

Cummings Park and West Beach Master Plan

Harbor Commission Design Concept Review

City of Stamford, CT
January 20, 2015



Cummings Park and West Beach Master Plan

Goals:

- Engage the community
- Identify needs
- Identify operational and physical improvements
- Restore the marina operation
- Prepare for future storms and sea level rise
- Prepare illustrative plans and narrative
- Determine priorities and costs
- Deliver a master plan document

Cummings Park and West Beach Master Plan

Key Master Plan Tasks:

Task 1: Conceptual Master Plan Design

Task 2: A-2 Survey

Task 3: Cummings Marina Concept Plan

Task 4: Cummings Marina Evaluation

Task 5: Cummings Marina Cost Estimate

Task 6: Study of Beach Reinforcement and Resiliency

Cummings Park and West Beach Master Plan

Community Outreach

- Community Meeting 1, June 2014 (SWOT Analysis)
- Stakeholder meetings and interviews (3 days)
- Community Meeting 2 (Concept Review)
- City Staff Review (December 2014)
- Harbor Commission Meeting
- Community Meeting 3 (Present Preferred Alternative)

Study Area



Cummings Park and West Beach Master Plan

Parks' Enhancement Strategy / Common Themes

Connectivity / Pedestrian, Bicycle and Vehicular Circulation
Community connectivity and recreation amenity

Natural Environment
Enhanced landscape diversity, habitat and green infrastructure

Beaches and Promenade
A more family-friendly and enjoyable park experience

Food and Recreation Concessions
Better offerings, greater use and year-round destination

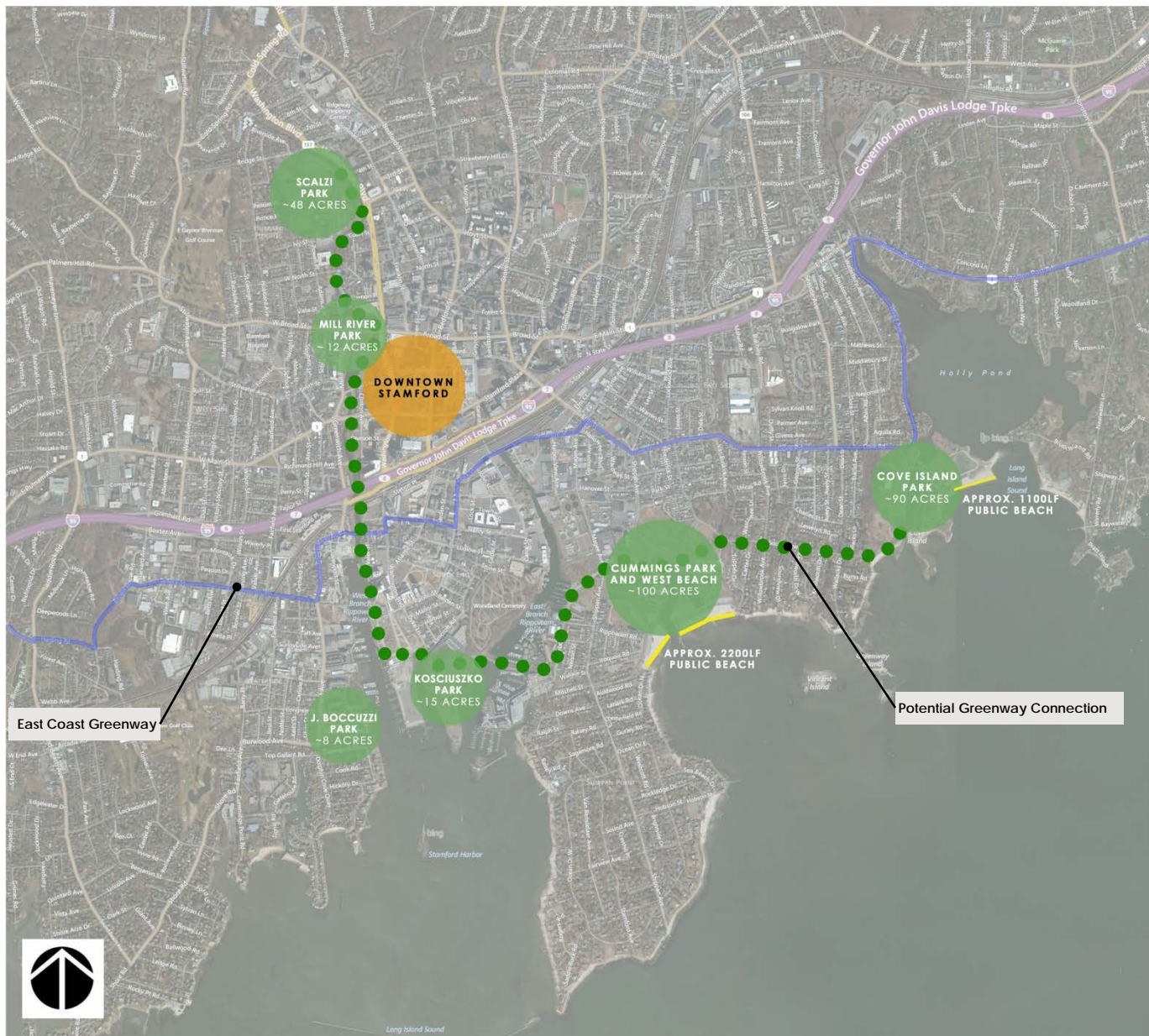
Parking
More efficient, better managed with enhanced landscape

Play Fields
Improved playability, safety and park integration

Marina
Rebuild with additional user amenities

Restrooms
Renovate, improve security and locate for convenience

Playground Environments / Destination Play
A more enriching play experience year-round



