



Town of Hilton Head Island
 Community Development Department
 One Town Center Court
 Hilton Head Island, SC 29928
 Phone: 843-341-4757 Fax: 843-842-8908
www.hiltonheadislandsc.gov

FOR OFFICIAL USE ONLY	
Date Received:	_____
Accepted by:	_____
Project Mgr:	_____
App. #: DPR	_____
Fees:	_____

**APPLICATION PACKET FOR
 MAJOR SITE DEVELOPMENT PLAN REVIEW (DPR)**

Project Name: _____ Project Address: _____
 Parcel Number [PIN]: R _____ Project Acreage: _____
 Zoning District: _____ Overlay District(s): _____

Applicant/Agent Name: _____ Company: _____
 Mailing Address: _____ City: _____ State: _____ Zip: _____
 Telephone: _____ Fax: _____ E-mail: _____
 Business License # _____
 Land Owner Name: _____ Telephone #: _____
 Address: _____ Email: _____

Are there recorded private covenants and/or restrictions that are contrary to, conflict with, or prohibit the proposed request? If so, a copy of the private covenants and/or restrictions must be submitted with this application. YES NO

Are there Protected Species located on the subject property? If so, provide documentation on how they will be protected during construction. YES NO

Fees and Forms: Please see www.hiltonheadislandsc.gov for all application fees and forms. The Town accepts cash or check made Payable to Town of Hilton Head Island. Credit cards are accepted as payment for some items.

Instructions: A Staff Project Manager will be assigned to you to assist in processing this application and to be your only Point of Contact throughout the entire project. This Project Manager will also inform you of any boards that require review of the application, and will assist in determining which of the requirements of this application apply to the project. Additional items must be submitted at the end of construction to obtain a Final Inspection for the Certificate of Occupancy or final sign off.

Prior to submittal for a permit, an optional **Pre-Application Meeting** is highly recommended. At this meeting, you may provide very general, conceptual ideas to Town Staff to better assist you in submitting items for site development or building permitting. Your Project Manager can assist you with this process.

Application is hereby made to perform work on the site and accompanying features, and I am authorized to submit this application. To the best of my knowledge, the information on this application and all additional documentation is true, factual, and complete. I hereby agree to abide by all conditions of any approvals granted by the Town of Hilton Head Island. I understand that such conditions shall apply to the subject property only and are a right or obligation transferable by sale. I understand that failure to abide by this approval, any conditions, and all codes adopted by the Town of Hilton Head Island deems me subject to enforcement action and/or fines.

I further understand that in the event of a State of Emergency due to a Disaster, the review and approval times set forth in the Land Management Ordinance may be suspended.

Print Name _____ Agent Signature: _____

**AFFIDAVIT OF OWNERSHIP AND RESPONSIBILITIES
AND
HOLD HARMLESS PERMISSION TO ENTER PROPERTY**

The undersigned being duly sworn and upon oath states as follows:

1. I am the current owner of the property which is the subject of this application.
2. I hereby authorize _____ to act as my agent for this application only.
3. All statements contained in this application have been prepared by me or my agents and are true and correct to the best of my knowledge.
4. The application is being submitted with my knowledge and consent.
5. Owner grants the Town, its employees, agents, engineers, contractors or other representatives the right to enter upon Owner's real property, located at _____ (address),
R _____ (parcel ID) for the purpose of application review, for the limited time necessary to complete that purpose.
Description of Work: _____
6. Owner agrees to hold the Town harmless for any loss or damage to persons or property occurring on the private property during the Town's entry upon the property, unless the loss or damage is the result of the sole negligence of the Town.
7. I acknowledge that the Town of Hilton Head Island Municipal Code requires that all construction in a Special Flood Hazard Zone be constructed in accordance with the following provisions that:
 - a. any enclosed area below the base flood elevation will be used solely for parking of vehicles, limited storage or access to the building. This space will never be used for human habitation without first becoming fully compliant with the Town's Flood Damage Controls Ordinance in effect at the time of conversion.
 - b. all interior walls, ceilings and floors below the base flood elevation will be constructed of flood resistant materials.
 - c. all mechanical, electrical and plumbing devices will be installed above base flood elevation.
 - d. walls of the enclosed area below base flood elevation will be equipped with at least two openings which allow automatic entry and exit of flood water. Openings will be on two different walls with at least one square inch of free area for every square foot of enclosed space and have the bottom of openings no more than a foot above grade.
 - e. the structure may be subject to increased premium rates for flood insurance from the National Flood Insurance Program.
8. I understand that failure to abide by Town permits, any conditions, and all codes adopted by the Town of Hilton Head Island deems me subject to enforcement action and/or fines.

