



January 23, 2019

Warren D. Mitchell
Jones Ferry Properties, LLC
227 Opus Way
Chapel Hill, NC 27516

**AUTHORIZATION of Jordan Lake Water Supply Watershed Riparian Buffer Protection Rules (Watershed Protection Ordinance Section 304(J) 4 and 15A NCAC 2B .0267)
Authorization Certificate**

Project Name: Morgan Ridge

Dear Mr. Mitchell,

You have our authorization, in accordance with the Chatham County Watershed Protection Ordinance and any conditions listed below, to permanently impact approximately 33,608 ft² of the protected riparian buffers associated with the installation of two (2) roadway crossings and one (1) driveway crossing. The impacts will occur within zones 1 and 2 of one (1) perennial stream and two (2) intermittent stream buffers within the Morgan Ridge subdivision as described within your application submitted December 3, 2018 and revised on December 21, 2018, in the U.S. Army Corps of Engineers Nationwide Permit (SAW-2017-01482) dated November 7, 2018, and on the Buffer Impact Maps, completed by Warren D. Mitchell Civil Engineering. Additional temporary impacts of 5,433 ft² associated with the installation of septic lines are also herein authorized. These temporary impacts must be regraded, vegetated, and returned to existing conditions following the installation. Per your application this review and authorization is only valid for those impacts stated above. In addition, you should obtain or otherwise comply with any other required federal, state or local permits before you proceed with your project including (but not limited to) Erosion and Sediment Control and Non-discharge regulations.

Per the initial review comments provided to the applicant on December 10, 2018, Skimmer Basin #1 will be relocated into Zone 2 of the intermittent stream buffer to reduce the likelihood of sedimentation impacts to the stream during construction. According to 15A NCAC 02B .0267 (9) – Table of Uses, the installation of temporary erosion control devices is “exempt” from review so long as the following conditions are met: (1) the activity occurs only in Zone 2, (2) ground cover is provided within the timeframes required by the Sedimentation and Erosion Control Act, (3) vegetation in Zone 1 is not compromised, and (4) runoff is released as diffuse flow in accordance with Item (8) of this Rule.

This authorization certification is for the purpose and design that you described in your application. If you change your project, you must notify us and you may be required to send us a new application. If the property is sold, the new owner must be given a copy of this authorization letter and is thereby responsible for complying with all conditions. This authorization requires you to follow the conditions listed below.



The Additional Conditions of the Certification are:

1. Impacts Approved

The following impacts are hereby approved as long as all of the other specific and general conditions of this Certification are met. No other impacts are approved including incidental impacts:

Permanent Impacts		
<i>(Road Crossing 1)</i>		
	Amount Approved (Units)	Plan Location or Reference
Perennial Stream Buffers (Zone 1)	4,155 (square ft.)	Buffer Impact Map Sheet X.1
Perennial Stream Buffers (Zone 2 Inner)	2,804 (square ft.)	Buffer Impact Map Sheet X.1
Perennial Stream Buffers (Zone 2 Outer)	7,446 (square ft.)	Buffer Impact Map Sheet X.1
Wetland (Zone 1)	15 (square ft.)	Buffer Impact Map Sheet X.1
Wetland (Zone 2 Inner)	1,307 (square ft.)	Buffer Impact Map Sheet X.1
Wetland (Zone 2 Outer)	2,209 (square ft.)	Buffer Impact Map Sheet X.1
Linear Impacts to Buffer	Maximum 74 linear feet	Buffer Impact Map Sheet X.1
<i>(Road Crossing 2)</i>		
Intermittent Stream Buffers (Zone 1)	4,912 (square ft.)	Buffer Impact Map Sheet X.2
Intermittent Stream Buffers (Zone 2)	2,974 (square ft.)	Buffer Impact Map Sheet X.2
Linear Impacts to Buffer	Maximum 77 linear feet	Buffer Impact Map Sheet X.2
<i>(Road/Driveway Crossing 3)</i>		
This impact includes the impacts of a septic line crossing that will be completely encompassed by the driveway buffer impacts.		
Intermittent Stream Buffers (Zone 1)	4,912 (square ft.)	Buffer Impact Map Sheet X.3
Intermittent Stream Buffers (Zone 2)	2,874 (square ft.)	Buffer Impact Map Sheet X.3
Linear Impacts to Buffer	Maximum 61 linear feet	Buffer Impact Map Sheet X.3

Temporary Impacts (Septic line installation)		
Septic (Impact #1)		
	Amount Approved (Units)	Plan Location or Reference
Perennial Stream Buffers (Zone 1)	968 (square feet)	Buffer Impact Map Sheet X.1
Perennial Stream Buffers (Zone 2 Inner)	652 (square ft.)	Buffer Impact Map Sheet X.1
Perennial Stream Buffers (Zone 2 Outer)	1,787 (square ft.)	Buffer Impact Map Sheet X.1
Wetland (Zone 2 Inner)	175 (Square ft.)	Buffer Impact Map Sheet X.1
Wetland (Zone 2 Outer)	536 (square ft.)	Buffer Impact Map Sheet X.1
Linear Impacts to Buffer	Maximum 13 linear feet	Buffer Impact Map Sheet X.1
Septic (Impact #3)		
Intermittent (Zone 1)	790 (square ft.)	Buffer Impact Map Sheet X.3
Intermittent (Zone 2)	525 (square ft.)	Buffer Impact Map Sheet X.3

