ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
S. DANIEL SMITH
Director

NORTH CAROLINA
Environmental Quality

February 22, 2022

Ms. Wanda Austin, Division 14 Engineer
NCDOT, Division 14
253 Webster Road
Sylva, NC 28779

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS for Proposed improvements to NC 129 and NC 143 in Graham County, Federal Aid Project No. APD-074(178), TIP A-0009C.
NCDWR Project No.20201371

Dear Ms. Austin:

Attached hereto is a copy of Certification No. WQC004651 issued to The North Carolina Department of Transportation (NCDOT) dated February 22, 2022.

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

Sincerely,

DocuSigned by:
Amy Chapman
9C9886312DCD474...

S. Daniel Smith, Director
Division of Water Resources

Electronic copy only distribution:
Crystal Amschler, US Army Corps of Engineers, Asheville Field Office
Patrick Breedlove, Environmental Specialist Division 14
Amanetta Somerville, US Environmental Protection Agency
Holland Youngman, US Fish and Wildlife Service
Dave McHenry, NC Wildlife Resources Commission
Beth Harmon, Division of Mitigation Services
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 1.11 acres of jurisdictional wetlands, 8,209 linear feet of jurisdictional streams, and 0.12 acre of open water in Graham County. The project shall be constructed pursuant to the application dated received December 17, 2021. The authorized impacts are as described below:

Stream Impacts in the Little Tennessee River Basin

Site	Permanent Fill in Intermittent Stream (linear feet)	Temporary Fill in Intermittent Stream (linear feet)	Permanent Fill in Perennial Stream (linear feet)	Temporary Fill in Perennial Stream (linear feet)	Total Stream Impact (linear feet)	Stream Impacts Requiring Mitigation
S1	39				39	
S2		20			20	
S3	24				24	
S4			12		12	
S5				20	20	
S6			30		30	
S7			26		26	
S8				15	15	
S9			18		18	
S10				20	20	
S11	18				18	
S12			15		15	
S13			48		48	
S14				10	10	
S15			44		44	
S16			48		48	
S17			93		93	
S18				10	10	
S19			18		18	
S20			56		56	
S21				8	8	
S22			14		14	
S23			91		91	
S24				50	50	
S25	45				45	
S26		11			11	
S27		3			3	
S28			13		13	
S29				20	20	
S30				20	20	
S31			18		18	
S32			22		22	
S33				91	91	
S34			29		29	
S35				37	37	
S36			50		50	
S37				10	10	
S38			35		35	
S39			32		32	
S40				10	10	
S41		10			10	

Site	Permanent Fill in Intermittent Stream (linear feet)	Temporary Fill in Intermittent Stream (linear feet)	Permanent Fill in Perennial Stream (linear feet)	Temporary Fill in Perennial Stream (linear feet)	Total Stream Impact (linear feet)	Stream Impacts Requiring Mitigation
S42			12		12	
S43				18	18	
S44		16			16	
S45				20	20	
S46		53			53	
S47			39		39	
S48				10	10	
S49			10		10	
S50			32		32	
S51			42		42	
S52				10	10	
S53			32		32	
S54				10	10	
S55			3		3	
S56			11		11	
S57			27		27	
S58				16	16	
S59			24		24	
S60				11	11	
S61			18		18	
S62			6		6	
S63			38		38	
S64				5	5	
S65	24				24	
S66		11			11	
S67			18		18	
S68				14	14	
S69			25		25	
S70			41		41	
S71				9	9	
S72			23		23	
S73				87	87	
S74	25				25	
S75		13			13	
S76	23				23	
S77		8			8	
S78			62		62	
S79			64		64	
S80				105	105	
S81			10		10	
S82			10		10	
S83			68		68	
S84				10	10	
S85		11			11	
S86			21		21	
S87				11	11	
S88			25		25	
S89			27		27	
S90				14	14	
S91			6		6	
S92			6		6	
S93			66		66	

