



2013 Summer Recap and Discussion on Rockaway Beach Reconstruction

Parks

Tonight's Agenda

- Summer Beach Update
- Phase 2
- Assumptions, Constraints and Regulations
- Rebuilding the Boardwalk
- Coastal Protection
- Rockaway Peninsula Conceptual Plan
- Next Steps
- Questions





Summer Beach Update

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Beach Season 2013



Rockaway Reconstruction: Summer

Army Corps Beach Replenishment



- Phase 1A:
Creation of a
berm between
B86-B149
 - 600,000
Cubic Yards
 - August –
September
2013



Baffle Walls



- Replaced walls that were lost or damaged during the storm
- Sand migration prevention
- Spans B126 – B149 St.
- Supported by 25' deep piles



Interim Measures: Trapbags



- 4' high and wide geotextile bags for interim protection against future storm events
- The bags contain over 17,000 cubic yards of sand in total
- Spans B55 – B149 St





Phase 2

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Community Visioning

- NYC Parks engaged the community on their vision for parks and open space in the Rockaways
- Hosted an April 2013 community visioning meeting with 100 participants
- Launched an interactive online visioning tool to capture input from an even wider audience from April - August
- Focused on coastal protection, recreation, economic development and aesthetics
- Nearly 25,000 votes on ideas



Community Visioning Results

Create a natural dune system with plants, and
build rock jetties, replenish reefs and oyster
beds

**Continuous boardwalk
with other recreation
facilities**

Include the
community
in the
decision-
making
process

**Build an ocean pier on B116 Street and a
marina along the bay wall. Hotels will follow**

**Enhanced Coastal
Protection**



Phase 2 Scope

- Rebuild the Boardwalk
- Provide coastal storm risk reduction measures, both interim and long-term
- Develop a conceptual plan for replacing storm damaged play features and new recreation, concession and access opportunities in partnership with NPS and the Jamaica Bay Rockaway Parks Conservancy



Community Meeting Schedule

September 23 at PS43 7:00 PM B9-B72	September 24 at Knights of Columbus 7:00 PM B73-B109
<ul style="list-style-type: none"> • Far Rockaway • Bayswater • Wave Crest • Arverne 	<ul style="list-style-type: none"> • Hammels • Rockaway Beach • Seaside
September 25 at PS114 7:00 PM B110-B149	October 8 CB14 Full Board Meeting
<ul style="list-style-type: none"> • Rockaway Park • Belle Harbor • Neponsit 	<ul style="list-style-type: none"> • Meeting to discuss boardwalk schematic



Milestones

- September 2013: Boardwalk Design Begins
- October – December 2013: Conceptual Plan Development
- December 2013: Pre-construction Begins on Initial Phase of Boardwalk





Assumptions, Constraints and Regulations

Parks

SIRR Priorities and Solutions



Conceptual rendering of Beach 116th Street

- Develop comprehensive revitalization plans for Boardwalk, B. 116th St., B. 108th St. and Mott Ave.
- Work with USACE to install double dune system in Breezy Pt. and to study system for rest of Rockaway Peninsula
- Work with USACE to study and install wetland and wave attenuation in Howard Beach
- Develop a plan to address frequent tidal inundation in Broad Channel and Hamilton Beach



Regulatory Agencies and Processes



US Army Corps of Engineers



FEMA



Environmental Review Process



SEQRA

CEQR

CEHA



Rockaway Reconstruction: Constraints

Army Corps of Engineers: Reformulation Study



- Draft and public review 2014
- Environmental Impact Statement
- Final submission expected by late 2015
- Cost benefit ratio analysis
- Construction funding 100% federal





Rebuilding the Boardwalk

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RFP Process and Selection

- **NYCEDC will manage Consultants and Contractors on behalf of Parks**
 - Selection of a Design Team:
 - Public Design RFP Released per City Procurement Guidelines on July 23: six firms responded
 - City Advisory Panel: Parks, EDC, DDC, OMB, Law
 - CH2MHill & Team Selected
 - Future Solicitations:
 - Construction Management winner selected by 10/9
 - Pre-qualified subcontractors selected by 10/25



