



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

March 17, 2026

MEMORANDUM TO: Division Environmental and Construction Units

FROM: *MAT* Michael A. Turchy, ECAP Group Leader
Environmental Analysis Unit

SUBJECT: Environmental Permits for the Replacement of:
Bridge 42 over Ivy Creek on SR 1576 (Bend of Ivy Road) in Madison County,
Division 13, WBS DF18313.205735

Please find enclosed the following permits for this project:

| Agency | Permit Type | Expiration |
|---|---|------------------------------|
| US Army Corps of Engineers Section 404 Clean Water Act Permit | Regional General Permit 50 Action ID: SAW-2026-00210 Dated March 17, 2026 | May 25, 2030 |
| NC Division of Water Resources Section 401 Water Quality Certification | General Certification No. 7679, <i>Written authorization not required.</i> | expires with above Permit |

Work is authorized by the above-referenced documents and must be accomplished in strict accordance with the permitted plans.

The Environmental Coordination and Permitting Group (ECAP) or the Division Environmental Office must be consulted if any deviation from the permit(s) or accompanying drawings is required.

404 Permit (USACE)



DEPARTMENT OF THE ARMY
 U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT
 151 Patton Avenue, Room 208
 Asheville, NC 28801-5006

March 17, 2026

Regulatory Division
 SAW-2026-00210

North Carolina Department of Transportation
 Attn: Mr. Michael A. Turchy
 Environmental Coordination and Permitting Group Leader
 1598 Mail Service Center
 Raleigh, North Carolina 27699-1598
 Sent Via Email: maturchy@ncdot.gov

Dear Mr. Turchy,

This letter is in response to the application you submitted to the U.S. Army Corps of Engineers (USACE), Wilmington District, WRDA/Transportation Branch on February 2, 2026, for a Department of the Army general permit verification to replace a bridge that was destroyed by **Hurricane Helene**. This project will replace **Bridge No. 42** over Ivy Creek on SR 1576 in Madison County, North Carolina (35.7939, -82.6133) and has been assigned file number SAW-2026-00210. In order to perform this work, NCDOT proposes to conduct the following activities in waters of the U.S.:

Summary of Proposed Impacts

| Impact ID # | NWP / GP # | Open Water (ac) | | Wetland (ac) | | Stream (lf) | |
|---|----------------------|-----------------|-----------|----------------------------------|-----------|---|-----------|
| | | Temporary | Permanent | Temporary | Permanent | Temporary | Permanent |
| Site 1 (Ivy Creek) | <u>RGP 50</u> | | | | | 73' (0.02 ac) / workpads | |
| Impact Totals | | 0 | 0 | 0 | 0 | 73' / (0.02 ac) | 0 |
| Total Loss of waters of the U.S. (wetlands and/or open waters) | | | 0 | Total Loss of waters of the U.S. | | | 0 |

We have reviewed the proposed activities in waters of the U.S. and have determined that these activities are authorized by Regional General Permit (RGP) 50 pursuant to authorities under Section 404 of the Clean Water Act (33 U.S.C § 1344). The proposed work must be accomplished in strict accordance with the following:

- enclosed terms, general conditions, and special conditions of RGP 50
- special conditions of the verification letter (see below)
- information in the PCN and attachments
- enclosed plans

If the extent of the project area and/or nature of the authorized impacts to waters are modified, a request detailing the proposed changes must be submitted to this office for written approval before work is initiated. Any deviation from the terms and conditions of the permit, the special conditions of this letter, the information contained in the PCN, or your submitted plans, may subject the permittee to enforcement action.

This verification is valid until **May 25, 2030**, unless the subject RGP is suspended, revoked, or is modified prior to that date such that the activity no longer complies with the terms and conditions of the RGP.

Project Specific Special Conditions:

1. This verification letter does not authorize you to take a federally listed species. In order to legally take a federally listed species, you must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a Biological Opinion (BO) under ESA Section 7, with “incidental take” provisions with which you must comply). The U.S. Fish and Wildlife Service (USFWS) issued a document titled, “Biological and Conference Opinions and Informal Consultations – Batch Format, Replace Multiple Crossing Structures Destroyed by Tropical Storm Helene in Buncombe, Madison, McDowell, Mitchell, and Yancey Counties, North Carolina, Service Log #25-276 through 25-299” on September 4, 2025. This document contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with incidental take for this project. Your authorization under this verification letter and RGP 50 is conditional upon your compliance with the mandatory terms and conditions associated with incidental take listed in this document for this project. Failure to comply with the terms and conditions associated with incidental take detailed in this document, where a take of a federally listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your verification letter and RGP 50. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its Opinion and with the ESA.
2. The permittee shall ensure that no more than 50% of stream flow is constricted at any one time.
3. The permittee shall ensure that any equipment that is placed on the workpads is removed when either of the following situations are forecasted or anticipated: (1) the water level will rise to a point where the equipment could be flooded (even during work days), and (2) the water level is expected to rise overnight, or over a non-work period of time, to a point where the equipment could be flooded.

4. Upon completion of work that requires the workpads to be in the stream, the permittee shall remove all readily detectible workpad material, to the extent practicable, while removing as little of the original riverbed as possible.

5. The permittee shall implement all reasonable and practicable measures to ensure that equipment, structures, workpads, work, and operations associated with this project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, flooding, and/or stream bank erosion. The permittee shall routinely monitor for these effects, cease all work when detected, take initial corrective measures to correct actively eroding areas, and notify this office immediately. Permanent corrective measures may require additional authorization the U.S. Army Corps of Engineers.

6. The permittee will ensure that (1) the contractor knows that the stream may be used by paddlers, (2) all onsite staff watch the area for stream users, (3) work is halted if someone is seen approaching the bridge work area, and (4) all overhead work is paused until stream users safely leave the area.

7. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this authorization letter in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this authorization letter, all conditions, and any authorized modifications. A copy of this authorization letter, all conditions, and any authorized modifications, shall be available at the project site during construction and maintenance of this project.

This general permit verification and any associated authorizations does not preclude the necessity to obtain any other Federal, State, or local permits, licenses, and/or certifications, which may be required.

If you have any questions related to this verification or have issues accessing documents referenced in this letter, please contact Lori Beckwith, Regulatory Project Manager of the WRDA/Transportation Branch at 828-230-0483, by mail at the above address, or by email at loretta.a.beckwith@usace.army.mil. Please take a moment to complete our customer satisfaction survey located at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Sincerely,



M. Scott Jones, PWS
WRDA / Transportation Branch Chief
USACE, Wilmington District

Enclosures

U.S. Army Corps of Engineers (USACE)

CERTIFICATION OF COMPLIANCE WITH DEPARTMENT OF THE ARMY PERMIT

For use of this form, see Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act; the proponent agency is CECW-COR.

*Form Approved -
OMB No. 0710-0003
Expires 2027-10-31*

The Agency Disclosure Notice (ADN)

The Public reporting burden for this collection of information, 0710-0003, is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PURPOSE: This form is used by recipients of U.S. Army Corps of Engineer Regulatory permits to certify compliance with the permit terms and conditions.

Your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the U.S. Army Corps of Engineers, Wilmington District, Regulatory Office.

The certification can be submitted by email at loretta.a.beckwith@usace.army.mil or by mail at the below address:

U.S. Army Corps of Engineers, Wilmington District
Asheville Field Office
Street Address: 151 Patton Avenue, Room 208
Asheville, North Carolina 28801-5006

Corps Action Number: SAW-2026-00210

Permit Type: General Permit

General Permit Number and Name (if applicable): RGP 50

Name of Permittee: NCDOT, Division of Highways

Project Name: NCDOT / Hurricane Helene/DF18313.205735 / Br 42 / SR 1576 / Madison / Div 1313

Project Location (physical address): Bridge 42 over Ivy Creek on SR 1576 Madison Co. NC

PERMITTEE'S CERTIFICATION

Date Work Started: _____

Date Work Completed: _____

Enclose photographs showing the completed project (if available).

I _____ hereby certify that the work authorized by the above referenced permit has been completed in accordance with all of the permit terms and conditions, and that any required compensatory mitigation has been completed in accordance with the permit conditions.

| | | |
|------|------|-----------|
| Name | Date | Signature |
|------|------|-----------|

projects to be carried out over the next two years.

In-water impacts

Considering the range in structure and waterbody sizes analyzed in this review, and basing amounts on past similarly-sized structure and waterbody NCDOT crossing structure projects in WNC, the estimate of combined temporary and permanent in-water impacts for these projects range from 0.01 – 0.35 acres (or 4,356 – 15,246 square feet) per structure. Some structure replacements will fall in the lower portion of that range of in-water impacts while some will fall in the higher range. These impacts may be in the form of work pad causeways, bent removal and/or placement, and placement of stream-bank stabilization materials.

Tree Clearing, Access Roads, and Demolition

The maximum estimate for tree clearing at structure replacement locations is 0.10 acre. That amount will likely be less at most locations, given the variability in site conditions and the extreme scour (and resulting loss of riparian vegetation) during TS Helene flooding. The season during which clearing will occur is not known for each location. Clearing and grading will occur to allow for access roads and general construction functionality.

Where damaged structures or portions of damaged structures remain in place, demolition will occur. The details of demolition activities and seasonality of demolition will vary by project.

2.3 Avoidance and Minimization and Conservation Measures

NCDOT will employ the following agency Standards, Guides, and Best Practices to avoid and minimize project mediated activities that could negatively impact listed/proposed species or their habitat.

2.3.1 Avoidance and minimization measures (AMMs)

General (regardless of species): The following General AMMs will be implemented on all projects to minimize impacts to listed/proposed species and habitat:

- **General AMM1** - NCDOT will ensure that all operators, employees, and contractors working in areas of suitable habitat for federally listed/proposed species are aware of all NCDOT environmental commitments, including all applicable AMMs and all associated NCDOT guidance documents.
- **General AMM2** - Best management practices (BMP) and sediment and erosion control (SEC) measures will be utilized to prevent non-point source pollution, control storm water runoff, and minimize sediment damage to avoid and reduce overall water quality degradation.
- **General AMM3** - Areas of disturbance, such as tree clearing, grubbing, and grading, will be limited to the maximum extent possible.

Bats - The General AMMs will minimize impacts to listed and proposed bat species. **To the maximum extent possible**, the following AMMs will also be incorporated into project work – though implementation of all bat AMMs below cannot be guaranteed at the time of this consultation, given the scale, scope, and timeline constraints addressed previously.

- Bat AMM Noise - Percussive activities will occur only after tree clearing within the action area has been completed, helping to reduce the exposure of any tree-roosting bats within the action area to high decibel noise.
- Bat AMM Lighting - No new lighting will be added to the action area. Any lighting needed for night work will be directed at the work area and shielded from surrounding waters/landscape, only on when needed, no brighter than necessary, and blue light emissions will be limited.
- Bat AMM Riparian Planting - Disturbed riparian areas will be replanted with native, fast-growing tree and shrub species where feasible, with the understanding that plantings likely cannot be done in utility/drainage/construction easements.

Aquatics- The General AMMs above will minimize impacts to listed/proposed aquatic species. **To the maximum extent possible**, the following AMMs will also be incorporated into project work – though implementation of all aquatic AMMs below cannot be guaranteed at the time of this consultation, given the scale, scope, and timeline constraints addressed previously.