Print Name: _____ Owner Signature: _____
Phone No.: _____ Email: _____

The foregoing instrument was acknowledged before me by _____, who is personally known to me or has produced _____ as identification and who did not take an oath.	
WITNESS my hand and official seal this _____ day of _____, A.D., 2____.	
_____ Notary Public Signature	My Commission expires: _____ Please affix seal or stamp.

STANDARD SITE PLAN SUBMITTAL REQUIREMENTS –

See LMO Appendix D-6

Note: Applicants may use this checklist as a guide for which documents are required for submittal.

<p>Written Project Narrative, describing:</p> <p><input type="checkbox"/> Scope of the project, proposed specific use</p> <p><input type="checkbox"/> Number of Buildings</p> <p><input type="checkbox"/> Square Footage of each Building</p> <p><input type="checkbox"/> Square Footage of each Use</p> <p><input type="checkbox"/> Number of Stories for each Building</p> <p><input type="checkbox"/> Maintenance Responsibility</p> <p><input type="checkbox"/> Dedicated Improvements</p> <p><input type="checkbox"/> Any Protected Species</p>	<p>Site Lighting Plan (if not previously submitted):</p> <p><input type="checkbox"/> Light levels- existing & proposed</p> <p><input type="checkbox"/> Fixture Locations- existing & proposed</p> <p><input type="checkbox"/> Manufacturer’s Photometric Data</p> <p>Landscape Plan (if not previously submitted):</p> <p><input type="checkbox"/> Planting Plan</p> <p><input type="checkbox"/> Plant Schedule</p> <p><input type="checkbox"/> Irrigation Plan</p>
<p>Site Development & Boundary Plan:</p> <p><input type="checkbox"/> Name of Development</p> <p><input type="checkbox"/> Legend defining all symbols, scale & north arrow</p> <p><input type="checkbox"/> Tax Map & Parcel Number</p> <p><input type="checkbox"/> Date & Revisions & Vicinity Sketch</p> <p><input type="checkbox"/> Acreage</p> <p><input type="checkbox"/> FEMA Flood Zone</p> <p><input type="checkbox"/> Original Seal & Signature</p> <p><input type="checkbox"/> Reference Plats</p> <p><input type="checkbox"/> Topographic Information</p> <p><input type="checkbox"/> Trees 6” Diameter & Over</p> <p><input type="checkbox"/> Existing Structures within 50 Feet</p> <p><input type="checkbox"/> Off-street Loading Areas</p> <p><input type="checkbox"/> Parking Calculations & Dimensions</p> <p><input type="checkbox"/> Impervious Surface Calculations</p> <p><input type="checkbox"/> Open Space Calculations</p> <p><input type="checkbox"/> Setback & Buffer Areas</p> <p><input type="checkbox"/> Wetlands Delineation</p> <p><input type="checkbox"/> Fire Hydrants & Fire Lanes</p> <p><input type="checkbox"/> Trash Receptacles & Enclosures</p> <p><input type="checkbox"/> HVAC and utility pedestals</p> <p><input type="checkbox"/> Location of Tree Protection Fencing around trees to be protected and along the edge of required buffers</p>	<p>Tree Protection Plan:</p> <p><input type="checkbox"/> Narrative</p> <p><input type="checkbox"/> Tree Survey (no older than 2 years)</p> <p><input type="checkbox"/> Tree Tally Sheets</p> <p><input type="checkbox"/> Replacement or supplemental tree plantings schedule, if required</p> <p><input type="checkbox"/> Method & location of tree protection</p> <p>Engineering:</p> <p><input type="checkbox"/> Pre-Design Conference Certification</p> <p><input type="checkbox"/> Storm Water Calculations</p> <p><input type="checkbox"/> Traffic Control Plan (Signage and Marking)</p> <p><input type="checkbox"/> Storm Water Review Application & checklist</p> <p>Others:</p> <p><input type="checkbox"/> Hydrant flow data</p> <p><input type="checkbox"/> Grading Plan showing any proposed grading</p> <p><input type="checkbox"/> Paving & Drainage Plan with drainage locations</p> <p><input type="checkbox"/> Water & Sewer Line Layout</p> <p><input type="checkbox"/> Septic or Waste System Layout</p> <p><input type="checkbox"/> Electric Line Layout (including lighting)</p> <p><input type="checkbox"/> Phasing Plan</p> <p><input type="checkbox"/> Archaeological Protection</p>
<p>OCRM/DHEC Approval:</p> <p><input type="checkbox"/> Beach/Dune Activity</p> <p><input type="checkbox"/> Coastal Zone Consistency Letter</p> <p><input type="checkbox"/> Land Disturbance Town & DHEC NOI if >1 acres</p> <p><input type="checkbox"/> Water Plan</p> <p><input type="checkbox"/> Sewer Plan</p> <p><input type="checkbox"/> Air & Water Quality Approval</p> <p><input type="checkbox"/> Septic Tank Approval</p>	<p>Wetlands Information:</p> <p>Total Wetland Area in Acres: _____</p> <p><input type="checkbox"/> Copy of Delineation (letter & survey) of wetland approved by Army Corps of Engineers</p> <p><input type="checkbox"/> Wetlands Alteration Permit (Army Corps of Engineers)</p>
<p>Encroachment Permit:</p> <p><input type="checkbox"/> SC Department of Transportation</p> <p><input type="checkbox"/> Beaufort County</p> <p><input type="checkbox"/> Town of Hilton Head Island</p>	<p>Utility Approval:</p> <p><input type="checkbox"/> PSD Water</p> <p><input type="checkbox"/> PSD Sewer</p> <p><input type="checkbox"/> Electric Company</p> <p><input type="checkbox"/> Telephone Company</p>
<p><input type="checkbox"/> Other Governmental Approvals</p>	<p><i>Disclaimer: Although the application has been accepted, it may not be complete per the Town of Hilton Head Island Land Management Ordinance.</i></p>



