



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

February 27, 2023

MEMORANDUM TO: Division Environmental and Construction Units

FROM: Gregory W. Price, SPWS
Division 6 Environmental Program Supervisor

SUBJECT: Environmental Permits for the Replacement of Bridge 201 on
SR 1002 over Western Prong Swamp, Columbus County,
WBS BP6.R004

Please find enclosed the following permit for this project:

| Agency | Permit Type | Permit Expiration |
|---|------------------------------|-------------------|
| US Army Corps of Engineers Section 404 Clean Water Act Permit | Nationwide 3 (non-notifying) | March 14, 2026 |
| NC Division of Water Resources Section 401 Water Quality Certification | GC No. 4239 | March 14, 2026 |

Work is authorized by the above referenced permit provided it is accomplished in strict accordance with the permitted plans.

The Division Environmental Office must be consulted if any deviation from the permit(s) is required.

The General Conditions and Certifications for Nationwide and Regional Permits can be referenced at:

<https://www.deq.nc.gov/about/divisions/water-resources/water-quality-permitting/401-buffer-permitting/general-certifications>

PROJECT COMMITMENTS

Replacement of Bridge No. 201 over Western Prong Swamp
On SR 1002 (Old Lumberton Road)
Columbus County
W.B.S. No. BP6.R004

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

NCDOT Division 6

In order to have time to adequately reroute school buses, Columbus County Schools will be contacted at (910) 642-5168 at least six months prior to road closure.

Columbus County Fire and EMS departments will be contacted at (910) 640-6610 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

Whiteville Rescue Unit will be contacted at (910) 642-2742 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

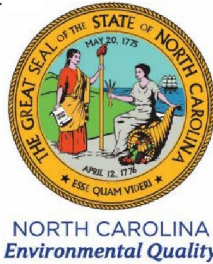
This project involves construction activities on or adjacent to a FEMA-regulated stream(s). Therefore, the Division will submit sealed as-built construction plans to the NCDOT Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

NCDOT Hydraulic Design Unit

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), the delegated state agency for administering FEMA's National Flood Insurance Program, to determine the status of the project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

COMMITMENTS FROM PERMITTING

No special commitments were developed during project permitting.



ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

RICHARD E. ROGERS, JR.
Director

February 22, 2023

Mr. Gregory Price
Division 6 Environmental Program Supervisor
North Carolina Department of Transportation
431 Transportation Drive
Fayetteville, NC 28302

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with
ADDITIONAL CONDITIONS for the proposed Replacement of Bridge 201 over Western Prong Swamp
on SR 1002 in Columbus County, NCDWR Project No. 20230104.

Dear Mr. Price:

Attached hereto is a copy of Certification No. 005569 issued to The North Carolina Department of Transportation (NCDOT) dated February 22, 2023.

This approval is for the purpose and design described in your application. The plans and specifications for this project are incorporated by reference as part of this Water Quality Certification. If you change your project, you must notify the Division and you may be required to submit a new application package with the appropriate fee. If the property is sold, the new owner must be given a copy of this Certification and is responsible for complying with all conditions. [15A NCAC 02H .0507(d)(2)].

This Certification does not relieve the permittee of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

DocuSigned by:

Amy Chapman

Richard E. Rogers, Jr., Director
Division of Water Resources



Attachments

CC:

Eric Alsmeyer, US Army Corps of Engineers, Wilmington Regulatory Field Office
James Kerko, Division 6 NCDOT
Gary Jordan, US Fish and Wildlife Service
Travis Wilson, NC Wildlife Resources Commission
Hannah Sprinkle, NC Division of Water Resources Wilmington Regional Office
File Copy



**401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act
with ADDITIONAL CONDITIONS**

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact 0.052 acres of jurisdictional wetlands, 46 linear feet of jurisdictional streams in Columbus County. The project shall be constructed pursuant to the application dated received January 20, 2023. The authorized impacts are as described below:

Stream Impacts in the Lumber River Basin

| Site | Stream Name | Permanent Fill in Perennial Stream (linear ft) | Temporary Fill in Perennial Stream (linear ft) | Total Stream Impact (linear ft) | Stream Impacts Requiring Mitigation (linear ft) |
|--------------|---------------------|--|--|---------------------------------|---|
| 1 | Western Prong Swamp | 46 | --- | 46 | N/A |
| Total | | 46 | --- | 46 | N/A |

**Total Stream Impact for Project: 46 linear feet
(permanent impacts: 46 lf)**

Wetland Impacts in the Lumber River Basin

| Site | Fill (ac) | Fill (temporary) (ac) | Excavation (ac) | Mechanized Clearing (ac) | Hand Clearing (ac) | Total Wetland Impact (ac) |
|--------------|--------------|-----------------------|-----------------|--------------------------|--------------------|---------------------------|
| 1 | 0.004 | --- | --- | 0.031 | --- | 0.035 |
| 2 | --- | --- | --- | 0.017 | --- | 0.017 |
| Total | 0.004 | --- | --- | 0.048 | --- | 0.052 |

**Total Wetland Impact for Project: 0.052 acres
(permanent impacts: 0.052 ac)**

The application provides adequate assurance that the discharge of fill material into the waters of the Lumber River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your application dated received January 20, 2023. Should your project change, you are required to 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 any additional wetland impacts for this project (now or in the future) exceed 1/10 acre, or total impacts to streams (now or in the future) exceed 300 linear feet, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations.



This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit. This Water Quality Certification neither grants nor affirms any property right, license, or privilege in any lands or waters, or any right of use in any waters. This Water Quality Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and does not create any prescriptive right or any right of priority regarding any usage of water. This Water Quality Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Water Quality Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded. Upon the presentation of proper credentials, the Division may inspect the property.

Condition(s) of Certification:
Project Specific Conditions

1. The impacts covered in this Certification are associated with the Nationwide Permit 3 issued by the Corps of Engineers.

General Conditions

2. 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.
3. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
4. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization, including all non-commercial borrow and waste sites associated with the project, 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. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]
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. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]
9. 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)]
10. 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)]
11. 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]
12. 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)]
13. 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)]
14. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within wetlands. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02B .0201]
15. NCDOT shall be in compliance with the NCS00250 issued to the NCDOT, including the applicable requirements of the NCG01000. Please note the extra protections for the sensitive watersheds.
16. 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)]
17. The post-construction removal of any temporary bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species. [15A NCAC 02H .0506(b)(2)]
18. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream, please refer to the most recent version of the *North Carolina Department of Transportation Stormwater Best Management Practices Toolbox* manual for approved measures. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506(b)(5)]



