

# PLANTER BOX SCM DESIGN CHECKLIST

**Stormwater Management Division  
c/o Development Services Department**

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Raleigh, NC 27601  
Telephone (919) 996-3773

## I. PROJECT INFORMATION

Project Name: \_\_\_\_\_ Phase: \_\_\_\_\_  
 Project Address: \_\_\_\_\_ Disturbed Area (sf): \_\_\_\_\_  
 PIN: \_\_\_\_\_ Case #: \_\_\_\_\_ Submittal Date: \_\_\_\_\_  
 Previous Permit numbers (if applicable): \_\_\_\_\_  
 Zoning District: \_\_\_\_\_  
 Legal Name of Owner: \_\_\_\_\_  
 Owner Contact: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Owner Address: \_\_\_\_\_  
 Design Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Design Contact Email: \_\_\_\_\_  
 The regulatory drainage basin in which the site is located: \_\_\_\_\_  
 The water supply watershed in which the site is located: \_\_\_\_\_

Function of Facility [check all that apply]:	
<input type="checkbox"/>	Nutrient (Total Nitrogen) Reduction
<input type="checkbox"/>	Green Stormwater Infrastructure
<input type="checkbox"/>	TSS Reduction
<input type="checkbox"/>	Peak Flow Rate Attenuation
<input type="checkbox"/>	<input type="checkbox"/> 1-Year event
<input type="checkbox"/>	<input type="checkbox"/> 10-Year event
<input type="checkbox"/>	<input type="checkbox"/> 100-Year event
<input type="checkbox"/>	<input type="checkbox"/> Other [ _____ ]
<input type="checkbox"/>	<input type="checkbox"/> Other [ _____ ]

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- II. **SUBMITTAL REQUIREMENTS** - See COR Stormwater Management Design Manual Chapter 5 for additional guidance. This completed checklist shall be submitted to the City of Raleigh with any proposed Planter Box. All files shall also be submitted electronically via CD or flash drive.

Routed flows and water surface elevations (WSE) at SCM [as applicable]:			
Storm Event	Inflow	Outflow	WSE
1-Year			
10-Year			
100-Year			
____-Year			
Peak flow rates at immediate point of analysis to which the SCM drains:			
Condition	1-year	10-year	____-year
Pre-development			
Post-development			

General Design Criteria	
<input type="checkbox"/>	<b>Sizing:</b> The design volume of the SCM accounts for the runoff at full build-out from all surfaces draining to it (calculations provided in Stormwater Development Analysis).
<input type="checkbox"/>	<b>Clean Out After Construction:</b> SCM impacted by sedimentation and erosion control during the construction phase shall be cleaned out and converted to its approved design state.
<input type="checkbox"/>	<b>Maintenance Access:</b> SCM has been provided with adequate access per City standards.
<input type="checkbox"/>	<b>Easements (except for SCMs located on single family residential lots):</b> Includes maintenance access, entire SCM footprint, and an additional 10 ft or more around the SCM.
<input type="checkbox"/>	<b>Single Family Residential Lots:</b> Plats for residential lots that contain an SCM shall include the location of SCM, typical detail of SCM, and note that the SCM on the property is required to meet stormwater regulations and that the property owner may be subject to enforcement actions if the SCM is removed, relocated, or altered without prior approval.
<input type="checkbox"/>	<b>Operation and Maintenance (O&amp;M) Agreement.</b>
<input type="checkbox"/>	<b>Operation and Maintenance (O&amp;M) Plan.</b>
<input type="checkbox"/>	<i>Operation and Maintenance (O&amp;M) Manual Submittal Checklist.</i>
<input type="checkbox"/>	<b>Erosion Protection:</b> The SCM inlets and outlet have been designed to protect areas downstream of the discharge points from erosion resulting from peak flows for the 10-year storm event.

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Specific Planter Box Design Criteria	
<input type="checkbox"/>	<b>Drainage Area:</b> The ratio of planter area to treated impervious area is at least 7%.
<input type="checkbox"/>	Ratio: _____ %
<input type="checkbox"/>	<b>Vegetation:</b> Self-sustaining with minimal pesticide and fertilizer requirements.
<input type="checkbox"/>	<b>Filter Media:</b> Filter media consists of either sand, gravel, and topsoil <b>OR</b> mulch and compost.
<input type="checkbox"/>	<b>Growing Media:</b> At least 24 inches of growing media has been provided.
<input type="checkbox"/>	<b>Gravel Layer:</b> At least 12 inches of washed round or crushed rock underlies the growing media, separated by a layer of 2-3 inches of pea gravel.
<input type="checkbox"/>	<b>Infiltration Rate:</b> The infiltration rate in the planter is at least 2 inches per hour.
<input type="checkbox"/>	<b>Drawdown Time:</b> Planter box draws down in 3-4 hours after storm event.
<input type="checkbox"/>	Drawdown Time: _____ hr
<input type="checkbox"/>	<b>Planter Dimensions:</b> Infiltration planters are at least 24 inches wide and flow-through planters are at least 18 inches wide.
<input type="checkbox"/>	Dimensions: _____
<input type="checkbox"/>	<b>Planter Construction:</b> The planter box is constructed of stone, concrete, or brick. <i>Note: Pressure-treated wood may be allowable provided it can be shown to not leach toxic chemicals that could contaminate the stormwater.</i>
<input type="checkbox"/>	The planter does not slope more than 0.5% in any direction.
<input type="checkbox"/>	Full or partial liners are utilized as applicable.
<input type="checkbox"/>	<b>Underdrains (as applicable):</b> Piping adheres to specifications provided in Section 5.6.2 of the Raleigh Stormwater Management Guidance Manual.

The SCM Plan Submittal shall also include the following elements:	
<input type="checkbox"/>	A plan view of the SCM, with grading and appropriate critical spot shots, has been provided.
<input type="checkbox"/>	A profile (showing all relevant component elevations and WSEs) through the riser, dam, and outlet structure/outfall has been provided.
<input type="checkbox"/>	Details of other required SCM elements have been provided.
<input type="checkbox"/>	All supporting design calculations (including all applicable site design calculations and drainage area exhibits) have been provided.

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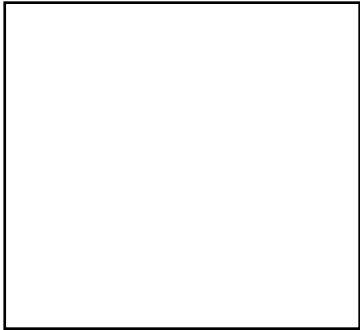
### III. PROFESSIONAL CERTIFICATION

Name: \_\_\_\_\_

Contact Email: \_\_\_\_\_

Contact Phone Number: \_\_\_\_\_

Professional Seal:



FOR REVIEW ONLY