STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

February 28, 2019

Mr. Hal R. Pitts
USCG-Fifth CG District
431 Crawford Street
Portsmouth, VA 23704-5004

Subject: **US Coast Guard Bridge Permit Request** for the Proposed US 17 Business / NC 37 from Hertford to north of NC 37; including replacement of Bridge No. 8 in Perquimans County; TIP Number R-4467, WBS Element 35748.3.2

Dear Mr. Pitts,

Application is hereby made for a Coast Guard bridge permit.

A. ADMINISTRATIVE AND NAVIGATION INFORMATION

1. Application Date: February 28, 2019

   a. Applicant information:

      1) Name: NC Department of Transportation

      2) Address: 1020 Birch Ridge Drive, Raleigh, NC 27610

      3) Telephone number: 919-707-6111

      4) Email address: jldilday@ncdot.gov

   b. Consultant/Agent information (if employed): N/A

      1) Name (company or individual):

      2) Address:

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

Telephone: (919) 707-6000
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH NC 27610

3) Telephone number:

4) Email address:

5) Letter authorizing a consultant/agent to obtain permits on behalf of the applicant included: ☐ Yes ☐ No

c. Name of Proposed Bridge(s): Replacement of Bridge No. 8

1) Name of the waterway that the bridge(s) would cross: Perquimans River

2) Number of miles above the mouth of the waterway where the bridge(s) would be located and provide latitude and longitude coordinates (degree/minute/second) at centerline of navigation channel (contact the local Coast Guard Bridge Office for guidance): ~12 miles to Albemarle Sound, 76°27'58"W, 36°11'39"N

3) City or town, county/parish, and state where the bridge(s) would be located at, near, or between: Town of Hertford, Perquimans County, North Carolina

4) Brief description of project to include type of bridge(s) proposed [fixed or movable (drawbridge, bascule, vertical lift, swing span, pontoon), highway, railway, pedestrian, pipeline] and existing bridge(s) at project site, if applicable: A new swing span bridge will replace an existing swing span bridge on US 17 Business / NC 37 across the Perquimans River in the Town of Hertford, NC. There is a pedestrian sidewalk on the existing bridge and there will also be pedestrian sidewalk on the proposed bridge.

5) Drawbridge Regulations (if applicable): N/A

6) Date of plans and number of plan sheets: February 13, 2019; 8 plan sheets

7) Estimated cost of bridge(s) and approaches:

a) Provide the estimated cost of the bridge(s) as proposed, with vertical and horizontal navigational clearances: $49.2 million (including costs for Right of Way and Utilities) for 15 feet of vertical clearance and 55 feet of horizontal clearance

b) Provide the estimated cost of a low-level bridge(s) on the same alignment with only sufficient clearance to pass high water while meeting the intended purpose and need: Construction costs only: $18 million for fixed-span bridge with 33 feet of clearance east of existing bridge; $25-26 million for fixed-span bridge with 33 feet of clearance west of existing bridge.

8) Type and source of project funding (federal, state, private, etc.): State

9) Proposed project timeline: Begin construction 2019, complete construction 2021.

10) Other Federal actions (e.g., permits, approvals, funding, etc.) associated with the proposal:

US Army Corps of Engineers Section 404 Permit
NC Division of Water Resources Section 401 Permit
NC Division of Coastal Management CAMA Permit

d. Legal authority for proposed action:

1) Cite appropriate Bridge Act: General Bridge Act of 1946

2) If not the owner of the existing bridge(s) that is being replaced or modified, include a signed statement from the bridge owner authorizing the removal or modification work and cite its location: N/A

3) For privately owned bridges, cite authorization for right to build (e.g. deed or easement from the property owner authorizing the proposed construction or modification work): N/A

e. International bridges (if applicable):

1) Cite the International Bridge Act of 1972, or a copy of the Special Act of Congress if constructed prior to 1972, as the legislative authority for international bridge construction: N/A

2) For permits issued under the International Bridge Act of 1972, cite Presidential approval, via the State Department, included with the application as required: N/A

NOTE: Please include a copy of State Department approval for international bridges in the application package for a Coast Guard bridge permit.

f. Dimensions of the proposed bridge(s):

1) Vertical clearance as indicated on plan sheets: Unlimited when swing span is open; 13.5 ft when swing span is closed.

2) Horizontal clearance as indicated on plan sheets: 55 ft

3) Length of bridge(s) project: 2,691 ft

If no prior permit exists, and this is a modification or replacement project, is the length the same as the old bridge: No

If not, what is the difference: 2,051 ft longer than existing bridge

4) Width of bridge(s) project: 41 ft

If no prior permit exists, and this is a modification or replacement project, is the width the same as the old bridge: No

If not, what is the difference: 11 ft wider than existing bridge

5) Depth of the waterway at project site at MHW if tidal or OHW if non-tidal, using the appropriate elevation and datum (e.g., NGVD 1929, NAVD 1988, etc.): 0-31.5 ft from NWL, 11 ft to 14 ft LWD, with controlling water depth being 9 ft at the US 17 Bypass bridge (Low Water Datum is 0.5 ft below mean sea level)

6) Width of waterway at project site at MHW if tidal or OHW if non-tidal: ~ 675 ft

7) Significant effect on flood heights and associated drift, if any, that could cause a navigation hazard: None, see February 2013 Environmental Assessment

g. Temporary Bridge(s) dimensions (vertical clearance, horizontal clearance, length and width), if applicable: N/A

h. [Include the following language, if applicable] Enclosed are the waterway data requirements as determined by the Coast Guard District Bridge Office. If a navigation impact report was conducted please cite location(s) in the case file, list title and date of document as appropriate: Navigation Study for Improvements to US 17 Business from Church Street to NC 37 Including the Replacement of Bridge No. 8 over the Perquimans River in Hertford and Winfall, Perquimans County, North Carolina. June 2017.

i. Existing bridge(s) if applicable:

1) Name of bridge(s): Bridge No. 8

2) Type of bridge(s) and number of lanes (e.g., fixed or moveable (drawbridge, bascule, vertical lift, swing span, pontoon, etc.); highway, railway, pedestrian, pipeline): swing span, two lanes, highway and pedestrian.

3) For movable spans identify the existing drawbridge operating regulation governing the structure (e.g. 33 CFR 117.XXX, if applicable): 33 CFR 117.835; open on signal from 8 a.m. to midnight from April 1 through September 30 and from 10 a.m. to 10 p.m. from October 1 through March 31. The draw need not be opened at all other times.

When applicable, identify if the local Coast Guard Bridge Office identified that modification of an existing drawbridge requires revision or removal of the existing regulation (e.g. if the bridge project involves replacing the existing drawbridge with a fixed bridge): N/A

<u>NOTE</u>: If the waterway is not already identified in 117 Subpart B, please note if an operating schedule other than open on demand is being considered.

4) Latitude and longitude coordinates (degree/minute/second) at centerline of the bridge(s): 76°27’58”W, 36°11’39”N

5) Dimensions of the existing bridge(s):

   a) Vertical clearance(s) as indicated on previous plan sheets (include both the open and closed-to-navigation clearances for movable spans). [The proposed and existing vertical clearances must be compared using the same datums. This may require surveying the existing bridge]: Unlimited when swing span is open; 7 ft when swing span is closed.

   b) Horizontal clearance as indicated on previous plan sheets: 55 ft at north opening and 60 ft at south opening

   c) Length of existing bridge(s): 640 ft

   d) Width of existing bridge(s): 30.0 ft

6) Owner of the existing bridge(s): NCDOT

j. Discuss construction methodology, if known, and removal of existing bridge(s), as applicable:

1) Discuss proposed construction methodology and restrictions: In shallow waters, a crawler crane on a trestle will be used to construct the bridge. A temporary causeway will be built near the north side of the bridge. Once the new roadway is complete, the existing bridge and causeway will be removed. The existing tender house will be removed and a new one built on the new bridge. Typical bridge construction equipment will include cranes, pile hammers, vibratory hammers, jetting pumps, forklifts, generators, etc. Typical roadway construction will include but is not limited to the following equipment; bulldozers, dump trucks and motor graders. A power cable to the pivot and resting piers will be installed via hand jetting performed by divers outside of the February 15 - June 30 moratorium.

2) Discuss maintenance of land traffic during construction activities: land traffic will remain on the existing bridge/road, and briefly on a temporary causeway during construction.

3) Discuss extent of removal of existing bridge(s) (e.g. in its entirety, two feet below the mud line, down to or below the natural bottom of the waterway or to a specific elevation), time needed for removal, etc.: The causeway of the existing roadway will be removed once the new roadway and bridge are open to the public. As much of the existing roadway and underlying causeway will be removed as possible without resulting in excessive damage to the surrounding wetlands. The causeway will then be backfilled where required such that there are not depressional areas lower than the adjacent wetlands. This effort is anticipated to take 6-months and will commence once traffic is diverted onto the new roadways/bridge.

4) Discuss demolition methodology: The pivot pier and existing deck will be wire sawed into manageable pieces for removal by crane. Following removal of the

deck, girders, and bent caps, piles would be extracted with vibratory hammers. In the event that the existing piles are of deteriorated quality and they break apart during vibratory extraction, piles will be removed to the mudline.

NOTE: In the interest of navigational safety, the Coast Guard must make the final decision concerning the extent of bridge(s) removal.

k. Other agencies with jurisdiction over the proposed project:

1) Agency:

US Army Corps of Engineers
NC Division of Water Resources
NC Division of Coastal Management

2) Permits or type of approvals required for the project:

US Army Corps of Engineers Section 404 Permit
NC Division of Water Resources Section 401 Permit
NC Division of Coastal Management CAMA Permit

B. ENVIRONMENTAL INFORMATION:

1. **National Environmental Policy Act**

Lead Federal Agency: US Army Corps of Engineers

List Cooperating Agencies for project: US Environmental Protection Agency, US Fish and Wildlife Service, National Marine Fisheries Service, NC Wildlife Resource Commission.

a. Type of environmental document.

☐ Environmental Impact Statement/Record of Decision (EIS/ROD)

Cite location(s) in the application package:

☒ Environmental Assessment/State Finding of No Significant Impact (EA/SFONSI)

Cite location(s) in the application package:

☐ Categorical Exclusion (CE)

Cite location(s) in the application package:

b. Has the environmental document been modified, reevaluated, supplemented or rescinded for the proposed action?

☐ Yes ☒ No

If yes, cite location(s) in the application package:

2. **Environmental Effects Abroad**

   a. Does the proposed project involve a bridge connection to Canada or Mexico?

   ☐ Yes ☒ No

   If yes, cite location(s) in NEPA document where environmental effects abroad are described:

3. **Clean Water Act**

   a. Has a Water Quality Certification (WQC), waiver or statement that the WQC is not required been obtained from the appropriate federal, interstate, or state agency?

   ☒ Yes ☐ No

   If yes, cite location(s) in the application package: Attached.

   NOTE: The USCG will not accept an application package as complete if a WQC, waiver, or statement from the appropriate regulatory body has not been obtained.

   b. Name of the Federal, State or Tribal certifying agency and point of contact with phone and email address, if available:

   NC Division of Water Resources, Garcy Ward, 252-948-3917, Garcy.ward@ncdenr.gov

   c. If the WQC is granted under a Programmatic Agreement (e.g., U.S. Army Corps of Engineers (USACE) Nationwide Permit (NWP) include the date of the NWP, the type of NWP (14, 15, etc.) and the NWP number and title: N/A

   d. For permit amendment actions, include a new WQC or a written confirmation from the certifying agency that the existing WQC has been reissued/renewed or is still valid for the proposed action.

   ☐ New WQC Attached

   ☐ Written Confirmation of WQC validity attached

4. **Wetlands**

   a. Is the proposed project located in or adjacent to a wetland?

   ☒ Yes ☐ No

b. If yes, what is the acreage of wetlands that will be permanently and temporarily impacted by the proposed project?

Permanent wetland impact: 0.06 acre. Temporary wetland impact: 0.44 acre.

Include USACE permit (nationwide authorization or individual), if required, and cite where wetland mitigation measures are described in the application package:

NWP 14 (Attached). Due to minimal impact to wetlands, mitigation was not required for impacts. However, removal of existing causeway and grading the area to surrounding wetland elevations is anticipated to potentially create new wetlands.

5. **Coastal Zone Management Act** - The Coastal Zone Management Act **(**CZMA**)** of 1972 (16 U.S.C. § 1451), as amended, and its implementing regulations (15 CFR Part 930), requires all projects located within the designated coastal zone of a state to be consistent with the State's federally approved CZM plan (CZMP).

a. Is the project located in a state that has an approved Coastal Zone Management Act Plan (CZMP)?

☒ Yes ☐ No

b. If yes, is the project within an area included in the federally approved CZMP?

☒ Yes ☐ No

c. If yes, has the State specifically excluded this activity from its federally approved CZMP?

☐ Yes ☒ No

Include State CZM concurrence/with consistency certification and cite location(s) in the application package: An application for a Coastal Area Management Act (CAMA) Major Development Permit was submitted to the NC Division of Coastal Management on February 12, 2019.

6. **Floodplains**

a. Is the proposed project located in the base floodplain? An encroachment into the base floodplain does not exist when only the piers, pilings, or pile bents are located in the floodplain.

☒ Yes ☐ No

b. Is there a significant encroachment (constituting a considerable probability of loss of human life; likely future damage associated with the encroachment that could be substantial in cost or extent; or a notable adverse impact on natural and beneficial floodplain values) into the floodplain?

☐ Yes ☒ No

c. If yes, provide documentation and cite location(s) in the application package:

7. **Wild and Scenic Rivers**

a. Is the river involved in the proposed bridge project a designated Wild and Scenic River?

☐ Yes ☒ No

b. If yes, attach correspondence with the river-administering agency and cite location(s) in the application package:

8. **Coastal Barrier Resources Act**

a. Does the proposed project connect to a unit of the Coastal Barrier Resources System?

☐ Yes ☒ No

b. If yes, and the project is federally funded, cite location of Section 6 exception in the application package and any correspondence with the FWS:

9. **Land and Water Conservation Fund Act**

a. Does the proposed project involve a conversion of land or facilities funded under Section 6(f) of the Land and Water Conservation Fund Act?

☐ Yes ☒ No

b. If yes, include correspondence with the NPS and authorization from the Secretary of the Interior for that conversion and cite location(s) in the application package:

10. **National Marine Sanctuaries Act**

a. Is the proposed project in or adjacent to a National Marine Sanctuary?

☐ Yes ☒ No

b. Is the proposed bridge(s) likely to destroy, cause loss of, or injure a resource of a National Marine Sanctuary? (If no, provide evidence)

☐ Yes ☒ No

c. If yes, include evidence of consultation with Office of National Marine Sanctuaries and the agency's findings/conditions and cite location(s) in the application package:
Project is not within a National Marine Sanctuary.

11. **Marine Protected Areas**

a. Is the proposed project in or adjacent to a Marine Protected Area (MPA) as defined in section 4(d) of Executive Order 13158?

☒ Yes ☐ No Albemarle Sound River Herring Management Area

b. If yes, will the proposed project affect the natural or cultural resources that are protected by the MPA? (If no, provide evidence)

☐ Yes ☒ No February 2013 Environmental Assessment / January 2018 State Finding of No Significant Impact

c. If yes, include evidence of correspondence with MPA Center, if applicable, and cite location(s) in the application package: N/A

12. **Endangered Species Act**

a. Are there federally designated threatened or endangered species and/or critical habitat in the area that the proposed project is located? (If no, provide evidence)

☒ Yes ☐ No Atlantic Sturgeon and West Indian Manatee, suitable habitat present.

b. May the proposed project affect federally designated threatened or endangered species and/or critical habitat? (If no, provide evidence)

☒ Yes ☐ No

c. If yes, was there formal or informal consultation with the United States Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS)?

☐ Formal consultation

☒ Informal consultation

d. If formal, provide date(s) and attach biological assessment, biological opinion, and any other relevant correspondence and cite location(s) in application package:

e. If informal, provide dates and include correspondence or documented phone conversations with and from USFWS/NMFS and cite location(s) in the application package: May 17, 2017, Appendix A of the State Finding of No Significant Impact January 2018. A biological conclusion of May Affect, Not Likely to Adversely Affect for West Indian Manatee. NCDOT has agreement with USFWS to implement" "Precautions for Constructions in Areas Which May Be Used by the West Indian Manatee in North Carolina".

f. Include Biological Assessment/Biological Evaluation, as appropriate.

13. **Fish and Wildlife Coordination Act**

a. Include any correspondence with USFWS and the relevant state wildlife agency regarding Fish and Wildlife Coordination Act coordination and cite location(s) in the application package: February 2013 Environmental Assessment

14. **Magnuson-Stevens Fishery Conservation and Management Act**

a. Will the proposed project likely adversely affect designated Essential Fish Habitats (EFH) as defined in the Magnuson-Stevens Act? (If no, provide evidence)

☐ Yes ☒ No January 2018 State Finding of No Significant Impact

b. Identify location of EFH assessment and relevant correspondence with NMFS in the application package:

15. **Marine Mammal Protection Act**

a. Does the proposed project involve a "take" of marine mammals as defined in the Marine Mammal Protection Act?

☐ Yes ☒ No

b. If yes, include the incidental harassment authorization or letter of authorization from NMFS and any relevant correspondence and cite location(s) in the application package:

16. **Migratory Bird Treaty Act**

a. Does the proposed project involve a potential take of migratory birds as defined in the Migratory Bird Treaty Act? (If no, provide evidence)

☐ Yes ☒ No Cliff swallow nests are present on the existing bridge. If possible, bridge demolition will occur outside of bird nesting season. Otherwise, action will be taken to preclude bird nesting (i.e. netting) beneath the bridge.

b. If yes, is a permit required?

☐ Yes ☒ No

c. If a permit is required, include it and any correspondence with USFWS and cite location(s) in the application package:

17. **Bald and Golden Eagle Protection Act**

a. May the proposed project take or disturb bald or golden eagles (including nests) as defined in the Bald and Golden Eagle Protection Act? (If no, provide evidence)

☐ Yes ☒ No Previous surveys have indicated no nests are located in the project area. Details in January 2018 State Finding of No Significant Impact.

b. If yes, is a permit required?

☐ Yes ☐ No

c. If a permit is required, include it and any correspondence with USFWS and cite

location(s) in the application package.

18. **Invasive Species**

a. Does the proposed project have potential to introduce or foster the spread of invasive species?

☐ Yes ☒ No

b. If yes, cite the document that describes measures that will be taken to minimize this risk and location(s) in the application package:

19. **Section 106**

a. Does the proposed project have potential to impact properties (including submerged abandoned shipwrecks) listed in or eligible for inclusion in the National Register of Historic Places?

☒ Yes ☐ No

b. If yes, provide evidence of consultation with the State Historic Preservation Officer (and the Advisory Council on Historic Preservation, if applicable) and cite location (s) in the application package. Include: Attached.

☐ Copies of the correspondence

☒ Memorandum of Agreement

☐ No effect determination

c. For projects involving Federal lands only provide:

☐ Archeological clearances

☐ Archeological reports

20. **Clean Air Act**

a. Does the proposed project occur in an area of nonattainment or maintenance for any criteria pollutant?

☐ Yes ☒ No

b. If project occurs in a nonattainment or maintenance area, do the transportation or general conformity regulations, or both, apply?

☐ General ☐ Transportation

c. Is the project exempt from a transportation conformity analysis for any of the reasons listed in 40 CFR § 93.126? Which reason?

☐ Yes ☐ No Reason:

d. Is the project exempt from a general conformity analysis for any of the reasons listed in 40 CFR § 93.153(c)?

☐ Yes ☐ No

e. If general conformity applies, is the project listed in a conforming State Implementation Plan (SIP)?

☐ Yes ☐ No

f. If a general conformity determination was prepared, include the draft and final determinations and any relevant correspondence and cite their location(s) in the application package:

g. If transportation conformity applies, is the project listed in a conforming SIP, Transportation Improvement Program (TIP), Regional Transportation Plan (RTP), or Federal Implementation Plan (FIP)?

☐ Yes ☐ No

h. If yes, cite location of information regarding listing in the application package:

i. If transportation conformity applies, does the project contribute to any new localized CO, PM_{10}, or $PM_{2.5}$ violations or increase the frequency or severity or any existing violations of the same?

☐ Yes ☐ No

j. If yes, cite location of information in the application package:

21. **Actions to Address Environmental Justice in Minority or Low-Income Populations**

a. Does the proposed project involve disproportionate adverse impacts to minority and/or low-income populations as defined in Executive Order 12898?

☐ Yes ☒ No

b. If yes, include the analysis describing the impacts and cite location(s) in the application package:

c. If yes, cite the location in the application package that describes measures to be taken to reduce those impacts:

22. **Hazardous Materials, Substances or Wastes**

a. Does the proposed project involve or is it located near a Superfund site or any site regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA) or State

law regulating hazardous materials, substances or wastes?

☐ Yes ☒ No

b. If yes, cite the location(s) in the NEPA document where hazardous materials, substances or wastes are discussed:

See Enclosure [ ] for plan sheets.

See Enclosure [ ] for Waterway Data Requirements

WATERWAY DATA REQUIREMENTS (as required by the Coast Guard, include the below information as an attachment to the application letter per Appendix A of the BPAG)

A. Means of Data Collection: See BPAG for additional information

B. Present governing bridge(s) or aerial structure(s) on the waterway:

1. Identify all bridges upstream and downstream of the proposed bridge site and their existing horizontal and vertical clearances to determine the existing minimum horizontal and vertical clearances (including overhead transmission line clearances). Provide in table format.

Direction	Crossing Carrying Structure	Horizontal Clearance	Vertical Clearance
Upstream	Railroad Bridge	22 ft	3 ft
Downstream	US 17 Bypass	55 ft	33 ft

(If all bridges downstream have the same minimum clearance, state instead of the above requested information.)

2. Does the proposed bridge(s) match (or is greater than) the navigational clearance of existing structures on the waterway? Yes

3. What is the most restrictive horizontal clearance on the waterway? (This may be a fixed bridge downstream/upstream of the proposed structure, a low hanging power line downstream/upstream of the bridge(s), or it may be some other structure that limits horizontal clearance. Sometimes the existing to-be-replaced bridge(s) is the most restrictive structure.) Upstream bridge at railroad bridge.

   a. Milepoint: MP 13

   b. Horizontal clearance: 22 ft

4. What is the most restrictive vertical clearance on the waterway? (This may be a fixed bridge downstream/upstream of the proposed structure, a low hanging power line downstream/upstream of the bridge(s), or it may be some other structure which limits vertical clearance. Sometimes the existing to-be-replaced bridge(s) is the most restrictive structure.) Upstream bridge at railroad bridge.

   a. Milepoint: MP 13

   b. Vertical clearance: 3 ft

5. Will the proposed bridge(s) become the most restrictive/obstructive structure across the waterway? No.

C. Waterway characteristics: (All domestic bridge navigational clearances should be stated in linear feet in decimal form vs. feet and inches. All international bridge navigational clearances should be stated in linear unit of measure as well as the metric equivalent.)

1. Various waterway stages: (Datum that is used). (Low Water Datum [LWD])

2. Natural flow of the waterway including currents, waterway velocity, water direction, and velocity fluctuations (seasonal, daily, hourly, etc.), that might affect navigation. The Perquimans River flows approximately west to east at the subject bridge, though it is also tidally influenced at the subject bridge.

3. Width of the waterway at bridge site**:** 680 ft.

4. Depth of the waterway and elevation fluctuations at bridge site: [List the depth at each waterway bridge stage (ex. Range of tides, average high water elevation, etc.): Water depth is 11 ft to 14 ft (LWD), tides vary in height by about 3 ft, average high water elevation

5. Waterway layout and geometry: (For example, is there a dam or lock; does the elevation of the approach impact the required bridge(s) clearance?) There are no restrictions or concessions that are required due to waterway layout and geometry.

6. Channel and waterway alignment: Location of the channel(s). The bridge is located at a sharp bend in the river, where the river is flowing south and takes a sharp turn to flow around a point and travel in a northeast direction before widening and generally flowing southeast below the subject bridge. The navigational channel is located slightly towards the southern side of the bridge.

7. Other limiting factors: (For example, bends in the waterway within one-half mile of project site, hindrances to free navigation, fog, hydraulics, etc. There is a bend in the river upstream of the subject bridge.

D. <u>Do vessels that engage in emergency operations (i.e., law enforcement, fire, rescue, emergency dam repair, etc.), national defense activities (i.e. cruisers, fuel barges, munitions ships, etc.) or channel maintenance (i.e., dredges, dam and levee repair, etc.) operate on the waterway? If yes, describe the vessels and provide the following information:</u> No.

