



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

DANIEL H. JOHNSON
SECRETARY

October 17, 2025

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 227 on SR 1310
over the Nantahala River in Macon County, Division 14, **TIP: BR-0052.**

Conveyance Authorization for the Federal Energy Regulatory Commission c/o Duke Energy has not been received. Bridgework over the Nantahala River is not authorized until receipt.

Please find enclosed the following permits for this project:

Agency	Permit Type	Permit Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Regional General Permit 50	May 25, 2025
NC Division of Water Resources Section 401 Water Quality Certification	General Certification No. 4135 [RGP50]	May 25, 2025

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

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

The General Conditions and Certifications for Nationwide and Regional Permits can be referenced at:
https://xfer.services.ncdot.gov/pdea/PermIssued/_General_Conditions_and_Certifications/

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

Action Id. **SAW-2023-01503** County: **Macon County** U.S.G.S. Quad: **Hewitt**

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Permittee: **North Carolina Department of Transportation**

Mr. Jeffrey Hemphill

Address: **1598 Mail Service Center**
Raleigh NC, 27699

Nearest Town **Beechertown**

Nearest Waterway **Nantahala River**

USGS HUC **06010202**

River Basin **Upper Tennessee**

Coordinates Latitude: **35.27044;**

Longitude: **-83.6738**

Location description: **The Bridge No. 227 (BR-0052) replacement project is located where Wayah Road crosses the Nantahala River, approximately 0.6 mile east of the intersection of Wayah Road and US 74 in Beechertown, Macon County, North Carolina**

Description of projects area and activity: **This permit verification authorizes the replacement of a structurally deficient bridge with a new bridge in the same location. The project will result in the permanent impact to 58 lf of stream channel and the temporary impact to 76 lf of stream channel.**

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: **GP 50 - NCDOT - Bridge, Road Widening and Interchanges**

SEE ATTACHED RGP or NWP GENERAL, REGIONAL AND/OR SPECIAL CONDITIONS

Special Conditions

- 1) **Per the USFWS 1/30/2024 letter, NCDOT will do the following:**
 - a. **Tree clearing will take place from October 16 to March 31.**
 - b. **Tree clearing will be minimized to the maximum extent possible and limits will be clearly marked for the contractor.**
 - c. **The existing bridges will be surveyed within 14 days of construction to ensure absence of roosting bats. The U.S. Fish and Wildlife Service (Service) Asheville Field Office will be contacted immediately if bats are observed.**
 - d. **Blasting during the bat pup season (May 15 – July 31) will be avoided to the maximum extent r, construction constraints and unforeseen site circumstances may necessitate some blasting during this period.**
 - e. **Night work will not occur.**
 - f. **No additional permanent lighting will be added to the roadway.**
 - g. **Design Standards in Sensitive Watersheds will be followed for the project's Sediment and Erosion Control procedures.**
 - h. **Any construction vehicles or equipment will be power washed prior to entering the bridge project areas to help eliminate introduction/spread of non-native invasive species.**
- 2) **NCDOT will develop a boater safety plan pursuant to Duke's FERC Permit and will forward to the Corps once it's finalized. Absent the final boater safety plan, NCDOT has committed to the following conditions:**

- a. The temporary work pads will not block more than 50% of the river and will also not create a hazardous situation or velocities that are any higher than the natural conditions found up and downstream of the river.
 - b. There will be a signage component to direct paddlers to the safest passage, when that direction is required, during construction.
 - c. No beams or equipment will be hoisted while boaters [or anyone] is present underneath.
 - d. No components of the bridge will be dropped into the water.
 - e. During the removal process, overhead removal will temporarily pause while boaters are present.
- 3) Per the NC Wildlife Resources Commission, NCDOT is prohibited from doing any in-stream work and land disturbance within the 25-foot trout buffer from October 15 to April 15 to protect trout spawning. Additionally, Design Standards in Sensitive Watersheds shall be implemented with this project.
 - 4) The Permittee shall implement commitments as described in the Historic Architecture and Landscapes Assessment of Effects Form (enclosed) to ensure no adverse effect to historic architecture resources.

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted application dated July 21, 2023 and ensuing record. 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 Morehead City, NC, at (252) 808-2808.

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 Crystal Amschler at (828) 526-6013 or Crystal.C.Amschler@usace.army.mil.

