



SHORE RD – PROSPECT AVE TRAFFIC CALMING, STREETSCAPE & DRAINAGE IMPROVEMENTS (CFPW19000010)



Conducted by Nassau County Department of Public Works

- Michael Kwaschyn, PE – Commissioner
- Joseph Pecora, PE, PTOE - Deputy Commissioner
- Harold Lutz, PE - Director of Traffic Engineering
- Chris Liberti, PE - Project Manager
- Devin Velasquez, PE – Project Manager

L. K. McLean Associates, D.P.C. Engineering Consultant Firm

- Founded in Wantagh in 1950
- 85 Employees, 22 Licensed Professionals
- Offices in Brookhaven and Hicksville
- Keith Masseria, PE – Vice President
- Steve Eisenberg, PE – Associate
- Vincent DeKoning, PE – Civil Engineer



Project Limits

- Shore Rd / Prospect Ave / Cliff Way / The Blvd
- 3.3 miles total
- Southern Limit: Shore Rd @ Scudders Ln
- Northern Limit: Shore Rd @ Glen Cove Ave
- 0.92 miles within Glenwood Landing
- 1.70 miles within Sea Cliff
- 0.70 miles within City of Glen Cove

Project Includes:

- **Drainage Improvements**
 - Scudders Pond in the vicinity of Tappan Beach (Village of Sea Cliff)
 - Shore Rd in the vicinity of 14 The Blvd (Village of Sea Cliff)
 - Shore Rd between Carpenter Avenue and Hammond Road (City of Glen Cove)

- **Traffic Improvements**
 - **New Traffic Signal**
 - Prospect Ave @ Tappen Beach Entrance
 - **Traffic Signal Reconstruction**
 - Shore Rd @ Glenwood Rd
 - Prospect Ave @ Littleworth Ln
 - **Intersection Reconstruction at Prospect Ave & Glen Ave/Locust Pl**
 - **Speed Awareness Devices**

- **Roadway Improvements**
 - **Traffic Calming**
 - **Bike Lanes**
 - **Roadway Resurfacing & Reconstruction**
 - **ADA Curb Ramp & Sidewalk Improvements**
 - **Streetscape along the North Limits**
 - Lighting, Benches, Parallel Parking, Sidewalk widening, Street trees, etc

Work Performed to Date:

- **Topographic Survey & Mapping throughout entire project limits**
- **Drainage Study Report**
- **Technical Design Report**
- **Traffic Signal Design**
- **Traffic Study Report**
- **Traffic Analysis**
- **30% Design Plans and Engineer's Estimate**

Scudders Pond Existing Conditions

- Timber Baffle obstructing flow through existing weir
- Existing weir structure is missing weir boards
- Existing drainage system and outfall are filled with debris
- Tidal waters observed back flowing in the pond (no visible back flow prevention)



Timber Baffle Obstructing Weir



*Prospect Avenue near
Scudders Pond on 9/2/21*



Outfall is over 50% filled

14 The Blvd Existing Conditions

- No existing outfall present for this drainage system
 - Inlet capacity is insufficient