1. Does levee maintenance, bridge work (other bridges), channel maintenance and emergency operations upstream of bridge require certain vessels to transit the waterway?

2. Does the proposed bridge(s) impact USCG and/or other government vessels' ability to transit the bridge(s) to conduct mission essential functions (icebreakers, patrols, etc.)?

3. Vessels using the waterway during the proposed bridge(s) lifespan (should include):

   a. Vessel name;

   b. Registration/documentation numbers;

   c. Vessel type;

   d. Vessel owner contact information (company/individual name, address, contact info.);

e. Primary vessel mooring location (include waterway milepoint, if known);

f. Vessel overall length;

g. Vessel beam;

h. Vessel draft (depth of hull below waterline at full load);

i. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);

j. Specialized vessels that use the waterway (e.g. vessels which have limited maneuverability due to inherent design or mode of operation);

k. Safety margin required by vessel to navigate through the bridge(s);

l. Vessel transit frequencies under proposed bridge(s), transit speeds, and load configurations; and

m. Vessel traffic characteristics (to include if tug assist is required for transit through the bridge(s) due to limited horizontal clearance).

4. Will the proposed bridge(s) provide the horizontal and vertical clearances for the safe, efficient passage of the largest of these vessels? Why?

5. If no, estimate the number of vessels in each of the above categories unable to pass through the proposed bridge(s). Give the name, length overall (LOA), beam, draft and height of highest fixed point above the waterline for vessels affected by the bridge(s).

6. Can these vessels be modified (i.e., folding mast, relocation or equipment, etc.) without decreasing their respective response times? If so, name the vessels.

7. If modifications are feasible, state the name of the vessel(s), their trip frequency, the necessary modifications, the cost of the modification(s) and who will pay for them (i.e., vessel owner, applicant, other).

8. Provide any additional information concerning the potentially impacted or burdened users of the waterway as well as the future use of the waterway.

E. <u>Has the United States Corps of Engineers (USACE) completed or does it plan to complete a federal navigation project on the waterway? If yes, provide the following information:</u> No.

1. Project name, downstream/upstream milepoints, depth, type of project, scope, status of project and other limiting factors.

2. Whether there is/was a "design vessel" used in planning the channel? What is/was the design vessel? Was the design vessel reviewed by the Coast Guard?

3. The following specifications of the vessel for which the navigation project is or will be

designed: LOA, beam, draft and height of highest fixed point above the waterline.

4. Will the proposed bridge(s) provide the horizontal and vertical clearances necessary for the safe, efficient passage of the vessel for which the navigation project was designed?

5. If so, can the vessel be modified to clear the proposed bridge(s) without substantially increasing operating costs?

6. If modifications are feasible, state the necessary modifications, costs of any modification(s), and who will pay for the modifications.

7. Are there projected changes in waterway usage based upon anticipated waterway improvement projects?

8. Does the proposed bridge(s) impact USACE ability to transit the bridge(s) in a Federal project channel?

F. **Describe the present and prospective recreational navigation:** Will the proposed bridge(s) affect the safe, efficient movement of any segment of the present or prospective recreational fleet operation on the waterway? If yes, provide the following information: No.

1. Vessels utilizing the waterway during the proposed bridge(s) lifespan. (Information in this bullet should include:)

   a. Vessel name;

   b. Registration/documentation numbers;

   c. Vessel type;

   d. Vessel owner contact information (company/individual name, address, contact info.);

   e. Primary vessel mooring location (include waterway milepoint, if known);

   f. Vessel overall length;

   g. Vessel beam;

   h. Vessel draft (depth of hull below waterline at full load);

   i. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);

   j. Specialized vessels that use the waterway (e.g., vessels which have limited maneuverability due to inherent design or mode of operation);

   k. Safety margin required by vessel to navigate through the bridge(s);

   l. Vessel transit frequencies under proposed bridge(s), transit speeds, and load configurations; and

m. Vessel traffic characteristics (to include if tug assist is required for transit through the bridge(s) due to limited horizontal clearance).

2. What is the estimated percentage of the recreational fleet, which may be affected by the proposed bridge(s)?

3. Will the proposed bridge(s) eliminate the access of these vessels to existing or planned commercial, water-oriented facilities (i.e., restaurants, shops, recreational areas, marinas, etc.) in the vicinity of the proposed bridge(s)? If yes, describe these facilities.

4. Is it feasible to modify the affected segments of the fleet to clear the proposed bridge(s) without substantially increasing operating costs? If yes, name the vessel(s), state the necessary modifications, cost of modifying each vessel and person or entity responsible for financing the modifications.

5. Provide any additional information concerning the potentially impacted or burdened users of the waterway as well as the future use of the waterway.

NOTE: Check with local USACE District Office, Chamber of Commerce or other organizations for proposed marinas, recreational areas, shops, etc.

G. Describe the present and waterway and prospective commercial navigation and the cargoes moved on the waterway: Will the proposed bridge(s) affect the safe, efficient movement of any segment of the present or prospective commercial fleet operating on the waterway? If yes, provide the following information: No.

1. Vessel name;

2. Registration/documentation numbers;

3. Vessel type;

4. Vessel owner contact information (company/individual name, address, contact info.);

5. Primary vessel mooring location (include waterway milepoint, if known); vessel overall length;

6. Vessel beam;

7. Vessel draft (depth of hull below waterline at full load);

8. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);

9. Specialized vessels that use the waterway (e.g. vessels which have limited maneuverability due to inherent design or mode of operation);

10. Safety margin required by vessel to navigate through the bridge(s);

11. Vessel transit frequencies under proposed bridge(s), transit speeds, and load

configurations; and

12. Vessel traffic characteristics (to include if tug assist is required for transit through the bridge(s) due to limited horizontal clearance).

13. Does the proposed bridge(s) impact existing and future cruise ship ports-of-call/terminals?

14. Does the proposed bridge(s) impact ports supporting post-Panamax vessels?

15. Does the proposed bridge(s) impact vessels that produce unique products for the region?

16. Does the proposed bridge(s) impact vessels that require helper boats/tugs? (Note the combined clearance requirement of the vessel and the helper boat/tug.)

17. Document annual cargo movements (cargo types and quantities);

18. State the estimated percentage of the commercial fleet, which may be affected by the proposed bridge(s).

19. Will the proposed bridge(s) clearance impact present and/or prospective upstream commercial activity, e.g., jobs and economic growth and development?

20. If yes, address any existing or planned commercial/industrial developments negatively affected by the proposed clearances and discuss the economic impacts the proposed clearances will have on these businesses:

21. Document the foreseeable needs to future navigation;

22. Provide existing and historical navigational use and waterway conditions;

23. Provide input from waterway dependent facilities concerning future use;

24. Describe land use zoning along the waterway (particularly within the riparian zone);

25. Describe future vessel size and traffic trends;

26. Include input from states based on state development plans;

27. Include input from facilities based on business plans;

28. Document local commercial shipping and other businesses affected by this restriction.

Note: the next opportunity to adjust clearances for navigation is usually between 50-100 years unless interim waterway improvement projects include the cost of bridge alterations.

29. Is it feasible to modify the restricted vessels to clear the proposed bridge(s) without substantially increasing operating costs? If yes, name the vessel(s), state the necessary modifications, cost of modifying each vessel and company or entity responsible

30. Provide any additional information concerning the potentially impacted or burdened users

of the waterway as well as the future use of the waterway.

H. Identify the name and contact information for marine facilities located within a 3-mile radius of the proposed project (public boat ramps, marinas or major docking facilities, boat repair facilities, etc. Hertford Bay Marina, 114 West Grubb Street, Hertford, NC 27944, (252) 426-5311.

I. Will the proposed bridge(s) block access of any vessel presently using local service facilities (i.e., repair shops, parts distributors, fuel stations)? If yes, provide the following information: No.

1. Describe the facilities impacted and estimate the number of vessels currently using these facilities.

    a. Vessel information should include the following for each blocked vessel:

        1) Vessel name;

        2) Registration/ documentation numbers;

        3) Vessel type;

        4) Vessel owner contact information (company/individual name, address, contact info);

        5) Primary vessel mooring location (include waterway milepoint, if known); vessel overall length;

        6) Vessel beam;

        7) Vessel draft (depth of hull below waterline at full load); and

        8) Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);

2. Could any of these facilities be considered critical infrastructure, key resources, or important/unique U.S. industrial capability (i.e., are these facilities unique or one of only a few of the type in the area?) Address whether the proposed clearances negatively affect those facilities and their customers.

3. What economic impact will loss of access have on these facilities? Include estimated dollar amount to support Commandant and DHS goals.

4. What is the distance to alternate service facilities capable of servicing the affected vessels? Describe the facilities.

5. Will use of these alternate facilities substantially increase vessel operation affected vessels? Describe the facilities.

6. Is it feasible to modify the affected vessels to clear the proposed bridge(s)?

7. If yes, state the name, necessary modifications, cost of modifying each vessel and who will pay for the modifications.

J. <u>Are alternate routes bypassing the proposed bridge(s) available for use by vessels unable to pass the proposed bridge(s)? If yes, provide the following information:</u> No.

1. State the number of vessels that will be forced to use alternate routes.

2. For each vessel identified in section H1.a. above, include the following information:

   a. Vessel name;

   b. Registration/documentation numbers;

   c. Vessel type;

   d. Vessel owner contact information (company/individual name, address, contact info.);

   e. Primary vessel mooring location (include waterway milepoint, if known);

   f. Vessel overall length;

   g. Vessel beam;

   h. Vessel draft (depth of hull below waterline at full load);

   i. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty); and

   j. Specialized vessels that use the waterway (e.g., vessels which have limited maneuverability due to inherent design or mode of operation);

3. Identify any alternate routes and provide the respective distances between the proposed bridge(s) and these routes.

4. Will use of these routes substantially increase the transit time and/or operating costs of the affected vessels? This relates to the mobility goals of the Commandant and DHS.

5. If yes, describe the impacts of increased transit time and/or operating costs.

6. Is it feasible to modify these vessels to clear the proposed bridge(s)?

7. If yes, state the name, necessary modifications, cost of modifying each vessel and who will pay for these modifications.

K. <u>Will the bridge(s) prohibit the entry of any vessels to the local harbor of refuge? If yes, describe the harbor and provide the following information:</u> No.

1. What percentage of vessels currently using the harbor refuge will not be able to pass the proposed bridge(s) to gain access to that refuge? Describe the vessels.

2. Provide vessel information for those vessels identified in J.1.:

    a. Vessel name;

    b. Registration/documentation numbers;

    c. Vessel type;

    d. Vessel owner contact information (company/individual name, address, contact info.);

    e. Primary vessel mooring location (include waterway milepoint, if known);

    f. Vessel overall length;

    g. Vessel beam;

    h. Vessel draft (depth of hull below waterline at full load);

    i. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty); and

    j. Specialized vessels that use the waterway (e.g. vessels which have limited maneuverability due to inherent design or mode of operation);

3. Is it feasible to modify these vessels to clear the proposed bridge(s)?

4. If yes, state the name, necessary modification, cost of modifying each vessel and who will pay for the modifications.

5. If alternate refuges are available, describe them and state the distance of each from the present harbor of refuge.

NOTE: A harbor of refuge is defined as a naturally or artificially protected water area that provides a place of relative safety or refuge for commercial and recreational vessels traveling along the coast or operating in a region.

L. Will the proposed bridge(s) be located within one-half mile of a bend in a waterway? If yes, describe the bend and provide the following information: Yes. The bridge is located at a sharp bend in the river, where the river is flowing south and takes a sharp turn to flow around a point and travel in a northeast direction before widening and generally flowing southeast below the subject bridge. The navigational channel is located slightly towards the southern side of the bridge.

1. Is there sufficient distance between the bridge(s) and the bend to allow proper vessel alignment for the safe, efficient passage of vessels through the proposed bridge(s)? Yes

2. If no, what factors make construction of the bridge(s) at an alternate location impractical?

M. Are there other factors (i.e., dockages, lightering areas, existing bridges, etc.) located within one-half mile of the proposed bridge(s), which would create hazardous passage

through the proposed structure? If yes, provide the following information: No.

1. Describe the factors. (For example, construction impacts to navigation and waterway users, etc.)

2. What mitigative measures are being recommended? (For example, navigation safety during construction, etc.) Why?

N. Do local hydraulic conditions (i.e., wave chop, cross currents, tides, shoals, etc.) increase the hazard of passage through the proposed bridge(s)? If yes, provide the following information: No.

1. Describe the conditions:

2. What mitigative measures are being recommended? Why?

O. Do local atmospheric conditions (i.e., strong, prevailing winds, fog, rapidly developing storms, etc.) increase the hazard of passage through the proposed bridge(s)? If yes, provide the following information: No.

1. Describe the conditions:

2. What mitigative measures are being recommended? Why?

P. Have guide clearances been established for the waterway? If yes, provide the following information: No.

1. Horizontal guide clearance;

2. Vertical guide clearance;

3. Do the proposed bridge(s) clearances differ from these guide clearances?

4. If yes, what factors justify deviating from these guide clearances?

Q. Are there other natural or man-made conditions that affect navigation (atmospherics, exclusion zones, etc.)? No.

1. Describe the conditions:

2. What mitigative measures are being recommended? Why?

R. State any other factors considered necessary for the safe, efficient passage of vessels through the proposed bridge(s)? N/A Are clearance gauges needed? No. Why? Swing span bridge so no clearance restrictions.

S. Include a description of the impacts to navigation caused or which could be reasonably caused by the proposed bridge(s) including but not limited to: proposed construction methodology, proposed or prospective changes to the existing bridge(s) operating schedule (for movable bridges), and any proposed mitigation to all unavoidable impacts

to navigation. Navigation will not be impacted by construction, and the existing bridge will remain in operation during construction. While the existing bridge has two navigational channels, the proposed bridge will have one navigational channel. The navigational clearances, as stated previously, will not be reduced as a result of this change.

1. Conduct a navigational impact report, and include a review of all bridges upstream and downstream of the proposed site to determine the minimum vertical and horizontal clearances available on the waterway. See navigation study attached

2. If the proposed bridge(s) is fixed, and is replacing an existing drawbridge with unlimited vertical clearance, the applicant must determine whether the proposed bridge(s) will accommodate existing and perspective navigation. The proposed bridge is not fixed.

T. Is there any proposed or completed mitigation for impacted waterway users? Are there any impacts that cannot be mitigated? No.

1. Can vessels and cargoes be partially disassembled/dismantled in order to transit the proposed bridge(s), and if so, is it economically reasonable? The Coast Guard must take into consideration a vessel's ability to adjust its operations without economic loss. Adjustment or mitigations techniques may include using other routes, lowering electronics (GPS, radar, communication antennae, etc.), lowering crane booms, etc.

2. Are alternative routes available for vessel passage? No.

3. Can vessels transit at typical lower water stages (mean low water, mean pool level, etc.)? Yes.

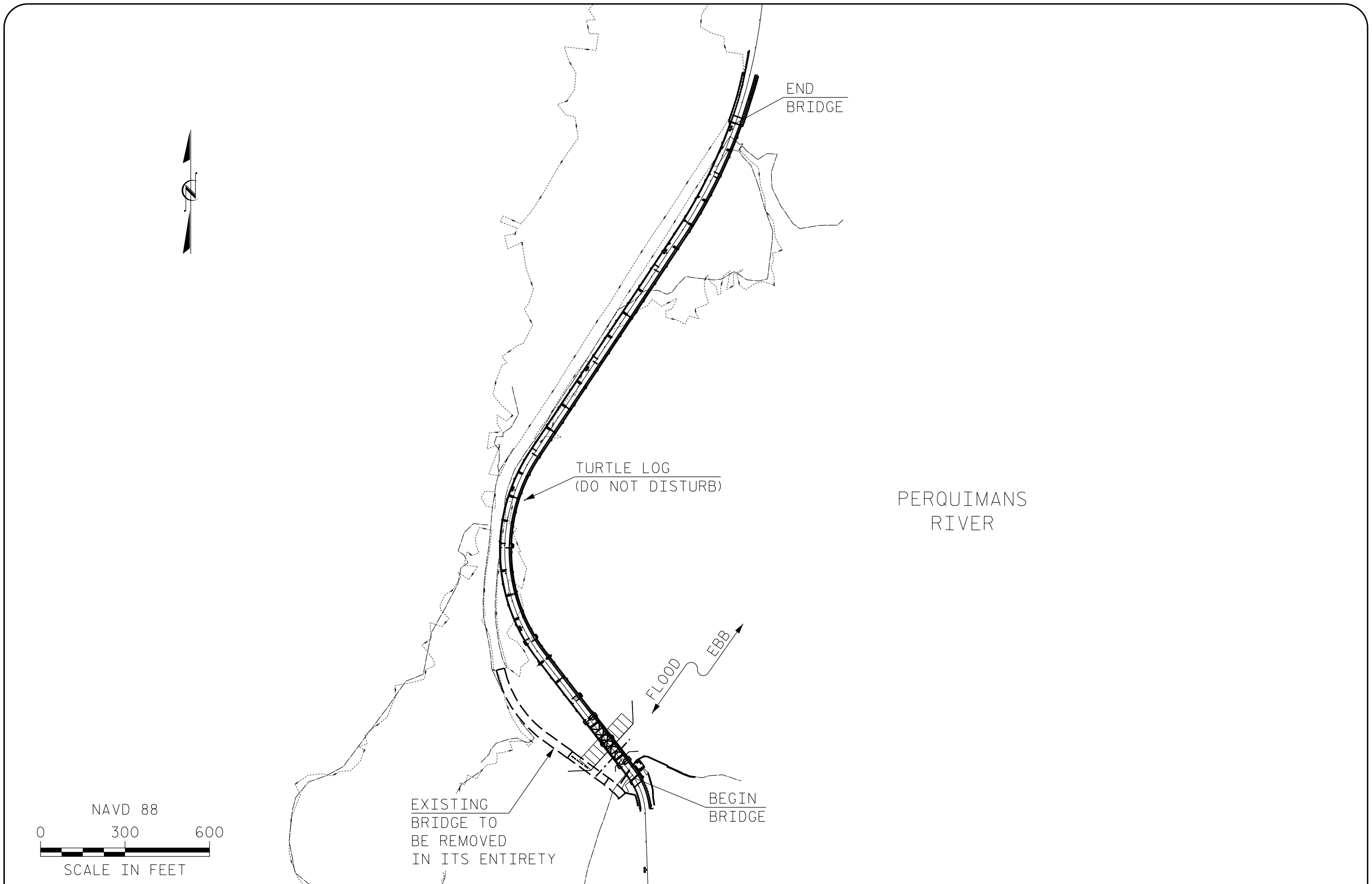
Please initiate review of the proposed project for authorization under a U.S. Coast Guard Permit. It is requested that any correspondence from your office regarding this project include the NCDOT TIP Number (R-4467). Should you have any questions regarding this information, please contact Jason Dilday at (919) 707-6111 or jldilday@ncdot.gov.

Sincerely,

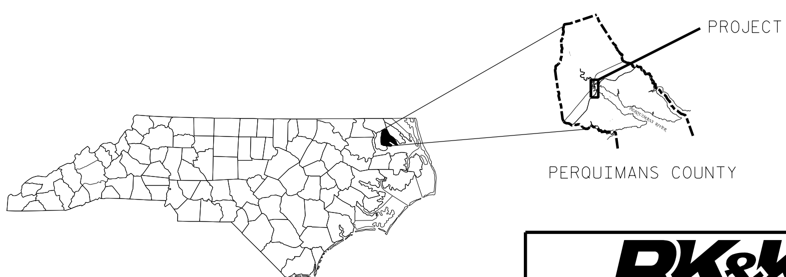
Carla Dagnino

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

Enclosures
Bridge plans
Navigation Study
Section 401 Water Quality Certification
Section 404 Nationwide 14
Memorandum of Agreement



VICINITY MAP



STATE OF NORTH CAROLINA

NOTE: CONCEPTUAL PLANS UTILIZED TO OBTAIN COAST GUARD BRIDGE PERMIT.

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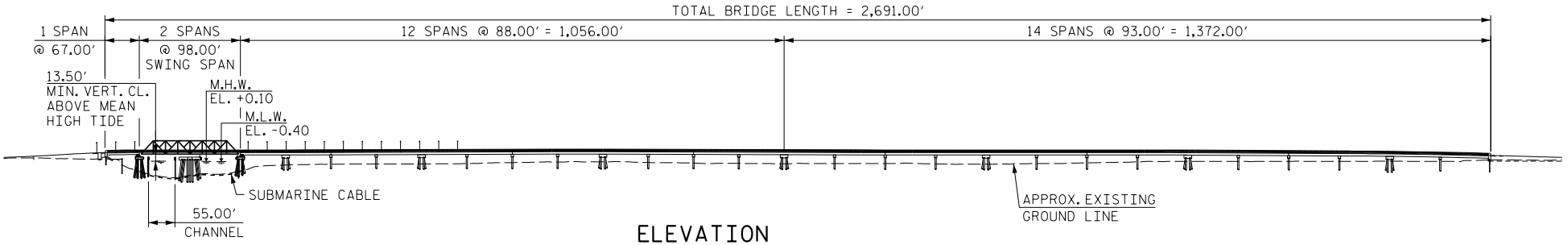
2/13/2019

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BRIDGE NO. 8 US 17 BUS/NC37
OVER PERQUIMANS RIVER AT
HERTFORD, PERQUIMANS, NORTH CAROLINA
LOCATED 12.0 MILES FROM
MOUTH OF PERQUIMANS RIVER

VICINITY MAP

DATE: 12/21/2018



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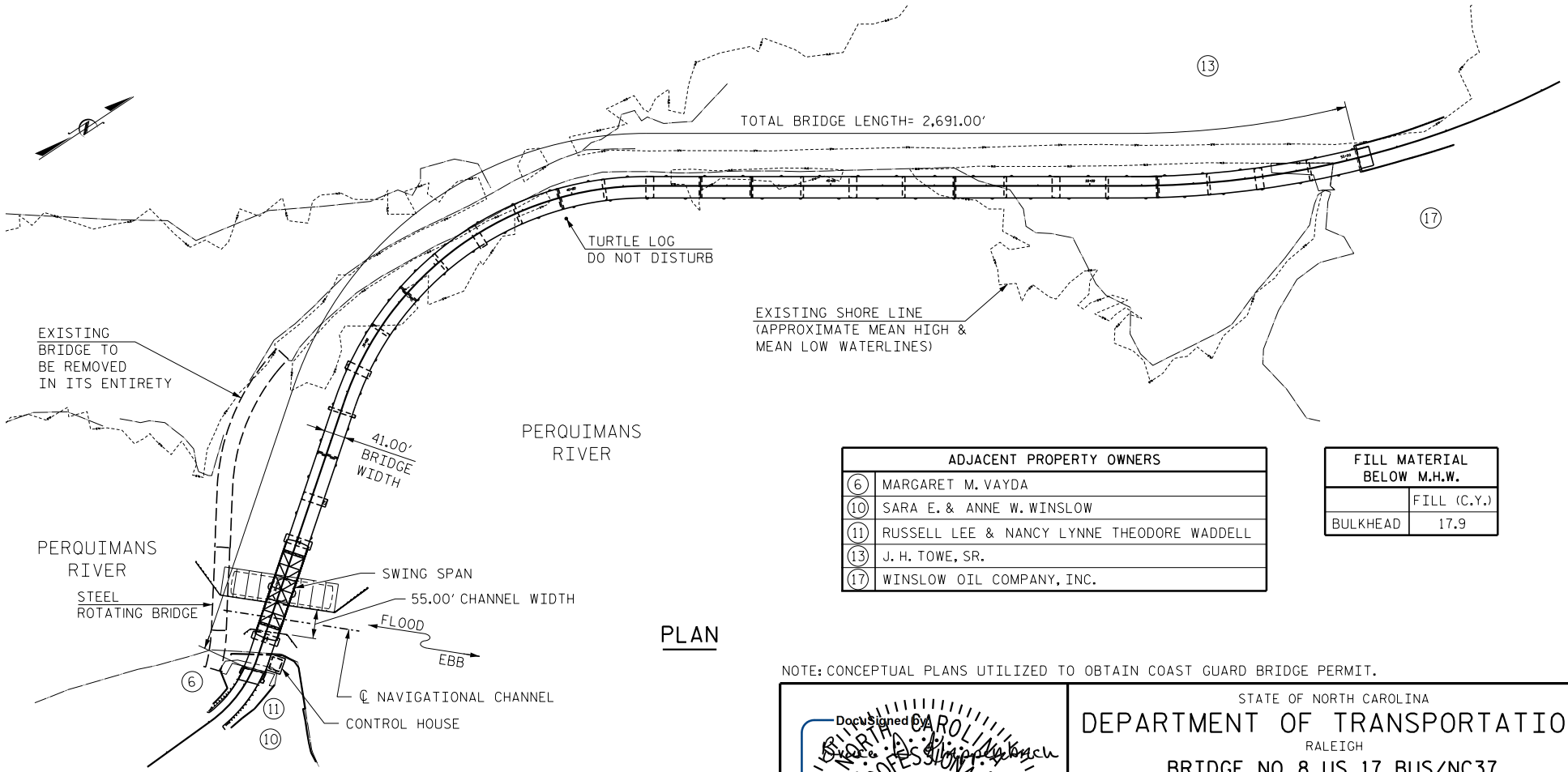

PLAN

ADJACENT PROPERTY OWNERS	
6	MARGARET M. VAYDA
10	SARA E. & ANNE W. WINSLOW
11	RUSSELL LEE & NANCY LYNNE THEODORE WADDELL
13	J. H. TOWE, SR.
17	WINSLOW OIL COMPANY, INC.

