

JOSH STEIN
Governor

D. REID WILSON
Secretary

RICHARD E. ROGERS, JR.
Director



September 18, 2025

DWR # 20241262
Dare and Currituck Counties

North Carolina Department of Transportation
Attn: Michael Turchy
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Delivered via email to: maturgy@ncdot.gov

Subject: Approval of Individual 401 Water Quality Certification
Mid-Currituck Bridge Project, WBS Element# 34470.1.TA1, STIP R-2576
USACE AID Number SAW-1995-02242

Dear Mr. Turchy:

Attached hereto is a copy of Certification No. WQC008093 issued to The North Carolina Department of Transportation (NCDOT), North Carolina Turnpike Authority (NCTA) dated September 18, 2025. This approval is for the purpose and design described in your application.

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

Upon the presentation of proper credentials, the Division of Water Resources (Division) may inspect the property.

This Water Quality Certification shall expire on the same day as the expiration date of the corresponding Section 10 or Section 404 Permit that is current at the time this Certification is issued. The conditions shall remain in effect for the life of the project, regardless of the expiration date of this Water Quality Certification.

Non-compliance with or violation of the conditions herein set forth may result in revocation of this Water Quality Certification for the project and may also result in criminal and/or civil penalties.



North Carolina Department of Environmental Quality | Division of Water Resources
512 North Salisbury Street | 1617 Mail Service Center | Raleigh, North Carolina 27699-1617
919.707.9000

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 <https://www.oah.nc.gov> or by calling the OAH Clerk's Office at (919) 431-3000.

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

Dan Hirschman, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

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

This letter completes the Division's review under Section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Garcy Ward at 252-948-3917 or garcy.ward@deq.nc.gov if you have any questions or concerns.

Sincerely,

DocuSigned by:

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Michael Pjetraj, Deputy Director
Division of Water Resources

Electronic cc: Kyle Barnes, US Army Corps of Engineers, Washington Field Office
Lee Cannady, NC Division of Coastal Management
Cathy Brittingham, NC Division of Coastal Management
Missy Pair, NC Turnpike Authority
Lisa Wickliffe, National Marine Fisheries Service
Travis Wilson, NC Wildlife Resources Commission
Daniel Royster, NC Division of Marine Fisheries
Jason Elliott, NC Department of Transportation
Garcy Ward, NC Division of Water Resources, Washington Regional Office
File Copy



NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

CERTIFICATION #WQC008093 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to North Carolina's Regulations in 15 NCAC 02H .0500 and 15A NCAC 02B .0200, to the North Carolina Department of Transportation, North Carolina Turnpike Authority (NCTA) and Mr. Michael Turchy who have authorization for the impacts listed below, as described within your application received by the N.C. Division of Water Resources (Division) on September 18, 2024, and subsequent information received on August 15, 2025, and by Public Notice issued by the U.S. Army Corps of Engineers on October 21, 2024, and by Public Hearing held by the Division on February 27, 2025, and within the *Reasonable Period of Time* pursuant to 40 CFR Part 121.6.

The State of North Carolina certifies that this activity will comply with water quality requirements and the applicable portions of Sections 301, 302, 303, 306, 307 of the Public Laws 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, and conditions hereinafter set forth.

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

Wetland Impacts in the Pasquotank River Basin

Site	Fill Permanent (acre)	Fill Temporary (acre)	Mechanized Clearing (acre)	Hand Clearing (acre)	Total Wetland Impact (acre)
1A	0.023	--	--	0.048	0.071
1B	0.025	--	--	0.070	0.095
1C	0.001	--	--	0.018	0.019
1D	0.004	--	--	0.017	0.021
1E	0.131	--	--	0.075	0.206
3	0.042	4.718	0.034	11.469	16.263
5	0.258	--	--	0.078	0.336
6	0.003	--	--	0.008	0.011
7	0.001	--	--	0.013	0.014
8	0.242	--	--	0.140	0.382
9	0.187	--	--	0.192	0.379
10	0.182	--	--	0.184	0.366
11	0.085	--	--	0.047	0.132
Total	1.184	4.718	0.034	12.359	18.295