Corps Regulatory Official:  2024.03.22 07:04:21 -04'00' Date: **March 21, 2024**
Expiration Date of Verification: **May 25, 2025**

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 <https://regulatory.ops.usace.army.mil/customer-service-survey/>

Action ID Number: SAW-2023-01503

County: Macon County

Permittee: North Carolina Department of Transportation
Mr. Jeffrey Hemphill

Address: 1598 Mail Service Center
Raleigh NC, 27699

Project Name: Bridge No. 227 (BR-0052) replacement project

Date Verification Issued: March 21, 2024

Project Manager: Crystal Amschler

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: Crystal Amschler, Project Manager
Asheville Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, North Carolina 28801**

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

17-12-0042



HISTORIC ARCHITECTURE AND LANDSCAPES ASSESSMENT OF EFFECTS FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

PROJECT INFORMATION

Project No:	BR-0031, BR-0052	County:	Macon
WBS No.:	67031.3.1	Document Type:	MCC
Fed. Aid No:	N/A	Funding:	☒ State ☐ Federal
Federal Permit(s):	☒ Yes ☐ No	Permit Type(s):	USACE
<u>Project Description:</u> Replace Bridge Nos. 226 and 227 on SR 1310 (Wayah Road) over Nantahala River.			

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

<u>Description of review activities, results, and conclusions:</u> Review of HPO quad maps, HPO GIS information, historic designations roster, and indexes was undertaken on January 8, 2018. Based on this review, the project falls within the Determined Eligible Nantahala Power and Light Complex. An assessment of effects is required.

ASSESSMENT OF EFFECTS

Property Name:	Nantahala Hydroelectric Power Project	Status:	Determined Eligible
Survey Site No.:		PIN:	
<u>Effects</u> ☐ No Effect ☒ No Adverse Effect ☐ Adverse Effect			
<u>Explanation of Effects Determination:</u> There will be no adverse effect with the following environmental commitments listed below.			
<u>List of Environmental Commitments:</u> 1. Maintain Right of Way 2. Oregon Rail to be utilized for bridge rails 3. Retaining walls will utilize a natural stone design			

FHWA Intends to use the State Historic Preservation Office's concurrence as a basis for a "de minimis" finding for the following properties, pursuant to Section 4(f):