FILL MATERIAL BELOW M.H.W.	
	FILL (C.Y.)
BULKHEAD	17.9

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STATE OF NORTH CAROLINA
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LOCATED 12.0 MILES FROM
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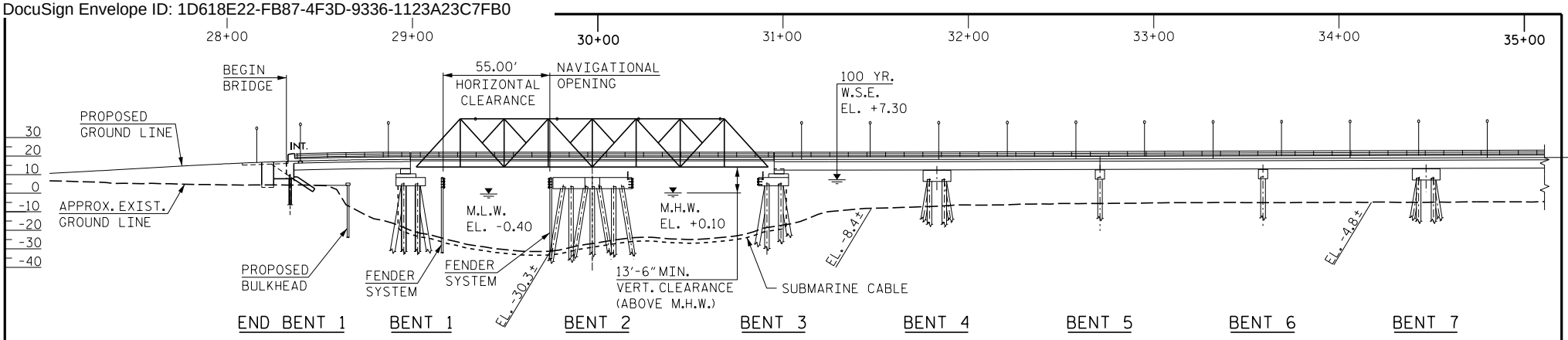
PLAN AND ELEVATION

DATE: 12/21/2018 SHEET 2 OF 8



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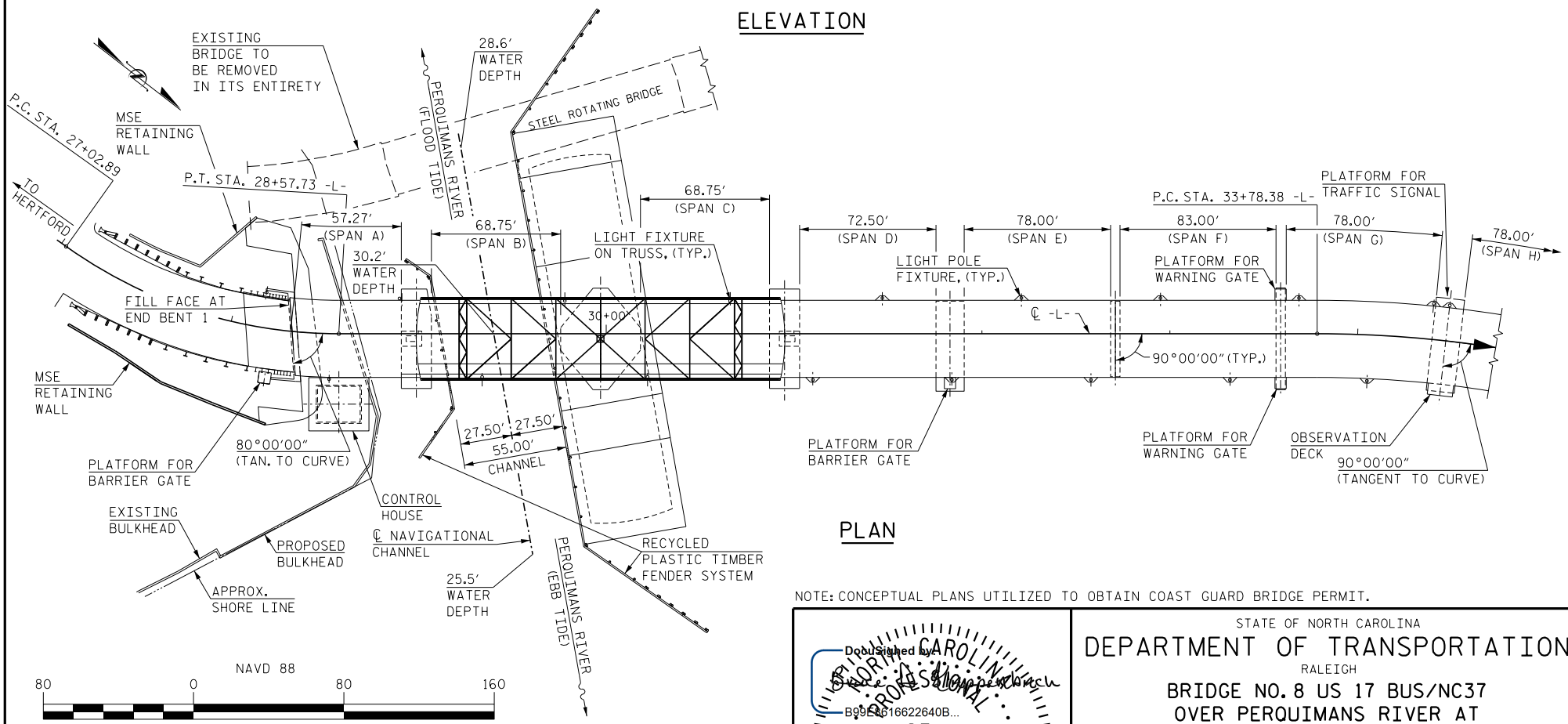
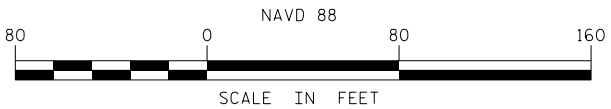


PLAN



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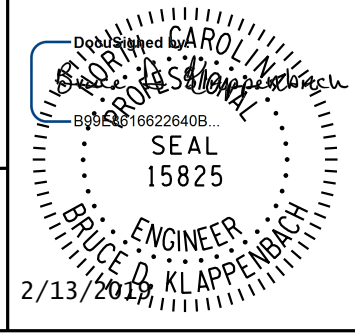
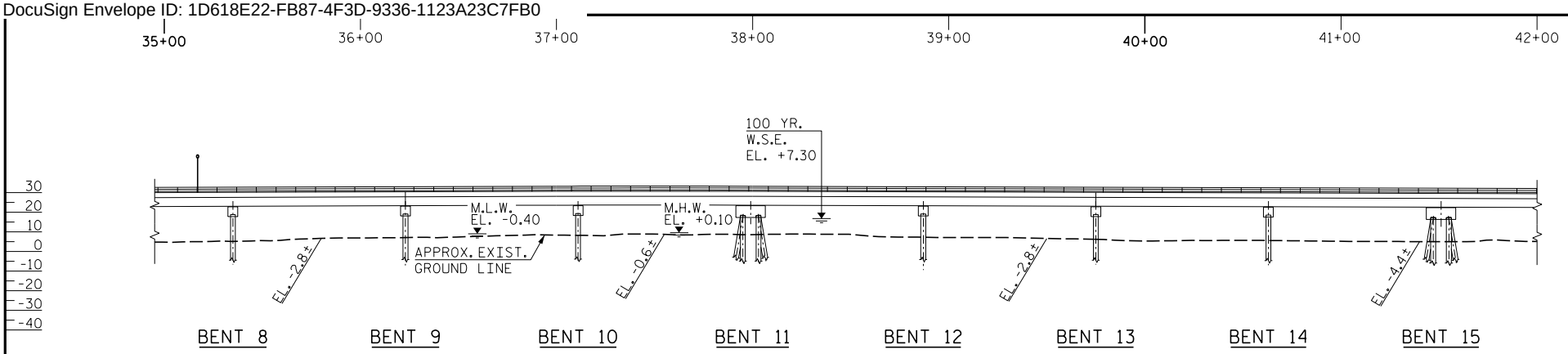


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BRIDGE NO. 8 US 17 BUS/NC37
OVER PERQUIMANS RIVER AT
HERTFORD, PERQUIMANS, NORTH CAROLINA
LOCATED 12.0 MILES FROM
MOUTH OF PERQUIMANS RIVER

PARTIAL PLAN AND ELEVATION

DATE: 12/21/2018 SHEET 3 OF 8



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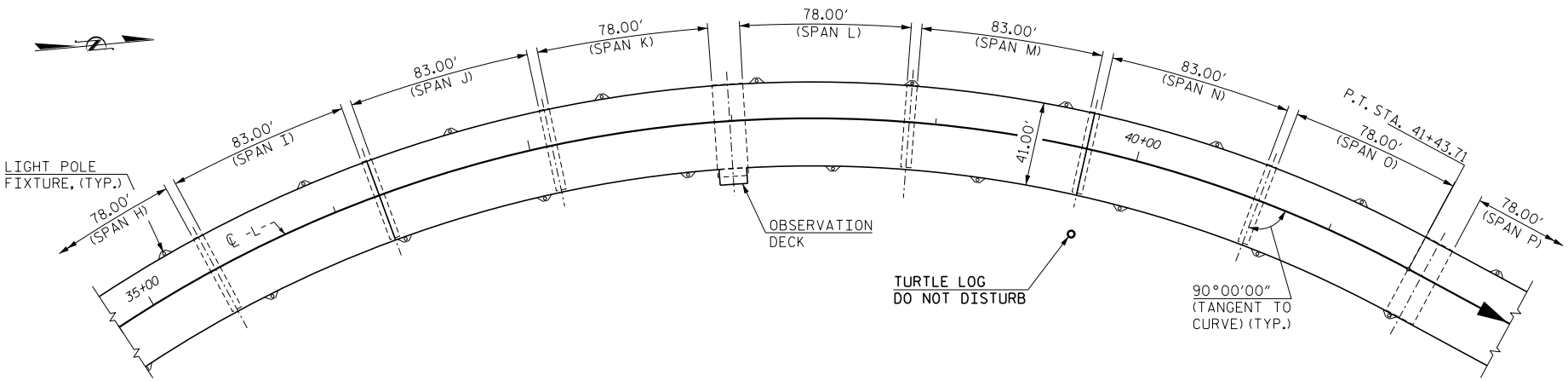

PLAN

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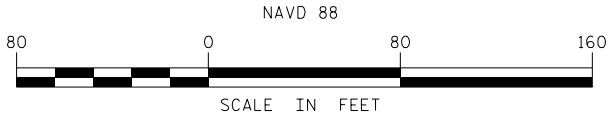

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2/13/2019

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BRIDGE NO. 8 US 17 BUS/NC37
OVER PERQUIMANS RIVER AT
HERTFORD, PERQUIMANS, NORTH CAROLINA
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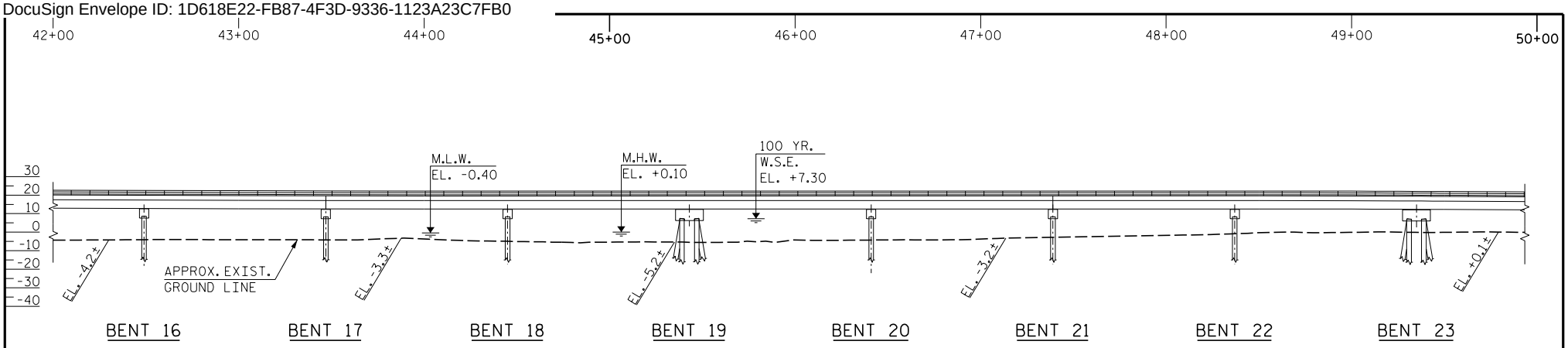
MOUTH OF PERQUIMANS RIVER

PARTIAL PLAN AND ELEVATION

DATE: 12/21/2018



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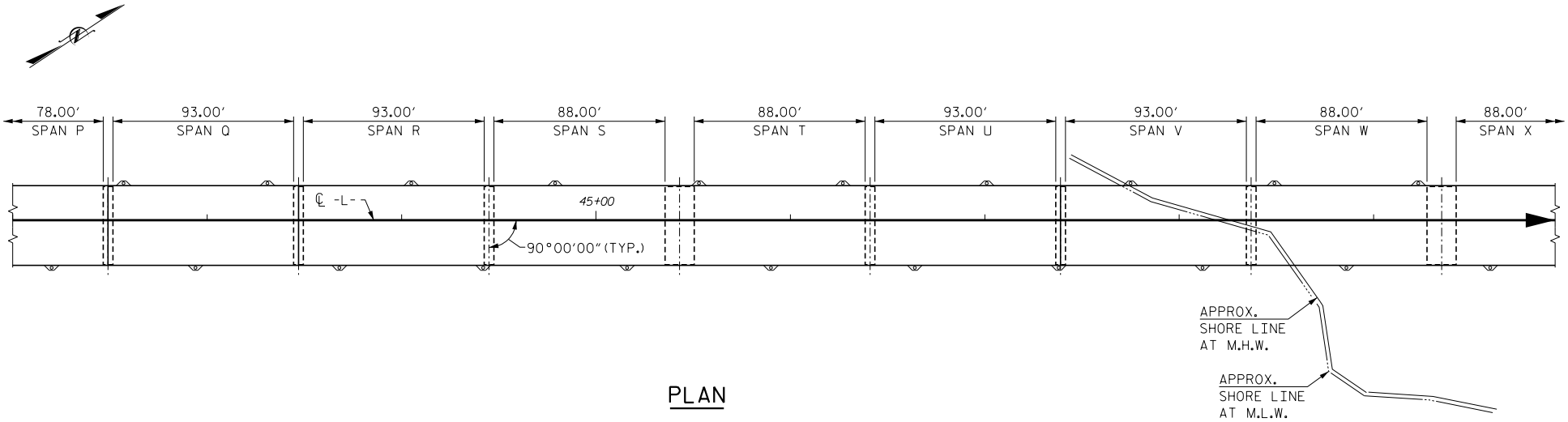

PLAN

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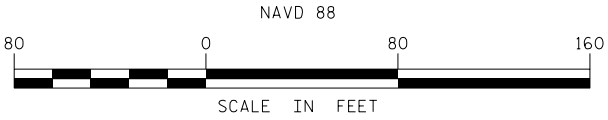

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STATE OF NORTH CAROLINA
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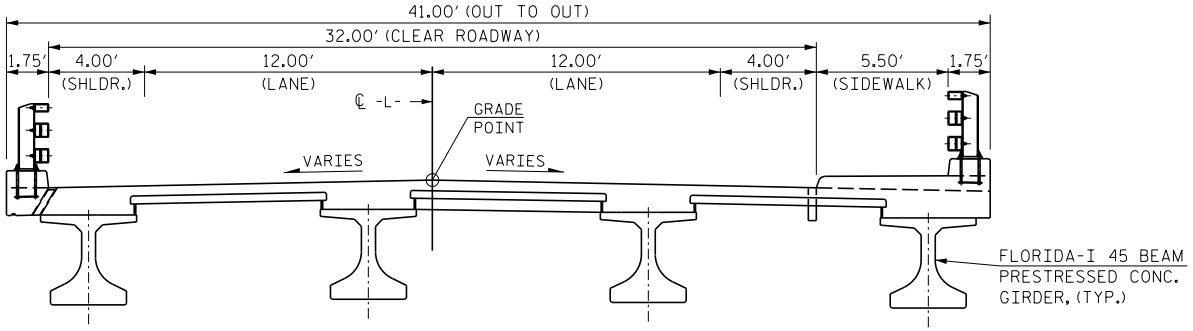
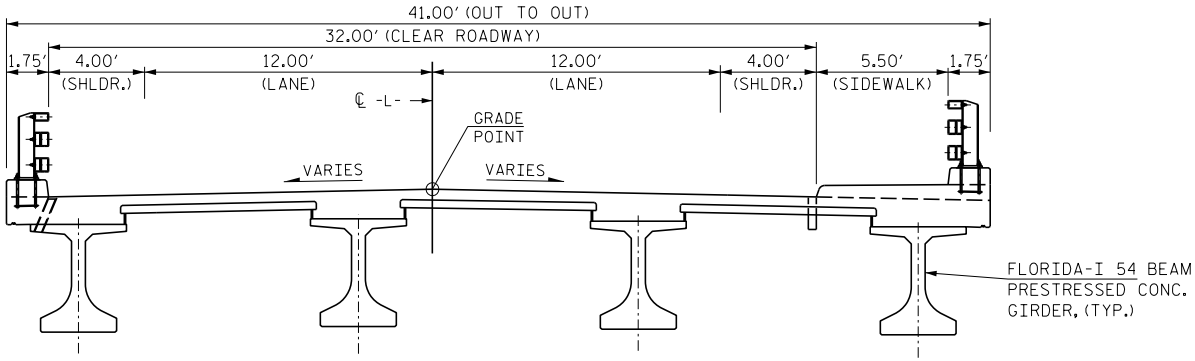
PARTIAL PLAN AND ELEVATION

DATE: 12/21/2018



TYPICAL SECTION - 45" GIRDERS



TYPICAL SECTION - 54" GIRDERS

NOTE: CONCEPTUAL PLANS UTILIZED TO OBTAIN COAST GUARD BRIDGE PERMIT.

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STATE OF NORTH CAROLINA
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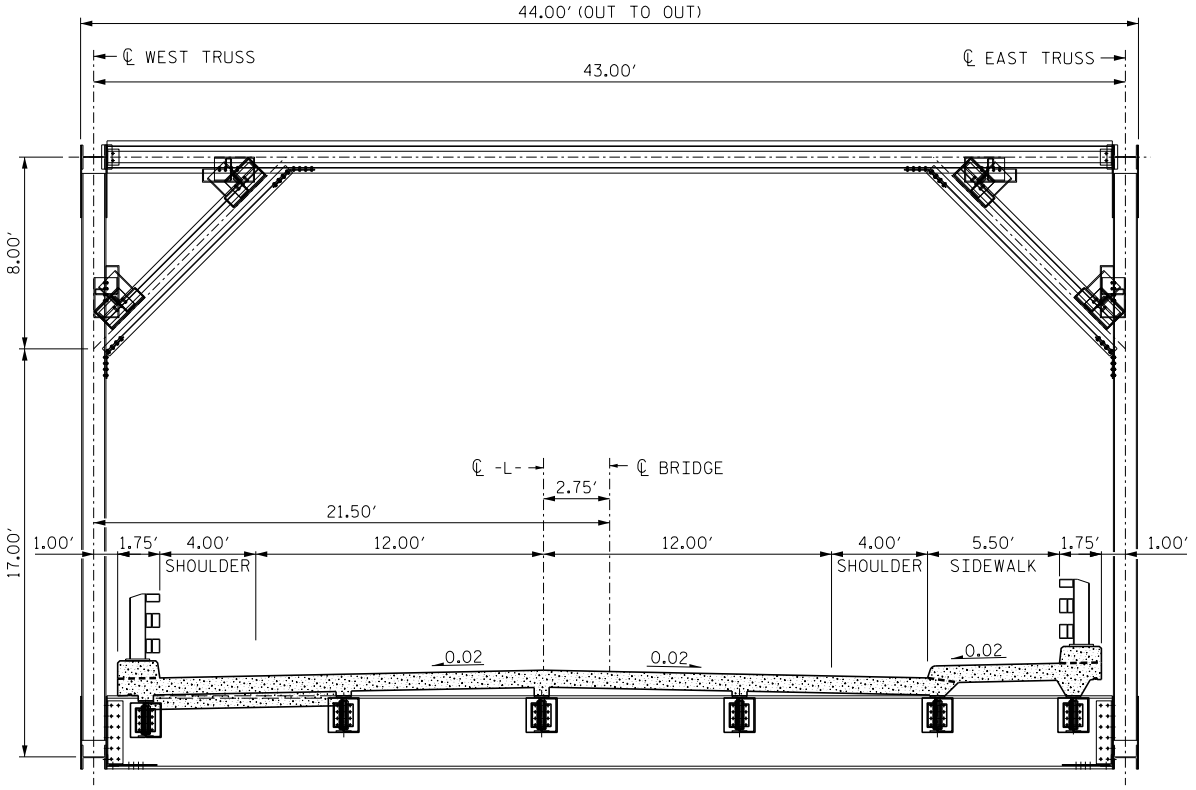
TYPICAL SECTIONS

DATE: 12/21/2018



TYPICAL SECTION

NOTE: CONCEPTUAL PLANS UTILIZED TO OBTAIN COAST GUARD BRIDGE PERMIT.

