



## 9.7 Village of Belle Terre

This section presents the jurisdictional annex for the Village of Belle Terre. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the Village participated in the planning process; an assessment of the Village of Belle Terre’s risk and vulnerability; the different capabilities utilized in the Village; and an action plan that will be implemented to achieve a more resilient community.

### 9.7.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Belle Terre’s hazard mitigation plan primary and alternate points of contact.

**Table 9.7-1. Hazard Mitigation Planning Team**

Primary Point of Contact	Alternate Point of Contact
Name/Title: Bob Sandak, Mayor Address: 1 Cliff Road, Belle Terre, NY 11777 Phone Number: 631-928-0020 Email: btvillageoffice@gmail.com	Name/Title: David Wolosin, Emergency Manager Sheila Knapp, Deputy Mayor Address: 1 Cliff Road, Belle Terre, NY 11777 Phone Number: 631-928-0020 Email: btvillageoffice@gmail.com
NFIP Floodplain Administrator	
Name/Title: Joanne Raso, Village Clerk-Treasurer Address: 1 Cliff Road, Belle Terre, NY 11777 Phone Number: 631-928-0020 Email: btvillageoffice@gmail.com	

### 9.7.2 Municipal Profile

The area which is now known as the Incorporated Village of Belle Terre was inhabited by Indians prior to the 1600’s and was deeded to three Englishmen in 1689. The area was developed as a summer retreat for wealthy New York families during the early 1900’s. Special railway cars brought residents from New York City to the Port Jefferson Railroad Station on the Long Island Railroad tracks. From there they were driven about a mile to the gated Community of Belle Terre. The current Village was incorporated in 1931 and encompasses about .9 square miles. Minimum zoning is 1 acre in this strictly residential Village of hundred-year-old Victorians mixed with contemporary and post-modern homes.

The Incorporated Village of Belle Terre is located in the Town of Brookhaven, on the north shore of Long Island. The Village of Belle Terre is governed by a Mayor, a Deputy Mayor and three Trustees.

According to the U.S. Census, the 2010 population for the Village of Belle Terre was 792. The estimated 2017 population was 681, a 14.0 percent decrease from the 2010 Census. Data from the 2017 U.S. Census American Community Survey indicate that 4.1 percent of the population is 5 years of age or younger and 24.0 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

### 9.7.3 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern.



Table 9.7-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. The figures at the end of this annex illustrate the geographically-delineated hazard areas and the location of potential new development, where available. The recent and anticipated development depicted on these figures excludes the Suffolk County wastewater upgrades; refer to Section 4 (County Profile) for additional information on this development.

**Table 9.7-2. Recent and Expected Future Development**

Type of Development	2014		2015		2016		2017		2018		2019	
<b>Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)</b>												
	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>
Single Family	1	0	0	0	1	0	0	0	1	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Permits Issued</b>	1	0	0	0	1	0	0	0	1	0	0	0
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
<b>Recent Major Development and Infrastructure from 2015 to Present</b>												
None Identified												
<b>Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years</b>												
None Anticipated												

SFHA Special Flood Hazard Area (1% flood event)

\* Only location-specific hazard zones or vulnerabilities identified.

### 9.7.4 Capability Assessment

The Village of Belle Terre performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Information on National Flood Insurance Program (NFIP) compliance.
- Classification under various community mitigation programs.
- The community’s adaptive capacity for the impacts of climate change.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in Capability Assessment (Section 9.7.4). The Village of Belle Terre identified specific integration activities that will be incorporated into municipal procedures are



included in the updated mitigation strategy. Appendix G provides the results of the planning/policy document review and the answers to integration survey questions.

### Planning, Legal, and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Village of Belle Terre and where hazard mitigation has been integrated.

**Table 9.7-3. Planning, Legal, and Regulatory Capability**

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						Yes	If no - can it be a mitigation action?
<b>Codes, Ordinances, &amp; Requirements</b>							
Building Code	Yes	Fire Prevention and Building Construction, Code of the Village of Belle Terre, Chapter 78	Local	Building Inspector	Yes	Yes	-
Comment: It is the intent of this chapter to provide for the administration and enforcement of the provisions of all laws, codes, regulations and orders applicable to the location, design, materials, construction, alteration, repair, equipment, use, maintenance, occupancy, removal and demolition of buildings, structures and appurtenances located in the village.							
Zoning Code	Yes	Zoning, Code of the Village of Belle Terre, Chapter 170	Local	Building Inspector	No	Yes	-
Comment: No building permit or certificate of occupancy shall be issued except when the provisions of this chapter, the New York State Uniform Fire Prevention and Building Code and the rules and regulations of the Planning Board are complied with.							
Subdivisions	Yes	Subdivision of Land, Code of the Village of Belle Terre, Chapter 138	Local	Planning Board	No	Yes	-
Comment: At a meeting, the Planning Board will consider all phases of the proposed subdivision and either approve or disapprove the preliminary map, whereupon the developer will be notified in writing.							
Stormwater Management	No	Title 6, Ch. X, 17-7,8,70	-	-	Yes	-	-
Comment:							
Post-Disaster Recovery	No	-	-	-	No	-	-
Comment:							
Real Estate Disclosure	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent	Yes	Yes	-
Comment:							
Growth Management	No	-	-	-	No	-	-
Comment:							
Site Plan Review	Yes	Site Plan Review, Code of the Village of Belle Terre,	Local	Planning Board	No	Yes	-



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
		Chapter 125					
<p>Comment: The Board of Trustees of the Incorporated Village of Belle Terre finds that the proper and desirable development of residential lots must consider the retention of native trees, shrubs, flora, fauna and ground cover, the preservation of animal habitat, preservation of the vegetated character of views along roadways, protection of slopes, strict compliance with drainage regulations in order to prevent pollution and to recharge aquifers, and the use of imaginative ways to create a balance between reasonable enjoyment and improvement of land and the preservation of dwindling natural resources in the Village. In order to achieve the aforesaid goals and to otherwise promote the health, safety, general welfare, comfort and convenience of the Village and its residents, site plans for land use, development and construction activities proposed within the Village shall be subject to Village Planning Board review.</p>							
Environmental Protection	No	Title 6 NYCRR Part 617	State	-	Yes	-	-
<p>Comment:</p>							
Flood Damage Prevention	Yes	Code of the Village of Belle Terre, Chapter 86	Local	Building Administrator/ Clerk	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)	Yes	-
<p>Comment: The Flood Damage Prevention Ordinance was adopted in order to:</p> <ul style="list-style-type: none"> <li>To protect human life and health;</li> <li>To minimize expenditure of public money for costly flood control projects;</li> <li>To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;</li> <li>To minimize prolonged business interruptions;</li> <li>To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, sewer lines, streets and bridges located in areas of special flood hazard;</li> <li>To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;</li> <li>To provide that developers are notified that property is in an area of special flood hazard; and</li> <li>To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.</li> </ul>							
Municipal Separate Storm Sewer System (MS4)	No	EPA Phase II Stormwater Rule	-	-	Yes	-	-
<p>Comment: The Village has an MS4 exemption.</p>							
Emergency Management	No	NYS Executive Law, Article 2B.	-	-	Yes	-	-
<p>Comment:</p>							
Climate Change	No	NYS Executive Law, Article 75	-	-	Yes	-	-
<p>Comment:</p>							
Disaster Recovery Ordinance	No	-	-	-	No	-	-
<p>Comment:</p>							
Disaster Reconstruction Ordinance	No	-	-	-	No	-	-
<p>Comment:</p>							
Other	No	-	-	-	-	-	-
<p>Comment:</p>							
<p><b>Planning Documents</b></p>							
Comprehensive	No	-	-	-	No	-	-