CONNECTIVITY / PEDESTRIAN, BICYCLE AND VEHICULAR CIRCULATION

Concept #1



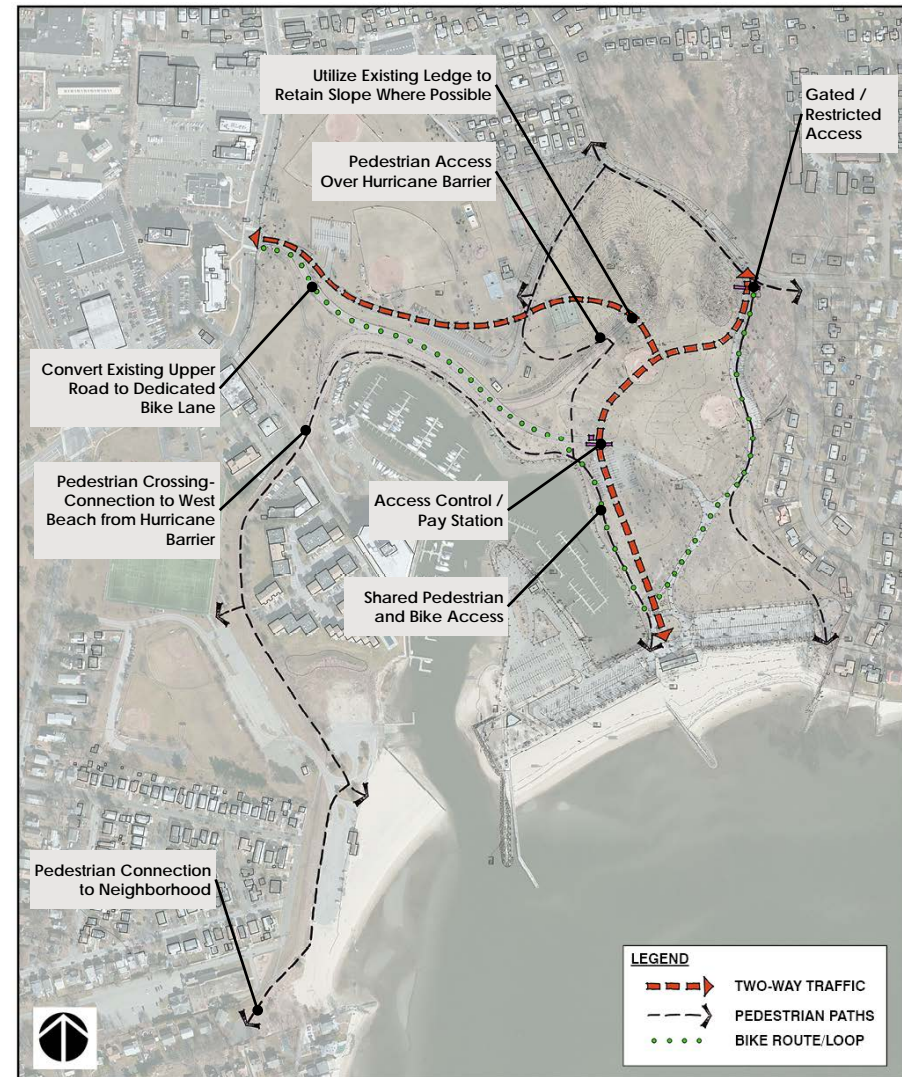
Concept #2



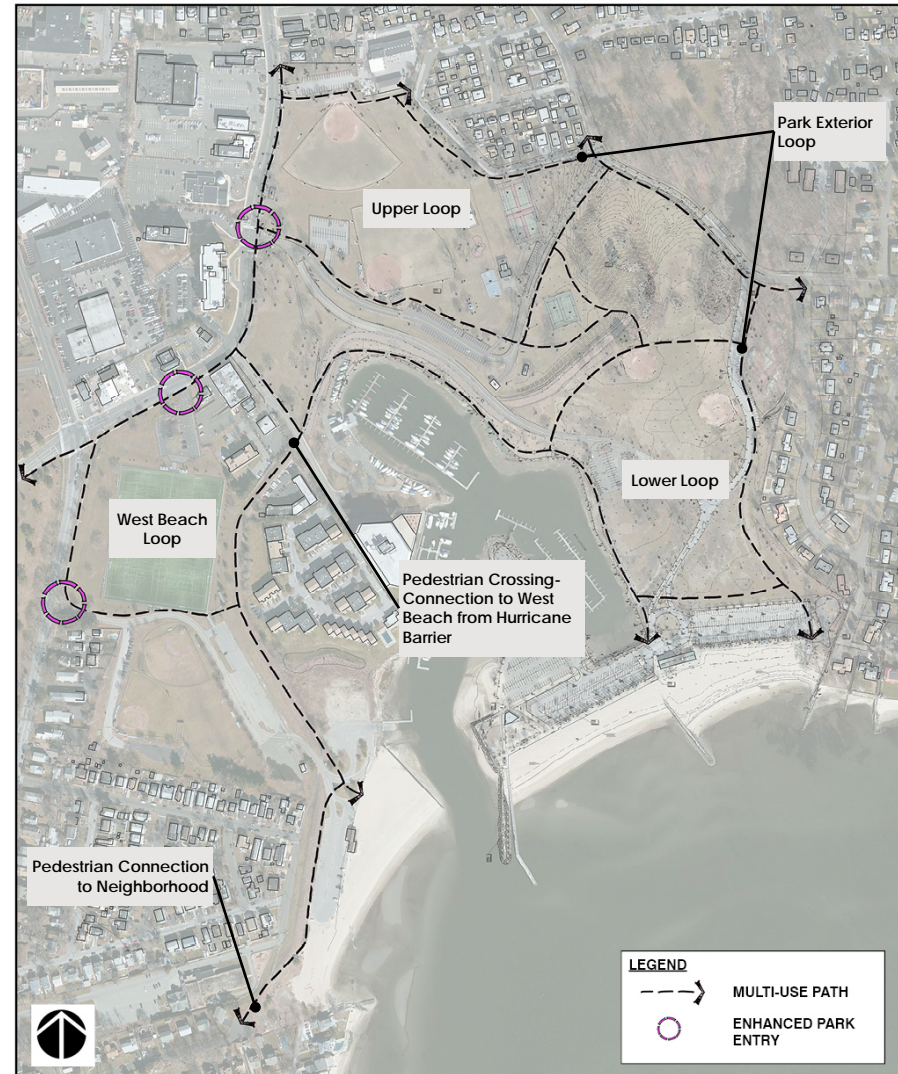
Concept #3



Concept #4



Multi-Use Path Network





CONNECTIVITY / PEDESTRIAN, BICYCLE AND VEHICULAR CIRCULATION



CONNECTIVITY / PEDESTRIAN, BICYCLE AND VEHICULAR CIRCULATION



