 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| TGS ENGINEERS 706 HILLSBOROUGH ST SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

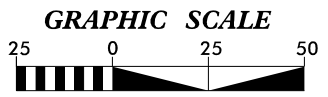
STREAM AND WETLAND IMPACTS



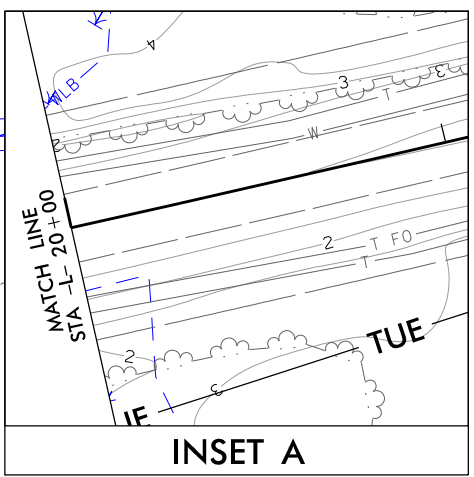
Q2=0.26 CFS
 Q10=0.33 CFS
 V2=0.1 FT/S
 V10=0.1 FT/S

Q2=0.31 CFS
 Q10=0.41 CFS
 V2=0.3 FT/S
 V10=0.3 FT/S

- NOTES:**
1. MASON CREEK IS IN THE NEUSE RIVER BASIN.
 2. NEUSE RIVER BUFFER RULES IN EFFECT.
 3. NO DECK DRAINS REQUIRED.
 4. CLEARING SHALL BE PERFORMED PER NCDOT METHOD II.
 5. FELLED TREES OR PORTIONS THEREOF TO BE HAND CLEARED THAT FALL WITHIN PROPOSED RIGHT OF WAY SHALL BE REMOVED FROM THE SITE. FELLED TREES WITHIN TEMPORARY UTILITY EASEMENT BUT OUTSIDE PROPOSED RIGHT OF WAY MAY BE LEFT IN PLACE.

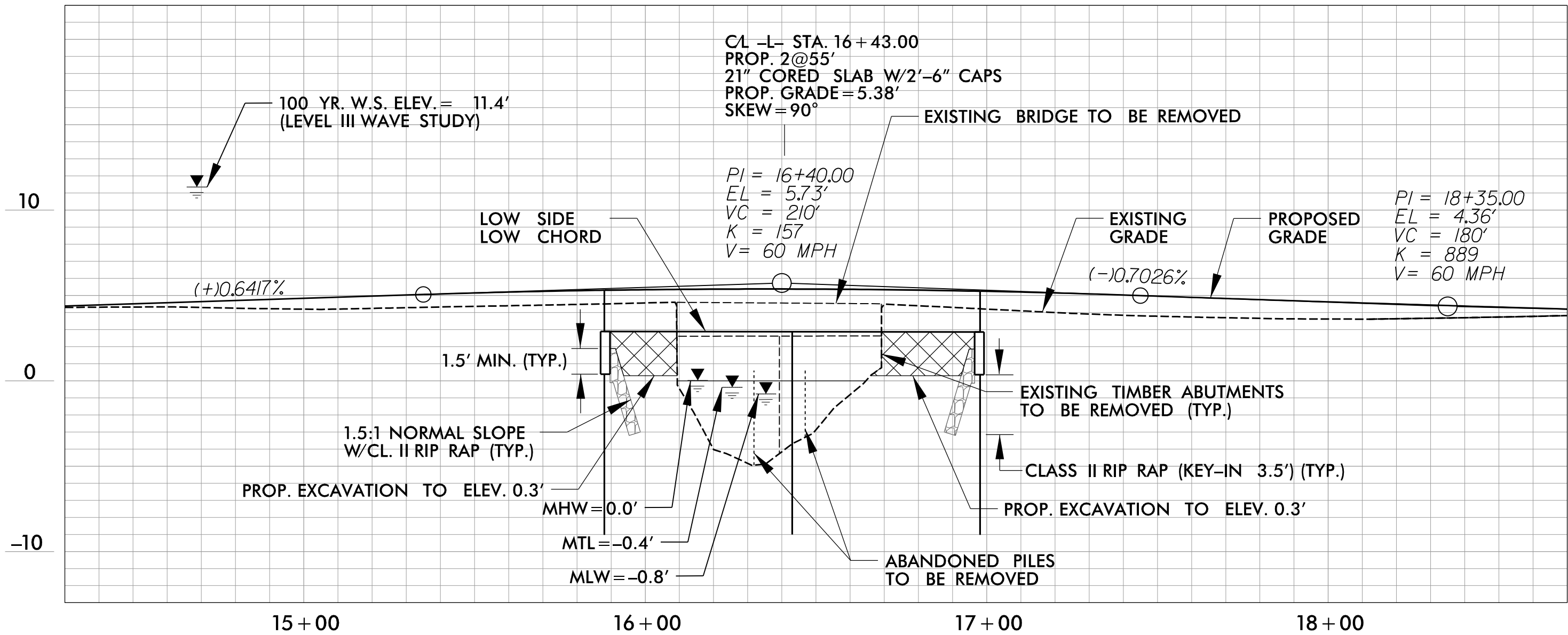


**PERMIT DRAWING
 SHEET 3 OF 7**



2/25/2017 10:41:00 AM C:\NGDOT\B-4598\Hydraulics\PERMITS Environmental Drawings\Permit Pack\Roadway\20170223_B-4598_Hyd_perm_wet_perk.dgn

2/24/2017
 atturner
 X:\NCDOT\B-4598\Hydraulics\PERMITS_Environmental\Drawings\Permit Package[Roadway]_20170224\B-4598_Hyd_perm_pfl.dgn



STRUCTURE HYDRAULIC DATA

| | | |
|-----------------------|----------|-----|
| DESIGN DISCHARGE | = --- | CFS |
| DESIGN FREQUENCY | = <5* | YRS |
| DESIGN HW ELEVATION | = --- | FT |
| BASE DISCHARGE | = --- | CFS |
| BASE FREQUENCY | = 100 | YRS |
| BASE HW ELEVATION | = 11.4** | FT |
| OVERTOPPING DISCHARGE | = 5,800 | CFS |
| OVERTOPPING FREQUENCY | = <5 | YRS |
| OVERTOPPING ELEVATION | = 3.7*** | FT |

* DESIGN MAINTAINS EXISTING LEVEL OF SERVICE. NOT PRACTICABLE TO SERVICE 25-YR EVENT.
 ** 100-YR WSE (NAVD 88) FROM LEVEL III WAVE STUDY
 *** OVERTOPPING ELEVATION REPRESENTS LOWEST HIGH POINT ON DECK/ROADWAY, WHICH OCCURS AT RIGHT EDGE OF PAVEMENT @ -L- STA. 11+03

PROFILE

PERMIT DRAWING SHEET 4 OF 7

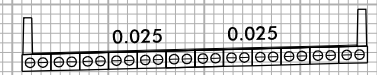
**PERMIT DRAWINGS
 FOR B-4598
 PAMLICO COUNTY
 BRIDGE #680016**

NCDOT
 DIVISION OF HIGHWAYS
 PAMLICO COUNTY
 PROJECT: 38426.1.2 (B-4598)
 REPLACEMENT OF BRIDGE NO. 680016
 ON SR 1324 (FLORENCE RD)
 OVER MASON CREEK

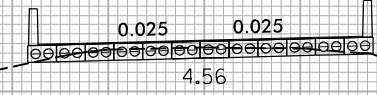
8/23/99

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

END BRIDGE
-L- STA. 16+99.19

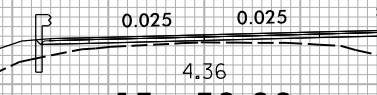


-2.87
16+50.00

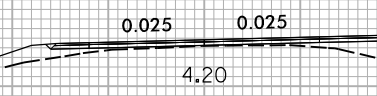


16+00.00

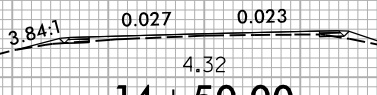
BEGIN BRIDGE
-L- STA. 15+86.81



15+50.00



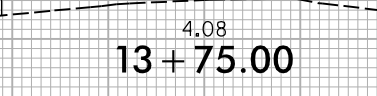
15+00.00



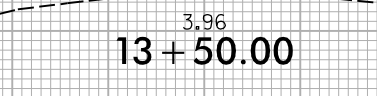
14+50.00

14+00.00

BEGIN CONSTRUCTION
-L- STA. 13+75.00



13+50.00



-L-

WETLANDS

WETLANDS

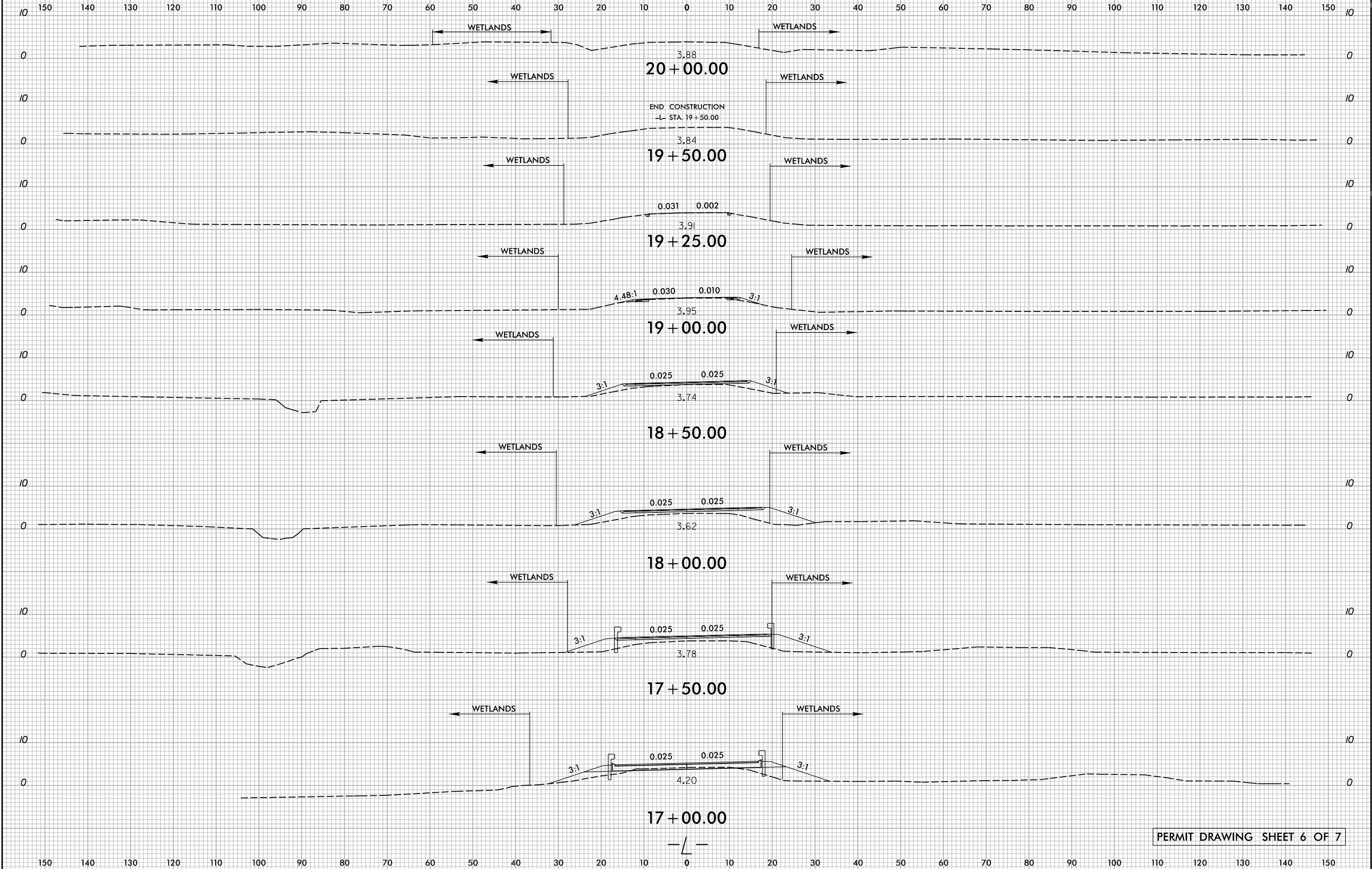
WETLANDS

WETLANDS

WETLANDS

WETLANDS

7/21/2016 X:\N\001\B-4598\Hydraulics\PERMITS\Environmental\Drawings\Permit_PeckogelRoadway\20160721\B-4598_Hyd_perm_xpl.dgn User:smelvin



