

# OVERALL LARGE SITE DEVELOPMENT SUBMITTAL CHECKLIST

**Stormwater Management Division**  
**c/o Development Services Department**  
 One Exchange Plaza, 4<sup>th</sup> 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. SUBMITTAL REQUIREMENTS – This checklist is intended to guide a large site development through the major items that may apply to their projects. Compliance with the entirety of the Unified Development Ordinance (UDO) and Stormwater Management Design Manual (SWMDM) is required. This completed checklist shall be submitted to the City of Raleigh with any large site development project. All files shall also be submitted electronically via CD or flash drive.**

Required Reference Material	
<input type="checkbox"/>	Reference material (including, but not limited to, <a href="#">USGS 7.5 Minute Quadrangle Map</a> , <a href="#">Web Soil Survey Map</a> , <a href="#">NFIP Flood Insurance Rate Map</a> , <a href="#">Wake County</a> or <a href="#">Durham County</a> published soil survey map, <a href="#">Atlas 14 rainfall data</a> , etc. as detailed in Chapter 2, Section 2.4 of the Stormwater Management Design Manual)

Active Stormwater Controls – <a href="#">UDO Section 9.2.2</a>	
Applicable to all large site developments which add any new impervious areas	
<input type="checkbox"/>	Existing Impervious Surface Area (sf): _____
<input type="checkbox"/>	Proposed Impervious Surface Area (sf): _____
<input type="checkbox"/>	Maximum Allowable Impervious Area, if applicable (sf): _____

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<input type="checkbox"/>	No increase in impervious surface area proposed.
<input type="checkbox"/>	Nutrient loading compliance for proposed increase in impervious surface area:
<input type="checkbox"/>	Exemption to Nutrient Loading Requirements Claimed (Y/N): _____ If Yes, specify: _____
<input type="checkbox"/>	Complete "Stormwater Development Analysis" section of checklist below to determine submission requirements.
<input type="checkbox"/>	Compliance shown via (check one): Conventional treatment: _____ or Green Stormwater Infrastructure: _____ If Green Stormwater Infrastructure is utilized for nutrient control compliance, include <i>Green Stormwater Infrastructure (GSI) Submittal Checklist</i> .
<input type="checkbox"/>	Nitrogen buydown required (Y/N): _____
<input type="checkbox"/>	Stormwater Control Measure(s) Proposed for Nutrient Control (Y/N): _____ Include all appropriate <i>Stormwater Control Measure (SCM) Design Submittal Checklist</i> for each proposed measure.
<input type="checkbox"/>	Rate of runoff control compliance for proposed increase in impervious surface area:
<input type="checkbox"/>	Exemption to Rate Control Requirements Claimed (Y/N): _____ If Yes, specify: _____ If exemption to rate control requirements is claimed due to no benefit or adverse impacts from detention under <a href="#">UDO 9.2.2.E.2.d. or e</a> , a Downstream Assessment is provided as outlined in SWMDM Section 2.8. Include <i>Downstream Assessment (DSA) Submittal Checklist</i> .
<input type="checkbox"/>	Stormwater Control Measure(s) Proposed for Rate Control (Y/N): _____ Include all appropriate <i>Stormwater Control Measure (SCM) Design Submittal Checklist</i> for each proposed measure.

### Lot Grading Plan – SWMDM Section 2.5

**Applicable to all large site development projects except the following:**

- Residential:** additions, decks, patios and other small accessory structures or improvements, as long as drainage patterns are not altered leaving the property
- Commercial:** interior alterations that do not include exterior work

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | No Lot Grading Plan is required for this project, as it meets one of the exemptions noted above.    |
| <input type="checkbox"/> | Lot Grading Plan required and provided. Include <i>Lot Grading Plan (LGP) Submittal Checklist</i> . |

### Stormwater Development Analysis (SDA) – SWMDM Section 2.6

**Applicable to all large site development projects where:**

- Existing or proposed drainage patterns are to be changed
- Increase in impervious area is proposed (over existing or previously approved)
- Existing conveyance system is to be replaced or supplemented
- New conveyance system is proposed

