



Stormwater Operation and Maintenance Plan

WET POND

Regular inspection and maintenance are necessary to preserve long-term functionality of Stormwater Control Measures “SCMs” per the original design intent. This Plan outlines the Town of Chapel Hill requirements for regular inspection and maintenance of Wet Pond SCMs. The Owner as defined in the Agreement shall keep a copy of this Stormwater Operations and Maintenance Plan, the SCM Inspection and Maintenance Log, and a copy of the approved As-Built Plans in a known set location and made available to the Town of Chapel Hill upon request.

Annual inspections shall be performed by a qualified licensed Professional Engineer or Landscape Architect. Routine maintenance and inspection shall be performed by a qualified professional with NCSU Stormwater Inspection and Maintenance Certification or similar certification.

The qualified professional shall maintain a **SCM Inspection and Maintenance Log** and make available to the Town of Chapel Hill upon request. All inspections shall be recorded in the log according to the frequency in the Inspection and Maintenance Table (Table 1 below) and within 24 hours after storm events that exceed 1.0 inch of rainfall. Any deficit SCM elements noted during inspection shall be recorded in the log and immediately corrected, repaired, or replaced. All routine and corrective/emergency maintenance activities shall be recorded in the log. The log template can be found at the Town of Chapel Hill Stormwater Control Measures [website](#).

An **Annual Inspection and Maintenance Report** shall be submitted to the Town of Chapel Hill Stormwater Department. The report shall detail the status of the SCM and maintenance performed as outlined in the [SCM Inspection Report Guidelines](#). A copy of the annual report shall be submitted to the Town of Chapel Hill Stormwater Management Division beginning one year after issuance of the Certificate of Occupancy.

REQUIRED INSPECTION AND MAINTENANCE TASKS FOR WET POND

NOTE: The following inspection and maintenance table is not an exhaustive list of inspection and maintenance tasks. It is the responsibility of the professional inspecting the facility to perform comprehensive maintenance for the SCM to be operational.

Table 1: Inspection and Maintenance Provisions for Wet Pond

FREQUENCY OF INSPECTIONS	MAINTENANCE ACTIVITIES
Upon completion of construction	<ul style="list-style-type: none"> • Watering is needed twice a week until the plants on the vegetated shelf and perimeter of the basin become established (commonly 6-8 weeks), depending on rainfall.
Once a quarter	<ul style="list-style-type: none"> • Mow grass surface areas to a height of approximately six to eight inches and remove grass clippings. • Check inlet system/forebay and outlet device for any obstructions or clogging. Remove accumulated grit, leaves, and debris and dispose off-site. • Remove any trash within the pond area. • Inspect for ponding and bare or eroding areas and make adjustments before the next rainfall as necessary.
Twice during the growing season	<ul style="list-style-type: none"> • Pull out dead or diseased plants, weeds, or invasives preferably by hand.
Annually	<ul style="list-style-type: none"> • Have the embankment inspected by a dam safety expert. • Remove woody species on or near embankment area and maintenance access. A dam safety specialist should be consulted to remove any trees. • Prune trees and shrubs to best professional practice. Thin vegetation so that sunlight can penetrate the pond surface.
As needed (Typical Problems)	<p>Vegetation</p> <ul style="list-style-type: none"> • If the wet pond suffers from dead or diseased plants or overgrown with invasive species, evaluate the source of the problem: soils, hydrology, species, and/or type of disease to determine the cause of the plant failure. <ul style="list-style-type: none"> ○ Remediate the problem by selecting new species and/or implementing an eradication plan for invasives. ○ Ensure appropriate plant maintenance is occurring. ○ A one-time fertilizer application to establish ground cover is permissible if a soil test indicates it is necessary. No portion of the wet pond system shall be fertilized after the initial fertilization that is required to establish the vegetation. ○ Consult with the Town of Chapel Hill Stormwater Management Division. If algal growth covers 50% of the area, consult a professional to remove and control the algal growth. • If cattails, phragmites, or other invasive plants exceed 50% of the wet pond, remove invasives by physical removal or wiping them with a herbicide. Consult the Town of Chapel Hill before any aquatic herbicide is used. Site specific approval is required. Extended periods of dewatering may be a possible treatment approach for reducing invasives.

- Remediate bare soils or erosive gullies.
 - In perimeter areas, regrade the soil to remove the gully, plant a ground cover and water until it is established. If soil test shows that the pH has dropped, dolomitic lime shall be applied as recommended.
 - Within the pretreatment area, provide erosion control devices such as reinforced turf matting or riprap to avoid future problems with erosion.

Structural integrity

- Replace or repair any cracked, separated or damaged inlet pipes, outfalls, impoundment walls or other structural elements.
- If dam embankment or emergency spillway needs maintenance, consult with a professional.

Functionality

- Sediment Accumulation
 - Maintain stable ground cover in the drainage area.
 - Sweep or vacuum sediment on pavement in the contributing drainage area.
 - If sedimentation or clogging is occurring in the inlet, design modification may be needed to ensure adequate drop or slope between inlet and filter bed.
 - If sediment has accumulated in the forebay area reducing its depth to 75% of the original design depth, remove the sediment off site, restabilize the area, and replace with clean rock. Search for the source of the sediment in the drainage area and remedy the problem if possible.
- If there are visible disturbances to the forebay design, make the necessary repairs to ensure that the forebay is functioning as intended.
- If evidence of a muskrat or beaver activity is observed, contact a professional to remove muskrat or beaver.
- If the basin must be drained for an emergency or to perform maintenance, the flushing of sediment through the emergency drain should be minimized to the maximum extent practical.

For additional information or if damage has occurred at the outlet which effects the receiving water, contact the Town at Chapel Hill Stormwater Management at 919-969-7246 (RAIN).