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2/13/2019

STATE OF NORTH CAROLINA
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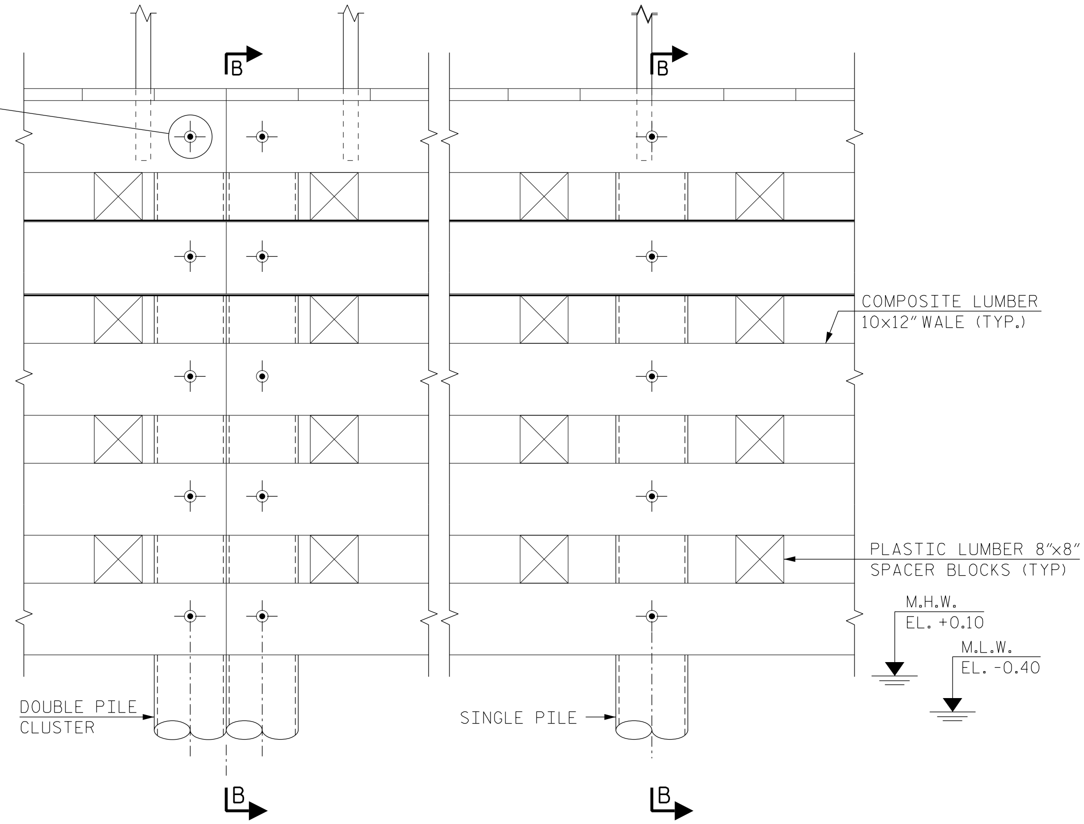
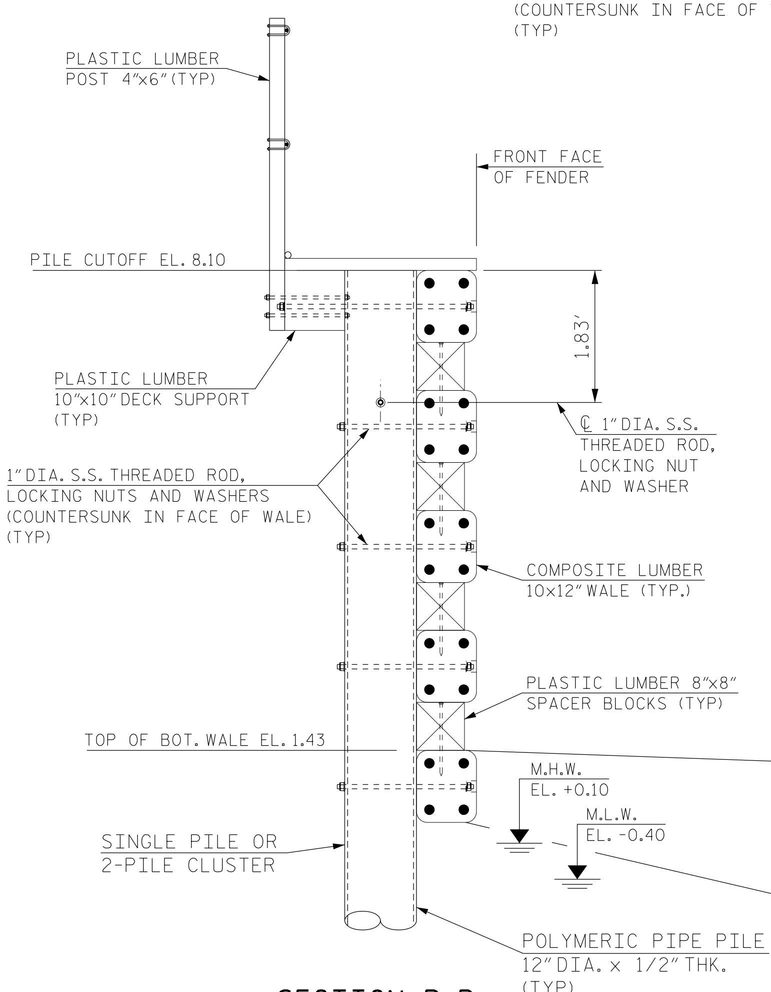
MOUTH OF PERQUIMANS RIVER

TYPICAL SECTION - SWING SPAN

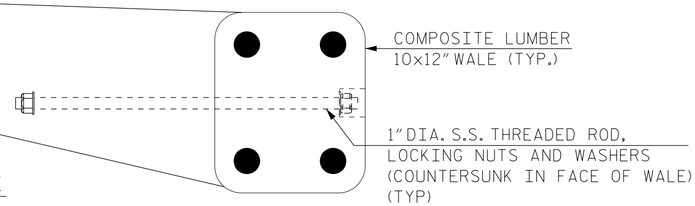
DATE: 12/21/2018



PARTIAL - FENDER ELEVATION



SECTION B-B



DETAIL

NOTE: CONCEPTUAL PLANS UTILIZED TO OBTAIN COAST GUARD BRIDGE PERMIT.

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2/13/2019

STATE OF NORTH CAROLINA
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RALEIGH

BRIDGE NO. 8 US 17 BUS/NC37
OVER PERQUIMANS RIVER AT
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LOCATED 12.0 MILES FROM
MOUTH OF PERQUIMANS RIVER

FENDER SYSTEM DETAILS

DATE: 12/21/2018

SHEET 8 OF 8

Navigation Study

IMPROVEMENTS TO US 17 BUSINESS
FROM CHURCH STREET TO NC 37

INCLUDING THE REPLACEMENT OF BRIDGE NO. 8
OVER THE PERQUIMANS RIVER

HERTFORD AND WINFALL
PERQUIMANS COUNTY, NORTH CAROLINA

TIP R-4467
WBS ELEMENT NO. 35748

THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Project Development and Environmental Analysis Branch

June 2017

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1.0 PURPOSE AND OBJECTIVE

The North Carolina Department of Transportation (NCDOT) proposes to replace the existing US 17 swing bridge, located at mile 12.0 on the Perquimans River, and the adjacent causeway (Figure 1). The purpose of this navigation evaluation is to identify the existing constraints to navigation for vessels which may reasonably navigate the waterway in the study area, and to provide a basis for establishing a recommendation for vertical and horizontal clearances for the proposed bridge replacement.

2.0 APPROACH AND METHODOLOGY

After preliminary review of aerial photography and navigation maps of the navigable waterway and its reaches, the following assumptions were considered to develop the proposed scope of work and methodology for this navigation study. These assumptions were confirmed to be reasonable during a scoping meeting with the U.S. Coast Guard (USCG) and NCDOT:

- The limits of the study area are those navigable waters between the US 17 Bypass fixed bridge and the upstream railroad bridge (Figure 2).
- The anticipated vessel traffic traveling the waterway is limited to that which can pass under the US 17 Bypass fixed bridge, which is sufficient for the future vessel traffic. Therefore, the proposed recommended vertical and horizontal clearances for the swing bridge replacement will not need to be greater than the US 17 Bypass fixed bridge mentioned above.
- There are no known plans for redevelopment in the study area that would require greater clearance than the US 17 Bypass fixed bridge.

The methodology employed, intended to evaluate the existing boat traffic that passes through the swing bridge and that which is reasonably, likely to continue to occur in the future. The assessment was conducted relative to vessel type, size and height, as well as the limitations of channel depth and height restriction of the US 17 Bypass fixed bridge which is seaward of the proposed replacement bridge.

A desktop review of the study area using readily available resources such as aerial photography and other various resources was conducted. These resources included the following:

- NOAA Nautical Chart 12205, 35th Ed., Feb 2017
- U.S. Coastal Pilot 48th Edition 2016
- Notice to Mariners
- Bridge Tender logs

- Hertford Zoning Map
- CAMA CORE Land Use Plan
- Hertford Marina Planning Documents 2009
- GIS-level aerial mapping

Field reconnaissance, by boat, was conducted, which consisted of a visual review of the shoreline and boat facilities within the study area. This survey of the study area identified and confirmed the location and type of many large vessels and sailboats utilizing the waterway within the study area.

Personal interviews were conducted with readily available representatives who operate the existing bridge as well as representatives with local marine knowledge of boating activity in the study area. Interviews were conducted with the following individuals:

- Mayor of Hertford
- Hertford Town Manager
- Buddy Lawrence (Albemarle Plantation Marina)
- Bill Curtright (bridge tender)
- Owner representative of Stokely-Holland Marine Construction, (Hertford)

As agreed to with the U.S. Coast Guard, the NCDOT mailed and emailed a boat survey questionnaire (Appendix A) to the public to solicit feedback for the navigational needs in the study area. The survey form was accepted as reasonable by USCG. The survey was mailed to all 42 waterfront property owners in the study area (Figure 3), and to the 10 marinas on the Albemarle Loop, of which the Hertford Marina is included. It was also sent to the Town Manager, Chamber of Commerce and the Perquimans Weekly newspaper for publishing, and was posted on the project website. A total of 12 responses were received. Responses received are attached as Appendix B.

3.0 FINDINGS

The following summarizes the findings from the documentation review, field reconnaissance, personal interviews and mail survey.

NOAA Nautical Chart 12205, 35th Ed., Feb 2017

- Currently, the swing bridge has a horizontal clearance of 55' at the north opening and 60' at the south opening. The vertical clearance is 7' in the closed position and unlimited in the open position.

- The US 17 Bypass fixed bridge is located approximately 0.7 miles seaward (east) of the subject bridge. This fixed bridge has a horizontal clearance of 55' and a vertical clearance of 33.'
- Two channel markers ("9" and "11") are located between the two bridges.
- Upstream of the subject bridge exists a railroad bridge which has a horizontal clearance of 22' and a vertical clearance of 3.'
- The approximate average water depth in the study area is 11' to 14' LWD, with the controlling water depth being 9' at the US 17 Bypass bridge, (Low Water Datum is 0.5' below mean sea level).
- The water depth is not significantly affected by tide. Water depth and current is affected more by rainfall runoff/flood flow and wind direction. During flood flow the waterway can experience higher stages in elevation. Wind from the north and northwest can cause a lower water elevation with a stronger current in the water. Wind from the south and southeast can cause a higher water elevation and less of a current.

U.S. Coastal Pilot 48th Edition 2016

The following is from is summarized in this document:

> "Hertford, on the southwest bank of Perquimans River, has rail connections with the Class I Railway and highway connections with U.S. Route 17 to Edenton and Elizabeth City. Oil is barged into Hertford to an oil pier on the south side of the river just above the highway swing bridge. The river water is fresh at Hertford. Above Hertford the river is narrow and crooked, but has fairly good depths for about 8 miles to a point near Goodwin Creek. Navigation is restricted to very small boats, about a mile above the highway swing bridge, by the railroad bridge, which has a 22-foot fixed span with a clearance of 3 feet."

Notice to Mariners

A review of the 10-17 1st Weekly Edition of Notice to Mariners report (March) revealed that the subject bridge was closed for repair. No other significant items have been noted relative to the study area since this report, other than the report announces that the US 17 bridge is being replaced.

Bridge Tender logs

The bridge is operated from October 1- March 31 from 10 am - 10 pm, and from April 1 – September 30, on demand, from 8 am - midnight (252-426-7241). While there is recognition that the volume and type of vessels on the waterway can vary with the seasons of the year, the study area is relatively small with only one way in and one way out, and there are no intensive marine

commercial facilities in the study area to generate a lot of vessel traffic. Most of the waterfront properties are single family residential lots. Therefore, a review of the bridge tender logs from January 2016 to February 2017 is anticipated to be typical of the waterway activity, (Appendix D). The bridge tender logs revealed the following information regarding the types of vessels that were observed on the waterway:

Eighty five percent (85%) of the total vessels requiring bridge openings were recreational vessels. They consisted of the following types of vessels:

- cuddy cabins
- center consoles
- cabin cruisers
- houseboats
- motor yachts
- pontoon boats
- sailboats

Of the recreational vessel traffic, only 2 sailboats were observed during this period. One was a local vessel and one was a transient vessel. Approximately 18% of the total vessels observed consisted of transient traffic which utilized the Hertford marina docking facility. Approximately 65% of the total vessels observed consisted of local traffic generated either from the single family docks in the study area or from the Hertford boat ramp. The Town of Hertford anticipates that the amount of traffic to their facility will increase, since the marina facility is relatively new.

Fifteen percent (15%) of the total vessels requiring bridge openings were commercial vessels. These consisted of the following types of vessels:

- contractor tugs and barges
- recreational boats outfitted for commercial fishing

No emergency or public safety vessels were observed on the waterway.

Hertford Zoning Map and CAMA CORE Land Use Plan

The Hertford zoning and existing and future land use plans reflected that only one commercial waterfront parcel exists in Herford, which is immediately adjacent to the railroad track. In Winfall, there were approximately 4 waterfront commercial parcels (Appendix C). The mapping did not reflect any waterfront industrial properties in the study area.

Hertford Marina Planning Documents 2009

A review of documentation prepared for the Town regarding the conceptual plans for the marina development and expansion were reviewed. While these conceptual plans have been developed,

interviews with the Town have not revealed any imminent plans on moving forward with the expansion.

Field Reconnaissance

Field reconnaissance of the study area was conducted on March 2, 2017. A review of land uses and watercraft in the area was noted to gain a better understanding of the size/type of vessels that likely pass through the subject bridge. The shoreline within the study area consists of predominantly single family residential properties with single family docks for recreational vessels. One boat ramp (Hertford) exists within the study area, and no marine commercial or industrial facilities on the waterfront in the study area other than the Hertford Marina docking facility.

Since this survey was completed in February, and not in the boating season for this geographic area, many recreational boaters did not have their vessels in the water or on their lifts/docks. However, supplementing the field reconnaissance with personal interviews, a review of the bridge tender logs, and mailed survey responses, provides an understanding of vessel traffic on the waterway.

There were no boats or boat trailers present on the day of the assessment, at the New Hope Wildlife Resources Boat Ramp on Boat Ramp Road in Perquimans County, NC. However, along the drive, roughly 10 miles outside of Hertford, a mix of vessels in residences' yards were observed. The vessels consisted of boats such as 16' skiffs, 24'-26' Center Console T-Tops and 35'-40' commercial fishing boats.

The Herford Marina has docking facilities that can accommodate one to two 50' vessels at a time, as well as 7 additional slips for smaller vessels. Many of the larger boats come in as part of a boat trail known as the Albemarle Loop which connects boaters from the Albemarle Sound to more remote waterways in the Albemarle Sound region. The Albemarle Loop consists of ten (10) marinas that offer free 48 hour stays similar to the Hertford Town Marina. The marina is free for the first 48 hours stay and then charge $1.75 per foot of boat per day. There are also weekly and monthly rates available for permanent seasonal slips.

Generally, there are a wide variety of vessels operating in the study area, and at mid-tide there is approximately 6' of vertical clearance under the existing bridge. Many smaller fishing vessels with T-Tops, require for the existing bridge to be opened.

Personal Interviews

- Buddy Lawrence at the Albemarle Plantation Marina (252) 426-4653, was interviewed. This 160 slip facility is part of the Albemarle Loop. Most of the boats at this facility are sailboats and cruisers up to 60' in length. He did not think many of his boaters go up to

Hertford. He recommended that Bobby Lane, (a commercial fisherman and who owns Capt. Bob's BBQ and Fish Restaurant (252) 426-1811) be interviewed. Attempts to reach this gentleman were unsuccessful.

- Thomas Stanton, was interviewed. According to Mr. Santon, there have been no known vessel collisions with the bridge. Mr. Stanton believes the existing horizontal clearance is sufficient for the existing vessel traffic. The commercial traffic is small fishing boats, many of which can clear the bridge. The 25' vessels require the bridge to be open because of the net reels. He indicated that if the bridge was raised to 20' most of the vessel traffic could clear the bridge. There is no significant current that adversely affects navigation.
- Another bridge tender at the site indicated that some trawler yachts and cruising yachts (50' range) use the facilities at the town marina for an overnight stay. The marina is free for the first 48 hours, so many of the larger boats come to use the septic and electric facilities provided at the marina.
- A few of the NCDOT workers that were resurfacing the existing bridge deck are local fishermen to the Town of Hertford. They indicated that there are many commercial fishing boats that currently use the town marina to launch their boats. Many of the commercial fishing boats have large reels and net rigs on them that require opening the existing swing bridge.
- An owner's representative of Stokely-Holland Marine Construction, Hertford, NC (252-264-2090) was interviewed. This conversation revealed that the area upstream of the subject bridge is known for good fishing (deep hole). Most of the traffic is small recreational boats. Commercial traffic is limited to marine contractors pushing small barges to local waterfront properties for various construction projects. It was indicated that the river current is manageable, with no real concerns for navigation. Although it was stated that it would be nice if horizontal clearance was a little wider, and some additional aids to navigation were installed.
- One person interviewed indicated that the largest vessel that accesses the study area may be a tug and barge operated by Riddick Marine (marine construction). Attempts to reach a representative were unsuccessful.
- Timothy A. Dewald of Timmy's Mobile Marine (252-426-5837) was interviewed. This is marine repair facility at 160 Creek Dr. on the north shore of Perquimans River, between the existing swing bridge and the US 17 fixed bridge. This facility services small vessels with outboard motors. Mr. Dewald did not believe there were any significant navigation concerns with the existing or proposed bridge replacement.

- A representative at a used car/boat dealer (A&B Motorsports) had a 21' Cuddy Cabin vessel for sale. This representative at the dealership stated that he personally owned a 41' offshore fishing boat, and that he uses the Hertford Marina boat ramp to launch his boat. He also indicated that another boat ramp was being built on the east side of the Rt. 17 Bypass bridge, (off of Granby Street in Hertford), which in his opinion, would likely reduce much of the traffic currently using the Hertford Marina boat ramp.

Mailing Survey

A total of 12 responses were received (Appendix B). The following is a summary of the responses received from the boat survey questionnaire.

- One question raised; If the bridge opened from a bobtail pivot with only one opening, what would be the required the horizontal clearance of the opening for the channel?

Since the existing bridge provide a horizontal clearance of 55' at the north opening and 60' at the south opening, and the existing US 17 fixed bridge provides for a horizontal clearance of 55', then the subject bridge would be required to provide a horizontal clearance of 55.' To be more restrictive would require a significant amount of justification.

- The Town of Herford indicated that maintain docks at their public docking facility, and they desire to have the same vertical and horizontal clearances as US 17 Bypass bridge. They also indicated they operate a vessel for emergency operations which is 80' in length with a 32' beam, and which has a draft of 7.' They desire to have 13' of navigable water depth.
- All of the remaining respondents indicated that they operation small recreational vessels which range from 19' to 30', of which one was a 30' houseboat.
- One respondent commented, that the water depth on the City side of the US 17 bridge had some very shallow areas.

This comment can be explored during final design which may be addressed in the form to include minor dredging or additional aids to navigation.

- One respondent suggested that a fixed span with a 15'-20' vertical clearance be considered.

This suggestion conflicts with the existing transient boat traffic which utilizes the City of Hertford's public docking facility.

- One respondent suggested moving the proposed bridge alignment to Edenton Road St.

- One respondent suggested that the old bridge be utilized for fishing and wildlife viewing, and that portions of the structure should be utilized as an artificial fish structure within the river.
- One respondent suggested that the waterway east of the subject bridge be regulated as a No Wake Zone until the green channel marker.

4.0 SUMMARY AND CONCLUSION

The subject bridge being replaced is a swing bridge that has a horizontal clearance of 55' at the north opening and 60' at the south opening. The vertical clearance is 7' in the closed position at mean high water, and it is unlimited in the open position. The US 17 Bypass fixed bridge, located approximately 0.7 miles seaward (east) of the subject bridge, is the limiting restriction on the waterway for the study area. This fixed bridge has a horizontal clearance of 55',a vertical clearance of 33', and a water depth of 9'. Since the subject bridge is being replaced with another swing bridge, (see Appendix F), then no vessels will lose access to the study due to vertical clearance requirements. Raising the bridge an additional 5' thus providing more vertical clearance would reduce the frequency of required bridge openings. While the US 17 Bypass bridge is more restrictive (55') than the subject bridge relative to horizontal clearance, consideration should be given to maintain at least one 60' horizontal clearance at the subject bridge, (preferably the south opening).

While both proposed bridge openings provide adequate water depth for the existing and anticipated vessel traffic, consideration should be given to post information signs at the bridge, directing vessels requiring deep water to the south bridge opening. Additional aids to navigation should be considered during the design and permitting of the bridge.

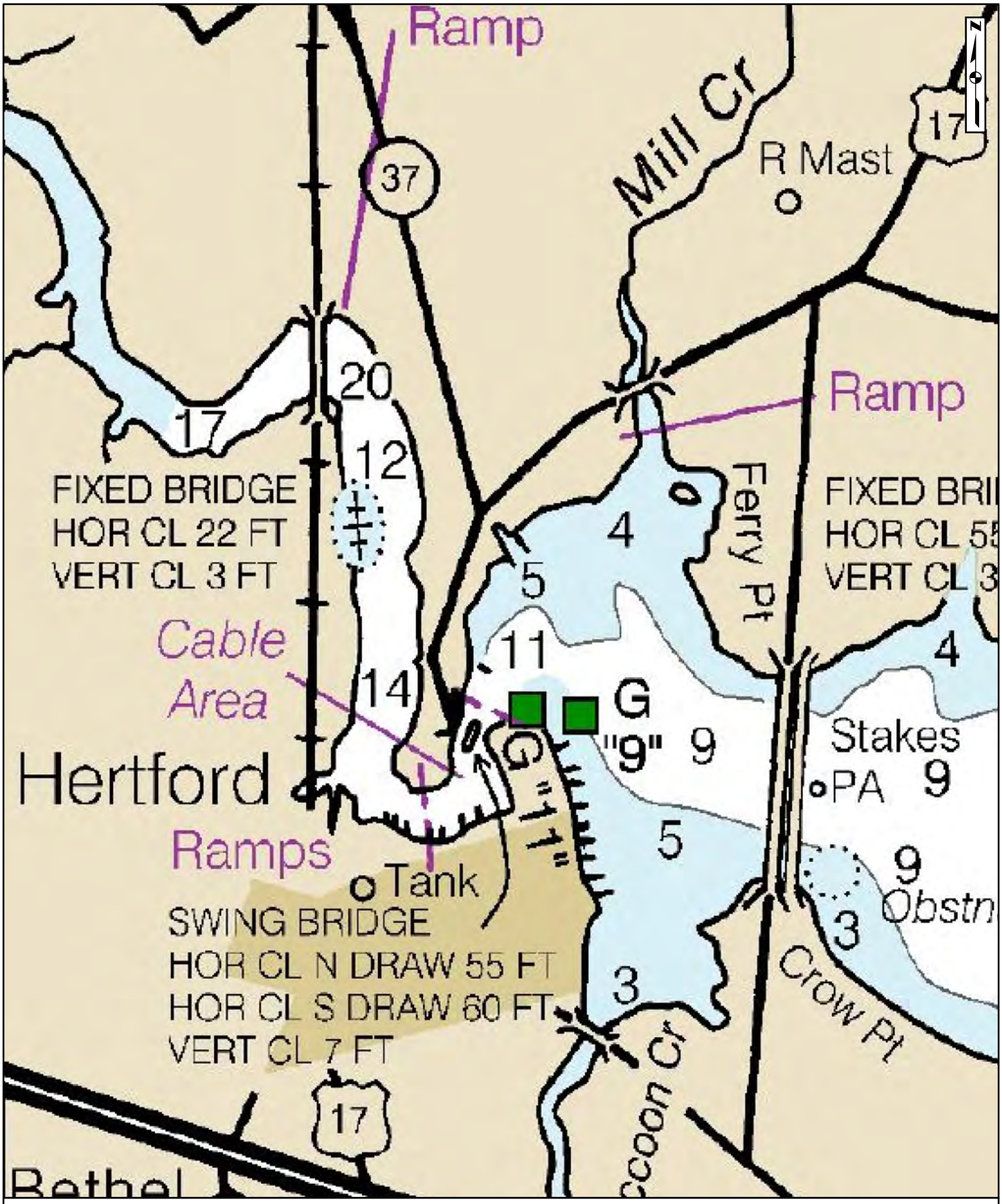


Figure 1
Location Map
R-4467 - US 17 Business from South of the Perquimans River Bridge to NC 37
Hertford and Winfall, Perquimans County

TIP Project R-4467

Railroad

0 250 500 750 1,000 Feet

Figure 2
Aerial of Study Area
R-4467 - US 17 Business from South of the Perquimans River Bridge to NC 37
Hertford and Winfall, Perquimans County

TIP Project R-4467

Railroad

Feet

0 250 500 750 1,000

Figure 2A
Aerial of Study Area
R-4467 - US 17 Business from South of the Perquimans River Bridge to NC 37
Hertford and Winfall, Perquimans County

TIP Project R-4467

Railroad

N

0 250 500 750 1,000 Feet

Figure 2B
Aerial of Study Area
R-4467 - US 17 Business from South of the Perquimans River Bridge to NC 37
Hertford and Winfall, Perquimans County

TIP Project R-4467
Railroad
Perquimans County Parcels
Mailed Survey Parcels
Feet
0 500 1,000

Figure 3
Waterfront Properties for Mailed Survey
R-4467 - US 17 Business from South of the Perquimans River Bridge to NC 37
Hertford and Winfall, Perquimans County

APPENDIX A

Survey Questionnaire

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

March 20, 2017

Dear Stakeholder:

The North Carolina Department of Transportation (NCDOT) proposes to replace the Perquimans River Bridge on US 17 Business (Church Street) in Hertford and improve the causeway from the bridge to the NC 37 intersection (Project R-4467). As part of this work, NCDOT is coordinating with the US Coast Guard relative to navigation needs on the river in the project area, which could be affected by the US 17 Business swing-span bridge replacement.