**The following large site development projects may be exempted from SDA requirements:**

- Residential:** additions, decks, patios and other small accessory structures or improvements, as long as drainage patterns are not altered leaving the property
- Commercial:** interior alterations that do not include exterior work

- |                          |  |
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| <input type="checkbox"/> | No SDA is required for this project, as it meets one of the exemptions noted above. Note that a designer's letter may still be required. Please refer to Section 2.7 of the SWMDM. |
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<input type="checkbox"/>	SDA required and provided. Include <i>Stormwater Development Analysis (SDA) Submittal Checklist</i> .
<input type="checkbox"/>	A designer's letter has been submitted in lieu of an SDA in accordance with Section 2.7 of the SWMDM. Include <i>Designer's Letter Submittal Checklist</i> .

Downstream Assessment – SWMDM Section 2.8	
<p><b>Applicable to all large site developments meeting one or more of the following conditions:</b></p> <ul style="list-style-type: none"> <li>A structural flooding issue is identified by the City downstream of the site within the development's zone of influence;</li> <li>The site development changes flow type (i.e. changing sheet flow to concentrated flow) or location leaving the property</li> </ul> <p><b>A development may also voluntarily choose to perform a downstream assessment to potentially avoid on-site detention where it may not be required due to flow timing of the watershed per <a href="#">UDO Section 9.2.2.E</a>.</b></p>	
<input type="checkbox"/>	No Downstream Assessment is required for this project, as none of the above conditions apply.
<input type="checkbox"/>	Required for all submittals: Exhibit delineating the project's zone of influence has been provided for staff to verify that no documented downstream structural flooding exists within its limits. The zone of influence is the drainage area that extends to the point where the drainage area of the lot being analyzed is equal to 10% of the overall drainage area. Refer to SWMDM Section 2.8.4.1.
<input type="checkbox"/>	Downstream Assessment provided as outlined in SWMDM Section 2.8. Include <i>Downstream Assessment (DSA) Submittal Checklist</i> .
<input type="checkbox"/>	Downstream Assessment previously approved. A copy of previously approved downstream assessment and associated case number have been provided.

Land Disturbance – <a href="#">UDO Article 9.4</a> and SWMDM Chapter 6	
<p><b>Applicable to any project which will include land disturbing activities. Refer to SWMDM Section 6.2.1 for more information on what constitutes a land disturbing activity. A land disturbance (grading) permit is required when 12,000 sf or more are disturbed by any of the following:</b></p> <ul style="list-style-type: none"> <li>a single project or development plan (whether on one or multiple lots)</li> <li>multiple lots by the same person within the same subdivision (regardless of age)</li> </ul> <p><b>A land disturbance (grading) permit is also required for certain disturbances less than 12,000 sf as identified in <a href="#">UDO Section 9.4.4</a>.</b></p> <p><b>Projects disturbing less than 12,000 sf within a larger common plan of development must obtain coverage under the State's General Construction Stormwater Permit (NCG01), which requires an approved erosion and sediment control plan through either the COR or NC Department of Environmental Quality.</b></p>	
<input type="checkbox"/>	Limits of disturbance are clearly identified and quantified on the plans. Proposed area of land disturbance (sf): _____
<input type="checkbox"/>	A land disturbance (grading) permit is not required for this project.
<input type="checkbox"/>	A land disturbance (grading) permit is required for this project, and permit has been applied for and/or issued. The case number is: _____