CONNECTIVITY / PEDESTRIAN, BICYCLE AND VEHICULAR CIRCULATION

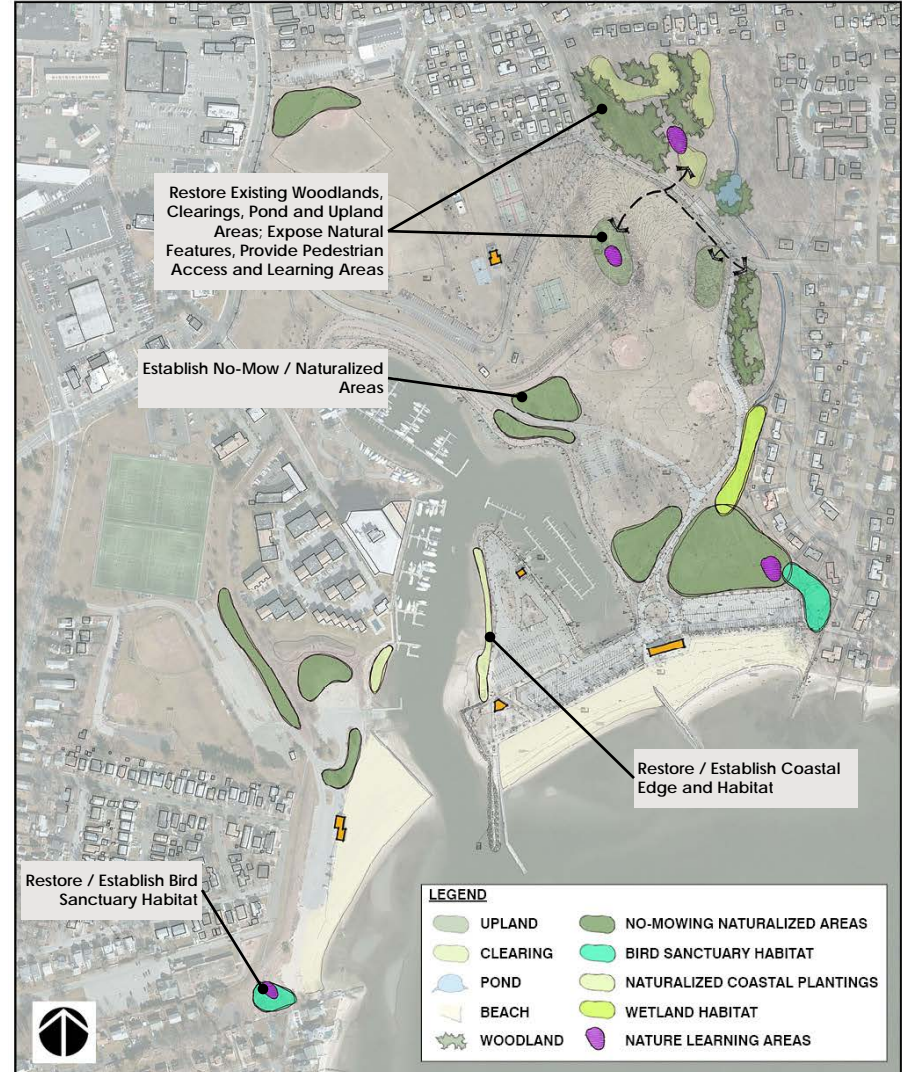


NATURAL ENVIRONMENT

Forestation Plan



Habitat Connectivity & Enhancement



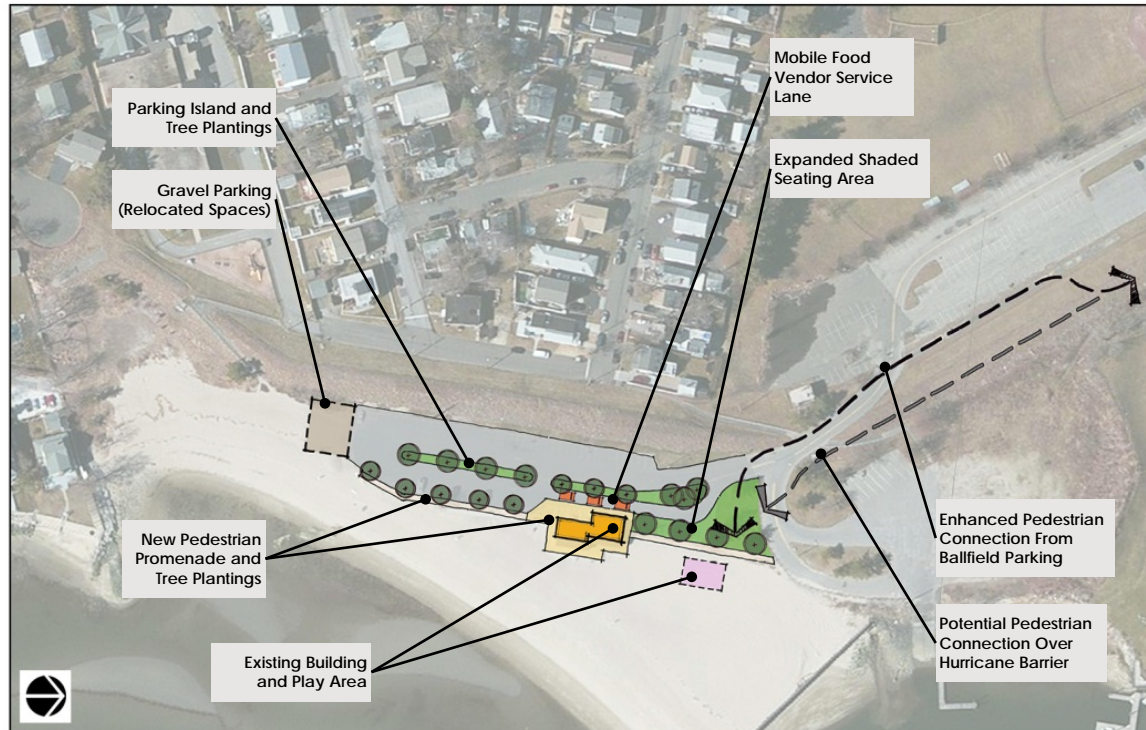


BEACHES AND PROMENADE

WESTCOTT COVE



West Beach Concept





BEACHES AND PROMENADE

WESTCOTT COVE



The Pavilion, Cummings Park, Stamford, Conn.