Currently, the existing swing-span bridge has a horizontal clearance of 55 feet at the north opening and 60 feet at the south opening. The vertical clearance is seven feet in the closed position and unlimited in the open position. To the east, the existing US 17 fixed bridge is located approximately 0.7 miles seaward (east) of the subject bridge. This fixed bridge has a horizontal clearance of 55 feet and a vertical clearance of 33 feet.

The existing swing-span bridge is proposed to be replaced with another swing-span bridge, providing for approximately five feet more vertical clearance in the closed position than the existing bridge. The new bridge is proposed be located parallel to the existing bridge, just to the east. (See the attached graphic.)

While the project is in this planning and preliminary design phase, NCDOT is seeking for mariners and affected waterfront property owners to fill out the attached survey and/or provide comments on their navigational concerns relative to this proposed bridge replacement. Comments will be received until April 28th.

Thank you for your interest and participation.

Sincerely,

James McInnis, Jr., P.E.
Project Engineer

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS
1548 MAIL SERVICE CENTER
RALEIGH, NC 27699-1548

Telephone: (919) 707-6200
Fax: (919) 250-4036
Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH, NC 27610

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER:

_____

_____

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

PLEASURE COMMERCIAL LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? _____

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

MOTOR SAIL FISHING FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER _____

VESSEL DIMENSIONS:

LENGTH_____BEAM_____DRAFT_____TONNAGE_____

HORSEPOWER_____

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: _____ HORIZONTALCLEARANCE: _____

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY

NAVIGATE? _____

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

SEASONALLY YEAR-ROUND DAY NIGHT

TIMES OF DAY USED MOST:_____

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

N

Alternative B Alignment

Preferred Alternative Alignment (Alternative B Swing-Span)

R-4467 - US 17 Business from South of the Perquimans River Bridge to NC 37
Hertford and Winfall, Perquimans County

APPENDIX B

Survey Responses

postmarked 3/27/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER:
Town of Hertford PO Box 32 Hertford, NC 27944

(252) 426-1969 x 9

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) (COMMERCIAL) LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? Em. Operations

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

(MOTOR) (SAIL) (FISHING) FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER _____

VESSEL DIMENSIONS:

LENGTH 80' BEAM 32' DRAFT 7' TONNAGE N/A

HORSEPOWER _____

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: 27 ft. HORIZONTALCLEARANCE: 20 ft.

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 13 ft.

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

SEASONALLY (YEAR-ROUND) (DAY) (NIGHT)

TIMES OF DAY USED MOST: Daylight

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

The town maintains docks near this project & wants the same availability w/ a new facility as we have now.

Vertical clearance is controlled by 17 bypass bridge.

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

postmarked 3/27/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER:

ROBERT E. LANE, 358 WINFALL BLVD, HERTFORD NC 27944

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) COMMERCIAL LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? NO

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

(MOTOR) SAIL FISHING FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER _____

VESSEL DIMENSIONS:

LENGTH 20 1/2 BEAM 8 DRAFT 18 TONNAGE 3800 #

HORSEPOWER 200

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: Bimini up - 8 feet down 6 feet HORIZONTAL CLEARANCE: 8

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 4'

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

SEASONALLY (YEAR-ROUND) DAY NIGHT

TIMES OF DAY USED MOST: Day light

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

postmarked 3/29/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER:
Garry P. Copeland
P.O. Box 37 Belvidere, NC 27919 (757) 353-9808

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) COMMERCIAL LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? NO

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

(MOTOR) SAIL FISHING FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER _____

VESSEL DIMENSIONS:

LENGTH 22' BEAM 8' DRAFT 1.0' TONNAGE 3

HORSEPOWER 140

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: 7' HORIZONTALCLEARANCE: 1

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 4'

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

(SEASONALLY) YEAR-ROUND DAY NIGHT

TIMES OF DAY USED MOST: 8:00 am – 8:00 pm

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

It would be great if the channel out to the US 17 bridge was widened - very shallow near town side.

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

postmarked 3/30/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER: STEVE MCDONALD 7708431491 (M)

344 WINFALL BLVD HERTFORD N.C 2524090203 (H)

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) COMMERCIAL LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? No

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

(MOTOR) SAIL (FISHING) FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER _____

VESSEL DIMENSIONS:

LENGTH 21 BEAM 8 DRAFT 18 TONNAGE 2

HORSEPOWER 200

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: 15 HORIZONTAL CLEARANCE: 10

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 30 INCHES

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

SEASONALLY (YEAR-ROUND) ~~DAY~~ (NIGHT)

TIMES OF DAY USED MOST: < 8AM > 5 PM

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

A FIXED SPAN WITH A 15-20 Vertical Clearance Along the Same Proposed footprint of the Proposed Swing bridge would be something to consider.

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

postmarked 3/31/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER: Martin Kent Sawyer
116 Howell St.
Hertford, NC 27944
252-312-9236

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) COMMERCIAL LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? No

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

MOTOR SAIL (FISHING) FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER _____

VESSEL DIMENSIONS:

LENGTH 18.5 BEAM 8' DRAFT 3' TONNAGE 5000 lbs

HORSEPOWER 150 Honda

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet) 10'

VERTICAL CLEARANCE: 10' HORIZONTAL CLEARANCE: 10'

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 6'

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

SEASONALLY (YEAR-ROUND) DAY NIGHT

TIMES OF DAY USED MOST: Different

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

Look like you could have included a self addressed envelope.

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

Postmarked 4/4/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER:
H. B. Matthews, 322 N Front St., Hertford, NC 27944

phone 919-618-2308

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) COMMERCIAL LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? _____

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

(MOTOR) SAIL FISHING FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER _____

VESSEL DIMENSIONS:

LENGTH 18 BEAM 6 DRAFT 2 TONNAGE _____

HORSEPOWER 90

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: 6 HORIZONTALCLEARANCE: 6

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 3 ft

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

SEASONALLY (YEAR-ROUND) DAY NIGHT

TIMES OF DAY USED MOST: P M

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

I would rather see the bridge go into Edenton Rd. St.

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

postmarked 4/7/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER: Rufus (Tim) & Kim Brinn (Tim) 7037748641

210 N. Front St, Hertford, NC 27944

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) COMMERCIAL LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWAY IN THE PROJECT AREA? NO

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

(MOTOR) SAIL FISHING FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER _____

VESSEL DIMENSIONS:

LENGTH 30' BEAM 8 1/2' DRAFT 2' TONNAGE 2 (HOUSEBOAT)

HORSEPOWER 115

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: 12' HORIZONTAL CLEARANCE: windage on house boat 30' actual boat is 8 1/2' wide

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 4 feet (mean low water)

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

SEASONALLY (YEAR-ROUND) DAY NIGHT

TIMES OF DAY USED MOST: 8AM - 8PM

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

(1) Consider use of old bridge as fishing/ nature viewing areas at either end of bridge. (State of Maryland has done a really good job of this with a number of old bridges).

(2) Consider use of old bridge pieces as artificial fish structure within the Perquimans River.

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

postmarked 4/7/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER:
Lynwood C. Winslow III

1209 Belvidere Rd, Belvidere, NC 27919 252-287-6632

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) COMMERCIAL LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? No

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

(MOTOR) SAIL FISHING FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER _____

VESSEL DIMENSIONS:

LENGTH 22' BEAM 8' DRAFT 2' TONNAGE 2 tons

HORSEPOWER 140

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: 8' HORIZONTALCLEARANCE: 18'

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 4'

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

SEASONALLY (YEAR-ROUND) DAY NIGHT

TIMES OF DAY USED MOST: All

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

postmarked 4/10/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER: Sara E. Winslow

102 Phelps Street, Hertford, NC 27944

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) COMMERCIAL LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? No

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

(MOTOR) SAIL FISHING FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER Canoe

VESSEL DIMENSIONS:

LENGTH 19' BEAM 7'6" DRAFT 18" TONNAGE _____

HORSEPOWER 115

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: 5 ft HORIZONTALCLEARANCE: _____

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 3'

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

SEASONALLY (YEAR-ROUND) (DAY) (NIGHT)

TIMES OF DAY USED MOST: 8Am - 8 Pm

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

The US 17 Bypass bridges restrict the height of vessels that can currently reach the S Bridge or Alt. B bridge.

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

postmarked 4/8/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER:
FRANK A. JAKUC 401 N. CHURCH STREET
HERTFORD, NC 27944 252 426 5246

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) COMMERCIAL (LICENSED) (UNLICENSED)

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? _____

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

(MOTOR) (SAIL) FISHING FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER CANOE, KAYAK, JON. BOAT

VESSEL DIMENSIONS:

LENGTH 19 BEAM 8 DRAFT 2 TONNAGE 1.5

HORSEPOWER 150

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: 5FT HORIZONTALCLEARANCE: 7

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 3 FOOT

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

(SEASONALLY) (YEAR-ROUND) (DAY) (NIGHT)

TIMES OF DAY USED MOST: DAYTIME 8AM-4PM

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

TO BE FINANCIALLY RESPONSIBLE, PLEASE DELAY ANY ACTION ON THIS BRIDGE UNTIL I-87 PATH IS UNDERSTOOD.

MAKE WAKEAWAY TO THE EAST OF THE BRIDGE A NO WAKE ZONE UNTIL GREEN NAVIGATION SIGN.

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

postmarked 4/12/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER:
CARLTON A. DAVENPORT, JR.
P.O. BOX 187, HERTFORD, NC 27944
252-426-5503

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) COMMERCIAL LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? NO

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

MOTOR (SAIL) FISHING FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER _____

VESSEL DIMENSIONS:

LENGTH 22 BEAM 6 DRAFT 4' TONNAGE _____

HORSEPOWER 6 HP OUTBOARD

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: 30' HORIZONTALCLEARANCE: 7'

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 5'

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

SEASONALLY (YEAR-ROUND) DAY NIGHT

TIMES OF DAY USED MOST: 0600 - 1900

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

Postmarked 4/12/17

PERQUIMANS RIVER
PROJECT R-4467
NAVIGATION SURVEY

USER INFORMATION:

NAME, ADDRESS & PHONE NUMBER:
William T. Winslow 252-426-8520
307 North Church St., Hertford, NC 27944

WHAT TYPE OF WATERWAY USER ARE YOU: (please circle all that apply)

(PLEASURE) COMMERCIAL LICENSED UNLICENSED

ARE YOU INVOLVED IN EMERGENCY OPERATIONS, NATIONAL DEFENSE, OR CHANNEL MAINTENANCE ON THE WATERWARY IN THE PROJECT AREA? NO

VESSEL INFORMATION:

TYPE VESSEL: (Please circle all that apply)

(MOTOR) SAIL FISHING FERRY TUG/BARGE PILOT DEEP DRAFT

OTHER _____

VESSEL DIMENSIONS:

LENGTH 18' BEAM 8' DRAFT 2' TONNAGE +/- 2 Ton

HORSEPOWER 140

BRIDGE CLEARANCE REQUIREMENTS FOR VESSEL: (measured in feet)

VERTICAL CLEARANCE: 6' HORIZONTALCLEARANCE: 8'

WATERWAY INFORMATION:

WHAT IS THE MINIMUM DESIRED WATER DEPTH DO YOU REQUIRE TO SAFELY NAVIGATE? 3'

WHEN DO YOU TRANSIT THESE WATERWAYS? (Please Circle all that apply)

(SEASONALLY) YEAR-ROUND DAY NIGHT

TIMES OF DAY USED MOST: 8:00 AM - 5:00 P.M

COMMENTS:

PLEASE USE THIS SPACE TO COMMENT ON ANY NAVIGATION RELATED ISSUES REGARDING THIS WATERWAY NOT COVERED IN THIS SURVEY. PLEASE BE SPECIFIC WITH RESPECT TO ACTUAL NAVIGATIONAL NEEDS AND REQUIREMENTS. PLEASE ATTACH SKETCHES OR ANY ADDITIONAL INFORMATION NECESSARY TO HELP US FULLY UNDERSTAND THE ISSUE. COMMENTS MUST BE RECEIVED BY APRIL 28, 2017:

None

MAIL TO:

Teresa Gresham
Kimley-Horn
421 Fayetteville Street, Suite 600
Raleigh, NC 27601

APPENDIX C

Zoning Maps

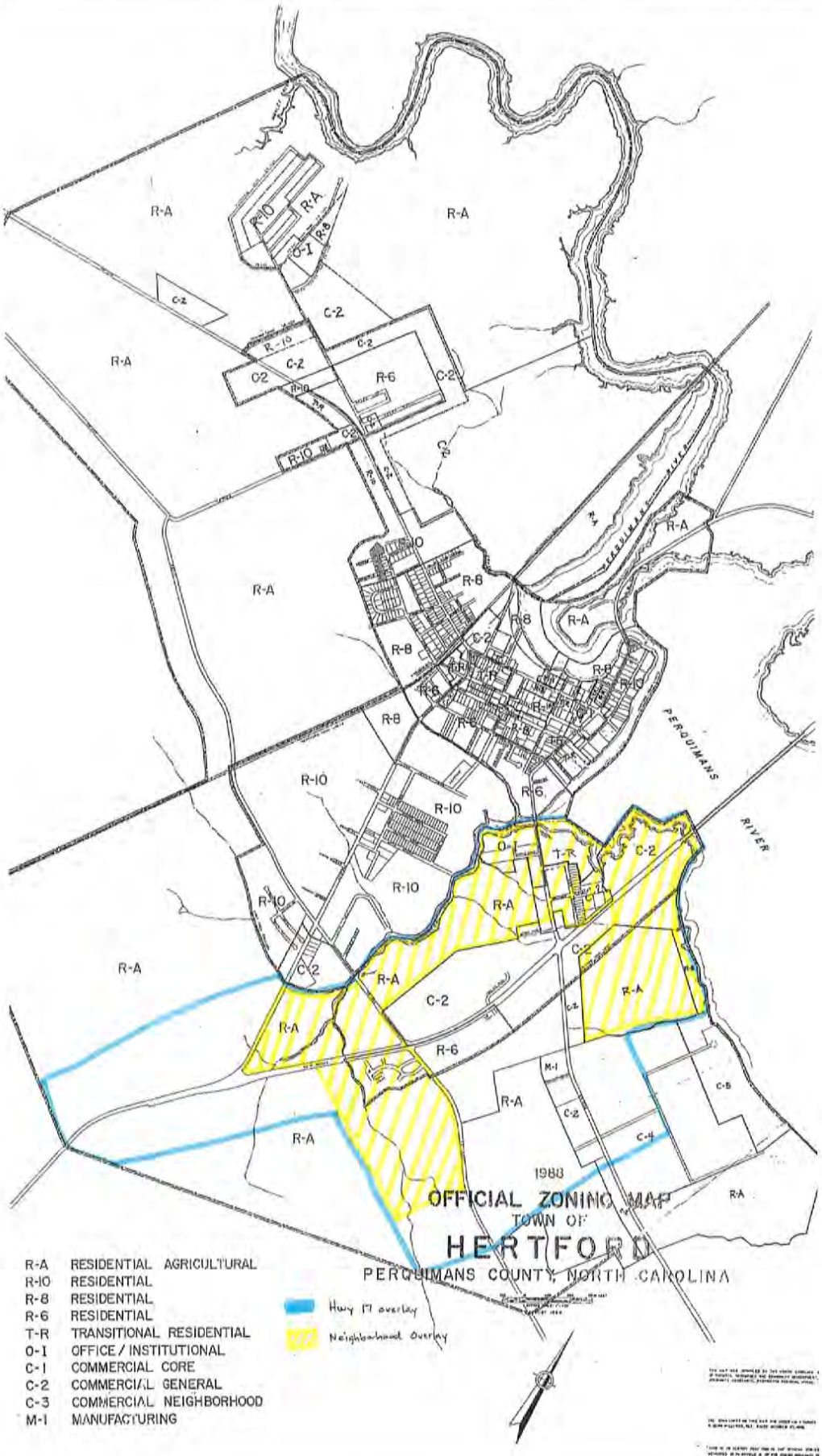
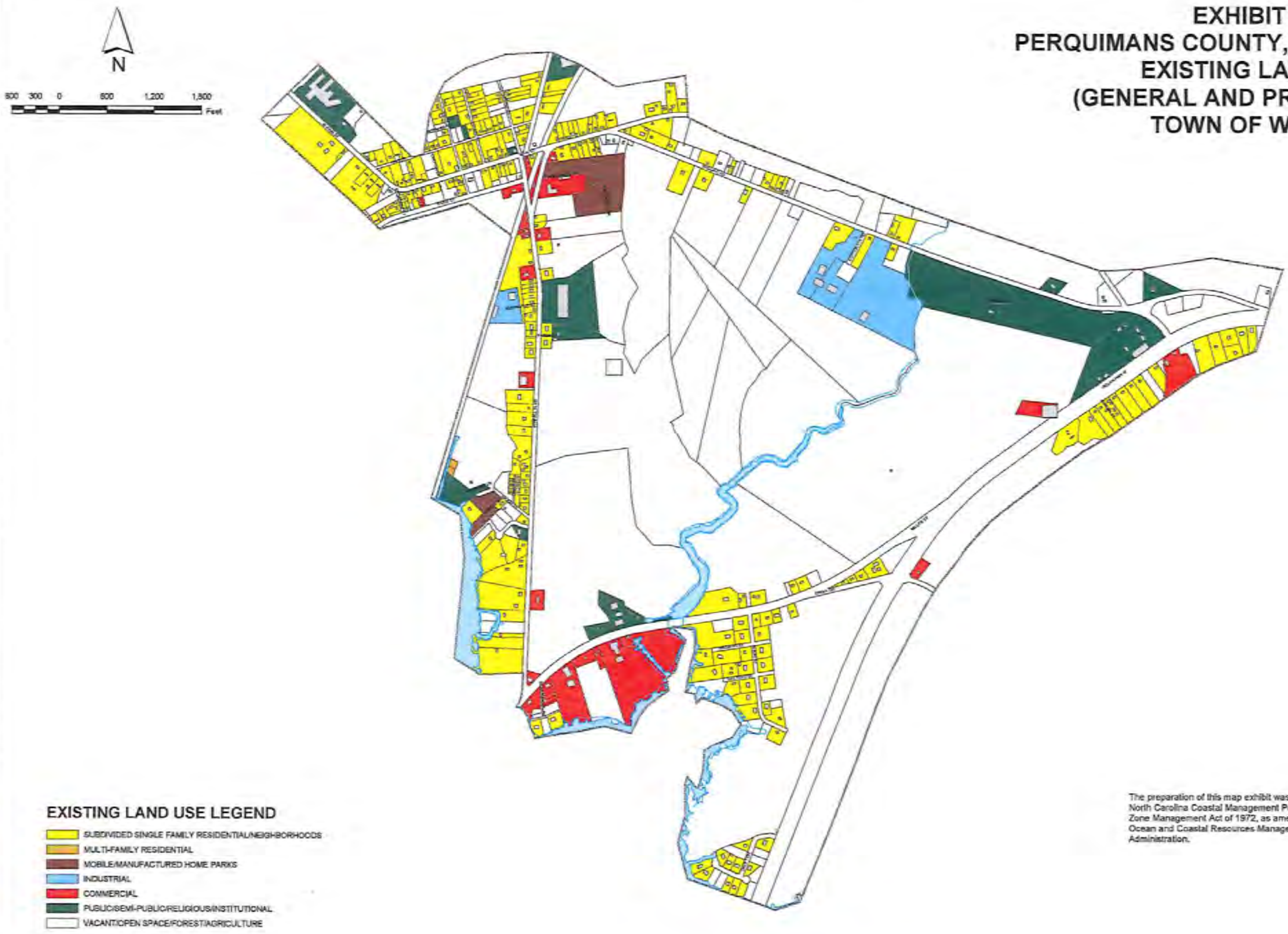

R-A
R-10
R-8
R-6
C-1
C-2
T-R
O-I
M-I
C-3
C-4
PERQUIMANS RIVER
1988
OFFICIAL ZONING MAP
TOWN OF
HERTFORD
PERQUIMANS COUNTY, NORTH CAROLINA
R-A RESIDENTIAL AGRICULTURAL
R-10 RESIDENTIAL
R-8 RESIDENTIAL
R-6 RESIDENTIAL
T-R TRANSITIONAL RESIDENTIAL
O-I OFFICE / INSTITUTIONAL
C-1 COMMERCIAL CORE
C-2 COMMERCIAL GENERAL
C-3 COMMERCIAL NEIGHBORHOOD
M-I MANUFACTURING
Hwy 17 overlay
Neighborhood Overlay

EXHIBIT V-D
PERQUIMANS COUNTY, NORTH CAROLINA
EXISTING LAND USE
(GENERAL AND PREDOMINANT)
TOWN OF WINFALL



The preparation of this map exhibit was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resources Management, National Oceanic and Atmospheric Administration.

COMMUNITY PLANNING COLLABORATIVE, INC.

