

FOR OFFICE USE ONLY  
Date Entered: \_\_\_\_\_  
Application ID # \_\_\_\_\_

Town of Guilford  
Planning and Zoning  
Coastal Area Management Application

Application Form  
Municipal Coastal Site Plan Review  
For Projects Located Fully or Partially Within the Coastal Boundary

Please complete this form in accordance with the attached instructions (CSPR-INST- 11/99), **make SEVEN copies** and submit them with **SEVEN copies** of the appropriate plans to the Planning and Zoning Department. **All fields must be filled in for application to be accepted.**

**Section I: Applicant Identification**

Applicant: \_\_\_\_\_ Date: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone: \_\_\_\_\_  
Project Address or location: \_\_\_\_\_

Map: \_\_\_\_\_ Lot: \_\_\_\_\_ Zone: \_\_\_\_\_

Interest in Property:  fee simple  option  lessee  easement  other (specify) \_\_\_\_\_

List primary contact for correspondence if other than applicant:

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

Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Business Phone: \_\_\_\_\_

E-mail \_\_\_\_\_

**Section II: Project Site Plans**

Please provide project site plans that clearly and accurately depict the following information, and check the appropriate boxes to indicate that the plans are included in this application:

- Project Location
- Existing and proposed conditions, including buildings and grading
- Coastal resources on and contiguous to the site
- High tide line [as defined in CGS § 22a-359(c)] and mean high water mark elevation contours (for parcels abutting coastal waters and/or tidal wetlands only)
- Soil erosion and sediment controls
- Stormwater treatment practices
- Ownership and type of use on adjacent properties
- Reference datum (i.e. National Geodetic Vertical Datum, Mean Sea Level, Etc.)

**Section III: Written Project Information**

Please check the appropriate box to identify the plan or application that has resulted in this Coastal Site Plan Review.

- Site Plan for Zoning Compliance
- Subdivision or Resubdivision
- Special Permit or Special Exception
- Variance
- Municipal Project (CGS §8-24)

**Part I: Site Information**

1. Street Address or Geographical Description: \_\_\_\_\_

City or Town: \_\_\_\_\_

2. Is project or activity proposed at a waterfront site (includes tidal wetlands frontage)?  YES  NO

3. Name of on-site, adjacent or downstream coastal, tidal or navigable waters, if applicable: \_\_\_\_\_

4. Identify and describe the existing land use on and adjacent to the site. Include any existing structures, municipal zoning classification, significant features of the project site: \_\_\_\_\_

5. Indicate the area of the project site: \_\_\_\_\_ acres \_\_\_\_\_ or square feet \_\_\_\_\_

Check the appropriate box below to indicate whether the project or activity will disturb 5 acres or more total areas of land area (please also see Part II.B. regarding proposed stormwater best management practices):

Project or activity will disturb 5 or more total acres of land area on the site and may be eligible for registration for the DEEP’s General Permit for the Discharge of Stormwater and dewatering Wastewaters Associated with Construction Activities

Project or activity will not disturb 5 or more total acres of land area

**Part II.A.: Description of Proposed Project or Activity**

Describe the proposed or activity its purpose and related activities such as site clearing, grading, demolition, and other site preparations; percentage of increase or decrease in impervious cover over existing conditions resulting from the project; phasing, timing and method of proposed construction; and new uses and changes from existing uses (attach additional pages if necessary): \_\_\_\_\_

---



---



---



---



---



---



---

**Part II.B.: Description of Proposed Stormwater Best Management Practices**

Describe the stormwater best management practices that will be utilized to ensure that the volume of runoff generated by the first inch of rainfall is retained on-site, especially if the site or stormwater discharge is adjacent to tidal wetlands. If runoff cannot be retained on-site, describe the site limitations that prevent such retention and identify how stormwater will be treated before it is discharged from the site. Also demonstrate that the loadings of total suspended solids from the site will be reduced by 80 percent on an average annual

basis, and that post- development stormwater runoff rates and volumes will not exceed pre-development runoff rates and volumes (attach additional pages if necessary); \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Part III: Identification of Applicable Coastal Resources and Coastal Resource Policies**

Identify the coastal resources and associated policies that apply to the project by placing a check mark in the appropriate box(es) in the following table.

