



North Carolina Department of Environment and Natural Resources  
Division Energy, Mineral, and Land Resources  
Land Quality Section

Tracy E. Davis, PE, CPM  
Director

Pat McCrory, Governor  
Donald van der Vaart, Secretary

February 1, 2016

City of Greenville  
Attention: Scott Godefroy  
1500 Beatty Street  
Greenville, NC 27834

Subject: Sedimentation and Erosion Control Local Program Review

Dear Mr. Godefroy:

On January 27, 2016, Allison Ward and Karyn Pageau conducted a review of the City of Greenville Local Program. Two positions would contribute 1.4 full time equivalents to the erosion control program, these positions are currently vacant and the program is being managed by the City Engineer and another member of his staff. The city has 12 active projects. During the past year, the City has reviewed 21 plans, with 20 approvals and 1 disapproval, and has conducted 4 inspections. The City has not issued any notices of violations nor has it assessed any civil penalties in the past 12 months. **Four projects were reviewed and inspected in the field. Two projects were located in the Neuse and two in the Tar-Pamlico River Basin.**

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

**1. Vidant Cancer Center**

This site is a 9acre commercial project. The file for this project included adequate documentation. The erosion and sediment control plan was approved and was adequate. No previous inspections were performed on this site. The site has not received a Notice of Violations. The site was active at the time of the inspection and was **out** of compliance. The violations found were: failure to follow approved plan, failure to take all reasonable measures, failure to self-inspect, and failure to maintain erosion control measures.

Corrective Actions: 1) Maintain construction entrance, additional clean stone is needed. 2) Provide impervious liner for concrete washout area installed. 3) Maintain perimeter silt fence. 4) Additional clean stone needed at yard inlets. 5) Provide copy of NPDES/Self-Inspection records. Provide revised plan to address additional sediment control and dewatering needed behind building on site.

Comment: Provide adequate ground cover on all bare and inactive areas. Additional silt fence needed along perimeter. Self-inspection and monitoring records should be kept and maintained onsite.

**2. Berkley Apartments**

This site is a 19.5 acre multi-family residential project. The file for this project included adequate documentation. The erosion and sediment control plan was approved and was not adequate. Some details were not shown on the drawings for planned sediment and erosion control measures, also NPDES requirements not shown including concrete washout areas, stockpiles, groundcover stabilization timeframes. The last inspection was conducted on 12/16/2014 and the site was out of compliance. The site has not received a Notice of Violations. The site was active at the time of the inspection and was **out** of compliance. The violations found were: failure to follow approved plan, failure to take all reasonable measures, unprotected exposed slopes, and failure to maintain erosion control measures.

Corrective Actions: 1) Maintain construction entrance, additional clean stone is needed. 2) Provide groundcover on stockpiles and on backside of perimeter slope near sediment basin. 3) Maintain perimeter silt fence and provide additional silt fence upstream of sediment basin along tree line. 4) Additional clean stone needed at yard inlets. 5) Provide copy of NPDES/Self-Inspection records.

Comment: Provide adequate ground cover on all bare and inactive areas. A revised plan is needed to show lined concrete washout with detail and additional sediment control downstream of stockpile near perimeter silt fence breach. Site has a high potential for offsite sediment.

**3. GCF Donation Center**

This site is a 1.4 acre commercial project. The file for this project did not contain adequate documentation, the landowner and FRP were different and no landowner authorization was observed in the file. The erosion and sediment control plan was approved and was not adequate. No inspections were documented in the file. The site has not received a Notice of Violations. The site was active at the time of the inspection and was **out** of compliance. The violations found were: failure to follow approved plan, failure to take all reasonable measures, failure to self-inspect, and failure to maintain erosion control measures.

Corrective Actions: 1) Maintain and repair perimeter silt fence. 2) Replace inlet protection with hardware cloth and gravel. Replace inlet protection at pipes awaiting junction box with that shown on drawings. Provide curb inlet near construction entrance with inlet protection. 3) Maintain construction entrance and provide clean stone. 4) Provide revised plan for basin upstream of culvert near construction entrance. 5) Provide copy of NPDES/Self-Inspection records.

Comments: Provide adequate ground cover on all bare and inactive areas. A revised plan is needed to show lined concrete washout with detail.