7/21/2016 X:\N\000\B-4598\Hydro\Permits\Environmental\Drawings\Permit\Peckogel(Roadway)_20160721\B-4598_Hyd_perm_xpl.dgn User:same1\m

WETLAND PERMIT IMPACT SUMMARY

| Site No. | Station (From/To) | Structure Size / Type | WETLAND IMPACTS | | | | | SURFACE WATER IMPACTS | | | | |
|-----------------|----------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------------|--------------------------------|---------------------------|-----------------------|---|-------------------------------------|----------------------------|
| | | | Permanent Fill In Wetlands (ac) | Temp. Fill In Wetlands (ac) | Excavation in Wetlands (ac) | Mechanized Clearing in Wetlands (ac) | Hand Clearing in Wetlands (ac) | Permanent SW impacts (ac) | Temp. SW impacts (ac) | Existing Channel Impacts Permanent (ft) | Existing Channel Impacts Temp. (ft) | Natural Stream Design (ft) |
| 1 | 14+46 to 18+64 | Roadway/Bridge | 0.09 | | | | | | | | | |
| 1 | 15+94 RT to 16+96 RT | Roadway/Bridge | | | < 0.01 | | | | | | | |
| 1 | 14+35 to 18+90 | Roadway/Bridge | | | | | 0.07 | | | | | |
| 1 | 16+10 RT,16+76 LT | Excavation | | | | | | < 0.01 | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| TOTALS*: | | | 0.09 | | < 0.01 | | 0.07 | < 0.01 | | 0 | 0 | 0 |

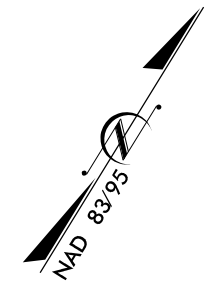
*Rounded totals are sum of actual impacts

NOTES:
 Wetland impacts listed in table above are all in CAMA Wetlands.
 0.01 acres of Temporary Fill in Wetlands in the Hand Clearing areas for erosion control measures.
 <0.01 acres of Permanent SW impacts for interior bent at 16+43.

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 2/25/2017
 PAMLICO
 PROJECT: 38426.1.2 (B-4598)

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C. | B-4598 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 38426.1.2 | BRZ-1324(5) | PE | |
| 38426.2.1 | | RW, UTL. | |
| | | | |
| | | | |
| | | | |

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



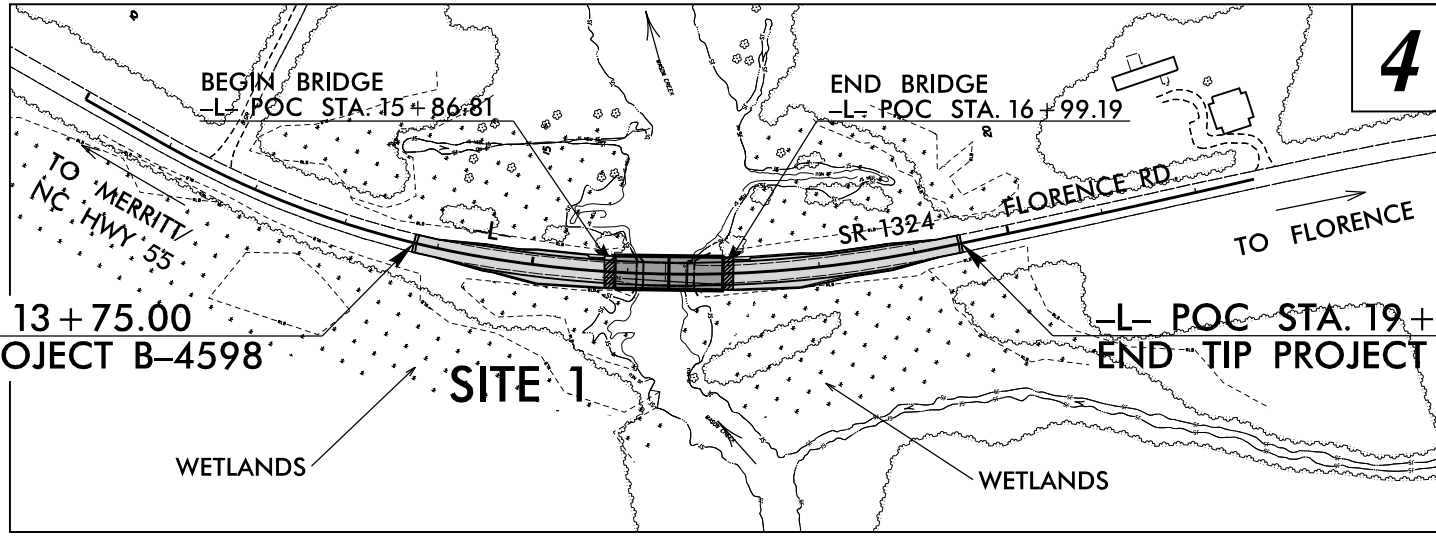
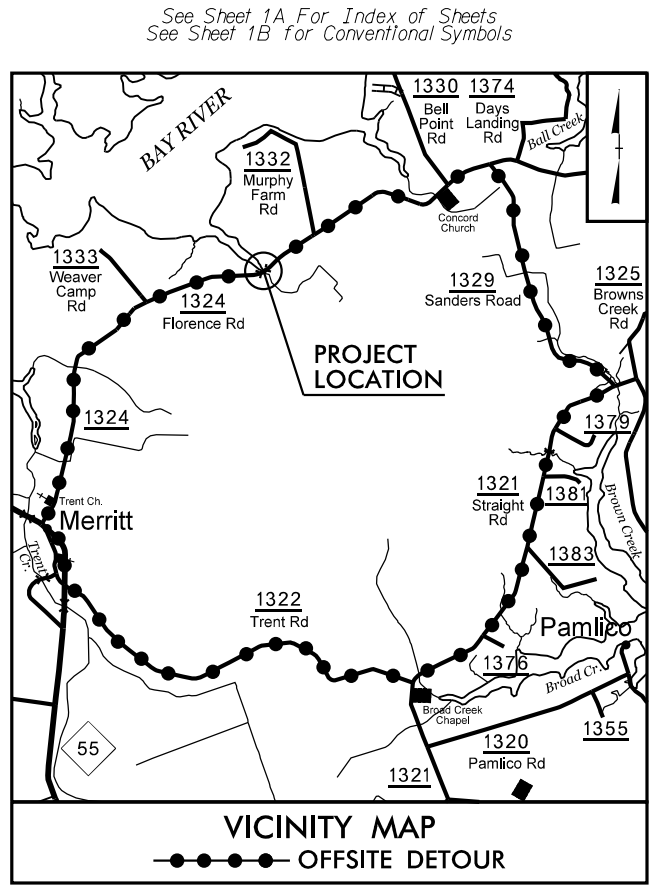
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PAMLICO COUNTY

LOCATION: REPLACE BRIDGE 16 OVER MASON CREEK
ON SR 1324 (FLORENCE RD.)

TYPE OF WORK: GRADING, DRAINAGE, STRUCTURE AND PAVING

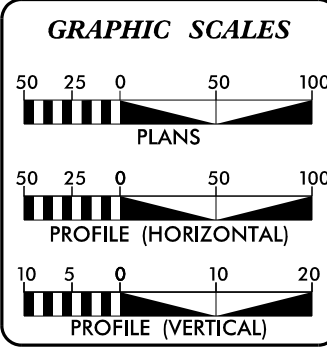
PERMIT DRAWINGS
BUFFER IMPACTS
DUE TO ROADWAY/BRIDGE
FEBRUARY 25, 2017



BUFFER DRAWING
SHEET 1 OF 5

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

DESIGN EXCEPTIONS
-L- Horizontal SSD, Sta. 13+75 to Sta. 19+50
Superelevation, Sta. 13+75 to Sta. 19+50



DESIGN DATA
ADT 2017 = 1065
ADT 2037 = 1326
DHV = 10 %
D = 55 %
T = 10 % *
V = 60 MPH
* (TTST 1% + DUAL 9%)
FUNCT CLASS=RURAL LOCAL
SUB-REGIONAL TIER DESIGN

PROJECT LENGTH

| | | |
|--------------------------------------|---|-------------|
| LENGTH ROADWAY TIP PROJECT B-4598 | = | 0.088 miles |
| LENGTH STRUCTURES TIP PROJECT B-4598 | = | 0.021 miles |
| TOTAL LENGTH TIP PROJECT B-4598 | = | 0.109 miles |

Prepared For:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610
By:
TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY 16, 2016

LETTING DATE:
JUNE 20, 2017

JIMMY TERRY, P.E.
PROJECT ENGINEER

BURKE EVANS, P.E.
PROJECT DESIGN ENGINEER

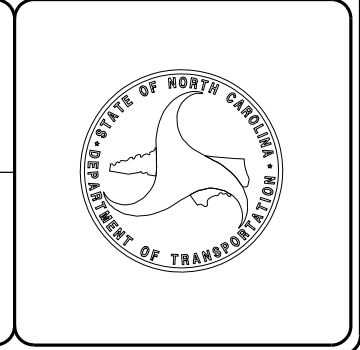
GARY LOVERING, PE
PROJECT ENGINEER
NCDOT ROADWAY DESIGN

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER


SIGNATURE: _____ P.E.



TIP PROJECT: B-4598


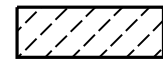
CONTRACT:

09/08/99
2/25/2017
X:\NCDOT\B-4598\Hydraulics\PERMITS_Environmental\Drawings\Permit Package(Roadway)_20170225\B-4598_Hyd_prm_buf_t.sh.dgn
User:dperry

| | |
|--|---------------------|
| PROJECT REFERENCE NO. B-4598 | SHEET NO. 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
|  TGS ENGINEERS 706 HILLSBOROUGH ST SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