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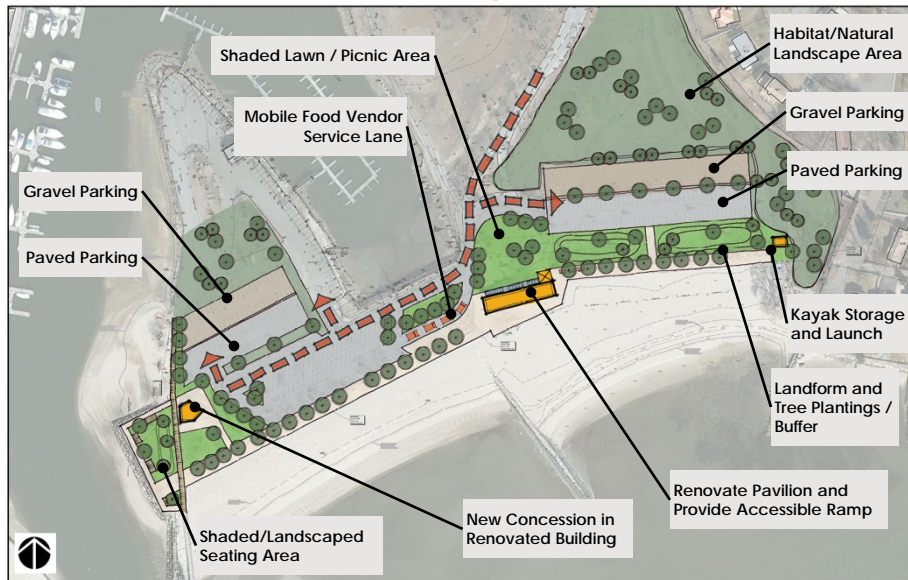
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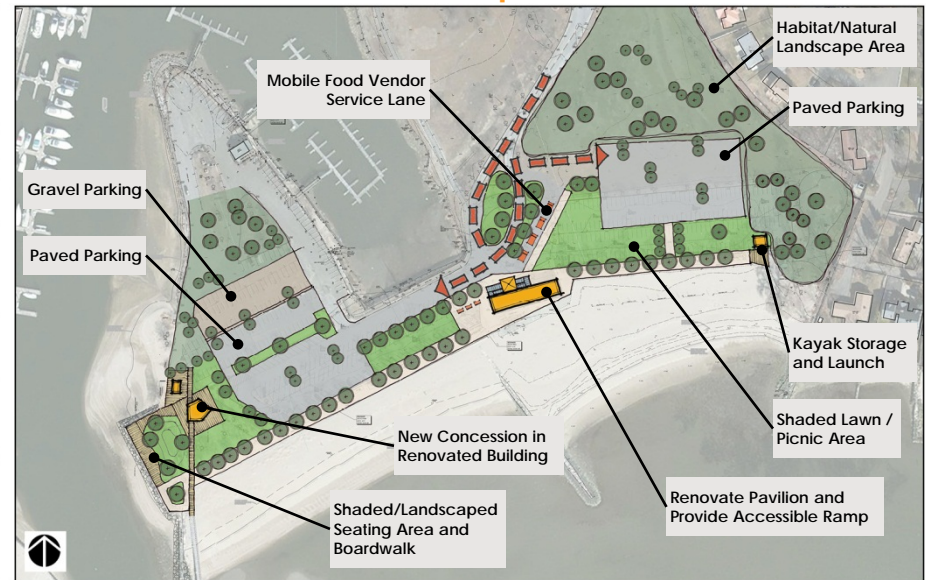


Concept 1



* Total Parking Reduction: Approximately 65 Spaces

Concept 3



* Total Parking Reduction: Approximately 110 Spaces

Concept 2



* Total Parking Reduction: Approximately 16 Spaces

Concept 4



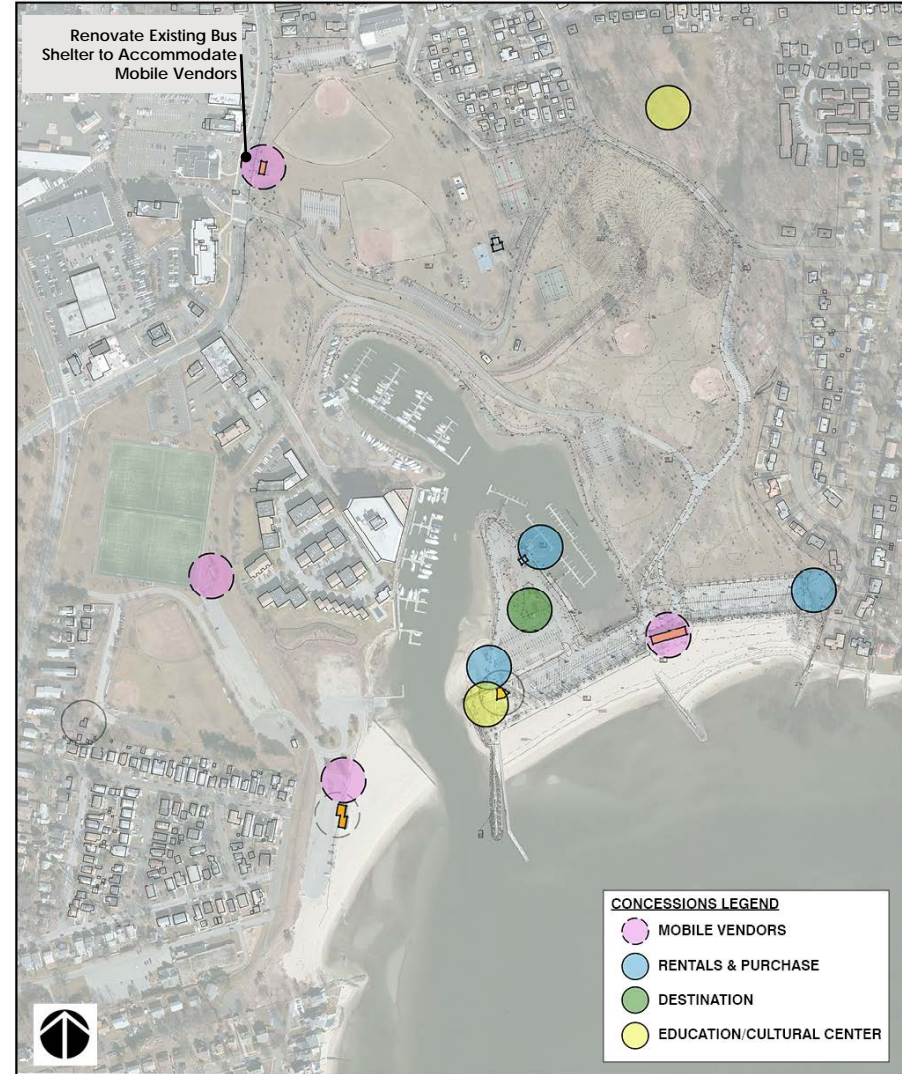
* Total Parking Reduction: Approximately 90 Spaces



