

Appendix I

Checklists

[This page left intentionally blank]

Checklist for Stormwater Management Report

Item	Name of Item	Required For Preliminary and Final Submittal	Required For Construction Submittal
1	Project Narrative	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Stormwater Management Standards Narrative	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Credits for LID BMP's	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	Comparison Table for Pre-&-Post Development Peak Flow, Volume, and Percent Difference	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	Identify Applicable Land Use Regulations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	Site Inventory & Evaluation <ul style="list-style-type: none"> • Topography • Soil Evaluation (Soil Evaluation Test Results (Form SC-101) Shall Be Used) <ul style="list-style-type: none"> ○ Initial Feasibility Evaluation ○ Concept Design Testing (test pits/borings and saturated hydraulic conductivity testing, as per Appendix B) • Hydrologic Patterns & Features • Native Forest & Soil Conservation Areas • Wetlands & Riparian Management Areas • Floodplains & Waterbodies • Natural Drainage Ways 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	Define Development Envelope <ul style="list-style-type: none"> • Consider construction techniques • Determine/Protect Sensitive Areas • Retain & Protect Mature Trees • Minimize disturbance of Steep Slopes (over 25%) • Minimize clearing and grading for buildings • Delineate preferred areas for infiltration (A & B Soils) • Confine envelope to areas to be permanently altered 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	Develop LID Control Strategies <ul style="list-style-type: none"> • Evaluate Pre-Development Site Hydrology (Runoff Volume and Peak Flow Rate – 1, 2, 5, 10, 25, 50 and 100-Year Storms) <ul style="list-style-type: none"> ○ Watershed Map Pre-Development ○ NRCS Runoff Curve Numbers Pre-Development ○ Time of Concentration Pre-Development • Minimize Total Site Impervious Area • Minimize Directly Connected Impervious Areas • Minimize Site Disturbance • Modify Drainage Flow Paths to Increase Time of Concentration • Evaluate Post-Development Site Hydrology (Runoff Volume and Peak Flow Rate – 1, 2, 5, 10, 25, 50 and 100-Year Storms) <ul style="list-style-type: none"> ○ Watershed Map Post-Development ○ NRCS Runoff Curve Numbers Post-Development ○ Time of Concentration Post-Development • Compare & Summarize Pre-&-Post Development Site Hydrology to Evaluate Benefits of Non-Structural LID and Structural LID Site Planning Techniques. • Identify Remaining need for Structural BMPs to Satisfy: <ul style="list-style-type: none"> ○ Water Quality Volume/Flow ○ TSS Removal Computations ○ Runoff Reduction Volume: 1-Year Storm ○ Groundwater Recharge Volume (if necessary) ○ 72-Hour Drawdown Computations 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

	<ul style="list-style-type: none"> o 2-Year Over Control Channel Protection (Required on a Site by Site Basis) o Peak Runoff Attenuation: 2, 5, & 10-Year Storm (and 25-Year Storm for projects that do not rely solely on LID BMPs), 50-Year & 100-Year Peak Runoff Attenuation Required on a Site by Site Basis 		
9	Remaining Structural BMPs to Meet Water Quality Volume/Flow (WQV)/(WQF) and TSS Removal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10	Remaining Structural BMP's to Meet 80% TSS Removal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11	Remaining Structural BMPs to Meet Runoff Reduction Volume (RRV): 1-Year Storm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
12	Remaining Structural BMPs to Meet Groundwater Recharge Volume (GRV), if necessary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13	Remaining Structural BMP's to Meet 72-Hour Drawdown	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14	Remaining Structural BMPs to Meet Stream Channel Protection: 2-Year Frequency ("Over-Control" of 2-Year Storm) – Required on Site By Site Basis	<input type="checkbox"/>	<input type="checkbox"/>
15	Remaining Structural BMPs to Meet Peak Runoff Attenuation: 2, 5, & 10 Year; 25-Year for Projects that Do Not Rely Solely on LID BMPs; 50-Year & 100-Year Required on Site by Site Basis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
16	Conveyance Protection: 10, 25, 50 & 100-Year Depending on Peak Flow Rate for Which Downstream Stormwater Facilities are Designed	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	Emergency Outlet Sizing: Safely Pass the 100-Year	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Culvert Capacity Calculations	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Outlet Protection Calculations – Based on Conveyance Protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Downstream Analysis – Required on Site by Site Basis	<input type="checkbox"/>	<input type="checkbox"/>
21	Town Storm Drain Analysis – Required on Site by Site Basis	<input type="checkbox"/>	<input type="checkbox"/>
22	Gutter Flow Calculations – Required on Site by Site Basis	<input type="checkbox"/>	<input type="checkbox"/>
23	Supporting Documents	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
24	Sealed and Signed By a Professional Engineer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Checklist for Projects Submitting a Stormwater Management Standards – Drainage Report Exemption