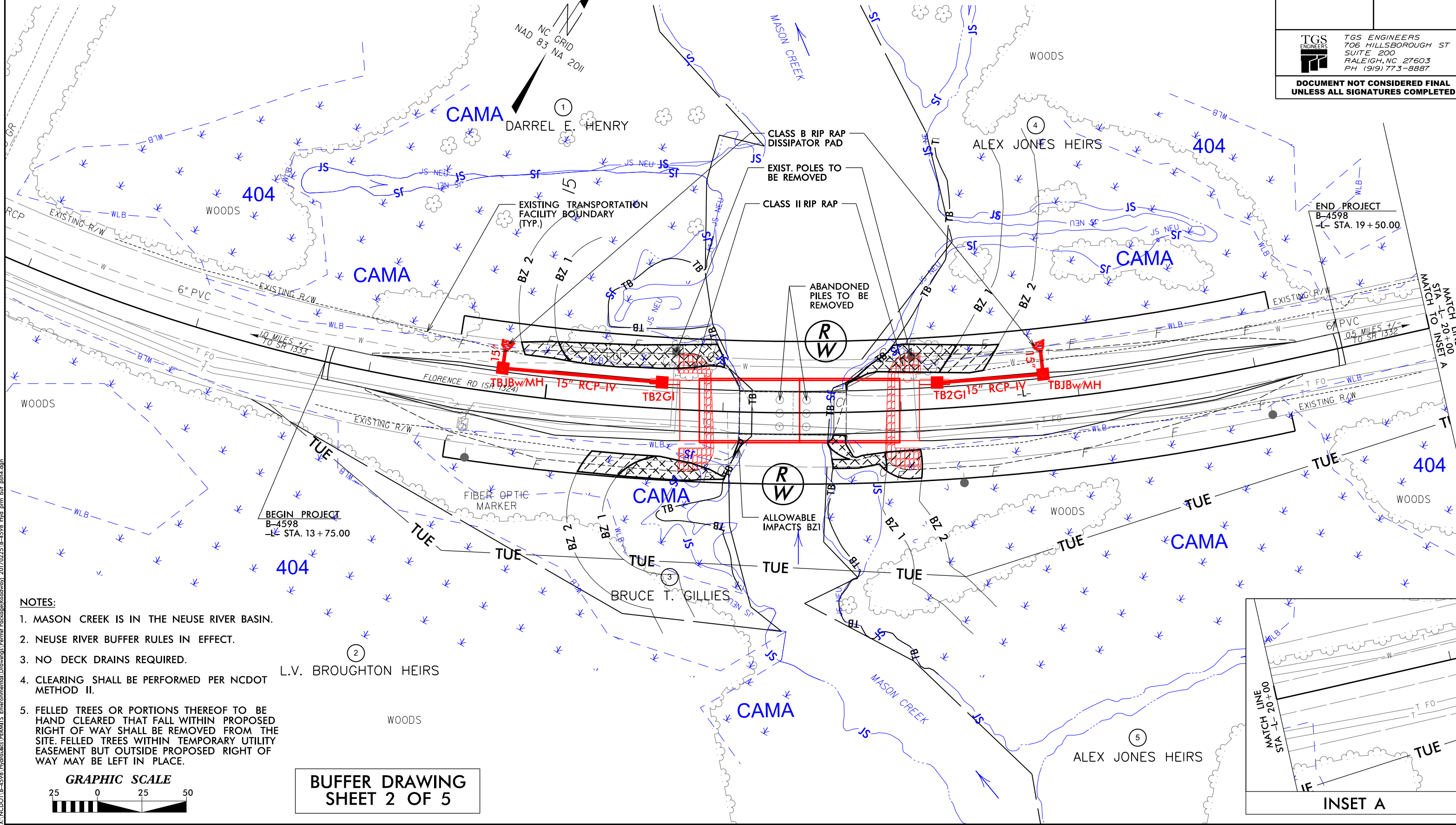
PERMIT DRAWINGS FOR B-4598 PAMLICO COUNTY BRIDGE #680016

EXISTING BRIDGE DIMENSIONS 60'X26' (DOUBLE-SPAN), 90 DEG. SKEW
 PROPOSED BRIDGE DIMENSIONS 110'X36' (DOUBLE-SPAN), 90 DEG. SKEW
 TOTAL PROJECT LENGTH - 575'

| Buffer Zone (BZ) Impacts | |
|---|---|
| Area of Allowable Impacts within BZ1 | Area of Allowable Impacts within BZ2 |
|  |  |

LEGEND

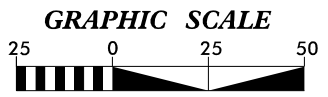
BUFFER IMPACTS



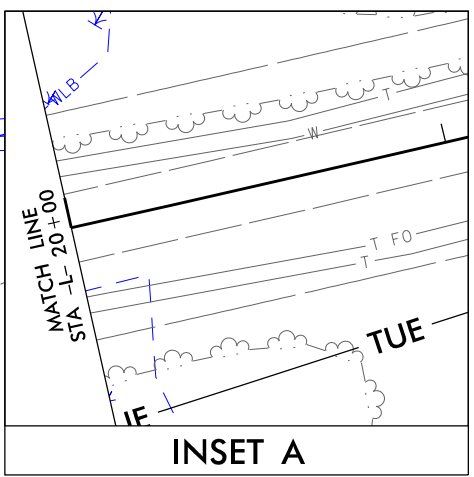
BEGIN PROJECT
B-4598
-L- STA. 13+75.00

END PROJECT
B-4598
-L- STA. 19+50.00


- NOTES:**
1. MASON CREEK IS IN THE NEUSE RIVER BASIN.
 2. NEUSE RIVER BUFFER RULES IN EFFECT.
 3. NO DECK DRAINS REQUIRED.
 4. CLEARING SHALL BE PERFORMED PER NCDOT METHOD II.
 5. FELLED TREES OR PORTIONS THEREOF TO BE HAND CLEARED THAT FALL WITHIN PROPOSED RIGHT OF WAY SHALL BE REMOVED FROM THE SITE. FELLED TREES WITHIN TEMPORARY UTILITY EASEMENT BUT OUTSIDE PROPOSED RIGHT OF WAY MAY BE LEFT IN PLACE.



**BUFFER DRAWING
SHEET 2 OF 5**


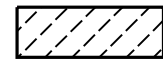


2/25/2017 10:41:00 AM C:\NGDOT\B-4598\Hydraulics\PERMITS\Environmental Drawings\Permit Pack\Roadway\20170223_B-4598_Hyd_perm_buf_gsh4.dgn

| | |
|--|---------------------|
| PROJECT REFERENCE NO. B-4598 | SHEET NO. 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
|  TGS ENGINEERS 706 HILLSBOROUGH ST SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

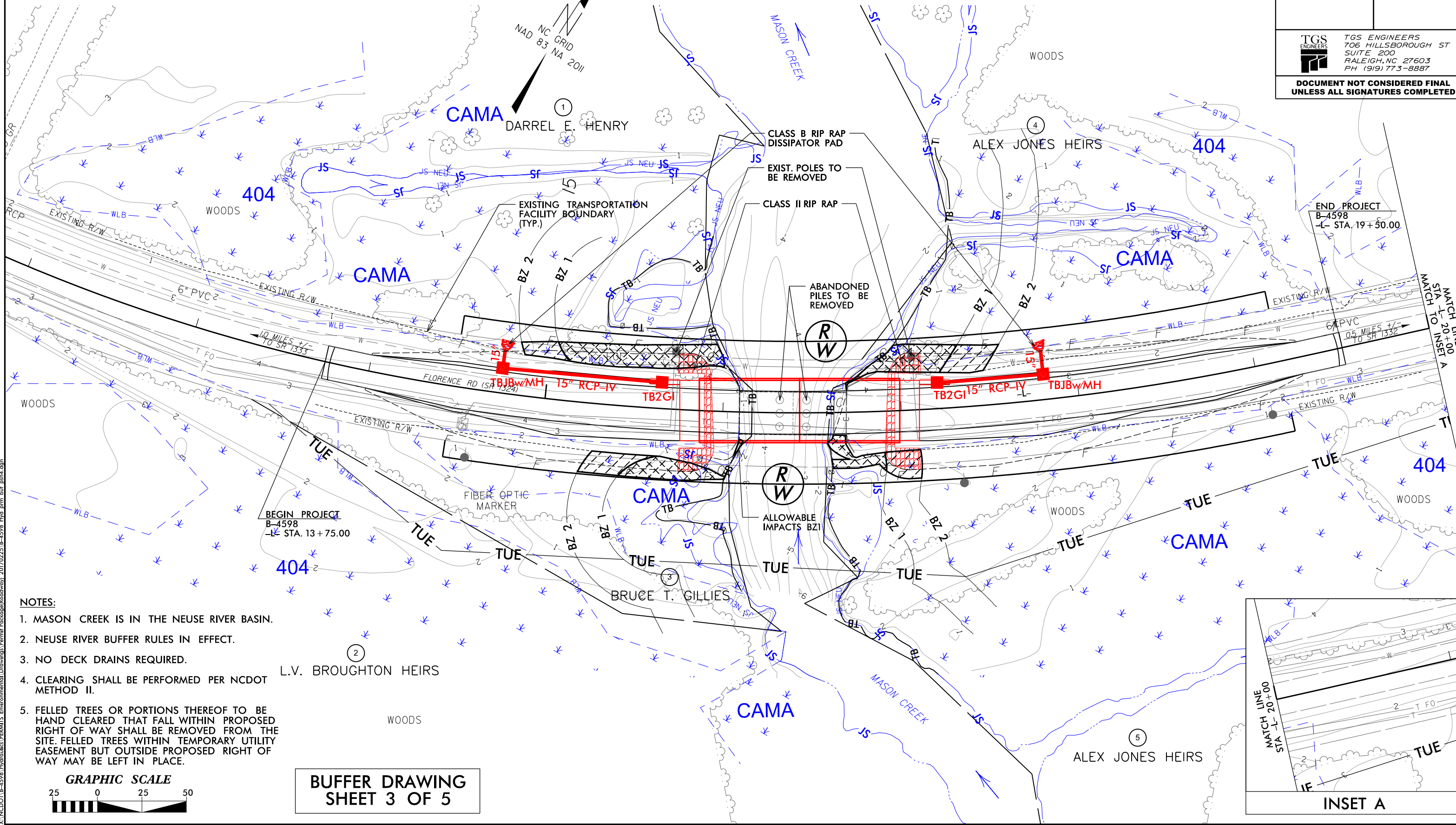
**PERMIT DRAWINGS
FOR B-4598
PAMLICO COUNTY
BRIDGE #680016**

EXISTING BRIDGE DIMENSIONS 60'X26' (DOUBLE-SPAN), 90 DEG. SKEW
 PROPOSED BRIDGE DIMENSIONS 110'X36' (DOUBLE-SPAN), 90 DEG. SKEW
 TOTAL PROJECT LENGTH - 575'

| Buffer Zone (BZ) Impacts | |
|---|---|
| Area of Allowable Impacts within BZ1 | Area of Allowable Impacts within BZ2 |
|  |  |

LEGEND

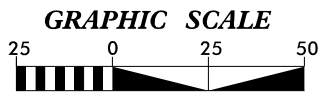
BUFFER IMPACTS



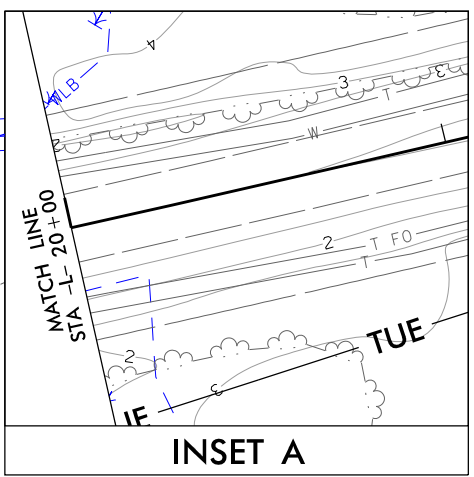
BEGIN PROJECT
B-4598
-L- STA. 13+75.00

END PROJECT
B-4598
-L- STA. 19+50.00

- NOTES:**
1. MASON CREEK IS IN THE NEUSE RIVER BASIN.
 2. NEUSE RIVER BUFFER RULES IN EFFECT.
 3. NO DECK DRAINS REQUIRED.
 4. CLEARING SHALL BE PERFORMED PER NCDOT METHOD II.
 5. FELLED TREES OR PORTIONS THEREOF TO BE HAND CLEARED THAT FALL WITHIN PROPOSED RIGHT OF WAY SHALL BE REMOVED FROM THE SITE. FELLED TREES WITHIN TEMPORARY UTILITY EASEMENT BUT OUTSIDE PROPOSED RIGHT OF WAY MAY BE LEFT IN PLACE.