19. 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)]
20. 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)]
21. A turbidity curtain will be installed in the stream if driving or drilling activities occur within the stream channel, on the stream bank, or within 5 feet of the top of bank, 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)]
22. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
23. Any rip-rap required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the area directly impacted by the approved construction activity. All rip-rap shall be placed such that the original streambed elevation and streambank contours are restored and maintained and shall consist of clean rock or masonry material free of debris or toxic pollutants. Placement of rip-rap or other approved materials shall not result in de-stabilization of the stream bed or banks upstream or downstream of the area or be installed in a manner that precludes aquatic life passage. [15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)]
24. Any rip-rap used for stream or shoreline stabilization shall be of a size and density to prevent movement by wave, current action, or stream flows, and shall consist of clean rock or masonry material free of debris or toxic pollutants. Rip-rap shall not be installed in the streambed except in specific areas required for velocity control and to ensure structural integrity of bank stabilization measures. [15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0201]
25. No drill slurry or water that has been in contact with uncured concrete shall be allowed to enter surface waters. This water shall be captured, treated, and disposed of properly. [15A NCAC 02H .0506(b)(3)]
26. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed. [15A NCAC 02H.0506(b)(2)]
27. Unless otherwise approved in this certification, placement of culverts and other structures in open waters and streams, shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by the NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required. [15A NCAC 02H.0506(b)(2)]
28. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]



29. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream. [15A NCAC 02H.0506(b)(3)]
30. In accordance with 143-215.85(b), the permittee shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours. [15A NCAC 02H .0507(c); N.C.G.S 143-215.85(b)]
31. 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)]
32. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
33. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage. [15A NCAC 02H.0506(b)(2)]
34. Pipes and culverts used exclusively to maintain equilibrium in wetlands, where aquatic life passage is not a concern, shall not be buried. These pipes shall be installed at natural ground elevation.
35. The stream channel shall be excavated no deeper than the natural bed material of the stream, to the maximum extent practicable. Efforts must be made to minimize impacts to the stream banks, as well as to vegetation responsible for maintaining the stream bank stability. Any applicable riparian buffer impact for access to stream channel shall be temporary and be revegetated with native riparian species. [15A NCAC 02H.0506(b)(2)]
36. Channel relocations shall be completed and stabilized, and approved on site by NCDWR staff, prior to diverting water into the new channel. Stream banks shall be matted with coir-fiber matting. Vegetation used for bank stabilization shall be limited to native riparian vegetation, and should include establishment of a vegetated buffer on both sides of the relocated channel to the maximum extent practical. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested. Once the stream has been turned into the new channel, it may be necessary to relocate stranded fish to the new channel to prevent fish kills. [15A NCAC 02H .0506(b)(3)]
37. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities. [15A NCAC 02H.0506(b)(3) and (c)(3)]
38. 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]
39. 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)]



40. The NCDOT Division Environmental Officer or Environmental Assistant will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the potential issues with stream and pipe alignment at the permitted site. NCDWR staff shall be invited to the pre-construction meeting. [15A NCAC 02H.0506(b)(2) and (b)(3)]
41. 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)]
42. 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)]

This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit. Please be aware that impacting waters without first applying for and securing the issuance of a 401 Water Quality Certification violates Title 15A of the North Carolina Administrative Code (NCAC) 2H .0500. Title 15A NCAC 2H .0500 requires certifications pursuant to Section 401 of the Clean Water Act whenever construction or operation of facilities will result in a discharge into navigable waters, including wetlands, as described in 33 Code of Federal Regulations (CFR) Part 323. It also states any person desiring issuance of the State certification or coverage under a general certification required by Section 401 of the Federal Water Pollution Control Act shall file with the Director of the North Carolina Division of Water Quality. Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. Pursuant to G.S. 143-215.6A, these violations and any future violations are subject to a civil penalty assessment of up to a maximum of \$25,000.00 per day for each violation.

This approval and its conditions are final and binding unless contested [G.S. 143-215.5]. Please be aware that impacting waters without first applying for and securing the issuance of a 401 Water Quality Certification violates Title 15A of the North Carolina Administrative Code (NCAC) 2H .0500. Title 15A NCAC 2H .0500 requires certifications pursuant to Section 401 of the Clean Water Act whenever construction or operation of facilities will result in a discharge into navigable waters, including wetlands, as described in 33 Code of Federal Regulations (CFR) Part 323. It also states any person desiring issuance of the State certification or coverage under a general certification required by Section 401 of the Federal Water Pollution Control Act shall file with the Director of the North Carolina Division of Water Quality. Pursuant to G.S. 143-215.6A, these violations and any future violations are subject to a civil penalty assessment of up to a maximum of \$25,000.00 per day for each violation.

This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) within sixty (60) calendar days. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at <http://www.ncoah.com/> or by calling the OAH Clerk's Office at (919) 431-3000.

A party filing a Petition must serve a copy of the Petition on:

William F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601



If the party filing the Petition is not the permittee, then the party must also serve the recipient of the Certification in accordance with N.C.G.S 150B-23(a).

This the 22nd day of February 2023

DIVISION OF WATER RESOURCES

DocuSigned by:

Amy Chapman

9C9886312DCD474...

Richard E. Rogers, Jr., Director

WQC No. 005569



NCDWR Project No.: _____ County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

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

Applicant's Certification

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

Signature: _____ Date: _____

Agent's Certification

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

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

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

Signature _____ Registration No. _____
Date _____





North Carolina Department of Transportation



Highway Stormwater Program
STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS

(Version 3.00; Released August 2021)

WBS Element: BP6.R004.1 TIP/Proj No: BP6.R004 County(ies): Columbus Page 1 of 2

General Project Information

| | | | | | | | |
|---------------------------------|--------------------|---|------------------------|---------------|--------------------|--|-----------|
| WBS Element: | BP6.R004.1 | TIP Number: | BP6.R004 | Project Type: | Bridge Replacement | Date: | 1/11/2023 |
| NCDOT Contact: | Adam Britt | | Contractor / Designer: | | He Yang, PE | | |
| | Address: | Highway Division 6 558 Gillespie St. Fayetteville, NC 28301 | | | Address: | Summit Design and Engineering Services 1110 Navaho Dr #600 Raleigh, NC 27609 | |
| | Phone: | (910) 364-0603 | | | Phone: | (919) 322-0115 | |
| | Email: | abritt@ncdot.gov | | | Email: | alec.yang@summitde.com | |
| City/Town: | Town of Whiteville | | County(ies): | Columbus | | | |
| River Basin(s): | Lumber | | CAMA County? | No | | | |
| Wetlands within Project Limits? | Yes | | | | | | |

Project Description

| | | | | | | | |
|--------------------------------------|--|-----------------------|---|---|--|--|--|
| Project Length (lin. miles or feet): | 0.076 miles | Surrounding Land Use: | Rural Area with Residential and Agricultural Land Use | | | | |
| | Proposed Project | | | Existing Site | | | |
| Project Built-Upon Area (ac.) | 0.3 | ac. | 0.2 | ac. | | | |
| Typical Cross Section Description: | Proposed Road and Bridge will be a 2-lane facility with 11' wide travel lane. The total proposed bridge length is 70 ft with an out-to-out width of 33.0 ft. | | | Existing road and bridge is a 2 lane facility with 11' wide travel lanes. The total bridge length is 55 ft 2 inch with an out-to-out width of 27.33 ft. | | | |

| | | | | | | | | |
|--|----------------|------|-------|------|-----------|------|-------|------|
| Annual Avg Daily Traffic (veh/hr/day): | Design/Future: | 5200 | Year: | 2025 | Existing: | 2600 | Year: | 2022 |
|--|----------------|------|-------|------|-----------|------|-------|------|

General Project Narrative:
(Description of Minimization of Water Quality Impacts)

State Project involves the replacement of NCDOT Bridge 230201 over Western Prong Creek on SR 1002 in Columbus County. The existing structure is a 55 feet 2 inch long, 3 span (2@18 ft 4 in, 1@18 feet 6 inch) reinforced concrete deck with girder structure. The proposed structure will be a 1 span (1@70 feet) 24-inch cored slab bridge with an out-to-out deck width of 33 feet. The existing structure has deck drains. The proposed bridge will not have deck drains. The proposed bridge will maintain the existing level of service. There are two proposed outfalls on the begin bridge side of the crossing. Modified concrete flumes will be utilized with rip rap outlet pads to dissipate the flow and minimize erosion. Existing ditches will be retained. Fill in wetland impacts are minimized and only due to roadway fill. All mechanized clearing will be within the silt fence limits.