Site	Permanent Fill in Intermittent Stream (linear feet)	Temporary Fill in Intermittent Stream (linear feet)	Permanent Fill in Perennial Stream (linear feet)	Temporary Fill in Perennial Stream (linear feet)	Total Stream Impact (linear feet)	Stream Impacts Requiring Mitigation
S94				62	62	
S95			4		4	
S96				14	14	
S97			15		15	
S98			17		17	
S99				20	20	
S100				22	22	
S101			16		16	
S102					16	
S103			12		12	
S104			8		8	
S105				6	6	
S106			6		6	
S107			15		15	
S108				17	17	
S109			13		13	
S110				21	21	
S111		27			27	
S112			17		17	
S113				20	20	
S114				30	30	
S115			89		89	
S116			20		20	
S117			14		14	
S118				7	7	
S119				21	21	
S120			58		58	
S121			14		14	
S122				5	5	
S123			10		10	
S124				6	6	
S125			41		41	
S126				55	55	
S127			2		2	
S128			12		12	
S129				10	10	
S130			53		53	
S131			68		68	
S132				9	9	
S133			22		22	
S134				26	26	
S135			34		34	
S136			37		37	
S137				33	33	
S138	127				127	
S139		25			25	
S140			24		24	
S141				22	22	
S142			29		29	
S143			10		10	
S144				10	10	
S145				31	31	

Site	Permanent Fill in Intermittent Stream (linear feet)	Temporary Fill in Intermittent Stream (linear feet)	Permanent Fill in Perennial Stream (linear feet)	Temporary Fill in Perennial Stream (linear feet)	Total Stream Impact (linear feet)	Stream Impacts Requiring Mitigation
S146			93		93	
S147				50	50	
S148			14		14	
S149				28	28	
S150			10		10	
S151			20		20	
S152				10	10	
S153		3			3	
S154			12		12	
S155				23	23	
S169	38				38	
S170		54			54	
S171				69	69	
S172			18		18	
S173				17	17	
S174				16	16	
S175			12		12	
S176				20	20	
S177				27	27	
S178			12		12	
S179				24	24	
S180		18			18	
S181		24			24	
S182				83	83	
S183	43				43	
S184			22		22	
S185				21	21	
S186			47		47	
S187				11	11	
S188			50		50	
S189			8		8	
S190				19	19	
S191			14		14	
S192				14	14	
S193			23		23	
S194				26	26	
S195	4				4	
S196		16			16	
S197			288		288	
S198				16	16	
S199			37		37	
S200			20		20	
S201				38	38	
S202			240		240	
S203				16	16	
S204			191		191	
S205			16		16	
S206				8	8	
S207	72				72	
S208		15			15	
S209				19	19	

Site	Permanent Fill in Intermittent Stream (linear feet)	Temporary Fill in Intermittent Stream (linear feet)	Permanent Fill in Perennial Stream (linear feet)	Temporary Fill in Perennial Stream (linear feet)	Total Stream Impact (linear feet)	Stream Impacts Requiring Mitigation
S210			84		84	
S211				20	20	
S212				20	20	
S213			67		67	
S214				22	22	
S215		21			21	
S216	6				6	
S217		419			419	
S218				50	50	
S219				16	16	
S220			67		67	
S221			77		77	
S222				42	42	
S223			50		50	
S224				20	20	
S225			30		30	
S226			24		24	
S227				3	3	
S228			10		10	
S229			23		23	
S230				20	20	
S231			209		209	
S232				12	12	
S233			31		31	
S234				20	20	
S235			226		226	
S236				66	66	
S237				361	361	
S238			31		31	
S239				31	31	
S240			35		35	
S241			54		54	
S242				65	65	
S243			43		43	
S244			9		9	
S245				16	16	
S246			91		91	
S247				11	11	
Total	**488**	**778**	**4,446**	**2,497**	**8,209**	

Total Stream Impact for Project: 4,934 linear feet of permanent and 3,275 feet of temporary.

