

## **Local Program Report to the SCC Guilford County, January 30, 2020**

On January 30, 2020, personnel from the NCDEQ, Land Quality Section, conducted a review of Guilford County's Erosion and Sedimentation Control Program. Guilford County was last reviewed on 7/27/17. The County has 2 staff members that currently contribute 2 full time equivalents to the erosion control program. The Program is currently in the process of hiring a second inspector, which would add one FTE to the program. The County requires a sediment and erosion control plan for sites that have a total land disturbance of a one acre or more or any disturbance within Tier 1 or Tier 2 of the critical watershed area. In the 2018-2019 fiscal year, Guilford County reviewed 59 erosion and sedimentation control plans, approved of 43, and disapproved 20. In the same time frame the County stated they conducted 1405 inspections, issued 1 NOV, and 1 stop work order. The County states that they will hold building permits as another means to achieve compliance. Preconstruction meetings are required for all approved projects before a grading permit is issued. Guilford County currently has 124 active projects. During our review of the program, we reviewed four sets of plans, as well as inspected four job sites. DEMLR staff had received multiple citizen complaints from two of these projects prior to the review of the local program.

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

### **1. Summersfield Ridge**

This project consists of 11.3 acres disturbed acres for residential development. This project is one of the two sites for which DEMLR had received compliant calls from the public. The file for this project contained the plan, approval letter, inspection reports, calculations, deed, and the FRO form. Inspection reports could use more detail, including site activity, project phase and noting any progress the contractor has made towards compliance if any. The plan was received on 5/31/2019 and approved on 7/5/2019. This plan review was completed outside of the 30 day statutory limit mandated by the state law. The approved plans were adequate. This site has received 5 inspections, all of which appeared to have been conducted after DEMLR had received complaint calls and notified the County. The last inspection for the site was conducted on 1/28/2020 and was found to be out of compliance for failure to provide groundcover, failure to install all reasonable measures to keep sediment onsite, unprotected slopes, and failure to maintain measures, as well as offsite sedimentation into a creek. No NOVs or CPAs have been issued to this site. During our inspection, we saw that the contractor had done a lot of work to remedy the violations noted in the past inspections. Matting had been installed on all roadside diversion ditches, construction entrances where installed on individual lots, and new check dams and silt fence outlets where installed; however, the offsite sediment remained in the creek and DWR had not yet been contacted about clean up.

### **2. Angels Landing**

This project consists of 5.7 disturbed acres for residential development. This project is one of the two sites for which DEMLR had received compliant calls from the public. The file for

this project contained the plan, approval letter, calculations, inspection reports, FRO form, and the deed. The plan was received on 7/17/2019 and approved on 7/27/2019. The approved plan was adequate. The site has had 3 inspections, all of which appeared to have been conducted after DEMLR had received complaint calls and notified the County. The most recent inspection was performed on 1/27/2020, during which the site was found to be out of compliance. DEMLR staff conducted an inspection after receiving multiple complaints on this site. During this inspection the DEMLR inspector noted that the site was actively mass grading and found that no measures had been installed on the site. The site has not received any NOV's or CPAs from the local program at this time. During our inspection, the site continued to be out of compliance; however, the contactor had halted all grading work and began working towards compliance. Perimeter silt fence had been installed around the entire disturbed area, silt fence outlets had been constructed at the discharge points, diversion ditches and a few check dams had been constructed, and skimmer basins were in the process of being installed. DEMLR staff and County inspectors followed the trail of sediment that had left the limits of disturbance and found that all sediment had remained within the property line.