Coastal Resources	On-site	Adjacent	Off-site but within the influence of project	Not Applicable
General Coastal Resources* - Definition: CGS § 22a-93(7); Policy: CGS § 22a-92(a)(2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beaches & Dunes – Definition: CGS §22a-93(7)(C); Policies CGS§ 22a-92-(b)(2)(C) and 22a-92(c)(1)(K)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bluffs & Escarpments- Definition CGS §22a-93(7)(A); Policy: CGS § 22a-92(b)(2)(A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Hazard Area – Definition: CGS §22a-93(7)(H); Policies: CGS §22a-92(a)(2), 22a-92(a)(5), 22a-92(b)(2)(F), 22a-92(b)(2)(J), and 22a-92(c)(2)(B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Waters, Estuarine Embayments, Nearshore Waters, Offshore Waters – Definition: CGS § 22a-93(5), 22a-93(7)(G), and 22a-93(7)(K), and 22a-93(7)(L) respectively; Policies: CGS § 22a-92(a)(2)(A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developed Shorefront – Definition: CGS § 22a-93(7)(I); Policy 22a-92(b)(2)(G)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Freshwater Wetlands and Watercourses – Definition: CGS § 22a-93(7)(F); Policy: CGS § 22a-92(a)(2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intertidal Flats- Definition: CGS § 22a-93(7)(D); Policies: 22a-92(b)(2)(D) and 22a-92(c)(1)(K)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Islands – Definitions: CGS § 22a-93(7)(J); Policy CGS § 22a-92(b)(2)(H)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rocky Shorefront – Definition: CGS§ 22a-93(7)(B); Policy CGS §22a-92(b)(2)(B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shellfish Concentration Areas – Definition CGS § 22a-93(7)(N); Policy: CGS § 22a-92(c)(1)(I)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shorelands – Definition: CGS § 22a-93(7)(M); Policy; CGS § 22a-92(b)(2)(I)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tidal Wetlands – Definitions: CGS § 22a-93(7)(E); Policies: CGS § 22a-92(a)(2), 22a(b)(2)(E), and 22a-92(c)(1)(B)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	--------------------------

\* General Coastal Resource policy is applicable to all proposed activities

**Part IV: Consistency with Applicable Coastal Resource Policies and Standards**

Describe the location and condition of the coastal resources identified in Part III above and explain how the proposed project or activity is consistent with all of the applicable coastal resource policies and standards; also see adverse impacts assessment in Part VII.A below ( attach additional pages if necessary):

---



---



---



---

**Part V: Identification of Applicable Coastal Use and Activity Policies and Standards**

Identify all coastal policies and standards in or referenced by CGS § 22a-92 applicable to the proposed project or activity:

- General Development\*- CGS § 22a-92(a)(1), 22a-92(a)(2), and 22a-92(a)(9)
- Water-Dependent Uses\*\* - CGS § 22a-92(a)(3) and 22a-92(b)(1)(A); Definition CGS § 22a-93(16)
- Ports and Harbors – CGS § 22a-92(b)(1)(C)
- Coastal Structures and Filling – CGS § 22a-92(b)(1)(D)
- Dredging and Navigation – CGS §22a-92(c)(1)(C) and 22a-92(c)(1)(D)
- Boating – CGS § 22a-92(b)(1)(G)
- Fisheries – CGS § 22a-92(c)(1)(I)
- Coastal Recreation and Access – CGS § 22a-92(a)(6), 22a-92(C)(1)(j), and 22a-92(c)(1)(K)
- Sewer and water lines – CGS 22a-92(b)(1)(B)
- Fuel, Chemicals and Hazardous Materials – CGS §22a-92(b)(1)(C), 22a-92(b)(1)(E) and 22a-92(c)(10)(A)
- Transportation – CGS § 22a-92(b)(1)(F), 22a-92(c)(1)(F), 22a-92(c)(1)(G), and 22a-92(c)(1)(H)
- Solid Waste – CGS §22a-92(a)(2)
- Dams, Dikes, and Reservoirs – CGS § 22a-92(a)(2)
- Cultural Resources- CGS § 22a-92(b)(1)(J)
- Open Space and Agricultural Lands CGS § 22a-92(a)(2)

\*General Development policies are applicable to all proposed activities

\*\* Water-dependent Use policies are applicable to all activities proposed at waterfront sites, including those with tidal wetlands frontage.