CH2MHill Team



Project Manager

*Civil, Marine, Structural, Geotechnical, MEP,
Sustainability, and Cost Estimating/Value Engineering*



Civil Engineering
Traffic Engineering
Urban Design
Landscape Architecture
Sustainable Design



Architecture
(WBE)



Environmental /
Permitting



Surveying
(WBE)



Foundation
Investigation
(MBE)



Cost/Benefit
Analysis



Signage



Code Compliance
(WBE)



Boardwalk Design Goals

- Resist storm forces
- Integrate with USACE work
- Incorporate rebuilt islands
- Design for varying elevations

Location	Pile Cap Elevation (ft)	Design Flood Elevation (ft)	Height above Cap (ft)
Beach 50 th	14.6	16	1.4
Beach 110 th	10.9	17	6.1
Beach 121 st	11.1	19	7.9



Boardwalk Design Assumptions

- Design Life: 50 years
- Structural Material: Concrete
- Vehicular Access: HS20 truck loading
- Account for new and varied elevations



Boardwalk Design Issues



- Coordinate with USACE risk reduction projects
 - Construction and funding issues
- Resist storm forces
 - Boardwalk structure to remain intact
 - No planks to come loose and float into neighborhood
- Reuse existing concrete foundations
 - Determine their capacities and conditions
 - Reinforce as required
- Connect to other structures
 - Meet existing islands
 - Restore access points



Initial Field Work Underway



- Complete site survey
 - Ground and aerial
- Geotechnical Testing
 - Pile dynamic analysis
 - Test pile driving
- Concrete Materials testing
 - Coring for chlorides
 - Windsor probes





Coastal Protection

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Coastal Protection

Immediate Term

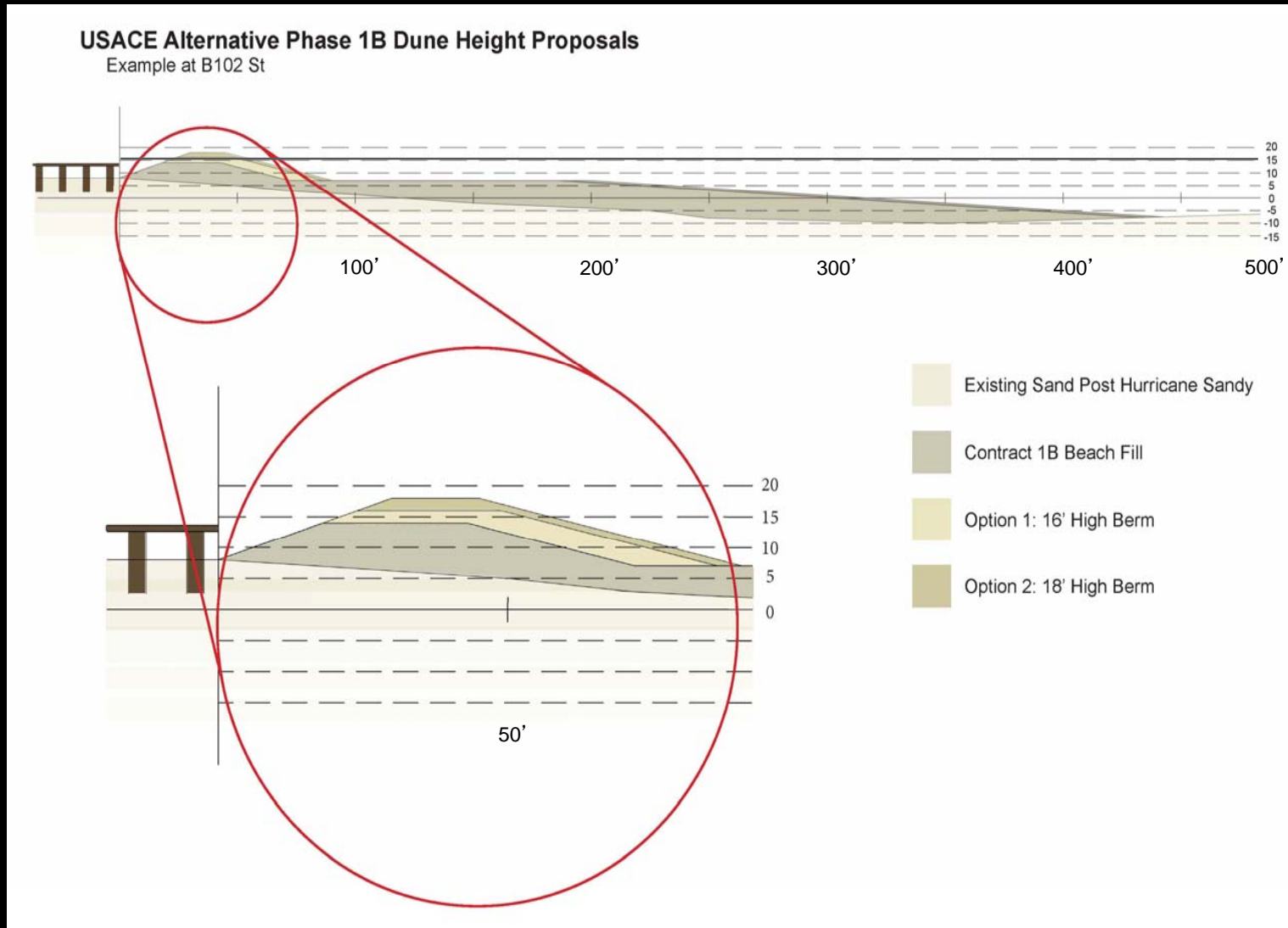
- USACE Short Term Dune Construction
 - 3.5 Million Cubic Yards of Sand
 - Reformulation Study