### **3. Aydogdu**

This project consists of 3.8 disturbed acres for residential development. The file for this project contained the plan, approval letter, calculations, inspection reports, deed, and the FRO form. The plan was received on 5/7/2019 and was approved on 6/6/2019. The approved plan was adequate. The site has been inspected 3 times. The site was last inspected on 9/27/2019 and was found to be in compliance at the time. No NOV's or CPAs have been issued to this site at the time of our review. During our inspection the site was out of compliance for failure to follow the approved plan resulting in slight sediment outside of the limits of disturbance in two areas, but all sediment remained within the property line. On the low end of the site a culvert was installed not according to the approved plan. While the culvert was designed to divert water from one side of the project towards the skimmer basin, it instead directed the water towards a silt fence outlet that was not designed to handle the drainage area. This resulted in slight sedimentation outside the limits of disturbance. Additionally, there were multiple unprotected stockpiles on site, one next to the skimmer basin and another next to a silt fence outlet. In another location on site a silt fence outlet was installed in the wrong location resulting in the silt fence at the planned outlet to be overwhelmed and undermined. Slight sedimentation was seen beyond the limits of disturbance outside the undermined silt fence. Both the construction entrance and the skimmer basin on site appeared to be well maintained.

### **4. The Summit Church**

This project consists of 8.13 acres for the construction of a church. The file for this project contained the plan, approval letter, calculations, inspection reports, deed, and the FRO form. The plan was received on 3/27/2019 and was approved on 4/26/2019. The approved plan was adequate. The site has been inspected 1 time. The site was last inspected on 9/20/2019 and was found to be out of compliance. No NOV's or CPAs have been issued to this site at the time of our review. During our inspection the site remained

out of compliance for failure to maintain devices and unprotected and steep slopes. The site contained numerous stockpiles that lacked any sort of protection and exceeded the maximum slope requirements. A handful of inlets required maintenance as the inlet protection that had been installed appeared to be clogged. Riprap and energy dissipaters needed to be repaired or in some cases needed to be installed at the end of discharge pipes. At the back of the site, the contractor had installed an unlined or vegetated diversion ditch outside of the skimmer basin discharge, resulting in the clean water discharge to come into contact with sediment. The construction entrance and both skimmer basins on site were well maintained. Inspectors also noted well a few well-maintained diversion ditches and check dams as well as adequate groundcover across the site including many of the sloped areas.

### **Positive findings:**

During our review we found a number of positive aspects about Guilford County's local erosion control program including:

- All approved plans had adequate phasing and sequencing.
- The County require applicants to include the DEMLR NPDES plan sheets in their plan submittals in order to receive an approval.
- Preconstruction meetings required for all projects.

### **Issues Noted and Required Actions:**

During our review we found that Guilford County's local erosion control program had a few deficiencies including:

- A plan review was conducted outside of the 30-day time frame we are given to review plans.
- Infrequent site inspections.
- Sites not following approved plan installing required measures.
- Sites not providing adequate groundcover within timetables.
- Sites with steep and unprotected slopes.

The County shall implement the following changes to correct the deficiencies noted above:

- Plan reviews must be conducted, and a decision rendered within 30 days of receipt. G.S. 113A-61(b)
- Periodically coordinate with the Winston-Salem Regional Office to conduct site inspection alongside County staff.
- Ensure that all sites are installing all temporary and permanent erosion control measures as shown in their approved plan. G.S. 113A-57(5); 15 NCAC 4B.0113
- Ensure sites are establishing groundcover within timetables. G.S. 113A-57(3); 15A NCAC 4B.0107(b)
- Ensure the steepness of slopes on site do not exceed design standards. G.S.113A-57(2)

### **Additional Recommendations for Improvement (Optional changes):**

DEMLR staff has also put together a list of recommendations, or option items, to improve the program:

- Issue NOVs to sites in violation of the SPCA or local ordinance. NOVs should be issued for offsite sedimentation, especially into waterways. Contact DWR if there is any sedimentation in a waterway.
- Increase inspection rates of permitted sites, especially for any sites previously found out of compliance.
- Increase the programs number of field inspectors in order to reduce time between inspections.
- Increase details added to inspection reports including site activity, project phase, and work towards compliance.
- Walk sites with site supervisor during inspections and show them what you noted during your inspection.

### **Conclusion:**

During our review we found that Guilford County's Locally Delegated Erosion and Sediment Control Program had a number of deficiencies leading to insufficient implementation of the program.

Based on the review, staff will recommend that Guilford County's Erosion and Sedimentation Control Program be placed on "probation" for a nine months.

This report has been prepared based on the review of Guilford County's Local Program conducted on 1/30/2020. This report will be presented to the Sedimentation Control Commission (SCC) on February 20, 2020.