

**CITY OF DURHAM**

Department of Public Works

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February 25, 2008

To: All Consultants and Development Design Professionals Practicing in Durham, NC

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SUBJECT: Level Spreaders

On Monday, March 24, 2008, the Stormwater Services Division (SSD) will begin to regulate more strictly all level-spreader devices constructed or proposed to be constructed in the City of Durham. This increased regulation is precipitated by a State of North Carolina Department of Environment and Natural Resources requirement that the City track and regulate the design and long-term maintenance of all level spreaders constructed in the City of Durham. Provided below, is a detailed description of how the City intends to regulate level spreaders beginning on March 24, 2008. These new regulations will apply to all level spreaders that have not yet been approved for construction by SSD. It should be understood that site plan approval does not constitute construction approval.

Site Plan Review

During the site plan phase of a project, the City will ensure that every proposed concentrated stormwater outfall into a stream buffer (i.e., Neuse, Cape Fear, WSO, etc.) will include a level-spreader system (or an approved equivalent) as a part of the outfall design. The efficacy of providing a level spreader system (or an approved equivalent) at the outlet end of a roadway culvert, an existing through drainage storm system, or a water quality treatment BMP (such as a wet pond, a stormwater wetland, or a bioretention area) will be evaluated during the site plan phase of a project.

The site plan drawings shall show the location of the main components of each level spreader devices (e.g., the flow-splitter structure, the forebay, the level spreader area, and the bypass outfall). The SIA shall include preliminary sizing information for the flow splitter and the level spreader as well as a discussion of the vegetated filter strip downstream of the proposed device. Construction Drawing (CD) quality design details and calculations will not be required during the site plan phase.

The design of all level-spreaders shall be in conformance with the most recent North Carolina Division of Water Quality Stormwater BMP Manual (DWQ Manual), with the exception of the provision of a by-pass channel to the stream. The cutting of a channel from the by-pass outfall to the stream will, in most instances, be prohibited. In-lieu of the provision of such a channel, the by-pass outfall shall be directed to a natural draw and ended at that point. In accordance with the most recent DWQ Manual, if site constraints will not permit the installation of a level spreader device upstream of a Neuse buffer, an alternate BMP, capable of removing 30% of the TN load from the outfall will be required. Additional questions regarding alternate BMPs should be directed to DWQ. Any proposed alternate BMP will require review, approval, and permitting as a separate BMP by SSD.

In accordance with current City policy, each level spreader device, as well as its graded maintenance access, shall be placed in a stormwater management facility easement. In conventionally designed residential subdivisions, all level spreader devices shall be placed on open space property and not on private residential lots.

Construction Drawing (CD) Review

During the CD phase of the project, the City will review more closely the fine details for the design of each level spreader device. To facilitate this review, the design of each device shall be shown in plan view on the overall grading and drainage sheet(s) in the CDs. In addition, a separate site specific detail sheet shall also be provided in the CDs for each device. This detail sheet shall include a scaled plan and profile of the facility, construction specifications, and any associated component details. All required design calculations, including a summary sheet, shall be included in the signed, sealed, and dated stormwater design calculations submitted with the CDs.

Prior to final CD approval and the release of water and sewer permits on a project, the following administrative items shall be completed for each level spreader device proposed on the plan:

1. **Agreement.** A Stormwater Facility and Operation and Maintenance Agreement shall be executed between the City of Durham and the owner of the project.
2. **Surety.** In accordance with the aforementioned Agreement, an acceptable surety shall be provided to the City of Durham. At this time, the surety amount will be \$0. However, an engineer's construction cost estimate for the construction of each level spreader device will be required.
3. **Permit Fee.** A "modified" BMP permit fee shall be paid to the City. The current BMP permit fee is \$3,500 per facility. The permit fee for a level spreader device will be \$700 per facility and will be effective for all level spreaders approved for construction on or after July 1, 2008. Until July 1, 2008, a permit fee will not be charged for any level spreaders approved for construction. This "modified" BMP permit fee for level spreaders will cover the City's development review and field assessment costs as well as annual maintenance certification administration costs. It should be noted that the permit fee for all other BMPs will remain at \$3,500 per facility.
4. **Opinion of Title.** An opinion of title concerning the ownership of the property on which the device is to be installed shall be provided to the City. The property owner identified in this "opinion" shall match the Permittee identified in the Agreement and on the surety documents.

NOTE: A level spreader device at the outlet end of another structural BMP (e.g., a "peak shaving" dry pond), will be treated as a separate BMP.

As-Built Review

As-builts for all level spreader devices shall be submitted in accordance with the City's current as-built submittal processes and protocols.

Annual Maintenance Certifications

In accordance with the recorded agreement, all level spreaders shall be certified annually by a qualified professional in accordance with the City's current BMP Annual Maintenance Certification Protocol.

If you have any questions or desire additional information regarding the above, please contact me by phone at 919/560-4326 or by e-mail at Robert.Joyner@durhamnc.gov.