



Wake County Environmental Services Department
 Water Quality Division, Watershed Management Section
 336 Fayetteville St. • P.O. Box 550 • Raleigh, NC 27602
 TEL 919 856-7400 • FAX 919 743-4772

SECPs – SEDIMENT and EROSION CONTROL CONSTRUCTION PLAN SUBMITTAL CHECKLIST

Project Name VINEYARD PINE COMMERCIAL Watershed NEUSE Jurisdiction ROLESVILLE

Project Acreage 1.45 Proposed Impervious 1.09 Disturbed Acreage 1.39

Applicant:

Name MRR DEVELOPMENT
 Address: 10121 CAPITAL BLVD
 Phone: WAKE FOREST NC
 Email: 330-573-4030
OMAR@MEINERENC.COM

Engineer:

Name: KEITH GETTUE, PE
 Address: 3616 WAXWING CT.
 Phone: WAKE FOREST NC 27589
 Email: 919-210-3934
KRGETTUE@GMAIL.COM

Sediment and Erosion Control Construction Plan Review Submittal Package Requirements

[10-30-2(B)]-The S&EC plan submittal package must include all applicable items below to demonstrate compliance with applicable regulations. Unless otherwise noted, all references shown in brackets are for the Wake County Unified Development Ordinance (UDO), adopted 04/17/06. Select all applicable items below and provide with the submittal.

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| <input checked="" type="checkbox"/> | 1. | <u>Erosion Control and Stormwater Joint Application</u> (Required to initiate processing) |
| <input checked="" type="checkbox"/> | 2. | <u>Review Fees</u> (Required to initiate processing) RESUBMITTALS: The first resubmittal is free, but all subsequent resubmissions require a \$75 Resubmission Fee |
| <input checked="" type="checkbox"/> | 3. | <u>Notarized Wake County Financial Responsibility/Ownership Form</u> (Required to initiate processing) |
| <input checked="" type="checkbox"/> | a. | The erosion and sedimentation control plan must include the owner's written consent for the applicant to submit an erosion and sedimentation control plan and to conduct the anticipated land-disturbing activity if the applicant is not the owner of the land to be disturbed [10-30-2-(B) -(2)-(c)] |
| <input type="checkbox"/> | 4. | Other documents: |
| <input type="checkbox"/> | a. | <u>WC ONLY PRELIMINARY ZONING AND SUBDIVISION APPROVAL</u> : Copy of approval notification (property description, subdivision or COSD approval, or Board of Adjustment approval, etc.). |
| <input type="checkbox"/> | b. | <u>WC ONLY FLOOD STUDY</u> : Copy of approval notification from Wake County Flood & Stormwater Environmental Engineer, (if applicable) |
| <input type="checkbox"/> | c. | <u>ENGINEERING APPROVAL</u> : Copy of approval notification for projects in a municipality's zoning jurisdiction |
| <input type="checkbox"/> | d. | 401/404 Documentation (Buffer determination letters, PCN application, comments, and approval) |
| <input type="checkbox"/> | e. | NCDOT Approval (Temporary Construction Entrances, Encroachment Agreements, etc.) |
| <input type="checkbox"/> | f. | Encroachment agreement(s) completed, signed and notarized for all off-site construction |
| <input type="checkbox"/> | 5. | Cover letter stating the purpose of the submission, i.e., project narrative RESUBMITTALS: A letter detailing any changes, comments, proposed solutions to review comments, etc. |
| <input checked="" type="checkbox"/> | 6. | Copy of the USGS Quad Map with delineated project limits |



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| <input checked="" type="checkbox"/> | 7. | Copy of the Wake County Soil Survey map with delineated project limits |
| <input checked="" type="checkbox"/> | 8. | Drainage Area Map showing drainage areas to erosion control devices |
| <input checked="" type="checkbox"/> | 9. | 1 set of Erosion Control Calculations: |
| | <input checked="" type="checkbox"/> a. | Sediment basin design (See website for Wake County design criteria) |
| | <input checked="" type="checkbox"/> b. | Ditches, swales, and channels: Q10/V10. Tractive force (shear stress), capacity and geometry. |
| | <input checked="" type="checkbox"/> c. | Dissipaters: Q10 velocities, stone size and dimensions. [10-21-4] |
| | <input checked="" type="checkbox"/> d. | Velocity calculations for stormwater runoff at points of discharge resulting from a 10-year storm after development [10-21-3] |
| <input checked="" type="checkbox"/> | 10. | One (1) electronic copy of a complete set of construction drawings for 1 st submission, five (5) copies for final approval |
| <input checked="" type="checkbox"/> | 11. | Proposed Site Plan: |
| | <input checked="" type="checkbox"/> a. | Location/Vicinity Map |
| | <input checked="" type="checkbox"/> b. | North arrow, graphic scale, drafting version date, legend and professional seal |
| | <input checked="" type="checkbox"/> c. | Existing and proposed contours; plan and profiles for roadways |
| | <input checked="" type="checkbox"/> d. | Boundaries of tract; including project limits |
| | <input checked="" type="checkbox"/> e. | Limits of disturbance specified on plan |
| | <input checked="" type="checkbox"/> f. | Proposed improvements: roads, buildings, parking areas, grassed landscaped, and natural areas. |
| | <input checked="" type="checkbox"/> g. | Lot lines, lot numbers and road names |
| | <input checked="" type="checkbox"/> h. | Utilities: community water and sewer, plan/profiles, easements and sediment controls, and offsite septic. |
| | <input checked="" type="checkbox"/> i. | Stormwater Network: inlets, culverts, swales, ditches, channels and drainage easements. |
| | <input checked="" type="checkbox"/> j. | TEMPORARY SEDIMENT CONTROLS: locations and dimensions of gravel entrances, diversion ditches, silt fence, sediment basins, inlet protection, etc. |
| | <input checked="" type="checkbox"/> k. | Sediment Basin Dewatering Bags: Provide a dewatering bag and location pad adjacent to all sediment basins for maintenance and closeout. Label the bag and pad with dimensions. |
| N/A | <input type="checkbox"/> l. | Stream Culvert Construction Phasing: Provide a detailed construction sequence for installation of culverts at streams and show the stream crossing(s) on the erosion control plan sheets. Include all applicable details related to managing the stream flow during the culvert installation (silt bags, pump around, impervious dikes, etc.). |