Shore Road Existing Conditions

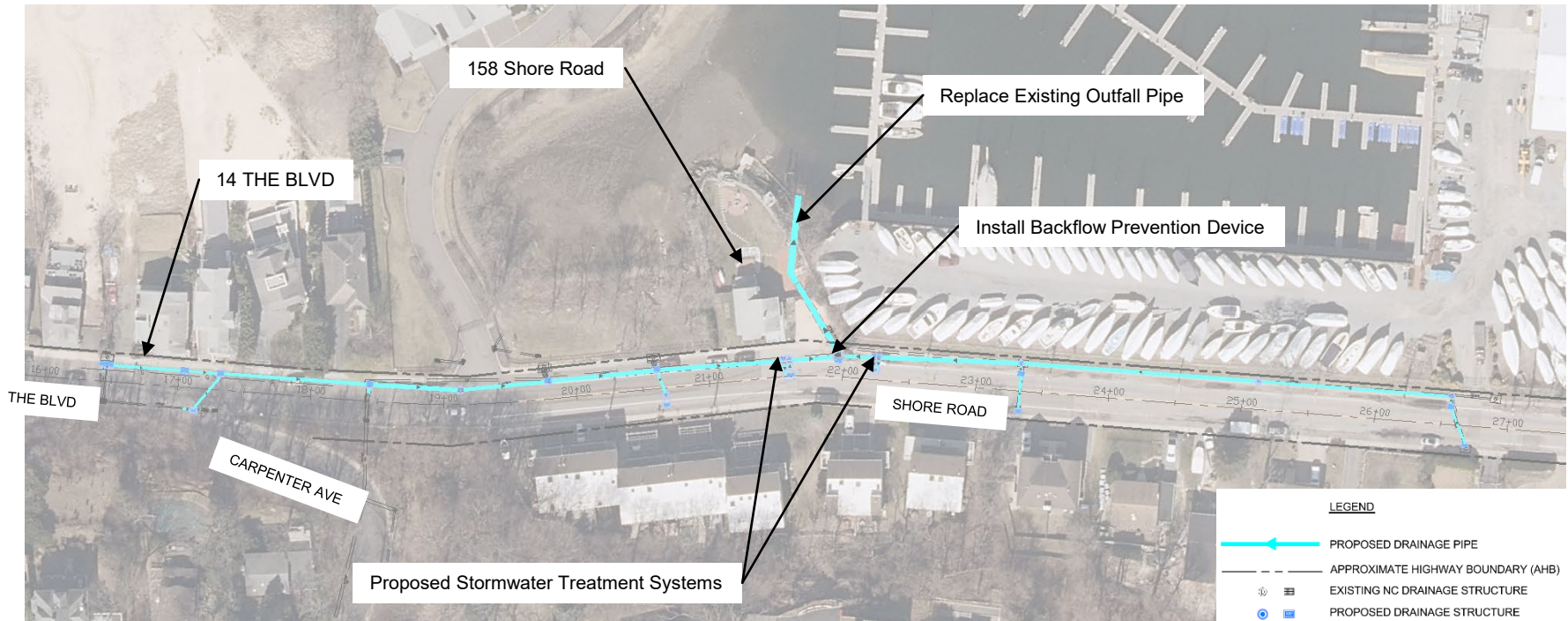
- Existing outfall pipe at 158 Shore Road is compromised (sections of pipe have become disjointed)
- Existing drainage system is undersized, and roadway has grading issues that result in ponding.



*14 The Blvd (North end of Carpenter Ave)
On 10/7/22*



Structures do not connect to positive system



Proposed Improvements

- Install additional drainage inlets & pipe connection to outfall near 158 Shore Road.
- Install new positive drainage system along Shore Road to handle the 10-year, 24-hour storm event (5.29" Rainfall)
- Replace existing 24" diameter outfall pipe with new 48" diameter outfall pipe.
- Install two stormwater treatment systems.
- Install backflow prevention device upstream of new outfall.
- Regrade roadway and install new curb and gutter.

Carpenter Avenue to Beverly Road

- Flooding occurs along uncurbed, poorly graded flow line in various locations
- Pipe outfall in poor condition and undersized / prone to clogging