Wetland Impacts in the Little Tennessee River Basin

Site	Permanent Fill (acres)	Temporary Fill (acres)	Total Wetland Impact (acres)	Impacts Requiring Mitigation (acres)
W1(A4)	.010		.010	.010
W2(A13)	.010		.010	.010
W3(A13)	.010		.010	.010
W4(A13)		.030	.030	.030
W5(A13)	.070		.070	.070
W6(A13)	.010		.010	.010

W7(A13)		.020	.020	.020
W8(A13)		.030	.030	.030
W9(A14)	.020		.020	.020
W10(A14)		.010	.010	.010
W11(A14)		.010	.010	.010
W12(A16)	.090		.090	.090
W13(A18)	.010		.010	.010
W14(A21)		.010	.010	.010
W15(A23)	.020		.020	.020
W16(A23)	.070		.070	.070
W17(A23)		.110	.110	.110
W18(A23)	.010		.010	.010
W19(A23)		.010	.010	.010
W20(A23		.050	.050	.050
W21(A24)		.020	.020	.020
W22(B5)		.010	.010	.010
W23(B6)	.060		.060	.060
W24(B6)		.010	.010	.010
W25(B6)	.010		.010	.010
W26(B6)		.010	.010	.010
W27(B10)	.030		.030	.030
W28(B12)	.080		.080	.080
W29(B12)		.010	.010	.010
W29(B12)		.010	.010	.010
W30(B15)	.040		.040	.040
W31(B15)	.020		.020	.020
W32(B15)		.010	.010	.010
W33(B19)	.010		.010	.010
W33(B19)		.010	.010	.010
W34(B19)	.010		.010	.010
W37(C1)	.010		.010	.010
W38(C1)		.010	.010	.010
W39(C7)	.010		.010	.010
W40(C7)		.010	.010	.010
W41(C7)		.020	.020	.020
W42(C22)	.070		.070	.070
W43(C22)	.010		.010	.010
W44(C22)		.010	.010	.010
Total	**0.69**	**0.42**	**1.11**	**1.11**

Total Wetland Impact for Project: 0.69 acres of permanent and 0.42 acres of temporary.

Open Water Impacts in the Little Tennessee River Basin

Site	Fill (acres)	Total Impact (acres)
O1	0.12	0.12
Total	**0.12**	**0.12**

Total Open Water Impact for Project: 0.12 acres.

The application provides adequate assurance that the discharge of fill material into the waters of the Little Tennessee 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 December 17, 2021. 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, or stream impacts, for this project (now or in the future) exceed 0.1 acre or 300 linear feet, respectively, additional compensatory

mitigation may be required as described in 15A NCAC 2H .0506 (c). 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.

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 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)]

2. The permittee will need to adhere to all appropriate in-water work moratoria (including the use of pile driving or vibration techniques) prescribed by the NC Wildlife Resources Commission. No in-water work is permitted between January 1 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 January 1 through April 15 to protect the egg and fry stages of trout.

3. Prior to commencing ground disturbing activities, an acceptable monitoring and mitigation plan for the presence of sulfide-bearing rock must be approved by the NCDWR.

4. The permittee shall use Design Standards in Sensitive Watersheds (15A NCAC 4B.0124[a]-[e]) in areas draining to Trout waters.

5. Compensatory mitigation for impacts to 1.11 acres riverine wetlands is required. We understand that you have chosen to perform compensatory mitigation for impacts to wetlands through the North Carolina Division of Mitigation Services (DMS) (formerly NCEEP), and that the DMS has agreed to implement the mitigation for the project. DMS has indicated in a letter dated February 10, 2022, that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with DMS's Mitigation Banking Instrument signed July 28, 2010.

6. Channel relocations at sites 11, 17, and 19 of Section C 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)]

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) and (c)(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) and (c)(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) and (c)(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(f)]

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) and (c)(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) and (c)(3]):

    a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
    b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
    c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
    d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.

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) and (c)(3)]

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. 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 permit.

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

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

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

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

Mr. Bill F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center

This the 22nd day of February 2022

DIVISION OF WATER RESOURCES

DocuSigned by:
Amy Chapman
9C9886312DCD474...

S. Daniel Smith, Director

WQC No. WQC004651

ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
S. DANIEL SMITH
Director

NORTH CAROLINA
Environmental Quality

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 _____