North Carolina Department of Transportation
Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
 FOR NCDOT PROJECTS



(Version 3.00; Released August 2021)

WBS Element: BP6.R004.1
 TIP/Proj No.: BP6.R004
 County(ies): Columbus
 Page 2 **of** 2

General Project Information

Waterbody Information

| | | | | | |
|--|--|--|--------------------------------|--|----|
| Surface Water Body (1): | Western Prong Creek | | NCDWR Stream Index No.: | 15-4-2 | |
| NCDWR Surface Water Classification for Water Body | Primary Classification: | Class C | | | |
| | Supplemental Classification: | Swamp Waters (Sw) | | | |
| Other Stream Classification: | None | | | | |
| Impairments: | None | | | | |
| Aquatic T&E Species? | No | Comments: | | | |
| NRTR Stream ID: | Western Prong Swamp (Creek) | | Buffer Rules in Effect: | N/A | |
| Project Includes Bridge Spanning Water Body? | Yes | Deck Drains Discharge Over Buffer? | N/A | Dissipator Pads Provided in Buffer? | No |
| Deck Drains Discharge Over Water Body? | No | (If yes, provide justification in the General Project Narrative) | | (If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative) | |
| | (If yes, provide justification in the General Project Narrative) | | | | |

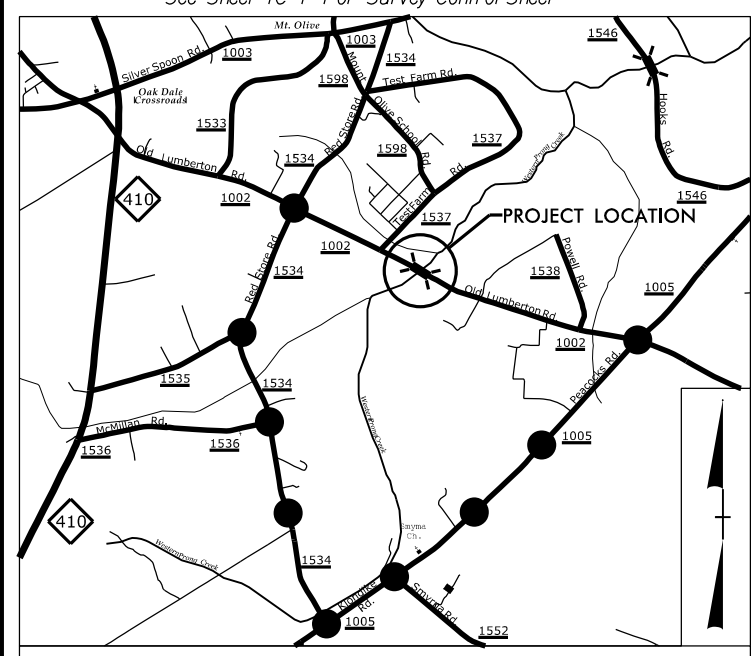
09.08/99

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols
See Sheet 1C-1 For Survey Control Sheet

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS COLUMBUS COUNTY

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C. | BP6.R004 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| BP6.R004.1 | NA | PE | |
| | | | |
| | | | |
| | | | |
| | | | |

TIP PROJECT: BP6.R004

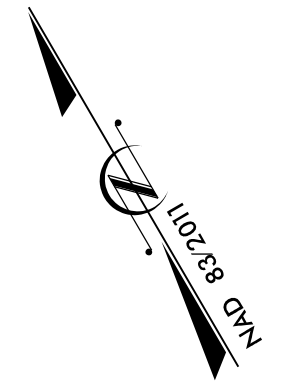


VICINITY MAP

LOCATION: BRIDGE NO. 230201 ON OLD LUMBERTON ROAD (SR 1002) OVER WESTERN PRONG SWAMP.

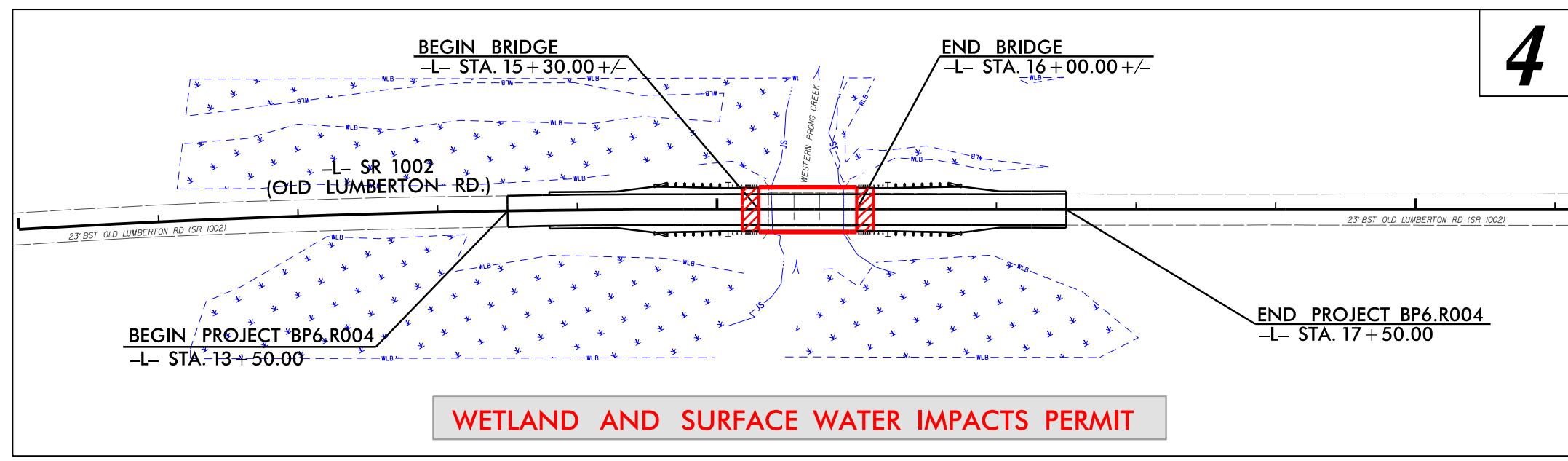
TYPE OF WORK: GRADING, DRAINAGE, PAVING & STRUCTURE.