Nantahala Hydroelectric Power Project

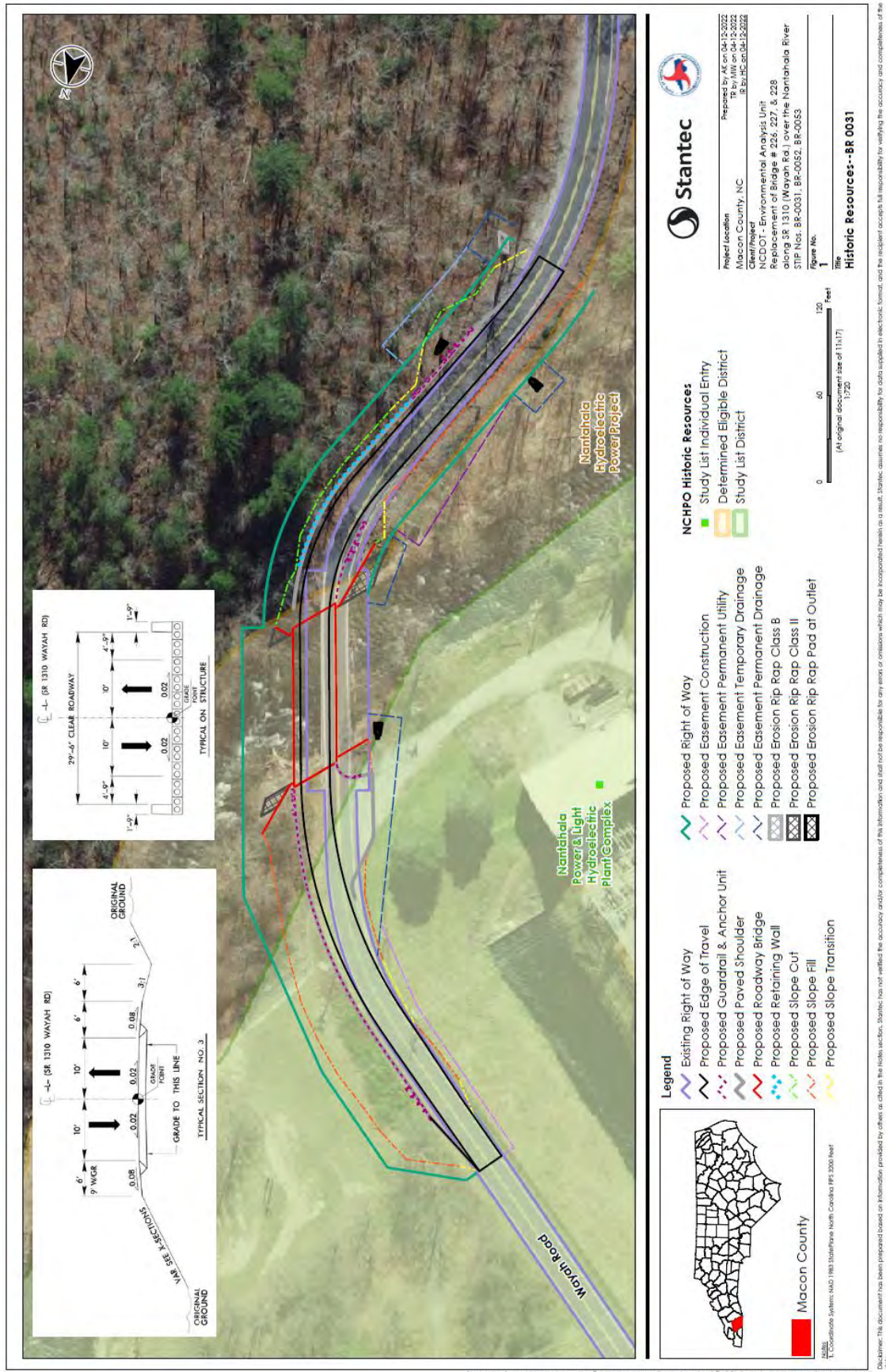
SUPPORT DOCUMENTATION

☐ Map(s) ☐ Previous Survey Info. ☐ Photos ☐ Correspondence ☐ Design Plans

FINDING BY NCDOT AND STATE HISTORIC PRESERVATION OFFICE

Historic Architecture and Landscapes – ASSESSMENT OF EFFECTS

DocuSigned by: <i>Katherine Husband</i> C47FECA930B040B...	04/28/2022
NCDOT Architectural Historian	Date
DocuSigned by: <i>Renee Gledhill-Earley</i> C26A1556A275464...	04/29/2022
State Historic Preservation Office Representative	Date
DocuSigned by: <i>Seth Wilcher</i> 9967A500E8714E0...	05/02/2022
Federal Agency Representative	Date



ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

RICHARD E. ROGERS, JR.

Director

NORTH CAROLINA
Environmental Quality

August 22, 2023

DWR # 20231043

Macon County

Mr. Michael Turchy
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, NC 27699-1598

Subject: APPROVAL OF 401 WATER QUALITY CERTIFICATION WITH ADDITIONAL CONDITIONS

Replace Bridge 227 on SR 1310 over the Nantahala River (BR-0052)
Nantahala River [Little Tennessee River Basin, 06010202, B; Trout]

Dear Mr. Turchy:

You have our approval for the impacts listed below for the purpose described in your application dated July 21, 2023, and received by the Division of Water Resources (Division) on July 21, 2023. These impacts are covered by the attached Water Quality General Certification Number 4135 and the conditions listed below. This certification is associated with the use of General Permit Number 201902350 once it is issued to you by the U.S. Army Corps of Engineers. Please note that you should get any other federal, state, or local permits before proceeding with your project, including those required by (but not limited to) Sediment and Erosion Control, Non-Discharge, and Water Supply Watershed regulations.

The Division has determined that the proposed project will comply with water quality requirements provided that you adhere to the conditions listed in the enclosed certification and to the additional conditions itemized below.

The following proposed impacts are hereby approved. No other impacts are approved, including incidental impacts. [15A NCAC 02H .0506(b)]

Stream Impacts in the Little Tennessee River Basin

Site	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	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)
S1			58		58	
S2				62	62	
S3				14	14	
Total			58	76	134	

Total Stream Impact for Project: 58 linear feet of permanent and 76 linear feet of temporary.

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 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)].

If you are unable to comply with any of the conditions of the attached Water Quality General Certification or with the additional conditions itemized below, you must notify the Asheville Regional Office within 24 hours (or the next business day if a weekend or holiday) from the time the permittee becomes aware of the circumstances.

The permittee shall report to the Asheville Regional Office any noncompliance with, and/or any violation of, stream or wetland standards [15A NCAC 02B .0200] including but not limited to sediment impacts to streams or wetlands. Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the permittee became aware of the non-compliance circumstances.

Condition(s) of Certification:

Project Specific Conditions

1. 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 potential issues at the permitted site. NCDWR staff shall be invited to the pre-construction meeting. [15A NCAC 02H.0506(b)(2) and (b)(3)]
2. For projects impacting waters classified by the NC Environmental Management Commission as Trout (Tr), stormwater shall be directed to vegetated buffer areas, grass-lined ditches or other means appropriate to the site for the purpose of pre-treating storm water runoff prior to discharging directly into streams. Mowing of existing vegetated buffers is strongly discouraged. [15A NCAC 02H.0506(b)(2)]
3. 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. No in-water work is permitted between October 15 and April 15 of any year, without prior approval from the NC Division of Water Resources and the NC Wildlife Resources Commission.