Immediate to Medium Term

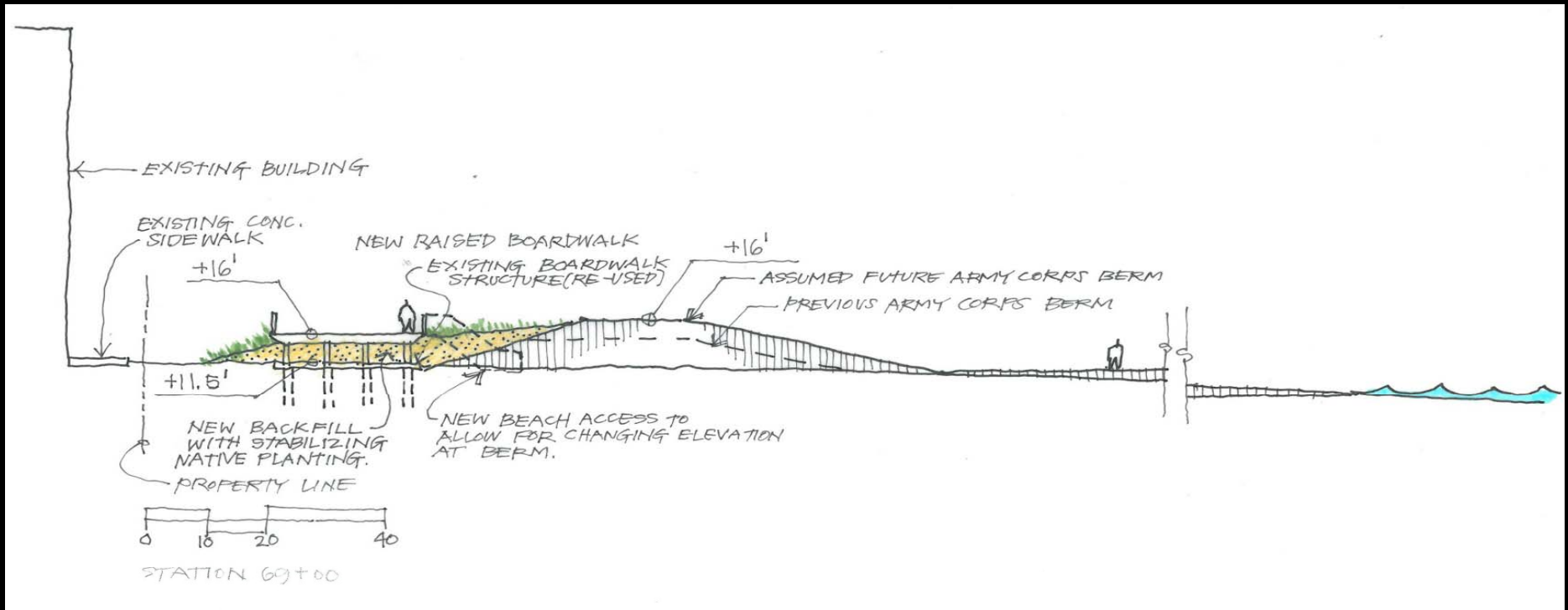
- City Betterment of USACE Dune
 - Raise New Berm/Dune Elevations to FEMA 100 Yr Flood level
 - Dune Plantings
 - Extended Dune/Sand to Underside and Back of Boardwalk