60% PLANS



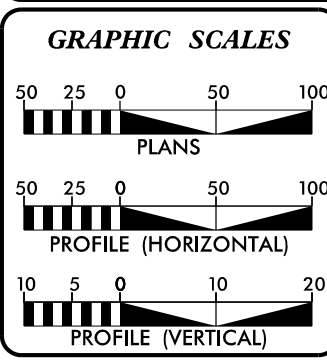
**PERMIT DRAWING
SHEET 1 OF 8**

THIS PROJECT DOES NOT FALL WITHIN ANY MUNICIPAL BOUNDARIES.
● DETOUR ROUTE



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY MODIFIED METHOD II.

**INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



DESIGN DATA

| | |
|-------------------|-----------------|
| ADT 2022 = | 2600 |
| ADT 2025 = | 5200 |
| V = | 60 MPH |
| * TTST = | 6% |
| FUNC CLASS = | MINOR COLLECTOR |
| SUB-REGIONAL TIER | |

PROJECT LENGTH

| | |
|----------------------------|-------------|
| LENGTH ROADWAY PROJECT = | 0.063 MILES |
| LENGTH STRUCTURE PROJECT = | 0.013 MILES |
| TOTAL LENGTH PROJECT = | 0.076 MILES |

NCDOT CONTACT: ADAM BRITT
DIV. 6 BRIDGE PROGRAM MANAGER

Prepared In the Office of:

320 Executive Ct.
Hillsborough, NC 27278-8551
Voice: (919) 732-3883
Fax: (919) 732-6776
www.summitde.net

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JUNE 16, 2022
LETTING DATE: JUNE 7, 2023

BRANDON W. JOHNSON, PE
PROJECT ENGINEER

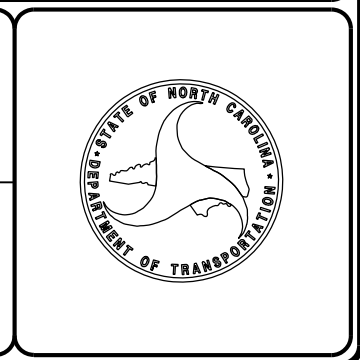
FAITH E. JAHNKE, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



11-JAN-2023 13:02
230201-Hyd_prm_+sh.dgn
he.yang

CONTRACT: XXXXXXX

8/17/99

-L-
 PI Sta 12+38.17
 $\Delta = 3' 24" 38.17$ (RT)
 $D = 0' 42" 58.3"$
 $L = 476.21'$
 $T = 238.17'$
 $R = 8,000.00'$
 $DS = 55$ MPH

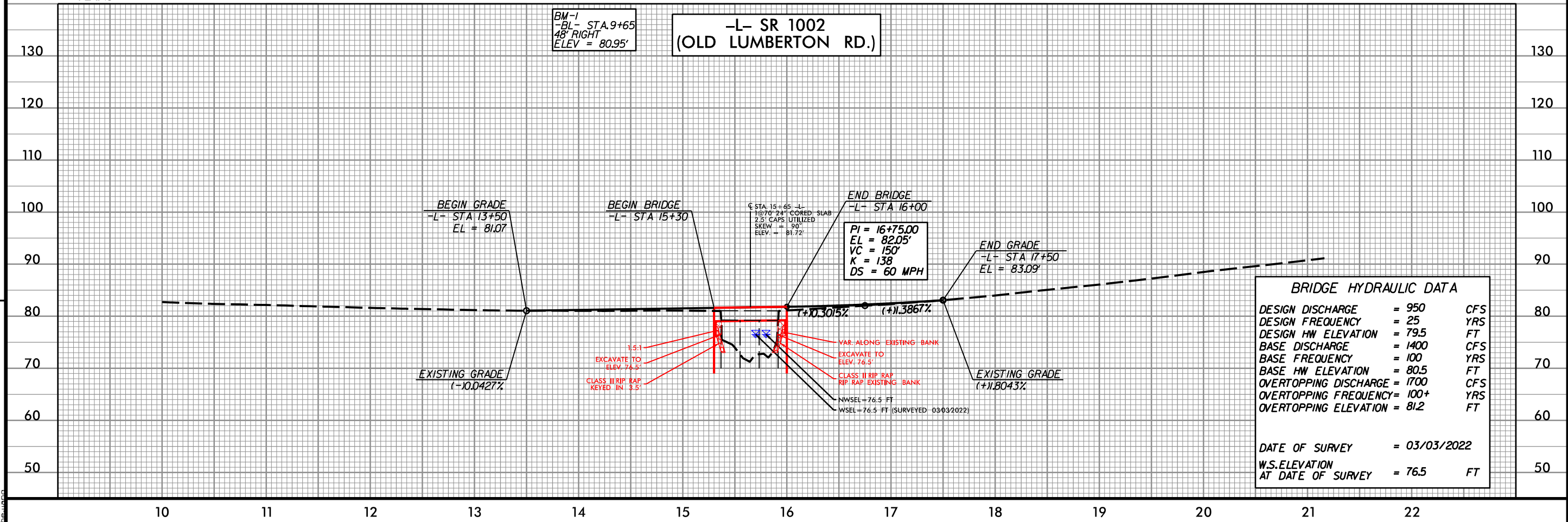
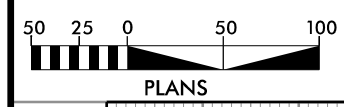
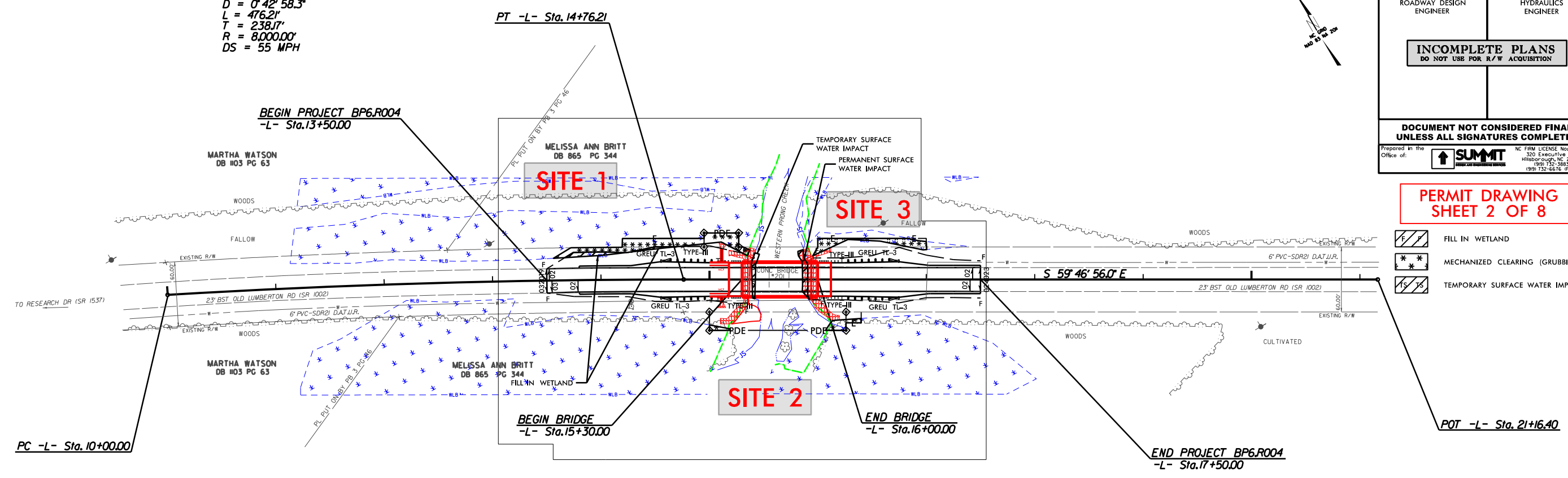
15