**Part VI: Consistency with Applicable Coastal Use Policies and Standards**

Explain how the proposed activity or use is consistent with all of the applicable coastal use and activity polices and standards identified in Part V. **For projects proposed at waterfront sites (including those with tidal wetlands frontage)** particular emphasis should be placed on the evaluation of the project’s consistency with the water-dependent use polices and standards contained in CGS §22a-92(a)(3) and 22a-92(b)(1)(A) – also see adverse impacts assessment in Part VII.B below (attach additional pages if necessary):

---



---



---



---

**Part VII.A.: Identification of Potential Adverse Impacts on Coastal Recourse**

Please complete this section for all projects.

Identify the adverse impact categories below that apply to the proposed project or activity. The applicable column **must** be checked if the proposed activity has the **potential** to generate any adverse impacts as defined in CGS §22a-93(15). If an adverse impact may result from the proposed project or activity, please use Part VIII to describe what project design features may be used to eliminate, minimize or mitigate the potential for adverse impacts.

Potential Adverse Impacts on Coastal Resources	Applicable	Not Applicable
Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or functions CGS § 22a-93(15)(H)	<input type="checkbox"/>	<input type="checkbox"/>
Increase the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones- CGS § 22a-93(15)(E)	<input type="checkbox"/>	<input type="checkbox"/>
Degrading existing circulation patterns of coastal water through the significant alteration of patterns of tidal exchange of flushing rates, freshwater input, or existing basin characteristics and channel contours CGS §22a-93(15)(B)	<input type="checkbox"/>	<input type="checkbox"/>
Degrading natural or existing drainage patterns through the significant alteration of groundwater flow and recharge and volume of runoff CGS §22a-93(15)(B)	<input type="checkbox"/>	<input type="checkbox"/>
Degrading natural erosion patterns through the significant alteration of littoral transport of sediments in terms of deposition or source reduction CGS §22a-93(15)(C)	<input type="checkbox"/>	<input type="checkbox"/>
Degrading visual quality through significant alteration of the natural features of vistas and view points CGS § 22a-93(15)(F)	<input type="checkbox"/>	<input type="checkbox"/>
Degrading water quality through the significant introduction into either coastal waters or groundwater supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity CGS § 22a-93(15)(A)	<input type="checkbox"/>	<input type="checkbox"/>
Degrading or destroying essential wildlife, finfish, or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alterations of the natural components of the habitat CGS §22a-93(15)(G)	<input type="checkbox"/>	<input type="checkbox"/>

**Part VII.B.: Identification of Potential Adverse Impacts on Water-dependent Uses**

Please complete the following two sections **only if the project or activity is proposed at a waterfront site:**

1. Identify the adverse impact categories below that apply to the proposed project or activity. The applicable column **must** be checked if the proposed activity has the **potential** to generate any adverse impacts as defined in CGS §22a-93(17). If an adverse impact may result from the proposed project or activity, use Part VIII to describe what project design features may be used to eliminate, minimize the potential for adverse impacts.

Potential Adverse Impacts on Future Water-dependent Development Opportunities and Activities	Applicable	Not Applicable
Locating a non-water-dependent use at a site physically suited for or planned for location of a water-dependent use CGS §22a-93(17)	<input type="checkbox"/>	<input type="checkbox"/>

Replacing an existing water-dependent use with a non-water-dependent use CGS §22a-93(17)	<input type="checkbox"/>	<input type="checkbox"/>
Siting a non-water- dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters CGS §22a-93(17)	<input type="checkbox"/>	<input type="checkbox"/>

**2. Identification of existing and/or proposed Water dependent Uses**

Describe the features or characteristics of the proposed activity or project that qualify as water-dependent uses as defined in CGS §22a-9393(16). If general public access to coastal waters is provided, please identify the legal mechanisms used to ensure public access in perpetuity, and describe any provisions for parking or other access to the site and proposed amenities associated with the access (e.g., boardwalk, benches, trash receptacles, interpretative signage, etc.)\* \_\_\_\_\_

---



---

\*If there are no water-dependent use components, describe how the project site is not appropriate for the development of a water-dependent use.