Town of Hilton Head Island

Engineering Division

One Town Center Court
Hilton Head Island, SC 29928

Phone: 843-341-4600 Fax: 843-842-8587

www.hiltonheadislandsc.gov

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Date Received: _____

Accepted by: _____

App. #:DPR _____

Meeting Date: _____

Project Name: _____ Project Address: _____

Applicant/Agent Name: _____

Owner Name: _____

Engineer of Record: _____

Parcel Number [PIN]: R _____

Proposed Area of Disturbance (acres): _____

Existing Impervious Area (sq. ft.): _____ Proposed Impervious Area (sq. ft.) _____

STORMWATER PLAN REVIEW SUBMITTAL REQUIREMENTS

*If the Area of Disturbance (above) is less than 0.5 acre or a single family residential that is not part of a larger common development, the items listed below are not required for review.

All items (if determined applicable by staff) are required at the time the application is submitted.

Further documentation may be required upon review of the application.

Digital Submissions are accepted via e-mail to cdic@hiltonheadislandsc.gov or to the Project Manager

_____ SCDHEC Stormwater Management and Sediment and Erosion Control Plan Review Checklist

_____ SCDHEC Notice of Intent (only if development disturbs > 1 acres)

_____ Town of Hilton Head Island Permanent Stormwater System Maintenance and Responsibility Agreement is required to be prepared and executed for all permanent drainage facilities. This agreement must be approved by the Town Engineer and executed by the Owner

_____ Town of Hilton Head Island Land Disturbance Permit Application

_____ Town of Hilton Head Island Engineering Pre-Design Certification Form

_____ Town of Hilton Head Island Engineering Checklist

_____ Stormwater Calculations per Section 16-5-109 of the LMO

Note: Further documentation may be required upon review of the application.

**TOWN OF HILTON HEAD ISLAND
STORMWATER PLAN REVIEW CHECKLIST**

Use this checklist to prepare the required Development Plan Review submittals. Please note that the following checklist is not all-inclusive. This checklist is intended to guide the preparation of the construction plans and calculations and is subject to change as necessary for clarification and updated according to current code and agency requirements.