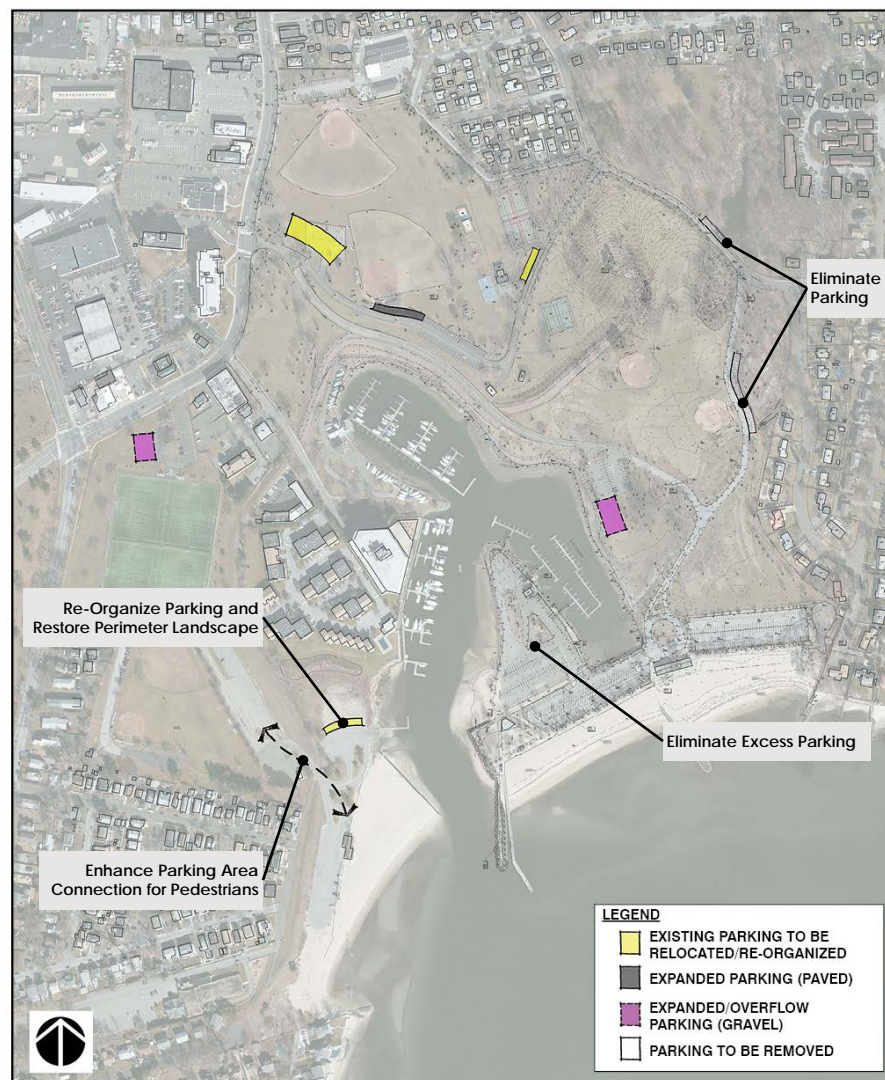
Existing Condition



Proposed Condition



Incremental Enhancements





MARINA

Cummings Park and West Beach Master Plan

Resiliency: Cummings Marina

Environmental

Wave Heights / Still Water Elevations / Salt Water

Structural

Lateral Loads: Wave / Wind / Ice

Vertical Loads: Gravity Loads / Live loads

Uplift Loads

Construction Material

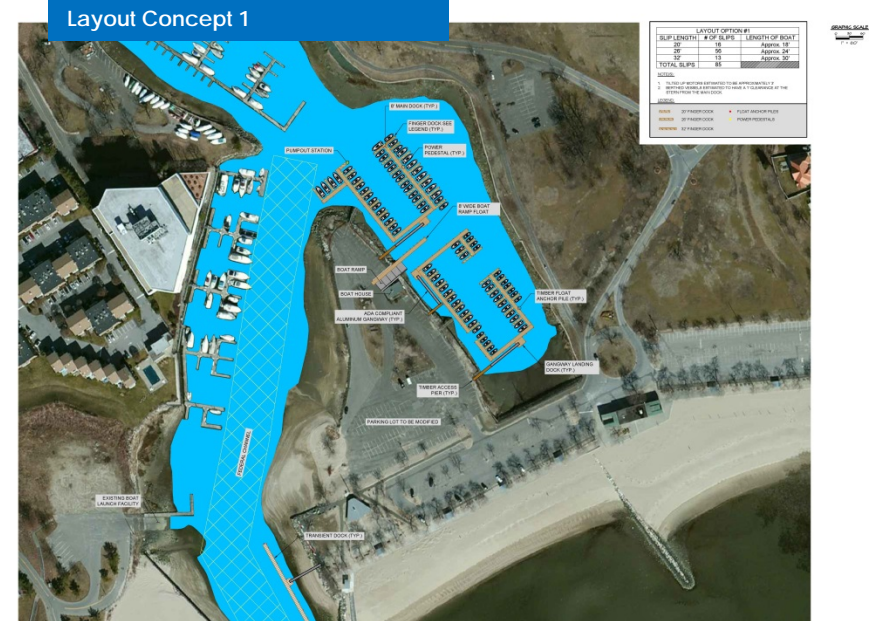
Treated Lumber / Steel (Coated or Stainless) / Marine Grade Aluminum

Marina Improvements

Access Piers / Gangways / Floating Docks / Float Anchor Piles / Seawalls /
Revetments

[illegible]