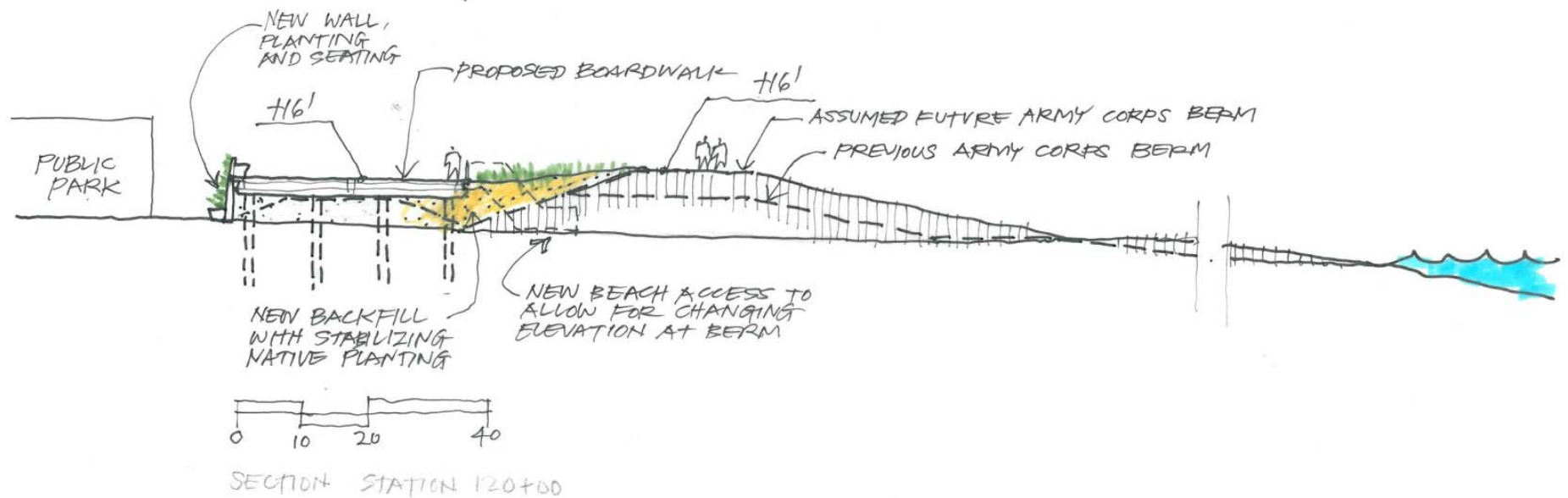
Betterment Plan



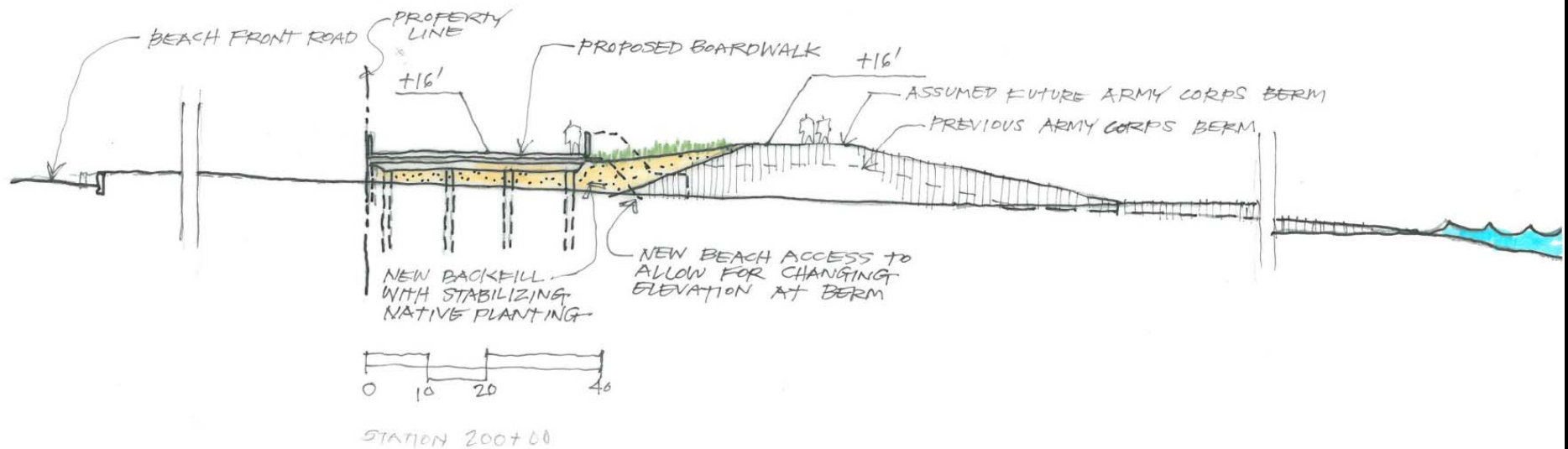
Elevated Boardwalk and Protection Options