**BUFFER DRAWING
SHEET 3 OF 5**



2/25/2017 10:41:00 AM C:\NGDOT\B-4598\Hydraulics\PERMITS Environmental Drawings\Permit Pack\Roadway\20170223_B-4598_Hyd_perm_buf_gsh4.dgn

BUFFER IMPACTS SUMMARY

| SITE NO. | STRUCTURE SIZE / TYPE | STATION (FROM/TO) | IMPACT | | | | | | | | | BUFFER REPLACEMENT | |
|---------------|-----------------------|-------------------|---------------|--------|-----------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|
| | | | TYPE | | | ALLOWABLE | | | MITIGABLE | | | ZONE 1 (ft ²) | ZONE 2 (ft ²) |
| | | | ROAD CROSSING | BRIDGE | PARALLEL IMPACT | ZONE 1 (ft ²) | ZONE 2 (ft ²) | TOTAL (ft ²) | ZONE 1 (ft ²) | ZONE 2 (ft ²) | TOTAL (ft ²) | | |
| 1 | Bridge | L 15+86 to 17+00 | | X | | 724 | 98 | 822 | | | | | |
| 1 | Roadway | L 14+83 to 17+58 | X | | | 1802 | 1083 | 2885 | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| TOTAL: | | | | | | 2526.0 | 1181.0 | 3707.0 | 0.0 | 0.0 | 0.0 | | |

NOTES:

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

PAMLICO COUNTY
PROJECT: 38426.1.2 (B-4598)

2/25/2017
SHEET 4 OF 5

WETLANDS IN BUFFER IMPACTS SUMMARY

| SITE NO. | STATION (FROM/TO) | WETLANDS IN BUFFERS | |
|---------------|-------------------|---------------------------|---------------------------|
| | | ZONE 1 (ft ²) | ZONE 2 (ft ²) |
| 1 | L 14+83 to 17+58 | 1983 | 921 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| TOTAL: | | 1983 | 921 |

NOTES:

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS

 PAMLICO COUNTY
 PROJECT: 38426.1.2 (B-4598)

 2/25/2017
 SHEET 5 OF 5

B-4598- ENVIROMENTAL NARRATIVE

Utility Owners

Water- Al Gerard, Field Operations Manager
Pamlico County Water System
Pamlico County, N.C.
(252)745-5453
a_gerard@yahoo.com

Century Link-Phone- Mitch Averitte
311 Hancock St.
New Bern NC 28560
252-636-6620.
Mitchell.Averitte@centurylink.com>

Power- John Marsh
Senior Staking Technician
Tideland Electric Membership Corporation
P O Box 38, Grantsboro, NC 28529
252-637-8314 / 1-800-637-1079 x4324
johnmarsh@tidelandemc.com
www.tidelandemc.com

General Utility Relocation:

All utility lines inside the project limits currently within the construction limits will be adjusted or relocated as necessary before the project Let Date.

Power

Tideland EMC- John Marsh stated there are two poles on the east side of the bridge that will be moved back 15' to accommodate crane clearance. In addition one pole to the north of these poles will be moved to eliminate pull and the need for a side guy. A 15' wide TUE will be needed from the center of the poles on each side. It is recommended that the trees cut for clearing be left where they fall as there will be no other work in this area by any other contractors. This would leave a minimum impact on the wetland areas. All clearing will be with non-mechanized means. The existing poles will be left in place. At the completion of the bridge replacement the lines can be transferred back to the existing poles, as the proposed poles will be unreachable by a pole truck should an outage or maintenance be required.

All pole placement inside the wetland areas will be accomplished with the use of mats. There will be minimum impact to environmentally sensitive areas due to the non-mechanized clearing and the use of mats.

Telephone

Century Link/Embarq- Mitch Averitte, stated that Century Link/Embarq has facilities in conflict. Relocation of the telephone facilities will be accomplished with a 4" directional drill. The proposed cables will be placed inside of the 4" plastic pipe pulled back with the directional drill. There are (2) buried copper cables on the right side of SR1324 (Florence Road) and (1) buried copper on the left side of SR1324 (Florence Road). This one buried copper crosses -L- at station 15+75 and transitions to an aerial crossing. This aerial crossing and all buried cables inside of the project limits will be replaced with (2) copper and (1) fiber optic cable. The relocated cables will be placed/relocated by directional drill. The bore entry will begin at station 13+75 RT-L to 19+50 RT-L. As outlined in the bore profile the bore will be a minimum of 15' below the stream bottom of Mason Creek.

There will be no impact to environmentally sensitive areas due to the buried cable relocation because all trenching will take place in the roadway fill. All telephone lines constructed in wetlands, streams, and buffer zones will be by directional drill.

Water

Pamlico County Water- Al Gerard-, it has been determined there will be a conflict with the water line. Pamlico County Water requested the NCDOT handle the design, specifications, surveying, construction, inspection, ie., and all permitting required to relocate the existing water main located at the waterway crossing on Florence Road in Pamlico County.

An existing 6" water line on the left side of SR1324 (Florence Road) will be replaced in kind by a new section of 6" water line. The relocated water line will be constructed by directional drill. The directional drill will begin approximately 25' after the start of the project in the roadway fill and end approximately 25' before the end of the project in the roadway fill. This bore will be a minimum of 10' below the stream bottom of Mason's Creek.

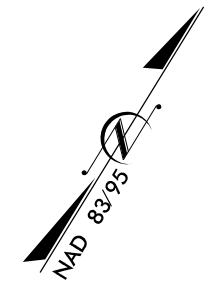
There will be no impact to environmentally sensitive areas due to the water line because all trenching will take place in the roadway fill. All water line constructed in wetlands, streams, and buffer zones will be by directional drill. Cutoff valves will be provided on each side of the stream.

Summary of Environmental Impacts

Based on the preliminary relocation plans provided by the power and telephone companies, there appears to be minimum impacts. The proposed directional bores will enter and exit as such with minimum impacts. Silt fence and all proper erosion control measures will be required and implemented. Any proposed telephone splice pits will be outside of the wetland boundaries. Hand clearing is typically expected in the wetlands and required for most buffer impacts. In addition mats can be placed as well to further minimize impacts.

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C. | B-4598 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 38426.1.2 | BRZ-1324(5) | PE | |
| 38426.2.1 | | RW, UTL. | |
| | | | |
| | | | |
| | | | |

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



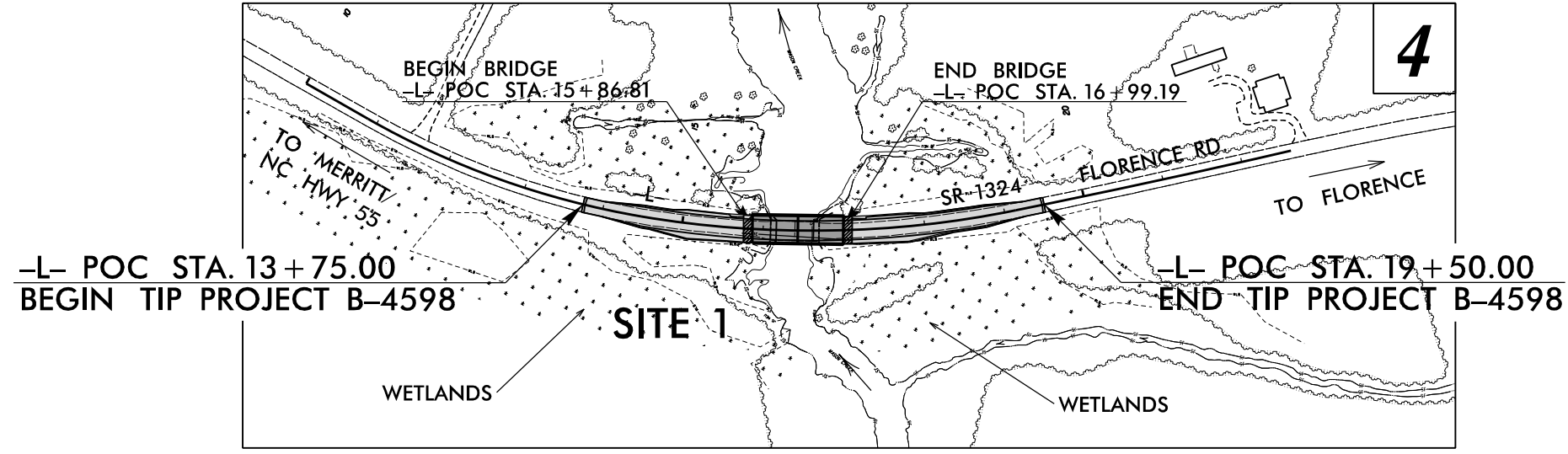
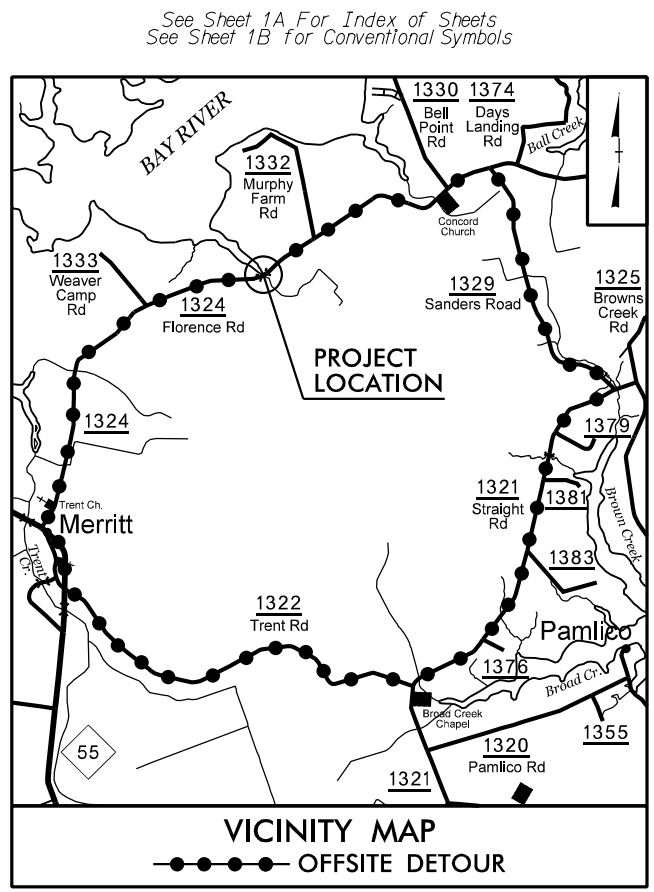
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PAMLICO COUNTY

LOCATION: REPLACE BRIDGE 16 OVER MASON CREEK
ON SR 1324 (FLORENCE RD.)

TYPE OF WORK: GRADING, DRAINAGE, STRUCTURE AND PAVING

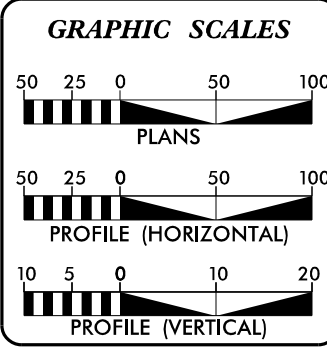
PERMIT DRAWINGS
STREAM AND WETLAND IMPACTS
DUE TO UTILITY RELOCATION
FEBRUARY 24, 2017



PERMIT DRAWING
SHEET 1 OF 7

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

DESIGN EXCEPTIONS
-L- Horizontal SSD, Sta. 13+75 to Sta. 19+50
Superelevation, Sta. 13+75 to Sta. 19+50



DESIGN DATA

| | |
|--------------------------|-------------|
| ADT 2017 = | 1065 |
| ADT 2037 = | 1326 |
| DHV = | 10 % |
| D = | 55 % |
| T = | 10 % * |
| V = | 60 MPH |
| * (TTST 1% + DUAL 9%) | |
| FUNCT CLASS = | RURAL LOCAL |
| SUB-REGIONAL TIER DESIGN | |

PROJECT LENGTH

| | | |
|--------------------------------------|---|-------------|
| LENGTH ROADWAY TIP PROJECT B-4598 | = | 0.088 miles |
| LENGTH STRUCTURES TIP PROJECT B-4598 | = | 0.021 miles |
| TOTAL LENGTH TIP PROJECT B-4598 | = | 0.109 miles |

Prepared For:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

By:
TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150

PH (704) 476-0003
CORP. LICENSE NO.: C-0275

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY 16, 2016

LETTING DATE:
JUNE 20, 2017

JIMMY TERRY, P.E.
PROJECT ENGINEER

BURKE EVANS, P.E.
PROJECT DESIGN ENGINEER

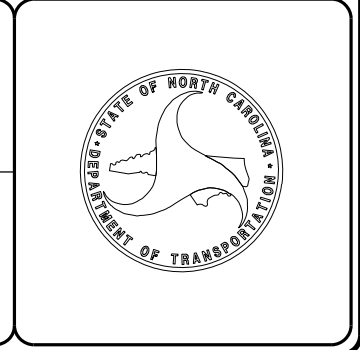
GARY LOVERING, PE
PROJECT ENGINEER
NCDOT ROADWAY DESIGN