**4. Langston Farms, Phase 7**

This site is a 4.5 acre residential project. The file for this project did contain adequate documentation. The erosion and sediment control plan was approved and was adequate. No recent inspections were documented in the file. The site has not received a Notice of Violations. The site was not active at the time of the inspection and was **in** compliance.

Comments: Provide adequate ground cover on all bare and inactive areas. A revised plan is needed to show lined concrete washout with detail.

**Conclusion:**

The City of Greenville Local Program has made significant changes since our last review including requiring phased erosion and sediment control plans, pre-construction meetings, and all the new files were well organized. The local program plans to have two staff positions dedicated to this program and these positions are being advertised. The local program should implement the following recommendations to improve the program:

- 1) Continue to check for self-inspection records on site.
- 2) Remember to implement all of the new NPDES requirements during the plan review process.
- 3) Document inspections made on each of approved sites. Projects should be inspected at least monthly.
- 4) Organize paperwork in files to adequately document the plan review process, approval letters/certificate of plan approvals, FRO forms, inspection reports, deeds, and landowner authorization letters(when applicable).
- 5) Document consent of landowner with signed and notarized landowner authorization letters for projects where the financially responsible party is not the landowner.

A summary of the review will be presented to the Sedimentation Control Commission (SCC) on February 4, 2016. Staff will recommend continued program delegation. Thank you again for the efforts of you and your staff to protect the State's waters from sedimentation.

Sincerely,

Karyn Pageau, EI, CPESC  
Assistant State Sedimentation Specialist

Ashley Rodgers, PE  
State Sedimentation Specialist

cc: Richard Peed, CPESC, Acting Washington Regional Engineer  
Allison Ward, Environmental Specialist



Site 1 - Revised plan needed to address additional sediment control needs at inlet draining offsite.



Site 2 – Concrete washout area needed for site.



Site 3 – Revised plan needed to address additional sediment control for culvert that drains offsite.



Site 4 – Sediment and erosion control installation underway.



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February 1, 2016

Durham County  
Attention: Ryan Eaves  
120 East Parrish Street, 1<sup>st</sup> Floor  
Durham, NC 27701

Subject: Sedimentation and Erosion Control Local Program Review

Dear Mr. Eaves:

On October 26, 2015, Joe Dupree, Tessa Monday, and Karyn Pageau conducted a review of the Durham County Local Program. Three staff positions contribute 3 full time equivalents to the erosion control program. The lead erosion control position is currently vacant and the program is currently being managed by a member of the stormwater staff until that position is filled. The county has 119 active projects. During the past year, the County has reviewed 135 plans, with 135 approvals, 0 disapprovals, and has conducted 1,433 inspections. The County issued 16 notices of violations, no stop work orders, and has assessed 0 civil penalties in the past 12 months. **Four projects were reviewed and inspected in the field.**

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

**1. Star Solar**

This site is a 33.9 acre commercial project. The file for this project included adequate documentation. The erosion and sediment control plan was approved and was adequate. No previous inspections were performed on this site. The site has not received a Notice of Violations. The last inspection was conducted on 10/12/2015 and the site had not started. The site was not active at the time of the inspection and was **in** compliance.

Comment: Installation of erosion and sediment control measures underway. Construction entrance and some of perimeter silt fence installed. Continue to install measures prior to land disturbance.

**2. New Hope Church – Phase 2**

This site is a 4.74 acre commercial project. The file for this project did not include adequate documentation. Calculations for diversions, slope drains, and some energy dissipators were missing. The erosion and sediment control plan was approved and appeared adequate. The last inspection was conducted on 10/5/2015 and the site was in compliance. The site has not received a Notice of Violations. The site was active at the time of the inspection and was **out** of compliance. The violations found were: failure to follow approved plan, failure to take all reasonable measures, and failure to maintain erosion control measures.

Corrective Actions: 1) Maintain and repair silt fence and silt fence outlets along perimeter of site. Provide check dam type silt fence outlet downstream of sediment basin outlet. Extend gravel beyond hardware cloth at silt fence outlets. 2) Provide groundcover on stockpiles and on slopes of sediment basin. 3) Replace welded wire at inlets with hardware cloth. 4) Re-install skimmer.

Comment: Provide adequate ground cover on all bare and inactive areas. Basin conversion to permanent stormwater pond underway, skimmer removed prematurely. Sediment beyond silt fence at two silt fence outlet locations, but still on tract. Contractor working on cleanup prior to leaving site.

