

# Field Checklist

for

## Level Spreader-Vegetated Filter Strip Systems

Date of Certification Assessment: \_\_\_\_\_

Assessing and Certifying NCPE: \_\_\_\_\_ Seal:

SCM Facility Name: \_\_\_\_\_

Access Address: \_\_\_\_\_

PIN/s of Parcel/s Where the Facility is Sited: \_\_\_\_\_

### CHECKLIST

**All items in this checklist must be compliant.**

*If an item is not applicable, write "N/A" next to the item.*

*If the engineer believes the non-compliant item still meets its intended purpose and is therefore acceptable, he/she must include the following in the "Additional Comments" box at the end of this form:*

- *A description of how the non-compliant item deviates from the standards and/or approved construction drawings, and*
- *An explanation of why this deviation is acceptable and how the deviation still meets the intended purpose behind the requirement.*

#### **A. Drainage Area**

- The drainage area to the facility is as indicated in the construction drawings.
- The drainage area to the facility is 100% stabilized.

#### **B. Easements and Accessibility**

- The SCM access way as constructed matches what is shown on the recorded final plat and is fully contained in the SCM Access and Maintenance Easement. The SCM Access and Maintenance Easement is clear of obstructions and traversable by anticipated maintenance equipment.
- Unobstructed maintenance vehicle access has been provided to the control structure and level spreader, and meets the following conditions per field observation and survey spot shot data:
  - It is a minimum of 10 feet wide.
  - It has a maximum centerline grade of fifteen percent (15%).
  - It has a maximum cross-slope of ten percent (10%).
- Unless it has been surfaced with gravel, asphalt, concrete, etc., in accordance with approved construction drawings, 85% of the SCM Access and Maintenance Easement has achieved a healthy stand of grass.

## C. Flow Splitter

- The flow splitter (FS) structure is reinforced concrete.
- The FS diameter or opening dimensions is/are \_\_\_\_\_.
- The FS appears to be sound.
- All orifices, ports, pipes, and weirs have been installed in accordance with the construction drawings.
- The FS is free of debris or obstructions.
- If a high-flow bypass has been provided, energy dissipation prior to entering the bypass channel has been installed in accordance with the approved construction drawings.

## D. Forebay

- A forebay, with an armored spillway to the blind channel-linear wetland, has been installed in accordance with the construction drawings.
- All accumulated sediment and other debris in the forebay has been removed.

## E. Blind Swale

- The size, shape, width, and depth of the blind swale are in accordance with the construction drawings.
- 85% of the wetland/wet meadow plantings proposed in blind swale are thriving.
- All accumulated sediment and other debris in the blind swale have been removed.

## F. Level Spreader Lip

- The level spreader lip (LSL) is reinforced concrete unless specified otherwise in the approved construction drawings.
- The LSL is of the length approved in the construction drawings.
- The LSL structure/leveler plate is level, and there are no locations where concentrated flows are discharging across the crest of the structure.
- The ends of the LSL have been contoured, with appropriate reinforcement, into the existing topography, and flows are not exiting the blind swale around the ends of the LSL.
- A minimum 3-foot width of a 3-inch layer of washed #57 stone has been installed immediately downstream of the LSL, and the surface elevation of this stone layer is approximately 2 inches below the crest of the LSL.

## G. Vegetated Filter Strip (VFS)

- The length, width, gradient, cross-slope, and vegetation for each component of the VFS are in accordance with the construction drawings.
- Flow across the VFS is even, and sheet flow is sustained throughout the length of the VFS.
- For an engineered filter strip (EFS), the entire EFS was covered with a 6-inch layer of topsoil prior to the installation of sod.

- For an EFS, the sod installed was grown in a non-clayey environment.
- For an EFS, 100% of the EFS and all slopes draining to the EFS have achieved a healthy stand of turf grass
- Velocities across the VFS are not causing erosion either within or downstream of the VFS.
- For riparian buffers, the vegetation in the VFS was not disturbed during LS construction, unless such disturbance was approved specifically in the site plan and construction drawings.

## H. Bypass Channel

- Bypass flows that are directed into a natural draw do not appear to be eroding the natural draw (i.e., banks of the draw not becoming incised, no sediment deposition in or at end of draw).
- Bypass flows are being directed into a reinforced bypass conveyance (either a channel or a pipe) in accordance with the approved plans. Any deviation from or revision to the approved plans is documented by engineering calculations demonstrating that, per 15A NCAC 02H .1003(5), the bypass channel does not cause erosion downslope of the discharge point during the peak flow from the 10-year storm event.

Additional Comments by Certifying Engineer: