



**SECPR - SEDIMENT AND EROSION CONTROL PLAN DISAPPROVAL AND REVIEW COMMENTS**

**Project Name** The Preserve at Jones Dairy – South Amenity      **Watershed** Lower Neuse      **Jurisdiction** Rolesville  
**Date Received** 7/13/2023      **Date Processing Initiated** 7/14/2023      **Project Number** SEC-106257-2023  
**Disturbed Acreage** 0.67      **Plan Review Fee** \$168.00 PAID      **Permit Fee** \$168.00 PAID

**Applicant:**

Name KB Home Raleigh-Durham  
4506 S. Miami Blvd, Ste 100,  
 Address: Durham, NC 27703  
 Phone: 919-422-8606  
 Email: rsjohnson@kbhome.com

**Engineer:**

CAA Engineers, Inc.  
4932 B Windy Hill Dr, Raleigh, NC 27609  
919-625-6755

**Plan Date/Revision Date:** 12/6/2023

<b>Review Status:</b> <u>12/14/2023</u>	<input type="checkbox"/>	<u>Construction Plan Not Approved and Incomplete</u> (Items 1-4 required to be a complete submittal)
	<input checked="" type="checkbox"/>	<u>Construction Plan Not Approved and requires additional information</u>

**Construction Plan Review Comments**

Items marked with an "X" were noted as either insufficient or not provided. Watershed Manager comments are in **RED** and provide the necessary requirements for construction plan approval. Unless otherwise noted, all references shown in brackets are for the *Wake County Unified Development Ordinance (UDO)*, adopted 04/17/06.

<input type="checkbox"/>	<b>1.</b>	<u>Erosion Control and Stormwater Joint Application</u> (Required to initiate processing)
<input type="checkbox"/>	<b>2.</b>	<u>Review Fees</u> (Required to initiate processing) <b>RESUBMITTALS:</b> The first resubmittal is free, but all subsequent resubmissions require a \$75 Resubmission Fee
<input checked="" type="checkbox"/>	<b>3.</b>	<u>Notarized Wake County Financial Responsibility/Ownership Form</u> (Required to initiate processing) <b>-Provide signature authority for R. Scott Johnson</b> <b>-Executed documents cannot be edited. Please provide newly executed FRO.</b>
<input type="checkbox"/>	<b>4.</b>	Other documents:
<input type="checkbox"/>	<b>a.</b>	<b>WC ONLY PRELIMINARY ZONING AND SUBDIVISION APPROVAL:</b> Copy of approval notification (property description, subdivision or COSD approval, or Board of Adjustment approval, etc.).
<input type="checkbox"/>	<b>b.</b>	Approval from either the Wake County Subdivision Section, Wake County Zoning Section, Wake County Stormwater Section, or the Town Engineer(s) for construction and/or utilities depending on the project location and type.
<input type="checkbox"/>	<b>c.</b>	<b>WC ONLY FLOOD STUDY:</b> Copy of approval notification from Wake County Flood & Stormwater Environmental Engineer, (if applicable)
<input type="checkbox"/>	<b>d.</b>	401/404 Documentation (Buffer determination letters, PCN application, comments, and approval)