*7/18/2022 Photo facing toward
158 Shore Road from 101 Shore Rd*



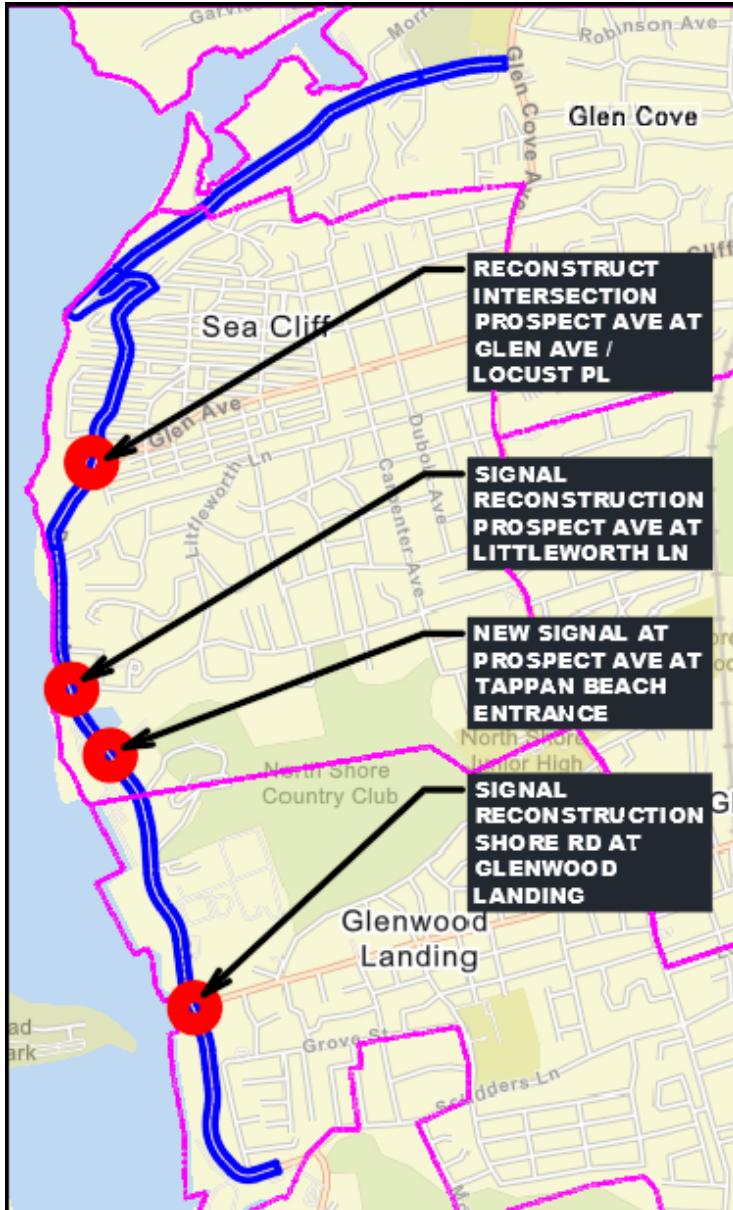
Poorly graded flow line



Outfall pipe Condition



- 



Traffic Signal Improvements based on Study Findings

- **New Traffic Signal**
 - Prospect Ave @ Tappen Beach Entrance
- **Traffic Signal Reconstruction**
 - Shore Rd @ Glenwood Rd
 - Prospect Ave @ Littleworth Ln
- **Reconstruct Prospect Ave at Glen Ave / Locust Pl Intersection (Slide No.'s 13 & 14)**
- **SYNCHRO Analysis performed with existing conditions vs. lane diet, and it was found that proposed conditions are acceptable**
- **Shore Rd / Prospect Ave Traffic Data Report**



Speed Awareness Devices

- Five (5) proposed Bidirectional Radar Speed Awareness Devices to be mounted overhead on mast arms. Refer to Conceptual Plans for locations

