# North Carolina Department of Environmental Quality **Division of Water Resources Public Water Supply Section**

# **Application for Approval** of Engineering Plans and Specifications For Water Supply Systems

	Chatham County Board of Commissioners	Peter Bellantoni, PE		
	(Name of Board, Council or Owner - the Applicant)	(Name of Design Engineer of Record)		
	Dan LaMontagne, Interim County Manager			
	(Name and Title of Authorized Official or Representative of the Applicant)	ne (Name of Engineering Firm)		
	12 East St., Courthouse Annex	5430 Wade Park Boulevard, Suite 106		
1	(Mailing Address)	(Mailing Address)		
	Pittsboro, NC 27312	Raleigh, NC 27607		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(City, State & ZIP)	(City, State & ZIP)		
	(919) 542-8200	(919) 230-9214		
	(Phone Number)	(Phone Number)		
	(919) 542-8272	(919) 493 - 6548		
	(FAX Number)	(FAX Number)		
	dan.lamontagne@chathamnc.org	PBellantoni@Pennoni.com		
_	(Signature of Authorized Official or Representative of the Applicant)	(Email address)		
Project	BONTERRA SUBDIVISION  (Name of Project to appear on Public Water Supply Section records and tracking system)  31 acre, 22 lot subdivision development			
	(descrip	otion of project)		
	3954 MANNS CHAPEL	RD, CHAPEL HILL, NC 27516		
		ocation of project)		
in _	CHATHAM COUNTY	County.		

Serial No.

(for DEQ use only)

Date

(for DEQ use only)

# Application for Approval of Engineering Plans and Specifications for Water Supply Systems

To:

Division of Water Resources,

Department of Environmental Quality

The **Applicant** applies under and in full accord with the provision of NCGS 130A-317, and such other statutes and rules as relate to public water systems. The **Authorized Official** or **Representative** of the **Applicant** represents that he is authorized to act for the **Applicant**. The **Authorized Official** or **Representative** of the **Applicant** understands and agrees to the following:

- The Applicant shall not award contracts or begin construction without first receiving "Authorization to Construct" from DEQ.
- The Applicant shall make no change or deviation from the engineering plans and specifications approved by DEQ except as allowed by 15A NCAC 18C .0306 or with the written consent and approval of DEQ.
- The Applicant shall obtain Final Approval in accordance with 15A NCAC 18C .0306 prior to placing the project (or any portion thereof) into service.
- 4. Digital (PDF) submittals are true image copy of the original sealed/signed documents.

An authorized representative of the Public Water System (not always the same as the Applicant) is to complete and sign the following WSMP section. Status of Water System Management Plan (WSMP) Check one of the following, and if applicable, provide the required information: The WSMP for the project, as defined in the attached engineering plans and specifications, has not been submitted. Three copies of the WSMP for the project, as defined in the attached engineering plans and specifications, are submitted with this application. The WSMP that includes this project, as defined in the attached engineering plans and specifications, was previously submitted. Provide the following: Public Water System Name: North Chatham Water System Owner Name: CHATHAM COUNTY PUBLIC UTILITIES Water System No.: NC 03-19-126 Serial Number of Deemed Complete WSMP: 12-00936 By my signature below, I certify that the previously submitted WSMP contains the information required by 15A NCAC 18C .0307(c) for the project defined in the attached engineering plans and specifications. Dan LaMontagne, (Type or print name of authorized representative of Public Water System) Interim County Manager, Chatham County (Title of authorized representative of Public Water System) 3/25/19 (Signature of authorized representative of Public Water System)

# North Carolina Department of Environmental Quality Division of Water Resources Public Water Supply Section

# Application for Approval of Engineering Plans and Specifications For Water Supply Systems

**Design Engineer** 

(for DEQ use only)

**Applicant** 

(for DEQ use only)