**SECPR - SEDIMENT AND EROSION CONTROL PLAN DISAPPROVAL AND REVIEW COMMENTS**

<input type="checkbox"/>	<b>e.</b>	NCDOT Approval
<input type="checkbox"/>	<b>f.</b>	Encroachment agreement(s) completed, signed and notarized for all off-site construction
<input type="checkbox"/>	<b>5.</b>	Cover letter stating the purpose of the submission <b>RESUBMITTALS:</b> A letter detailing any changes, comments, proposed solutions to review comments, etc.
<input type="checkbox"/>	<b>6.</b>	Copy of the USGS Quad Map with delineated project limits
<input type="checkbox"/>	<b>7.</b>	Copy of the Wake County Soil Survey map with delineated project limits
<input checked="" type="checkbox"/>	<b>8.</b>	Drainage Area Map showing drainage areas to <b>erosion control devices.</b> <b>-DA map provided is not for the erosion control (silt fence for this plan only)</b>
<input checked="" type="checkbox"/>	<b>9.</b>	Erosion Control Calculations: <b>Provide Erosion Control Plan</b> <b>Differentiate lines for existing and proposed contours and include a legend.</b> <b>This ESC permit is only for the Amenity Center.</b>
<input type="checkbox"/>	<b>a.</b>	Sediment basin design (See <a href="#">website</a> for Wake County design criteria)
<input type="checkbox"/>	<b>b.</b>	Ditches, swales, and channels: Q10/V10. Tractive force (shear stress), capacity and geometry.
<input type="checkbox"/>	<b>c.</b>	Dissipaters: Q10 velocities, stone size and dimensions.
<input type="checkbox"/>	<b>d.</b>	Velocity calculations for stormwater runoff at points of discharge resulting from a 10-year storm after development were not provided or do not comply with [10-21-3]
<input type="checkbox"/>	<b>10.</b>	One(1) copy of a complete set of construction drawings for 1 <sup>st</sup> submission, five (5) copies for approval
<input type="checkbox"/>	<b>11.</b>	Proposed Site Plan:
<input type="checkbox"/>	<b>a.</b>	Location/Vicinity Map
<input type="checkbox"/>	<b>b.</b>	North arrow, graphic scale, drafting version date, legend and professional seal
<input type="checkbox"/>	<b>c.</b>	Existing and proposed contours:
<input type="checkbox"/>	<b>d.</b>	Boundaries of tract: including project limits
<input type="checkbox"/>	<b>e.</b>	Limits of disturbance specified on plan
<input type="checkbox"/>	<b>f.</b>	Proposed improvements: roads, buildings, parking areas, grassed landscaped, and natural areas.
<input type="checkbox"/>	<b>g.</b>	Lot lines, lot numbers and road names
<input type="checkbox"/>	<b>h.</b>	Utilities: community water and sewer, plan/profiles, easements and sediment controls.
<input type="checkbox"/>	<b>i.</b>	Stormwater Network: inlets, culverts, swales, ditches, channels and drainage easements.
<input type="checkbox"/>	<b>j.</b>	TEMPORARY SEDIMENT CONTROLS: locations and dimensions of gravel entrances, diversion ditches, silt fence, sediment basins, inlet protection, etc. <b>-Add silt fence outlets.</b>
<input type="checkbox"/>	<b>k.</b>	PERMANENT EROSION CONTROLS: locations and dimensions of dissipaters, ditch linings, armoring, level spreaders, retaining walls, etc.



**SECPR - SEDIMENT AND EROSION CONTROL PLAN DISAPPROVAL AND REVIEW COMMENTS**

<input type="checkbox"/>	i.	Location and requirements for stockpiles (see website for <a href="#">Stockpile Requirements</a> )
<input checked="" type="checkbox"/>	m.	<a href="#">Wake County Construction Details</a> -Remove details for items not used on this plan (skimmer basin, skimmer, etc.) -Add Wake County signature block to cover sheet.
<input checked="" type="checkbox"/>	n.	<a href="#">Wake County Construction Sequence</a> (Provide project specific details as needed)
<input type="checkbox"/>	o.	<a href="#">Wake County Stabilization Guidelines</a>
<input type="checkbox"/>	p.	<a href="#">Wake County Basin Removal Sequence</a> Wake County or jurisdictional municipality must grant permission to convert the sediment basin over to stormwater use prior to completing any related work (a note in the construction sequence or elsewhere on the plan should indicate this).
<input type="checkbox"/>	q.	Show all Riparian Buffers [ <i>Article 9-21</i> ]; (Neuse: [15A NCAC 02B.0233 & 0242
<input type="checkbox"/>	r.	Delineation of current FEMA boundaries (floodway, flood fringe & future/0.2%) All road crossings of flood hazard soils and/or FEMA flood hazard area (with DA greater than 5 acres) require a flood study. If the FEMA crossing is in a municipality, notify the municipality. They may require a flood study.
<input type="checkbox"/>	s.	<b>WC ONLY</b> Delineation of flood prone soil areas
<input type="checkbox"/>	t.	Q-100 backwater elevations must be shown above all culverts/BMPs draining 4 or more acres.
<input type="checkbox"/>	u.	Location and type of all proposed stormwater management structures ( <i>grass swale, wet/dry detention basin, filtering/infiltration basin, bioretention, etc.</i> )