**Part VIII: Mitigation of Potential Adverse Impacts**

Explain how all potential adverse impacts on coastal resources and/or future water-dependent development opportunities and activities identified in Part VII have been avoided, eliminated, or minimized (attach additional pages if necessary): \_\_\_\_\_

---



---



---

**Part IX: Remaining Adverse Impacts**

Explain why any remaining adverse impacts resulting from the proposed activity or use have not been mitigated and why the project as proposed is consistent with the Connecticut Coastal Management Act (attach additional pages if necessary): \_\_\_\_\_

---



---



---



---

## **Low Impact Development Zoning and Subdivision Code Amendments**

Amend Zoning Code, Article IX Site Plan Review by adding the following;

### **§273-75 General Standards**

R. Low Impact Development. Applicants for Site Plan review are encouraged to practice low impact development as described in “Guidance Document for Low Impact Development Best Management Practices”, dated 12/15/09 and as it may be amended. Applicants shall complete “A Check List to Guide Low Impact Development Best Management Practices.”

## **GUIDANCE DOCUMENT FOR LOW IMPACT DEVELOPMENT BEST MANAGEMENT PRACTICES FOR GUILFORD March 11, 2010**

### **INTRODUCTION**

Over the past 30 years, Guilford has seen an increase in balancing environmental conservation with human needs, community growth and land use practices. Low Impact Development is an approach to the use of land which utilizes a variety of innovative approaches to site planning, conservation design and storm water management. Overall, the goal of Low Impact Development is to make the fewest changes to the environment consistent with zero increase in storm water runoff, environmental protection and economic considerations.

As a result of this approach, studies have shown that construction costs are reduced<sup>1</sup>, local property values are likely to rise<sup>2</sup>, tax revenues increase and compliance with wetlands and other resource protection regulations is easier<sup>3</sup>.

Guilford’s Storm Water Management regulations (adopted in 2005) require storm water management plans to be consistent with the latest version of Connecticut’s Storm Water Quality Manual. In this document, Section 4 describes Low Impact Development (LID) Site Planning and Management Practices. Additional guidance is described in “The Practice of Low Impact Development” by the US Department of Housing and Urban Development Office of Policy Development and Research, dated July 2003.

LID Planning and Design Practices include Site Planning, Erosion and Sediment Control, Storm Water Management and Landscape Design principles. To highlight those LID Management Practices expected in Guilford, the following principles are suggested for review by designers and developers. The attached checklist is intended for designers and developers to complete in order to provide the Planning and Zoning Commission and staff an overview of the developer’s efforts to protect natural resources wherever reasonable on any given site.

### **SITE PLANNING CONSIDERATIONS**

Environmentally sensitive development is a prime importance in Guilford, as is preservation of those elements which represent the Town’s historic and cultural heritage. A visually appealing site plan which will

stabilize and/ or increase property values and encourage sustainable development and energy efficient design are important elements to be included in a Site Plan application wherever possible.

Site Plans should also respect unique natural and historic features such as stone walls and public view sheds. As a result of this approach to site planning, more aesthetically pleasing and naturally attractive landscapes, more pedestrian friendly neighborhoods, more open space for recreation, and safer residential streets can be expected<sup>4</sup>.

Site planning can be divided into a four step process.

1. Identification of Natural Resources
2. Locating buildings outside the natural resource area wherever possible
3. Lay out streets, driveways, parking areas and trails.
4. Creation of lot lines.

#### Step1. Identification of Natural Resources

An initial site assessment is conducted to determine the location of all natural resources on a given site. These resources shall include wetlands, coastal resources, meadows, steep slopes, soil types, mature forest, significant trees, riparian corridors, wildlife corridors, view sheds, and the location of any endanger species. Most of these elements have already been identified in Guilford's 2005 Natural Resource Inventory and Assessment (NRIA) and they are illustrated in the NRIA Map Atlas. Other natural resource references are identified in Table 1.

After a document review of the site has been performed, a field survey should be conducted to locate hydrologic features such as streams, wetlands, floodplains and existing natural surface water drainage patterns. Once wetlands features have been identified, a surveyor needs to locate them on a site plan along with features such as site topography, limits of vegetation, exposed ledge and stone walls. Additional items required on a site plan are listed on the attached Low Impact Design Best Management Practices check list and in Table 1.

#### Step 2.Locating buildings outside the natural resource areas wherever possible

As a result of these initial steps, a site plan can be created showing areas of the site best suited for development and areas of the site that should be conserved. The developable areas are those locations on the site which will least disturb the natural resources and have the fewest regulator and zoning concerns. It may be advisable to cluster the development into one area of the site or into several smaller clusters that protect the site's natural features.