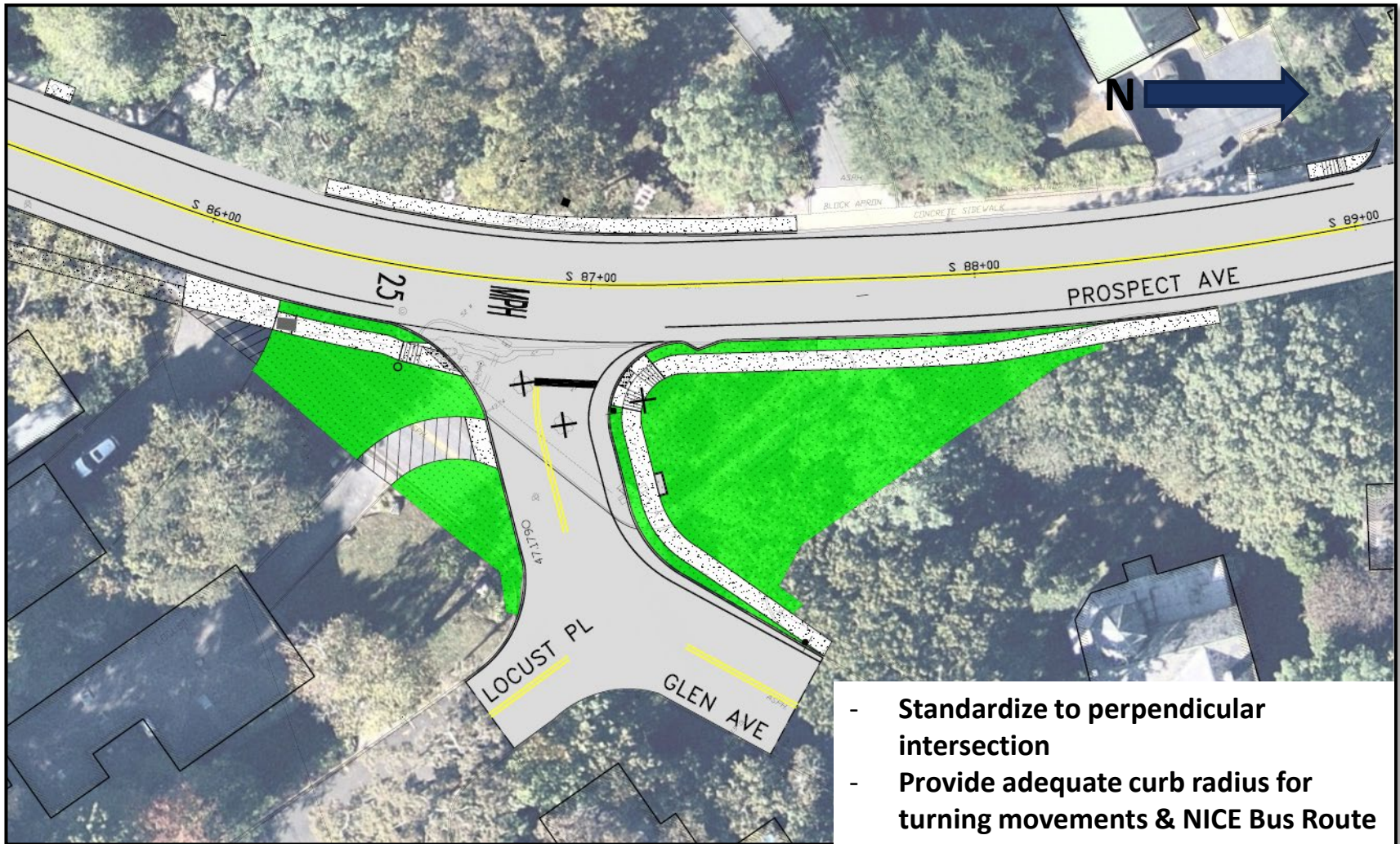


Sample Speed Awareness Device

Existing Intersection – Prospect Ave at Glen Ave / Locust Pl



Intersection Reconstruction – Prospect Ave at Glen Ave / Locust Pl





One Large Project, 5 Key Project Areas

- Based on the proposed roadway improvements, the project limits can be broken into 5 key areas
- Proposed improvements for each area has been designed based on input from NCDPW



Area 1: Scudders Ln to Glenwood Landing

- 0.45 miles
- Composite Roadway (Asphalt overlay on Concrete base)
- Existing: One lane in each direction with varying width shoulders, existing sidewalk on west side only
- Proposed: Retain existing lane widths
 - Mill & Resurface
 - No proposed new sidewalk
 - Update traffic signs



Two Lane Composite Roadway



Area 2: Glenwood Landing to Laurel Ave

- 1.0 mile
- Exposed Concrete Roadway
- Existing: Two (10') lanes in each direction with some shoulders (& varies), sidewalk on west side only
- Proposed: One lane (11') in each direction with (6') bike lanes & new 5' wide sidewalk added to east side.
 - Concrete Repairs & Asphalt Overlay
 - New street lighting along west side
 - New ADA compliant curb ramps
 - New Drainage castings & adjustments
 - Update traffic signs



