

Site CAM Report

Coastal Area Management Environmental
Analysis for the Construction of a New
Single Family Dwelling
at
22 Seagate Road
Darien, Connecticut

Prepared for:

Michael & Deborah Brennan
22 Seagate Road
Darien, Connecticut 06820

Date Prepared:

May, 2020

Prepared by:

DiVesta Civil Engineering Associates, Inc.

51 Painter Ridge Road
Roxbury, Connecticut 06783
(860) 354-4226
dceainc@charter.net

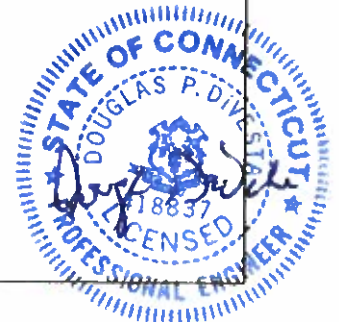


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DiVesta Civil Engineering Associates, Inc.

51 Painter Ridge Road
Roxbury, Connecticut 06783
(860) 354-4226
dceainc@charter.net

22 Seagate Road



MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town of Darien, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 8/1/2019
Data updated 8/1/2019

**COASTAL AREA MANAGEMENT ENVIRONMENTAL ANALYSIS
FOR THE CONSTRUCTION OF A NEW SINGLE FAMILY RESIDENCE
AND DRIVEWAY
AT
22 SEAGATE ROAD, DARIEN, CONNECTICUT**

This report evaluates the potential environmental and coastal area management impacts associated with the construction of a single family residence and driveway located on Seagate Road in Darien, Connecticut. The property is located within 100 feet from Holly Pond.

Information gathered from the site survey and field investigations was studied and analyzed. This evaluation concluded that the plan, as proposed, can be implemented with no significant long-term adverse impacts to the natural coastal resources.

Section 1 – Site Location

The property is a .3362 ± acre developed lot located on Seagate Road and has direct access to the shoreline of Holly Pond. The property is accessed by an existing asphalt driveway on the north side of the existing dwelling. The property is surrounded by other single family residences on two sides and Seagate Road to the north and Holly Pond to the south.

Section 2 – Existing Conditions

2.1 Existing Residence and Site

The existing residence is a 2-story, four-bedroom house constructed in 1941, according to the Assessor's card. It is located on a .3362 ± acre lot in the R-1/2 (one half-acre) residential zone in the Town of Darien, CT. The main level of the residence is accessed from the west via a walkway from the existing asphalt driveway.

The house is surrounded on all sides with a maintained lawn and landscaping. The planted landscape is comprised of native and ornamental trees, shrubs and perennial plantings. There are native plants along the boundaries between this property and the adjacent property to the east and west. There are mature trees throughout the existing landscape comprised of deciduous trees and conifers.

The property has direct access to Holly Pond.

A. Topography, Surface Runoff and Drainage.

The high point of this property is at elevation 13 ± located in the north side of the house adjacent to Seagate Road. The lowest portion of the property is located at the water edge at elevation 3.4 ± at the toe of the timber retaining wall. The top of the retaining wall is at elevation 8 to 8.46±.

Based on the existing topographical survey and site observations the runoff from the property will flow in two directions, to the south and east on the east side of the house

and to the south and west on the west side of the house. Ultimately all runoff drains to Holly Pond.

B. Soils and Inland Wetlands.

The U.S. Department of Agriculture Natural Resources Conservation Services classified the soil on-site as Haven-Urban land complex. Based on the NRCS the complex is about 40 percent Haven soils, 35 percent Urban soils and 25 percent minor components.

There is no indication that there are inland wetlands on-site.

C. Vegetation.

The vegetation associations on the lot consist of native and ornamental plant species growing within upland plant habitats. During the development of the lot many years ago it appears that many of the native trees were saved to create the present day landscape.

D. Tidal Wetlands.

Reviewing the Coastal Resource Map as prepared by the Coastal Area Management Program, Connecticut Department of Environmental Protection indicates that this area is a coastal "flood" hazard area.

E. Coastal Resource Features.

A field investigation identified the following coastal resources on or adjacent to the site: a coastal "flood" hazard area.

F. Floodplain and Flooding.

This property lies partly within a 1% annual chance flood boundary in accordance with the Federal Emergency Management Agency (FEMA) insurance rate map.