Conservation lands should include both inland and tidal wetlands, areas within the "A", "AE", or "V" flood zone as depicted on the flood Hazard Boundary Map or Flood Insurance Rate Map, steep slopes in excess of 25 percent (10 feet vertical in less than 40 feet horizontal), areas adjacent to open space, historic features such as stone walls, natural features such as fields, mature trees and forest, public view sheds, wildlife corridors, and site areas that contain threatened or endangered species.



### Step 3. Lay out streets, driveways, parking areas and trails

The lay out of streets, driveways, and parking areas should be designed after the site analysis. These features should be laid out in a way that minimizes their overall length and width and cutting and filling to conform to natural contours. Shared parking and driveways need to be considered. Streets and driveways should conform to natural land formations in order to reduce impact on the natural resources where possible.

### Step 4. Draw in the lot lines

Once the above steps have been completed, the lot lines (if any) can be drawn based on the location of buildings, driveways, septic systems, and wells. Due to the clustering of development, developers may be able to take advantage of an Open Space Subdivision or a Planned Residential Development.

## **EROSION AND SEDIMENT CONTROL**

Erosion and storm water drainage plans should utilize natural topography wherever possible. To reduce erosion of exposed soils and prevent sedimentation of wetlands, water bodies and other sensitive areas, land disturbance should be minimized to the area necessary for construction. Proposed development projects on a previously undeveloped site should minimize clearing and grading, especially in areas of steep slopes, erosion-prone soils and sensitive vegetation. For redevelopment projects, the site plan should concentrate development on previously disturbed areas to the extent possible. Vegetation outside immediate construction areas should remain undisturbed. Any disturbed areas should be replanted or heavily mulched. Erosion and sedimentation control plans shall be constructed in accordance with The Town of Guilford Subdivision and Zoning Codes using principles outlined in the Connecticut Guidelines for Soil Erosion Sediment Control (2002), as the same maybe revised.

## **STORMWATER MANAGEMENT**

Guilford's stormwater management regulations are designed to protect local and regional wetlands and water bodies, Long Island Sound and its tributaries from non-point sources of pollution and to maximize groundwater recharge on site. The goal of LID stormwater management is to mimic pre-development hydrologic conditions by utilizing natural topography and soils to detain, retain, percolate and evaporate source and use natural treatment systems instead of a centralized collection point. Non-structural stormwater management systems should be used, in part or in whole, only if the applicant can demonstrate that other systems are not feasible due to site conditions.

## **LANDSCAPE DESIGN**

Demand for irrigation should be minimized and groundwater recharge from landscaped areas should be maximized to the extent possible. To reduce proliferation of invasive species, native plants should be used wherever possible. All disturbed areas should be replanted or mulched in accordance to the Erosion and Sedimentation Control plan. Plants on the 2004 Connecticut DEP Invasive Plant List (as the same maybe revised) should not be used.

The existing vegetation outside the immediate construction area should remain undisturbed. Significant existing trees within the proposed development area should be preserved where possible as per the following caliper size thresholds related to species:

- 4-6" for small trees such as dogwood and redbud

- 8-10” for medium species such as sassafras, cherry and water beech
- 12-14” for slow growing hardwoods (oak, maple, ash)
- 15-18” for fast growers such as tulip poplar, sycamore and conifers<sup>5</sup>

As a result of these practices, forests, wetlands, and wildlife habitat would be preserved.

**Definitions:**

Permanent Erosion & Sedimentation Control Measures- Long term devices placed, constructed on or applied to the landscape that prevents or curb the detachment of soil, the movement of water and or the deposition of sediment. Examples include detention basins, grass swales, level spreaders, and vegetation.

Steep slopes- A steep slope has a grade of more than 25% and an area of 1,000 square feet or more. The grade is measured along a line perpendicular to the lot contours established at intervals not exceeding two feet.

View Shed- Scenic views into and from the site and any other features that contribute to the landscape character of the property. Examples include meadows, notable trees ridgelines, rock outcrops, stonewalls, beaches and dunes, Long Island Sound and its tributaries.

Stormwater Detention- Control measures that temporarily holds and gradually releases a volume of stormwater runoff to attenuate and delay stormwater runoff peaks.

Stormwater Best Management Practices- practices designed to mitigate the effects of stormwater runoff to attenuate flooding, reduce erosion, and reduce pollution.