	Chatham County Board of Comm	issioners	Peter Bellantoni, PE
	(Name of Board, Council or Owner - the A)	oplicant)	(Name of <b>Design Engineer</b> of Record)
	Dan LaMontagne, Interim County	Manager	Pennoni Associates, Inc.
	(Name and Title of <b>Authorized Official</b> or <b>Repre</b> Applicant)	sentative of the	(Name of Engineering Firm)
	12 East St., Courthouse Ar	inex	5430 Wade Park Boulevard, Suite 106
	(Mailing Address)		(Mailing Address)
	Pittsboro, NC 27312  (City, State & ZIP)  (919) 542-8200  (Phone Number)  (919) 542-8272		Raleigh, NC 27607
			(City, State & ZIP)
			(919) 230-9214
			(Phone Number) (919) 493 - 6548
	(FAX Number)		(FAX Number)
	dan.lamontagne@chatham	nc.org	PBellantoni@Pennoni.com
-	(Email address)		(Email address)
	(Signature of Authorized Official or Represen Applicant)	tative of the	
Proie	ct Name: BONTERF	RA SUBDIVISION	
110,0		ect to appear on Public Wa	ater Supply Section records and tracking system)
	31 acre.	22 lot subdivision	development
	0. 46.6,	(description of pro	·
	3954 MANN		APEL HILL, NC 27516
		(general location of p	roject)
in	CHATHAM COUNTY	County.	
Date		Se	erial No.

#### Application for Approval of Engineering Plans and Specifications for Water Supply Systems

To: Division of Water Resources,
Department of Environmental Quality

The **Applicant** applies under and in full accord with the provision of NCGS 130A-317, and such other statutes and rules as relate to public water systems. The **Authorized Official** or **Representative** of the **Applicant** represents that he is authorized to act for the **Applicant**. The **Authorized Official** or **Representative** of the **Applicant** understands and agrees to the following:

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- 4. Digital (PDF) submittals are true image copy of the original sealed/signed documents.

An authorized representative of the Public Water System (not always the same as the Applicant) is to complete and sign the following WSMP section.

sign the following WSMP section.			
Status of Water System Management Plan (WS	SMP)		
Check one of the following, and if applicable, pro	vide the required information:		
The WSMP for the project, as defined in	The WSMP for the project, as defined in the attached engineering plans and specifications, has not been submitted.		
Three copies of the WSMP for the project submitted with this application.	Three copies of the WSMP for the project, as defined in the attached engineering plans and specifications, are		
The WSMP that includes this project, as submitted.	The WSMP that includes this project, as defined in the attached engineering plans and specifications, was previous submitted.		
Provide the following:			
Public Water System Name:	North Chatham Water System		
Owner Name:	CHATHAM COUNTY PUBLIC UTILITIES		
Water System No.:	NC 03-19-126		
Serial Number of Deemed Complete WSMP:	12-00936		
	ously submitted WSMP contains the information required by 15A the attached engineering plans and specifications.		
Dan LaMontag	ne,		
(Type or print name of authorized represe	entative of Public Water System)		
Interim County Manage	<u>·</u>		
(Title of authorized representative	of Public Water System)		
(Signature of authorized representati	ve of Public Water System) (Date)		

In accordance with NCGS 130A-328, the Public Water Supply Section charges a fee for plan review. Any

	ents submitted for review must be accompanied by a check payable to <i>DEQ-Pu</i> before the review will begin.	blic Water Supply				
	There is a \$25 fee for returned checks.					
The cha	arges for review of plans are shown below. <u>Check one</u> of the following.					
	Distribution System fees  Construction of water lines, less than 5000 linear feet Construction of water lines, 5000 linear feet or more Other construction or alteration to a distribution system	\$150 \$200 \$ 75				
	Ground Water System fees  Construction of a new ground water system or adding a new well Alteration to an existing ground water system	\$200 \$100				
	Surface water system fees  Construction of a new surface water intake or treatment facility Alteration to existing surface water intake or treatment facility	\$250 \$150				
	Other fees  Water System Management Plan review Miscellaneous changes or maintenance not covered above	\$ 75 \$ 50				
Notes: 1. 2. 3. 4.	<ol> <li>Projects for Tank Rehabilitation use separate "Application for Water Tank Reconditioning Plan Approval."</li> <li>The fee is not refundable if the plans are not approved.</li> <li>Revisions to plans to address the Public Water Supply Section's or other state agency's comments do not incur an additional fee.</li> <li>If one set of plans has multiple related items (such as a new well with construction of water lines) only one fee must be submitted for highest price item. The amounts are not cumulative, except for fees for Water System Management Plans.</li> </ol>					
	proval does not address all applicable laws, rules, standards and criteria, and other a y be required by the local, state or federal government.	approvals and licenses				
accomp erasures	olic Water Supply Section has stamped and sealed the official copies of plans and spanying this application with the serial number of this applications, additions or alterations of the proposed improvements except those permitted in 1 his approval null and void.	Any				
This ap	proval does not constitute a warranty of the design, construction or future operation	of the water system.				
	Signed:  Robert W. Midgette, P.E., C Public Water Supply Section Division of Water Resource	n				

