STORMWATER DEVELOPMENT ANALYSIS (SDA) SUBMITTAL CHECKLIST

Stormwater Management Division

c/o Development Services Department

One Exchange Plaza, 4th Floor

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: _____________________________

II. Parcel Information

Parcel Size (sf): _______________ Existing Impervious (sf): _______________________

Proposed Impervious (sf): _______________ Maximum Allowable Impervious (sf): _______

Previous Case Number(s): _______________________________________________________

III. SUBMITTAL REQUIREMENTS - See COR Stormwater Management Design Manual

Section 2.6 for additional guidance. Please note that some exemptions to the

requirements below may apply for qualified small sites¹ (see Overall Small Site

Development Submittal Checklist for additional guidance). This completed checklist

shall be submitted to the City of Raleigh with any Stormwater Development Analysis.

All files shall also be submitted electronically via CD or flash drive.
**STORMWATER DEVELOPMENT ANALYSIS SUBMITTAL CHECKLIST**

### Items to be included in Stormwater Development Analysis Submittal:

- SDA materials bound together, with each appropriate section tabbed, in a three-ring notebook
- Cover sheet that includes the project name, case number, PIN, address, licensed design professional’s seal, signature, and date
- Table of Contents shall be provided. Each subsection identified in Section 2.6.2 of the Stormwater Design Manual shall be included in the table of contents and its page number provided.
- Project narrative and all applicable items (as detailed in Chapter 2, Section 2.6.2 of the Stormwater Management Design Manual)
- Reference material (including, but not limited to, USGS 7.5 Minute Quadrangle Map, Web Soil Survey Map, NFIP Flood Insurance Rate Map, Wake County or Durham County published soil survey map, Atlas 14 rainfall data, etc. as detailed in Chapter 2, Section 2.4 of the Stormwater Management Design Manual)

### Drainage Area Maps

1. Hydrologic drainage area maps shall be provided in a 24-inch by 36-inch format to a scale no less than 1 inch = 30 feet (unless approved otherwise on a case by case basis)
2. Large developments or tracts of land, where a smaller scale can limit the number of sheets and break lines may provide adequate justification for utilizing a scale smaller than 1 inch = 30 feet
3. Pre- and post-development and SCM drainage area land use maps for the nutrient calculations must be to a scale no smaller than 1 inch = 100 feet (unless a smaller scale is allowed on a case specific basis)
4. Generally, the City discourages multiple sheets with break lines when a better alternative exists to minimize multiple sheets by using a smaller scale

### Pre- and Post-Development Analysis

1. Change in Impervious Area between Pre- and Post ______________________ sq ft
2. Change between Pre- and Post-Development:

<table>
<thead>
<tr>
<th>Outfall ID</th>
<th>Runoff - with Detention (cfs)</th>
<th>Runoff - without Detention (cfs)</th>
<th>Velocity (ft/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outfall 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outfall 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outfall 3</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Outfall 4</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Is the outfall location(s) from post-development different than pre-development conditions?

   - Outfall - 1 □ Yes □ No
   - Outfall - 2 □ Yes □ No
   - Outfall - 3 □ Yes □ No
   - Outfall - 4 □ Yes □ No

4. Has the flow type (i.e. sheet flow, concentrated flow) of post-development runoff changed from pre-development conditions at the outfall location(s)?
   □ Yes □ No

### Downstream Assessment and zone of influence

- Also reference Downstream Assessment Checklist

Page 2 of 4
<table>
<thead>
<tr>
<th></th>
<th>Water quality requirements and calculations(^2), as applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Calculations and quantification of loading rates for Nitrogen and Phosphorus are included with the Submittal</td>
</tr>
</tbody>
</table>
|   | 2. Which City-approved tool or method was used to calculate nutrient loading rates?  
|   | ___________________________________________________________ |
|   | 3. If green stormwater infrastructure (GSI) is used to mitigate water quality requirements, please refer to the GSI Checklist |
|   | 4. Complies (as applicable) with the requirements of the Urban Watershed Overlay Protection District (see UDO Section 9.5.1.)  
|   | Buffer Width: ______________ % Impervious Cover ______________  
|   | Stormwater Measure Onsite: ____________________________________ |
|   | 5. Complies (as applicable) with the requirements of the Falls Watershed Overlay Protection District (see UDO Section 9.5.2.)  
|   | Buffer Width: ______________ % Impervious Cover ______________  
|   | Stormwater or GSI Measure Onsite: ____________________________  
|   | Nitrogen Loading Rate: ______________ Phosphorous Loading Rate: ______________ |
|   | 6. Complies (as applicable) with the requirements for the Swift Creek Watershed Overlay District (see UDO Section 9.5.3.)  
|   | Buffer Width: ______________ % Impervious Cover ______________  
|   | Stormwater or GSI Measure Onsite: ____________________________  
|   | Nitrogen Loading Rate: ______________ Phosphorous Loading Rate: ______________ |

|   | Flood Study Requirements\(^2\) (as detailed in Chapter 7 of the Stormwater Management Design Manual) – also reference the Flood Study Submittal Checklist |
|   | Completed appropriate SCM Checklist for each SCM proposed |
|   | SCM and other design calculations |

\(^1\) A small site may be considered qualified for exemption if the following conditions are met; development is below the maximum impervious area limitations for the zoning district, the proposed drainage patterns leaving the site are unaltered, and there is no documented downstream structural flooding.

\(^2\) Qualified small sites may be exempt from the requirements for peak flow mitigation, flood study and downstream assessment. Small sites not located in Watershed Protection Overlay districts are exempt from water quality reporting and nutrient loading requirements. Qualified small sites in Watershed Protection Overlay districts, if not increasing impervious area over approved existing conditions impervious area, are exempt from water quality reporting requirements.
IV. PROFESSIONAL CERTIFICATION

Name: __________________________________________________________
Contact Email: _________________________________________________
Contact Phone Number: __________________________________________
Professional Seal:

[Signature]

Page 4 of 4