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



TIP PROJECT: B-4598

CONTRACT:

09/28/99 2/24/2017 X:\NCDOT\B-4598\Hydraulics\PERMITS_Environmental\Drawings\Permit Package(Utility)\B-4598_Ut_prm_wet_t.sh.dgn User:rtturner

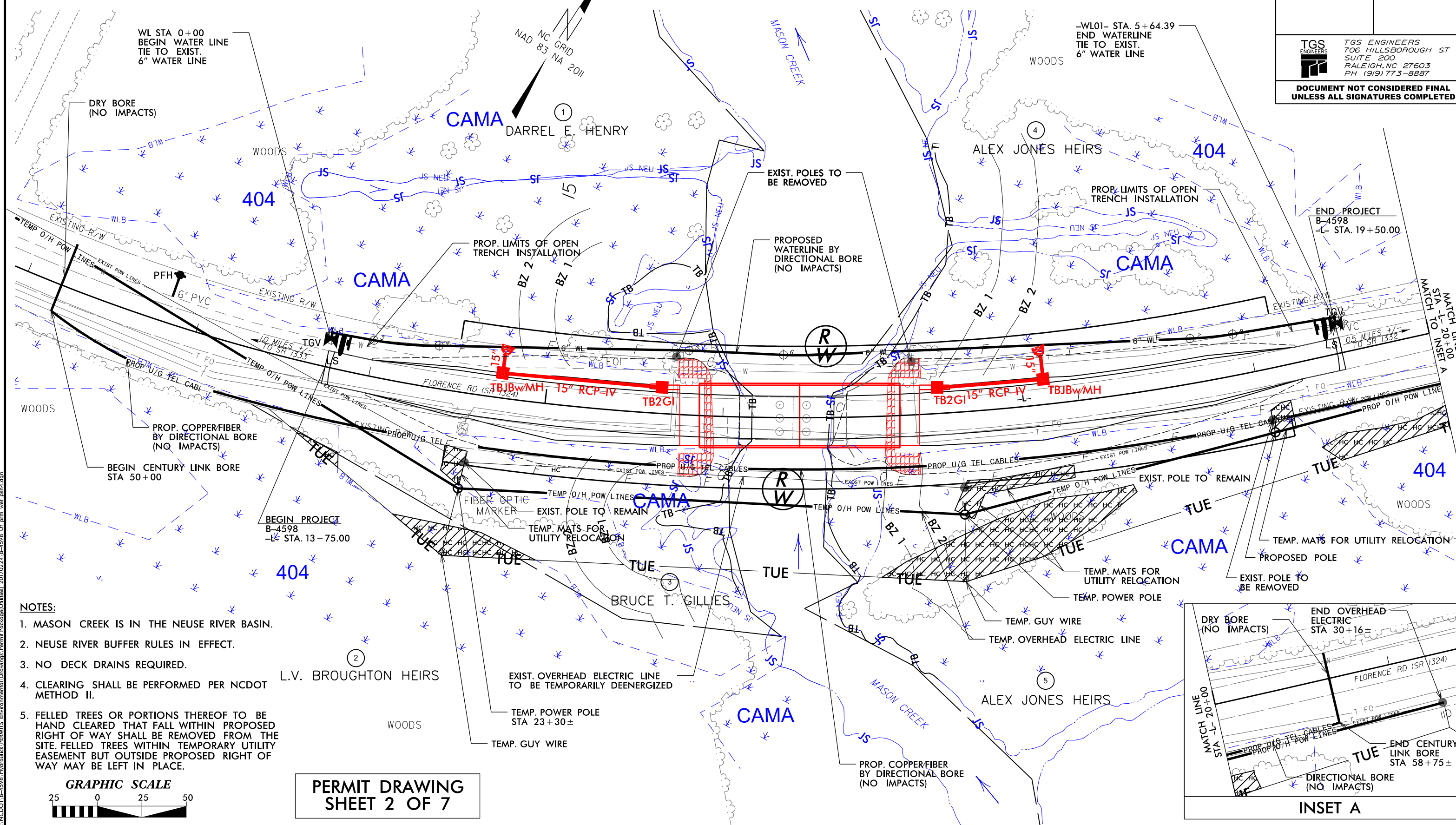
| WETLAND IMPACTS | |
|------------------------------|--|
| Hand Clearing in Wetlands | |

EXISTING BRIDGE DIMENSIONS 60'X26' (DOUBLE-SPAN), 90 DEG. SKEW
 PROPOSED BRIDGE DIMENSIONS 110'X36' (DOUBLE-SPAN), 90 DEG. SKEW
 TOTAL PROJECT LENGTH - 575'

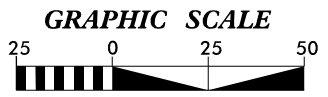
**PERMIT DRAWINGS
 FOR B-4598
 PAMLICO COUNTY
 BRIDGE #680016**

| | |
|---|------------------------|
| PROJECT REFERENCE NO. B-4598 | SHEET NO. 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| TGS ENGINEERS 706 HILLSBOROUGH ST SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

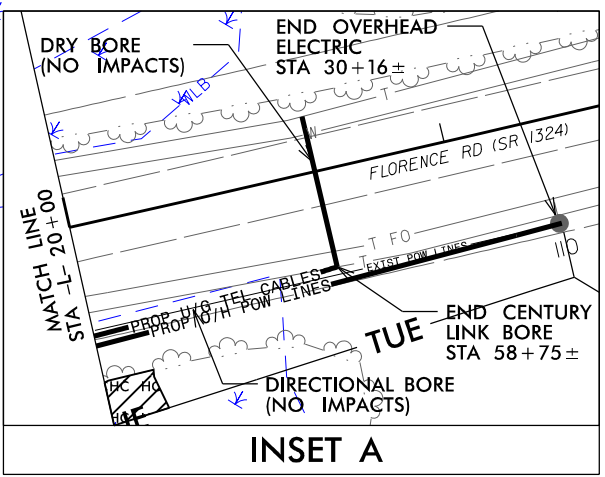
STREAM AND WETLAND IMPACTS



- NOTES:**
1. MASON CREEK IS IN THE NEUSE RIVER BASIN.
 2. NEUSE RIVER BUFFER RULES IN EFFECT.
 3. NO DECK DRAINS REQUIRED.
 4. CLEARING SHALL BE PERFORMED PER NCDOT METHOD II.
 5. FELLED TREES OR PORTIONS THEREOF TO BE HAND CLEARED THAT FALL WITHIN PROPOSED RIGHT OF WAY SHALL BE REMOVED FROM THE SITE. FELLED TREES WITHIN TEMPORARY UTILITY EASEMENT BUT OUTSIDE PROPOSED RIGHT OF WAY MAY BE LEFT IN PLACE.



**PERMIT DRAWING
 SHEET 2 OF 7**



22/2/2017
 Turner
 P:\PROJECTS\B-4598\Hydraulics\PERMITS\Environmental\Drawings\Permit Pack\Utilities\20170224\B-4598_UA_perm_wet_astk.dgn

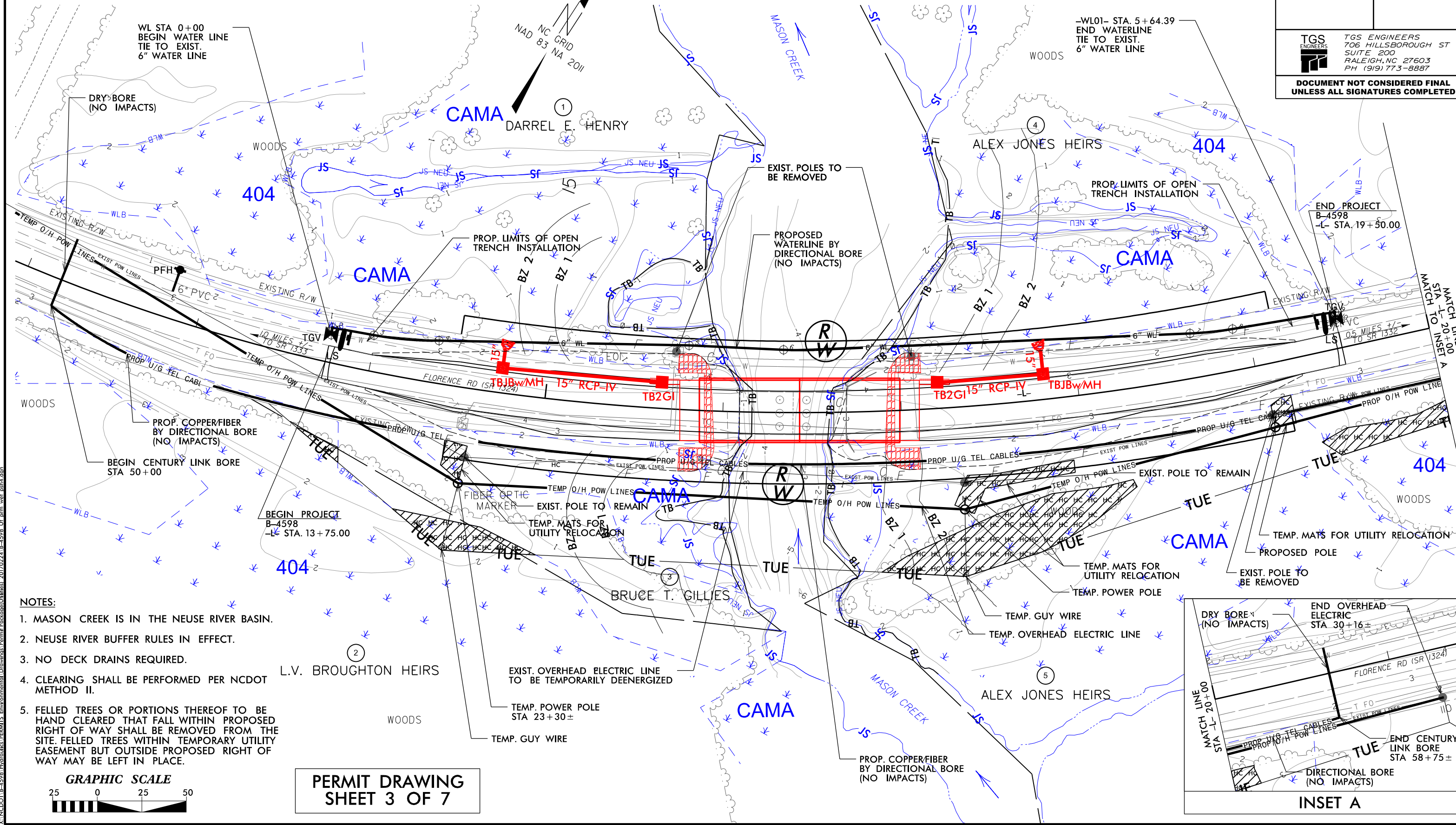
| WETLAND IMPACTS | |
|------------------------------|--|
| Hand Clearing in Wetlands | |
| DRY BORE (NO IMPACTS) | |

EXISTING BRIDGE DIMENSIONS 60'X26' (DOUBLE-SPAN), 90 DEG. SKEW
 PROPOSED BRIDGE DIMENSIONS 110'X36' (DOUBLE-SPAN), 90 DEG. SKEW
 TOTAL PROJECT LENGTH - 575'

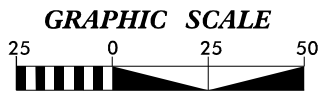
PERMIT DRAWINGS FOR B-4598 PAMLICO COUNTY BRIDGE #680016

| | |
|---|------------------------|
| PROJECT REFERENCE NO. B-4598 | SHEET NO. 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| TGS ENGINEERS 706 HILLSBOROUGH ST SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

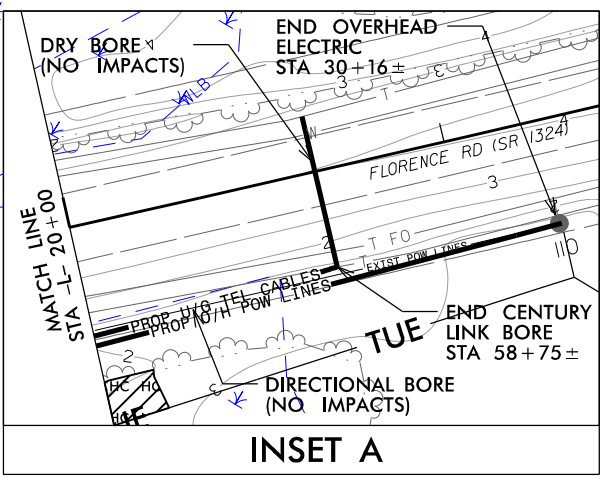
STREAM AND WETLAND IMPACTS



- NOTES:**
1. MASON CREEK IS IN THE NEUSE RIVER BASIN.
 2. NEUSE RIVER BUFFER RULES IN EFFECT.
 3. NO DECK DRAINS REQUIRED.
 4. CLEARING SHALL BE PERFORMED PER NCDOT METHOD II.
 5. FELLED TREES OR PORTIONS THEREOF TO BE HAND CLEARED THAT FALL WITHIN PROPOSED RIGHT OF WAY SHALL BE REMOVED FROM THE SITE. FELLED TREES WITHIN TEMPORARY UTILITY EASEMENT BUT OUTSIDE PROPOSED RIGHT OF WAY MAY BE LEFT IN PLACE.