Plan	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
Plan							
Comment:							
Capital Improvement Plan	No	-	-	-	No	-	-
Comment:							
Disaster Debris Management Plan	Yes	Suffolk County Multi-Jurisdictional Debris Management Plan	County, Local	Suffolk County FRES	No	Yes	-
Comment: This NYS and FEMA approved comprehensive Multi-Jurisdictional Debris Management Plan was developed through the cooperative efforts of Suffolk County and each of the ten (10) Towns, working together in conjunction with partners from private, state and federal agencies.							
Floodplain or Watershed Plan	No	-	-	-	No	-	-
Comment:							
Stormwater Plan	No	-	-	-	No	-	-
Comment:							
Open Space Plan	No	NYS Constitution - Article 9; Statute of Local Governments. Section 10 (7)	-	-	Yes	-	-
Comment:							
Urban Water Management Plan	No	-	-	-	No	-	-
Comment:							
Habitat Conservation Plan	No	-	-	-	No	-	-
Comment:							
Economic Development Plan	No	-	-	-	No	-	-
Comment:							
Shoreline Management Plan	No	Article 34, Environmental Conservation Law, Coastal Erosion Hazard Areas 6 NYCRR Part 505, Coastal Erosion Management Regulations	-	-	Yes	-	-
Comment:							
Community Wildfire Protection Plan	No	-	-	-	No	-	-



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
Comment:							
Forest Management Plan	No	-	-	-	No	-	-
Comment:							
Transportation Plan	No	-	-	-	No	-	-
Comment:							
Agriculture Plan	No	NYCRR Part 390 Agricultural and Farmland Protection	-	-	Yes	-	-
Comment:							
Other (this could include a climate action plan, tourism plan, business development plan, etc.)	No	-	-	-	-	-	-
Comment:							
<b>Response/Recovery Planning</b>							
Comprehensive Emergency Management Plan	Yes	Suffolk County Comprehensive Emergency Management Plan (2018)	Suffolk County and Associated Jurisdictions	Suffolk FRES	Yes	Yes	-
Comment: The County Comprehensive Emergency Management Plan (CEMP) describes the emergency obligations of County government and its capability and capacity to undertake emergency assignments or acquire those resources necessary to support its emergency mission. The Concept of Operations of the CEMP describes the management of emergencies within the National Incident Management System (NIMS) and details emergency management programmatic efforts to accommodate present standards.							
Strategic Recovery Planning Report	No	-	-	-	-	-	-
Comment:							
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	Yes	-	-
Comment:							
Post-Disaster Recovery Plan	No	-	-	-	No	-	-
Comment:							
Continuity of Operations Plan	No	-	-	-	No	-	-
Comment:							
Public Health Plan	No	-	-	-	No	-	-
Comment:							
Other	No	-	-	-	No	-	-
Comment:							



**Table 9.7-4. Development and Permitting Capability**

Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
Development Permits. If yes, what department?	Yes, Building Inspector
Permits are tracked by hazard area. For example, floodplain development permits.	No
Buildable land inventory If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No, the Village is fully built out

**Administrative and Technical Capability**

The table below summarizes potential staff and personnel resources available to the Village of Belle Terre.

**Table 9.7-5. Administrative and Technical Capabilities**

Resources	Available? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Warning Systems / Services (reverse 911, outdoor warning signals)	No	-
Maintenance programs to reduce risk	Yes	Outside Contractor performs sewer clean out
Mutual aid agreements	Yes	Intermunicipal agreement with Brookhaven, clean roads, leaf management, supply with sand and salt
<b>Technical/Staffing Capability</b>		
Planners or engineers with knowledge of land development and land management practices	Yes	Contract as Needed
Engineers or professionals trained in building or infrastructure construction practices	Yes	Contract as Needed
Planners or engineers with an understanding of natural hazards	Yes	Contract as Needed
Staff with expertise or training in benefit/cost analysis	Yes	Contract as Needed
Professionals trained in conducting damage assessments	Yes	Contract as Needed
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Contract as Needed
Scientist familiar with natural hazards	Yes	Contract as Needed
NFIP Floodplain Administrator (FPA)	Yes	Contract as Needed - Joann Raso
Surveyor(s)	Yes	Contract as Needed
Emergency Manager	Yes	Contract as Needed
Grant writer(s)	Yes	Contract as Needed
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-



### Fiscal Capability

The table below summarizes financial resources available to the Village of Belle Terre.

**Table 9.7-6. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	Yes-Subdivision fee for recreational space
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes-State Grants
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

### Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Belle Terre.

**Table 9.7-7. Education and Outreach Capabilities**

Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Public information officer or communications office?	No
Personnel skilled or trained in website development?	Yes, Contractor
Hazard mitigation information available on your website; if yes, describe	No
Social media for hazard mitigation education and outreach; if yes, briefly describe.	No
Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.	No
Other programs already in place that could be used to communicate hazard-related information; if yes, briefly describe.	Yes, Quarterly newsletter
Warning systems for hazard events; if yes, briefly describe.	Yes, Email listserv
Natural disaster/safety programs in place for schools; if yes, briefly describe.	Yes, text system, email system





Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Other	None

### Community Classifications

The table below summarizes classifications for community programs available to the Village of Belle Terre.

**Table 9.7-8. Community Classifications**

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	NP	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	NP	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	NP	-	-
NYSDEC Climate Smart Community	NP	-	-
Storm Ready Certification	NP	-	-
Firewise Communities classification	NP	-	-
Other	No	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

### Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current ability to adjust to, protect from, or withstand a hazard event. This term is often discussed in reference to climate change; however, adaptive capacity also includes an understanding of local capacity for adapting to current and future risks and changing conditions. The table below summarizes the adaptive capacity for each hazard and the jurisdiction’s rating.

**Table 9.7-9. Adaptive Capacity**

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
Coastal Erosion	Medium
Cyber Security	Low
Disease Outbreak	Low
Drought	Low
Earthquake	Low
Expansive Soils	Medium
Extreme Temperature	Medium
Flood	Medium
Groundwater Contamination	Medium
Hurricane	Medium
Infestation and Invasive Species	Medium
Nor’Easter	Medium
Severe Storm	Medium
Severe Winter Storm	Medium
Shallow Groundwater	Medium
Wildfire	Medium

\*High Capacity exists and is in use



Medium Capacity may exist; but is not used or could use some improvement  
 Low Capacity does not exist or could use substantial improvement  
 Unsure Not enough information is known to assign a rating

The Village has access to resources to determine the possible impacts of climate change upon the municipality and the administration is supportive of integrating climate change in policies or actions. Some climate change policies/plans/actions are already underway in the Village.

### 9.7.5 National Flood Insurance Program

This section provides specific information on the management and regulation of the regulatory floodplain.

#### NFIP Floodplain Administrator (FPA)

Joann Raso, Clerk-Treasurer

#### National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Belle Terre.

Table 9.7-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties
Village of Belle Terre	11	4	\$47,050	1

Source: FEMA 2020  
 Notes: According to FEMA statistics as of 7/13/2020  
 RL Repetitive Loss

#### Flood Vulnerability Summary

Though the Village is surrounded by water, the bluffs keep all structures out of the flood zone. The end of Anchorage Road is a flood prone area in the Village.

Following Hurricane Sandy, no structures were damaged. The Village does not maintain lists of properties damaged by flooding or property owners interested in flood mitigation. No properties have been mitigated from flooding recently.

Should any buildings be rendered Substantially Damaged, the Village Building Inspector would do the assessment. No recent flood events have resulted in Substantially Damage declarations.

#### Resources

Joann Raso currently serves as the NFIP Floodplain Administrator. Duties and responsibilities of the NFIP Administrator are permit review and inspections from the Building Inspector. The Village of Belle Terre does not conduct educational and/or outreach activities related to the NFIP.

In addition to the NFIP FPA, the community has supplementary staff for which NFIP is an auxiliary duty; personnel including the Board of Trustees and Building Inspector.

Joann Raso feels she is adequately supported and trained to fulfill his responsibilities as the municipal floodplain administrator. There have never been any issues within the Village where support or lack thereof



would be an issue. Joann Raso is not certified in floodplain management, however attends regular continuing education programs for code enforcement.

### Compliance History

Village of Belle Terre joined the NFIP on March 16, 1983, and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated September 25, 2009.

The community is currently in good standing in the NFIP and has no outstanding compliance issues. The most recent Community Assistance Visit (CAV) took place on May 27, 2015. The municipality sees no specific need for a CAV at this time.