Exposed concrete panels

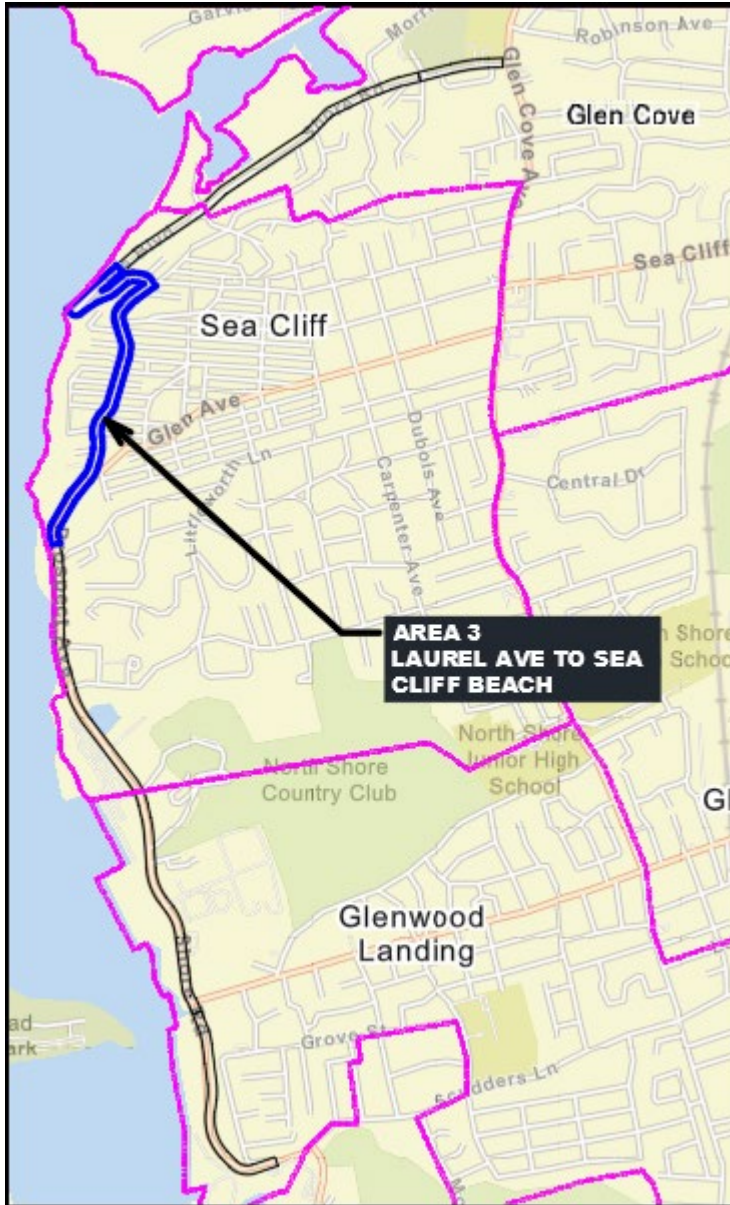
Proposed Bike Lane Improvements Area 2: Sea Cliff Beach to Putnam Ave



Existing Condition



Proposed Condition (Add bike lanes & sidewalk)