In-stream work and land disturbance within the 25-foot buffer zone are prohibited during the trout-spawning season of October 15 through April 15 to protect the egg and fry stages of trout. [15A NCAC 02H .0506(b)(2)]

4. The permittee shall use Design Standards in Sensitive Watersheds in areas draining to Trout Waters. [15A NCAC 4B.0124 (a)-(e)]
5. 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 .0506(b)(2)]
6. 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)]
7. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. To meet the requirements of NCDOT's NPDES permit NCS000250, 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)(2)]
8. Provide advanced notice of construction to Dave McHenry with the North Carolina Wildlife Resources Commission so that he may advise the site contractor about ways to minimize possible impacts to the Eastern Hellbender (NC Special Concern). [15A NCAC 02H .0506(b)(1) and (2)]



General Conditions

1. 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 downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact 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)]
2. 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]
3. 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)]
4. 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)]
5. 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)]
6. 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)]
7. 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)]
8. 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)]
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. 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)]
11. Discharging hydroseed mixtures and washing out hydro seeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
12. 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]

13. 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)]
14. 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)]
15. 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]
16. 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.
17. 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)]
18. 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]
19. 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)]
20. 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)]
21. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards [15A NCAC 02H.0506(b)(3)]:
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
22. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification. [15A NCAC 02H.0506(b)(3)]



This approval and its conditions are final and binding unless contested. [G.S. 143-215.5] 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.

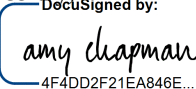
One (1) copy of the Petition must also be served to the North Carolina Department of Environmental Quality:

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

This letter completes the review of the Division under section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Kevin Mitchell at 828-296-4650 or kevin.mitchell@deq.nc.gov if you have any questions or concerns.

Sincerely,

DocuSigned by:


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

ec: Crystal Amschler, US Army Corps of Engineers Asheville Regulatory Field Office (via email)
Dave McHenry, NC Wildlife Resources Commission (via email)
Holland Youngman, US Fish and Wildlife Service (via email)
Erin Cheely, NC Department of Transportation (via email)
Jeff Hemphill, NC Department of Transportation (via email)

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North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS



(Version 3.00; Released August 2021)

WBS Element: 67052.1.1 TIP/Proj No: BR-0052 County(ies): Macon Page 1 of 2

General Project Information

WBS Element:		67052.1.1		TIP Number:		BR-0052		Project Type:		Bridge Replacement		Date:		1/4/2022			
NCDOT Contact:		Jonathan Moore						Contractor / Designer:		Corey Cavalier							
	Address:		1590 Mail Service Center Raleigh, NC 27699-1590							Address:		1590 Mail Service Center Raleigh, NC 27699-1590					
	Phone:		(919) 707-6738							Phone:		(919) 707-6763					
	Email:		jmoore6@ncdot.gov							Email:		ccavalier@ncdot.gov					
City/Town:		N/A						County(ies):		Macon							
River Basin(s):		Little Tennessee						CAMA County?		No							
Wetlands within Project Limits?		No															

Project Description

Project Length (lin. miles or feet):	.134 mile		Surrounding Land Use:		National Forest					
	Proposed Project					Existing Site				
Project Built-Upon Area (ac.)	0.6			ac.		0.4			ac.	
Typical Cross Section Description:	Two 10' lanes with 6-9' grassed shoulders.					Two 9' lanes with variable width grass shoulders.				
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	640		Year:	2022	Existing:	600		Year:	2019

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

Project BR-0052 involves replacement of bridge #550227 over the Nantahala River with a total of 0.184 mile of roadwork on SR 1310 (Wayah Road) in Macon County. The existing bridge #550227, a 1@35'-6", 1@35'-0", 1@35'-6" structure with an overall length of 106'-0" and out-out width of 20'-0", is to be replaced by a 2@55'-0" structure with an overall length of 110'-0" and out-out width of 33'-0". The new bridge will be offset from the existing one so that traffic can be maintained through staged construction.

The proposed bridge does not contain deck drains. All storm water runoff from the bridge and approaches will be collected by a storm drainage system on the north side of the bridge and discharged into the floodplain through rip rap. Proposed roadway runoff excluding the bridge will collect in ditches and discharge to the Nantahala River and its floodplain.

The existing bridge does not contain deck drains. All storm water runoff from the bridge collects along the railing, flows down the roadway fill slopes behind the wingwalls, and into a ditch that discharges into the floodplain. Runoff along the rest of the road sheets across the pavement, down the roadway fill slopes, and into a ditch that discharges to the floodplain.