Layout Concept 2



Layout Concept 3

Cummings Park and West Beach Master Plan

Resiliency: Potential Cummings & West Beach Modifications

Areas Susceptible to Flooding Events "V" Zone El 15

Beach Nourishment

Continue Yearly Maintenance of Beach

Beach Grading

Re-grade beach to have a slope of approximately 1:40 slope

Sand Gradation Modification

Increase the grain size

Sand Dunes

Wave Attenuator

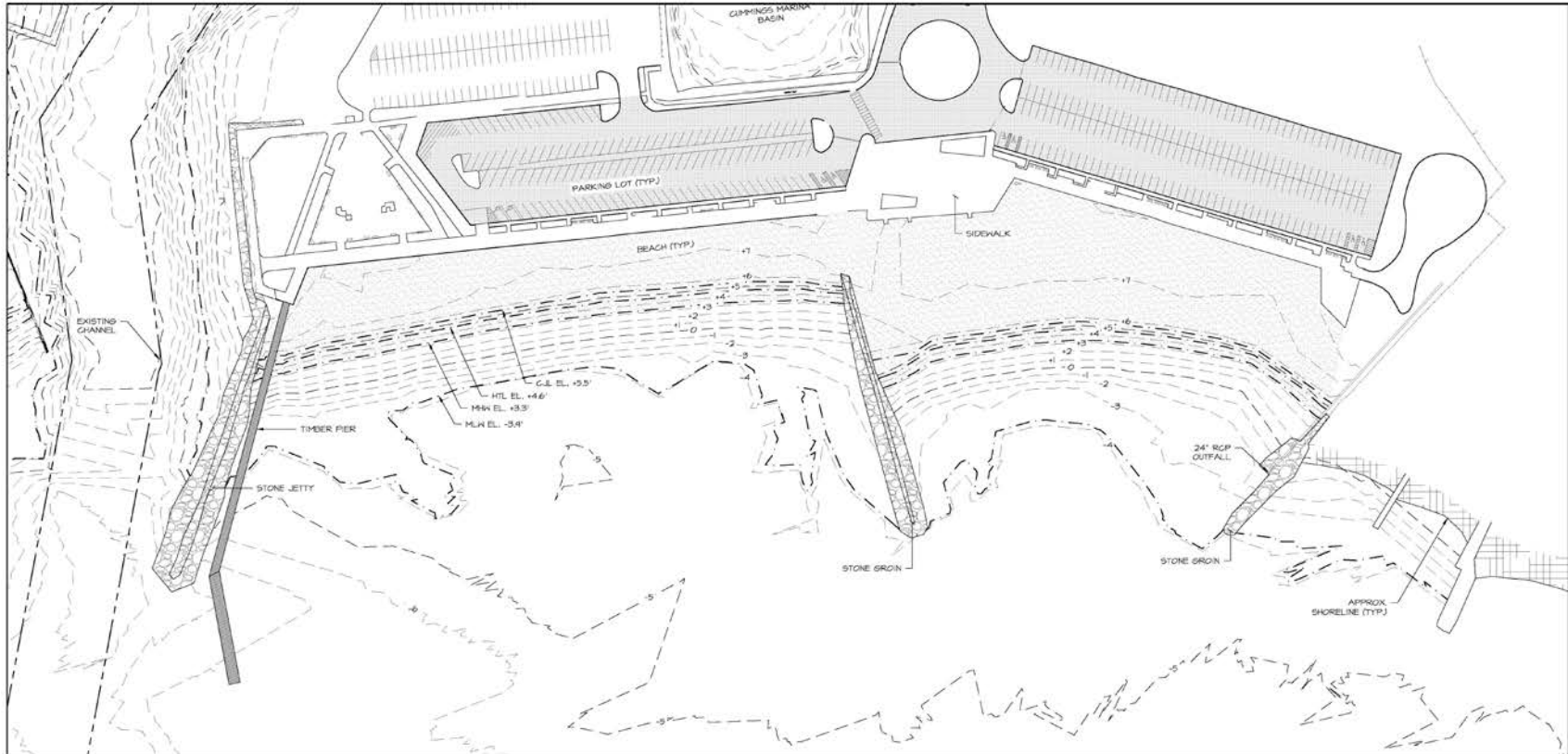
Floating structure in Westcott Cove to minimize wave impact

Feeder Bar

Create a sand bar which provides protection and sand nourishment to the existing beach



WESTCOTT COVE
SCALE: 1" = 175'



CUMMING BEACH EXISTING CONDITION & BEACH MAINTENANCE OPTIONS

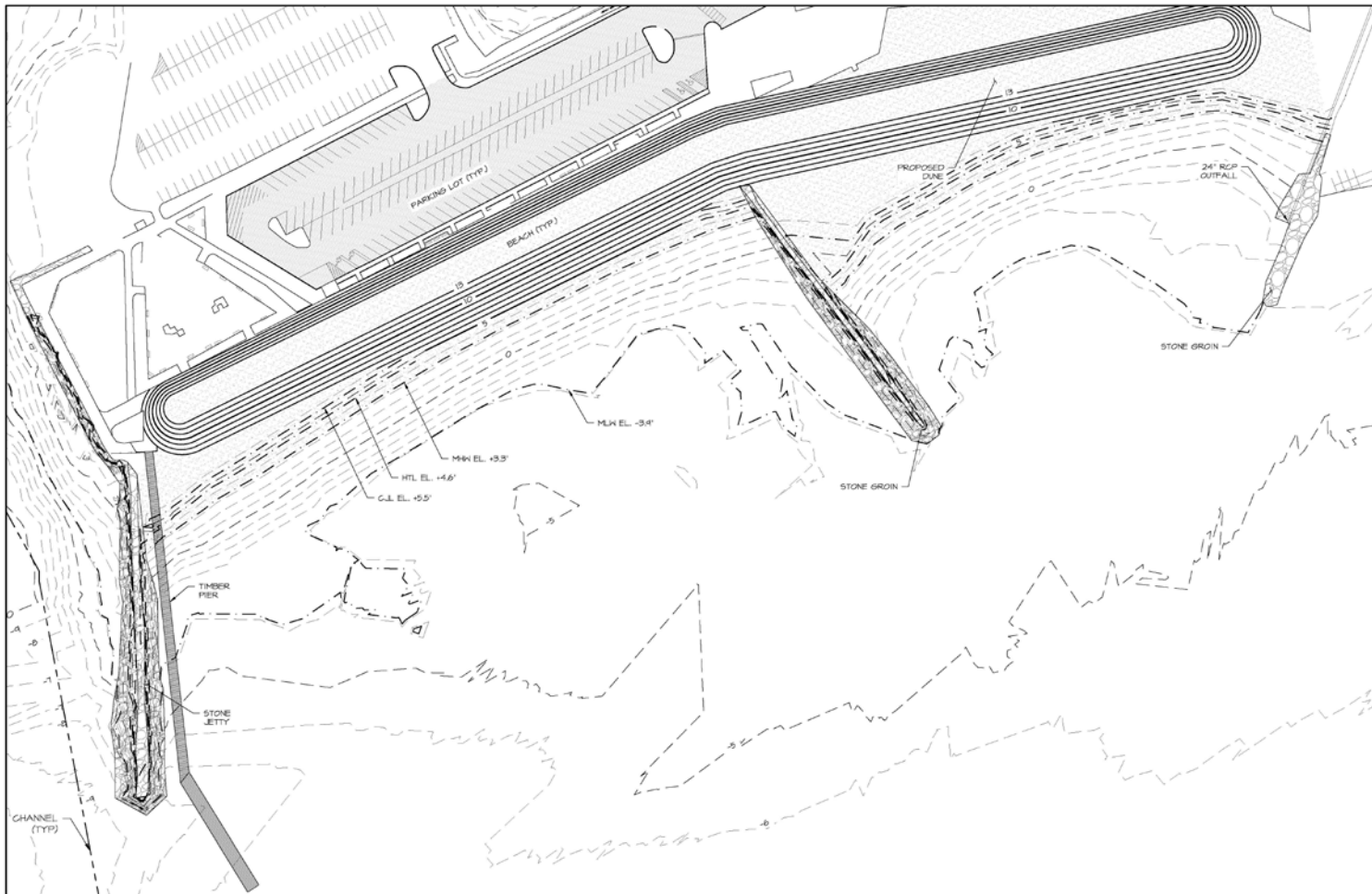
SCALE: 1" = 60'