CONSTRUCTION PLANS – GENERAL INFORMATION

Requirement	Yes	No	N/A
PROFESSIONAL SEAL AND SIGNATURE required on final and complete approved plans, drawings, technical reports and specifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DESIGNER INFORMATION - The engineer, surveyor, and/or landscape architect's name, address, telephone number, and e-mail address	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
APPLICANT INFORMATION - The owner's and/or developers name, address, telephone number, and e-mail address	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLAN DATE and all revision dates with a brief description of the items revised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TITLES AND NUMBERING for all plan sheets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VICINITY MAP with street names and the site location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SCALE at 1" = 30' minimum - Provide a graphic scale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NORTH ARROW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLAN LEGEND with line types and symbols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BOUNDARY SURVEY of project site (Metes and Bounds, computed acreage, benchmarks, control points, property corners, reference plats)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROPERTY INFORMATION for all parcels and adjacent parcels (tax map and parcel number, owner's name and address)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OFF-SITE CONSTRUCTION requires a recorded easement or notarized right of entry from the affected property owner(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROJECT OR CONSTRUCTION PHASE LINES (where applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOPOGRAPHY of the site and surrounding vicinity, showing existing and proposed contours with intervals of one (1) foot (max) and spot elevations as necessary. Reference source and date of all topography.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VERTICAL DATUM - NAVD88 required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXISTING AND PROPOSED SITE FEATURES - buildings, parking lots, patios, pools, water bodies, driveways, sidewalks, and bike paths.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PERVIOUS MATERIAL - Location of existing and proposed pervious surface materials including pavers, granite stone #57 or CR-14 (stone choked with sand, not Crusher run)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FINISH FLOOR ELEVATIONS of proposed buildings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXISTING AND PROPOSED UTILITIES - Show and label all existing and proposed utilities (above ground and underground).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXISTING AND PROPOSED RIGHTS-OF-WAY – Location, width, and ownership information for existing and proposed rights-of-way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXISTING AND PROPOSED DRAINAGE EASEMENTS - Location, width, and recordation information for all existing and proposed drainage easements per Section 16-5-109.G. of the LMO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EXISTING AND PROPOSED DRAINAGE STRUCTURES AND FACILITIES – Location of natural and manmade drainage infrastructure including pipes, swales, ditches, channels, curb and gutter, roof drains per Section 16-5-109 of the LMO.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DRAINAGE PATTERNS with flow direction arrows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OCRM CRITICAL LINE delineated and shown on plan (where applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ENVIRONMENTALLY SENSITIVE AREAS such as wetlands, floodplains, critical soils, buffers, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FLOODPLAIN LIMITS and FEMA FIRM PANEL referenced with designated special flood hazard areas or zone designations associated with the site (where applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