**Standards and Requirements**

Items marked with an "X" note relevant standards to be applied to the proposed development. Notes in RED provide review comments and/or any required elements to comply with standard. Unless otherwise noted, all references shown in brackets are for the *Wake County Unified Development Ordinance (UDO)*, adopted 04/17/06.

**Wake County UDO Article 10 - Erosion and Sedimentation Control Requirements**

<input checked="" type="checkbox"/>	12.	<b>Erosion Control:</b> This project will require a Land Disturbance Permit if it involves <u>greater than one acre of disturbance</u> . See <a href="#">website</a> for details.
<input checked="" type="checkbox"/>	13.	<b>10-20-1 Minimum Standards</b> - All soil erosion and sedimentation control plans and measures must conform to the minimum applicable standards specified in <i>North Carolina's Erosion and Sediment Control Planning and Design Manual</i> and the <i>Wake County Sedimentation and Erosion Control Plan Review Manual</i> . Erosion control devices must be installed to prevent any offsite sedimentation for any construction site regardless of the size of the land disturbance.
<input type="checkbox"/>	14.	<b>10-20-3 Operation in Lakes or Natural Watercourses</b> -Land disturbing activity in connection with construction in, on, over, or under a lake of natural watercourse must minimize the extent and duration of disruption of the stream channel. Where relocation of a stream forms an essential part of the proposed activity, the relocation must minimize unnecessary changes in the stream flow characteristics.
<input type="checkbox"/>	15.	<b>10-20-10 Standards for High Quality Water (HQW) Zones</b> Land-disturbing activities to be conducted in High Quality Water Zones must be designed as follows:
<input type="checkbox"/>	a.	Uncovered areas in High Quality Water (HQW) zones must be limited at any time to a maximum total area of 20 acres within the boundaries of the tract.



**SECPR - SEDIMENT AND EROSION CONTROL PLAN DISAPPROVAL AND REVIEW COMMENTS**

<input type="checkbox"/>	<b>b.</b>	<b>Maximum Peak Rate of Runoff</b> - Erosion and sedimentation control measures, structures, and devices within HQW zones must be planned, designed and constructed to provide protection from the runoff of the 25-year storm.
<input type="checkbox"/>	<b>c.</b>	<b>Settling Efficiency</b> - Sediment basins within HQW zones must be designed and constructed so that the basin will have a settling efficiency of at least 70% for the 40 micron (0.04mm) size soil particle transported into the basin by the runoff of that 2-year storm which produces the maximum peak rate of runoff.
<input type="checkbox"/>	<b>d.</b>	<b>Grade</b> - The angle for side slopes must be sufficient to restrain accelerated erosion (side slopes no steeper than 2 horizontal to 1 vertical if a vegetative cover is used for stabilization unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices or other acceptable ditch liners)
<input type="checkbox"/>	<b>16.</b>	<b>Senate Bill 1020; "SECTION 3.(h) Additional standards for land-disturbing activities in the water supply watershed":</b>
<input type="checkbox"/>	<b>a.</b>	Erosion and sedimentation control measures, structures, and devices shall be planned, designed, and constructed to provide protection from the runoff of the 25-year storm
<input type="checkbox"/>	<b>b.</b>	Sediment basins shall be planned, designed, and constructed so that the basin will have a settling efficiency of at least seventy percent (70%) for the 40-micron size soil particle transported into the basin by the runoff of the two-year storm that produces the maximum peak rate of runoff
<input type="checkbox"/>	<b>c.</b>	Newly constructed open channels shall be planned, designed, and constructed with side slopes no steeper than two horizontal to one vertical if a vegetative cover is used for stabilization unless soil conditions permit steeper slopes or where the slopes are stabilized by using mechanical devices, structural devices, or other acceptable ditch liners.

