

October 27, 2015

Town of Wake Forest
Attention: Holly Miller, PE
301 S. Brooks Street
Wake Forest, NC 27587-2901

Subject: Sedimentation and Erosion Control Local Program Review

Dear Ms. Miller:

On September 30, 2015, Joe Dupree and Karyn Pageau conducted a review of the Town of Wake Forest's Local Program. Six staff members contribute to 2.5 full time equivalents to the erosion control program, 2 are new employees to the Town. The town has 55 projects and has completed 72 plan reviews, with 31 approvals and 41 disapprovals. The town has conducted 497 inspections, issued 5 notices of violations, 5 stop work orders and one civil penalty in the past 12 months. Four projects were reviewed.

The following is a summary of the projects that were inspected:

1. Wake Forest Fire Station #4

This site is a 2.20 acre commercial project. The file for this project included adequate supporting documentation, and the approved plan for this site was adequate. This project is located in the Falls Lake Watershed. The last inspection listed the site in compliance with no previous Notice of Violations history. The site was active at the time of the inspection and was **out** of compliance. Violations included: failure to follow approved plan, insufficient measures to retain sediment on site, failure to take all reasonable measures, and failure to maintain measures.

Corrective Actions:

- 1) Remove sediment from Jenkins Street. Install clean stone and extend existing construction entrance, and provide additional construction entrance where fire truck/trailers are currently accessing and parking on site.
- 2) Provide clean stone at inlets.
- 3) Remove stockpile located within 50 feet of two inlets, provide silt fence around stockpile at new location and stabilize.
- 4) Tie baffle into basin slopes, stabilize basin slopes, and connect skimmer to riser.

Comments:

- 1) Provide adequate ground cover on all bare and inactive areas. Steep slope at back of site has good groundcover, the top of the slope should be overseeded.

2. Holding Village Phase 1

This site is a 57.1 acre residential project. The file for this project included adequate supporting documentation, and the approved plan for this site was adequate. The last inspection listed the site in compliance with no previous Notice of Violations history. The site was active at the time of the inspection and was **out** of compliance. Violations included: failure to follow approved plan, failure to take all reasonable measures, and failure to maintain measures.

Corrective Actions:

- 1) North and West Borrow Areas - Repair/maintain perimeter silt fence. Stabilize diversions entering basins. Provide groundcover on stockpiles and overseed borrow areas to achieve dense vegetation.
- 2) Main Site – Maintain/repair perimeter silt fence. Maintain silt fence outlet, inlet protection, sediment basins, and repair eroded areas onsite. Re-install baffles in sediment basin that is being short circuited. Remove sediment from interior roads near curb inlets and exterior roadside ditch and re-stabilize.

Comments:

- 1) Re-install concrete washout location per plan prior to next concrete pour.
- 2) Provide adequate ground cover on all bare and inactive areas.

3. Fresnius Medical Care

This site is a 1.6 acre commercial project. The file for this project included adequate supporting documentation, and the approved plan for this site was not adequate (missing: details, concrete washout, diversion and dissipator calculations). The last inspection listed the site out of compliance. This site had not received a Notice of Violations. The site was active at the time of the inspection and was **in** compliance.

Comments: Site preparation for final stabilization was underway. Recommend additional silt fence along curb at both entrances or provide seed and rolled erosion control product over bare areas. Final conversion of permanent Stormwater pond was observed while onsite.

4. Shearon Farms Tract 4

This site is a 7.32 acre multi-family residential project. The file for this project included adequate supporting documentation, and the approved plan for this site was not adequate. The last inspection listed the site in compliance. The site has received a Notice of Violations. The site was active at the time of the inspection and was **out** of compliance. Violations included: failure to follow approved plan, insufficient measures to retain sediment on site, failure to provide adequate ground cover, failure to take all reasonable measures, inadequate buffer zone, unprotected slopes, and failure to maintain measures.

Corrective Actions:

- 1) Provide adequate ground cover on all bare and inactive areas.
- 2) Repair, install, and maintain inlet protection and silt fence throughout site.
- 3) Provide channel liner and check dams in all ditch lines.
- 4) Revise plan for additional waste area that has been installed on site. These slopes are too steep and signs of slope failure are evident. Waste area is located adjacent to Neuse River Riparian Buffer and dirt clods from stockpile are in buffer already.
- 5) Stabilize all inactive stockpiles with temporary vegetation immediately. Sparse weeds were growing on stockpile.

Comments:

- 1) The waste area site has high potential of degrading the Neuse Buffer further. The Division of Water Resources should be notified immediately.

Conclusion:

The Town of Wake Forest Local Program is visiting sites on a frequent basis, which is appreciated. The local program should also implement the following recommendations to improve the program:

- 1) Continue to check for self-inspection records and concrete washout areas on site and request this information and the NPDES stabilization timetable be placed on the drawings during plan review.
- 2) Keep hard copies of calculations in plan folder or store electronically in file folder for particular project.
- 3) Document when slopes have been graded or areas are left idle in the comments section of inspection reports in order to establish a time frame for establishing ground cover.

A summary of the review will be presented to the Sedimentation Control Commission (SCC) on November 12, 2015. Staff will recommend continued delegation. Thank you again for the efforts of you and your staff to protect the State's waters from sedimentation.

Sincerely,

Ashley Rodgers, PE
State Sedimentation Specialist

Karyn Pageau, EI, CPESC
Assistant State Sedimentation Specialist

cc: John Holley, PE, Raleigh Regional Engineer



Site 1 – Inlet protections needs to be maintained and provided with clean stone.



Site 2 – Curb inlet needs to be maintained and sediment removed from street.



Site 3 – Sediment basin being converted to permanent Stormwater BMP.



Site 4 – Yard inlet needs maintains and stockpiles need groundcover.