AREA OF DISTURBANCE – Tabulation of disturbed area and limits of disturbance delineated on plans. Includes area required for implementation of erosion and sediment controls, stockpile areas and utilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IMPERVIOUS SURFACE COVERAGE - Tabulation of impervious cover applicable to the zoning district in which development is located	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CONSTRUCTION PLANS - PLAN INFORMATION			
DRAINAGE INFORMATION			
1. Storm sewer – invert elevations, lengths, size (15" min. diameter or equivalent), material types, pipe class and slopes for all segments labeled on plan and correspond to calculations. Reinforced Concrete Pipe AASHTO M170 or ASTM Spec C-76, Class II and III, and corrugated High Density Polyethylene ASTM F2648 are permitted for drainage systems within the Town. Such other pipe as is approved in writing by the Town Engineer may be used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Drainage structures (inlets, manholes, junctions, etc.) - rim elevations, invert elevations, inlet type and required grate or top unit and lengths labeled on plan and correspond to calculations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Pipes and structures numbered or labeled and correspond to calculations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Adequate horizontal clearance from other site utilities or structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Delineation of ponding, headwater, surcharge or backwater areas which may affect adjacent existing or proposed buildings, structures or upstream adjacent properties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROFILES are encouraged to expedite review. If not provided, ensure all pipe segments have adequate minimum cover, do not exceed maximum depths of cover for the type/class of pipe specified, and do not conflict with other site utilities or excavation areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EROSION AND SEDIMENT CONTROL PLAN per Section 16-5-109 of the LMO and in accordance with SCDHEC Stormwater Management and Sediment and Erosion Control Plan Review Checklist For Design Professionals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CONSTRUCTION DETAILS			
1. Typical bedding details for all proposed storm pipe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Standard details or reference note for all proposed access structure types (inlets, manholes, junctions, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Catch basins shall provide for a bottom sand trap of 1.0 feet below the inlet or outlet, i.e. basins may be required to provide baffles for oil and grease trap operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Step detail or applicable reference note (if depth 4 ft. or more)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Open channel details: shape, bottom width, top width, side slopes, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Outlet protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. All special design structures (flumes, basin outlets, energy dissipators, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Storm water management details for embankment, principal spillway, trash rack, anti-vortex device, anti-seep collars, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Construction Details of standard structures (Drop Inlets, Curb/Gutter, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Catch basins provide for a bottom sediment trap of 1' below the inlet or outlet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
STORM WATER FACILITY – GENERAL INFORMATION			
1. Basic considerations for safety and unauthorized entry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Proper length/width ratio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Safety bench around permanent pool; 10' Minimum width	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Embankment or excavation side slopes labeled (slope varies per BMP type).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Material with watertight joints.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Support and bedding requirements for barrel – concrete cradles, etc. or as recommended by the Geotechnical Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. End treatment (Flared end section, headwall, wingwall) at barrel outlet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Anti-seep collar(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
STORM WATER FACILITY - ELEVATION AND DIMENSIONAL DATA			
1. All pertinent dimensions and elevations shown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<ol style="list-style-type: none"> 2. Riser diameter 3. Control orifice or weir dimensions and elevations shown 4. Pipe inverts, length, size, class and slope shown 5. Top of facility – elevation and width labeled (15' Minimum) 6. Crest elevation of principal control structure spillway 7. Minimum freeboard of one (1) foot above the 100-year design high water elevation for facilities with an emergency spillway 8. Minimum freeboard of two (2) feet above the 100-year design high water elevation for facilities without an emergency spillway or in accordance with the SCS National Engineering Handbook (prior approval required) 9. Basin Sediment Clean-Out elevation 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>STORM WATER FACILITY - CROSS SECTION</p> <ol style="list-style-type: none"> 1. Existing Ground 2. Proposed grade 3. Top of facility - constructed and settled 4. Emergency spillway with side slopes labeled (emergency spillway in cut) 5. Barrel location 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>STORMWATER FACILITY - EMERGENCY SPILLWAY PROFILE</p> <ol style="list-style-type: none"> 1. Existing ground 2. Inlet, level (control) and outlet sections 3. Spillway and crest elevations 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>PRETREATMENT DEVICES of adequate depth and properly designed using required pretreatment volumes for the selected County BMP facility type</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>OUTLET PROTECTION</p> <ol style="list-style-type: none"> 1. Sized for maximum design release 2. Flared end section or endwall 3. Dimensions 4. Rock or riprap size, quantity and placement thickness 5. Slope at 0 percent (Level Grade) 6. Geotextiles (nonwoven) 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