**Reference:**

1. Reducing Stormwater Costs through Low Impact Development (LID), Strategies and Practices, EPA Publication number 841-F07-006, December 2007
2. The Economic Value of Open Space: A review and Synthesis, CJ Fausold and RJ Lillieholm, Environmental Management Volume 23 (3):307-320,1999
3. The Practice of Low Impact Development by the U.S. Department of Housing and Urban Development, July.
4. 2004 Connecticut Stormwater Quality Manual prepared by the Connecticut Department of Environmental Protection.
5. Conservation Subdivision Design: A Brief Overview by Randall Arendt, FRTPI, ASLS (Hon.)

Table 1  
LID/BMP Resource Requirements and Resources

Natural Resource Regulatory Requirements			Natural Resource Reference Sources	
Natural Resource Elements	PZC Site Plan map reqt.	Inland Wetlands app	Natural Resource Inventory	Other References
Contours and slopes >25%	Already required	#5		Site survey already required
Watercourse boundaries @100'	Already required	#6		Site survey already required
Soil mapping		#16.D	Map A-4 Prime soils	USDA map/ wetland soils

Wetlands and watercourses		IWC jurisdiction	Map J-2	IWC regulations –Appx A
Stone walls	Already required			Site survey already required
Ledge and rock outcroppings	Often already included			Site survey required
Logging roads and trails	Often already included			Site survey required
Flood hazard areas			Map C-2	FEMA maps
Aquifers and watersheds			Map C-1 for watersheds	Zoning map for aquifers
Natural drainage areas-swales		#9A (for regulated area only)		Inferred from contours
Impervious surface % whole site	Commercial and Industrial Zones VLB & proposed CAM regs		Map of 10% VLBs at build out	Storm water regs
Rare and endangered species			Map J-3 and THS wall map	CT DEP NDDB maps
Significant forests & Grasslands			Map J-1	Property survey already reqd
Significant Natural Resource Areas (SNRAs)			Map J-6	
Wildlife movement corridors			Map J-4	CT DEP NDDB maps
Viewsheds	Cam Regulations Only		Section G, Map G Appx G1&2	Site survey required
Significant trees (in proposed development area only)				See definitions in BMP text Site survey required
Contiguity of site with protected open space, unbuilt land, wetlands & ridgelines				USGS, NRI Map H-3, GIS plus aerial photos

**A CHECK LIST TO GUIDE LOW IMPACT DEVELOPMENT – BEST MANAGEMENT PRACTICES**

Date: \_\_\_\_\_  
 Assessor Map No. \_\_\_\_\_ Lot No. \_\_\_\_\_  
 Location of Property: \_\_\_\_\_  
 Applicant: \_\_\_\_\_

Items listed below should be considered by developers in the creation of site plans. Due to individual site constraints not all items will apply to each individual property. CHECK ALL ITEMS THAT HAVE BEEN ADDRESSED IN THE SITE PLAN APPLICATION. Applicants should indicate by writing Yes, No, or N/A (not applicable). Additional comments are to be attached on a separate sheet of paper with project name and address.

**A. SITE PLAN CONSIDERATIONS**

<b>1. Site Assessment of Natural Resources</b>	<b>Applicant</b>	<b>Staff Comments</b>
a. Natural Resources and constraints have been indicated and are identified on the plans (wetlands, rivers, streams, flood hazard zones, meadows, agricultural land, tree lines, slopes [2 foot contours], soil types, exposed ledge & stone walls).		
b. Is the property shown on the latest copy of CT DEP State and Federal Listed Species and Significant Natural Communities Map as property listed in the Natural Diversity Data Base (NDDDB)? If yes, provide a copy of the CT-DEP NDDDB request form and CT-DEP reply letter.		
c. Development is designed to avoid critical coastal resources, water courses, wetlands and steep slopes.		
d. Soils Suitable for septic & stormwater infiltration have been identified		
e. Natural existing drainage patterns have been delineated on the plan and are proposed to be preserved or impacts minimized.		
f. Significant trees/ tree clusters in proposed development areas have been identified. Removal avoided and or protection in conservation easement suggested. (See guidance document).		
g. View sheds have been recognized/ maximized		
h. A copy of the latest USGS Quad map along with an aerial photograph showing the site and adjacent properties is attached.		