### Regulatory

The communities Flood Damage Prevention Ordinance (FDPO) was last updated on September 16, 2009, and is found at Chapter 86 of the local code.

Floodplain regulations and ordinances are aligned with FEMA and New York State requirements. The site plan review process addresses NFIP requirements and floodplain management. There are not many parcels within the Village requiring floodplain management regulations and ordinances.

### Community Rating System

The Village of Belle Terre has not considered joining the Community Rating System (CRS).

## 9.7.6 Integration with Other Planning Initiatives

As this HMP update is implemented, the Village of Belle Terre will use information from the plan as the best available science and data for natural hazards. The capability assessment presented in this annex identifies codes, plans, and programs that provide opportunities for integration. The Suffolk County and local action plans developed for this HMP update actions related to plan integration, as well as progress on these actions, will be reported through the progress reporting process described in Volume I. New opportunities for integration also will be identified as part of the annual progress report.

### Existing Integration

**Village website:** The Village website includes current events and Village news.

### Opportunities for Future Integration

None identified.

## 9.7.7 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

### Evacuation Routes

The Village of Belle Terre follows the guidance of Suffolk County for evacuation routes and procedures.



### Sheltering

The Village of Belle Terre has identified the Community Center as a shelter, in addition to American Red Cross identified shelters.

Shelter Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Community Center	55 Cliff Road	180	Yes	Yes	Yes	None	None

### Temporary Housing

The Village of Belle Terre has not identified locations for the placement of temporary housing following a disaster event. If temporary housing is needed, the Village directs people to hotels outside the municipality.

### Permanent Housing

The Village of Belle does not have identified locations for the placement of permanent housing in order to relocate homes outside of the floodplain.

## 9.7.8 Hazard Event History Specific to the Village of Belle Terre

Suffolk County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The Village of Belle Terre’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Suffolk County. Table 9.7-11 provides details regarding municipal-specific loss and damages the Village experienced during hazard events. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.7-11. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
February 8 – 9, 2013	Severe Winter Storm and Snowstorm (FEMA DR-4111)	Yes	Low pressure that formed along the northern Gulf coast by the morning of Thursday, February 7, 2013 moved northeast to near Cape Hatteras by the morning of Friday, February 8, 2013. The low then rapidly intensified while moving northeast to a position east of Cape Cod by the morning of Saturday, February 9, 2013, producing very heavy snowfall and blizzard conditions across central and eastern Long Island on February 8th and 9th, and winter storm conditions across the rest of southeast New York.	None, private contractor used for snow clearing.
August 4, 2015	Thunderstorm, Wind, Hail	No	An approaching cold front triggered a cluster of severe thunderstorms producing multiple macrobursts that	Multiple trees were reported down on houses with roof damage, as well as power



Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
			impacted the North Shore of Long Island, from Northwest Nassau County onto the North Fork of Long Island. Hail of 1.75 inches was reported in Mount Sinai. Hail of 1 inch was reported in Shoreham. A gust of 71 mph was measured at Great Gull Island. A wind gust of 95 mph was measured on the roof of Stony Brook University's Health Sciences Tower.	lines reported as down around the Port Jefferson Firehouse in Belle Terre resulting in \$25K in property damage
February 24, 2016	Strong Wind	No	Strong winds occurred behind a warm front and ahead of a cold front.	The WeatherFlow station in Belle Terre measured a wind gust up to 52 mph at 1056 pm on the 24th. Numerous branches were knocked down due to strong winds with \$20K in property damage reported
March 14 – 15, 2017	Severe Winter Storm and Snowstorm (FEMA DR-4322)	Yes	On Tuesday, March 14th, rapidly deepening low pressure tracked up the eastern seaboard resulting in damaging winds in Suffolk County.	Although the County was impacted, the Village of Belle Terre did not report any damages.
October 29-30, 2017	High Wind	No	A low pressure system rapidly intensified as it moved north, passing west of the local area.	A mesonet station measured a 60 mph wind gust near Belle Terre at 1105 pm on the 29th. Northwest Suffolk reported \$500K in property damage

Notes:

FEMA Federal Emergency Management Agency  
 DR Major Disaster Declaration (FEMA)

### 9.7.9 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes critical facility and community lifeline flood exposure, and the hazards of greatest concern and risk to the Village of Belle Terre. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.

A gradient of certainty was developed to summarize the confidence level regarding the input used to populate the hazard ranking. A certainty factor of high, medium or low was selected and assigned to each hazard to provide a level of transparency and create increased understanding of the data used to support the resulting ranking. The following scale was used to assign a certainty factor to each hazard:

- High—Defined scenario/event to evaluate; probability calculated; evidenced-based/quantitative assessment to estimate potential impacts through hazard modeling.



- Moderate—Defined scenario/event or only a hazard area to evaluate; estimated probability; combination of quantitative (exposure analysis, no hazard modeling) and qualitative data to estimate potential impacts.
- Low—Scenario or hazard area is undefined; there is a degree of uncertainty regarding event probability; majority of potential impacts are qualitative.

### Critical Facilities

New York Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 500-year flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities and community lifelines located in the 1-percent and 0.2-percent floodplain. It also summarizes if the facility is already mitigated in compliance with NYS standards (i.e., to the 0.2-percent annual chance event or worse-case scenario), or if a new mitigation action is proposed in the plan update.

**Table 9.7-12. Potential Flood Losses to Critical Facilities**

Name	Type	Exposure			Complies with NYS Standards	Addressed by Proposed Action
		1% Event		0.2% Event		
		A-Zone	V-Zone			
Harbor Well Field & Pump Station*	SCWA	-	X	X	Unknown	2020-Belle Terre-003

Source: Suffolk County 2020; FEMA 2009

Notes: x = Facility is located in the floodplain boundary.

\*Community Lifeline

### Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Suffolk County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential hazards for the Village of Belle Terre. The Village of Belle Terre has reviewed the county hazard risk/vulnerability risk ranking table and provided input to its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Village of Belle Terre indicated the following:





- The Village changed the hazard ranking for flood from medium to low, noting that most areas are well above sea level.
- The Village agreed with the remainder of the calculated hazard rankings.

**Table 9.7-13. Hazard Ranking**

Coastal Erosion	Cyber Security	Disease Outbreak	Drought	Earthquake	Expansive Soils
Medium	Medium	Medium	Low	Low	Low
Extreme Temperature	Flood	Groundwater Contamination	Hurricane	Infestation and Invasive Species	Nor'Easter
Medium	Low	Medium	High	Medium	High
	Severe Storm	Severe Winter Storm	Shallow Groundwater	Wildfire	
	Medium	Medium	Low	Medium	

**Identified Issues**

The municipality has identified the following vulnerabilities within their community:

- Climate change has increased amount of rain more than ever before, the last three years have been wetter than previous in their minds.
- Nor'easter's are more dangerous than hurricanes because they bring northerly winds that uproot trees
- Beaches are washed out by the northeaster's storms
- The cliffs at the shore are being eroded by the ocean and there are 11 houses and 1 village building that are in danger from falling
  - Working with a state grant to stabilize the bluff area at the end of Cliff Road
- The Village lacks a Public Works Department so response for hazard event cleanup is difficult.

**9.7.10 Mitigation Strategy and Prioritization**

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

**Past Mitigation Initiative Status**

The following table indicates progress on the community's mitigation strategy identified in the 2014 HMP. Actions that are carried forward as part of this plan update are included in the updated mitigation strategy table (Table 9.7-15). Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.