**PERMIT DRAWING
 SHEET 3 OF 7**

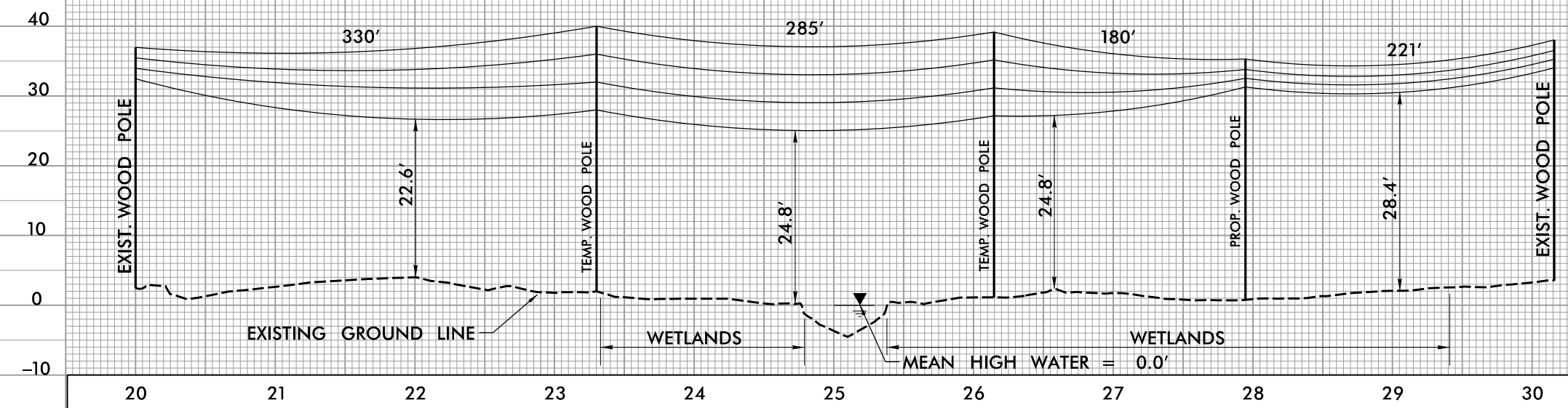


22/2/2017
 Turner
 P:\PROJECTS\B-4598\Hydraulics\PERMITS Environmental Drawings\Permit Pack\Utilities\20170224\B-4598_Ul_perm_wet_ashk.dgn

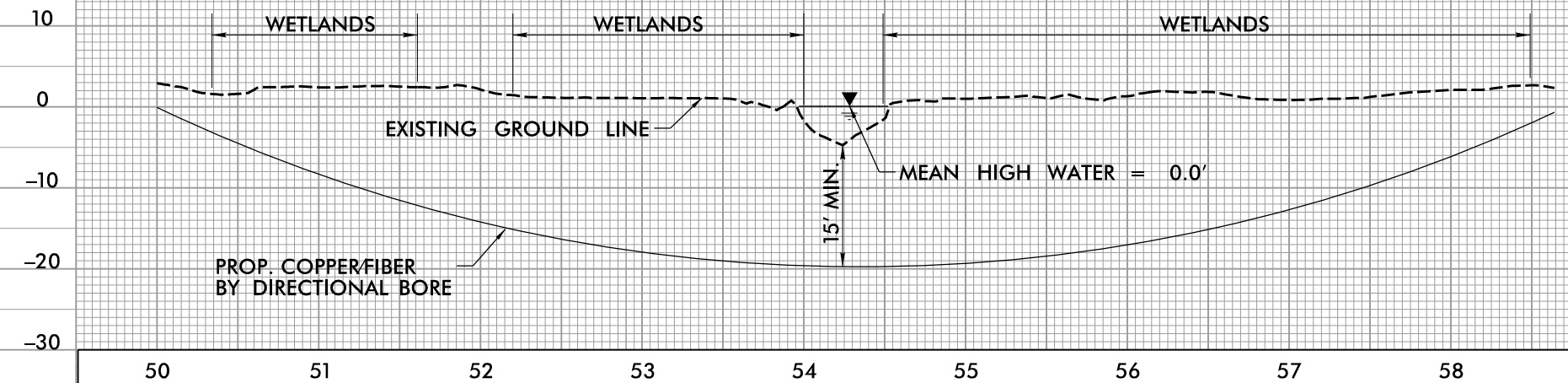
5/14/99

| | |
|--|-----------------------|
| PROJECT REFERENCE NO. <i>B-4598</i> | SHEET NO. <i>5</i> |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

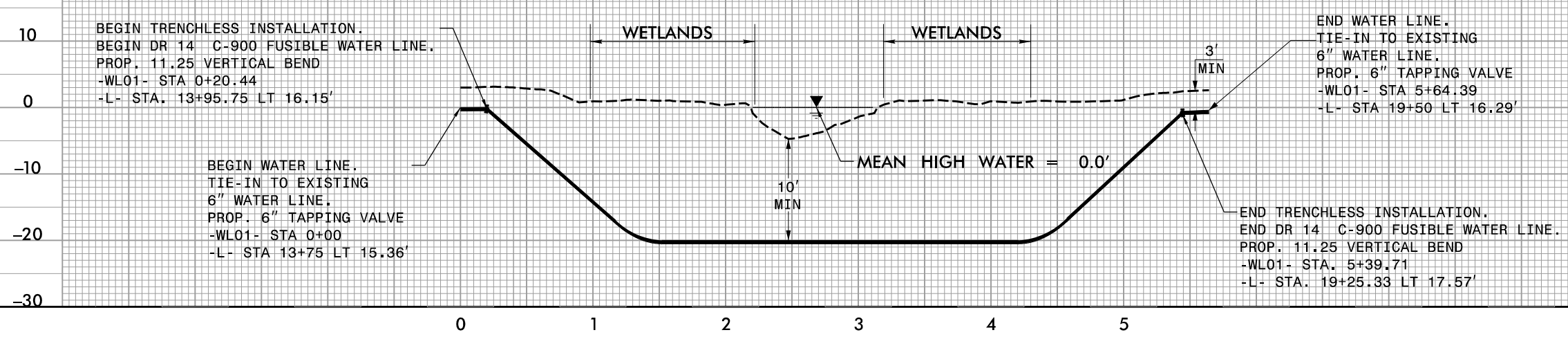
TEMC OVERHEAD ELECTRIC PROFILE



CENTURY LINK PROFILE



WATER LINE PROFILE



PERMIT DRAWING SHEET 4 OF 7

2/24/2007 10:00 AM C:\Users\jturner\Documents\Drawings\Permit Package\Utilities\20170224\B-4598_Ut_perm.plt.dgn

8/23/99



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

END BRIDGE
-L- STA. 16+99.19

0.025 0.025

-2.87
16+50.00

WETLANDS

0.025 0.025

16+00.00
BEGIN BRIDGE
-L- STA. 15+86.81

15+50.00

15+00.00

14+50.00

14+00.00
BEGIN CONSTRUCTION
-L- STA. 13+75.00

13+75.00

13+50.00

-L-

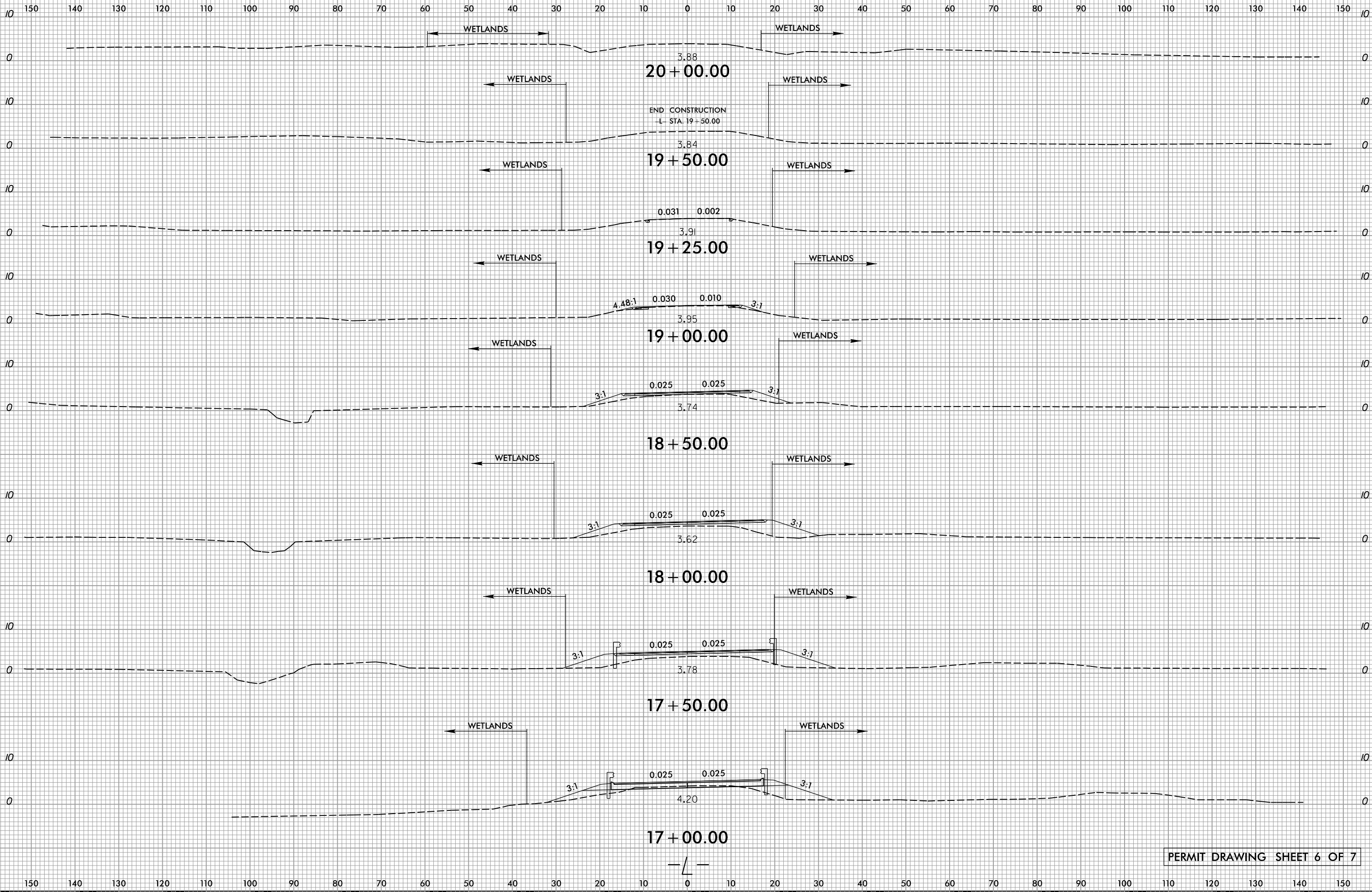
2/24/2017 X:\NC001\B-4598\Hydraulics\PERMITS\Environmental\Drawings\Permit Package\Utilities\20170224\B-4598_Ut.prm_xpl.dgn