## OVERALL LARGE SITE DEVELOPMENT CHECKLIST

Neuse Riparian Buffer and/or Stream/Wetland Impacts – <a href="#">UDO Section 9.2.3</a>	
<b>Applicable if surface water features are present on or within 150 feet of the lot that are depicted on either the <a href="#">USGS Quad Map</a> or published <a href="#">Soil Survey map</a> (see required reference materials) or <u>Jurisdictional Streams or Wetlands are present on the lot</u></b>	
<input type="checkbox"/>	No feature(s) depicted on USGS Quad Map and/or soil survey on or within 150 feet of the lot
<input type="checkbox"/>	Feature(s) is depicted on USGS Quad Map and/or soil survey on or within 150 feet of the lot
<input type="checkbox"/>	Feature(s) are not subject to the buffer rules. NCDEQ buffer determination letter provided.
<input type="checkbox"/>	Buffer(s) will not be impacted and are clearly depicted on the plan
<input type="checkbox"/>	Features(s) are subject to the buffer rules but not to the extent shown on Quad or soil survey, are clearly depicted on the plan and no buffer impacts are proposed. NCDEQ buffer determination letter provided.
<input type="checkbox"/>	Buffer(s) will be impacted and are clearly depicted on plan. NCDEQ authorization and/or variance letter and associated impact maps provided.
<input type="checkbox"/>	Jurisdictional streams/wetlands do not exist onsite. If necessary for confirmation, USACE Jurisdictional Determination provided.
<input type="checkbox"/>	Jurisdictional streams/wetlands exist onsite. USACE Jurisdictional Determination provided.
<input type="checkbox"/>	No impacts are proposed to jurisdictional streams or wetlands and these features are clearly depicted on the plan
<input type="checkbox"/>	Impacts are proposed to jurisdictional streams or wetlands and these features are clearly depicted on the plans. USACE 404 permit/ NCDEQ 401 certification approval letters and associated impacts maps provided.
<input type="checkbox"/>	Diffuse flow has been provided into any riparian buffer as required

Water Supply Watershed Requirements – <a href="#">UDO Article 9.5</a>	
<b>Applicable if the lot is located within any Water Supply Watershed Overlay District</b>	
<input type="checkbox"/>	Lot is not located within a Water Supply Watershed Overlay District (Falls Lake, Swift Creek, or Urban Watershed Overlay District)
<input type="checkbox"/>	Lot is within Falls Lake or Swift Creek Watershed Overlay District – Refer to <a href="#">UDO Section 9.5.2</a> and <a href="#">UDO Section 9.5.3</a> , respectively, for additional requirements
<input type="checkbox"/>	Compliant with Impervious Surface Coverage Table Connected to City Water/Sewer (Y/N): _____ Existing Maximum Impervious Restriction, if applicable (sf): _____ Proposed <a href="#">Impervious Area</a> (sf): _____; %: _____ Proposed <a href="#">Built Area</a> (sf): _____; %: _____
<input type="checkbox"/>	If Built Area exceeds 24%, use of green stormwater infrastructure is required. Include <i>Green Stormwater Infrastructure Submittal Checklist</i> .
<input type="checkbox"/>	Nitrogen and Phosphorus Loading Calculations have been provided using the SNAP Tool Nitrogen Loading Rate (lb/ac/yr): _____ [max: 2.2 lb/ac/yr] Phosphorous Loading Rate (lb/ac/yr): _____ [max: 0.33 lb/ac/yr]
<input type="checkbox"/>	Stormwater Control Measure(s) Proposed (Y/N): _____ Include all appropriate <i>Stormwater Control Measure (SCM) Design Submittal Checklist</i> for each proposed measure.
<input type="checkbox"/>	Nutrient Buydown Proposed (Y/N): _____ Note: 60% reduction with onsite SCM is required prior to becoming eligible for buydown

## OVERALL LARGE SITE DEVELOPMENT CHECKLIST

<input type="checkbox"/>	Exemption Claimed (Y/N): _____ If Yes, specify: _____
<input type="checkbox"/>	Any primary and secondary watercourse buffers are identified and shown on plans. Refer to <a href="#">UDO Section 9.2.3</a> and note that any watercourse (not only those shown on required reference material) requires these buffers.
<input type="checkbox"/>	Lot is within Urban Watershed Overlay District – See <a href="#">UDO Section 9.5.1</a> for additional requirements
<input type="checkbox"/>	Compliant with Impervious Surface Coverage Requirements in <a href="#">UDO Section 9.5.1.B.1</a> Existing Maximum Impervious Restriction, if applicable (sf): _____ Proposed <a href="#">Impervious Area</a> (sf): _____ ; %: _____
<input type="checkbox"/>	Stormwater Control Measure(s) Proposed to meet retention/detention/capture requirements (Y/N): _____ Include appropriate <i>Stormwater Control Measure (SCM) Design Submittal Checklist</i> for each proposed measure.
<input type="checkbox"/>	Exemption Claimed (Y/N): _____ If Yes, specify: _____
<input type="checkbox"/>	Any primary and secondary watercourse buffers are identified and shown on plans. Refer to <a href="#">UDO Section 9.2.3</a> and note that any watercourse (not only those shown on required reference material) requires these buffers.