GRAPHIC SCALE
0 30 60
1" = 60'

NOTE:

1. FOR BEACH NOURISHMENT MAINTENANCE TO EX-GRADGES, ITS ESTIMATED THAT THE CITY WILL BE RESPONSIBLE TO FILL APPROXIMATELY 500 C.Y. ANNUALLY.
2. EXISTING BEACH SAND MAY BE MIXED WITH COARSER GRAIN SAND ($d_{50} = 0.05mm$ OR GREATER) TO MAKE BEACH MORE RESILIENT TO EROSION.

RETURN PERIOD (YRS)	EROSION POTENTIAL (CY)
1	MINIMAL
10	3,750±
50	8,750±
100	10,000±



NOTE:
11,000 C.Y. REQUIRED FOR DUNE CONSTRUCTION

DUNE OPTION - CUMMINGS BEACH

SCALE: 1" = 50'





BEACH SLOPE MODIFICATION OPTION - CUMMINGS BEACH

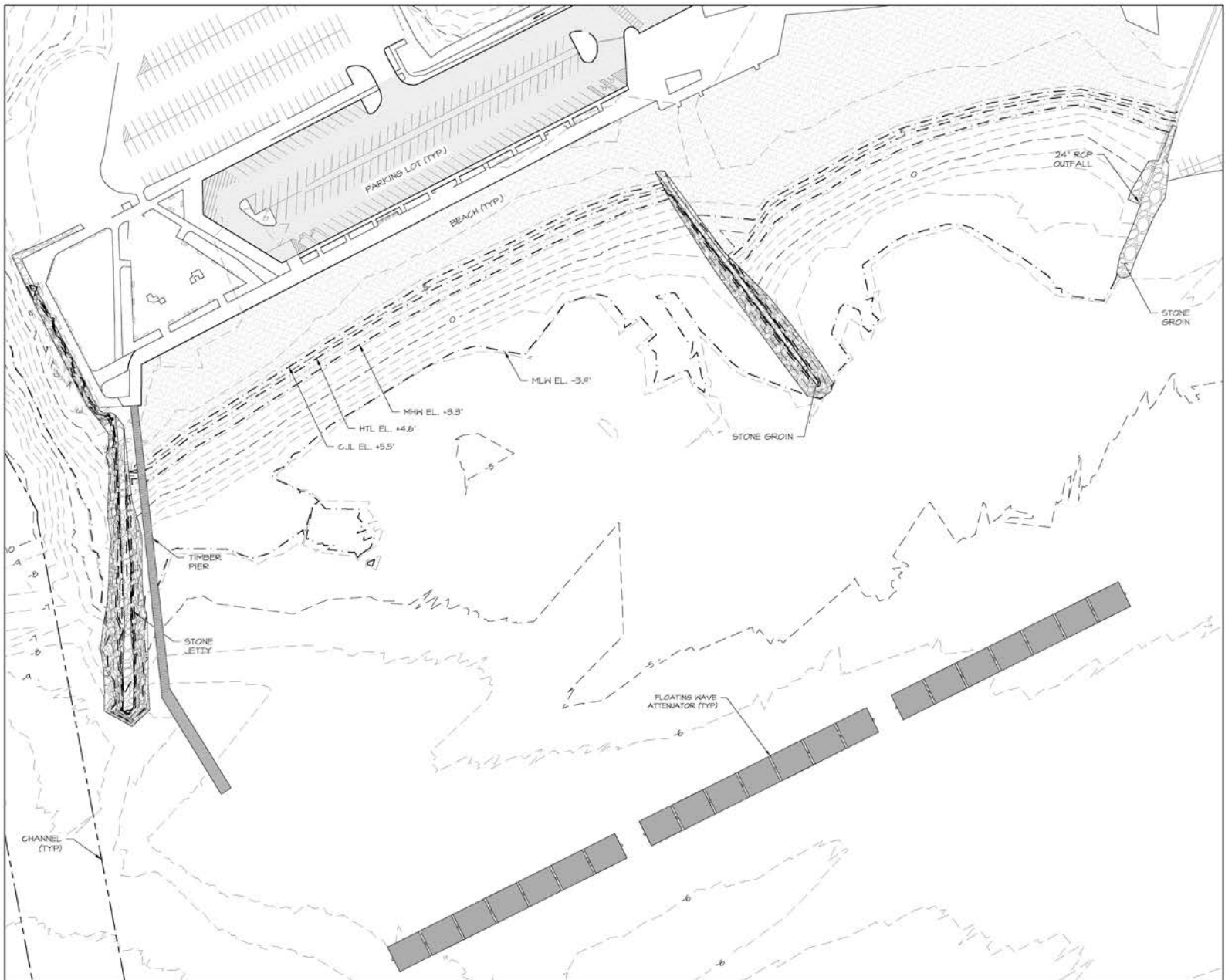
SCALE: 1" = 50'

GRAPHIC SCALE



NOTE

11,000 C.Y. REQUIRED FOR REGRADING



WAVE ATTENUATOR OPTION - CUMMINGS BEACH

SCALE: 1" = 50'





WEST BEACH EXISTING CONDITION & BEACH MAINTENANCE OPTIONS

SCALE: 1" = 50'
GRAPHIC SCALE
0 10 20
1" = 50'

NOTE:

1. FOR BEACH NOURISHMENT MAINTENANCE TO EX. GRADES, ITS ESTIMATED THAT THE CITY WILL BE RESPONSIBLE TO FILL APPROXIMATELY 340 C.Y. ANNUALLY.
2. EXISTING BEACH SAND MAY BE MIXED WITH COARSER GRAIN SAND ($d_{50} = 0.60\text{mm}$ OR GREATER) TO MAKE BEACH MORE RESILIENT TO EROSION.