Table 9.7-14. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
VBT-1 (VBT-3)	Install storm drains	Flood, Severe Storm, Nor'Easter, Hurricane	Village		In Progress; Completed for Seaside Dr. Beach Rd., Saints Orchard Rd, Cliff Road.	Cost		<ol style="list-style-type: none"> <li>1. Include in 2020 HMP</li> <li>2. Village will continue to identify other roads for implementation.</li> <li>3.</li> </ol>
						Level of Protection		
						Damages Avoided; Evidence of Success		
VBT-2	Assess and prioritize options to retrofit, acquire, or relocate structures located in hazard-prone areas, and implement as funding becomes available.	Flood, Nor'Easter, Hurricane, Severe Storm	Village		In Progress	Cost		<ol style="list-style-type: none"> <li>1. Include in 2020 HMP</li> <li>2. Bluff stabilization.</li> <li>3.</li> </ol>
						Level of Protection		
						Damages Avoided; Evidence of Success		
VBT-3	Work together with the County and others to bring CRS training/workshops into the community where appropriate community officials and staff will actively participate	Flood, Nor'Easter, Hurricane, Severe Storm	NFIP Floodplain Administrator		Ongoing capability	Cost		<ol style="list-style-type: none"> <li>1. Discontinue</li> <li>2.</li> <li>3. Ongoing capability</li> </ol>
						Level of Protection		
						Damages Avoided; Evidence of Success		
VBT-4 (former VBT-9)	Install storm drains on steeply graded roads to minimize storm water erosion.	Flood, Severe Storm, Nor'Easter, Hurricane	Village		No Progress	Cost		<ol style="list-style-type: none"> <li>1. Discontinue</li> <li>2.</li> <li>3.</li> </ol>
						Level of Protection		
						Damages Avoided; Evidence of Success		
VBT-5 (former	Support and participate in county	All Hazards	Suffolk County, as supported by		Ongoing	Cost		<ol style="list-style-type: none"> <li>1. Discontinue</li> </ol>
						Level of Protection		





Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
VBT-7, 10)	led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically: <ul style="list-style-type: none"> <li>• Mitigation Education for Natural Disasters (natural hazard awareness and personal scale risk reduction/mitigation on public education and outreach program)</li> <li>• Build Local Floodplain Management and Disaster Recovery Capabilities (enhanced floodplain management, and post-disaster assessment and recovery capabilities)</li> <li>• County-Wide Debris Management</li> </ul>		relevant local department leads,		capability	Damages Avoided; Evidence of Success		2.  3. Ongoing capability



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Plan <ul style="list-style-type: none"> <li>• Jurisdictional Knowledge of Mitigation Needs of Property Owners (improved understanding of damages and mitigation interest/activity of private property owners)</li> <li>• Create a Multi-Jurisdictional Seismic Safety Committee in Suffolk County (build regional, county and local capabilities to manage seismic risk, both pre- and post-disaster)</li> <li>• Alignment of Mitigation Initiatives through all levels of Government (effort to build State and Federal level recognition and support of the County and local hazard mitigation planning strategies)</li> </ul>							



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
	identified in this plan).							
VBT-6	Work with County and PSEG (formerly LIPA) to identify roads within the municipality that are considered “critical”, and to be the first priority for clearing after an event involving downed power lines.	Severe Storm; Severe Winter Storm; Hurricane; Nor’Easter	PSEG, County		Ongoing Capability	Damages Avoided; Evidence of Success		<ol style="list-style-type: none"> <li>1. Discontinue</li> <li>2.</li> <li>3. Ongoing Capability</li> </ol>

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### Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Belle Terre has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2014 HMP:

- The Village regularly conducts road paving on an as needed basis.

### Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Belle Terre participated in a mitigation action workshop in June 2020 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

Table 9.7-15 summarizes the comprehensive-range of specific mitigation initiatives the Village of Belle Terre would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6 (Mitigation Strategy), fourteen criteria are used to evaluate and prioritize each proposed mitigation action. A numeric factor is assigned (-1, 0, or 1) to each criterion to provide a relative indication of the opportunities and constraints of each action. A numerical sum of the input provides the basis of the prioritization of actions wherein each action is assigned a category of Low, Medium, or High to indicate an implementation hierarchy. A High priority action indicates the jurisdiction will prioritize its implementation and apply for funding, if needed, as opportunities become available during the plan period of performance. This does not prevent the jurisdiction from implementing other ranked actions; however, this provides a snapshot of implementation priority at the time of this plan update.

Table 9.7-16 provides a summary of the evaluation and prioritization for each proposed mitigation initiative. Refer to the action worksheets at the end of this annex for more details on the high-ranked hazards identified first for implementation.



Table 9.7-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2020-Belle Terre-001	Stormwater Upgrades	2	Flood, Severe Storm	<p><b>Problem:</b> Climate change has increased amount of rain falling in the Village. The last three years have been wetter than usual. It causes more localized flooding as the frequent rains are raining the Seasonal High Water Table and overwhelming the drainage system.</p> <p><b>Solution:</b> The Village will continue to install storm drains on flood-prone roadways in the Village. The next roadways to have these improvements will be Lower Devon Road, Motts Hollow Road, and Cliffside Drive. A contractor will be hired by the Village to conduct engineering and carry out the identified improvements.</p>	No	None	2 years	Roads Department	High	Reduction in stormwater flooding	HMGP, BRIC, Village budget	High	SIP	SP
2020-Belle Terre-002	Bluff Revetment Project	2, 5	Coastal Erosion, Hurricane, Nor'Easter	<p><b>Problem:</b> The cliffs along the shore are being eroded by the high tides and ocean wave action. This has resulted in approximately 11 houses and 1 village building becoming in danger from falling along Cliff Road.</p> <p><b>Solution:</b> The Village will install revetments along the toe of the Village owned portions of the bluff. The Village will determine if additional protective measures are needed by monitoring the performance of the project over the next several years.</p>	No	None	1 year	Roads Department	\$165,000	Reduction in erosion to bluff	HMGP, BRIC, State grant funding, Village budget	High	SIP	PP
2020-Belle Terre-003	Critical Facilities Outreach	6	Flood	<p><b>Problem:</b> The Harbor Well Field &amp; Pump Station at 1 Observatory Path is a critical facility located in the 100-year floodplain, owned by the Suffolk County Water Authority.</p> <p><b>Solution:</b> The Village floodplain administrator will conduct outreach to the SCWA to discuss the facilities flood risk and mitigation actions.</p>	Yes 💧	None	Within 6 months	FPA	Staff time	Facility manager aware of flood risk and potential mitigation actions	Village budget	High	EAP	PI
2020-	Coastal	1, 2,	Coastal	<b>Problem:</b> The Village experiences	No	None	1 year	SC SCWD,	Staff time	Data	County	High	LPR	PR





Table 9.7-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
Belle Terre-004	Erosion Monitoring Program	3, 5	Erosion	coastal erosion, including bluff erosion which has required mitigation in the past. <b>Solution:</b> The Village will participate in a county led erosion monitoring program.				Village Administration		available to support grants, reporting, and decision making.	budget, SWCD			

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- PDM Pre-Disaster Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:





- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

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**Table 9.7-16. Summary of Prioritization of Actions**

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2020-Belle Terre-001	Stormwater Upgrades	0	1	0	1	1	1	0	1	0	1	1	1	1	1	10	High
2020-Belle Terre-002	Bluff Revetment Project	0	1	1	1	1	0	1	0	1	1	1	1	1	1	11	High
2020-Belle Terre-003	Critical Facilities Outreach	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2020-Belle Terre-004	Coastal Erosion Monitoring Program	0	1	1	1	1	1	0	1	1	1	0	1	1	1	11	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).







### 9.7.11 Proposed Mitigation Action Types

The table below indicates the range of proposed mitigation action categories.

**Table 9.7-17. Analysis of Mitigation Actions by Hazard and Category**

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	2020-Belle Terre-004	2020-Belle Terre-002			2020-Belle Terre-004	2020-Belle Terre-002				
Cyber Security										
Disease Outbreak										
Drought										
Earthquake										
Expansive Soils										
Extreme Temperature										
Flood		2020-Belle Terre-001		2020-Belle Terre-003			2020-Belle Terre-003		2020-Belle Terre-001	
Groundwater Contamination										
Hurricane		2020-Belle Terre-002				2020-Belle Terre-002				
Infestation and Invasive Species										
Nor'easter		2020-Belle Terre-002				2020-Belle Terre-002				
Severe Storm		2020-Belle Terre-001							2020-Belle Terre-001	
Severe Winter Storm										
Shallow Groundwater										
Wildfire										

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

### 9.7.12 Staff and Local Stakeholder Involvement in Annex Development

The Village of Belle Terre followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: Mayor’s Office, Clerk/Treasurer. The Mayor represented the community on the Suffolk County Hazard Mitigation Plan Planning Partnership, and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.