# Application for Approval of Engineering Plans and Specifications for Water Supply Systems

Other Information and Checklist Page					
X	Attached is a check for the proper plan review fee amount, in accordance with NCGS 130A-328. See note 4 on page 3.				
This-subn folders:	nittal includes one paper original with two digital (P	DF) CDs of the following items, each item in separate			
X	This completed "Application for Approval of Engineering Plans and Specifications for Water Supply Systems"				
X	The sealed plan drawings, separate file in PDF format for each drawing. Cover sheet must include drawings index;				
X	The project-specific Engineering Report (ER) describing the scope and purpose of the project and addressing each of the items listed in 15A NCAC 18C .0307(b), including the design basis of the project. [15A NCAC 18C .0307(b) (12)];				
X	Specifications for this project; <b>OR</b>				
	The project will use the following system's previously approved standard specifications for waterline extensions:				
	Name of System:				
	Serial Number:				
The Seria	l Numbers for previously approved standard specific	eations can be found at the following website:			
http://ww	/w.ncwater.org/?page=424				
0 64	C II ·				
	e following:	of Dill Was G			
X	the project and stating that the system has adequate	entative of the Public Water System agreeing to serve e supply;			
OR					
Ш	The <b>Applicant</b> is the Public Water System.				
	project has sought funding (for example, DWSRF Inding number below:  Program Name	oan) list the program and (if available) the application  Application or Funding Number, if available			
Yes	No Project will be completed with significant expenditure of state moneys, greater than ten million dollars (\$10,000,000) in accordance with G.S. 113A-9 (7a).				
	Project will cause substantial, permanent land-disturbing activity of an area greater than 10 acres of public lands in accordance with G.S. 113A-9 (11).				

# STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES

# WATER QUALITY GENERAL CERTIFICATION NO. 4139

#### GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR US ARMY CORPS OF ENGINEERS

- NATIONWIDE PERMIT NUMBER 18 (MINOR DISCHARGES),
- NATIONWIDE PERMIT NUMBER 29 (RESIDENTIAL DEVELOPMENT),
- NATIONWIDE PERMIT NUMBER 39 (COMMERCIAL AND INSTITUTIONAL DEVELOPMENTS),
- NATIONWIDE PERMIT NUMBER 40 (AGRICULTURAL ACTIVITIES),
- NATIONWIDE PERMIT NUMBER 41 (RESHAPING EXISTING DRAINAGE DITCHES),
- NATIONWIDE PERMIT NUMBER 42 (RECREATIONAL FACILITIES),
- NATIONWIDE PERMIT NUMBER 44 (MINING ACTIVITIES),
- NATIONWIDE PERMIT NUMBER 46 (DISCHARGES IN DITCHES).
- NATIONWIDE PERMIT NUMBER 51 (LAND BASED RENEWABLE ENERGY GENERATION FACILITIES), AND
- NATIONWIDE PERMIT NUMBER 52 (WATER BASED RENEWABLE ENERGY GENERATION PILOT PROJECTS).

Water Quality Certification Number 4139 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 Regulations in 15A NCAC 02H .0500 and 15A NCAC 02B .0200 for the discharge of fill material to surface waters and wetland areas as described in 33 CFR 330 Appendix A (B) (18, 29, 39, 40, 41, 42, 44, 46, 51 and 52) of the US Army Corps of Engineers regulations.

The State of North Carolina certifies that the specified category of activity will not violate applicable portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

Effective date: December 1, 2017

Signed this day: December 1, 2017

Ву

for Linda Culpepper Interim Director

Activities meeting any one (1) of the following thresholds or circumstances require <u>written</u> <u>approval</u> for a 401 Water Quality Certification from the Division of Water Resources (DWR):

- a) If any of the conditions of this Certification (listed below) cannot be met; or
- b) Any impacts to streams from excavation or dredging other than excavation that is conducted as preparation for installing permanent fill or structures; or
- c) Total temporary and permanent impacts to streams greater than 150 feet; or
- d) Any stream relocation or stream restoration; or
- e) Complete dewatering and drawdowns to a sediment layer related to pond/dam maintenance or removal; or
- f) Total temporary and permanent impacts to wetlands or open waters equal to or greater than one-tenth (1/10) acre; or
- g) Any high-density project, as defined in 15A NCAC 02H .1003(2)(a) and by the density thresholds specified in 15A NCAC 02H .1017, which:
  - i. Disturbs one acre or more of land (including a project that disturbs less than one acre of land that is part of a larger common plan of development or sale); and
  - ii. Has permanent wetland, stream or open water impacts; and
  - iii. Is proposing new built-upon area; and
  - iv. Does not have a stormwater management plan reviewed and approved under a state stormwater program<sup>1</sup> or a state-approved local government stormwater program<sup>2</sup>.