STORM WATER MANAGEMENT PLAN – Storm Water Management plan and calculations in accordance with Section 16-5-109 of the LMO.			
Requirement	Yes	No	N/A
STORM WATER MANAGEMENT and DRAINAGE DESIGN REPORT signed and sealed by Professional Engineer registered in South Carolina. Shall generally include a title sheet, date, project identification, owner and preparer information, table of contents, narrative, summaries and computations as required.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
STORMWATER MANAGEMENT NARRATIVE describing the project, location, site and drainage basin soil characteristics, receiving water or drainage facility, existing site and drainage basin conditions (topography, land use, cover, slopes, etc.), proposed site development, proposed stormwater management Best Management Practices, summary of hydrology and hydraulics, maintenance program, and any special assumptions utilized for development of the stormwater management and drainage design plan or computations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DRAINAGE AREA MAP depicting drainage area boundaries for pre- and post-development conditions. Maps shall include drainage area size, runoff coefficient or curve number and time of concentration flow paths for each sub-area. Include off-site drainage where applicable. Clearly show roof drainage flow directions on buildings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SOILS MAP with soil symbols, Hydrologic Soil Group, soil boundaries and legend in accordance with the current Soil Survey of Beaufort County, South Carolina with approximate locations of the project site, BMPs and applicable drainage basins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GEOTECHNICAL REQUIREMENTS 1. Groundwater Elevations – Seasonal high to be used for design purposes; Test boring locations with reference surface elevations (if known). 2. Geotechnical report prepared by a registered professional engineer with recommendations specific to BMP facility type selected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
METHODOLOGY for surface runoff calculations in accordance with Section 16-5-109 of the LMO 1. Rational Method; drainage area of 20 acres or less 2. USDA NRCS TR-55 Method; sites of any size 3. The Savannah Intensity—Duration Curve shall be used in computations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DESIGN STORM 25-year Frequency/24 Hour/8.4 Inch Rainfall, Antecedent Condition II. Type III distribution curve.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HYDROLOGY CALCULATIONS - Provide supporting calculations for the hydrologic analysis of both pre-developed and post-developed conditions at <u>each</u> outfall point on the project site. 1. Calculations to include runoff Curve Number or Coefficient and Time of Concentration 2. Runoff Curve Number or Coefficient determinations: pre-developed and ultimate development land use scenarios. Shall be in all cases acceptable to Town Engineer. 3. Curve Numbers shall not be less than the minimums established in the latest edition of the National Engineering Handbook, Part 630 (Hydrology), and shall be in all cases acceptable to the Town Engineer. 4. Site inflow and outflow Hydrograph generation (tabular or graphical) for the 25-year design storm event 5. Site inflows C.F.S. (Hydrograph); 6. Site outflows C.F.S. (Hydrograph); 7. Tidal backwater effects; 8. Soil characteristics; 9. Static water levels; 10. Peak water levels—25-year storm; Peak water levels shall be checked relative to a 100 year storm frequency in setting first flow elevations; and 11. Pre-development conditions shall be carefully evaluated as to adequacy of drainage design (if any), and removed, replaced, or reworked if found	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

unsatisfactory			
HYDRAULIC CALCULATIONS			
1. Elevation- or Stage-Storage curve and/or tabular data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Weir / Orifice Control calculations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Inlet / Outlet (barrel) control calculations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Emergency spillway capacity and depth of flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Elevation - Discharge (Outlet Rating) curve and/or table.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Adequate channel computations for receiving channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Permanent pool, 25-Year, 100-Year water surface elevations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Tidal backwater effects taken into consideration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Pipe calculations - Capacity, Flow Rate, Velocity, and Flow Depth; 25-year storm event. All storm sewer pipe shall be designed and constructed to produce a minimum velocity of two (2) feet per second (ft/s) when flowing full, unless site conditions do not allow. No storm sewer system or portion thereof will be designed to produce velocities in excess of ten (10) ft/s.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Hydraulic Grade Line computations; 25-year storm event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Open Channel computations; Capacity, Flow Rate, Velocity, and Flow Depth; 25-year storm event, 2-year storm event for velocity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Culvert computations – Capacity, Headwater depth, Velocity; 25-year storm event, 100-year storm event check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Pipe thickness design computations, as required, for selected pipe type (live load, minimum cover, maximum height of cover, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Downstream receiving channel check (based on field measured channel section data); 25-year storm event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Inlet / Catch Basin computations - Throat length, grate size, and inlet placement; 2-year storm event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Outlet velocity and outlet protection calculations; Discharge velocities shall be reduced to provide a non-erosive velocity flow from a structure, channel, or other control measure or the velocity of the 10-year, 24-hour storm runoff in the receiving waterway prior to the land disturbance activity, whichever is greater.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Curb and Gutter calculations -Spread and Ponding depth; 2-year storm event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Storage-Indication Routing of post-developed inflow hydrographs; 25-year design storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Downstream hydrographs at established study points, if conditions warrant (i.e. facility discharge combined with uncontrolled bypass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Provisions for retention of "First Inch" runoff from on-site impervious surfaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Pre- vs. Post-development peak discharge calculations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Provisions for treatment of First Flush runoff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Design for 10-year sediment load storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MISCELLANEOUS			
1. Riser / base structure flotation analyses (if warranted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Downstream danger reach study and/or emergency action plan (if conditions warrant)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Upstream backwater analyses onto offsite adjacent property (if conditions warrant)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. 100-year floodplain impacts (if conditions warrant)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>