Checklist for Construction Plans

Item	Name of Item	Required For Construction Submittal
1	Existing Conditions Survey Sheets – Professional will determine minimum area requiring topographic survey (T-2) for drainage design	<input checked="" type="checkbox"/>
2	Site Plan Sheets shall include all proposed work, E&S Controls and Construction Details	<input checked="" type="checkbox"/>
3	Bind Plan Set – No Separate Sheets	<input checked="" type="checkbox"/>
4	All Surveys – Sealed & Signed by a Licensed Surveyor	<input checked="" type="checkbox"/>
5	All Site Plans – Sealed & Signed by a Professional Engineer or Landscape Architect	<input checked="" type="checkbox"/>

Checklist for Certificate of Occupancy

Item	Name of Item	Required For Certificate of Occupancy Submittal
1	Site Inspection Certification Sign-Off – Form SC - 102	<input checked="" type="checkbox"/>
2	Drainage Certification Sign-Off – Form SC - 103	<input checked="" type="checkbox"/>
3	Bioretention Soil Testing Certification Sign-Off (as applicable) – Form SC - 104	<input checked="" type="checkbox"/>
4	Field Inspection Record – Form SC - 106	<input checked="" type="checkbox"/>
5	Directly Connected Impervious Area (DCIA) Certification – Post-Construction – Form SC - 108	<input checked="" type="checkbox"/>
6	Operation & Maintenance Plan Report – (see Form CL - 104 for what is required in report)	<input checked="" type="checkbox"/>
7	Improvement Location Survey Depicting “As-Built” Conditions (see Form CL - 106 for what is required on plan)	<input checked="" type="checkbox"/>

Checklist for Construction Plans

Item	Name of Item	Required For Preliminary Submittal	Required For Final Submittal	Required For Construction Submittal
1	Cover Sheet	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Existing Conditions Survey Sheet	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Low Impact Development and Soil Tests Sheet	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	Site Plan Sheets	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	Driveway Profile & Sight Distance Sheet	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	Turning Movements Sheet (Commercial Only)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	Traffic Signage, Pavement Markings, and Parking Space Layout Sheet (Commercial Only)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	Erosion & Sediment Control Sheet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9	Construction Details Sheets	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10	Building/House Section or Elevation Sheet	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11	Bind Plan Set – No Separate Sheets	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
12	All Surveys – Sealed & Signed by a Licensed Surveyor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13	All Site Plans – Sealed & Signed by a Professional Engineer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Each plan sheet listed above must be included in all submittals (Planning & Zoning Permits, Inland Wetlands & Watercourses Permits, Building Permits, and Highway Permits) and each plan sheet must include at a minimum all the items listed under each plan sheet as shown in Section 7.3 of the Town of Greenwich Drainage Manual February 2012 as amended.

Checklist for Driveway Profile and Sight Distance Plan

Item	Name of Item	Required For Preliminary Submittal	Required For Final Submittal	Required For Construction Submittal
1	Sight Distance for Existing Driveway on Plan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Sight Distance for Proposed Driveway on Plan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Proposed and Remaining Driveway Width at Property Line on Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Proposed and Remaining Driveway Width at Edge of Road on Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Distance from Proposed and Remaining Driveway to Intersection on Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Distance between Proposed and Remaining Driveways on Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	Distance from Proposed and Remaining Driveway to Property Line on Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	Distance from Edge of Road to Proposed and Remaining Driveway Gate (Minimum 25 Feet)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Proposed and Remaining Modified Driveway Profile from Edge of Road to Garage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10	Slope of Proposed and Remaining Modified Driveway for first five feet on Profile (+3% to 6%, include on profile)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11	Slope of Proposed and Remaining Modified Driveway for next twenty feet on Profile (Maximum Slope of 4% when remaining slope \geq 10%, include on profile)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
12	Slope of Proposed and Remaining Modified Driveway for the remaining distance to Garage on Profile (Maximum Slope of 8% for Commercial, 12% Residential (Two or More Family), and 15% for Residential, include on profile)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13	Driveway Sight Distance Plan Must be for the entire Lot Frontage, entire Town of Greenwich Right-of-Way Width, and be certified A-2 & T-2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Town of Greenwich
 Department of Public Works – Engineering Division
 Town Hall – 101 Field Point Road, Greenwich, CT 06830
 Phone 203-622-7767 – Fax 203-622-7747