Wetland Impacts in the Pasquotank River Basin due to Utilities

Site	Fill Permanent (acre)	Fill Temporary (acre)	Hand Clearing (acre)	Total Wetland Impact (acre)
U-1A	--	0.002	--	0.002
U-1B	--	0.001	--	0.001
U-1C	--	0.001	--	0.001
U-1D	--	<0.001	--	<0.001
U-1E	--	0.002	--	0.002
U-1F	--	0.003	--	0.003
U-1G	--	0.003	--	0.003
U-1H	--	0.004	--	0.004
U-1I	--	<0.001	--	<0.001
U-1J	--	0.004	--	0.004
U-1K	--	0.006	--	0.006
U-1L	--	0.010	--	0.010
U-1M	--	0.014	--	0.014
U-1N	--	0.012	--	0.012
2	--	--	0.009	0.009
3	--	--	0.004	0.004
Total	--	0.062	0.013	0.075

Stream Impacts in the Pasquotank River Basin

Site	Stream Permanent (linear feet)	Stream Temporary (linear feet)	Total Stream Impact (linear feet)
2	238	9	247

Open Water Impacts in the Pasquotank River Basin

Site	Open Water Permanent (acre)	Open Water Temporary (acre)	Total (acre)
4	0.129	--	0.129
5	0.036	0.017	0.053
11	0.022	0.025	0.047
Total	0.187	0.042	0.229

Submerged Aquatic Vegetation (SAV) Impacts in the Pasquotank River Basin

Site	Permanent (acre)	Temporary (acre)	Total (acre)
Bridge - piles	0.064	0.112	0.180
Bridge - shading	8.876*	0.777	9.649
Total	8.94	0.889	9.829

* includes area underneath dripline of the bridge



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This approval requires you to follow the conditions listed in the Certification below.

CONDITIONS OF CERTIFICATION [15A NCAC 02H .0507(c)]:

Project Specific Conditions

1. Compensatory mitigation for impacts to 1.218 acres of non-riparian wetlands is required. You have chosen to perform compensatory mitigation for impacts to wetlands through the North Carolina Division of Mitigation Services (DMS), and DMS has agreed to implement the mitigation for the project. DMS has indicated in a letter dated November 26, 2023, that they will assume responsibility for satisfying the compensatory mitigation requirements for the above-referenced project in accordance with DMS's Mitigation Banking Instrument signed July 28, 2010. [15A NCAC 02H .0506(c)]
2. Compensatory mitigation is required for impacts to submerged aquatic vegetation (SAV). The mitigation shall be provided in accordance with the *Final Revised Mid-Currituck Bridge Submerged Aquatic Vegetation Mitigation Plan to Determine Mitigation* dated August 15, 2025. This includes providing upfront mitigation for SAV acreage that will be impacted by the permanent bridge piles plus the SAV acreage that is within the 60-100% Percent Time in the Shade Zone. The mitigation shall be provided at a 2:1 ratio for in-kind mitigation, with 1:1 to be provided prior to or commensurate with bridge construction and the remaining 1:1 to be provided after the five (5) year post-construction monitoring period. The location and type of mitigation shall be approved by an SAV working group comprised of federal and state agencies involved in the permitting process as well as other stakeholders. Any additional permanent SAV impacts beyond those included in the initial up-front mitigation shall be mitigated using the best available science to determine loss and mitigation option with the most ecological benefit at the end of the five-year post-construction monitoring period and as determined by the SAV Working Group. If the SAV Working Group agrees that in-kind mitigation is not feasible, out-of-kind mitigation may be accepted at a ratio higher than 2:1. [15A NCAC 02H .0506(c)]
3. Seven parcels have been identified that contain high quality wetlands as rated using the North Carolina Wetland Assessment Method (NCWAM) and will become landlocked (no longer have road access) as a result of the project. If NCDOT acquires any of these landlocked parcels, the purchased land shall be set aside as a conservation area and allowed to retain or return to its natural state. NCDOT shall permanently preserve these wetlands as an additional measure that is not considered compensatory mitigation. [15A NCAC 02h .0507(c)]
4. The permittee must adhere to all appropriate in-water work moratoria (including the use of pile driving or vibration techniques) prescribed by the NC Wildlife Resources Commission (WRC), the US Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS) and the NC