REVISED: JUNE 1, 2006

APPENDIX D

Bridge Tender Logs

Town of Hertford - Chruch Street Swing Bridge Bridge Open Log Summary
Dates: January 2016 to January 2017

Vessel Type	January	February	March	April	May	June	July	August	September	October	November	December	January	Total by Vessel Type
Cabin	1	2			1		2	2						8
T-Top	2		2	10	4	7	14	8	7	2	6	4		66
Cabin Cruiser		1	2	1	2	2			1	1				10
House Boat			1				1				1	1		4
Yacht			2	1	2	2	4	6	12	2				31
Cruiser						4	2	1	3		1			11
Center Console					6	4	3	1	1	2				17
Sailboat					1		2			1				4
Pontoon					4	2	4		3	3				16
Walk - Thru					1		1							2
Racing Boat						3			2					5
Marine Fisher						2			2					4
Parker						1								1
Tri-Hull							2							2
Tug Boat							2	2				4	3	11
Commercial							2			3				5
Barge									2			1		3
Ski-Boat									2	2				4
Commercial Fish									4					4
Fish Boat									6					6
Total by Month	3	3	7	12	21	27	39	20	45	16	8	10	3	

Jan '16 – Jan '17

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF January 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
1-23-16	10:00 AM	10:08 AM	10:06 AM	CABIN	(COMM) DAVID SPAIFORD	10:10 A	10'00	20	IN	SLEET	NO	W.C. Curtis
1-31-16	1440	1443	1446	T-TOP	NC 5227 EC	1450	10:00	16	OUT	SUNNY	NO	W.C. Curtis
1-31-16	1520	1523	1526	T-TOP	NC 5227 EC	1530	10:00	17	IN	SUNNY	NO	W.C. Curtis

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder. noise in operation of bridge mechanism ampere fluctuation. unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

SHEET NO. 1 OF 1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF FEBRUARY 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
2-7-16	1000	1003	1006	CABIN	BOBBY WHITE	1010	10:00	12	OUT	CLOUDY	NO	W. Castleberry
2-7-16	1405	1408	1411	CABIN	BOBBY WHITE	1415	10:00	24	IN	RAIN	NO	W. Castleberry

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder. noise in operation of bridge mechanism ampere fluctuation. unusual occurrence. etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

SHEET NO. I OF 1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF March 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
3/4-16	1005	1008	1009	Cabin Cruiser	NC 3014 VH	1012	1000	23	OUT	Clear	NO	Phyllis Winslow
3/17/16	1010	1003	1006	Cabin Cruiser	NC 9882 WU had no boat no.	1010	1000	26	OUT	Clear	NO	Phyllis Winslow
3/17/16	1708	1711	1714	House Boat	Blue Devil	1718	1000	47	OUT	Clear	NO	Phyllis Winslow
3/17/16	1742	1745	1748	Cabin Cruiser	NC 9882 WU	1752	1000	28	IN	Clear	NO	Phyllis Winslow
3/28-16	1445	1448	1451	YACHT	NC 9143	1455	10:00	29	IN	CLOUDY	NO	W.C. Cartwright
3-29-16	1005	1008	1011	YACHT	NC 9143	1015	10:00	13	OUT	CLOUDY	NO	W.C. Cartwright
3-28-16	1725	1728	1731	T. TOP	N/A	1035	10:00	51	OUT	Sunny	NO	T. Stanton
3-28-16	1905	1908	1912	T. TOP	N/A	1915	10:00	42	IN	Sunny	NO	T. Stanton

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder. noise in operation of bridge mechanism ampere fluctuation. unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

SHEET NO. I OF I

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF April 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
4-4-16	1845	1848	1852	T. Top	N-A	1855	10:00	42	IN	Sunny	NO.	T. Stanton
4-22-16	1540	1548	1552	Yacht	Evening Star	1558	1000	46	IN	Rain	NO	Phyllis Winborne
4-24-16	1030	1033	1036	T-TOP	NC 2810	1040	10:10	25	OUT	CLEAR	NO	W.C. Cartwright
4-24-16	1130	1133	1136	YACHT	EVENING STAR	1140	10:00	19	OUT	CLEAR	NO	W.C. Cartwright
4-24-16	1440	1443	1446	T-TOP	NC 2810	1450	10:00	24	IN	CLEAR	NO	W.C. Cartwright
4-25-16	1415	1418	1421	T. TOP	NC 4176	1425	10:00	40	OUT	Sunny	NO	T. Stanton
4-25-16	1530	1533	1536	T. TOP	MAY CRAFT	1540	10:00	32	OUT	Sunny	NO	T. Stanton
4-25-16	1650	1653	1656	T. TOP	MAY CRAFT	1600	10:00	42	IN	Sunny	NO	T. Stanton
4-26-16	1545	1653	1656	T. Top	May Craft	1600	10:00	28	Out	Sunny	NO	P. Winborne
4-26-16	1740	1743	1746	T. Top	May Craft	1749	1000	55	IN	Sunny	NO	P. Winborne
4-27-16	1500	1503	1506	T. TOP	MAY CRAFT	1510	10:00	52	OUT	Sunny	NO	T. Stanton
4-27-16	1645	1648	1651	T. TOP	May Craft	1650	10:00	38	IN	Sunny	NO	T. Stanton

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder, noise in operation of bridge mechanism ampere fluctuation, unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

SHEET NO. 1 OF 1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF MAY 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
5-8-16	1430	1433	1436	CENT. CONS.	NC 7959 EC	1440	10:00	32	OUT	CLOUDY	NO	W.C. Carlton
5-8-16	1620	1623	1626	CENT. CONS.	NC 7959 EC	1630	10:00	15	IN	CLOUDY	NO	W.C. Carlton
5-9-16	1645	1648	1651	CENT CONS	NC 7959 EC	1655	10:00	36	OUT	FAIR	NO	T. Stanton
5-9-16	1900	1903	1906	CENT CONS	NC 7959 EC	1910	10:00	20	IN	FAIR	NO	T. Stanton
5-11-16	1100	1103	1106	CABIN CRUISER	NC 8345 DS	1110	10:00	30	OUT	Sunny	NO	T. Stanton
5-11-16	1115	1118	1121	SAIL BOAT	N/A	1125	10:00	28	OUT	Sunny	NO	T. Stanton
5-14-16	1010	1013	1016	CENT. CONS.	MARGARITA	1020	10:00	16	OUT	SUNNY	NO	W.C. Carlton
5-14-16	1110	1113	1116	YACHT	995415	1120	10:00	11	IN	SUNNY	NO	W.C. Carlton
5-14-16	1145	1148	1151	CENT. CONS.	MARGARITA	1155	10:00	27	IN	SUNNY	NO	W.C. Carlton
5-15-16	815	818	821	YACHT	SLOWMOCEAN	825	10:00	10	OUT	SUNNY	NO	W.C. Carlton
5-17-16	1540	1543	1546	Cabin Cruiser	Didn't know no	1548	10:00	20	Out	Rainy	NO	P Winborne
5-20-16	0945	0948	0951	PONTOON	BLUE DEVIL	0955	10.00	26	IN	Sunny	NO	T. Stanton
5-20-16	1438	1441	1444	Pontoon	Blue Devil	1449	1000	49	Out	Cloudy	NO	P Winborne
5-23-16	0945	0948	0951	CABIN BOAT	PARKER	0955	1000	40	IN	CLOUDY	NO	T Stanton
5-26-16	1355	1358	1401	T-TOP	NC 8525 DR	1404	1000	48	IN	Sunny	NO	P Winborne
5-26-16	1515	1518	1501	T-TOP	NC 3298	1504	1000	15	OUT	Sunny	NO	P Winborne
5-26-16	1916	1919	1902	T-Top	NC 3298	1905	1000	23	IN	Sunny	NO	P Winborne
5-27-16	0800	0803	0806	PONTOON	BLUE DEVIL	0810	10.00	36	IN	Sunny	NO	T. Stanton
5-27-16	1401	1404	1407	Pontoon	Blue Devil	1412	1000	32	OUT	Sunny	NO	P Winborne
5-29-16	905	908	911	WALK-THRU	NC 8807 WW	915	10:00	11	IN	DRIZZLE	NO	W.C. Carlton
5-30-16	1330	1333	1336	T-TOP	NC 8522 DR	1340	10:00	36	OUT	DRIZZLE	NO	T. Stanton

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder, noise in operation of bridge mechanism ampere fluctuation, unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first-class condition at all times.

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

SCANNED 7/11/16

SHEET NO. I OF 2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF JUNE 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
6-1-16	1100	1103	1106	PARKER	N/A	1110	10:00	36	OUT	Cloudy	NO	T. Stanton
6-4-16	1705	1708	1711	CENT. CONS.	NC3111WS	1715	10:00	30	IN	DRIZZLE	NO	W.C. Cartwright
6-5-16	845	848	851	CENT. CONS.	NC0369EP	855	10:00	11	OUT	CLOUDY	NO	W.C. Cartwright
6-5-16	1110	1113	1116	CENT. CONS.	NC0369EO	1120	10:00	15	IN	CLOUDY	NO	W.C. Cartwright
6-5-16	1320	1323	1326	RACING BOAT	NC4362WR	1330	10:00	29	OUT	CLOUDY	NO	W.C. Cartwright
6-5-16	1545	1548	1551	RACING BOAT	NC4362WR	1555	10:00	10	IN	CLOUDY	NO	W.C. Cartwright
6-5-16	1615	1618	1621	RACING BOAT	NC5898RO	1625	10:00	14	IN	CLOUDY	NO	W.C. Cartwright
6-8-16	1345	1348	1351	MARINE FISH	PARKER	1355	10:00	41	IN	SUNNY	NO	T. Stanton
6-8-16	1520	1523	1526	MARINE FISH	PARKER	1530	10:00	61	OUT	Sunny	NO	T. Stanton
6-10-16	0805	0808	0811	T TOP	NC6048BG	0816	10:00	45	OUT	Sunny	NO	PW Winborne
6-10-16	1111	1114	1117	T TOP	NC6048BG	1121	10:00	30	IN	Sunny	NO	PW Winborne
6-14-16	1815	1818	1821	T TOP	NC7959EC	1825	10:00	26	OUT	Sunny	NO	PW Winborne
6-14-16	1910	1913	1916	T TOP	NC7959EC	1920	10:00	23	IN	Cloudy	NO	Phyllis Winborne
6-16-16	1525	1528	1531	T TOP	NC5053CT	1535	10:00	25	OUT	Sunny	NO	PW Winborne
6-22-16	1715	1718	1721	CABIN CRUISE	NO HURRY	1725	10:00	35	IN	Sunny	NO	T. Stanton
6-24-16	0810	0813	0816	CABIN CRUISE	NO HURRY	0820	10:00	33	OUT	CLOUDY	NO	T. Stanton
6-26-16	1020	1023	1026	PONTOON	BLUE DEVIL	1030	10:00	17	IN	SUNNY	NO	W.C. Cartwright
6-26-16	1245	1248	1251	T-TOP	NC9823CB	1255	10:00	14	OUT	SUNNY	NO	W.C. Cartwright
6-26-16	1335	1338	1341	CENT. CONS.	NC9284DN	1345	10:00	24	OUT	SUNNY	NO	W.C. Cartwright
6-26-16	1405	1408	1411	PONTOON	BLUE DEVIL	1415	10:00	9	OUT	SUNNY	NO	W.C. Cartwright
6-26-16	1810	1813	1816	T-TOP	NC9823CB	1820	10:00	11	IN	SUNNY	NO	W.C. Cartwright
6-29-16	1230	1233	1236	YACHT	VENTURE	1240	10:00	39	IN	Sunny	NO	T. Stanton

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder, noise in operation of bridge mechanism ampere fluctuation, unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF JUNE 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
6-29-16	1420	1423	1426	Cruiser	NC-8348-DS	1430	10:00	36	IN	Sunny	NO T.	Stanton
6-29-16	1525	1528	1531	Cruiser	NC-8348 DS	1535	10:00	41	OUT	Sunny	NO T.	Stanton
6-30-16	0820	0823	0826	Yatch	Venture	0827	10:00	32	Out	Sunny	NO	PWinborne
6-30-16	1221	1225	1228	Cruiser	Daddy Girl	1232	1000	33	Out	Cloudy	NO	PWinborne
6-30-16	1350	1354	1357	Cruiser	Daddy Girl	1401	1000	44	In	Cloudy	NO	PWinborne

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder, noise in operation of bridge mechanism ampere fluctuation, unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

8/2/16

SHEET NO. 1 OF 2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF JULY 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
7-1-16	1935	1938	1941	HOUSEBOAT	NC 5466	1945	10:00	15	OUT	SUNNY	NO	W.C. Carter
7-2-16	1305	1308	1311	T-TOP	NC 2810	1315	10:00	26	OUT	CLOUDY	NO	W.C. Carter
7-2-16	1630	1633	1636	T-TOP	NC8663P	1640	10:00	27	OUT	SUNNY	NO	W.C. Carter
7-2-16	1650	1653	1656	T-TOP	NC9696AK	1700	10:00	22	OUT	SUNNY	NO	W.C. Carter
7-2-16	1740	1743	1746	T-TOP	NC2810	1750	10:00	17	IN	CLOUDY	NO	W.C. Carter
7-2-16	1810	1813	1816	T-TOP	NC8663P	1820	10:00	19	IN	CLOUDY	NO	W.C. Carter
7-2-16	1835	1838	1841	T-TOP	MARINE FISHERIES	1845	10:00	15	OUT	CLOUDY	NO	W.C. Carter
7-2-16	1855	1858	1901	CABIN	NC 1751 CJ	1905	10:00	21	OUT	CLOUDY	NO	W.C. Carter
7-2-16	1920	1923	1926	PONTOON	BLUE DEVIL	1930	10:00	11	IN	CLOUDY	NO	W.C. Carter
7-2-16	2010	2013	2016	CABIN	NC 1751 CJ	2020	10:00	24	IN	CLOUDY	NO	W.C. Carter
7-2-16	2030	2033	2036	T-TOP	NC3708WY	2040	10:00	23	IN	CLOUDY	NO	W.C. Carter
7-2-16	2045	2048	2051	WALK-THRU	NC9696AK	2055	10:00	28	IN	NIGHT	NO	W.C. Carter
7-2-16	2130	2133	2136	T-TOP	NC3708WY	2140	10:00	32	OUT	CLEAR NIGHT	NO	W.C. Carter
7-2-16	2145	2148	2151	PONTOON	BLUE DEVIL	2155	10:00	12	OUT	CLEAR NIGHT	NO	W.C. Carter
7-3-16	1030	1033	1036	CENT. CONS.	NC9696AK	1040	10:00	6	IN	RAIN	NO	W.C. Carter
7-3-16	1325	1328	1331	CENT. CONS.	NC8642WF	1335	10:00	13	OUT	CLOUDY	NO	W.C. Carter
7-3-16	1505	1508	1511	T-TOP	NC8522DR	1515	10:00	18	IN	CLOUDY	NO	W.C. Carter
7-3-16	1845	1848	1851	CENT. CONS.	NC8642WF	1855	10:00	10	IN	CLOUDY	NO	W.C. Carter
7-4-16	1120	1123	1126	Tri-Hull	VA3582BD	1130	10:00	23	IN	Cloudy	NO	T. Stanton
7-4-16	1200	1203	1206	Tri-Hull	VA3582BD	1210	10:06	17	OUT	Cloudy	NO	T. Stanton
7-4-16	1230	1231	1233	T-TOP	TIDEWATER	1240	10:00	19	OUT	RAINY	NO	T. Stanton
7-4-16	1545	1548	1551	PONTOON	NC 5466EA	1555	10:06	25	IN	Sunny	NO	T. Stanton

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Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF JULY 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
7-4-16	1730	1733	1736	T.Top	TIDEWATER	1740	10:00	18	IN	Sunny	NO T.	Stanton
7-4-16	1800	1803	1806	PONTOON	N/A	1810	10:00	15	OUT	Sunny	NO T.	Stanton
7-5-16	1045	1048	1051	T Top	8522DR	1055	1000	25	Out	Sunny	NO PL	Winborne
7-5-16	1946	1949	1952	Yatch	Polly P	1956	1000	22	In	Night	NO PL	Winborne
7-6-16	0805	0808	0811	Yatch	Polly P	0815	10:00	32	Out	Sunny	NO T.	Stanton
7-10-16	1645	1648	1651	YACHT	ERNBA28B303	1655	10:00	18	IN	SUNNY	NO	W.C. Cutlaw
7-10-16	1750	1753	1756	YACHT	ERNBA28B303	1800	10:00	26	OUT	SUNNY	NO	W.C. Cutlaw
7-11-16	0900	0903	0906	TUG BOAT	LITTLE SAM	0910	10:00	33	IN	P.Sunny	NO T.	Stanton
7-11-16	1010	1013	1016	TUG BOAT	LITTLE SAM	1020	10.00	32	OUT	P.Sunny	NO T.	Stanton
7-13-16	1410	1413	1416	CRUISER	NC 3959 EA	1420	10:00	51	IN	Sunny	NO T.	Stanton
7-13-16	1520	1523	1526	CRUISER	NC 3959 EA	1530	10:00	46	OUT	Sunny	NO T.	Stanton
7-20-16	0845	0848	0851	T.TOP	NC-2698DR	0855	10:00	22	OUT	Sunny	NO T.	Stanton
7-20-16	1100	1103	1106	SAIL BOAT	NC-8517DJ	1110	10:00	19	IN	Sunny	NO T.	Stanton
7-20-16	1135	1138	1141	SAIL BOAT	NC-8517DJ	1145	10:00	23	OUT	Sunny	NO T.	Stanton
7-20-16	1330	1333	1336	T.TOP	NC-2698DR	1340	10:00	32	IN	Sunny	NO T.	Stanton
7-31-16	1430	1433	1436	COMMERCIAL	NC 4848 WG	1440	10:00	16	IN	CLOUDY	NO	W.C. Cutlaw
7-31-16	1520	1523	1526	COMMERCIAL	NC 4848 WG	1530	10:00	13	OUT	CLOUDY	NO	W.C. Cutlaw

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Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

SHEET NO. 1 OF 1

SCANNED 9/1/16

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF Aug 1 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
8-1-16	1414	1416	1419	Yatch	Tenn6356EC	1429	10.00	47	IN	Cloudy	NO	PLWinborne
8-2-16	0815	0818	0821	YATCH	TENN6356EC	0825	10:00	16	OUT	Sunny	NO	T. Starter
8-2-16	1244	1247	1250	T. TOPMM	"PARKER"	1244	10:00	20	IN	Cloudy	NO	T. Starter
8-2-16	1530	1533	1536	T. TOP	"PARKER"	1540	10:00	31	OUT	RAIN	NO	T. Starter
8-3-16	0900	0903	0906	T. TOPMM	"PARKER"	0910	10:00	25	OUT	Sunny	NO	T. Starter
8-3-16	1305	1308	1311	T-TOP. MM	PARKER	1315	10:00	40	IN	Sunny	NO	T. Starter
8-2-16	1410	1413	1416	T-TOP	NC 9823	1420	10:00	21	OUT	SUNNY	NO	W.C. Carter
8-7-16	1700	1703	1706	T-TOP	NC 9823	1710	10:00	12	IN	CLOUDY	NO	W.C. Carter
8-19-06	0830	0833	0836	TUG	LITTLE SAM	0840	10:00	15	IN	Sunny	NO	T. Starter
8-19-06	0900	0903	0906	TUG	LITTLE SAM	0910	10:00	27	OUT	Sunny	NO	T. Starter
8-15-06	1945	1948	1951	YATCH	VAGABOND	1955	10:00	31	IN	Sunny	BRIDGE WIDNTOPEN DUE TO HEAVY GUNS CLOSE	T. Starter
8-16-06	0815	0818	0821	Yatch	Vaga Bond	0825	10:00	36	Out	Sunny	NO	PL Winborne
8-19-06	0900	0903	0906	CRUISER	NC 8348	0910	10:00	25	OUT	CLOUDY	NO	T. Starter
8-20-16	0850	0853	0856	CABIN	SB 250 RESCUE	0900	10:00	14	OUT	SUNNY	NO	W.C. Carter
8-20-16	1020	1023	1026	CABIN	SB250 RESCUE	1030	10:00	20	IN	CLOUDY	NO	W.C. Carter
8-20-16	1200	1203	1206	CENT. CONS.	NC 3685 CK	1210	10:00	16	IN	CLOUDY	NO	W.C. Carter
8-23-16	0900	0903	0906	T. TOP	PARKER	0910	10:00	31	OUT	Sunny	NO	T. Starter
8-23 16	0915	0918	0921	T. TOP	PARKER	0925	10:00	15	IN	Sunny	NO	T. Starter
8-28-16	0810	0813	0816	YACHT	SL 8889 RA	0820	10:00	9	IN	SUNNY	NO	W.C. Carter
8-30-16	0830	0833	0836	Yacht	SL 8889 RA	0840	10:00	36	Out	Sunny	NO	PL Winborne

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Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

SHEET NO. I OF 3

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF Sept-1-2016

SCANNED 9/4/16

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
9-1-16	1040	1043	1046	Cabin Cruiser	NC 8348DS	1050	10:00	24	IN	Sunny	NO PW	Winborne
9-4-16	1630	1633	1636	T-TOP	NC 4897 AY	1640	10:00	16	OUT	SUNNY	NO WC	Outlaw
9-5-16	0915	0918	0921	BARGE	NC-5301 WU	0925	10:00	15	IN	Cloudy	NO	T. Stanton
9-5-16	1010	1013	1016	BARGE	NC-5301 WU	1020	10:00	22	OUT	Cloudy	NO	T. Stanton
9-5-16	1030	1033	1036	T-TOP	TROPHY	1040	10:00	18	OUT	Sunny	NO	T. Stanton
9-5-16	1230	1233	1236	T-TOP	TROPHY	1240	10:00	32	IN	Sunny	NO	T. Stanton
9-5-16	1545	1548	1551	Comm FISH	PARKER	1555	10:00	36	OUT	Sunny	NO	T. Stanton
9-5-16	1610	1613	1616	COMM FISH	PARKER	1620	10:00	35	IN	Sunny	NO	T. Stanton
9-6-16	0835	0838	0841	Fish boat	NC 3685CK	0845	10:00	22	OUT	Sunny	NO PW	Winborne
9-6-16	1101	1104	1107	T Top	NC 6909WW	1111	10:00	28	Out	Sunny	NO PW	Winborne
9-6-16	1150	1153	1156	Fish boat	NC 3685CK	1200	10:00	24	IN	Sunny	NO PW	Winborne
9-6-16	1351	1354	1357	Fish boat	NC 3685CK	1401	10:00	32	OUT	Sunny	NO PW	Winborne
9-6-16	1525	1528	1531	Fish boat	NC 3685CK	1435	10:00	52	IN	Sunny	NO PW	Winborne
9-7-16	0800	0803	0806	Comm FISH	PARKER	0810	10:00	38	OUT	Sunny	NO	T. Stanton
9-7-16	1150	1153	1156	Comm FISH	PARKER	12:00	10:00	41	IN	Cloudy	NO	T. Stanton
9-7-16	1420	1423	1426	MARINE FISH	PARKER	14:30	10:00	40	OUT	Cloudy	NO	T. Stanton
9-7-16	1600	1603	1606	MARINE FISH	PARKER	1610	10:00	35	IN	Cloudy	NO	T. Stanton
9-8-16	0811	0814	0817	Fish boat	NC 3685CK	0821	10:00	48	OUT	Rain	NO PW	Winborne
9-8-16	1009	1012	1015	Fish boat	NC 3685CK	1019	10:00	33	IN	Rain	NO PW	Winborne
9-8-16	1240	1243	1246	T Top	NC 2800WD	1250	10:00	28	Out	Cloudy	NO PW	Winborne
9-8-16	1345	1348	1351	T Top	NC 2800WD	1355	10:00	36	IN	Sunny	NO PW	Winborne
9-8-16	1445	1448	1451	Patoon	NC 8658DG	1455	10:00	60	OUT	Sunny	NO PW	Winborne

NOTE: All draw bridges are to be opened at least once a week: The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder. noise in operation of bridge mechanism ampere fluctuation. unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

Legend for completing Equipment Problem Column

G.	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PEROUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF Sept 1, 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
9-8-16	1520	1523	1526	Yacht	Catalina	1530	10:00	38	IN	Sunny	NO	PW Inborne
9-8-16	1539	1542	1546	Yacht	DeDe Mouse	1550	10:00	48	IN	Sunny	NO	PW Inborne
9-10-16	0935	0938	0941	YACHT	CATALINA	0945	10:00	22	OUT	CLOUDY	NO	W.C. Carter
9-10-16	0950	0953	0956	YACHT	CATALINA	1000	10:00	21	IN	CLOUDY	NO	W.C. Carter
9-10-16	1205	1208	1211	YACHT	CATALINA	1215	10:00	27	OUT	SUNNY	NO	W.C. Carter
9-10-16	1300	1303	1306	YACHT	DIDI-MAU	1310	10:00	24	OUT	SUNNY	NO	W.C. Carter
9-11-16	1310	1313	1316	CENT. CONS.	NC 2800 WD	1320	10:00	16	IN	SUNNY	NO	W.C. Carter
9-12-16	1105	1108	1111	CRUISER	NC 8348 DS	1115	10:00	36	OUT	CLOUDY	NO	T. Starter
9-20-16	1043	1046	1049	Yacht	C Duck II	1653	10:00	32	IN	Cloudy	NO	PW Inborne
9-2016	1053	1056	1059	Yacht	Martha Jean	1100	10:00	32	IN	Cloudy	NO	PW Inborne
9-20-16	1250	1253	1256	Yacht	Red Sky	1300	10:00	28	IN	Cloudy	NO	PW Inborne
9-23-16	0800	0803	0806	Yacht	C-Duck II	0812	12:00	36	OUT	Cloudy	NO	T. Starter
9-23-16	0800	0803	0806	Yacht	MARTH JEAN	0812	12:00	36	OUT	CLOUDY	NO	T. Starter
9-23-16	0800	0803	0806	Yacht	RED SKY	0812	12:00	36	OUT	CLOUDY	NO	T. Starter
9-24-16	1045	1048	1051	SKI-BOAT	NC 1797 EC	1055	10:00	24	OUT	SUNNY	NO	W.C. Carter
9-24-16	1500	1503	1506	SKI-BOAT	NC 1797 EC	1510	10:00	18	IN	SUNNY	NO	W.C. Carter
9-25-16	1245	1248	1251	RACE BOAT	BAD INVESTMENT	1255	10:00	12	OUT	CLOUDY	NO	W.C. Carter
9-25-16	1540	1543	1546	PONTOON	NC 9252 EC	1550	10:00	23	OUT	CLOUDY	NO	W.C. Carter
9-25-16	1720	1723	1726	RACE BOAT	BAD INVESTMENT	1730	10:00	17	IN	CLOUDY	NO	W.C. Carter
9-25-16	1740	1743	1746	PONTOON	NC 9252 EC	1750	10:00	14	IN	CLOUDY	NO	W.C. Carter
9-26-16	1025	1028	1031	CRUISER	NC-8348-DS	1035	10:00	35	IN	Sunny	NO	T. Starter
9-26-16	1100	1103	1106	T TOP	NC-5053	1110	10:00	26	IN	Sunny	NO	T. Starter

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder, noise in operation of bridge mechanism ampere fluctuation, unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

SHEET NO. 3 OF 3

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF September

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
9-26-16	1140	1143	1146	CRUISER	NC-8348-DS	1150	10:00	38	OUT	Cloudy	NO	T. Stalls

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder. noise in operation of bridge mechanism ampere fluctuation. unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