Checklist for Operation & Maintenance Plan Report

Item	Name of Item	Required For Final Submittal	Required For Construction Submittal	Required For Certificate of Occupancy Submittal
1	Exhibit A Operations and Maintenance Plan with Log	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Stormwater Management Practices Maintenance Declaration Draft	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Stormwater Management Practices Maintenance Declaration review before filing on Greenwich Land Records	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Exhibit B Improvement Location Survey Depicting “As-Built” Conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Town of Greenwich
 Department of Public Works – Engineering Division
 Town Hall – 101 Field Point Road, Greenwich, CT 06830
 Phone 203-622-7767 – Fax 203-622-7747

Checklist for Certificate of Occupancy

Item	Name of Item	Required For Certificate of Occupancy Submittal
1	Site Inspection Certification Sign-Off – Form SC - 102	<input checked="" type="checkbox"/>
2	Drainage Certification Sign-Off – Form SC - 103	<input checked="" type="checkbox"/>
3	Bioretention Certification Sign-Off (as applicable) – Form SC - 104	<input checked="" type="checkbox"/>
4	Field Inspection Record – Form SC - 106	<input checked="" type="checkbox"/>
5	Directly Connected Impervious Area (DCIA) Certification – Post-Construction – Form SC - 108	<input checked="" type="checkbox"/>
6	Improvement Location Survey Depicting “As-Built” Conditions	<input checked="" type="checkbox"/>
7	Final Operation & Maintenance Plan Report	<input checked="" type="checkbox"/>
8	Copy of Revised Construction Site Plans not submitted for Construction Site Plan Field Change Review	<input checked="" type="checkbox"/>

Checklist for Improvement Location Survey Depicting “As-Built” Conditions

Item	Name of Item	Required For Certificate of Occupancy Submittal
1	Property Lines	<input checked="" type="checkbox"/>
2	Buildings, Garage, Etc	<input checked="" type="checkbox"/>
3	Patios, Walks, Etc	<input checked="" type="checkbox"/>
4	Driveways, Roads, Etc	<input checked="" type="checkbox"/>
5	Tennis Court, Pool, Etc	<input checked="" type="checkbox"/>
6	Fence, Walls, Etc	<input checked="" type="checkbox"/>
7	Catch Basins, Manholes, Etc	<input checked="" type="checkbox"/>
8	Roof Down Spout Locations and Entire Pipe Network to Discharge	<input checked="" type="checkbox"/>
9	All Pipes Shall Have Type, Size & Slope	<input checked="" type="checkbox"/>
10	Footing Drain Network to Discharge	<input checked="" type="checkbox"/>
11	Scour Holes/Level Spreader, Etc	<input checked="" type="checkbox"/>
12	Underground Systems Shall Show Number of Units, Size, Model#, Bottom Elevation, Invert Elevation In & Out	<input checked="" type="checkbox"/>
13	Control Structures Shall Show Outlet Type, Size, & Elevation	<input checked="" type="checkbox"/>
14	Two Foot Contours – One Foot Contours when slopes less than 2%	<input checked="" type="checkbox"/>
15	Spot Elevations	<input checked="" type="checkbox"/>
16	Top & Bottom Elevation of Walls	<input checked="" type="checkbox"/>
17	Elevation of Discharge Outlets	<input checked="" type="checkbox"/>
18	Invert Elevations for All Pipes	<input checked="" type="checkbox"/>
19	Cover & Grate Elevations	<input checked="" type="checkbox"/>
20	Low Impact Development Non-Structural BMPs	<input checked="" type="checkbox"/>
21	Low Impact Development Structural BMPs	<input checked="" type="checkbox"/>
22	Sealed and Signed by a State of Connecticut Licensed Surveyor	<input checked="" type="checkbox"/>