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS

(Version 3.00; Released August 2021)

WBS Element: 67052.1.1

TIP/Proj No.: BR-0052

County(ies): Macon

Page 2 of 2

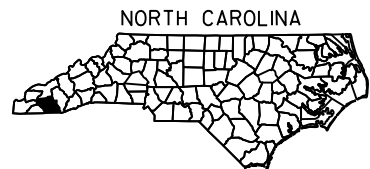
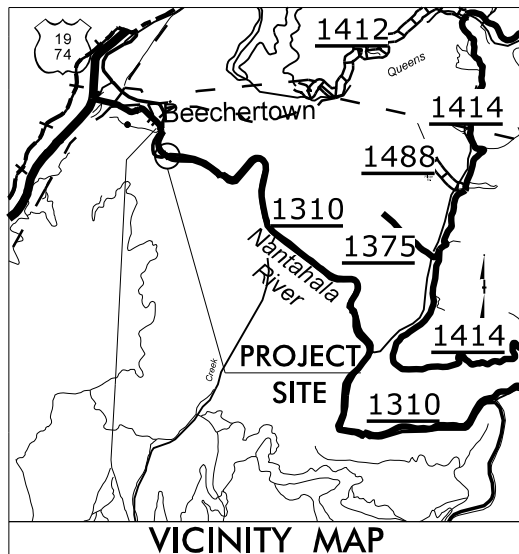
General Project Information

Waterbody Information

Surface Water Body (1):	Nantahala River		NCDWR Stream Index No.:	2-57-(22.5)	
NCDWR Surface Water Classification for Water Body	Primary Classification:		Class B		
	Supplemental Classification:		Trout Waters (Tr)		
Other Stream Classification:	None				
Impairments:	None				
Aquatic T&E Species?		Comments:			
NRTR Stream ID:				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?	
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)					
Surface Water Body (2):			NCDWR Stream Index No.:		
NCDWR Surface Water Classification for Water Body	Primary Classification:				
	Supplemental Classification:				
Other Stream Classification:					
Impairments:					
Aquatic T&E Species?		Comments:			
NRTR Stream ID:				Buffer Rules in Effect:	
Project Includes Bridge Spanning Water Body?		Deck Drains Discharge Over Buffer?		Dissipator Pads Provided in Buffer?	
Deck Drains Discharge Over Water Body?		(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)					
Surface Water Body (3):			NCDWR Stream Index No.:		
NCDWR Surface Water Classification for Water Body	Primary Classification:				
	Supplemental Classification:				
Other Stream Classification:					
Impairments:					
Aquatic T&E Species?		Comments:			
NRTR Stream ID:				Buffer Rules in Effect:	
Project Includes Bridge Spanning Water Body?		Deck Drains Discharge Over Buffer?		Dissipator Pads Provided in Buffer?	
Deck Drains Discharge Over Water Body?		(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)					