BRIDGE NO. 230201

| | |
|---|---|
| PROJECT REFERENCE NO. BP6.R004 | SHEET NO. 4 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of: | NC PERM LICENSE NO. P-0339 300 Executive Ct. Hillsborough, NC 27278 (919) 332-3883 (919) 732-6676 (FAX) |

PERMIT DRAWING
SHEET 2 OF 8

- FILL IN WETLAND
- MECHANIZED CLEARING (GRUBBING)
- TEMPORARY SURFACE WATER IMPACTS



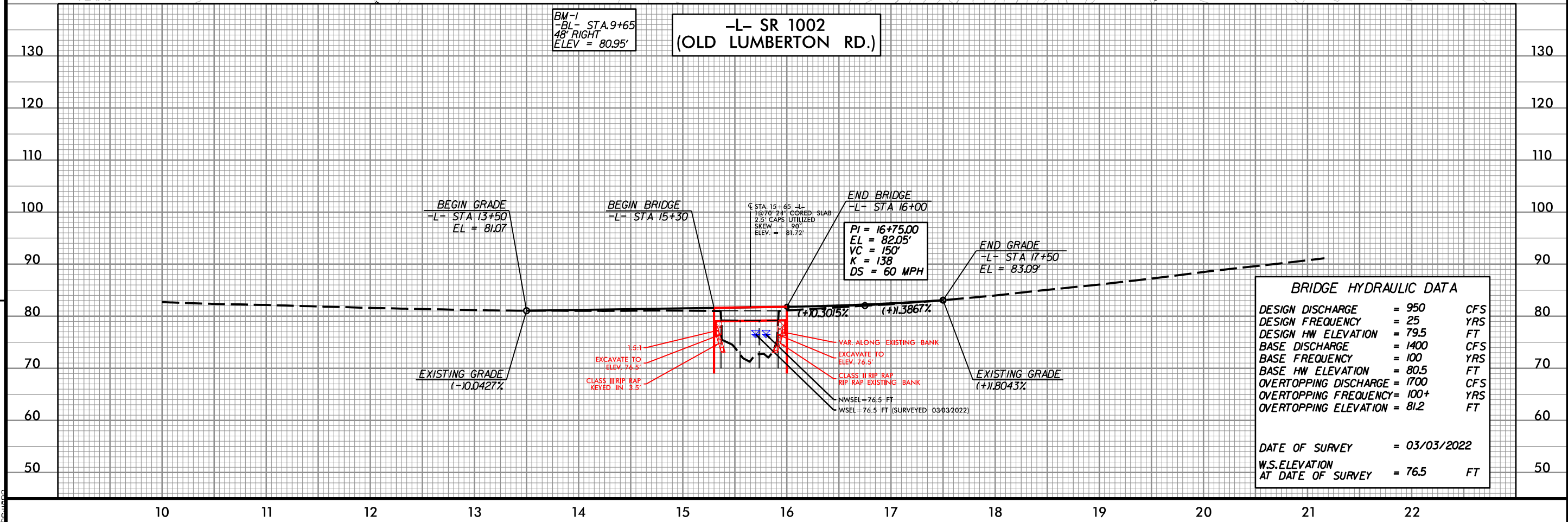
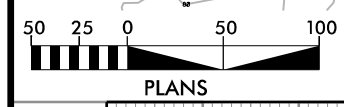
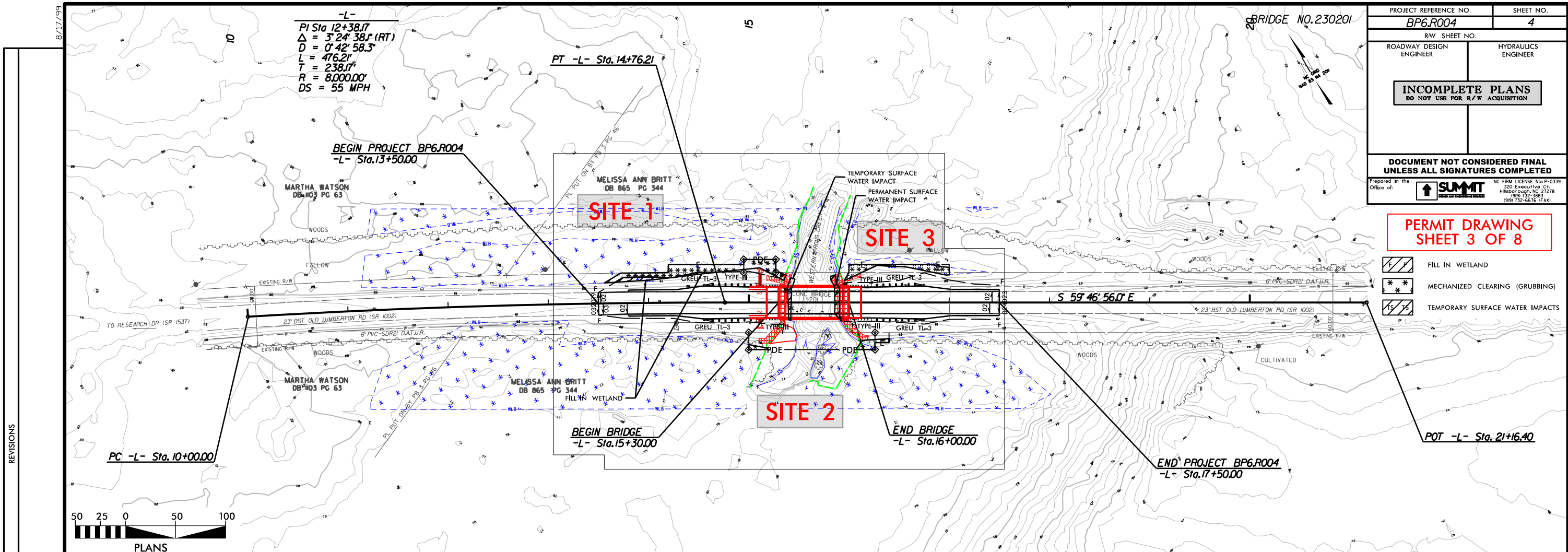
| BRIDGE HYDRAULIC DATA | | |
|--|--------|-----|
| DESIGN DISCHARGE | = 950 | CFS |
| DESIGN FREQUENCY | = 25 | YRS |
| DESIGN HW ELEVATION | = 79.5 | FT |
| BASE DISCHARGE | = 1400 | CFS |
| BASE FREQUENCY | = 100 | YRS |
| BASE HW ELEVATION | = 80.5 | FT |
| OVERTOPPING DISCHARGE | = 1700 | CFS |
| OVERTOPPING FREQUENCY | = 100+ | YRS |
| OVERTOPPING ELEVATION | = 81.2 | FT |
| DATE OF SURVEY = 03/03/2022 | | |
| W.S. ELEVATION AT DATE OF SURVEY = 76.5 FT | | |