Projects that have vested rights, exemptions, or grandfathering from state or locally-implemented stormwater programs and projects that satisfy state or locally-implemented stormwater programs through use of community in-lieu programs **require** written approval.; or

- h) Any permanent impacts to waters, or to wetlands adjacent to waters, designated as: ORW (including SAV), HQW (including PNA), SA, WS-I, WS-II, Trout, or North Carolina or National Wild and Scenic River; or
- i) Any permanent impacts to coastal wetlands [15A NCAC 07H .0205], or Unique Wetlands (UWL) [15A NCAC 02H .0506]; or
- j) Any impact associated with a Notice of Violation or an enforcement action for violation(s) of NC Wetland Rules (15A NCAC 02H .0500), NC Isolated Wetland Rules (15A NCAC 02H .1300), NC Surface Water or Wetland Standards (15A NCAC 02B .0200), or State Regulated Riparian Buffer Rules (15A NCAC 02B .0200); or
- k) Any impacts to subject water bodies and/or state regulated riparian buffers along subject water bodies in the Neuse, Tar-Pamlico, or Catawba River Basins or in the Randleman Lake, Jordan Lake or Goose Creek Watersheds (or any other basin or watershed with State Regulated Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) unless:
  - i. The activities are listed as "EXEMPT" from these rules; or

<sup>&</sup>lt;sup>1</sup> e.g. Coastal Counties, HQW, ORW, or state-implemented Phase II NPDES

<sup>&</sup>lt;sup>2</sup> e.g. Delegated Phase II NPDES, Water Supply Watershed, Nutrient-Sensitive Waters, or Universal Stormwater Management Program

- ii. A Buffer Authorization Certificate is issued by the NC Division of Coastal Management (DCM); or
- iii. A Buffer Authorization Certificate or a Minor Variance is issued by a delegated or designated local government implementing a state riparian buffer program pursuant to 143-215.23.

Activities included in this General Certification that do not meet one of the thresholds listed above do not require written approval.

#### I. ACTIVITY SPECIFIC CONDITIONS:

- 1. If this Water Quality Certification is used to access residential, commercial or industrial building sites, then all parcels owned by the applicant that are part of the single and complete project authorized by this Certification must be buildable without additional impacts to streams or wetlands. If required in writing by DWR, the applicant shall provide evidence that the parcels are buildable without requiring additional impacts to wetlands, waters, or state regulated riparian buffers. [15A NCAC 02H .0506(b)(4) and (c)(4)]
- 2. For road construction purposes, this Certification shall only be utilized from natural high ground to natural high ground. [15A NCAC 02H .0506(b)(2) and (c)(2)]
- 3. Deed notifications or similar mechanisms shall be placed on all lots with retained jurisdictional wetlands, waters, and state regulated riparian buffers within the project boundaries in order to assure compliance with NC Wetland Rules (15A NCAC 02H .0500), NC Isolated Wetland Rules (15A NCAC 02H .1300), and/or State Regulated Riparian Buffer Rules (15A NCAC 02B .0200). These mechanisms shall be put in place at the time of recording of the property or individual parcels, whichever is appropriate. [15A NCAC 02H .0506(b)(4) and (c)(4)]
- 4. For all dam removal projects meeting the definition under G.S. 143-215.25 and requirements under G.S. 143-215.27 of a professionally supervised dam removal, the applicant shall provide documentation that any sediment that may be released has similar or lower level of contamination than sediment sampled from downstream of the dam in accordance with Session Law 2017-145.
- 5. For the North Carolina Department of Transportation, compliance with the NCDOT's individual NPDES permit NCS000250 shall serve to satisfy this condition. All other high-density projects that trigger threshold Item (g) above shall comply with one of the following requirements: [15A NCAC 02H .0506(b)(5) and (c)(5)]

- a. Provide a completed Stormwater Management Plan (SMP) for review and approval, including all appropriate stormwater control measure (SCM) supplemental forms and associated items, that complies with the high-density development requirements of 15A NCAC 02H .1003. Stormwater management shall be provided throughout the entire project area in accordance with 15A NCAC 02H .1003. For the purposes of 15A NCAC 02H .1003(2)(a), density thresholds shall be determined in accordance with 15A NCAC 02H .1017.
- b. Provide calculations to document that the project will not cause degradation of downstream surface waters. Documentation shall include a detailed analysis of the hydrological impacts from stormwater runoff when considering the volume and velocity of stormwater runoff from the project built upon area and the size and existing condition of the receiving stream(s).