SHEET NO. 1 OF 1

SCANNED 11/3/16

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF OCTOBER 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
10-2-16	1030	1033	1036	COMMERCIAL	NC 6683 AV	1040	10:00	16	IN	SUNNY	NO	W.C. Cartwright
10-2-16	1330	1333	1336	COMMERCIAL	NC 6730 BH	1340	10:00	11	IN	SUNNY	NO	W.C. Cartwright
10-2-16	1520	1523	1526	SKI-BOAT	NC 8742 DZ	1530	10:00	17	OUT	SUNNY	NO	W.C. Cartwright
10-2-16	1625	1628	1631	SKI-BOAT	NC 8742 DZ	1635	10:00	19	IN	CLOUDY	NO	W.C. Cartwright
10-3-16	1620	1623	1626	PONTOON	NC. 8658 DG	1630	10:00	35	IN	CLOUDY	NO	T. Stanton
10-4-16	0955	0958	1001	Commercial	Unknown	1005	10:00	15	IN	Cloudy	NO	Pleasinbourne
10-4-16	1244	1247	1300	T Top	NC 8907 T	1304	10:00	13	IN	Cloudy	NO	Pleasinbourne
10-4-16	1318	1321	1324	T Top	NC 8907 T	1328	10:00	46	OUT	Cloudy	NO	Pleasinbourne
10-4-16	1318	1321	1324	T Top	NC 8907 T	1328	10:00	32	IN	Sunny	NO	T. Stanton
10-12-16	1225	1228	1231	SAILBOAT	NC 8517 DJ	1235	10:00	32	OUT	SUNNY	NO	W.C. Cartwright
10-15-16	1510	1513	1516	CENT. CONS.	NC 0589 BS	1520	10:00	22	IN	DUSK	NO	W.C. Cartwright
10-15-16	1830	1833	1836	CENT. CONS.	NC 0589 BS	1840	10:00	19	IN	SUNNY	NO	W.C. Cartwright
10-21-16	1140	1143	1146	PONTOON	BLUE DEVIL	1150	10:00	28	IN	SUNNY	NO	W.C. Cartwright
10-21-16	1340	1343	1346	PONTOON	BLUE DEVIL	1350	10:00	17	OUT	SUNNY	NO	W.C. Cartwright
10-25-16	1226	1229	1232	Cabin Cruiser	NC 8346 DS	1236	10:00	29	OUT	Sunny	NO	Pleasinbourne
10-29-16	1535	1538	1541	YACHT	NANCY LEE	1540	10:00	26	IN	SUNNY	NO	W.C. Cartwright
10-31-16	1530	1533	1536	Yacht	Nancy Lee	1540	10:00	44	Out	Sunny	No	Pleasinbourne

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder, noise in operation of bridge mechanism ampere fluctuation, unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

SHEET NO. 1 OF 1

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF December - 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
11-6-16	1645	1648	1651	HOUSE BOAT	BY - GORGE	1655	10:00	17	OUT	SUNNY	NO	W.C. Carter
11-9-16	10:05	10:08	10:11	CRUISER	NC-8348-DS	10:15	10:05	25	IN	CLOUDY	NO	T. Carter
11-11-16	1210	1213	1216	T-TOP	NC 4154 WO	1220	10:00	27	OUT	SUNNY	NO	W.C. Carter
11-11-16	1420	1423	1426	T-TOP	NC 4154 WO	1430	10:00	23	IN	SUNNY	NO	W.C. Carter
11-13-16	1445	1448	1451	T-TOP	WY 9495	1455	10:00	17	OUT	SUNNY	NO	W.C. Carter
11-13-16	1640	1643	1646	T-TOP	WY 9495	1650	10:00	19	IN	SUNNY	NO	W.C. Carter
11-25-16	1235	1238	1241	T-TOP	NC 2810	1245	10:00	20	OUT	CLOUDY	NO	W.C. Carter
11-25-16	1710	1713	1716	T-TOP	NC 2810	1720	10:00	16	IN	CLOUDY	NO	W.C. Carter

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder, noise in operation of bridge mechanism ampere fluctuation, unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

SHEET NO. 1 OF 1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF December 2016

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
12-18-16	1430	1433	1436	HOUSEBOAT	NC 5466 EA	1440	10:00	26	IN	CLOUDY	NO	W.C. Cutlip
12-21-16	1030	1033	1036	T-TOP	NC 2810	1040	10:00	16	OUT	Sunny	NO	T. Stanton
12-21-16	1500	1503	1506	T-TOP	NC 2810	1510	10:00	28	IN	Sunny	NO	T. Stanton
12-29-16	10:30	10:33	10:36	Barge	Unknown	1040	10:00	35	Out	Cloudy	NO	P. Sinborne
12-29-16	1505	1508	1511	Tug Boat	Unknown	1515	10:00	34	IN	Cloudy	NO	P. Sinborne
12-29-16	1522	1525	1528	Tug Boat	Unknown	1532	10:00	39	OUT	Cloudy	NO	P. Sinborne
12-29-16	1601	1604	1608	Tug Boat	Unknown	1612	10:00	48	IN	Cloudy	Someone hit stop mail	P. Sinborne
12-29-16	1635	1638	1642	Tug Boat	Unknown	1646	10:00	31	OUT	Sunny	NO	P. Sinborne
12-31-16	1040	1043	1046	T-TOP	NC 2810	1050	10:00	14	OUT	SUNNY	NO	W.C. Cutlip
12-31-16	1345	1348	1351	T-TOP	NC 2810	1355	10:00	12	IN	CLOUDY	NO	W.C. Cutlip

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder. noise in operation of bridge mechanism ampere fluctuation. unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

1/4/17

Legend for completing Equipment Problem Column

G	Gate	NB	North Bridge
T	Trip Breaker	SB	South Bridge
BRN	Bridge Noise	FS	Far Span
		NS	Near Span

SHEET NO. 1 OF 1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
BRIDGE OVER PERQUIMANS RIVER AT HERTFORD ROUTE US 017
REPORT OF DRAW OPENINGS FOR MONTH OF JANUARY 2017

Date	Time Vessel Signaled	Time Gates Closed	Draw Fully Open	Kind of Vessel	Name or Number of Vessel	Time Gates Are Opened	Delay Due to Bridge Opening	No. of Vehicles Delayed	Remarks	Weather When Boat was Passing Through	Equipment Problems	Name of Operator
1-3-17	1415	1418	1421	Tug Boat	Unknown	1425	10:00	33	IN	Cloudy	NO	PL Winborne
1-3-17	1442	1445	1448	Tug Boat	Unknown	1452	10:00	57	Out	Cloudy	NO	PL Winborne
1-6-17	1130	1133	1136	TUG BOAT	CMS-3	1140	10:00	39	IN	CLOUDY	NO	W.C. Outland

NOTE: All draw bridges are to be opened at least once a week. The machinery, gates, etc. especially gears and bearings, are to be inspected at least once a week and are to be kept thoroughly lubricated. Reports are to be sent immediately after the last day of each month to the District Engineer. An accident or serious damage to the fender system, the bridge or machinery, is to be reported at once by telephone or telegram to the District Engineer. A report of an accident or damage is to be made on regular form and forward immediately. In the column above (Equipment Problems) on this sheet note any unusual disorder, noise in operation of bridge mechanism ampere fluctuation, unusual occurrence, etc. Particular attention is to be paid to all navigation and warning lights which are to be kept in first class condition at all times.

APPENDIX E

Responses to Questions Presented in the USCG Appendix A of the Bridge Permit Application Guide (Sections B-D and F-I)

B. Present governing bridge(s) or aerial structure(s) on the waterway:

1. Identify all bridges upstream and downstream of the proposed bridge site and their existing horizontal and vertical clearances to determine the existing minimum horizontal and vertical clearances (including overhead transmission line clearances). **See Figures 1 and 2.**

	Horizontal Clearance	**Vertical Clearance**
The US 17 fixed bridge, 0.7 miles downstream.	**55'**	**33'**
Fixed Railroad bridge, upstream	**22'**	**3'**

2. Does the proposed bridge(s) match (or is greater than) the navigational clearance of existing structures on the waterway?

Yes, in the open position, and the proposed clearance in the closed position will be 5 feet higher than the existing bridge being replaced.

3. What is the most restrictive horizontal clearance on the waterway?

The two bridges identified in question 1 are the most restrictive.

a. Milepoint:
The US 17 fixed bridge is located at mile 11.3 on the Perquimans River, and the fixed railroad bridge is located at mile 13.39.

b. Horizontal clearance: **22' upstream and 55' downstream**

4. What is the most restrictive vertical clearance on the waterway?

The two bridges identified in question 1 are the most restrictive.

a. Milepoint: **Same as response to question 3a above.**

b. Vertical clearance: **3' upstream and 33' downstream**

5. Will the proposed bridge(s) become the most restrictive/obstructive structure across the waterway? **No.**

C. Waterway characteristics:

1. Various waterway stages:

The NOAA Nautical Chart 12205, 35th Ed., Feb 2017, indicates that the low water datum in the sound is reported to be 0.5' below mean sea level. Tide range is 0.5' or less. Water elevation is effected more by flood flow and wind setup. The FEMA base flood elevation is 6' NAVD 88. The high water surface elevation for the bridge is reported to be 0.56' NAVD 88, and the low water surface elevation is reported to be 0.36' NAVD.

2. Natural flow of the waterway including currents, waterway velocity, water direction, and velocity fluctuations (seasonal, daily, hourly, etc.), that might affect navigation.

While the waterbody is tidal, the waterway can be characterized as only having a flood flow, downstream to sea. No recorded information has been found relative to current or flow velocity of the water. However, based upon interviews with a bridge tender and local marine contractor familiar with the project area, the daily current does not significantly affect navigation.

3. Width of the waterway at bridge site: **360 feet**

4. Depth of the waterway and elevation fluctuations at bridge site: [List the depth at each waterway bridge stage (ex. Range of tides, average high water elevation, etc.)].

Tide range is reported to be less than 0.5.' The limiting water depth in the channel at the bridge is approximately 20.5' at low water. The approximate average water depth in the study area is 11' to 14' at low water, with the controlling water depth being approximately 9' at low water, at the US-17 Bypass bridge. (Low Water Datum is 0.5' below mean sea level).

	Elevation	**Water Depth**
Low Water	**0.36'**	**20.5'**
High Water	**0.56'**	**20.7**

5. Waterway layout and geometry: **The waterway at the location of the bridge turns on either side of the bridge in the form of an "S", with the bridge being in the center of the "S." The distance for alignment of the approach to the bridge is approximately 660 feet on either side of the bridge.**

6. Channel and waterway alignment: **The channels are 95' to 180' from the eastern shoreline. The proposed bridge replacement will be located along the same alignment as the existing.**

7. Other limiting factors: **As described in response #5, bends occur on each side of the bridge, approximately 1200' from the existing bridge. No other limiting factors are known.**

D. Do vessels that engage in emergency operations (i.e., law enforcement, fire, rescue, emergency dam repair, etc.), national defense activities (i.e. cruisers, fuel barges, munitions ships, etc.) or channel maintenance (i.e., dredges, dam and levee repair, etc.) operate on the waterway?

No vessels that engage in emergency operations or national defense are known to operate within the study area, other than a emergency vessel as reported by the Town of Hertford (80' in length, with a 32' beam, and a draft of 7'). Support vessels and small barges do operate within the study area to provide maintenance and construction for docks, seawalls and maintenance to the existing bridges.

1. Does levee maintenance, bridge work (other bridges), channel maintenance and emergency operations upstream of bridge require certain vessels to transit the waterway? **Yes, vessels utilizing small barges may be required in the future to perform maintenance on the upstream fixed, railroad bridge.**

2. Does the proposed bridge(s) impact USCG and/or other government vessels' ability to transit the bridge(s) to conduct mission essential functions (icebreakers, patrols, etc.)? **No.**

3. Vessels using the waterway during the proposed bridge(s) lifespan (should include): **Unknown; A survey was mailed to all waterfront property owners in the study area, as well as to all of the marinas on the Albemarle Loop. Notice was also provided in the local newspaper, and public workshops have been conducted regarding the proposed bridge replacement.**

a. Vessel name;

b. Registration/documentation numbers;

c. Vessel type;

d. Vessel owner contact information (company/individual name, address, contact info.);

e. Primary vessel mooring location (include waterway milepoint, if known);

f. Vessel overall length;

g. Vessel beam;

h. Vessel draft (depth of hull below waterline at full load);

i. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);

j. Specialized vessels that use the waterway (e.g. vessels which have limited maneuverability due to inherent design or mode of operation);

k. Safety margin required by vessel to navigate through the bridge(s);

l. Vessel transit frequencies under proposed bridge(s), transit speeds, and load configurations; and

m. Vessel traffic characteristics (to include if tug assist is required for transit through the bridge(s) due to limited horizontal clearance).

4. Will the proposed bridge(s) provide the horizontal and vertical clearances for the safe, efficient passage of the largest of these vessels? Why? **Yes, the proposed bridge will not be any more restrictive than what currently exists.**

5. If no, estimate the number of vessels in each of the above categories unable to pass through the proposed bridge(s). Give the name, length overall (LOA), beam, draft and height of highest fixed point above the waterline for vessels affected by the bridge(s). **N/A**

6. Can these vessels be modified (i.e., folding mast, relocation or equipment, etc.) without decreasing their respective response times? If so, name the vessels. **N/A**

7. If modifications are feasible, state the name of the vessel(s), their trip frequency, the necessary modifications, the cost of the modification(s) and who will pay for them (i.e., vessel owner, applicant, other). **N/A**

8. Provide any additional information concerning the potentially impacted or burdened users of the waterway as well as the future use of the waterway. **None.**

F. Describe the present and prospective recreational navigation: Will the proposed bridge(s) affect the safe, efficient movement of any segment of the present or prospective recreational fleet operation on the waterway? If yes, provide the following information:

Recognizing that most of the waterfront in the study area is private single family residential, the majority of the vessels on the waterway are recreational vessels (powerboats), 40 feet in length and under. The proposed bridge replacement will not affect the safe, efficient movement, (present or prospective), or operation of vessels on the waterway. The proposed swing bridge will be constructed along the same alignment as the existing. It will have the same horizontal clearances, and it will provide for an additional 5 feet of vertical clearance in the closed position. A survey was mailed to all waterfront property owners in the study area, as well as to all of the marinas on the Albemarle Loop. Notice was also provided in the local newspaper, and public workshops have been conducted regarding the proposed bridge replacement.

1. Vessels utilizing the waterway during the proposed bridge(s) lifespan. (Information in

this bullet should include:)

a. Vessel name;

b. Registration/documentation numbers;

c. Vessel type;

d. Vessel owner contact information (company/individual name, address, contact info.);

e. Primary vessel mooring location (include waterway milepoint, if known);

f. Vessel overall length;

g. Vessel beam;

h. Vessel draft (depth of hull below waterline at full load);

i. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);

j. Specialized vessels that use the waterway (e.g., vessels which have limited maneuverability due to inherent design or mode of operation);

k. Safety margin required by vessel to navigate through the bridge(s);

l. Vessel transit frequencies under proposed bridge(s), transit speeds, and load configurations; and

m. Vessel traffic characteristics (to include if tug assist is required for transit through the bridge(s) due to limited horizontal clearance).

2. What is the estimated percentage of the recreational fleet, which may be affected by the proposed bridge(s)? **Approximately 85% of the vessels which operate with in the study area are recreational vessels. None, are expected to be adversely affected by the proposed bridge replacement.**

3. Will the proposed bridge(s) eliminate the access of these vessels to existing or planned commercial, water-oriented facilities (i.e., restaurants, shops, recreational areas, marinas, etc.) in the vicinity of the proposed bridge(s)? If yes, describe these facilities. **No.**

4. Is it feasible to modify the affected segments of the fleet to clear the proposed bridge(s) without substantially increasing operating costs? If yes, name the vessel(s), state the necessary modifications, cost of modifying each vessel and person or entity responsible for financing the modifications. **N/A**

5. Provide any additional information concerning the potentially impacted or burdened users of the waterway as well as the future use of the waterway.

The Town of Hertford has recently completed an 8 slip public docking facility adjacent to the Town's boat ramp. The Town provides overnight dockage for visitors, with the first 48 hours free of charge, including electricity and sanitary pump out. This facility provides services to vessels up to 50 feet in length.

No other multi-slip docking facility, marina marine commercial or marine industrial facility is located within the study area.

G. Describe the present and waterway and prospective commercial navigation and the cargoes moved on the waterway: Will the proposed bridge(s) affect the safe, efficient movement of any segment of the present or prospective commercial fleet operating on the waterway? If yes, provide the following information: **Based upon an interview with an owner's representative from Stokely-Holland Marine Construction, Hertford, NC (252-264-2090) and observations in the field, commercial vessels are limited to marine construction and commercial fishing.**

The commercial fishing vessels are generally under 35 feet in length and are trailered to the local boat ramps for launching. Many commercial fishing boats currently use the town's boat ramp to launch their boats. Many of the commercial fishing boats have large reels and net rigs on them that require opening the existing swing bridge

The remaining vessels marine contractors pushing small barges to local waterfront properties for various construction projects. Stokely-Holland Marine Construction indicated that the river current is manageable, with no real concerns for navigation.

Based upon an interview with a local bridge tender, there are no known occurances of collisions with the existing bridge. The proposed bridge replacement will not affect the safe, efficient movement of any segment of the present or prospective commercial fleet operating on the waterway in the study area.

A survey was mailed to all waterfront property owners in the study area, as well as to all of the marinas on the Albemarle Loop. Notice was also provided in the local newspaper, and public workshops have been conducted regarding the proposed bridge replacement.

1. Vessel name;

2. Registration/documentation numbers;

3. Vessel type;

4. Vessel owner contact information (company/individual name, address, contact info.);

5. Primary vessel mooring location (include waterway milepoint, if known); vessel overall length;

6. Vessel beam;

7. Vessel draft (depth of hull below waterline at full load);

8. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);

9. Specialized vessels that use the waterway (e.g. vessels which have limited maneuverability due to inherent design or mode of operation); **Marine contractor barges and tugs.**

10. Safety margin required by vessel to navigate through the bridge(s);

11. Vessel transit frequencies under proposed bridge(s), transit speeds, and load configurations; and

12. Vessel traffic characteristics (to include if tug assist is required for transit through the bridge(s) due to limited horizontal clearance).

13. Does the proposed bridge(s) impact existing and future cruise ship ports-of-call/terminals? **No**

14. Does the proposed bridge(s) impact ports supporting post-Panamax vessels? **No**

15. Does the proposed bridge(s) impact vessels that produce unique products for the region? **No**

16. Does the proposed bridge(s) impact vessels that require helper boats/tugs? **No**

17. Document annual cargo movements (cargo types and quantities); **None**

18. State the estimated percentage of the commercial fleet, which may be affected by the proposed bridge(s). **Approximately 15% of the vessels which operate in the study area are commercial Vessels.**

19. Will the proposed bridge(s) clearance impact present and/or prospective upstream commercial activity, e.g., jobs and economic growth and development? **No**

20. If yes, address any existing or planned commercial/industrial developments negatively affected by the proposed clearances and discuss the economic impacts the proposed clearances will have on these businesses: **The Town of Hertford has recently completed an 8 slip public docking facility adjacent to the Town's boat ramp. No other multi-slip docking facility, marina marine commercial or marine industrial facility is located within the study area.**

21. Document the foreseeable needs to future navigation; **No significant foreseeable changes are anticipated in the study area which would affect navigation requirements in the study area.**

22. Provide existing and historical navigational use and waterway conditions;

23. Provide input from waterway dependent facilities concerning future use; **None exist within the study area.**

24. Describe land use zoning along the waterway (particularly within the riparian zone); **The land use is generally single family residential properties. See Appendix B.**

25. Describe future vessel size and traffic trends; **No significant changes are anticipated in the study area due to the land use.**

26. Include input from states based on state development plans; **None**

27. Include input from facilities based on business plans; **None**

28. Document local commercial shipping and other businesses affected by this restriction. **None**

29. Is it feasible to modify the restricted vessels to clear the proposed bridge(s) without substantially increasing operating costs? If yes, name the vessel(s), state the necessary modifications, cost of modifying each vessel and company or entity responsible **N/A**

30. Provide any additional information concerning the potentially impacted or burdened users of the waterway as well as the future use of the waterway. **None**

H. Identify the name and contact information for marine facilities located within a 3-mile radius of the proposed project (public boat ramps, marinas or major docking facilities, boat repair facilities, etc.:

- **Timmy's Mobile Marine is marine repair facility at 160 Creek Dr. on the north shore of Perquimans River, between the existing swing bridge and the US 17 fixed bridge. This facility services small vessels with outboard motors. Mr. Dewald did not believe there were any significant navigation concerns with the existing or proposed bridge replacement.**

- **Perquimans ~ New Hope Boat Ramp**
  386 Boat Ramp Road
  Hertford, NC 27944
  GPS 36° 08'01.46" N 76° 19'10.71" W (Waters edge at ramp)

- **Hertford Marina**

- **Hertford Boat Ramp**
  Closest intersection is; North Church Street (Route 37) & Punch Alley
  Hertford, NC 27944
  GPS 36° 11'28.25" N 76° 27'59.35" W

There are no other local marine service facilities on the waterfront within a 3 mile radius of the proposed project.

I. Will the proposed bridge(s) block access of any vessel presently using local service facilities (i.e., repair shops, parts distributors, fuel stations)? If yes, provide the following information: **No, there are no local marine service facilities located upstream of the proposed bridge replacement, and there are no such facilities planned for, upstream of the proposed bridge replacement.**

1. Describe the facilities impacted and estimate the number of vessels currently using these facilities.

a. Vessel information should include the following for each blocked vessel:

1) Vessel name;

2) Registration/ documentation numbers;

3) Vessel type;

4) Vessel owner contact information (company/individual name, address, contact info);

5) Primary vessel mooring location (include waterway milepoint, if known); vessel overall length;

6) Vessel beam;

7) Vessel draft (depth of hull below waterline at full load); and

8) Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);

2. Could any of these facilities be considered critical infrastructure, key resources, or important/unique U.S. industrial capability (i.e., are these facilities unique or one of only a few of the type in the area?) Address whether the proposed clearances negatively affect those facilities and their customers. **N/A**

3. What economic impact will loss of access have on these facilities? Include estimated dollar amount to support Commandant and DHS goals. **N/A**

4. What is the distance to alternate service facilities capable of servicing the affected vessels? Describe the facilities. **N/A**

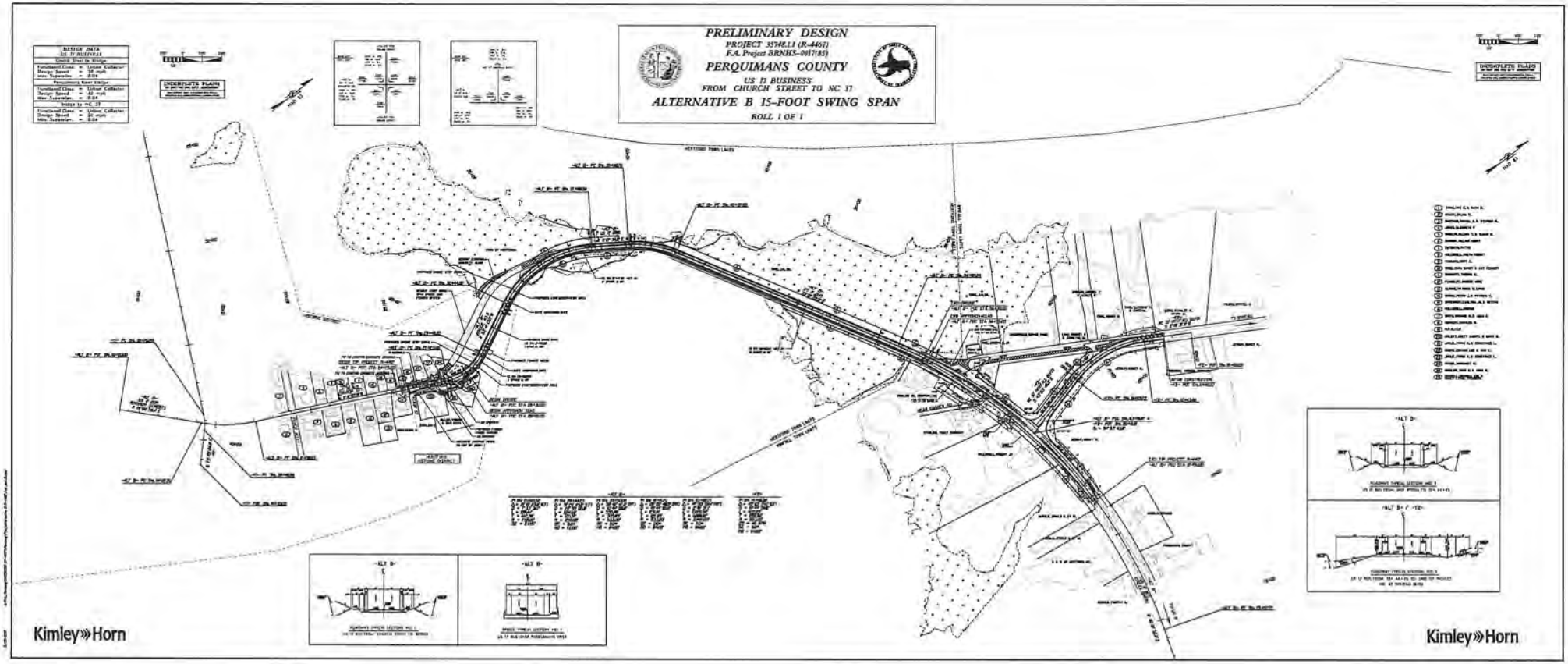
5. Will use of these alternate facilities substantially increase vessel operation affected vessels? Describe the facilities. **N/A**

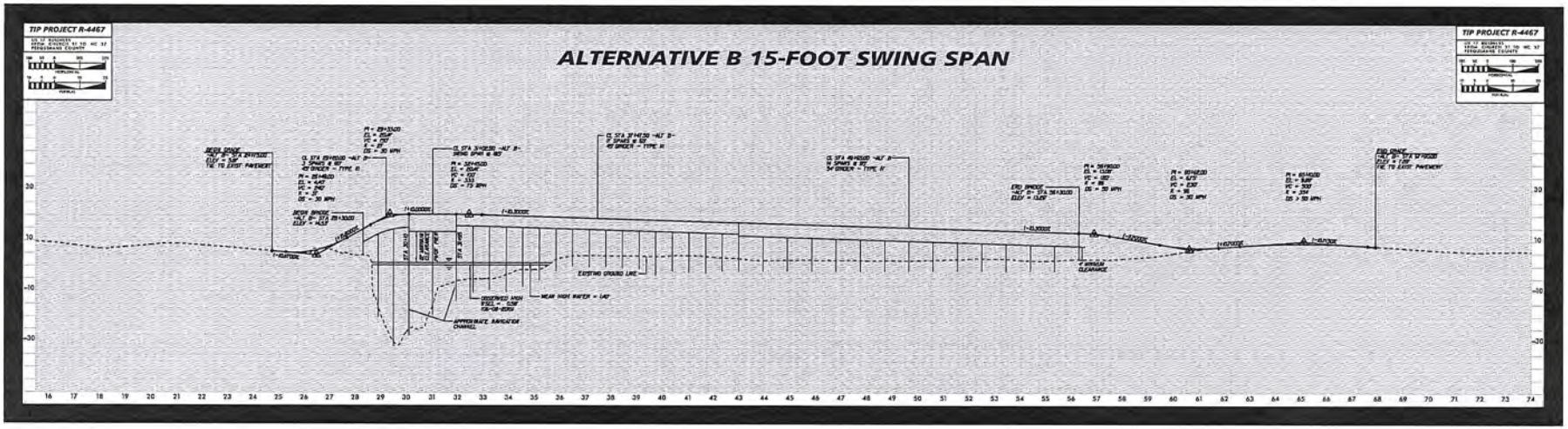
6. Is it feasible to modify the affected vessels to clear the proposed bridge(s)? **N/A**

7. If yes, state the name, necessary modifications, cost of modifying each vessel and who will pay for the modifications.