REVISIONS

15-MAN-2023_13-02
 2-30-2023
 15-MAN-2023_13-02.dgn

PERMIT DRAWING SHEET 3 OF 8

- FILL IN WETLAND
- MECHANIZED CLEARING (GRUBBING)
- TEMPORARY SURFACE WATER IMPACTS



| BRIDGE HYDRAULIC DATA | | |
|---------------------------------|--------------|-----|
| DESIGN DISCHARGE | = 950 | CFS |
| DESIGN FREQUENCY | = 25 | YRS |
| DESIGN HW ELEVATION | = 79.5 | FT |
| BASE DISCHARGE | = 1400 | CFS |
| BASE FREQUENCY | = 100 | YRS |
| BASE HW ELEVATION | = 80.5 | FT |
| OVERTOPPING DISCHARGE | = 1700 | CFS |
| OVERTOPPING FREQUENCY | = 100+ | YRS |
| OVERTOPPING ELEVATION | = 81.2 | FT |
| DATE OF SURVEY | = 03/03/2022 | |
| W.S.ELEVATION AT DATE OF SURVEY | = 76.5 | FT |

REVISIONS

15-MAN-2023_13-02
2-30-2024
15-MAN-2023_13-02.dgn




8/17/99

MELISSA ANN BRITT
DB 865 PG 344

PL PUT ON BY PL

| | |
|---|---|
| PROJECT REFERENCE NO. BP6.R004 | SHEET NO. 4 |
| RW SHEET NO. | HYDRAULICS ENGINEER |
| ROADWAY DESIGN ENGINEER | |
| INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of: | NC FIRM LICENSE No: P-0339 300 Executive Ct. Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX) |