The following table summarizes who participated and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

**Table 9.7-18. Contributors to the Annex**

Name	Title/Entity	Method of Participation
Joanne Raso	Clerk/Treasurer	NFIP FPA, attended plan participant meeting provided impact data, contributed to mitigation strategy
Bob Sandak	Mayor	Primary POC, attended plan participant meeting provided impact data, contributed to mitigation strategy

### 9.7.13 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Village of Belle Terre that illustrate the probable areas that may be impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan and are considered to be adequate for planning purposes. The maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Village of Belle Terre has significant exposure.

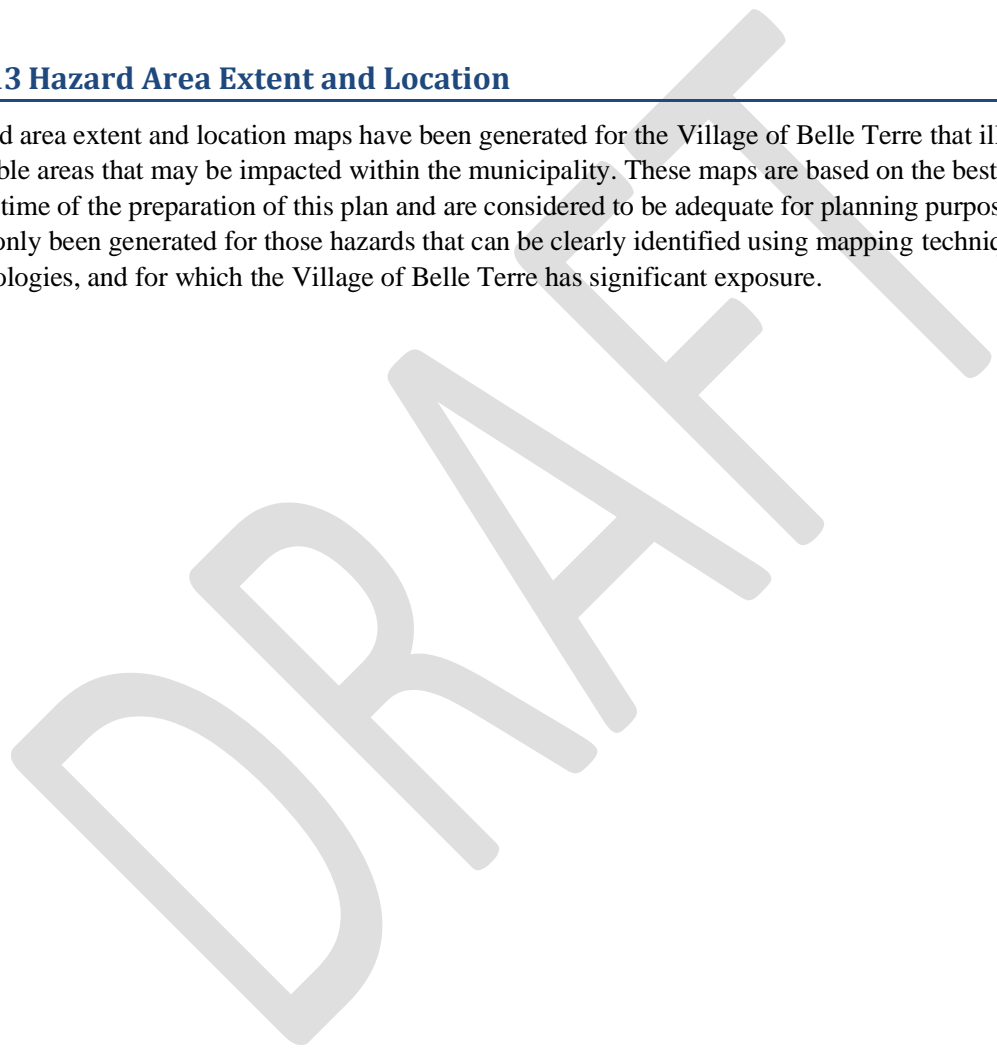




Figure 9.7-1. Village of Belle Terre Hazard Area Extent and Location Map 1

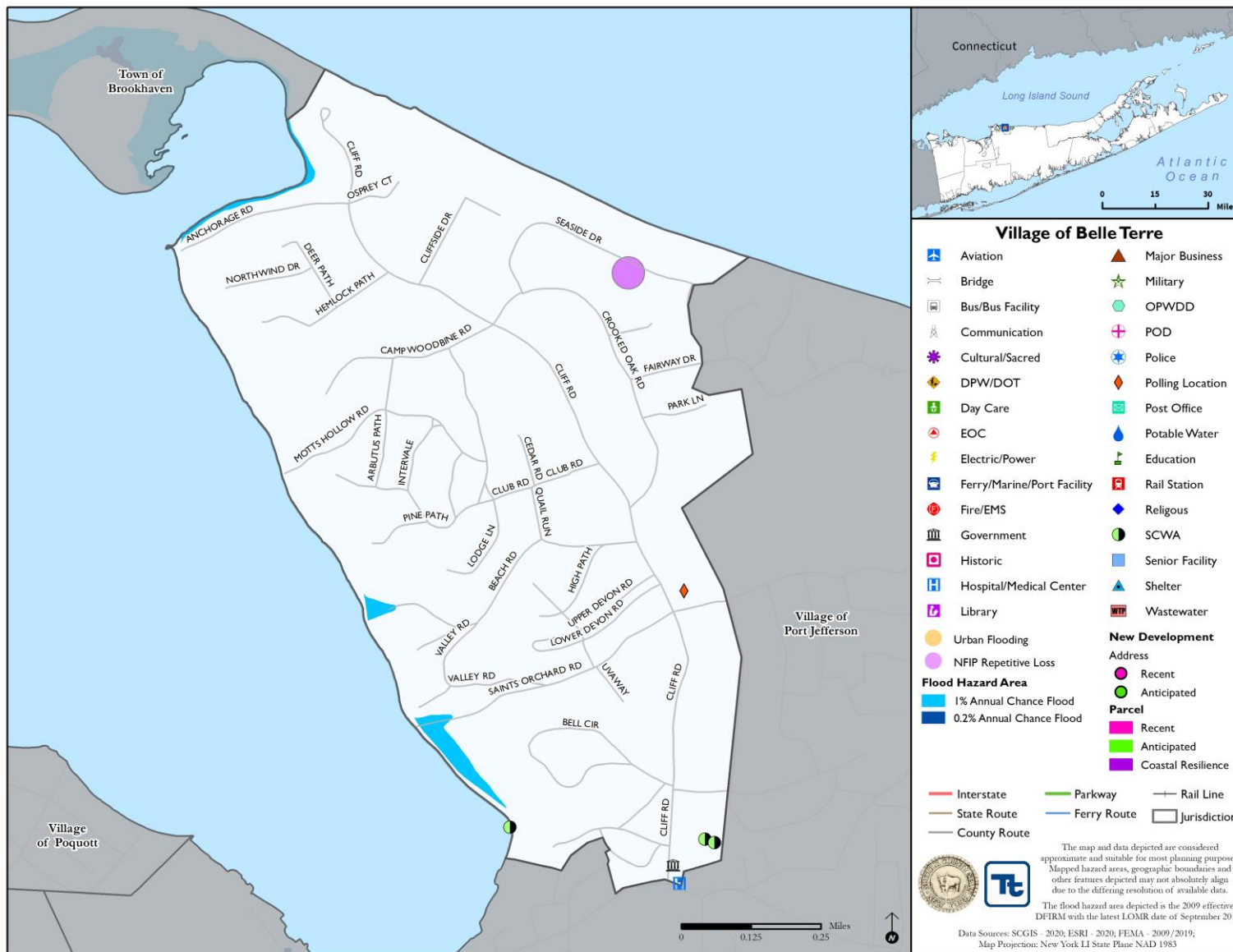