RETURN PERIOD (YRS)	EROSION POTENTIAL (CY)
1	MINIMAL
10	2,550 ±
50	5,950 ±
100	6,800 ±



NOTE:
1500 C.Y. REQUIRED FOR DUNE CONSTRUCTION

DUNE OPTION - WEST BEACH
SCALE: 1" = 50'

GRAPHIC SCALE
0 50 100
1" = 50'



NOTE:
48,300 C.Y. REQUIRED FOR REGRADING

BEACH SLOPE MODIFICATION OPTION - WEST BEACH

SCALE: 1" = 50'

GRAPHIC SCALE
0 25 50
1" = 50'



WAVE ATTENUATOR ALTERNATIVE - WEST BEACH

SCALE: 1" = 50'

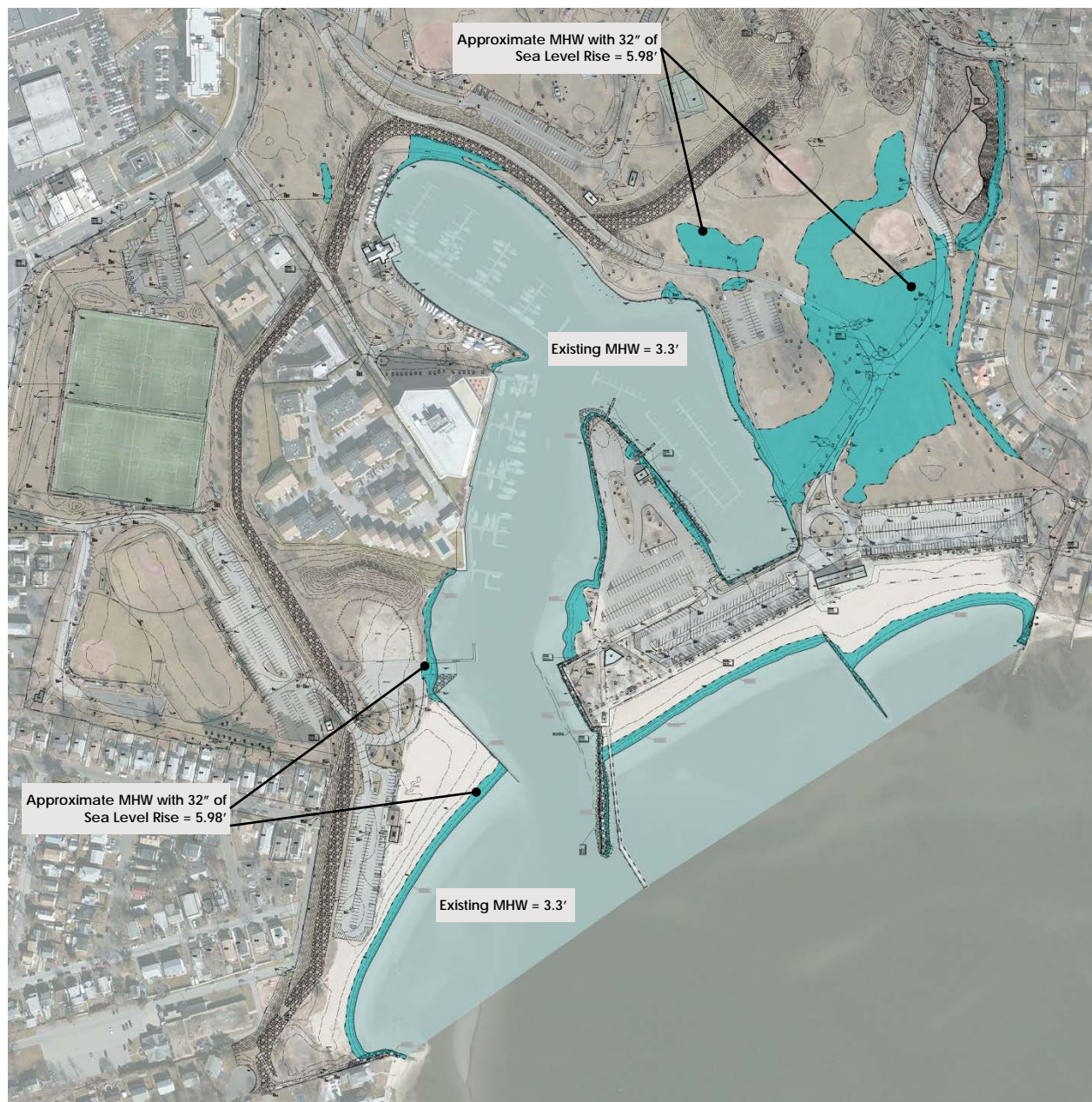




BEACH BACKPASSING ALTERNATIVE - WEST BEACH

SCALE: 1" = 50'





SEA LEVEL RISE (SLR @ 32")

Proposed Scheme





PLAYGROUND ENVIRONMENT / DESTINATION PLAY

Renovate Marina Docks and Parking

Picnic Area, Waterfront Walkway and Landform

Gated Access to Marina Parking

Relocate Parking Lot, Building and Marina Docks

Marina Overlook and Seating

Walking Paths, Fitness Stations and Landform

Relocate Parking Lot, Building and Marina Docks

Marina Overlook and Seating

Destination Playground, Picnic Areas and Landform

Cummings Park and West Beach Master Plan

Parks' Enhancement Strategy

Keep it simple!

Short-term Priorities

Operations, cleanliness, security and enhanced visitor experience

Capital Improvements

Focus on connectivity, walkability, parking, restrooms, beach and site features, enriched play environments, marina and concessions

Program Enhancements

Food, fitness, recreation and environment!

Cummings Park and West Beach Master Plan

Next Steps

Community Meeting 3 (Present Preferred Alternative)

- Integrate preferred concepts
- Develop a comprehensive schematic plan and graphics
- Illustrate priorities and implementation plan