Division of Marine Fisheries (DMF). No in-water work is allowed in SAV habitat (including existing beds) between February 15 and September 30 of any year. Exceptions to this require prior approval from the NC Division of Water Resources and the resource agency responsible for the given moratorium. [15A NCAC 02H .0506(b); 15A NCAC 02H .0506(c)]

5. Adherence to *The Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters* is required throughout construction. [15A NCAC 02H .0506(b)(1)]
6. The post-construction removal of any temporary fill at Site 3 must return the site to its preconstruction contours and elevations. The impacted area shall be revegetated with appropriate native species including woody species. [15A NCAC 02H .0506(b); 15A NCAC 02h .0507(c)]
7. Due to the possibility that compaction and/or other site alterations at Site 3 might prevent the temporary wetland impact area from re-attaining jurisdictional wetland status; the permittee shall provide a report on the wetland areas temporarily impacted by the temporary fill. This report shall be submitted two growing seasons after completion of the work and shall consist of photographs and a brief narrative on the progress of the areas in re-attaining wetland function. Upon submission of this update to the NCDWR, the permittee shall schedule an agency field meeting with the NCDWR and the US Army Corps of Engineers to determine if wetland areas temporarily impacted by this project have lost function or jurisdiction. If the wetland areas temporarily impacted by this project results in a loss, the NCDWR will require compensatory wetland mitigation. [15A NCAC 02H .0506(b); 15A NCAC 02H .0506(c); 15A NCAC 02h .0507(c)]
8. An update to the stormwater management plan shall be provided to DWR for approval 3 months prior to the intended start date of construction. The permittee may not begin construction until the updated plan is approved. This plan shall include more specific information regarding the location and height of deck drains as well as a specific plan for bridge sweeping per previous commitments as noted in the document 'Approach for Stormwater Management' dated June 20, 2019, and as discussed in Section 2.1.7.2 of the FEIS. [15A NCAC 02H .0506(b); 15A NCAC 02h .0507(c)]
9. The permittee shall monitor the area beneath the bridges over Maple Swamp and Currituck Sound to ensure that erosive scouring to the wetland floor and/or shallow water substrate does not occur during stormwater discharge from deck scuppers. The initial monitoring shall be conducted within six months of the completion of the bridge deck and annually thereafter. Upon completion of each monitoring event, the permittee shall submit a report along with photographs detailing the findings. If DWR determines that significant scouring is occurring, the permittee shall

implement mitigative measures such as scupper outlet devices as referenced in the FEIS and RFEIS. Exceptions to this condition require written approval from DWR. [15A NCAC 02H .0506(b)(3); 15A NCAC 02h .0507(c)]

10. The permittee shall resume the water quality monitoring program that was paused after 2020. This includes in-water sampling as well as benthic macroinvertebrate surveys to establish baseline conditions prior to bridge construction. The monitoring shall be done in accordance with the methodology described in the document *Benthic Macroinvertebrate and Water Quality Technical Report* dated February 2021. The monitoring program shall resume on January 1, 2026, and continue for five (5) years post construction. The monitoring plan for the program shall be provided to DWR for review and approval prior to resuming monitoring activities.

General Conditions

6. 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.
7. 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); 15A NCAC 02H .0506 (b)(2)]
8. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization, including all non-commercial borrow and waste sites associated with the project, shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)]
9. 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); 15A NCAC 02H .0506(c)]
10. 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 02H .0506(b); 15A NCAC 02H .0506c);15A NCAC 02B.0200]
11. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)]



12. 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)]
13. 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); 15A NCAC 02H .0506(c)]
14. 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)(1)]
15. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506(b)(2); 15 NCAC 02H.0507(c); 15A NCAC 02B .0200]
 - a. Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NCDOT Sediment and Erosion Control Manual*.
 - b. All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.
 - c. For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.
 - d. If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-1, WS-11, High Quality Waters (HQW), or Outstanding Resource Waters (ORW), then the sedimentation and erosion control designs shall comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watershed*.
16. Sediment and erosion control measures shall not be placed in wetlands or surface waters or within 5 feet of the top of bank without prior approval from DWR. [15A NCAC 02H.0506(b)(3)]
17. Erosion control matting in riparian areas shall not contain a plastic or nylon mesh grid which can impinge and entrap small animals. [15A NCAC 02H .0506(b); 15A NCAC 02H .0506(c)]