09/08/2023

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols



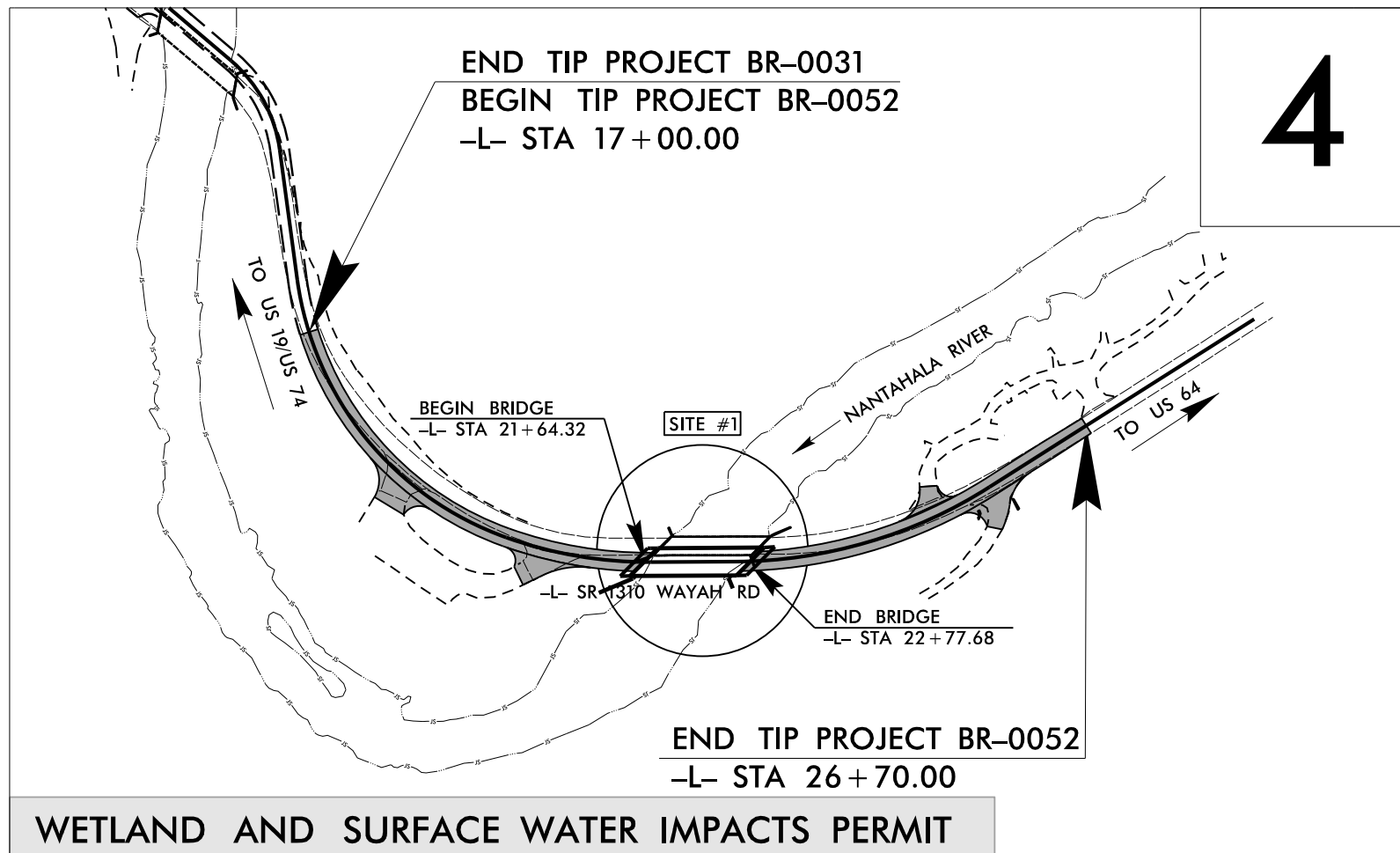
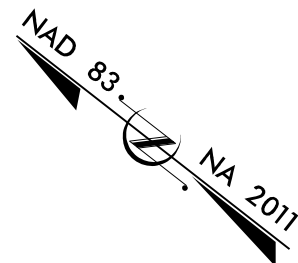
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MACON COUNTY

LOCATION: BRIDGE NO. 227 ON SR 1310 OVER
NANTHALA RIVER

TYPE OF WORK: GRADING, PAVING, DRAINAGE, RETAINING WALL
AND STRUCTURE

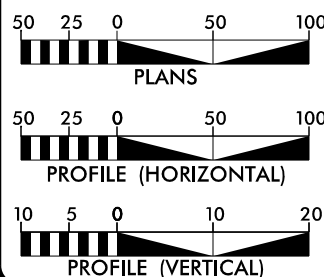
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0052	1	
STATE PROJ.NO.	F.A.PROJ.NO.	DESCRIPTION	
67052.1.1	N/A	PE	
67052.2.1	N/A	ROW & UTIL.	
67052.3.1	N/A	CONST.	
PERMIT DRAWING SHEET 1 OF 5			



DESIGN EXCEPTION FOR DESIGN SPEED
THIS PROJECT HAS NO CONTROLLED ACCESS
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2017 = 640
ADT ? =
K = %
D = %
T = % *
V = 40 MPH
* TTST = DUAL
FUNC CLASS =
MAJOR COLLECTOR
SUB REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT BR-0052 = 0.163 MI.
LENGTH STRUCTURE TIP PROJECT BR-0052 = 0.021 MI.
TOTAL LENGTH TIP PROJECT BR-0052 = 0.184 MI.

Prepared In the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MAY 23, 2022

LETTING DATE:
JUNE 20, 2023

ADAM COLE, PE
PROJECT MANAGER

JORDAN A. WOODARD, PE
PROJECT ENGINEER

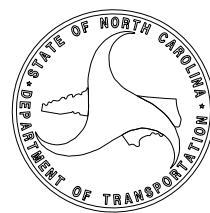
DOUGLAS KRETCHMAN, PE
PROJECT TEAM LEAD

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN
ENGINEER

SIGNATURE: P.E.