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| N/A | <input type="checkbox"/> | m. | Stream Protection: Design temporary sediment storage during the construction phase of stream culvert installation on all four-corners of the stream crossing (where applicable) and show on the erosion control plan sheets. Provide erosion control blankets on all permanent slopes of culvert at stream crossing. |
| | <input checked="" type="checkbox"/> | n. | PERMANENT EROSION CONTROLS: locations and dimensions of dissipaters, ditch linings, armoring, level spreaders, retaining walls, etc. |
| | <input checked="" type="checkbox"/> | o. | Location and requirements for stockpiles (see website for Stockpile Requirements) |
| | <input checked="" type="checkbox"/> | p. | Wake County Construction Details Include Wake County Signature Block on Cover |
| | <input checked="" type="checkbox"/> | q. | Wake County Construction Sequence (Provide project specific details as needed) |
| | <input checked="" type="checkbox"/> | r. | Wake County Stabilization Guidelines |
| | <input checked="" type="checkbox"/> | s. | Wake County Basin Removal Sequence 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). |
| N/A | <input type="checkbox"/> | t. | Show all Riparian Buffers [<i>Article 9-21</i>]; (Neuse: [15A NCAC 02B.0233 & 0242]) |
| | <input checked="" type="checkbox"/> | u. | Delineation of current FEMA boundaries (floodway, non-encroachment areas, flood fringe and future/0.2%) |
| | <input type="checkbox"/> | v. | WC ONLY Delineation of flood prone soil areas |
| N/A | <input type="checkbox"/> | w. | Q-100 backwater elevations must be shown above all culverts/BMPs draining 4 or more acres. |
| | <input checked="" type="checkbox"/> | x. | Location and type of all proposed stormwater management structures (<i>grass swale, wet/dry detention basin, filtering/infiltration basin, bioretention, etc.</i>). Must be located in a common area of development. |
| | <input checked="" type="checkbox"/> | y. | Proposed easement access lanes and sediment disposal areas for future maintenance of stormwater management facilities. Provide and label minimum 20 ft. Access easement and 10 ft. Maintenance easement from toe of stormwater pond embankment. |

Standards and Requirements

By marking items with an "X", applicant acknowledges potential standards to be applied to the proposed development.

Wake County UDO Article 10 - Erosion and Sedimentation Control Requirements

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| <input checked="" type="checkbox"/> | 12. | Erosion Control: This project will require a Land Disturbance Permit if it involves <u>greater than one acre of disturbance</u> . Note: If the land disturbance is part of a common plan of development that is greater than one acre of disturbance, an Approved Erosion and Sediment Control Plan and Land Disturbance Permit are required for each individual tract or parcel disturbance within the common plan of development, regardless of land disturbance acreage in each tract/parcel. |
| <input checked="" type="checkbox"/> | 13. | 10-20-1 Minimum Standards - 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. |



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| <input checked="" type="checkbox"/> | 14. | 10-20-3 Operation in Lakes or Natural Watercourses -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 checked="" type="checkbox"/> | 15. | 10-20-11 Standards for High Quality Water (HQW) Zones 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. |
| <input type="checkbox"/> | b. | Maximum Peak Rate of Runoff - 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"/> | c. | Settling Efficiency - 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"/> | d. | Grade - 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 checked="" type="checkbox"/> | 16. | Senate Bill 1020; "SECTION 3. (h) Additional standards for land-disturbing activities in the water supply watershed": |
| <input type="checkbox"/> | a. | 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. | 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"/> | c. | 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. |
| <p>Buffer Rules:</p> <p>These rules shall supersede the Neuse Rules within the Jordan Lake watershed portion of the Cape Fear River Basin. See <u>Wake County's Stormwater Manual: Submittal and Design Guidance</u></p> <p>Jordan Lake Buffer Rules [15A NCAC 02B.0265] & [Article 9-21-3]</p> <p>Select all that apply.</p> | | |
| <input type="checkbox"/> | 17. | Riparian Buffer Rules: |



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| <input type="checkbox"/> | a. | 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 Neuse River Riparian Area Protection and Maintenance Rule (15A NCAC 2B.0233) 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. | 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 Jordan Lake Water Supply Watershed Buffer Rules (15A NCAC 02B .0267) 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". |

Applicant Signature: Robert C. Latta, PE

Date: 9/25/23