- Aquatic AMM Structure - To the maximum extent possible, structure will be built in the same location as the previous structure, with minimal impact [such as in-water bents] to water resource, built to NCDOT's current improved highway and hydraulic standards.
- Aquatic AMM Equipment - To the maximum extent possible, heavy machinery will not be utilized within the waterbody. Additionally, staging and storage areas for equipment and materials will be managed in such a way to ensure that potential spills and leaks do not have access to the waterbody.
- Aquatic AMM Temporary and Permanent Fill - Any temporary fill (i.e. causeways) or permanent (i.e. bents/piers) fill in excess of what was previously present will be avoided and minimized to the maximum extent possible.
- Aquatic AMM Abutments - Existing abutments will be completely removed unless removal results in destabilizing of banks or increases the adverse effect to listed/proposed aquatic species.
- Aquatic AMM Deck Drains - Deck drains that empty directly to the waterbody below will not be included in new bridge designs. Surface water drainage transport will be designed to incorporate improved treatment prior to drainage entering the waterbody.
- Aquatic AMM Erosion Control Matting - Coir fiber matting will be utilized instead of plastic or other synthetic matting.

2.3.2 Conservation Measures (CMs)

CMs represent actions, pledged in the project description, that the action agency will implement to further the recovery of the species under review. The beneficial effects of CMs are considered in making determinations of whether the projects will jeopardize the species under consideration in this document.

modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” (50 CFR 17.3). Incidental taking “means any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity” (50 CFR 17.3). Harass is defined by the Service as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering” (50 CFR 17.3). Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to, and not intended as part of, the agency action is not considered to be prohibited under the Endangered Species Act, provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

7.1 Amount of Take for Gray Bat, Northern Long-eared Bat, and Tricolored Bat

The Service anticipates incidental take of gray, northern long-eared, and tricolored bats may result from the demolition (if applicable) and construction of crossing structures 110, 132, 135, 139, 147, 175, 200, 307, and 428 (Buncombe County); 042 (Madison County); 023, 044, 079, 083, 119, and 345 (McDowell County); 123, 152, and 154 (Mitchell County); and 100 and 156 (Yancey County). Specifically, take of these species may occur as a result of flushing, wounding, or direct mortality during demolition activities (if applicable); or, for northern long-eared bat and tricolored bat, take may occur as a result of clearing suitable roost trees during times of year that these bats could be tree-roosting within the action area, which may similarly result in flushing, wounding, or direct mortality during clearing activities.

Incidental take of bats is difficult to measure or detect given that 1) the animals are small, cryptic, and generally difficult to observe, 2) finding dead or injured bats during or following project implementation is unlikely, and 3) some incidental take is in the form of non-lethal harm and not directly observable. Given this, the 1) maximum estimated tree clearing (for northern long-eared bat and tricolored bat only) and 2) number of structures replaced, are used as surrogate measures of take for this Opinion. Additionally, as discussed in the Environmental Baseline, no more than one individual of gray bat or two individuals of northern long-eared bat or tricolored bat (given structure and tree roosting) are estimated to be present within the action areas of each crossing structure.

Therefore, the incidental take permitted by the Opinion would be exceeded if:

1. *Tree clearing amount exceeds 0.10 acre at a single structure location for the crossing structures listed at the beginning of section 7.2.
2. Any more than one structure is demolished/replaced per crossing structure, as listed at the beginning of section 7.2.

**For northern long-eared bat and tricolored bat only*

Exceedance of take as defined above will represent new information that was not considered in this Opinion and shall result in reinitiation of this consultation. The incidental take of gray bat, northern long-eared bat, and tricolored bat is expected to be in the form of harm, wounding, or death.

7.2 Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measure(s) are necessary and appropriate to minimize take of gray bat, northern long-eared bat, and tricolored bat. These non-discretionary measures reduce the level of take associated with project activities and include only actions that occur within the action area.

1. NCDOT shall ensure that the contractor(s) understands and follows the measures listed in the “Conservation Measures”, “Reasonable and Prudent Measures,” and “Terms and Conditions” sections of this Opinion.
2. NCDOT shall minimize the area of disturbance within the action areas to only the area necessary for the safe and successful implementation of the proposed actions.
3. NCDOT shall monitor and document any take numbers and the surrogate measures of take and report those to the Service in a batched format.

7.3 Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the Applicant must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting and/or monitoring requirements. When incidental take is anticipated, the terms and conditions must include provisions for monitoring project activities to determine the actual project effects on listed fish or wildlife species (50 CFR §402.14(i)(3)). These terms and conditions are nondiscretionary. If this conference opinion is adopted as a biological opinion following a listing or designation, these terms and conditions will be non-discretionary.

1. NCDOT shall adhere to all measures as listed in the Avoidance and Minimization and Conservation Measures section as summarized in this Opinion.
2. The NCDOT will immediately inform the Service if the amount or extent of incidental take in the incidental take statement is exceeded.
3. When incidental take is anticipated, the Terms and Conditions must include provisions for monitoring project activities to determine the actual project effects on listed fish or wildlife species (50 CFR §402.14(i)(3)). In order to monitor the impact of incidental take, the NDOT must report the action impacts on the species to the Service according to the following:
 - a. The NCDOT will submit a report each year not later than September 30 identifying, per individual project (via Service Log # and NCDOT identifiers), the following for the preceding calendar year ending December 31:
 - i. Acreage and dates of tree removal (if any), if LAA for bats (excepting gray bat).
 - ii. Dates of structure removal (if any), if LAA for bats.
 - iii. List of implemented AMMs and BMPs [as listed in Section 2.3].