TIP PROJECT: BR-0052

CONTRACT:

\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$DON\$\$\$\$\$
\$\$\$\$\$SERNAME\$\$\$\$\$

WETLAND AND SURFACE WATER IMPACTS PERMIT

PROJECT REFERENCE NO.	SHEET NO.
BR-0052	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PERMIT DRAWING SHEET 2 OF 5	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

END TIP PROJECT BR-0052
-L- STA 26+70.00

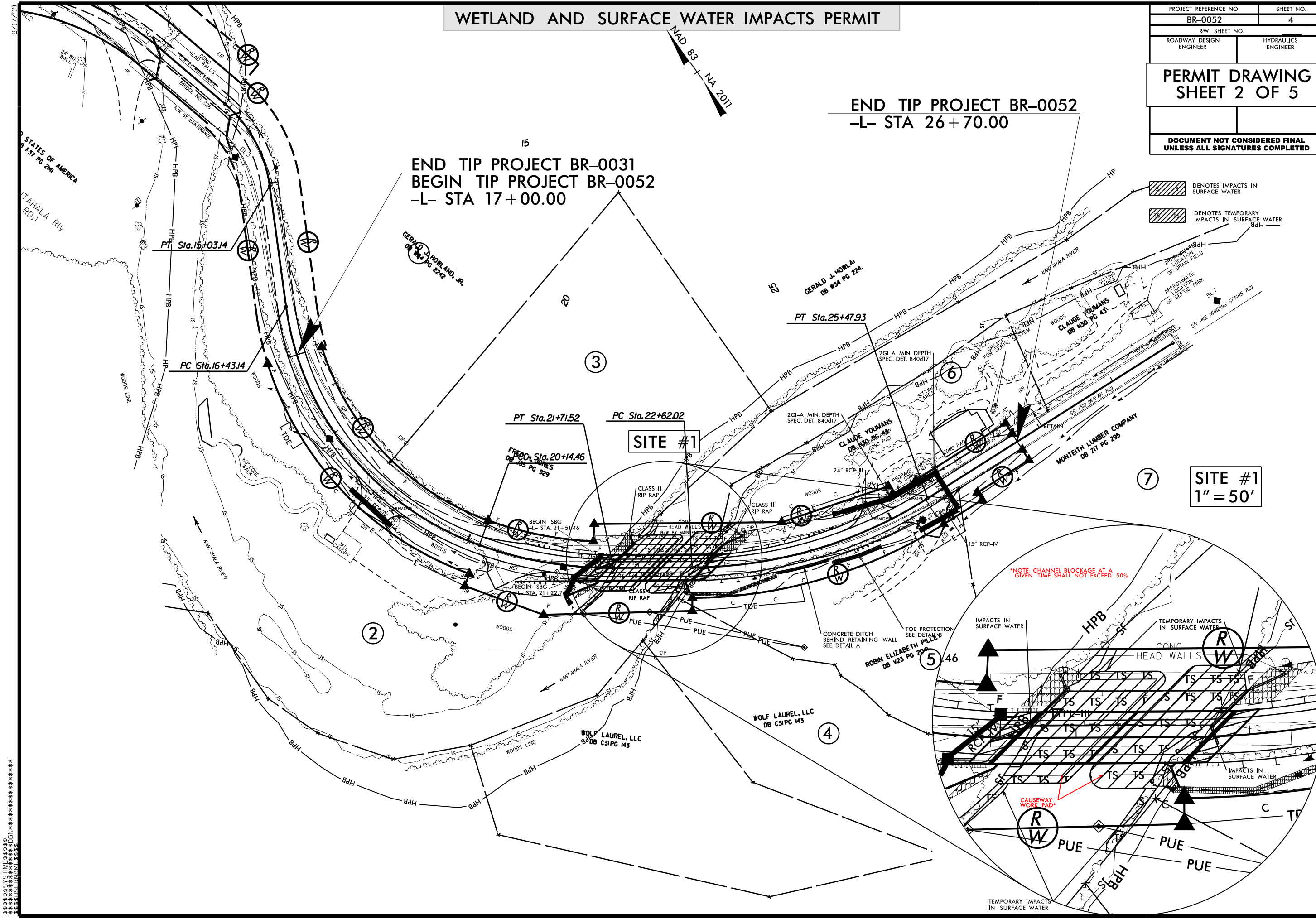
END TIP PROJECT BR-0031
BEGIN TIP PROJECT BR-0052
-L- STA 17+00.00

DENOTES IMPACTS IN SURFACE WATER
DENOTES TEMPORARY IMPACTS IN SURFACE WATER

SITE #1
1" = 50'

*NOTE: CHANNEL BLOCKAGE AT A GIVEN TIME SHALL NOT EXCEED 50%

TEMPORARY IMPACTS IN SURFACE WATER



WETLAND AND SURFACE WATER IMPACTS PERMIT

PROJECT REFERENCE NO.	SHEET NO.
BR-0052	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PERMIT DRAWING SHEET 3 OF 5	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

