**Priority Projects and Featured Projects**

**Community Planning and Capacity Building**
1. American Legion Hall Improvements
2. BCAC Resiliency Improvements
3. BC VFD Communications Center
4. BC Historical Society Digital Archive
5. VFW Hall Resiliency Improvements

**Sustainable Infrastructure**
6. Cross Bay Blvd. Complete Street Pilot
7. East 12 Rd. Boardwalk
   - Provide a new boardwalk structure along E 12th Rd that can accommodate sewer and water connection
8. Lanark Rd.
   - Provide sewer and water connection to homes on Lanark Road
   - Stabilize Lanark Road and remove ponding condition

**Coastal Protection**
9. Sunset Cove
   - Implement Sunset Cove edge protection strategy

**Featured Projects**
10. Broad Channel Relief Campus Protection Berm
11. Natural Gas Pipeline
12. North-side Culvert
   - Redesign the culvert under Cross Bay Blvd. at 4th Rd.
   - Replace the backflow preventer at south end of West Rd.
14. Street Raising (from 13th Rd. to 19th Rd.)
Sustainable Infrastructure Strategies
Implement 9th Road Complete Street pilot

- Solar energy
- Street light
- Generator
- Permeable paver
- Salt tolerant trees
- Colored concrete/painted asphalt bike lane
- Broad Channel

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Sustainable Infrastructure Strategies

Rebuild the East 12th Road Boardwalk

- Solar street lights
- 6 Feet
- Dry hydrant standpipe system
- Resilient Open Pile Construction
- Water line
- Sanitary Sewer line

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Edge Protection for the Broad Channel Relief Campus

Overall Strategy

Create a Relief Campus for the Broad Channel community to assist with recovery efforts after storm events.

The Relief Campus should include:
• electrical back-up facilities
• electricity for daytime and nighttime relief efforts
• indoor and outdoor staging and gathering spaces
• coordinated relief effort with citywide, regional and national relief programs

Option 1: Raise Buildings and Equipment
Option 2: Tight Berm
Option 3: Connect to High Ground
Sustainable Infrastructure Strategies

Make sewer and water connection at Lanark Road
Community Planning and Capacity Building

Creating Resiliency for Broad Channel’s Civic Centers

Relief Campus: Broad Channel Athletic Club

Storm Impact
- Flooding of first-floor storage facility; lost thousands of dollars in youth athletic equipment
- Damage to field lighting and electrical equipment
- Center for neighborhood youth; used as a shelter by families during storms

Project Needs
- Second-floor flood proof storage facility to store athletic and electrical equipment
- Generator system for emergency source of power for relief efforts
- Athletic field lighting and flood lighting for shared parking lot with American Legion to ensure safety during emergency events

Relief Campus: American Legion Hall

Storm Impact
- Flooding of first floor during storm
- Damage to HVAC system and electrical equipment
- Facilitates neighborhood essential and recreational services; used as a shelter by families during storm

Project Needs
- Facility waterproofing system including flood doors
- Replacement HVAC system with filter capability
- Generator system for emergency source of power for relief efforts
- Permeable parking lot foundation to share with BCAC
Community Planning and Capacity Building
Creating Resiliency for Broad Channel’s Civic Centers

Broad Channel Historical Society Digitizing Project

Storm Impact
- Damage to hundreds of physical archives
- Long-term longevity of collection unclear

Project Needs
- Digital archival project that will include scanning of collection, cataloging and inclusion of donor information, date of historical occurrence, location, etc.; creation of back-up repository
- Creation of Virtual Museum that will house and showcase digital collection and allow wide dissemination to current and former Broad Channel residents

Resiliency Repairs of VFW Hall

Storm Impact
- Damage to front hall
- Facility difficult to navigate for vulnerable populations (mostly disabled and elderly community members)
- Served as 24-hour center for distributing necessities to families throughout the region after the storm

Project Needs
- Reconstruction of main entrance
- Construction of ADA ramp to facility and accessible public restrooms to serve vulnerable populations
Relief Campus: Broad Channel Volunteer Fire Department

Storm Impact
- Lack of adequate building facilities
- Lack of central communications to coordinate emergency response
- Current facility completely compromised during Superstorm Sandy

Project Needs
- Build out of second-floor facilities in new VFD facility
- Communications center to coordinate emergency response
- Generator system for emergency source of power to support VFD functions during power loss on island
Sustainable Infrastructure Strategies

Western Canal Blocks Street-Raising Project
Sustainable Infrastructure Strategies

Natural Gas Pipeline, West Rd Back Flow Preventer, North-side Culvert

Broad Channel Infrastructure Projects
- Flooded Area
- Broad Channel Planning Area
- Storm Surge
- 1.96-4.54 (Elevation, ft) (Mean High Water with Sea Level Rise)
- Critical Location Causing the Flood
- Natural Gas Pipeline

North-side Culvert
Replace culvert at Crossbay Blvd. and 4th Rd. with flood control gate

West Rd Back Flow Preventer
Replace/repair backflow preventor at West Rd.

Inundation data for Long Island not included
The diagram to the left describes the currently proposed location for incorporation of oysters. The proposed reefs / revetments offer opportunities for wave attenuation benefits as well as habitat enhancement.

- **Oyster spat on marl stone**
- **Oyster Reef Balls**
- **Oyster cages**

**Strategies for incorporation of oysters into a rock revetment**

- Oyster cages in upper water column (12-18 inches off bottom)
- Alternatively: Wave-attenuating reefballs
- Oyster spat on marlstone in rock revetment
- Upland Berm

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