G. Site Utilities.

Electric, phone and cable service wires enter the property from the north overhead from the utility pole located to the north of the property adjacent to Seagate Road and will be placed underground servicing the new dwelling. The existing house is connected to the sanitary sewer via lateral to the existing sewer main. The existing residence is served by municipal water. The proposed dwelling will be connected to both sanitary sewer and municipal water.

Section 3 – Proposed Development

3.1 Development Plan

The site development plan for this property is to raze the existing dwelling and detached garage and to construct a new single family residence in the same general location as the existing residence. A new driveway will be installed to access the new dwelling with a side load garage. The site development plan has been prepared using the site survey information by William W. Seymour and Associates, P.C., Darien, CT dated 6/17/16 as a base map and using the site plan developed by the project architect Robert A. Cardello Architecture & Design for the proposed residence and driveway.

It is proposed to install a catch basin on the proposed driveway to collect runoff from the driveway and roof areas and convey the flows to subsurface bio-retention areas. The stormwater treatment systems have been designed to collect runoff for the water quality volume consisting of one-inch of runoff from surface areas of the driveway, roof areas, a portion of the side patio and rear patio. The runoff from the subsurface bio-retention areas will infiltrate into the surrounding soils with an ultimate discharge into Holly Pond.

The proposed site plan is subject to review and approval by the Town of Darien's Planning and Zoning Commission under Coastal Area Management regulations.

Section 4 – Coastal Resources and Coastal Use Policies

4.1 Coastal Resources

In accordance with the Connecticut Coastal Area Management Act, the following coastal resources, including general resources, have been identified on or adjacent to the property: an estuarine embayment. The proposed work avoids impact to the sensitive coastal areas.

4.2 Coastal use Policies

The Connecticut Coastal Area Management Act, Coastal Use Policies, applicable to this site are general development and water dependent uses. The construction of the new single family residence, driveway and associated site work have been planned to avoid environmentally sensitive site areas and the overall environmental quality of the site will remain or be restored to a residential landscape after construction is completed. Reference is made to the attached coastal area management charts.

The current use and proposed land use of this property is a single-family private residential use. Current and proposed access to this lot is via asphalt driveway serving the existing and proposed residence. After the project is completed the access to this property will be via asphalt driveway to a side load garage from Seagate Road. Since the water-dependent use component of the Coastal Use Policies deals specifically with land uses requiring waterfront sites (boat basins, fishing) and/or provisions for public access, this coastal use is not considered applicable for the existing single family residential property.

Section 5 – Potential Adverse Impacts

The proposed construction of the new single family residence and driveway and other site work associated with the construction activity is within the 100-foot regulated area of Holly Pond and will not result in long-term environmental impacts to the natural ecosystems. All construction activity has been planned to occur within a previously constructed residential landscape which will be restored as part of the project.

During the anticipated construction period the potential for environmental impacts resulting from erosion and sedimentation is possible. This potential for environmental impact can be managed and controlled with the proper installation and maintenance of sediment and erosion control devices.

During and after construction, the surface stormwater runoff patterns will remain generally the same.

The study site is not known, nor is it designated by the Town of Darien or State of Connecticut as a scenic overlook or vista area. However, the property is an integral part of the viewscape of the residential development along Seagate Road. The entire site is privately owned and access to the property is restricted to the single family land use.

Section 6 – Potential Beneficial Impacts

Collecting and treating the runoff from the proposed impervious surfaces will provide a beneficial impact to the coastal resources. The construction of the new dwelling will be within the same general footprint of the existing dwelling which will not impact the natural resources anymore that what is being impacted. The redevelopment will have a positive environmental impact on the surrounding coastal area.

Section 7 – Mitigation

Erosion controls will be installed prior to the commencement of construction related activities. These controls will be maintained in proper working order throughout the construction phase and will be removed after all construction is completed and disturbed site areas have been restored to a quality residential landscape condition. It is also proposed to collect the runoff from the impervious areas and convey the flow to two subsurface bio-retention areas. The subsurface bio-retention systems will act as a primary treatment system to capture the water quality volume consisting of the first inch of runoff from the impervious areas. The subsurface stormwater management systems will promote infiltration into the surrounding ground to reduce the nutrient loads to Holly Pond.

Section 8 – Conclusion

Construction of the new single family residence and new driveway will require the removal of some of the existing ornamental plantings. The landscape disruption will be balanced and mitigated by the establishment of a new lawn area and keeping the existing landscaping as much as possible throughout the property. Erosion controls will be used throughout the construction period.

Planning efforts have been implemented to reduce, minimize, or mitigate activities on the property that will affect the ecological balance of the natural ecosystems on or in the vicinity of the site and provide for a viable continued high quality residential use of the property.