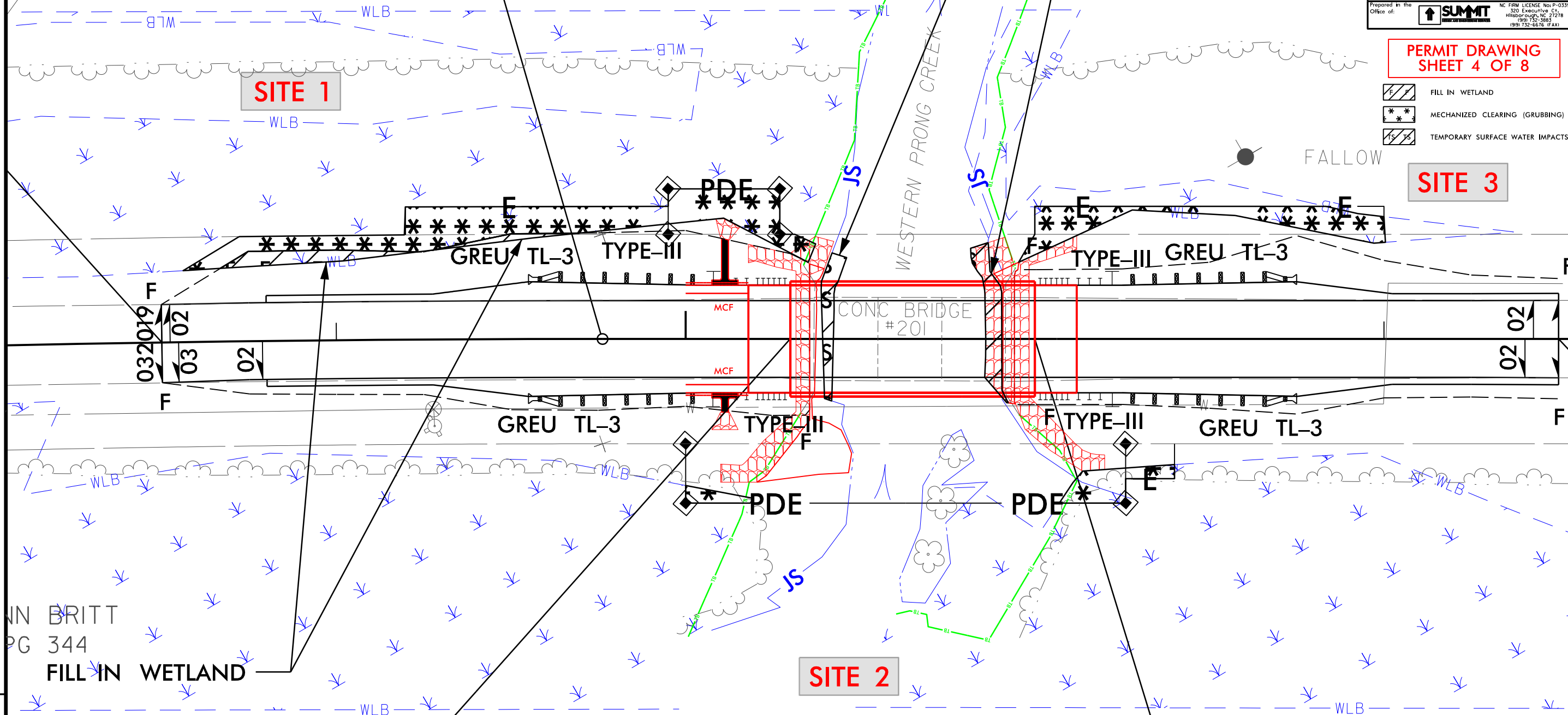
PERMIT DRAWING
SHEET 4 OF 8

-  FILL IN WETLAND
-  MECHANIZED CLEARING (GRUBBING)
-  TEMPORARY SURFACE WATER IMPACTS

SITE 3

TEMPORARY SURFACE
WATER IMPACT
PERMANENT SURFACE
WATER IMPACT

FALLOW



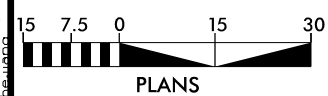
ANN BRITT
PG 344
FILL IN WETLAND

BEGIN BRIDGE
-L- Sta.15+30.00

END BRIDGE
-L- Sta.16+00.00

REVISIONS

15-MN-2023_13-02
2-30-2024
15-MN-2023_13-02.dgn
4.dgn

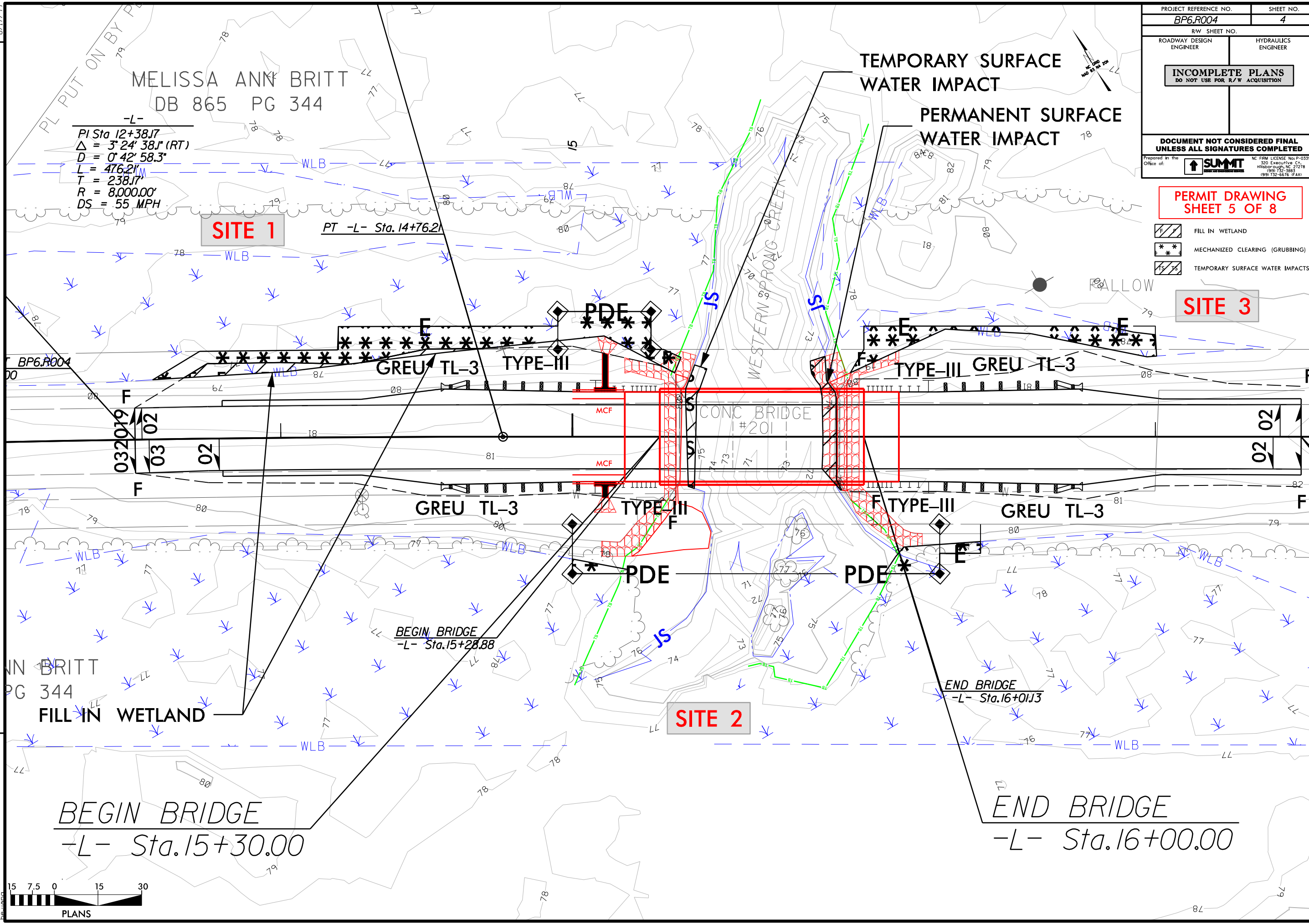


| | |
|---|---|
| PROJECT REFERENCE NO. BP6.R004 | SHEET NO. 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of: | NC FIRM LICENSE No: P-0339 300 Executive Ct. Hillsborough, NC 27278 (919) 332-3883 (919) 732-6676 (FAX) |

PERMIT DRAWING
SHEET 5 OF 8

- FILL IN WETLAND
- MECHANIZED CLEARING (GRUBBING)
- TEMPORARY SURFACE WATER IMPACTS

SITE 3



MELISSA ANN BRITT
DB 865 PG 344

-L-
PI Sta 12+38.17
 $\Delta = 3^{\circ} 24' 38.1''$ (RT)
 $D = 0^{\circ} 42' 58.3''$
 $L = 476.21'$
 $T = 238.17'$
 $R = 8,000.00'$
 $DS = 55$ MPH

SITE 1

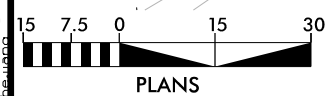
PT -L- Sta. 14+76.21

GREU TL-3 TYPE-III

SITE 2

END BRIDGE
-L- Sta. 16+00.00

BEGIN BRIDGE
-L- Sta. 15+30.00



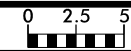
REVISIONS

15-MAN-2023_13-02
2-30-2024
15-MAN-2023_13-02.dgn

6/23/16

Prepared in the Office of:

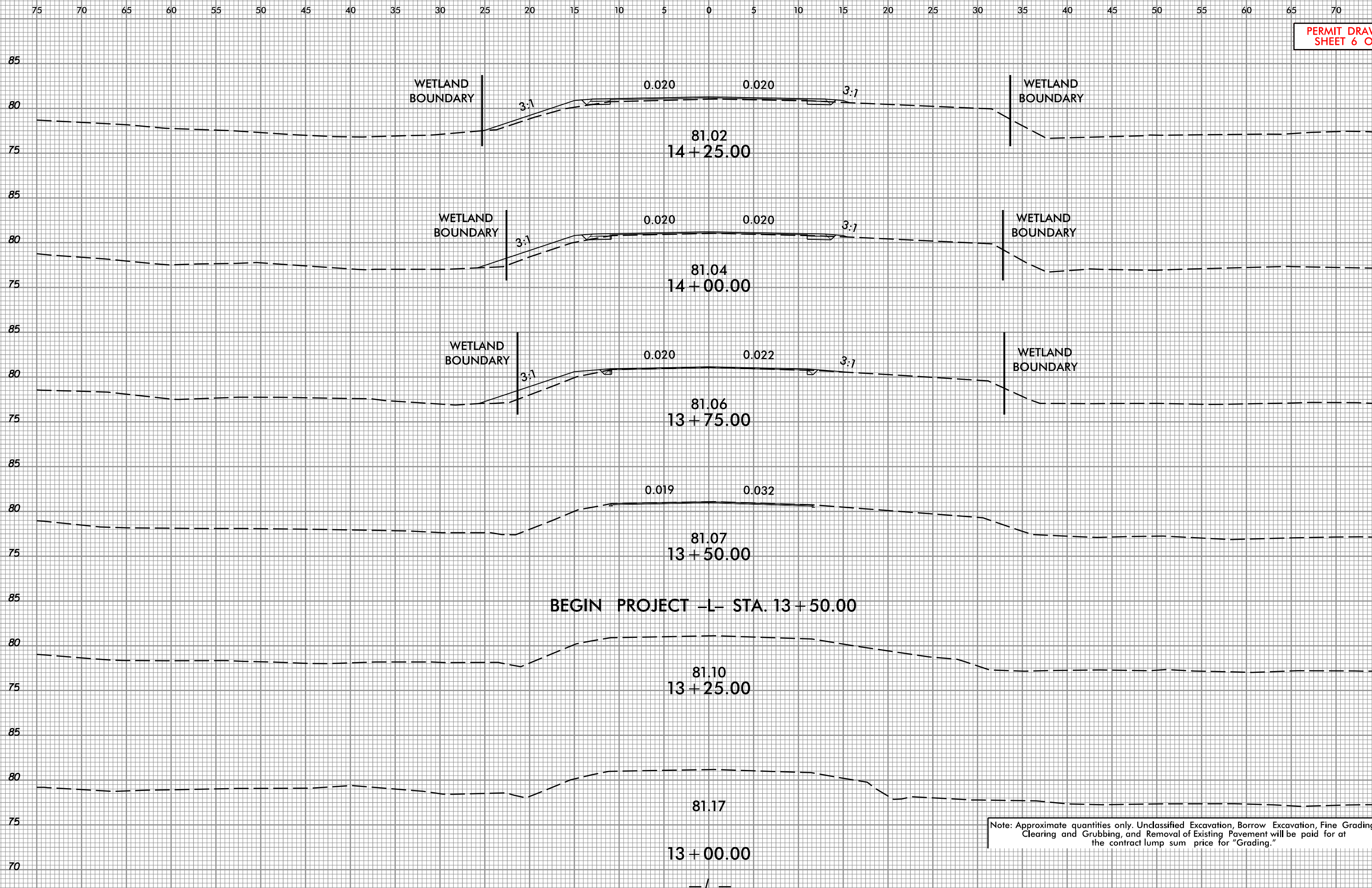
NC FIRM LICENSE No. P-0399
300 Executive Ct.
Hillsborough, NC 27278
(919) 732-3888
(919) 732-6676 (FAX)