18. Sediment and erosion control measures shall not be installed in wetland or waters except within the footprint of temporary or permanent impacts otherwise authorized by this Certification. All sediment and erosion control devices shall be removed from wetlands and waters and the natural grade restored within two (2) months of the date that the Division of Energy, Mining and Land Resources (DEMLR) or locally delegated program has released the specific area within the project. [15A NCAC 02H .0506(b); 15 NCAC 02H.0507(c); 15A NCAC 02B .0200]
19. The post-construction removal of any temporary fill or bridge structures must return the project site to its preconstruction contours and elevations. The impacted areas shall be revegetated with appropriate native species including woody species. [15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)]
21. Bridge deck drains should be limited to the maximum extent practicable over SAV beds. Additionally, to reduce the potential for scour, deck drains are not allowed where there is less than twelve (12) feet of clearance from the deck drain to the water or wetland surface. Stormwater from this section of the bridge shall be directed across the deck and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) where possible before entering the stream. To meet the requirements of NCDOT's NPDES permit NCS0000250, please refer to the most recent version of the North Carolina Department of Transportation Stormwater Best Management Practices Toolbox manual for approved measures. [15A NCAC 02H .0506(b)]
22. All bridge construction shall be performed from the existing bridge, temporary work bridges, temporary causeways, or floating or sunken barges. If work conditions require barges, they shall be floated into position and then sunk. The barges shall not be sunk and then dragged into position. Under no circumstances should barges be dragged along the bottom of the surface water. [15A NCAC 02H .0506(b)(2); 15 NCAC 02H.0507(c)]
23. Bridge piles and bents shall be constructed using driven piles (hammer or vibratory) or drilled shaft construction methods. More specifically, jetting or other methods of pile driving are prohibited without prior written approval from the NCDWR first. [15A NCAC 02H.0506(b)(2)]
24. A turbidity curtain will be installed in the stream if driving or drilling activities occur within the stream channel, on the stream bank, or within 5 feet of the top of bank, or during the removal of bents from an old bridge. This condition can be waived with prior approval from the NCDWR. [15A NCAC 02H .0506(b)(3)]
25. 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)(1)]

26. Any rip-rap required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the area directly impacted by the approved construction activity. All rip-rap shall be placed such that the original streambed elevation and streambank contours are restored and maintained and shall consist of clean rock or masonry material free of debris or toxic pollutants. Placement of rip-rap or other approved materials shall not result in de-stabilization of the stream bed or banks upstream or downstream of the area or be installed in a manner that precludes aquatic life passage. [15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)]
27. Any rip-rap used for stream or shoreline stabilization shall be of a size and density to prevent movement by wave, current action, or stream flows, and shall consist of clean rock or masonry material free of debris or toxic pollutants. Rip-rap shall not be installed in the streambed except in specific areas required for velocity control and to ensure structural integrity of bank stabilization measures. [15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0201]
28. 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 02H .0506(b); 15 NCAC 02H.0507(c)]
29. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
30. NCDOT shall be in compliance with the NCS00250 issued to the NCDOT, including the applicable requirements of the NCG01000. [15A NCAC 02H .0506(b); 15 NCAC 02H.0507(c)]
31. 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]
32. 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); 15A NCAC 02H .0507(c)]
33. The NCDOT will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the permit conditions and any potential issues at the permitted site. NCDWR staff shall be invited to the pre-construction meeting. [15A NCAC 02H .0506(b); 15 NCAC 02H.0507(c)]



34. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete the "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502]
35. 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); 15A NCAC 02H .0506 (b)]

This Water Quality Certification shall expire on the same day as the expiration date of the corresponding Section 404 Permit that is current at the time this Certification is issued. The conditions shall remain in effect for the life of the project, regardless of the expiration date of this Water Quality Certification.

This, the 18th day of September 2025

DocuSigned by:



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Michael Pjetraj, Deputy Director
Division of Water Resources