Exceptions to this condition require application to and written approval from DWR.

#### **II. GENERAL CONDITIONS:**

- 1. When written authorization is required, the plans and specifications for the project are incorporated into the authorization by reference and are an enforceable part of the Certification. Any modifications to the project require notification to DWR and may require an application submittal to DWR with the appropriate fee. [15A NCAC 02H .0501 and .0502]
- 2. No waste, spoil, solids, or fill of any kind shall occur in wetlands or waters beyond the footprint of the impacts (including temporary impacts) as authorized in the written approval from DWR; or beyond the thresholds established for use of this Certification without written authorization. [15A NCAC 02H .0501 and .0502]
  - No removal of vegetation or other impacts of any kind shall occur to state regulated riparian buffers beyond the footprint of impacts approved in a Buffer Authorization or Variance or as listed as an exempt activity in the applicable riparian buffer rules. [15A NCAC 02B .0200]
- 3. In accordance with 15A NCAC 02H .0506(h) and Session Law 2017-10, compensatory mitigation may be required for losses of greater than 300 linear feet of perennial streams and/or greater than one (1) acre of wetlands. Impacts associated with the removal of a dam shall not require mitigation when the removal complies with the requirements of Part 3 of Article 21 in Chapter 143 of the North Carolina General Statutes. Impacts to isolated and other non-404 jurisdictional wetlands shall not be combined with 404 jurisdictional wetlands for the purpose of determining when impact thresholds trigger a mitigation requirement. For linear publicly owned and maintained transportation projects that are not determined to be part of a larger common plan of development by the US Army Corps of Engineers, compensatory mitigation may be required for losses of greater than 300 linear feet per perennial stream.

Compensatory stream and/or wetland mitigation shall be proposed and completed in compliance with G.S. 143-214.11. For applicants proposing to conduct mitigation within a project site, a complete mitigation proposal developed in accordance with the most recent guidance issued by the US Army Corps of Engineers Wilmington District shall be submitted for review and approval with the application for impacts.

- 4. All activities shall be in compliance with any applicable State Regulated Riparian Buffer Rules in Chapter 2 of Title 15A.
- 5. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506 (b)(3) and (c)(3) and 15A NCAC 02B .0200]

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.

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.

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.

If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-I, WS-II, 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 Watersheds.

- Sediment and erosion control measures shall not be placed in wetlands or waters except within the footprint of temporary or permanent impacts authorized under this Certification. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0501 and .0502]
- 7. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within wetlands. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02B .0201]

8. An NPDES Construction Stormwater Permit (NCG010000) is required for construction projects that disturb one (1) or more acres of land. The NCG010000 Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If the project is covered by this permit, full compliance with permit conditions including the erosion & sedimentation control plan, inspections and maintenance, self-monitoring, record keeping and reporting requirements is required. [15A NCAC 02H .0506(b)(5) and (c)(5)]

The North Carolina Department of Transportation (NCDOT) shall be required to be in full compliance with the conditions related to construction activities within the most recent version of their individual NPDES (NCS000250) stormwater permit. [15A NCAC 02H .0506(b)(5) and (c)(5)]

- 9. All work in or adjacent to streams shall be conducted so that the flowing stream does not come in contact with the disturbed area. Approved best management practices from the most current version of the NC Sediment and Erosion Control Manual, or the NC DOT Construction and Maintenance Activities Manual, such as sandbags, rock berms, cofferdams, and other diversion structures shall be used to minimize excavation in flowing water. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(3) and (c)(3)]
- 10. If activities must occur during periods of high biological activity (e.g. sea turtle nesting, fish spawning, or bird nesting), then biological monitoring may be required at the request of other state or federal agencies and coordinated with these activities. [15A NCAC 02H .0506(b)(2) and 15A NCAC 04B .0125]

All moratoriums on construction activities established by the NC Wildlife Resources Commission (WRC), US Fish and Wildlife Service (USFWS), NC Division of Marine Fisheries (DMF), or National Marine Fisheries Service (NMFS) shall be implemented. Exceptions to this condition require written approval by the resource agency responsible for the given moratorium. A copy of the approval from the resource agency shall be forwarded to DWR.