8/23/99



PROJ. REFERENCE NO.
B-4598

SHEET NO.
X-2



X:\NC001\B-4598\Hydraulics\PERMITS\Environmental\Drawings\Permit Package\Utilities\20170224\B-4598-Ut.prm.xpl.dgn
User: jburner

WETLAND PERMIT IMPACT SUMMARY

| Site No. | Station (From/To) | Structure Size / Type | WETLAND IMPACTS | | | | | SURFACE WATER IMPACTS | | | | |
|-----------------|-------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------------|--------------------------------|---------------------------|-----------------------|---|-------------------------------------|----------------------------|
| | | | Permanent Fill In Wetlands (ac) | Temp. Fill In Wetlands (ac) | Excavation in Wetlands (ac) | Mechanized Clearing in Wetlands (ac) | Hand Clearing in Wetlands (ac) | Permanent SW impacts (ac) | Temp. SW impacts (ac) | Existing Channel Impacts Permanent (ft) | Existing Channel Impacts Temp. (ft) | Natural Stream Design (ft) |
| 1 | L 13+68 to 20+15 | Overhead Power Line | | | | | 0.13 | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| TOTALS*: | | | | | | | 0.13 | | | 0 | 0 | 0 |

*Rounded totals are sum of actual impacts

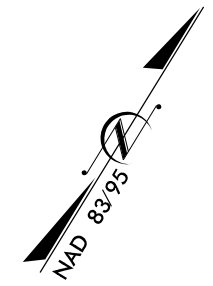
NOTES:
 Wetland Impacts listed in table above are total quantities for both CAMA & 404 Wetlands.
 0.09 acres of Hand Clearing are in CAMA Wetlands.

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 2/24/2017
 PAMLICO
 PROJECT: 38426.1.2 (B-4598)

 SHEET 7 OF 7

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C. | B-4598 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 38426.1.2 | BRZ-1324(5) | PE | |
| 38426.2.1 | | RW, UTL. | |
| | | | |
| | | | |
| | | | |
| | | | |

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



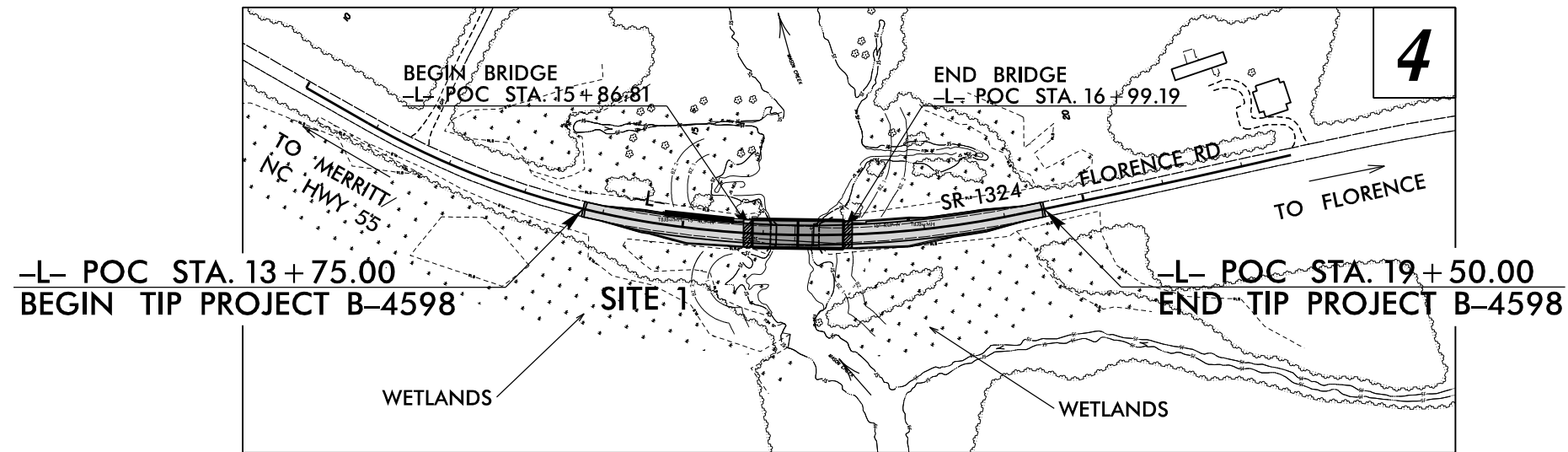
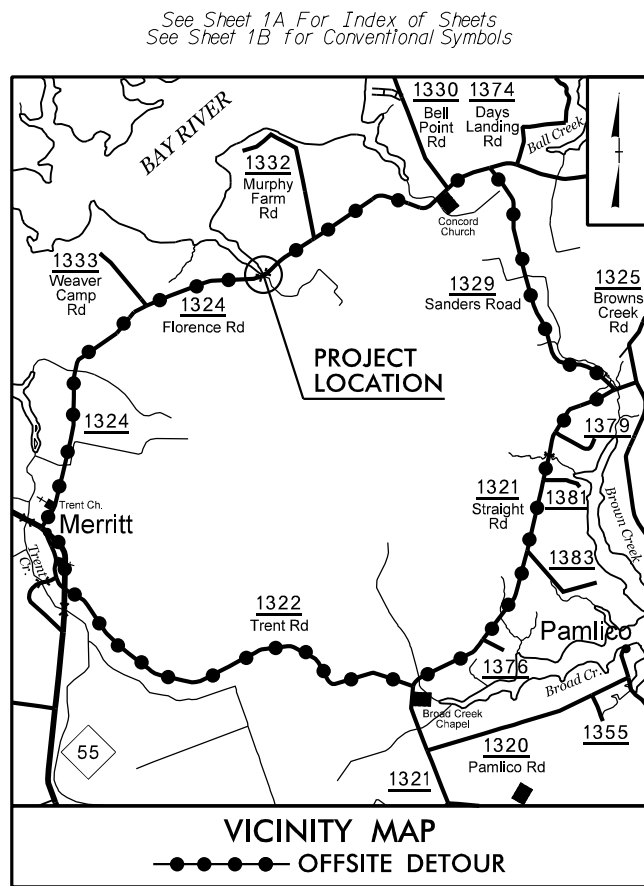
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PAMLICO COUNTY

LOCATION: REPLACE BRIDGE 16 OVER MASON CREEK
ON SR 1324 (FLORENCE RD.)

TYPE OF WORK: GRADING, DRAINAGE, STRUCTURE AND PAVING

PERMIT DRAWINGS
BUFFER IMPACTS
DUE TO UTILITY RELOCATION
FEBRUARY 24, 2017



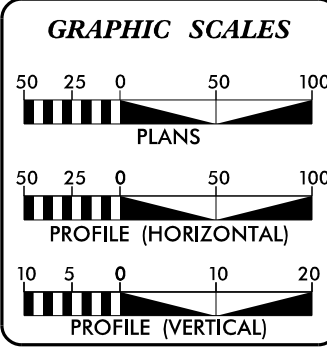
BUFFER DRAWING
SHEET 1 OF 5

DESIGN EXCEPTIONS

-L- Horizontal SSD, Sta. 13+75 to Sta. 19+50
Superelevation, Sta. 13+75 to Sta. 19+50

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

CONTRACT:



DESIGN DATA

| | |
|--------------------------|--------|
| ADT 2017 = | 1065 |
| ADT 2037 = | 1326 |
| DHV = | 10 % |
| D = | 55 % |
| T = | 10 % * |
| V = | 60 MPH |
| * (TTST 1% + DUAL 9%) | |
| FUNCT CLASS=RURAL LOCAL | |
| SUB-REGIONAL TIER DESIGN | |

PROJECT LENGTH

| | | |
|--------------------------------------|---|-------------|
| LENGTH ROADWAY TIP PROJECT B-4598 | = | 0.088 miles |
| LENGTH STRUCTURES TIP PROJECT B-4598 | = | 0.021 miles |
| TOTAL LENGTH TIP PROJECT B-4598 | = | 0.109 miles |

Prepared For:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

By:
TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150

PH (704) 476-0003
CORP. LICENSE NO.: C-0275

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY 16, 2016

LETTING DATE:
JUNE 20, 2017

JIMMY TERRY, P.E.
PROJECT ENGINEER

BURKE EVANS, P.E.
PROJECT DESIGN ENGINEER

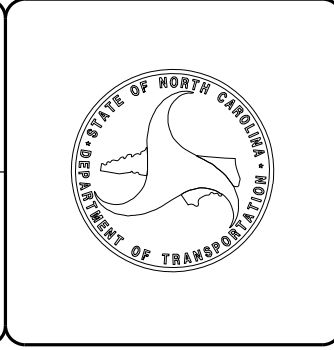
GARY LOVERING, PE
PROJECT ENGINEER
NCDOT ROADWAY DESIGN

HYDRAULICS ENGINEER


SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER


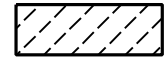
SIGNATURE: _____ P.E.



09/28/99 2/24/2017 X:\NCDOT\B-4598\Hydraulics\PERMITS_Environmental\Drawings\Permit Package(Utility)\B-4598_Ut_prm_buf_t sh.dgn User:rtturner

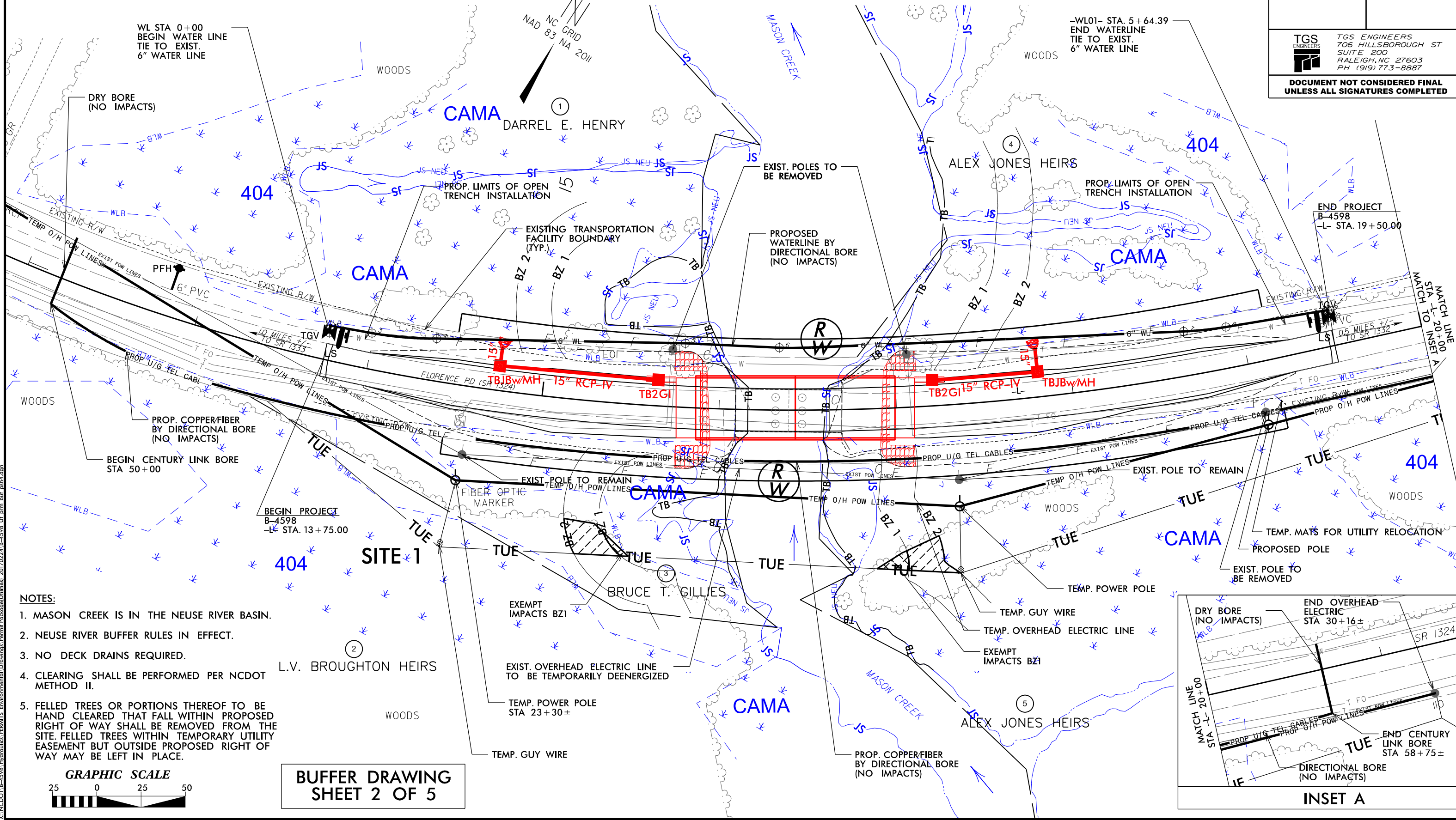
| | |
|--|---------------------|
| PROJECT REFERENCE NO. B-4598 | SHEET NO. 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
|  TGS ENGINEERS 706 HILLSBOROUGH ST SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