### **3. Liberty Ridge**

This site is a 29.5 acre industrial project. The file for this project did not contain adequate documentation. Supporting calculations were missing for temporary diversions and roadside swales. The erosion and sediment control plan was approved and was not adequate. Runoff conveyance into and exiting basins were not stable. Skimmer orifice sizes not shown on the plans. The last inspection was on 10/6/2015 and the site was in compliance. The site has not received a Notice of Violations. The site was active at the time of the inspection and was **out** of compliance. The violations found were: failure to follow approved plan, failure to take all reasonable measures, insufficient measures to retain sediment on site, and failure to maintain erosion control measures.

Corrective Actions: 1) Maintain and repair silt fence outlets. Remove deposition and stabilize. 2) Provide groundcover on all stockpiles and silt fence around all stockpiles. 3) Provide additional silt fence outlets downstream of skimmer basins. Repair area behind skimmer basin where it is eroding along weir. 4) Remove sediment downstream of skimmer basin outlet toward silt fence.

Comments: Provide adequate ground cover on all bare and inactive areas. A revised plan was submitted for this project and is under review. This site has a high potential for additional offsite sediment.

### **4. Sierra Phase 1/Laurel Grove (Fendol Farms)**

This site is a 150.6 acre residential project. The file for this project did contain adequate documentation. The erosion and sediment control plan was approved and was not adequate. Additional sediment controls needed for site, phased erosion control needed, additional runoff conveyance and basins needed for clearing and grubbing phase, no information shown on the plans for existing streams to be crossed, and no calculations for supporting erosion and sediment control measures. The site was last inspected on 10/20/15 and was found out of compliance. The site was under a Notice of Violations at time of inspection with DWR, DEMLR, and Durham County. The site was not active at the time of the inspection and was **out** of compliance. The violations found were: failure to follow approved plan, failure to take all reasonable measures, insufficient measures to retain sediment on site, inadequate buffer zone, and failure to maintain erosion control measures.

Corrective Actions: 1) A revised plan is needed to provide a phased erosion and sediment control plan with additional runoff conveyance and sediment control. 2) Additional groundcover is needed on site. 3) Removal of sediment from stream and buffer zones should be accomplished to the satisfaction of DWR.

Comments: Provide adequate ground cover on all bare and inactive areas. A revised plan is needed immediately to prevent further offsite deposition to adjacent properties and stream. Additional sediment controls need to be installed immediately to prevent further offsite deposition. Sub-contractor onsite repairing failed weir section in one of basins. This site has a high potential for additional offsite sediment.

**Conclusion:**

The Durham County Local Program went without an inspector for approximately 10 months in the last year and hired a temporary employee to assist with inspections until a full time person could be hired. The local program found deficiencies in the temporary employee hired and terminated that contract. Durham County has since hired a full time inspector, but has lost the lead erosion control officer. The local program should implement the following recommendations to improve the program:

- 1) Continue to check for self-inspection records on site.
- 2) Remember to implement all of the new NPDES requirements during the plan review process. Ensure sequence for converting sediment basins to permanent stormwater measures (including dewatering sequence), stream crossing sequence/detail, and slope drains are considered during the plan approval process.
- 3) Organize paperwork in files to adequately document the plan review process, including calculations, DWR authorizations, and sites that fall in the Upper Falls Lake Watershed, etc.

A summary of the review will be presented to the Sedimentation Control Commission (SCC) on February 4, 2016. Staff would recommend no decision be made regarding this delegation until the lead erosion control position is filled. An additional review of the Durham Program was recently cancelled due to inclement weather, this review will be re-scheduled and additional assistance will be provided to this delegation. Staff will provide an update at the May Commission meeting, based on the Commission's decision. Thank you again for the efforts of you and your staff to protect the State's waters from sedimentation.

Sincerely,

Karyn Pageau, EI, CPESC  
Assistant State Sedimentation Specialist

Ashley Rodgers, PE  
State Sedimentation Specialist

cc: John Holley, PE, CPESC, Raleigh Regional Engineer  
Joe Dupree, Senior Environmental Specialist  
Tessa Monday, Environmental Engineer





Site 1 – Installation of measures just beginning, site still vegetated.



Site 2 – Bare slopes of sediment basin being converted to Stormwater pond.



Site 3 – Offsite sediment downstream of sediment basin and skimmer outlet.



Site 4 – Offsite deposition in jurisdictional stream.