**Buffer Rules :**

These rules shall supersede the Neuse Rules within the Jordan Lake watershed portion of the Cape Fear River Basin. See [Wake County's Stormwater Manual: Submittal and Design Guidance](#)

**Jordan Lake Buffer Rules [15A NCAC 02B.0265] & [Article 9-21-3]**

Select all that apply.

<input type="checkbox"/>	<b>17.</b>	Riparian Buffer Rules:
<input type="checkbox"/>	<b>a.</b>	Due to the location of this project, it should be noted that a rule to protect and maintain existing buffers along watercourses in the Neuse River Basin became effective on July 22, 1997. The <b>Neuse River Riparian Area Protection and Maintenance Rule (15A NCAC 2B.0233)</b> applies to all perennial and intermittent streams, lakes, ponds and estuaries in the Neuse River Basin with forest vegetation on the adjacent land or "riparian area".
<input type="checkbox"/>	<b>b.</b>	Due to the location of this project, it should be noted that a rule to protect and maintain existing buffers along watercourses in the Jordan Lake Watershed became effective on August 11, 2009. The <b>Jordan Lake Water Supply Watershed Buffer Rules (15A NCAC 02B .0267)</b> applies to all perennial and intermittent streams, lakes, ponds and estuaries in the Jordan Lake Watershed with forest vegetation on the adjacent land or "riparian area".

**Notifications/Suggested Changes/Comments**



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<input checked="" type="checkbox"/>	<b>18.</b>	<b>Other Agency Approvals/Enforcement: Wake County's approval of this plan does not supersede any other required approvals or permits. See Wake County Unified Development Ordinance (UDO) 1-18-6 References to Other Regulations and 1-19-1 Conflict with State or Federal Regulations and 10-30-3 (H)</b>
<input checked="" type="checkbox"/>		<ol style="list-style-type: none"> <li>1. Please be advised that the Financially Responsible Party is responsible for compliance with all applicable local, state or federal laws and is responsible for obtaining all applicable agency approvals/permits. These approval/permits may include, but are not limited to: NCDOT plan approval and NCDOT encroachment permits, Federal Emergency Management Area Flood regulations/requirements, NC Dept. of Environmental Quality requirements/permits, U.S. Army Corps of Engineers under Article 404/401 (wetlands/Streams) jurisdiction/requirements, etc. (UDO 1-18-6 and UDO 1-19-1).</li> </ol>
<input type="checkbox"/>		<ol style="list-style-type: none"> <li>2. Wake County requests a courtesy copy of applicable NCDOT plan approval notification and encroachment permits upon receipt. (UDO 10-30-3 (H))</li> </ol>
<input type="checkbox"/>	<b>XX.</b>	
<p><b>Environmental Consultant:</b> <a href="mailto:Jeevan Neupane, PE">Jeevan Neupane, PE</a>      <b>Contact Info:</b> <a href="mailto:jeevan.neupane@wake.gov">jeevan.neupane@wake.gov</a>  <a href="tel:919-856-7422">919-856-7422</a></p>		
<p><b>Wake County Plan Reviewer:</b> <a href="mailto:Janet Boyer, PE, CFM">Janet Boyer, PE, CFM</a>      <b>Contact Info:</b> <a href="mailto:janet.boyer@wake.gov">janet.boyer@wake.gov</a>  <a href="tel:919-369-6135">919-369-6135</a></p>		