8. Conservation Recommendations

Section 7(a)(1) of the Endangered Species ESA directs Federal agencies to use their authorities to further the purposes of the Endangered Species ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

- **Eastern Hellbender:** Proximity to eastern hellbender occurrence records was noted for the following crossing structures: Buncombe County structures 132, 135, and 139, and Yancey County structure 298. Ahead of work at this location, coordinate with the NCWRC and the Service to survey for/relocate any hellbender that may be within the action area and vulnerable to impacts from project work.
- **State Species of Concern:** Proximity to aquatic species with North Carolina designations was noted for Buncombe County crossing structures 132, 135, 175, and 200, Madison County crossing structure 042, McDowell County crossing structure 044, and Mitchell County crossing structure 123. While these species are not currently afforded legal protection under the ESA, we recommend the most

401
Certification
(NCDWR)

*Written
Authorization
Not Required*

Permitted Drawings



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN



(Version 3.02; Released April 23, 2024)

FOR NCDOT PROJECTS

WBS Element: DF18313.2057035.F TIP/Proj No: DF18313.2057035.PR County(ies): Madison Page 1 of 2

General Project Information

| | | | | | | | |
|---------------------------------|-------------------------------------|-------------|--------------------|------------------------|--|-------|-----------|
| WBS Element: | DF18313.2057035.PR | TIP Number: | DF18313.2057035.PR | Project Type: | Bridge Replacement | Date: | 1/21/2025 |
| NCDOT Contact: | Joel M Davis | | | Contractor / Designer: | Jason Patskoski, PE | | |
| Address: | 55 orange st Asheville, NC 28801 | | | Address: | 324 Blackwell St Suite 1200 Durham, NC 27701 | | |
| Phone: | 828-250-3360 | | | Phone: | (919) 732-1300 | | |
| Email: | jmdavis4@ncdot.gov | | | Email: | jason.patskoski@threeoaksengineering.com | | |
| City/Town: | Marshall | | | County(ies): | Madison | | |
| River Basin(s): | French Broad | | | CAMA County? | No | | |
| Wetlands within Project Limits? | No | | | | | | |

Project Description

| | | | | | | | | |
|--|---|-----------------------|--|--|-----------|-----|-------|------|
| Project Length (lin. miles or feet): | 0.08 | Surrounding Land Use: | Rural/Mountainous area with residential land use | | | | | |
| | Proposed Project | | | Existing Site | | | | |
| Project Built-Up Area (ac.) | 0.3 | ac. | 0.2 | ac. | | | | |
| Typical Cross Section Description: | SR 1576 (Bend of Ivy Rd) is a proposed two-lane road with 10-ft lanes and 3-ft shoulders. Portions of Bend of Ivy Rd will include shoulder berm gutter. The proposed bridge along Bend of Ivy Rd will be 30' out-to-out and 27'-10" clear roadway. There will be two lanes, each 10' wide, a 4'-8" paved shoulder on the RT and a 3'-2" paved shoulder on the LT. | | | The existing SR 1576 (Bend of Ivy Rd) was a 2-lane paved roadway with 9' lanes. It had an out-to-out of 30.833' and clear roadway of 28'. The left shoulder was 2' wide and fully paved, and the right shoulder was 8' wide with only 1' paved closest to the lanes. There was guardrail on both sides of the roadway. The roadway was damaged during hurricane helene and the bridge was washed away. The existing typical cross-section description was gathered from the 2024 bridge inspection report. | | | | |
| Annual Avg Daily Traffic (veh/hr/day): | Design/Future: | 180 | Year: | 2026 | Existing: | 180 | Year: | 2026 |

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

NCDOT Division 13 proposes to replace Bridge 560042 on SR 1576 (Bend of Ivy Road) over a jurisdictional stream (Ivy Creek) in Madison County, North Carolina. The existing roadway was damaged from Hurricane Helene, and the existing bridge was completely washed away. During project construction, minimization measures such as utilizing 2:1 fill slopes to avoid stream impacts. The existing grass lined ditches were retained to the greatest extent practicable to help promote infiltration, and rip rap toe protection was used where this was not feasible. The proposed -L- crossing is a 3-span bridge. To reduce erosion in the stream, rip rap stabilization along the existing and proposed roadway fill slope on the north side. Stream impacts are limited to two temporary causeways to install the interior bents.

To keep spread outside the travel lanes, deck drains are proposed. No deck drains are above the water.



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



(Version 3.02; Released April 23, 2024)

WBS Element: DF18313.2057035.F
 TIP/Proj No.: DF18313.2057035.PR
 County(ies): Madison
 Page 2 **of** 2

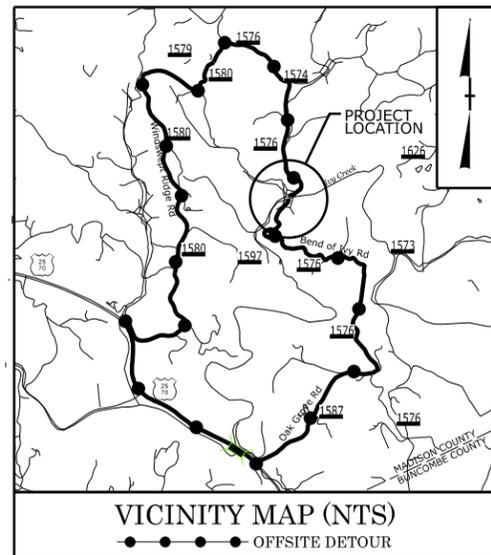
General Project Information

Waterbody Information

| | | | | | |
|--|--|--|--------------------------------|--|----|
| Surface Water Body (1): | Ivy Creek | | NCDWR Stream Index No.: | 6-96-(11.7) | |
| NCDWR Surface Water Classification for Water Body | Primary Classification: | | Class C | | |
| | Supplemental Classification: | | None | | |
| Other Stream Classification: | None | | | | |
| Impairments: | None | | | | |
| Aquatic T&E Species? | No | Comments: | | | |
| NRTR Stream ID: | Ivy 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) | | | | |