APPENDIX F

Current Preliminary Design Plans


PRELIMINARY DESIGN
PROJECT 3574BL1 (R-4467)
F.A. Project BRNHS-0017(85)
PERQUIMANS COUNTY
US 17 BUSINESS
FROM CHURCH STREET TO NC 37
ALTERNATIVE B 15-FOOT SWING SPAN
ROLL 1 OF 1
Kimley»Horn
Kimley»Horn


TIP PROJECT R-4467
ALTERNATIVE B 15-FOOT SWING SPAN
TIP PROJECT R-4467
EXISTING GROUND LINE
MEAN HIGH WATER = 1.40'
APPROXIMATE NAVIGATION CHANNEL
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74

ROY COOPER
Governor
MICHAEL S. REGAN
Secretary
LINDA CULPEPPER
Director

NORTH CAROLINA
Environmental Quality

February 20, 2019
Perquimans County
NCDWR Project No. 20181060
TIP R-4467

APPROVAL of 401 WATER QUALITY CERTIFICATION with ADDITIONAL CONDITIONS

Mr. Chris Rivenbark
Environmental Analysis Unit
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, NC 27699-1598

Dear Mr. Rivenbark:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge Number 8 on US 17 Business/NC 37 over the Perquimans River and causeway removal between the towns of Hertford and Winfall in Perquimans County:

Wetland and Open Water Impacts in the Pasquotank River Basin

Site	Wetland Fill Permanent (ac)	Wetland Fill Temporary (ac)	Wetland Hand Clearing (ac)	Open Water (ac)	Open Water temporary (ac)
Bridge	0.06	0.40	1.71	0.03	0.13
Utilities	--	0.04	--	--	<0.01
Total	0.06	0.44	1.71	0.03	0.13
Net Total	2.21			0.16	

The project shall be constructed in accordance with your application dated received August 3, 2018 and revised application received February 12, 2019. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 4135. This certification corresponds to the Nationwide Permit 14 issued by the Corps of Engineers. 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 300 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.

Condition(s) of Certification:

1. 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)]

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 (WRC), or the NC Division of Marine Fisheries (NCDMF). No in-water work is permitted between February 15 and June 30 of any year, without prior approval from the NC Division of Water Resources, WRC and/or NCDMF. 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 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.

4. 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]

5. 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)]

6. 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)]

7. 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)]

8. 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)]

9. 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]

    a. 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.*
    b. 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.
    c. 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.
    d. If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-1, WS-11, 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 Watershed.* [15A NCAC 02H.0506(b)(3) and (c)(3); GC 4135]

10. Sediment and erosion control measures shall not be placed in wetlands or surface waters or within 5 feet of the top of bank without prior approval from DWR. [15A NCAC 02H.0506(b)(3) and (c)(3)]

11. Erosion control matting in riparian areas shall not contain a plastic or 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.0201]

12. If placement of sediment and erosion control devices in wetlands and waters is unavoidable, then design and placement of temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands, stream beds, or banks, adjacent to or upstream and downstream of the above structures. All sediment and erosion control devices shall be removed from wetlands and waters and the natural grade restored within two (2) months of the date that the Division of Energy, Mining and Land Resources (DEMLR) or locally delegated program has released the specific area within the project. [15A NCAC 02H.0506(b)(3) and (c)(3)]

13. 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)]

14. Bridge deck drains shall not discharge directly into the stream to the maximum extent practicable. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) where possible 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)]

15. 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)]

16. Adherence to *The Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters* will be required throughout construction.

17. 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)]

18. 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, or during the removal of bents from an old bridge. This condition can be waived with prior approval from the NCDWR. [15A NCAC 02H .0506(b)(3)

19. NCDOT shall be in compliance with the NCS00250 issued to the NCDOT, including the applicable requirements of the NCG01000.

20. 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)]

21. 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]

22. 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)]

23. 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)]

24. 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. Bill F. Lane, 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)946-6481or garcy.ward@ncdenr.gov.

Sincerely,

Linda Culpepper, Director
Division of Water Resources

Electronic copy only distribution:
Kyle Barnes, US Army Corps of Engineers, Washington Field Office
Greg Daisey, NC Division of Coastal Management
Cathy Brittingham, NC Division of Coastal Management
Paul Williams, NCDOT, Division 1
Garcy Ward, NC Division of Water Resources Washington Regional Office
File Copy

U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT

Action Id. **SAW-2018-01572** County: **Perquimans County** U.S.G.S. Quad: **Hertford**

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Permittee: **Chris Rivenbark**
NCDOT-NEU
Address: **1548 Mail Service Center**
Raleigh NC, 27699
Telephone Number: **(919) 707-6152**

Size (acres) **66**
Nearest Waterway **Perquimans River**
USGS HUC **03010205**
Nearest Town **Hertford**
River Basin **Albemarle-Chowan**
Coordinates Latitude: **36.194987**
Longitude: **-76.467046**

Location description: **The project area is the located north of the town of Hertford from the Perquimans River to the town of Winfall on US 17 Business/NC37 in Perquimans County, North Carolina.**

Description of projects area and activity: **The project involves the replacement of the US 17Business/NC37 Bridge and causeway from the town of Hertford to the town of Winfall with a 0.5 mile long bridge. The project will permanently impacts 0.055 acres of wetlands and temporarily impacts 2.172 acres of wetlands. Additionally 0.03 acres of the Perquimans River will be permanently impacted with fill and 0.13 acres will be temporarily impacted as outlined in the August 3, 2018 permit submittal.**

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

Authorization: Regional General Permit Number and/or Nationwide Permit Number: **14**
SEE ATTACHED RGP or NWP GENERAL, REGIONAL AND/OR 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 August 3, 2018. 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 and/or regional general permit authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide and/or regional general 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 and/or regional general 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 and/or regional general permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide and/or regional general 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 **Kyle Barnes at (910) 251-4584 or Kyle.W.Barnes@usace.army.mil**.

Corps Regulatory Official: BARNES.KYLE.WILLIAM.1388035397 Digitally signed by BARNES.KYLE.WILLIAM.1388035397 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=BARNES.KYLE.WILLIAM.1388035397 Date: 2018.08.22 07:59:29 -04'00'
Date: **August 21, 2018**
Expiration Date of Verification: **March 18, 2022**

A. Determination of Jurisdiction:

1. ☒ 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.

2. ☐ 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.

3. ☐ 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.

4. ☐ A jurisdiction determination was not completed with this request. Therefore, this is not an appealable action. However, you may request an approved JD, which is an appealable action, by contacting the Corps for further instruction.

5. ☐ The aquatic resources within the above described project area have been identified under a previous action. Please reference the approved jurisdictional determination issued . Action ID: **SAW-** .

B. Basis For Jurisdictional Determination: **The Perquimans River is a TNW and the adjacent wetlands within the project area flow unimpeded to the Perquimans River.**

C. Remarks:

D. 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.

E. Appeals Information for Approved Jurisdiction Determinations (as indicated in A2 and A3 above).

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 **N/A**.

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: BARNES.KYLE.WILLIAM.1388035397 Digitally signed by BARNES.KYLE.WILLIAM.1388035397 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=BARNES.KYLE.WILLIAM.1388035397 Date: 2018.08.22 07:59:57 -04'00'

Kyle Barnes

Date of JD: **August 21, 2018** Expiration Date of JD: **N/A**

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.

SPECIAL CONDITIONS

A. The regional condition for NWP 6 excludes the use of this permit for discharges into Waters of the United States designated by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas during the prohibited period of February 15 and June 30. This project shall adhere to that moratorium.

B. A Memorandum of Agreement (MOA) for this project, R-4467, was signed by the United States Coast Guard, the US Army Corps of Engineers, the North Carolina Department of Transportation, the North Carolina State Historic Preservation Officer, and the Advisory Council on Historic Preservation. The applicant shall adhere to the terms and conditions of the MOA titled "Improvements to US 17 from Church Street to NC 37 including the replacement of Bridge No. 8 over the Perquimans River in Hertford, Perquimans Count, North Carolina, TIP Mo. R-4467".

Action ID Number: **SAW-2018-01572** **County:** **Perquimans County**

Permittee: **Chris Rivenbark**
NCDOT-NEU

Project Name: **NCDOT R-4467 Perquimans River Bridge**

Date Verification Issued: **August 21, 2018**

Project Manager: **Kyle Barnes**

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: Kyle Barnes

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**

MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES COAST GUARD,
UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE
IMPROVEMENTS TO US 17 BUSINESS FROM CHURCH STREET TO NC 37 INCLUDING THE REPLACEMENT OF BRIDGE NO. 8 OVER THE PERQUIMANS RIVER IN HERTFORD, PERQUIMANS COUNTY, NORTH CAROLINA
TIP NO. R-4467

WHEREAS, the United States Coast Guard (USCG) is the federal agency responsible for the processing of a federal bridge permit application for the Improvements to US 17 Business from Church Street to NC 37 including the replacement of Bridge Number 8 over the Perquimans River in Hertford, Perquimans County, North Carolina (the Undertaking) pursuant to the General Bridge Act of 1946 (33 U.S.C. §§ 525-533)and the Coast Guard bridge regulations (33 CFR. Subchapter J)[]; and

WHEREAS, the United States Army Corps of Engineers (USACE), intends to issue a Nationwide Permit, pursuant to 33 CFR 330, and to rely upon the findings and consultation process of the USCG, as the lead federal agency for the Undertaking; and

WHEREAS, the USCG has determined that the Undertaking will have an adverse effect upon the Hertford Historic District and Perquimans Bridge Number 8, properties listed in the National Register of Historic Places (NRHP); and

WHEREAS, the USCG has consulted with the North Carolina State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (54 U.S.C. 300101 et seq.); and

WHEREAS, the USCG has notified the Advisory Council on Historic Preservation (Council) of the adverse effect and the Council participated in the consultation; and

WHEREAS, NCDOT has participated in the consultation and has been invited by the USCG and SHPO to be a signatory to this Memorandum of Agreement (MOA); and

WHEREAS, the Town of Hertford (Town), the Citizens for the Preservation and Growth of Hertford, represented by Sara E. Winslow, and Hertford citizens Nancy Theodore, Frank and Connie Jaklic, Penny Byrd, Robert E. Halter, Virginia Miller, Don Keith, Leslie E. Piercy, Rhonda Waters, and Margaret and Charles Lindsay have participated in the consultation and have been invited by the USCG and SHPO to be concurring parties to this MOA;

NOW, THEREFORE, the USCG, USACE, NCDOT, SHPO and Council agree that the Undertaking shall be implemented in accordance with the following stipulations to take into account the effects of the Undertaking on the historic properties and that these stipulations shall govern the Undertaking and all of its parts unless this MOA expires or is terminated.

STIPULATIONS

The USCG shall ensure that the following measures are carried out:

I. Photographic Recordation

Prior to the initiation of construction, NCDOT will record the existing conditions of the properties and landscapes in the Hertford Historic District, including Perquimans Bridge Number 8 that are located adjacent to or affected by the project in accordance with the attached Historic Structures and Landscape Recordation Plan (Appendix A).

The results of the photographic recordation will be submitted to the SHPO in advance of any work taking place. The SHPO shall have fifteen (15) days from receipt of the materials to review and comment. If no comments are received by NCDOT after the 15 days, work may commence.

Copies of the documentation will be deposited in the files of the SHPO, NCDOT Historic Architecture Group, and the Town and be made available to other signatories to this MOA.

II. Design of Replacement Bridge

NCDOT has worked with the primary signatories and concurring parties on the plans for the replacement bridge and associated retaining walls to develop a unified design that incorporates context sensitive design principles and follows NCDOT's aesthetic guidelines. These design elements include:

A. Truss swing span;
B. Oregon rails;
C. Decorative pedestrian lights which match the streetlights throughout the town;
D. Safety standard vertical lift gates;
E. Two observational bump-outs on the bridge;
F. Sidewalks on the east side of the bridge;
G. Reuse current bridge plaque on new bridge and add a second bridge plaque for the new bridge;
H. Retaining walls of stamped concrete within the historic district;
I. Signs on NCDOT property stating authorized vehicles and personnel only;
J. Flag pole with US and NC flags lit dusk to dawn;
K. Fenders composed of artificial timber and includes lights and signs.

III. Design of the Tender House

NCDOT, in consultation with the primary signatories and concurring parties, shall develop

plans for the tender house and parking spaces designated for use by the bridge operator and bridge maintenance crew to develop a unified design that incorporates context sensitive design principles and follows NCDOT's aesthetic guidelines. These design elements include:

A. A two-story structure above the bridge deck with the generator housed inside the tender house;
B. Hipped roof structure with fiber cement siding;
C. Multi-light windows with pedimented arches;
D. A three-foot wide walkway around the second story;
E. An escape ladder on the east side of the tender house.

IV. Landscape Plan

NCDOT, in consultation with the primary signatories and concurring parties, shall develop a landscape plan for the south side of the bridge within the Hertford Historic District contained within the NCDOT right-of-way.

V. Vibration Monitoring

To minimize vibration effects on the historic district in the vicinity of the bridge, a vibration monitoring and enforcement program shall be implemented by NCDOT as part of the construction contract. The Design-Build Team shall employ a vibration monitoring firm from NCDOT's list of approved firms to perform pre and post construction inventories and vibration monitoring of buildings located within 200 feet of the mainline project limits in the historic district. The inventories will require the appointed firm has access to the interior of buildings in the area being monitored.

If vibration levels rise above the prescribed thresholds that could cause structural damage to any building the contractor, or the property owners shall immediately contact the Resident Engineer. If structural damages are discovered during this period, work in that area of the project shall immediately cease and NCDOT shall contact SHPO and the property owners immediately to determine what steps should be taken to address the damage. After completion of all vibration inducing construction activities, vibration monitoring equipment may be discontinued. If vibration monitoring is to be discontinued prior to completion of the Undertaking, property owners will be notified by NCDOT.

VI. Unanticipated Discovery

In accordance with 36 CFR 800.11(a), if NCDOT identifies additional cultural resource(s) during construction and determines them to be eligible for the NRHP, all work will be halted within the limits of the NRHP-eligible resource(s) and the USCG and North Carolina SHPO contacted within 48 hours. If after consultation with the Signatory Parties and additional mitigation is determined necessary, the NCDOT, in consultation with the Signatory Parties, will develop and implement appropriate protection/mitigation measures for the resource(s). NCDOT will notify the SHPO and USCG of any findings of additional cultural resources that are determined to not be eligible for NRHP listing.

Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statutes 65 and 70.

VII. Dispute Resolution

Should any of the Signatory or Concurring Parties object within (30) days to any plans or documentation provided for review pursuant to this MOA, the USCG shall consult with the objecting party(ies) to resolve the objection. If the USCG or the objecting party(ies) determines that the objection cannot be resolved, the USCG will forward all documentation relevant to the dispute to the Council. Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

A. Provide the USCG with recommendations, which the USCG will take into account in reaching a final decision regarding the dispute, or

B. Notify the USCG that it will comment pursuant to 36 CFR 800.7(c).Any Council comment provided in response to such a request will be taken into account by the USCG in accordance with 36 CFR 800.7(c) (4) with reference to the subject of the dispute. Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; USCG and NCDOT's responsibility to carry out all of the actions under this agreement that are not the subject of the dispute will remain unchanged.

VIII. Amendments

Should any of the Signatory or Concurring Parties to this MOA believe that its terms cannot be carried out or that an amendment to the terms must be made, that party(ies) shall immediately consult with the other party(ies) to develop amendments in accordance with 36 CFR 800.6(c)(7). If an amendment cannot be agreed upon, the dispute resolution process set forth in Stipulation VII will be followed.

IX. Termination

Any of the Signatory Party (ies) may terminate the MOA by providing 30 days written notice to the other parties, provided that the signatories will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800. This MOA may be terminated by the execution of a subsequent MOA that explicitly terminates or supersedes its terms.

X. Duration

Unless terminated pursuant to Stipulation IX above, this MOA will be in effect until December 31, 2027. Prior to such time, the USCG may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance to the dispute resolution process set forth in Stipulation VII.

XI. Other Provisions

A. Nothing in this MOA is intended to conflict with current law or regulation or the directives of the USCG or Department of Homeland Security. If this MOA is inconsistent with such authority, then that term shall be invalid, but the remaining terms and conditions of this agreement shall remain in full force and effect.

B. This MOA is not an agreement by the United States, USCG to indemnify any party, nor is it an agreement by the United States, USCG to assume financial, legal, or any other liabilities.

C. Nothing in this MOA shall constitute an obligation of funds of the United States in advance of an appropriation of those funds.

XII. Effective Date

The terms of this MOA will become effective upon issuance of the Coast Guard bridge permit.

AGREED:

DocuSigned by:
By: Hal P. Pitts
11D71632C86D42D...
Date: 12/8/2017

Mr. Hal R. Pitts
District Bridge Manager
Fifth Coast Guard District

DocuSigned by:
By: Kevin Cherry
C55D8C37C9EE4E7...
Date: 12/5/2017

Kevin Cherry, Ph.D.
North Carolina State Historic Preservation Officer
North Carolina Department of Cultural Resources

DocuSigned by:
By: Phillip S. Harris
8C1643F8874A457...
Date: 12/5/2017

Philip S. Harris III, P.E., C.P.M.
Environmental Analysis Unit Head
North Carolina Department of Transportation

for DocuSigned by:
By: [signature]
28691C47C8AD4DF...
Date: 12/6/2017

Robert J. Clark
Colonel, U.S. Army
District Commander
US Army Corps of Engineers

By: John M. Fowler
Date: 1/10/18

John M. Fowler, Executive Director
Advisory Council on Historic Preservation

MEMORANDUM OF AGREEMENT
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AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
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IMPROVEMENTS TO US 17 BUSINESS FROM CHURCH STREET TO NC 37 INCLUDING THE REPLACEMENT OF BRIDGE NO. 8 OVER THE PERQUIMANS RIVER IN HERTFORD, PERQUIMANS COUNTY, NORTH CAROLINA
TIP NO. R-4467

Execution of this MOA by USCG, USACE, NCDOT, ACHP, and the North Carolina SHPO, and implementation of its terms, evidence that the USCG, as the lead federal agency, has afforded the Council an opportunity to comment on the Undertaking.

CONCUR:

Brandon S. Shoaf
Town Manager, Town of Hertford

Date: 12-13-2017

1/10

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CONCUR:

Sara E Winslow Date: 12-15-17

Sara. E Winslow
Citizens for the Preservation and Growth of Hertford

This signature only represents CPGH group. As adjacent property owner who will be negatively impacted I will not sign. Way to many unknowns and lack of data and information supplied.

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CONCUR:

_____ Date: _____

Nancy Theodore
103 Phelps Street
Hertford, NC 27944

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CONCUR:

_____ Date: _____

Frank Jaklic
401 N Church Street
Hertford, NC 27944

_____ Date: _____

Connie Jaklic
401 N Church Street
Hertford, NC 27944

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CONCUR:

_____ Date: _____

Virginia Miller
405 North Front Street
Hertford, NC 27944

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CONCUR:

_____ Date: _____

Don Keith
405 North Front Street
Hertford, NC 27944

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CONCUR:

_____ Date: _____

Penny Byrd
137 Broad River Drive
Hertford, NC 27944

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CONCUR:

_____ Date: _____

Robert E. Halter
105 Little River Circle
Hertford, NC 27944

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RIVER IN HERTFORD, PERQUIMANS COUNTY, NORTH CAROLINA
TIP NO. R-4467

CONCUR:

_____ Date: _____

Leslie E. Piercy
202 Front Street
Hertford, NC 27944

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CONCUR:

DocuSigned by:
Rhonda Waters
18CF1D8FE43B460

Date: 12/16/2017

Rhonda Waters
217 North Church Street
Hertford, NC 27944

MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES COAST GUARD,
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CONCUR:

_____ Date:_____

Margaret Lindsay
306 N Front Street
Hertford, NC 27944

_____ Date: _____

Charles Lindsay
306 N Front Street
Hertford, NC 27944

APPENDIX A

Historic Structures and Landscape Recordation Plan For Improvements to US 17 Business from Church Street to NC 37 including the Replacement of Bridge No. 8 over the Perquimans River in Hertford, Perquimans County, North Carolina TIP No. R-4467

Photographic Requirements

- Elevations and oblique views of the properties affected by the R-4467 project within the Hertford Downtown Historic District, including Perquimans Bridge Number 8.
- Representative street/landscapes within the affected areas of historic district.

Photographic Format

- Color digital images (all views). Images are to be shot on a SLR digital camera with a minimum resolution of 6 megabyte pixels, at a high quality (preferably RAW) setting, to be saved in TIF format as the archival masters and labeled according to the State Historic Preservation Office standards.
- Images provided to the Town will be in JPEG format.
- All processing to be done to archival standards.
- Labeled map with a key to the shots and photographs
- The accompanying printed inventory of the images – including subject, location, date, and photographer information for each image – is to be completed according to the State Historic Preservation Office standards.

Copies and Curation

- One (1) set of all above mentioned photographic documentation, including a compact disc of labeled images, will be deposited with the North Carolina Office of Archives and History/Historic Preservation Office to be made a permanent part of the statewide survey and iconographic collection.
- One (1) contact sheet shall be deposited in the files of the Historic Architecture Group of NCDOT.