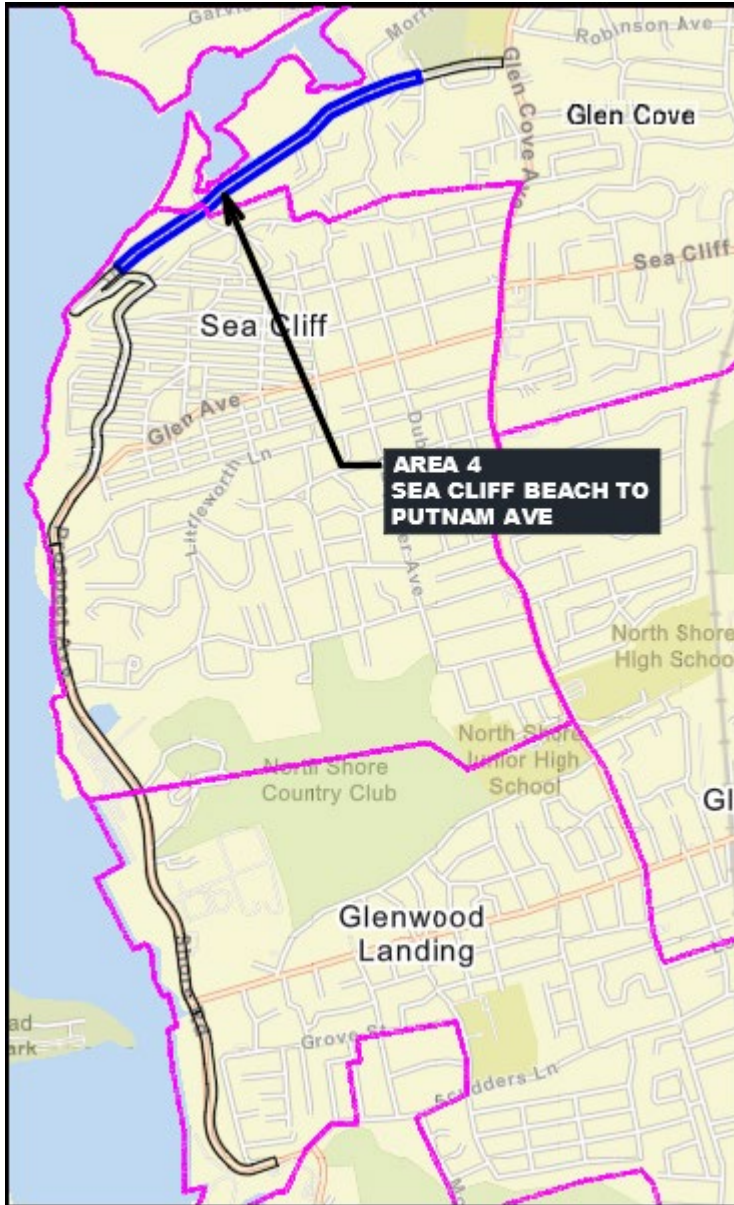


Area 3: Laurel Ave to Sea Cliff Beach

- 1.0 mile
- Composite Roadway (Asphalt overlay on Concrete base)
- Existing: One lane (11') in each direction with varying width shoulders, existing sidewalk with substandard curb ramps & poor signage
- Proposed: Retain existing lane widths
 - Mill & Resurface
 - New ADA compliant curb ramps & necessary utility adjustments
 - Update traffic signs



Two Lane Composite Roadway



Area 4: Sea Cliff Beach to Putnam Ave

- 0.7 miles
- Composite Roadway or Asphalt (varies)
- Existing: One lane (11') in each direction with varying width shoulders for parking, existing sidewalk with substandard curb ramps, mix of curb/uncurbed flow lines
- Proposed Streetscape: One lane (11') in each direction with 8' wide parking lane along the W/B lane (north side)
 - Mill & Resurface or Full Depth Reconstruction
 - New ADA compliant curb ramps & necessary utility adjustments
 - New drainage structures and pipes with regraded flow lines
 - Update traffic signs
 - Decorative light fixtures, benches, planters, street trees etc. to match existing style (to the west)
- Potential for crosswalks just east of Carpenter Ave & all around at Albin St



Two Lane Composite Roadway

Proposed Streetscape

Area 4: Sea Cliff Beach to Putnam Ave



Existing Condition



*Proposed Condition (shifted centerline
with parking on north side)*



Area 5: Putnam Ave to Glen Cove Ave

- 0.15 miles
- Composite Roadway (Asphalt overlay on Concrete base)
- Existing: One lane (11') in each direction with varying width shoulders, existing sidewalk with substandard curb ramps
- Proposed: Retain existing lane widths
 - Mill & Resurface
 - New ADA compliant curb ramps & necessary utility adjustments
 - Install new sidewalk on north side where necessary
 - Update traffic signs as necessary



Retain striping configuration near Glen Cove Ave

Next Steps:

- Address County's comments on the Plans, Drainage Study Report and the Technical Design Report
- Regulatory Permitting
 - NYSDEC
 - Army Corps of Engineers
 - Department of State
 - Various Towns/Villages

QUESTIONS & COMMENTS

Thank You!