CONTRACT: C205029 TIP PROJECT: DF18313.2057035.PR

See Sheet 1A For Index of Sheets



RIGHT OF WAY PLAN SET SUBMITTAL



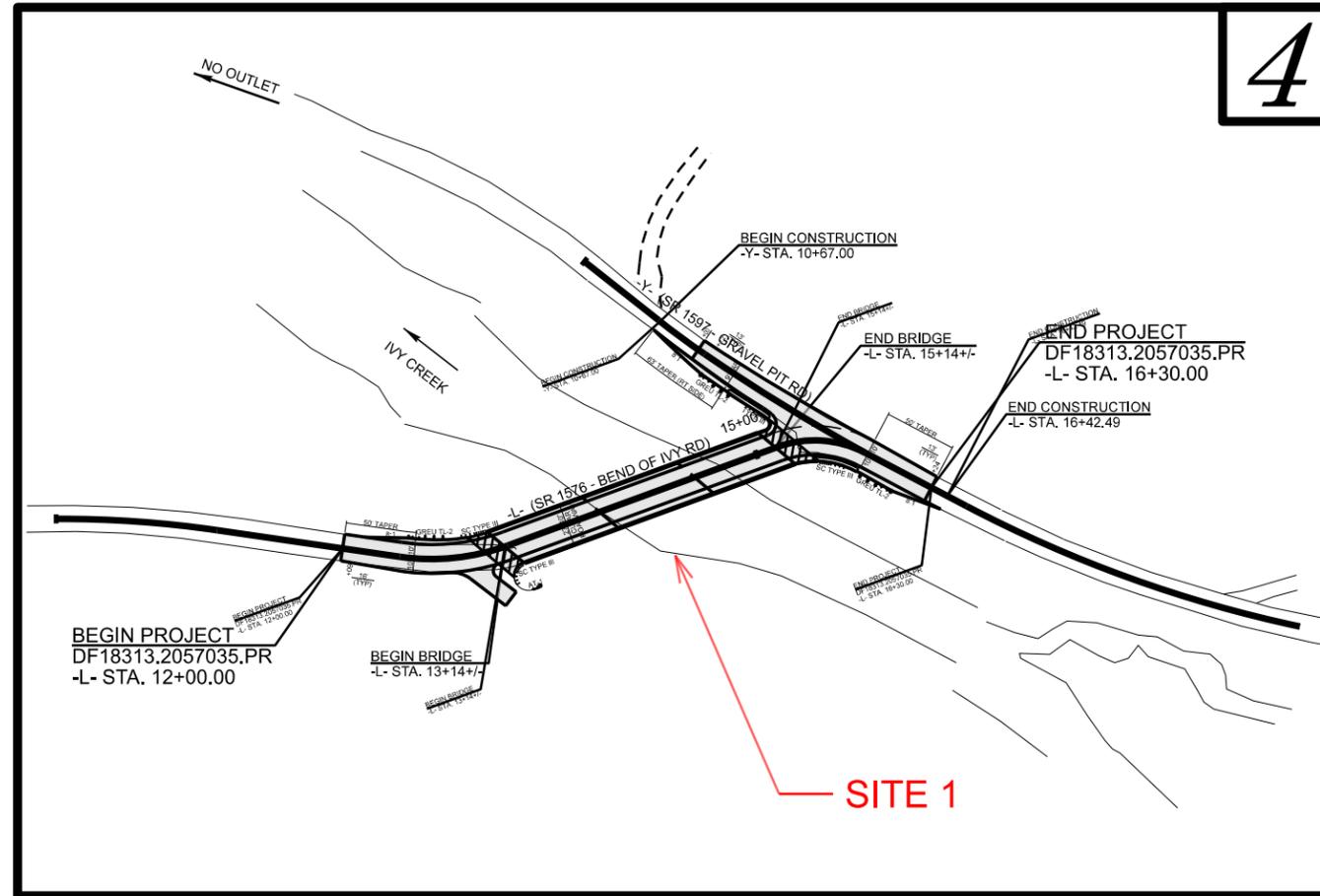
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

MADISON COUNTY

LOCATION: *REPLACEMENT OF BRIDGE NO. 560042 ON SR 1576
(BEND OF IVY RD) OVER IVY CREEK*

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

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|--------------------|-----------------------------|-------------|--------------|
| N.C. | DF18313.2057035.PR | 11 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| DF18313.2057035.PR | | P.E. | |
| DF18313.2057035.PR | | ROW / UTIL. | |
| DF18313.2057035.PR | | CONST. | |
| | | | |
| | | | |



**PERMIT DRAWING
SHEET 1 OF 5**



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION
**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

CLEARING ON THIS PROJECT WILL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II - MODIFIED.
THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.