2. Temporary Impacts

Such impacts are typically associated with construction corridors, temporary access roads, and the installation and operation of temporary sediment and erosion control measures and devices. Approved temporary impacts must remain temporary in nature, minimize impacts to the riparian buffer, meet or exceed required Best Management Practices (BMP), perform and be maintained so that no violations of county riparian buffer or state water quality standards, statutes, or rules occur, and must be returned to the uses that were existing at the time of authorization. Temporary impacts associated with the project are as follows:

- Temporary crossings associated with non-electric perpendicular utilities (septic) without maintenance corridors. These impacts must be temporary in nature and stabilized with a permanent riparian seed mixture in accordance with the timeframes required by the Sedimentation and Erosion Control Act. Riparian seed mixtures may be substituted for temporary erosion control seed mixture within established wetland boundaries.
- Temporary sediment and erosion control measures (Skimmer Basin #1) within Zone 2 of the perennial stream buffer. Impacts associated with the construction of the temporary skimmer basin include 719 square feet of disturbance within Zone 2 (Inner) and 2,2,17 square feet of disturbance to Zone 2 (Outer). Upon removal of the skimmer basin the riparian buffer will be returned to existing conditions and stabilized with native riparian seed mixtures. The area must be allowed to revegetate naturally once the native riparian seed mix matures. Temporary

sediment and erosion control measures within the Jordan Lake Watershed are exempt from requiring Authorization to complete the activities. However, the installation and removal of temporary sediment and erosion control measures must adhere to the following stipulations as defined in 15A NCAC 02B .0267 (9) – Table of Uses

- The activity must occur only in Zone 2
- Ground cover must be provided within the timeframes required by the Sedimentation and Erosion Control Act
- Vegetation in Zone 1 must not be compromised
- Runoff is released as diffuse flow in accordance with Item (8) of this Rule.

3. No Waste, Spoil, Solids, or Fill of Any Kind

No waste, spoil, solids, or fill of any kind shall occur in riparian areas beyond the footprint of the impacts depicted in the Pre-Construction Notification. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices, shall be performed so that no violations of county riparian buffer or state water quality standards, statutes, or rules occur.

4. Diffuse Flow

An additional condition is that all stormwater shall be directed as diffuse flow at non-erosive velocities through the protected stream buffers and will not re-concentrate before discharging into the stream as identified within Section 304(J)2 of the Watershed Protection Ordinance.

5. Protective Fencing

The outside buffer boundary and along the construction corridor within these boundaries approved under this authorization shall be clearly marked with orange warning fencing (or similar high visibility material) for the areas that have been approved to infringe within the buffer, stream channel or water prior to any land disturbing activities to ensure compliance with the Watershed Protection Ordinance.

6. Certificate of Completion

Upon completion of all work approved within this authorization, and any subsequent modifications, the applicant is required to certify that the completed project is in accordance with this buffer authorization and shall submit actual 'as-built' plans.

7. Deed Notifications

Deed notifications or similar mechanisms shall be placed on all retained protective buffers in order to assure compliance for future buffer impact. These mechanisms shall be put in place at the time of recording of the property, or easements, whichever is appropriate.

Any disputes over determinations regarding this Authorization of Approvable Impacts (associated with the approved buffer impacts) shall be referred in writing to the Director of the Division of Water Resources, c/o the 401 & Buffer Permitting Unit. The Director's decision is subject to review as provided in G.S. 150B Articles 3 and 4.

The mailing address for the 401 & Buffer Permitting Unit is:

Ms. Karen Higgins
1650 Mail Service Center
Raleigh, NC 27699-1650
Telephone: 919-807-6300, Facsimile: 919-807-6494

This Authorization shall expire five (5) years from the date of this letter.

This letter completes the review of the "No Practical Alternatives" determination under Section 304(I) and 15A NCAC 2B .0267. If you have any questions or would like a copy of the buffer rules, please call Drew Blake at (919) 545-8394. This letter does not authorize any impacts to either Waters of the United States or Waters of the State. Please contact the US Army Corps of Engineers (USACE) or NC Division of Water Quality (DWQ) if any impacts are proposed to either of these waters.

Sincerely,



Rachael Thorn
Chatham County Watershed Administrator

cc: Paul Wojoski, NC DWR 401/Buffer Coordinator
Andy Williams, USACE Raleigh Regulatory Field Office
Jason Sullivan, Chatham County Planning Director
Kimberly Tyson, Chatham County Subdivision Administrator
File Copy

Enclosures: Riparian Buffer Authorization Application
USACE Notification of Jurisdictional Determination
USACE Signed Jurisdictional Determination Maps
USACE General Permit Verification
NCDWR 401 Water Quality Certification
Riparian Buffer Impacts Maps
Erosion Control Construction Drawings