Figure 9.7-2. Village of Belle Terre Hazard Area Extent and Location Map 2

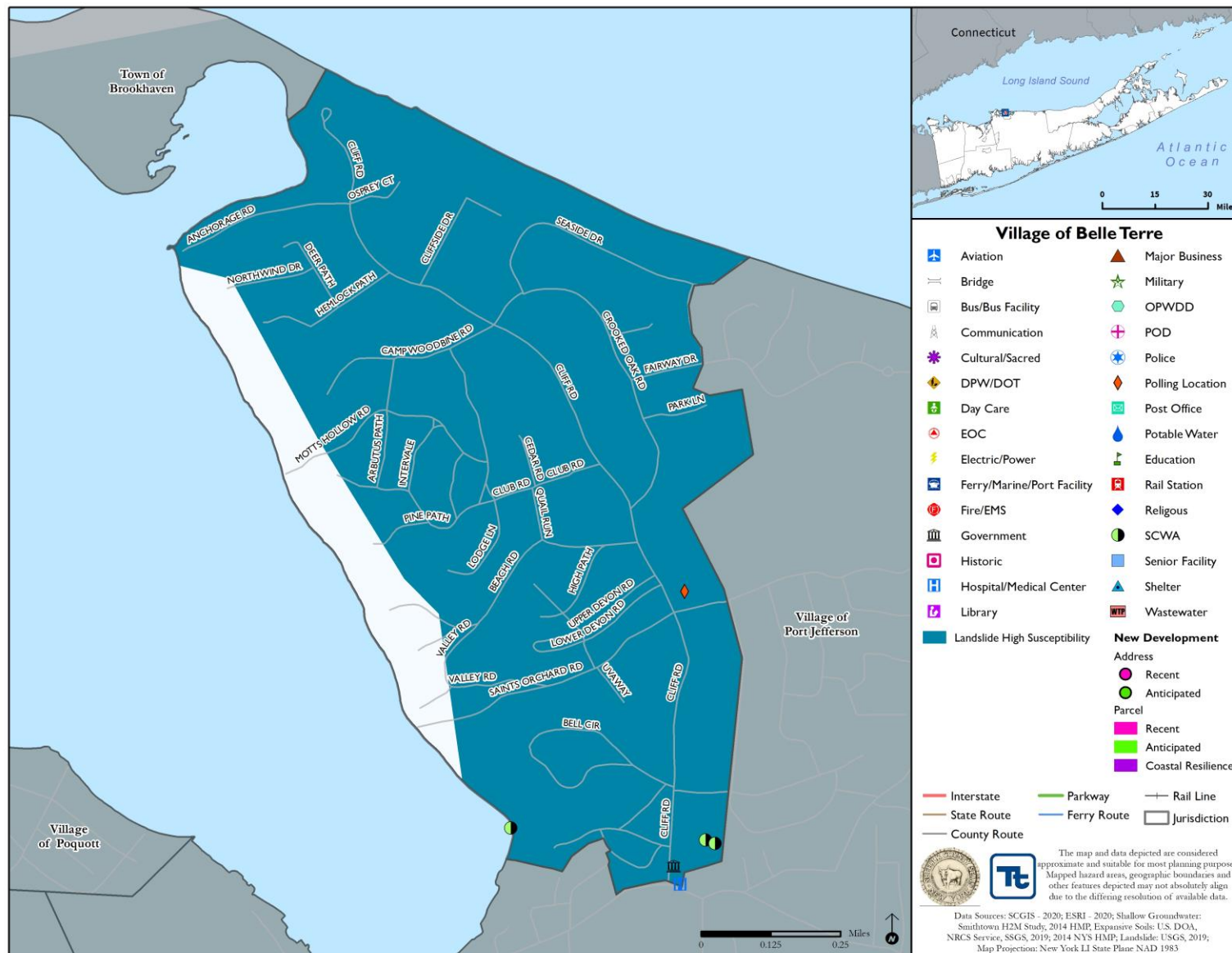




Figure 9.7-3. Village of Belle Terre Hazard Area Extent and Location Map 3

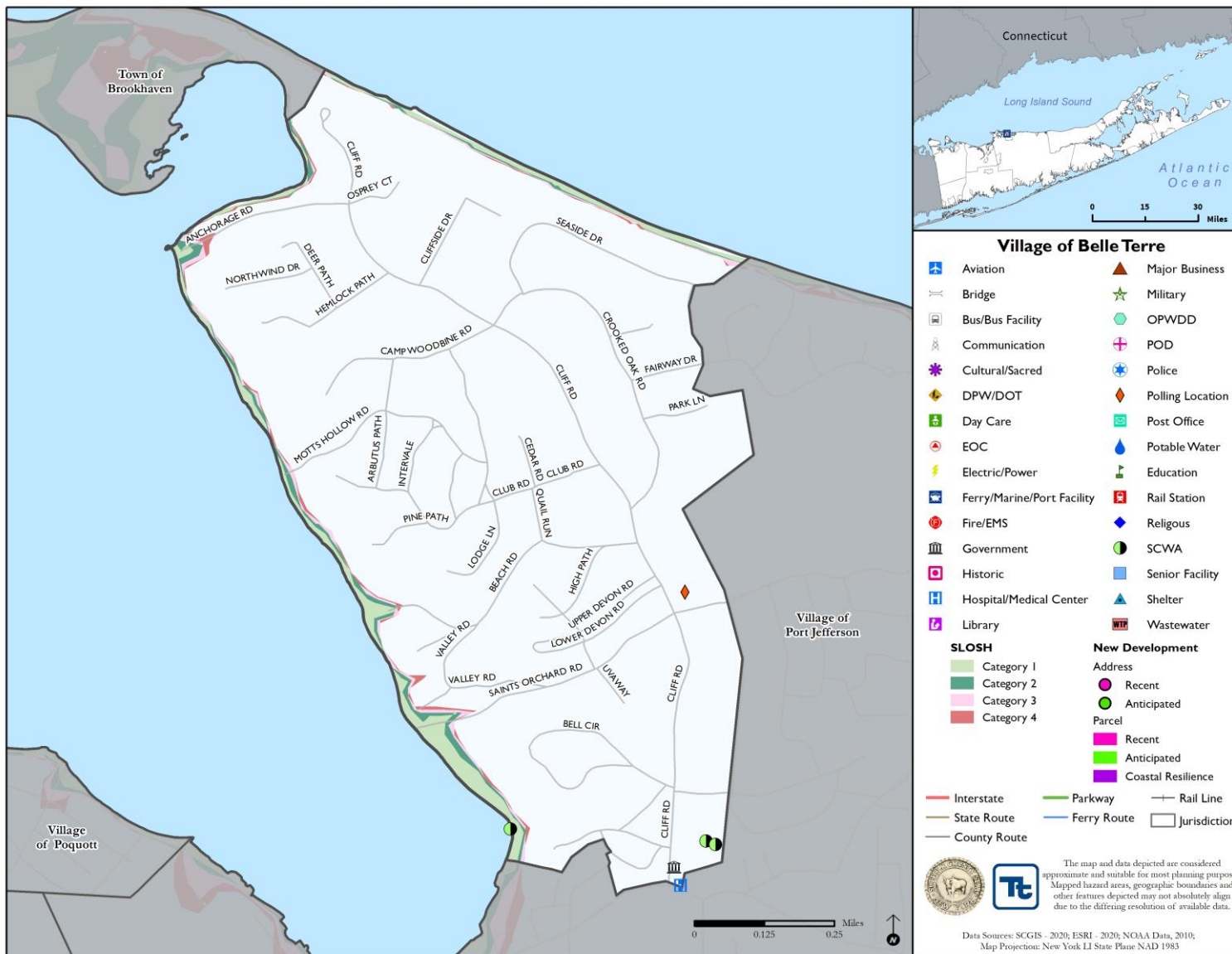






Figure 9.7-4. Village of Belle Terre Hazard Area Extent and Location Map 4

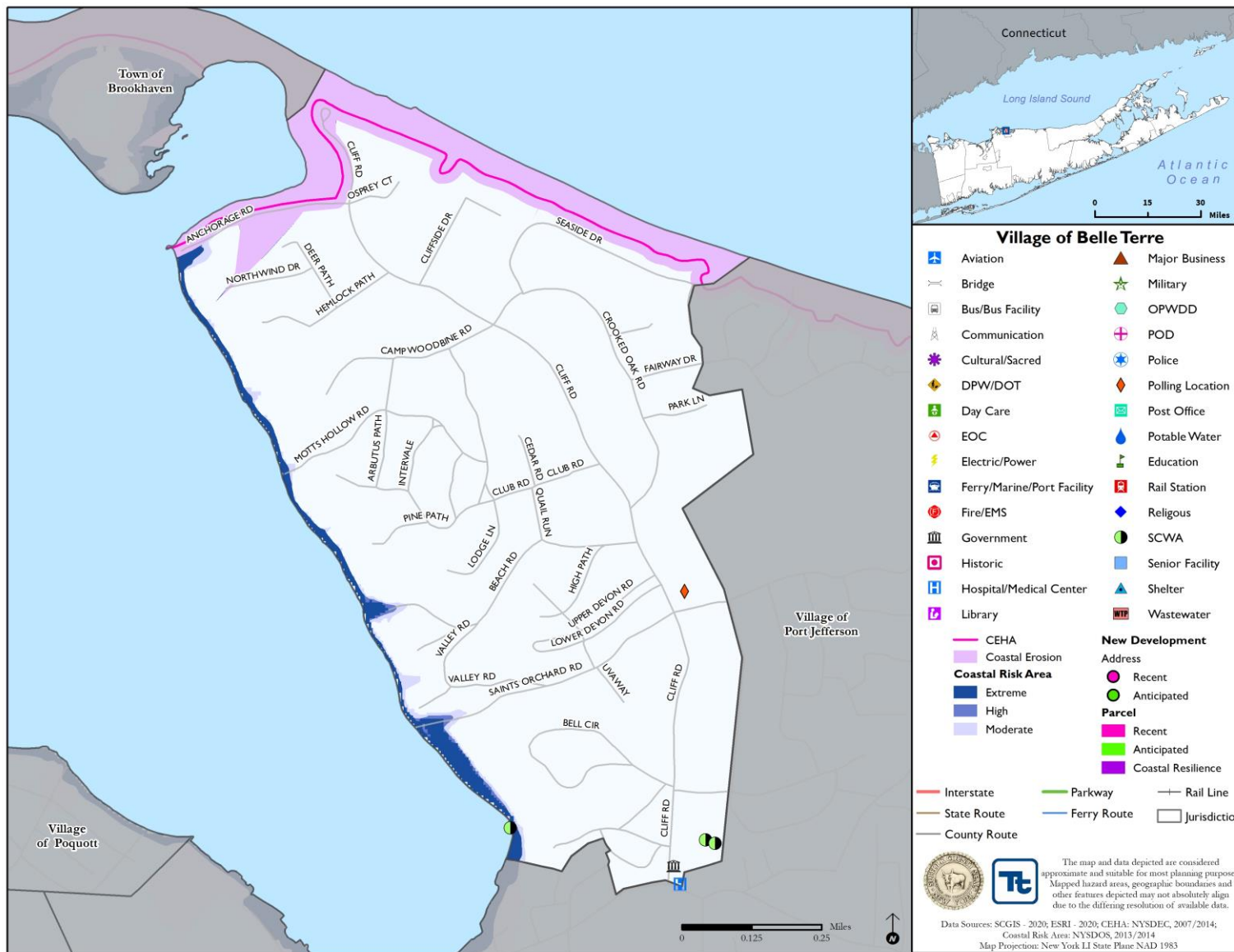




Figure 9.7-5. Village of Belle Terre Hazard Area Extent and Location Map 5

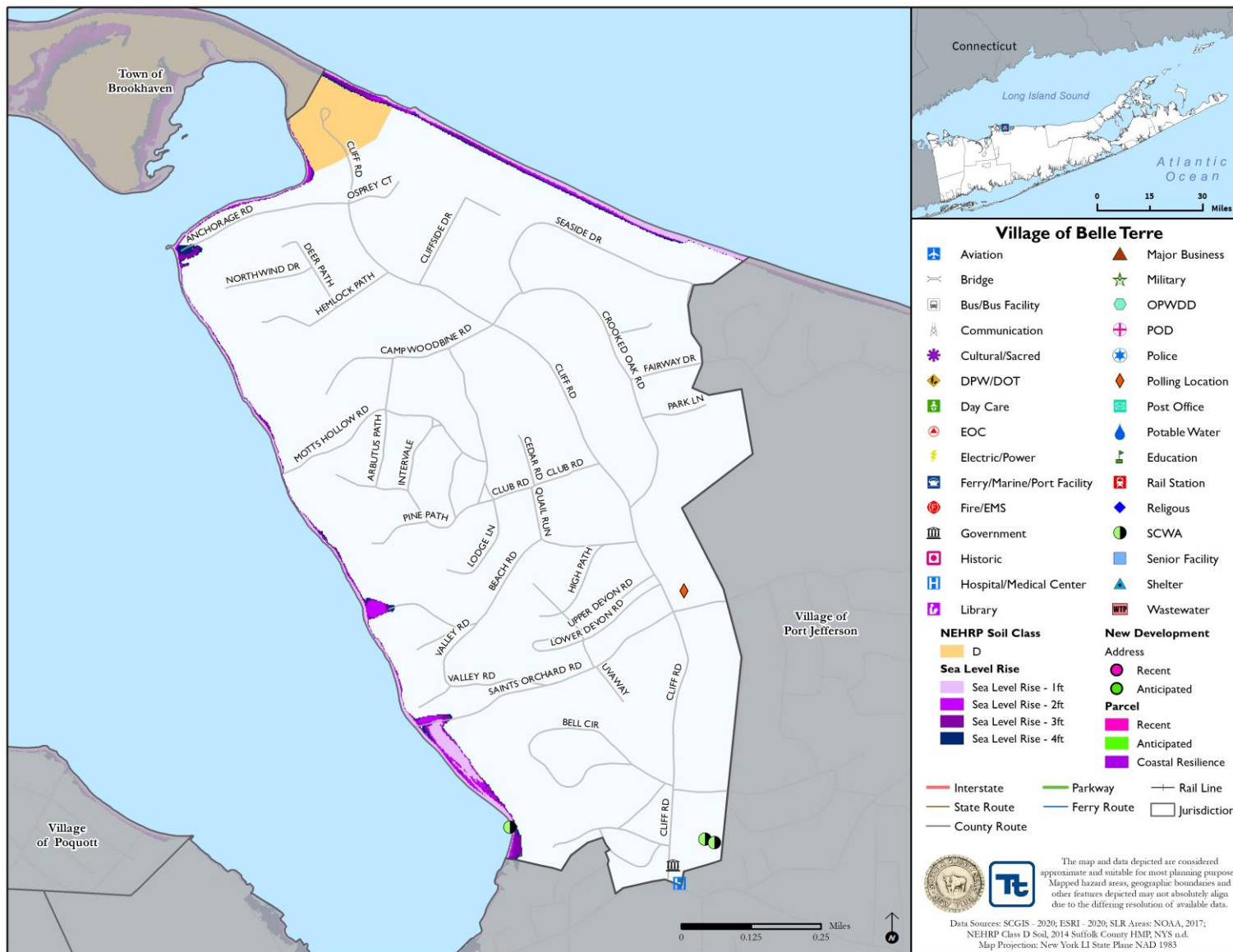
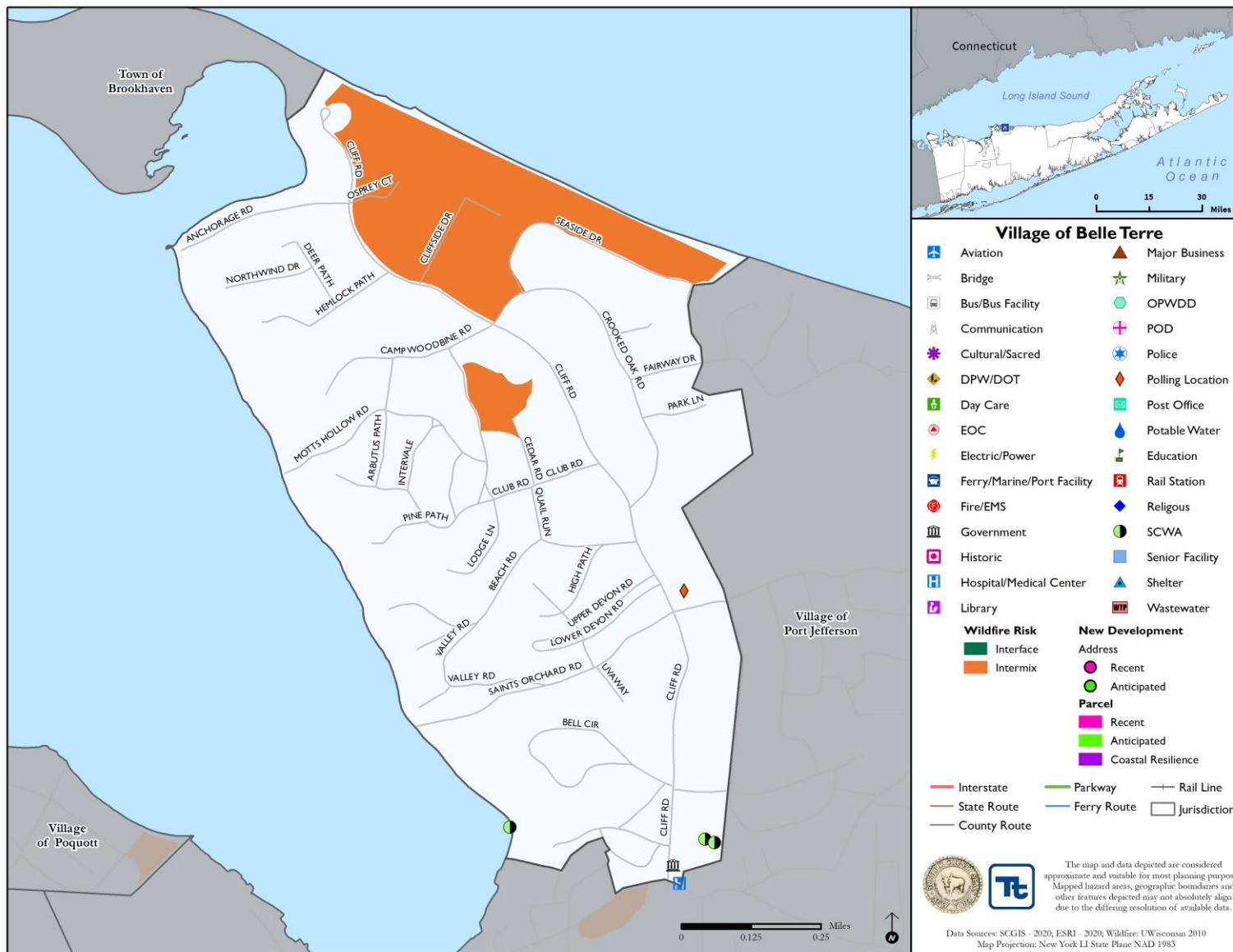