| | | | | | | |
|--|--|--|--|--|---|--|
| <p>GRAPHIC SCALES</p> <p>30 15 0 30 60 PLANS</p> <p>30 15 0 30 60 PROFILE (HORIZONTAL)</p> <p>6 3 0 6 12 PROFILE (VERTICAL)</p> | <p>DESIGN DATA</p> <p>ADT (PER RFP) = 180 V = 30 MPH</p> <p>FUNC CLASS = LOCAL SUBREGIONAL TIER</p> | <p>PROJECT LENGTH</p> <p>LENGTH OF ROADWAY TIP PROJECT DF18313.2057035.PR = 0.043 MILES LENGTH OF STRUCTURE TIP PROJECT DF18313.2057035.PR = 0.038 MILES TOTAL LENGTH OF TIP PROJECT DF18313.2057035.PR = 0.081 MILES</p> | <p>PLANS PREPARED BY: VOLKERT 5430 Wade Park Blvd., Suite 410 Raleigh, NC 27609 Tel: 919-854-0344 Fax: 919-854-0355 NC License No. F-0785</p> <p>2024 STANDARD SPECIFICATIONS</p> <p>RIGHT OF WAY DATE: DECEMBER 15, 2025</p> <p>LETTING DATE: MARCH 14, 2026</p> | <p>PLANS PREPARED FOR: DIVISION OF HIGHWAYS DIVISION 13 55 ORANGE ST. ASHEVILLE, NC 28801</p> <p>CHRISTOPHER H. LEE, PE PROJECT ENGINEER</p> <p>W. CRAIG PARKER, PE PROJECT DESIGN ENGINEER</p> <p>JOEL M. DAVIS NCDOT CONTACT DIV. 13 ASST. BRIDGE PROGRAM MANAGER</p> | <p>HYDRAULICS ENGINEER</p> <p>NC Firm License No: F-1334 324 Blackwell Street Suite 1200 Durham, NC 27701 919.732.1300</p> <p>SIGNATURE: _____ P.E. ROADWAY DESIGN ENGINEER</p> <p>SIGNATURE: _____ P.E.</p> | |
|--|--|--|--|--|---|--|

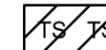


PERMIT DRAWING
SHEET 2 OF 5

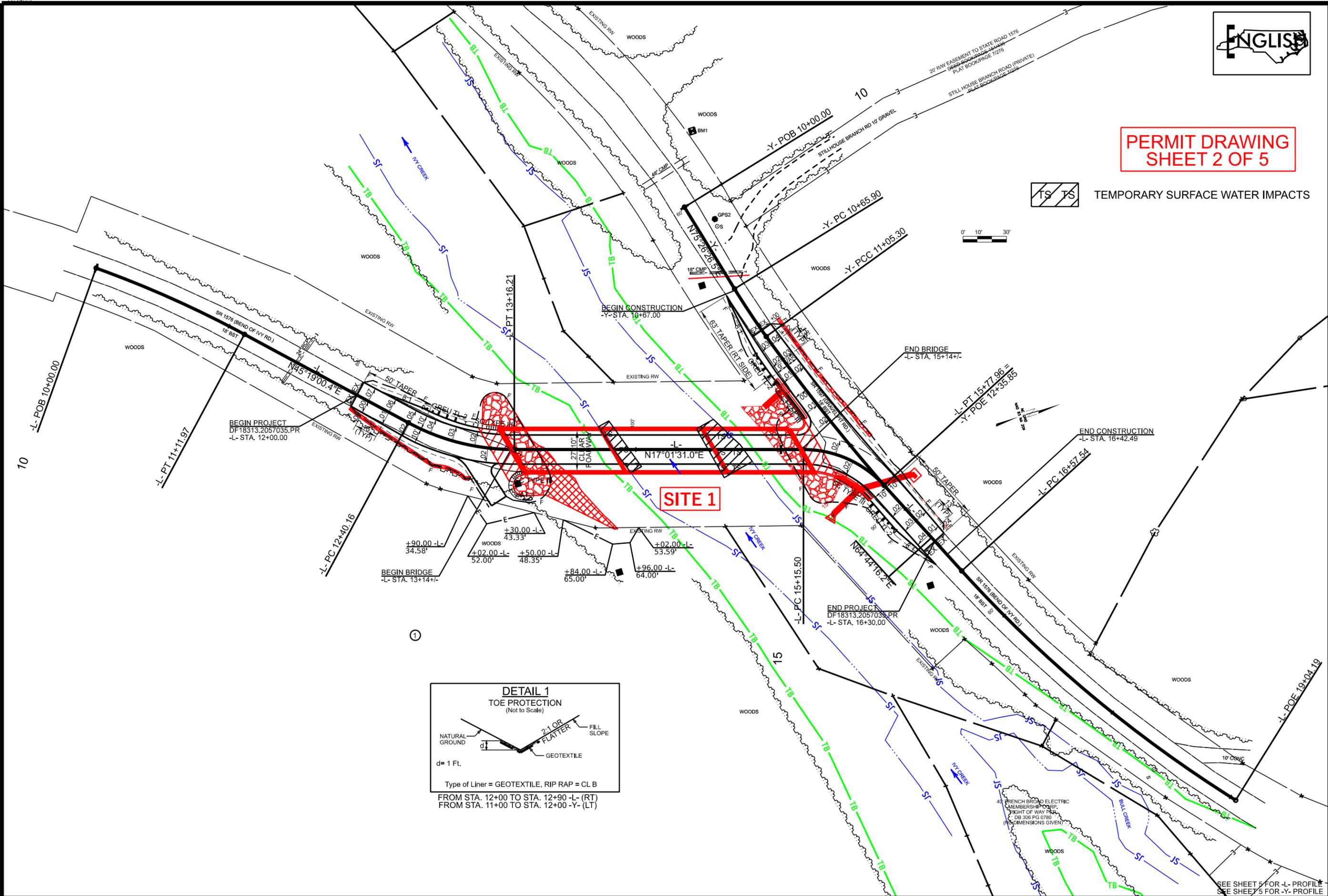
VOLKERT

5430 Wade Park Blvd., Suite 410
Raleigh, NC 27606
Tel: 919-854-0344 Fax: 919-854-0355
NC License No. F-0765

HYDRAULIC DESIGN
ENGINEER



TEMPORARY SURFACE WATER IMPACTS

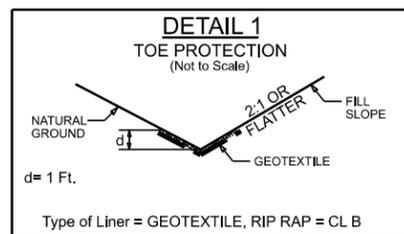


NC Firm License No. F-1334
224 Meadow Street
Suite 1200
Durham, NC 27701
919.732.1300