Erosion and sediment controls will be utilized during the land development period to minimize impacts of related stormwater runoff.

Brennan Residence - 22 Seagate Road, Darien, CT

Appendix A:
Coastal Area Charts

DiVesta Civil Engineering Associates, Inc.

51 Painter Ridge Road
Roxbury, Connecticut 06783
(860) 354-4226
dceainc@charter.net

COASTAL AREA MANAGEMENT - COASTAL RESOURCES Page 1	Resource On-site	Resources Adjacent To Site	Resources Affected by The Activity	Resource Not Affected By The Activity	Resource Not Present or Applicable	COMMENTS
General Resource					✓	All proposed work will be well away from these areas.
Bluffs and Escarpments					✓	All proposed work will be well away from these areas.
Rocky Shorefront					✓	No proposed work will be near these resources.
Beaches and Dunes					✓	No proposed work will be near these resources.
Intertidal Flats					✓	
Tidal Wetlands					✓	
Freshwater Wetlands and Watercourses					✓	

COASTAL AREA MANAGEMENT - COASTAL RESOURCES Page 2	Resource On-site	Resources Adjacent To Site	Resources Affected by The Activity	Resource Not Affected By The Activity	Resource Not Present or Applicable	COMMENTS
Coastal Hazard Areas					✓	
Developed Shorefront					✓	
Island					✓	
Shorelands					✓	
Shellfish Concentration Areas					✓	
Coastal Waters and Estuarine Embayments					✓	
Air Resources and Air Quality					✓	

COASTAL AREA MANAGEMENT – ADVERSE IMPACTS Page 1	Applicable	Not Applicable	Impact	No Impact	REMARKS
<p>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. [Source: CGS Section 22a-93(15)(A)]</p>				✓	<p>This project will be providing treatment of the stormwater quality volume and adding native landscape throughout the property.</p>
<p>Degrading existing circulation patterns of coastal waters through the significant alteration of existing patterns of tidal exchange of flushing rates, freshwater input, or existing basin characteristics and channel contours. [Source: CGS Section 22a-93(15)(8)]</p>		✓			
<p>Degrading natural erosion patterns through the significant alteration of littoral transport of sediments in terms of deposition or source reduction. [Source: CGS Section 22a-93(15)(C)]</p>		✓			
<p>Degrading natural or existing drainage patterns through the significant alteration of groundwater flow and recharge and volume of runoff. [Source: CGS Section 22a-93(15)(D)]</p>		✓			
<p>Increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones. [Source: CGS Section 22a-93(15)(E)]</p>		✓			

COASTAL AREA MANAGEMENT – ADVERSE IMPACTS Page 2	Applicable	Not Applicable	Impact	No Impact	REMARKS
Degrading visual quality through significant alterations of the natural features of vistas and viewpoints. [Source: CGS Section 22a-93(15)(F)]		✓			
Degrading or destroying essential wildlife, finfish, or shellfish habitat through significant alterations 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. [Source: CGS Section 22a-93(15)(G)]		✓			
Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics of function. [Source: CGS Section 22a-93(15)(H)]		✓			

COASTAL AREA MANAGEMENT – COASTAL USE POLICIES Page 1	Applicable	Not Applicable	COMMENTS
General Development	√		The construction of a new single family residence will not adversely impact the existing quality of the site or residential neighborhood it will actually improve the quality of the surrounding area.
Water Dependent Uses		√	
Ports and Harbors		√	
Coastal Structures and Filling		√	
Dredging and Navigation		√	
Boating		√	
Fisheries		√	