Figure 9.7-6. Village of Belle Terre Hazard Area Extent and Location Map 6







Action Worksheet			
<b>Project Name:</b>	Stormwater Upgrades		
<b>Project Number:</b>	2020-Belle Terre-001		
<b>Risk / Vulnerability</b>			
<b>Hazard(s) of Concern:</b>	Flood, Severe Storm		
<b>Description of the Problem:</b>	Climate change has increased amount of rain falling in the Village. The last three years have been wetter than usual. It causes more localized flooding as the frequent rains are raising the Seasonal High Water Table and overwhelming the drainage system.		
<b>Action or Project Intended for Implementation</b>			
<b>Description of the Solution:</b>	The Village will continue to install storm drains on flood-prone roadways in the Village. The next roadways to have these improvements will be Lower Devon Road, Motts Hollow Road, and Cliffside Drive. A contractor will be hired by the Village to conduct engineering and carry out the identified improvements.		
<b>Is this project related to a Critical Facility?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	Increased stormwater function	<b>Estimated Benefits (losses avoided):</b>	Reduction in stormwater flooding
<b>Useful Life:</b>	50 years	<b>Goals Met:</b>	2
<b>Estimated Cost:</b>	High	<b>Mitigation Action Type:</b>	Structure and Infrastructure Project
<b>Plan for Implementation</b>			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	1 year
<b>Estimated Time Required for Project Implementation:</b>	2 years	<b>Potential Funding Sources:</b>	HMGP, BRIC, Village budget
<b>Responsible Organization:</b>	Roads Department	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation, Stormwater management
<b>Three Alternatives Considered (including No Action)</b>			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Problem continues.
	Elevate roadways	\$500,000	Costly and may not solve problem
	Relocate roadways	N/A	Not possible
<b>Progress Report (for plan maintenance)</b>			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			



Evaluation and Prioritization		
<b>Project Name:</b>	Stormwater Upgrades	
<b>Project Number:</b>	2020-Belle Terre-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Project will protect roadways from flooding
Cost-Effectiveness	0	
Technical	1	The project is technically feasible
Political	1	
Legal	1	The Village has the legal authority to complete the project
Fiscal	0	Project requires funding support
Environmental	1	
Social	0	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	2 years
Agency Champion	1	Roads Department
Other Community Objectives	1	
<b>Total</b>	10	
<b>Priority (High/Med/Low)</b>	High	



Action Worksheet			
<b>Project Name:</b>	Bluff Revetment Project		
<b>Project Number:</b>	2020-Belle Terre-002		
<b>Risk / Vulnerability</b>			
<b>Hazard(s) of Concern:</b>	Coastal Erosion, Hurricane, Nor'Easter		
<b>Description of the Problem:</b>	The cliffs along the shore are being eroded by the high tides and ocean wave action. This has resulted in approximately 11 houses and 1 village building becoming in danger from falling along Cliff Road.		
<b>Action or Project Intended for Implementation</b>			
<b>Description of the Solution:</b>	The Village will install revetments along the toe of the Village owned portions of the bluff. The Village will determine if additional protective measures are needed by monitoring the performance of the project over the next several years.		
<b>Is this project related to a Critical Facility?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	Bluff toe protected from erosion.	<b>Estimated Benefits (losses avoided):</b>	Reduction in erosion to bluff.
<b>Useful Life:</b>	25 years	<b>Goals Met:</b>	2, 5
<b>Estimated Cost:</b>	\$165,000	<b>Mitigation Action Type:</b>	Structure and Infrastructure Project
<b>Plan for Implementation</b>			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	1 year
<b>Estimated Time Required for Project Implementation:</b>	1 year	<b>Potential Funding Sources:</b>	HMGP, BRIC, State grant funding, Village budget
<b>Responsible Organization:</b>	Roads Department	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation
<b>Three Alternatives Considered (including No Action)</b>			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Problem continues.
	Buyout properties	\$250,000 each home evacuated	Costly
	Beach replenishment	\$500,000	Permitting, costs
<b>Progress Report (for plan maintenance)</b>			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			



Action Worksheet		
<b>Project Name:</b>	Bluff Revetment Project	
<b>Project Number:</b>	2020-Belle Terre-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Project protects properties on the bluff
Cost-Effectiveness	1	
Technical	1	The project is technically feasible
Political	1	There is public support for the project
Legal	0	Project requires legal funding
Fiscal	1	Project is funded by state grants and Village funding
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	Coastal Erosion, Hurricane, Nor'Easter
Timeline	1	1 year
Agency Champion	1	Roads Department
Other Community Objectives	1	
<b>Total</b>	11	
<b>Priority (High/Med/Low)</b>	High	