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED
STATE OF NORTH CAROLINA
MADISON COUNTY



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



FROM STA. 12+00 TO STA. 12+90 -L- (RT)
FROM STA. 11+00 TO STA. 12+00 -Y- (LT)

SEE SHEET 5 FOR -L- PROFILE
SEE SHEET 5 FOR -Y- PROFILE



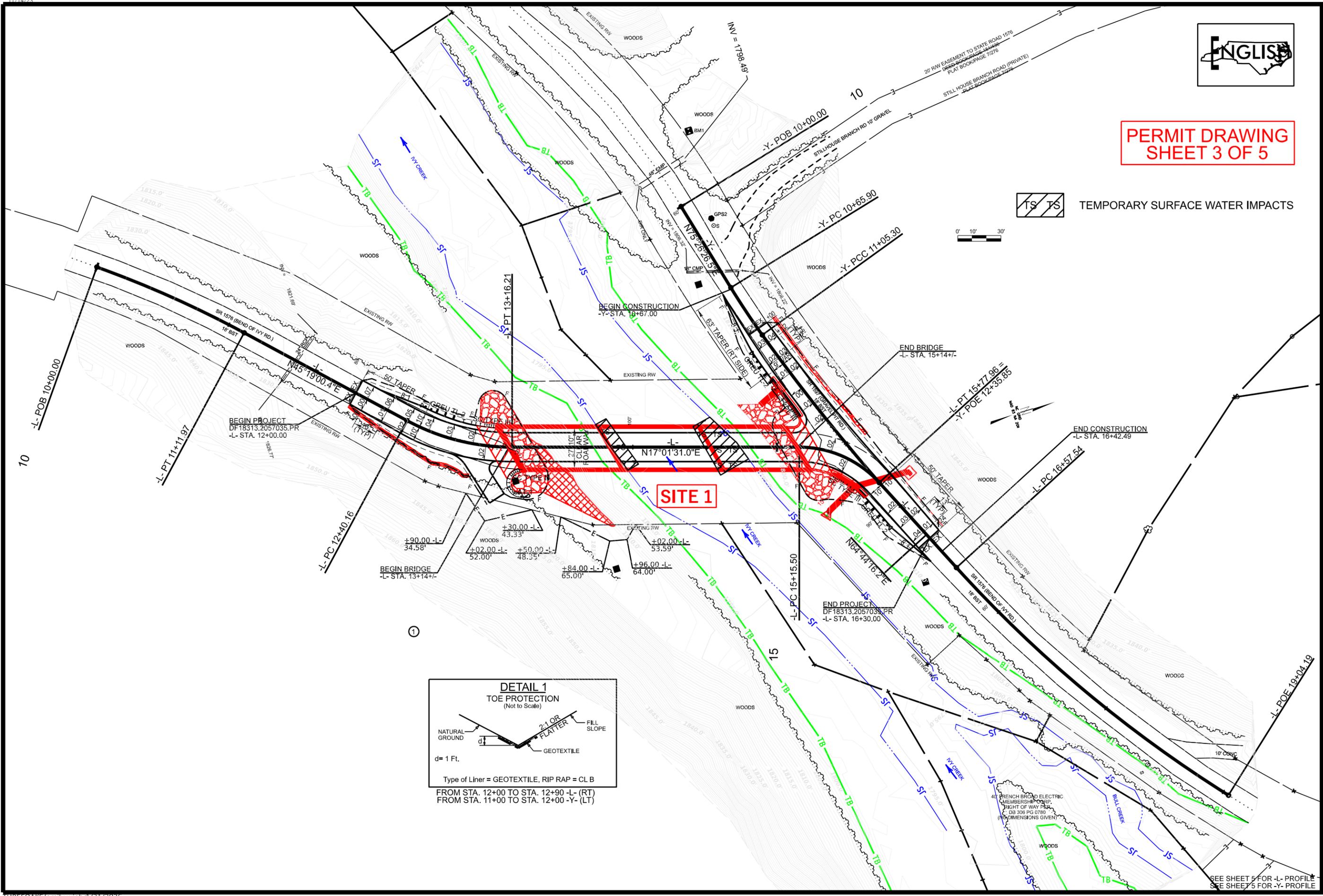
**PERMIT DRAWING
SHEET 3 OF 5**

VOLKERT
5430 Wade Park Blvd., Suite 410
Raleigh, NC 27606
Tel: 919-854-0344 Fax: 919-854-0355
NC License No. F-0765
**HYDRAULIC DESIGN
ENGINEER**

NC Firm License No. F-1334
224 Meadow Street
Suite 1200
Durham, NC 27701
919.732.1300
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED
STATE OF NORTH CAROLINA
MADISON COUNTY



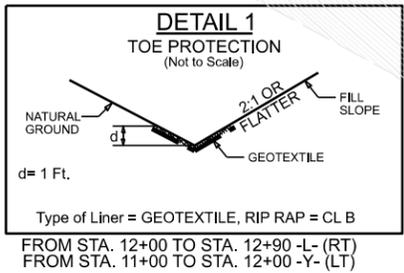
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