<b>2. Preservation of Open Space</b>	<b>Applicant</b>	<b>Staff Comments</b>
a. An open space subdivision or planned residential development (PRD) has been considered.		
b. Open space/ common areas are delineated.		
c. Open space is retained in a natural condition.		
d. Proposed open space is located adjacent to open space areas, trail systems, and / or wild life corridors. ( See Town of Guilford Natural Resource Inventory)		
e. Coastal Public access should be evaluated for properties with non water-dependent uses on waterfront sites.		
f. Street line setbacks are minimized to reduce impervious surface and to optimize open space.		

<b>3. Minimization of Land Disturbance</b>	<b>Applicant</b>	<b>Staff Comments</b>
a. The proposed building is located where development can occur with the least environmental impact.		
b. Buildings designed for maximum solar gain. (Window exposure, are oriented to the sun for maximum energy efficiency).		
c. Clustered development has been considered.		
d. Disturbance areas have been delineated to avoid unnecessary clearing or grading,		

e. Sanitary systems should be setback from water bodies to maximum extent possible.		
f. Native Vegetation outside the immediate construction areas remains undisturbed or will be restored.		

<b>4. Street and Driveway Sizes</b>	<b>Applicant</b>	<b>Staff Comments</b>
a. The design provides an efficient layout to minimize the overall length and width of streets.		
b. Roadways and driveways conform to natural land formations.		
c. Design features to reduce impervious surfaces such as shared parking & Driveways have been considered.		
d. Proposed drainage systems utilize existing topography.		

**B. EROSION AND SEDIMENT CONTROL**

<b>EROSION AND SEDIMENT CONTROL</b>	<b>Applicant</b>	<b>Staff Comments</b>
a. Erosion and Sedimentation control plan is designed in accordance to Guilford Subdivision and Zoning Regulations.		
b. Permanent erosion control measures are to be utilized.		
c. Development does not create steep slopes subject to erosion		
d. Vegetated buffers are provided for riparian areas, intermittent streams, and wetlands.		
e. Cleared areas will be replanted and/ or heavily mulched.		

**C. MANAGING STORMWATER**

<b>MANAGING STORMWATER</b>	<b>Applicant</b>	<b>Staff Comments</b>
a. Efforts have been made to retain or infiltrate water on site.		
b. Outfalls are stabilized and receiving streams are protected from sediment scour potential velocity.		
c. Level spreaders or dispersed flow methods are used only where natural dispersal is not possible		
d. Maximum use is made of vegetated ditches/ swales, especially along driveways, parking areas and roads.		
e. Cul-de-sacs include a landscape island for bio-retention.		
f. Sheet flow is used to the maximum extent possible to avoid concentrating runoff.		
g. Rooftop drainage is discharged into bio-retention areas or rain gardens.		
h. Innovations like collecting/ reusing rainwater, green roofs, or porous pavement have been considered.		
i. Grass swales are used beside roads instead of curbs and gutters.		
j. Parking medians are designed for bio-retention to allow infiltration.		
k. Infiltration structures have been included –e.g. drywells and infiltration trenches.		
l. Best Management Practices to provide water quality treatment to remove existing and expected pollutants generated to be the proposed use.		
m. Impervious surfaces are disconnected and stormwater is treated locally.		
n. Proposed construction of the storm water management system is designed in compliance with the Guilford Town Codes and Connecticut Stormwater Manuel.		
o. Onsite soil infiltration/ permeability has been measured.		
p. Onsite soils are suitable for stormwater detention/ infiltration.		
q. Sufficient areas of infiltration (if present) are being utilized to maximize onsite stormwater retention.		

**D. LANDSCAPE PLAN**

<b>LANDSCAPE PLAN</b>	<b>Applicant</b>	<b>Staff Comments</b>
a. Clearing and grading have been minimized.		
b. Irrigation with automatic sensors have been considered.		
c. Landscaped areas retain water such as in water gardens, vegetated swales, etc.		
d. Habitat-enhancing native plant species are used.		
e. Species appropriate to soil, site, wetlands and microclimate conditions have been considered.		
f. Indigenous plants suitable for vegetated buffers, stream corridors and wetlands are included.		
g. Plants on the 2004 CT DEP Invasive Plant List are not included in the landscape design plan.		
h. Invasive species removal and maintenance control plan has been considered.		
i. Underground utilities have been considered.		