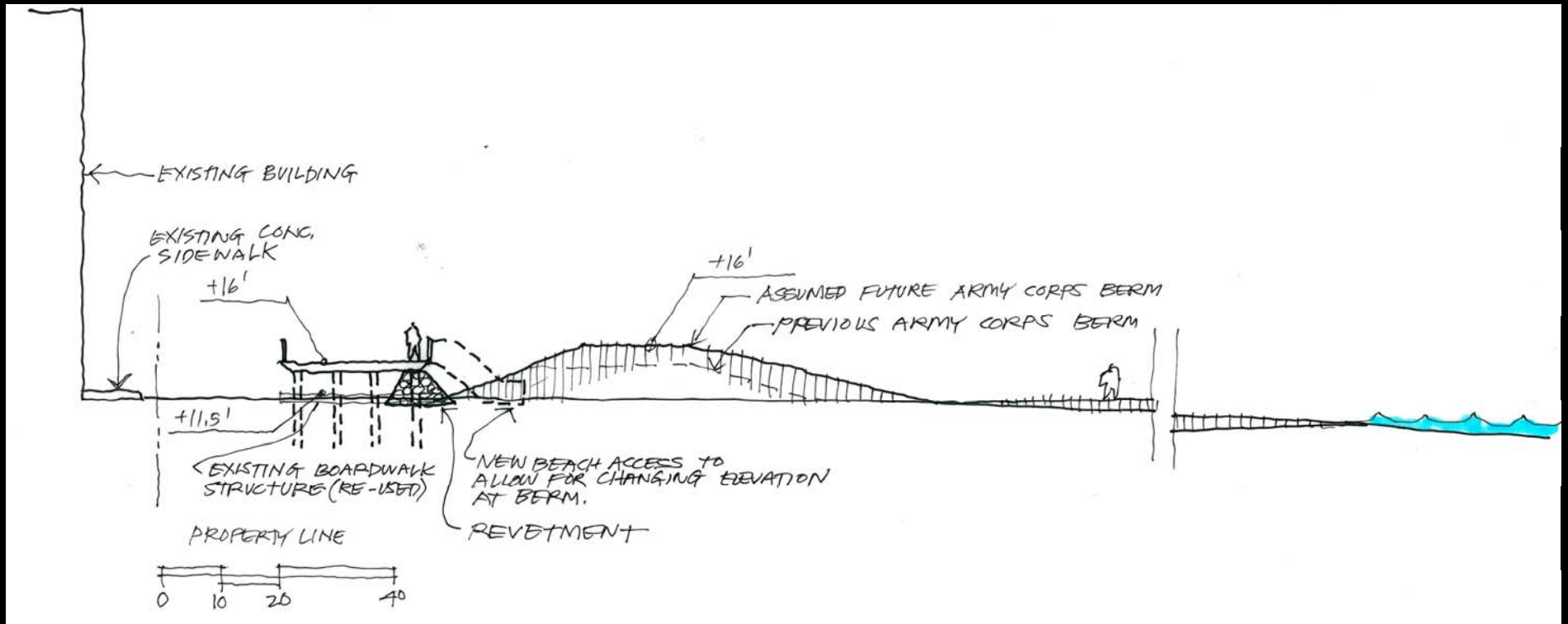
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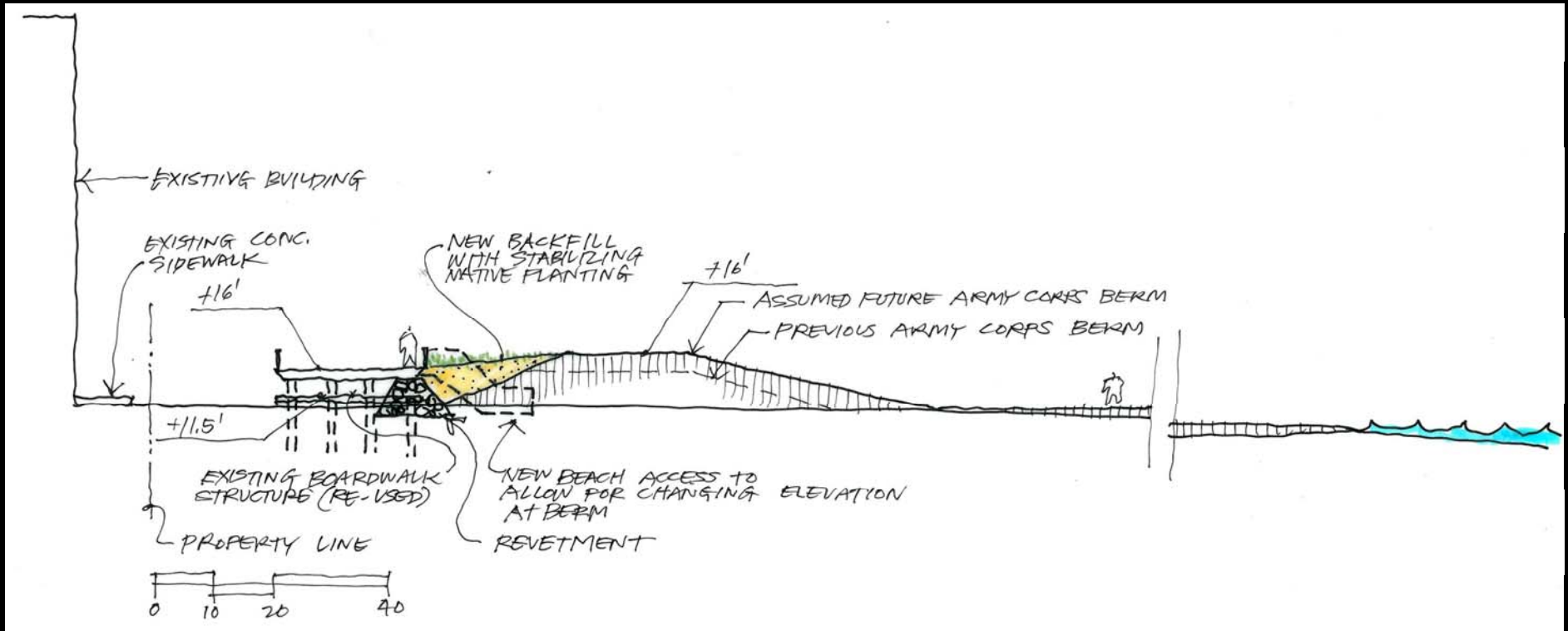
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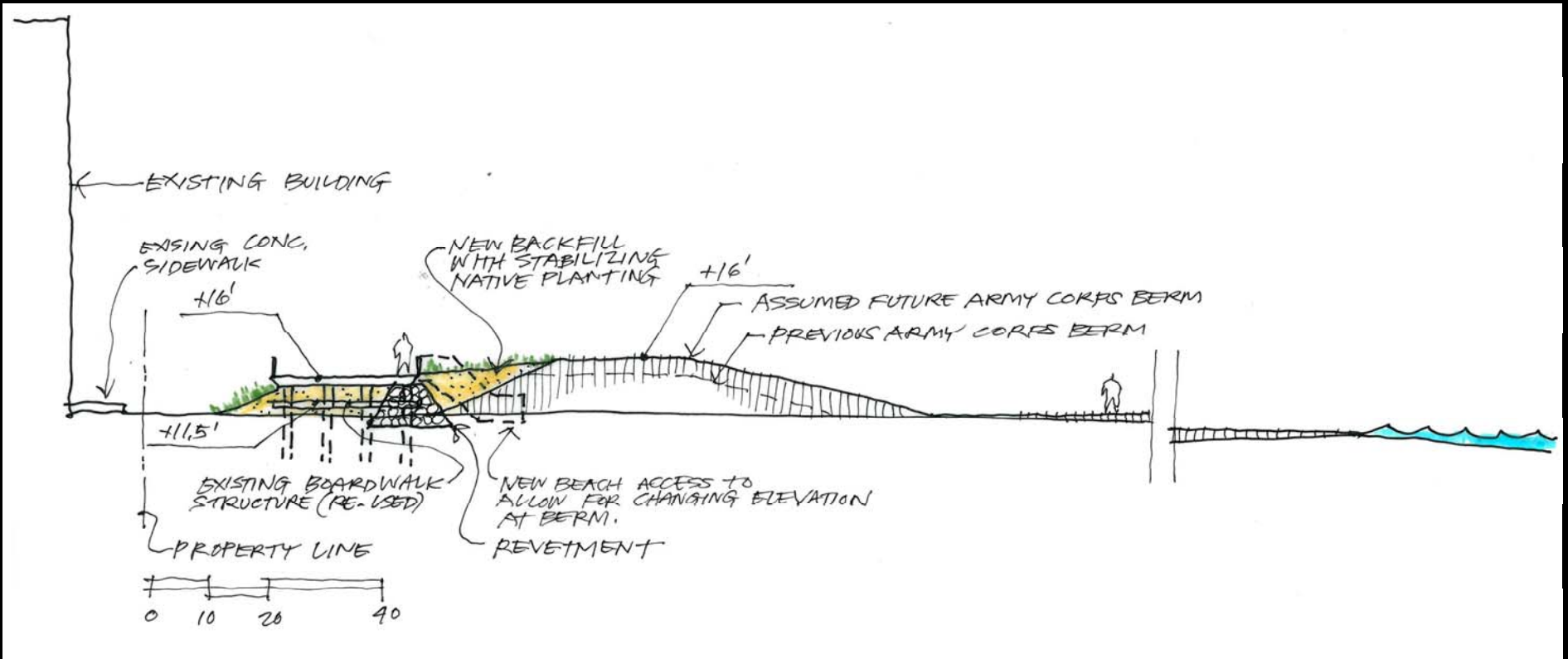
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Elevated Boardwalk and Protection Options



Elevated Boardwalk and Protection Options





Rockaway Peninsula Conceptual Plan

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Conceptual Discussion

Centers on a plan for parks and open space on the Rockaway Peninsula from the Bay to the Ocean between Beach 9th and Beach 149th. The Conceptual Plan will focus on:

- Upland connections
- Replacement of recreation and parks facilities
- Boardwalk access
- Beach access

This plan will be worked on in a parallel timeline to the Boardwalk Reconstruction Schematic Design.





Next Steps

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