TS TS TEMPORARY SURFACE WATER IMPACTS

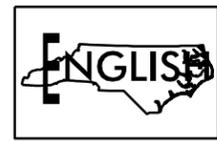
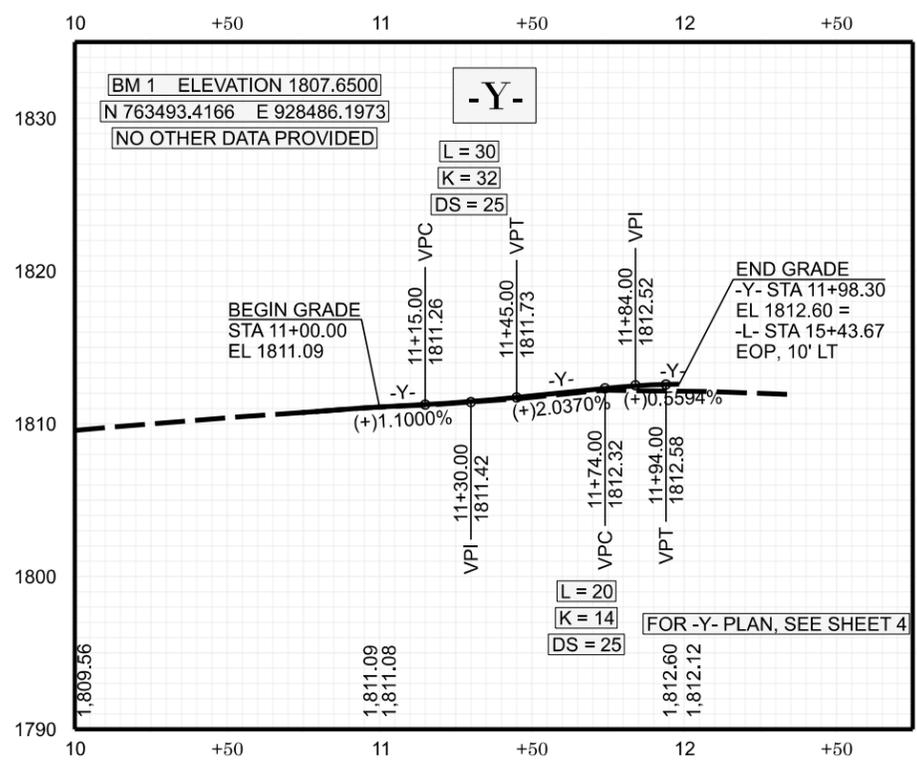
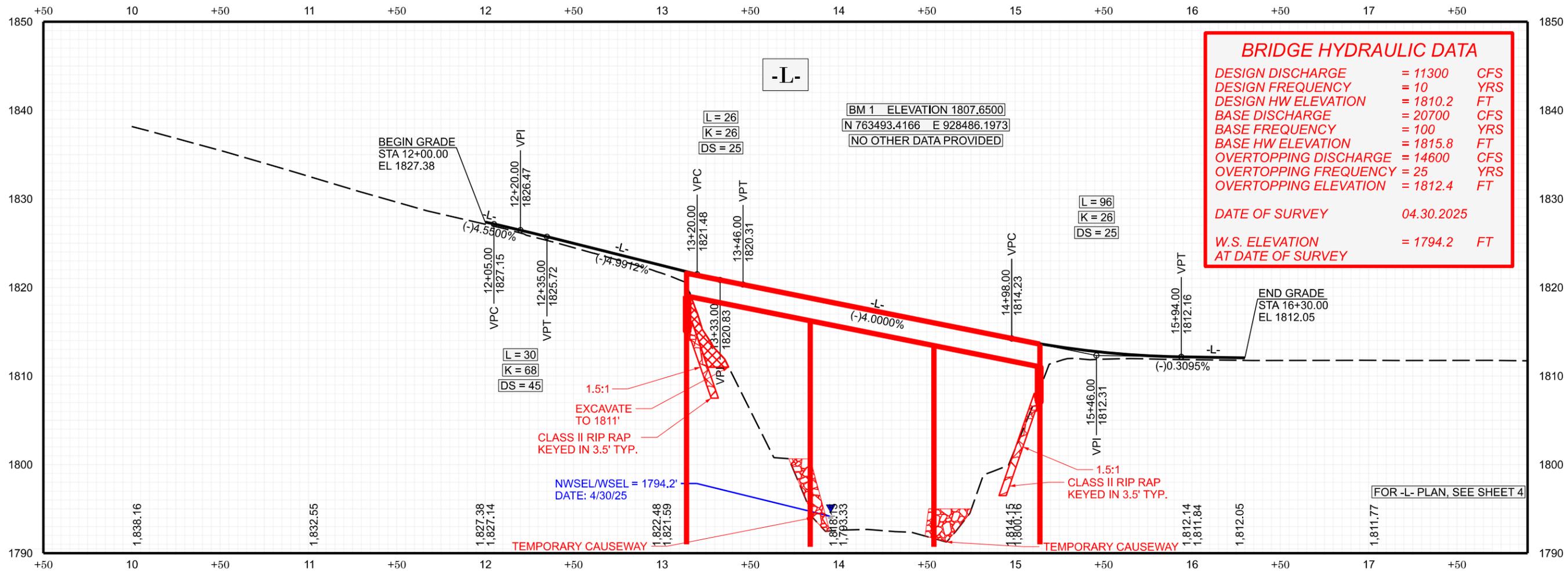


SITE 1



Type of Liner = GEOTEXTILE, RIP RAP = CL B
FROM STA. 12+00 TO STA. 12+90 -L- (RT)
FROM STA. 11+00 TO STA. 12+00 -Y- (LT)

SEE SHEET 5 FOR -L- PROFILE
SEE SHEET 5 FOR -Y- PROFILE



PERMIT DRAWING SHEET 4 OF 5



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+74 to 14+80 -L- | Temporary Causeways | | | | | | 0.02 | | 73 | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| TOTALS*: | | | | | | | | 0.02 | 0 | 73 | 0 | |

*Rounded totals are sum of actual impacts

NOTES:
The temporary surface water impacts due to the temporary causeway includes impacts from the causeways around both end bents

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 01/21/2026
 Madison County
 DF18313.2057035.PR
 DF18313.2057035.PR
 SHEET 5 OF 5