END TIP PROJECT BR-0052
-L- STA 26+70.00

END TIP PROJECT BR-0031
BEGIN TIP PROJECT BR-0052
-L- STA 17+00.00

DENOTES IMPACTS IN
SURFACE WATER

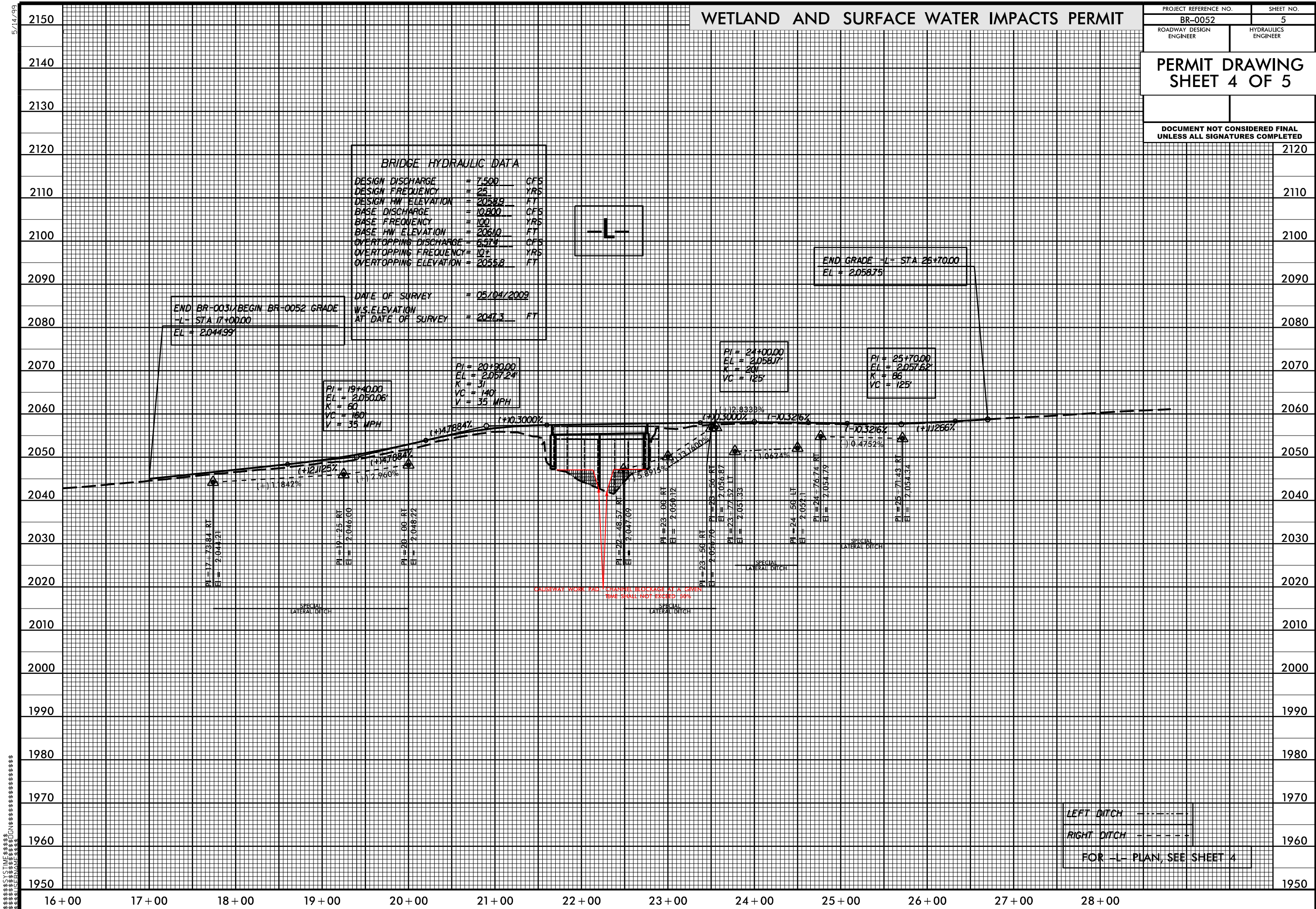
DENOTES TEMPORARY
IMPACTS IN SURFACE WATER

SITE #1

SITE #1
1" = 50'

NOTE: CHANNEL BLOCKAGE AT
GIVEN TIME SHALL NOT EXCEED 50%

TEMPORARY IMPACTS
IN SURFACE WATER



WETLAND AND SURFACE WATER IMPACTS SUMMARY												
			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-L- 21+34 / 23+22	Bridge + Rip Rap Wingwall						0.01	0.02	58	62	
		/ Abutment Protection										
		Causeway Work Pad +							0.12		14	
TOTALS*								0.01	0.14	58	76	0

NOTES: The Causeway length is 92'. The permanent impacts overlap all but 14' of the temporary Causeway impacts

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