PERMIT DRAWINGS FOR B-4598 PAMLICO COUNTY BRIDGE #680016

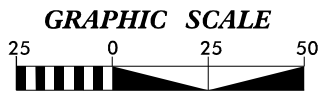
| Buffer Zone (BZ) Impacts | |
|---|---|
| Area of Exempt Bridge Impacts within BZ1 | Area of Exempt Bridge Impacts within BZ2 |
|  |  |

EXISTING BRIDGE DIMENSIONS 60'X26' (DOUBLE-SPAN), 90 DEG. SKEW
 PROPOSED BRIDGE DIMENSIONS 110'X36' (DOUBLE-SPAN), 90 DEG. SKEW
 TOTAL PROJECT LENGTH - 575'

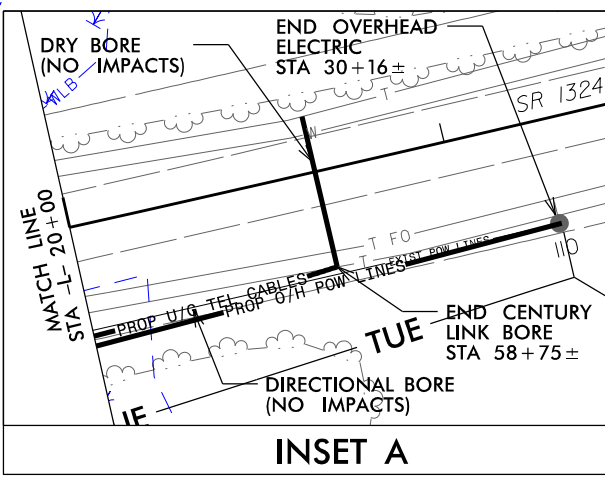
BUFFER IMPACTS




- NOTES:**
1. MASON CREEK IS IN THE NEUSE RIVER BASIN.
 2. NEUSE RIVER BUFFER RULES IN EFFECT.
 3. NO DECK DRAINS REQUIRED.
 4. CLEARING SHALL BE PERFORMED PER NCDOT METHOD II.
 5. FELLED TREES OR PORTIONS THEREOF TO BE HAND CLEARED THAT FALL WITHIN PROPOSED RIGHT OF WAY SHALL BE REMOVED FROM THE SITE. FELLED TREES WITHIN TEMPORARY UTILITY EASEMENT BUT OUTSIDE PROPOSED RIGHT OF WAY MAY BE LEFT IN PLACE.




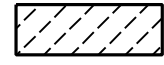
**BUFFER DRAWING
SHEET 2 OF 5**



22-22017
 Turner
 MANAGED BY: 4598 Hydraulics PERMITS Environmental Drawings Permit Packets/Utilities 20170224 B-4598 U:\perm\buf\ash4.dgn

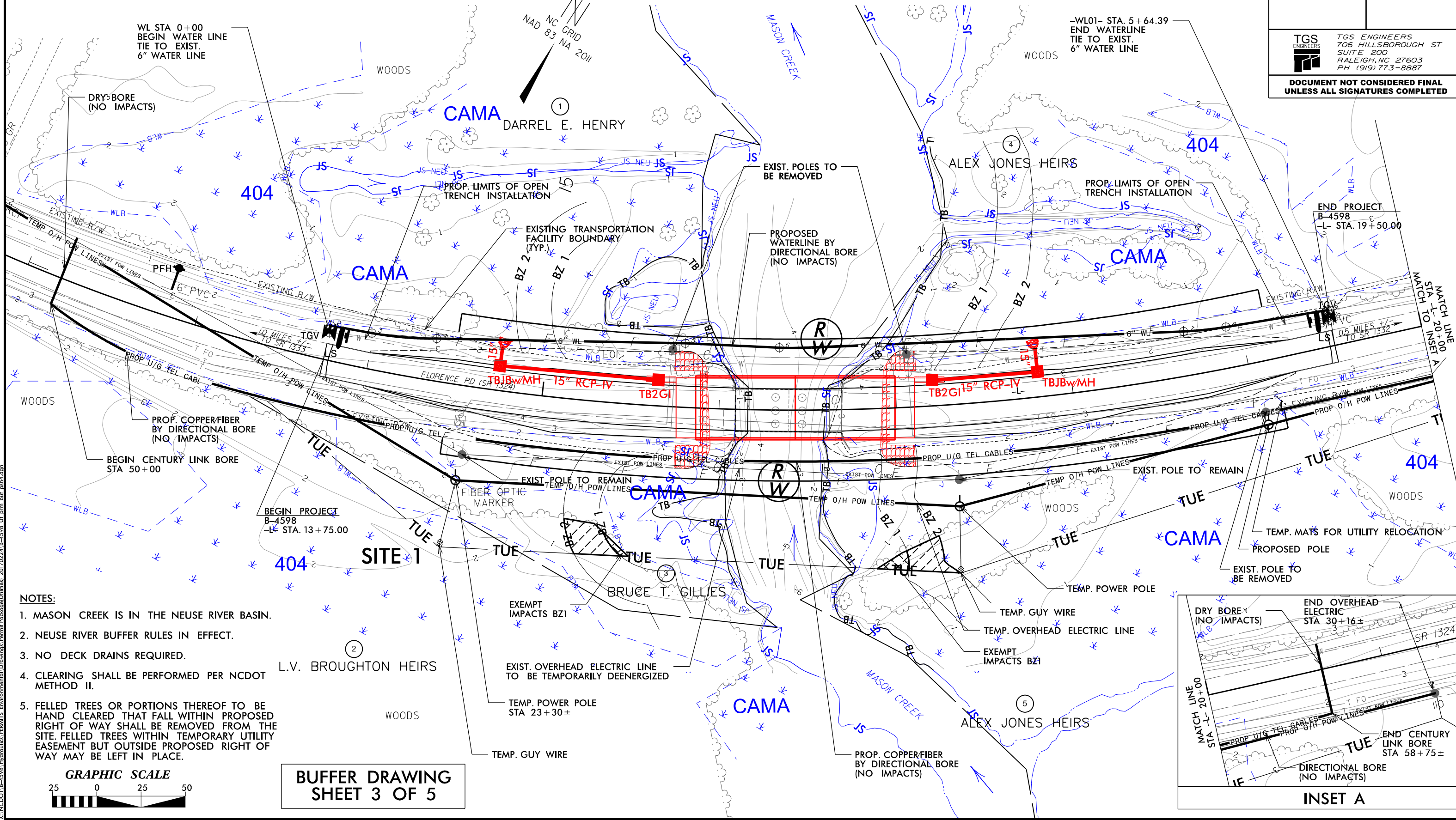
| | |
|--|---------------------|
| PROJECT REFERENCE NO. B-4598 | SHEET NO. 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
|  TGS ENGINEERS 706 HILLSBOROUGH ST SUITE 200 RALEIGH, NC 27603 PH (919) 773-8887 | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

PERMIT DRAWINGS FOR B-4598 PAMLICO COUNTY BRIDGE #680016

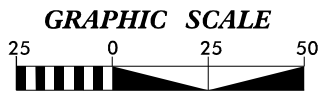
| Buffer Zone (BZ) Impacts | |
|---|---|
| Area of Exempt Bridge Impacts within BZ1 | Area of Exempt Bridge Impacts within BZ2 |
|  |  |

EXISTING BRIDGE DIMENSIONS 60'X26' (DOUBLE-SPAN), 90 DEG. SKEW
 PROPOSED BRIDGE DIMENSIONS 110'X36' (DOUBLE-SPAN), 90 DEG. SKEW
 TOTAL PROJECT LENGTH - 575'

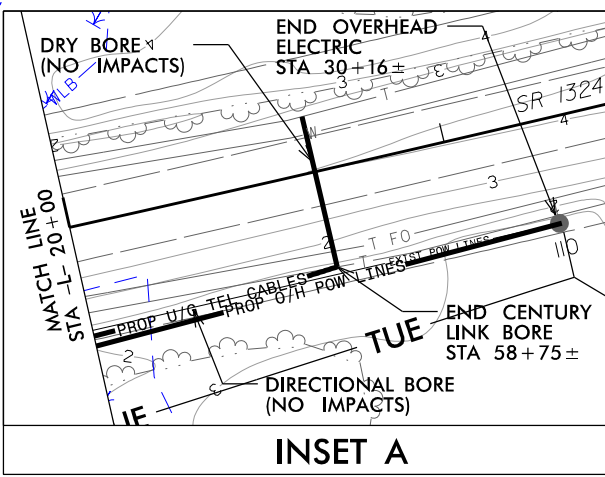
BUFFER IMPACTS



- NOTES:**
1. MASON CREEK IS IN THE NEUSE RIVER BASIN.
 2. NEUSE RIVER BUFFER RULES IN EFFECT.
 3. NO DECK DRAINS REQUIRED.
 4. CLEARING SHALL BE PERFORMED PER NCDOT METHOD II.
 5. FELLED TREES OR PORTIONS THEREOF TO BE HAND CLEARED THAT FALL WITHIN PROPOSED RIGHT OF WAY SHALL BE REMOVED FROM THE SITE. FELLED TREES WITHIN TEMPORARY UTILITY EASEMENT BUT OUTSIDE PROPOSED RIGHT OF WAY MAY BE LEFT IN PLACE.



**BUFFER DRAWING
SHEET 3 OF 5**



22/2/2017
 Turner
 P:\PROJECTS\B-4598\Hydraulics\PERMITS\Environmental\Drawings\Permit Pack\Utilities\20170224\B-4598_Ul_perm_buf_ast4.dgn

BUFFER IMPACTS SUMMARY

| | | | IMPACT | | | | | | | | | BUFFER REPLACEMENT | |
|---------------|-----------------------|-------------------|---------------|--------|-----------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|
| SITE NO. | STRUCTURE SIZE / TYPE | STATION (FROM/TO) | TYPE | | | ALLOWABLE EXEMPT | | | MITIGABLE | | | ZONE 1 (ft ²) | ZONE 2 (ft ²) |
| | | | ROAD CROSSING | BRIDGE | PARALLEL IMPACT | ZONE 1 (ft ²) | ZONE 2 (ft ²) | TOTAL (ft ²) | ZONE 1 (ft ²) | ZONE 2 (ft ²) | TOTAL (ft ²) | | |
| 1 | Overhead Power Line | L 15+19 to 17+30 | X | | | 146 | 750 | 896 | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| TOTAL: | | | | | | 146.0 | 750.0 | 896.0 | 0.0 | 0.0 | 0.0 | | |

NOTES:
 All Zone 1 and Zone 2 impacts are due to overhead power line relocations which are exempt impacts.

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS

PAMLICO COUNTY
 PROJECT: 38426.1.2 (B-4598)

2/24/2017
 SHEET 4 OF 5