Work within a designated trout watershed of North Carolina (as identified by the Wilmington District of the US Army Corps of Engineers), or identified state or federal endangered or threatened species habitat, shall be coordinated with the appropriate WRC, USFWS, NMFS, and/or DMF personnel.

11. Culverts shall be designed and installed in such a manner that the original stream profiles are not altered and allow for aquatic life movement during low flows. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed culvert shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. [15A NCAC 02H .0506(b)(2) and (c)(2)]

Placement of culverts and other structures in streams shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20% of the culvert diameter for culverts having a diameter less than or equal to 48 inches, to allow low flow passage of water and aquatic life.

If multiple pipes or barrels are required, they shall be designed to mimic the existing stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel shall be avoided.

When topographic constraints indicate culvert slopes of greater than 5%, culvert burial is not required, provided that all alternative options for flattening the slope have been investigated and aquatic life movement/connectivity has been provided when possible (e.g. rock ladders, cross vanes, etc.). Notification, including supporting documentation to include a location map of the culvert, culvert profile drawings, and slope calculations, shall be provided to DWR 60 calendar days prior to the installation of the culvert.

When bedrock is present in culvert locations, culvert burial is not required provided that there is sufficient documentation of the presence of bedrock. Notification, including supporting documentation such as, a location map of the culvert, geotechnical reports, photographs, etc. shall be provided to DWR a minimum of 60 calendar days prior to the installation of the culvert. If bedrock is discovered during construction, then DWR shall be notified by phone or email within 24 hours of discovery.

If other site-specific topographic constraints preclude the ability to bury the culverts as described above and/or it can be demonstrated that burying the culvert would result in destabilization of the channel, then exceptions to this condition require application to and written approval from DWR.

Installation of culverts in wetlands shall ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. When roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges shall be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.

The establishment of native woody vegetation and other soft stream bank stabilization techniques shall be used where practicable instead of rip-rap or other bank hardening methods.

12. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means to the maximum extent practicable (e.g. grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. -Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0506(b)(5)]

- 13. Application of fertilizer to establish planted/seeded vegetation within disturbed riparian areas and/or wetlands shall be conducted at agronomic rates and shall comply with all other Federal, State and Local regulations. Fertilizer application shall be accomplished in a manner that minimizes the risk of contact between the fertilizer and surface waters. [15A NCAC 02B .0200 and 15A NCAC 02B .0231]
- 14. If concrete is used during construction, then all necessary measures shall be taken to prevent direct contact between uncured or curing concrete and waters of the state. Water that inadvertently contacts uncured concrete shall not be discharged to waters of the state. [15A NCAC 02B .0200]
- 15. All proposed and approved temporary fill and culverts shall be removed and the impacted area shall be returned to natural conditions within 60 calendar days after the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross sectional dimensions, planform pattern, and longitudinal bed profile. For projects that receive written approval, no temporary impacts are allowed beyond those included in the application and authorization. All temporarily impacted sites shall be restored and stabilized with native vegetation. [15A NCAC 02H .0506(b)(2) and (c)(2)]
- 16. All proposed and approved temporary pipes/culverts/rip-rap pads etc. in streams shall be installed as outlined in the most recent edition of the North Carolina Sediment and Erosion Control Planning and Design Manual or the North Carolina Surface Mining Manual or the North Carolina Department of Transportation Best Management Practices for Construction and Maintenance Activities so as not to restrict stream flow or cause dis-equilibrium during use of this Certification. [15A NCAC 02H .0506(b)(2) and (c)(2)]
- 17. 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 stream elevation and streambank contours are restored and maintained. 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 in a manner that precludes aquatic life passage. [15A NCAC 02H .0506(b)(2)]
- 18. 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)(2)]
- 19. Applications for rip-rap groins proposed in accordance with 15A NCAC 07H .1401 (NC Division of Coastal Management General Permit for construction of Wooden and Rip-rap Groins in Estuarine and Public Trust Waters) shall meet all the specific conditions for design and construction specified in 15A NCAC 07H .1405.