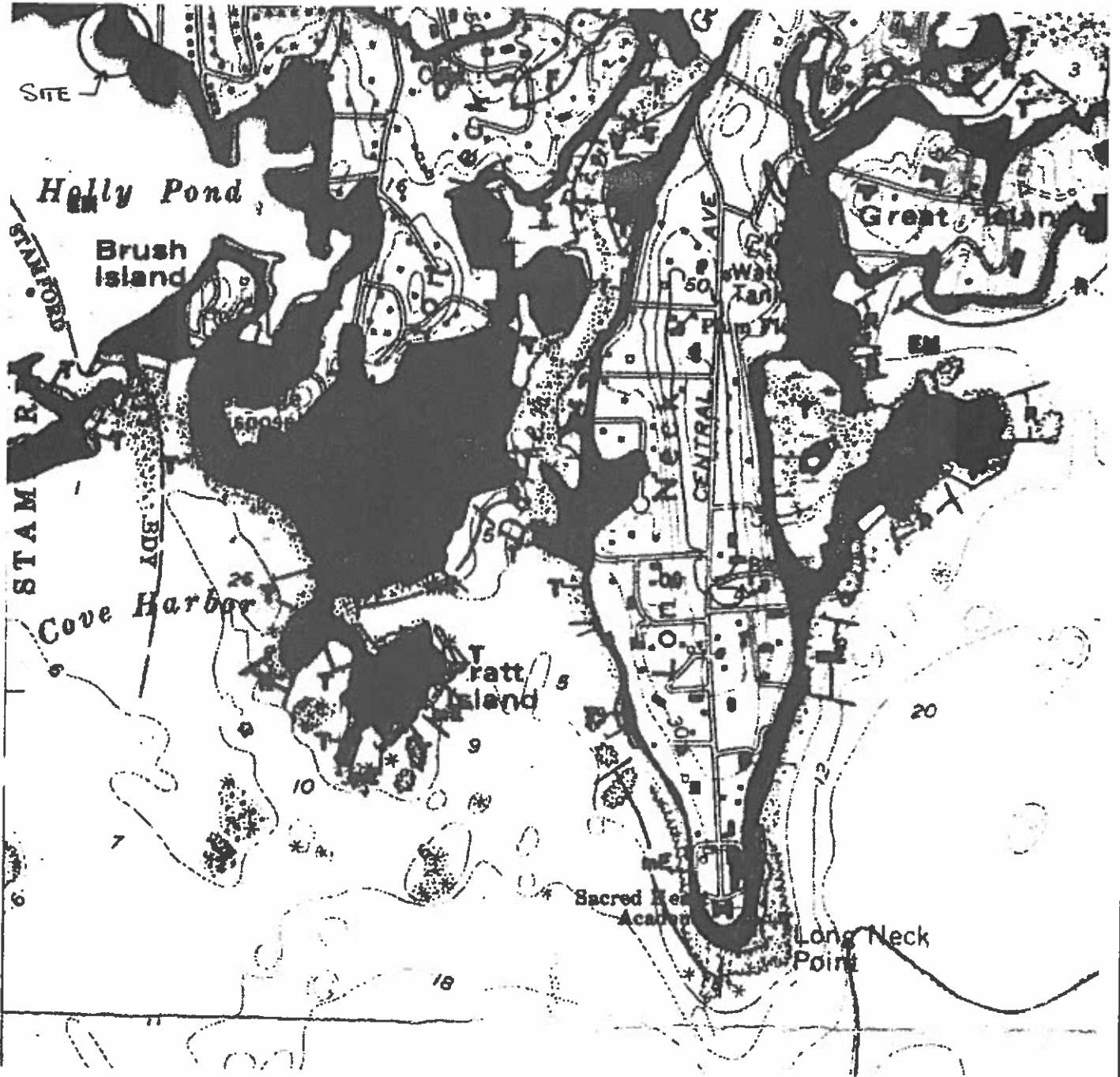
COASTAL AREA MANAGEMENT – COASTAL USE POLICIES Page 2	Applicable	Not Applicable	COMMENTS
Coastal Recreation and Access	√	√	
Sewer and Water Lines	√		The existing sanitary sewer and water service will be used for this residence.
Energy Facilities		√	
Fuel Chemicals and Hazardous Materials		√	
Transportation		√	
Solid Waste		√	
Dams, Dikes and Reservoirs		√	

Brennan Residence - 22 Seagate Road, Darien, CT

Appendix B: **Coastal Resources**

DiVesta Civil Engineering Associates, Inc.

51 Painter Ridge Road
Roxbury, Connecticut 06783
(860) 354-4226
dceainc@charter.net



DIVESTA CIVIL ENGINEERING		
ASSOCIATES, INC.		
<small>31 BANTER RIDGE ROAD NOYBURY, CONNECTICUT</small>		
<small>TEL: (800) 334-4226</small>		<small>FAX: (800) 334-4226</small>
PROJECT: BRENNAN RESIDENCE		
<small>22 SEAGATE ROAD, DARIEN, CONNECTICUT</small>		
TITLE: COASTAL RESOURCES		
<small>SCALE: NTS</small>	<small>DATE: 05/12/20</small>	<small>DESIGNED BY: DD</small>
<small>DRAWN: DD</small>	<small>APPROVED BY: DD</small>	D-1