PROJ. REFERENCE NO.
BP6.R004

SHEET NO.
X-1

PERMIT DRAWING
SHEET 6 OF 8



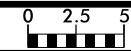
Note: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Fine Grading, Clearing and Grubbing, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

I:\JAN-2023 13r02
230201_Hyd_xpl.dgn
neubang

6/23/16

Prepared in the Office of:

NC FIRM LICENSE No. P-0399
300 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

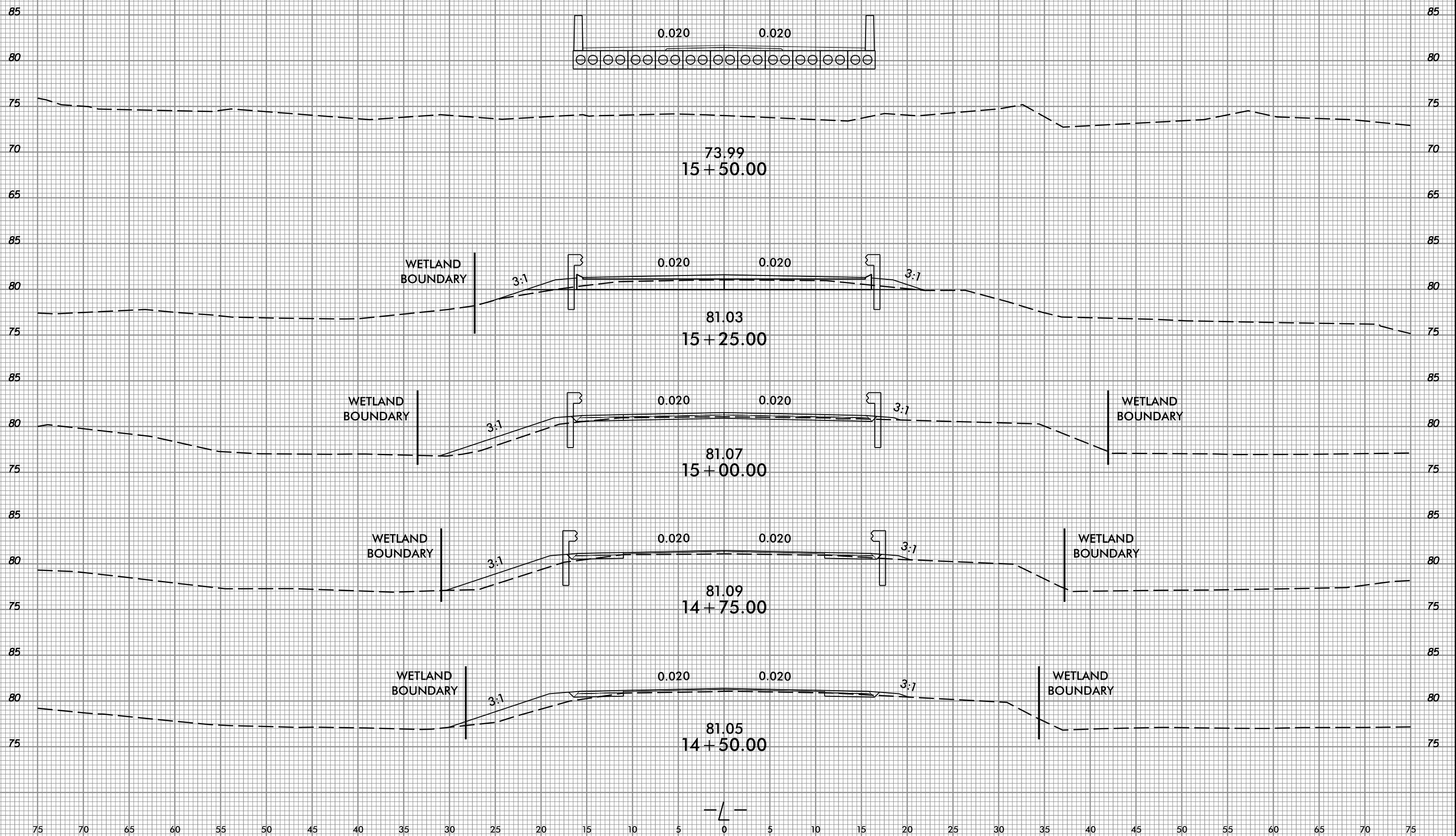


PROJ. REFERENCE NO.
BP6.R004

SHEET NO.
X-2

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

PERMIT DRAWING
SHEET 7 OF 8



I:\JAN-2023 13r02
230201_Hyd_xpl.dgn
neubang

WETLAND AND SURFACE WATER IMPACTS SUMMARY

| Site No. | Station (From/To) | Structure Size / Type | WETLAND IMPACTS | | | | | SURFACE WATER IMPACTS | | | | |
|-----------------|-----------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------------|--------------------------------|---------------------------|-----------------------|---|-------------------------------------|----------------------------|
| | | | Permanent Fill In Wetlands (ac) | Temp. Fill In Wetlands (ac) | Excavation in Wetlands (ac) | Mechanized Clearing in Wetlands (ac) | Hand Clearing in Wetlands (ac) | Permanent SW impacts (ac) | Temp. SW impacts (ac) | Existing Channel Impacts Permanent (ft) | Existing Channel Impacts Temp. (ft) | Natural Stream Design (ft) |
| 1 | 13+56 TO 15+38 -L- LT | ROADWAY FILL | 0.004 | | | 0.031 | | | | | | |
| 3 | 15+38 TO 16+12 -L- LT | Bank Stabilization | | | | | | 0.004 | 0.003 | 46 | | |
| 2 | 15+95 TO 17+01 -L- LT | ROADWAY FILL | | | | 0.017 | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| TOTALS*: | | | 0.004 | 0.00 | 0.00 | 0.048 | 0.00 | 0.004 | 0.003 | 46 | 0 | 0 |

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 1/11/2023
 COLUMBUS COUNTY
 230201
 BRIDGE REPLACEMENT ON SR 1002 OVER
 WESTERN PRONG CREEK
 SHEET 8 OF 8