- 20. All mechanized equipment operated near surface waters shall be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids, or other toxic materials. Construction shall be staged in order to minimize the exposure of equipment to surface waters to the maximum extent practicable. Fueling, lubrication and general equipment maintenance shall be performed in a manner to prevent, to the maximum extent practicable, contamination of surface waters by fuels and oils. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0211 (12)]
- 21. Heavy equipment working in wetlands shall be placed on mats or other measures shall be taken to minimize soil disturbance. [15A NCAC 02H .0506(b)(3) and (c)(3)]
- 22. In accordance with 143-215.85(b), the applicant shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours.
- 23. If an environmental document is required under the State Environmental Policy Act (SEPA), then this General Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse. If an environmental document is required under the National Environmental Policy Act (NEPA), then this General Certification is not valid until a Categorical Exclusion, the Final Environmental Assessment, or Final Environmental Impact Statement is published by the lead agency [15A NCAC 01C .0107(a)]
- 24. This General Certification does not relieve the applicant 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.
- 25. The applicant and their authorized agents shall conduct all 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 DWR determines that such standards or laws are not being met, including 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, then DWR may revoke or modify a written authorization associated with this General Water Quality Certification. [15A NCAC 02H .0507(d)]
- 26. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit 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 Certification. A copy of this Certification, including all conditions shall be available at the project site during the construction and maintenance of this project. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]

- 27. When written authorization is required for use of this Certification, upon completion of all permitted impacts included within the approval and any subsequent modifications, the applicant shall be required to return a certificate of completion (available on the DWR website <a href="https://edocs.deq.nc.gov/Forms/Certificate-of-Completion">https://edocs.deq.nc.gov/Forms/Certificate-of-Completion</a>). [15A NCAC 02H .0502(f)]
- 28. Additional site-specific conditions, including monitoring and/or modeling requirements, may be added to the written approval letter for projects proposed under this Water Quality Certification in order to ensure compliance with all applicable water quality and effluent standards. [15A NCAC 02H .0507(c)]
- 29. If the property or project is sold or transferred, the new permittee shall be given a copy of this Certification (and written authorization if applicable) and is responsible for complying with all conditions. [15A NCAC 02H .0501 and .0502]

#### III. GENERAL CERTIFICATION ADMINISTRATION:

- 1. In accordance with North Carolina General Statute 143-215.3D(e), written approval for a 401 Water Quality General Certification must include the appropriate fee. An applicant for a CAMA permit under Article 7 of Chapter 113A of the General Statutes for which a Water Quality Certification is required shall only make one payment to satisfy both agencies; the fee shall be as established by the Secretary in accordance with 143-215.3D(e)(7).
- 2. This Certification neither grants nor affirms any property right, license, or privilege in any waters, or any right of use in any waters. This Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and this Certification does not create any prescriptive right or any right of priority regarding any usage of water. This Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded.
- 3. This Certification grants permission to the Director, an authorized representative of the Director, or DWR staff, upon the presentation of proper credentials, to enter the property during normal business hours. [15A NCAC 02H .0502(e)]
- 4. This General Certification shall expire on the same day as the expiration date of the corresponding Nationwide Permit and/or Regional General Permit. The conditions in effect on the date of issuance of Certification for a specific project shall remain in effect for the life of the project, regardless of the expiration date of this Certification. This General Certification is rescinded when the US Army Corps of Engineers reauthorizes any of the corresponding Nationwide Permits and/or Regional General Permits or when deemed appropriate by the Director of the Division of Water Resources.

- 5. Non-compliance with or violation of the conditions herein set forth by a specific project may result in revocation of this General Certification for the project and may also result in criminal and/or civil penalties.
- 6. The Director of the North Carolina Division of Water Resources may require submission of a formal application for Individual Certification for any project in this category of activity if it is deemed in the public's best interest or determined that the project is likely to have a significant adverse effect upon water quality, including state or federally listed endangered or threatened aquatic species, or degrade the waters so that existing uses of the water or downstream waters are precluded.

History Note: Water Quality Certification (WQC) Number 4139 issued December 1, 2017 replaces WQC 4092 issued March 3, 2017; WQC 3890 issued March 19, 2012; replaces WQC Number 3821 issued April 6, 2010; WQC Number 3631 issued March 19, 2007; WQC 3402 issued March 28, 2003; WQC Number 3362, issued March 18, 2002; WQC 3287, issued June 1, 2000; WQCs 3106 and 3108 issued February 11, 1997.