Other Overlay Districts – UDO Sections <a href="#">5.5.2</a> and <a href="#">9.2.3</a>	
<b>Applicable to any lot located within the Metro Park Overlay District or Conservation Management Overlay District. Both overlay districts require the establishment of watercourse buffers, and the Metro Park Overlay district has additional restrictions related to impervious area and disturbed areas.</b>	
<input type="checkbox"/>	Lot is not located within the Metro Park Overlay District.
<input type="checkbox"/>	Lot is located within the Metro Park Overlay District. Refer to <a href="#">UDO Section 5.2.2</a> and <a href="#">UDO Section 9.2.3.A.3</a> .
<input type="checkbox"/>	No land disturbing activity is located within 32 feet of a Metro Park boundary, per UDO <a href="#">Section 5.2.2.D.1.b</a> .
<input type="checkbox"/>	Compliant with Impervious Surface Restrictions of <a href="#">UDO Section 5.2.2.E.2</a> Existing Maximum Impervious Restriction, if applicable (sf): _____ Proposed <a href="#">Impervious Area</a> (sf): _____ ; %: _____
<input type="checkbox"/>	If impervious surface coverage on the lot is greater than 30% but less than 45%, stormwater control measures have been provided to reduce nutrient loading by 25%. Calculations and appropriate <i>Stormwater Control Measure (SCM) Design Submittal Checklist</i> for each proposed measure are provided.
<input type="checkbox"/>	Any primary and secondary watercourse buffers have been identified and shown on plans. Refer to <a href="#">UDO Section 9.2.3</a> and note that any watercourse (not only those shown on required reference material) requires these buffers.
<input type="checkbox"/>	Lot is not located within a Conservation Management Overlay District.
<input type="checkbox"/>	Lot is located within a Conservation Management Overlay District.
<input type="checkbox"/>	Any primary and secondary watercourse buffers have been identified and shown on plans. Refer to <a href="#">UDO Section 9.2.3</a> and note that any watercourse (not only those shown on required reference material) requires these buffers.

## OVERALL LARGE SITE DEVELOPMENT CHECKLIST

Easements – SWMDM Section 2.9	
<b>Applicable to any lot located within City of Raleigh (COR) with:</b> <ul style="list-style-type: none"> <li>• <b>New or existing pipes, channels or swales</b></li> <li>• <b>Increases in flood levels due to development</b></li> <li>• <b>New Stormwater Control Measures (SCMs) and conveyance to and from them</b></li> </ul>	
<input type="checkbox"/>	New or existing pipes or channels serving more than 1 lot have been provided with easements as required and these easements are clearly depicted on plans.
<input type="checkbox"/>	New swales serving more than 1 lot, and which have runoff exceeding 3 cfs in a 10 year storm, have been provided with easements as required and these easements are clearly depicted on plans.
<input type="checkbox"/>	Newly concentrated stormwater discharge locations have been identified, provided with an easement as required, and are clearly depicted on plans. Easement extends until stormwater flow reaches a jurisdictional water body, a City right-of-way (ROW), or another public/private drainage easement.
<input type="checkbox"/>	All buffers or erosion hazard setback zones have been identified for any streams or channels and are clearly depicted on the plans.
<input type="checkbox"/>	Areas of increased flood levels have been depicted on plans and provided with a new flood storage easement as required. Calculations are provided to justify extent and elevation of flood storage easement.
<input type="checkbox"/>	Stormwater Control Measures and conveyance of stormwater to and from them have been provided with easements as required and these easements are clearly depicted on plans.
<input type="checkbox"/>	Proposed development receives runoff from upstream properties through a system that is already contained in an easement. A new easement is proposed to continue the system through the proposed development, regardless of the number of lots contributing or the runoff quantity. New easement is clearly depicted on plans.

Special Flood Hazard Areas (SFHA) – UDO Article 9.3 and SWMDM Chapter 7	
<b>Applicable to any lot located within City of Raleigh (COR) regulated special flood hazard areas: FEMA floodplain (including 1% future), flood hazard soils, COR approved local or drainage basin study</b>	
<input type="checkbox"/>	Lot is not located within COR regulated special flood hazard area
<input type="checkbox"/>	Lot is located within COR regulated special flood hazard area:
<input type="checkbox"/>	FEMA Floodplain - FEMA floodway, floodway fringe, and 1% future limits are clearly delineated on all relevant plan sheets. If cut/fill or obstruction is proposed within the FEMA floodway, flood study is required. Include <i>Flood Study Submittal Checklist</i> .
<input type="checkbox"/>	COR Regulated Flood Hazard Soils – Soil type(s): _____ Plans include extent and elevation of flood hazard soils.
<input type="checkbox"/>	COR approved Local Flood Study or Drainage Basin Study - Flood study number or name of Drainage Basin Study: _____
<input type="checkbox"/>	For any lot located within a Special Flood Hazard Area:
<input type="checkbox"/>	Plan identifies and labels all special flood hazard areas on relevant sheets
<input type="checkbox"/>	Map/exhibit included which identifies the areas of proposed obstructions or fill in the floodway fringe to demonstrate compliance with <a href="#">UDO Section 9.3.5.C</a> . (Maximum 50% fill)



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<input type="checkbox"/>	Cost Estimate of work to structure provided with application. If costs of improvements over the previous 5 years total 50% of structure's tax value, the entire structure must be brought into compliance with current floodplain regulations.
<input type="checkbox"/>	Non-substantial improvements: All improvements are proposed at or above the existing finished floor. Any proposed addition to an existing structure has shown compliance with <a href="#">UDO Article 9.3</a> & <a href="#">UDO Section 11.4.6</a> . Finished floor of the addition and all equipment serving the addition (HVAC, ductwork, etc.) are proposed to be elevated at or above the Regulatory Flood Protection Elevation (RFPE).
<input type="checkbox"/>	Flood vents are proposed for any new crawlspace or enclosure(s) or attached garage below the (RFPE).
<input type="checkbox"/>	Additional requirements for any new or substantially improved building within a SFHA:
<input type="checkbox"/>	Building is compliant with elevation requirements. The elevation of the finished floor of any residential building is at or above the RFPE. Commercial buildings may choose to floodproof the structure to an elevation at or above the RFPE.
<input type="checkbox"/>	Lowest elevation of machinery or equipment servicing the building is proposed to be elevated at or above RFPE.
<input type="checkbox"/>	Flood vents are proposed for any building with a crawlspace or enclosure(s) or attached garage below the Regulatory Flood Protection Elevation (RFPE).
<input type="checkbox"/>	Residential building plans include an engineer or architect sealed certification that all parts of structure below Regulatory Flood Protection Elevation (RFPE) are designed to withstand flood depths, pressure, velocities, impact & uplift forces. See also <a href="#">UDO Section 11.4.6.A</a> .
<input type="checkbox"/>	Commercial building plans show compliance with one of the options outlined in <a href="#">UDO Section 11.4.6.B</a> .
<input type="checkbox"/>	New or redeveloped parking lots have been elevated to ensure the elevation of the lowest parking space is no more than six inches below the RFPE. Note: This provision does not apply to single family lots.
<input type="checkbox"/>	Dry land access has been provided for safe vehicular access to habitable structures to allow emergency responders and vehicles access during flood events. Dry land access roads shall be at or above the RFPE. This is required for all new or substantially improved buildings within SFHAs.
<input type="checkbox"/>	Dry land access is required for this project, but a design exception has been submitted to document that the property does not have access to a dry public street and is requesting that this provision be waived.

### III. PROFESSIONAL CERTIFICATION

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

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

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

Professional Seal: