



Breezy Point Planning Committee Meeting #6

January 16, 2014

Agenda

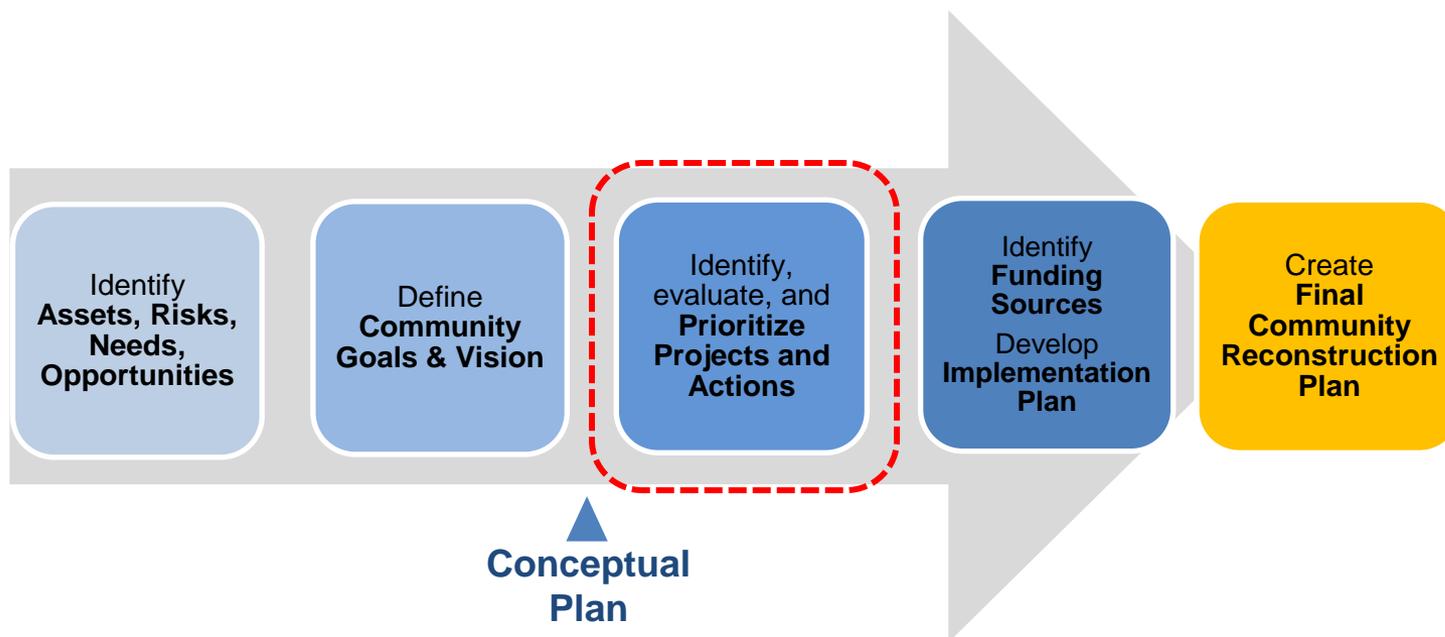


- 1. Program update** **7:00 – 7:15**
- 2. Key project review** **7:15 – 8:45**
- 3. Next steps** **8:45 – 9:00**

Committee Meeting #6: Project refinement

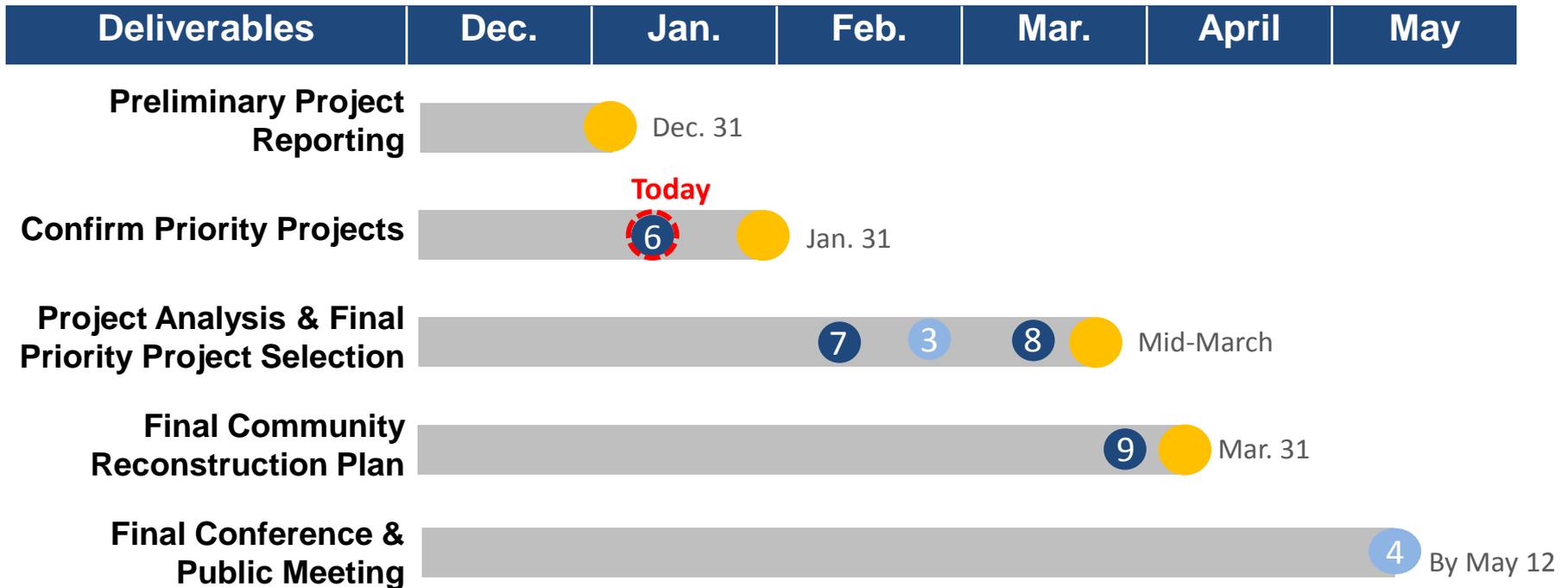
Objectives:

- Confirm Public Meeting #3 approach
- Review and refine scope of key projects



NY Rising Community Reconstruction Program Schedule

- Planning Committee Meeting
- Public Meeting
- Deliverable Due Date



Refined NYRCR deliverables approach

By end of January

Finalize “Priority CDBG-DR Projects” and “Featured Projects” for Breezy Point

Total list of projects add up to more than \$19.5 million

- In February consultants will analyze and cost projects, NYRCR determines CDBG-DR eligibility of projects
- Committee will continue to coordinate mid-March which project(s) to submit for NY Rising funding

Initiatives not on the CDBG-DR Priority Project or Featured Project list *can still be included* in the Final Community Reconstruction Plan

- Additional projects, recommendations, or actions
- Suggested regulatory reforms

Public Meeting #3 Approach

Goal of Public Meeting #3:

- Solicit community feedback on proposed priority and featured projects

Potential Approach

- 2 hour meeting, similar format, weeknight or weekend
- Store-front open house, open to the public, 1-2 days in a row, over a weekend
- Other?

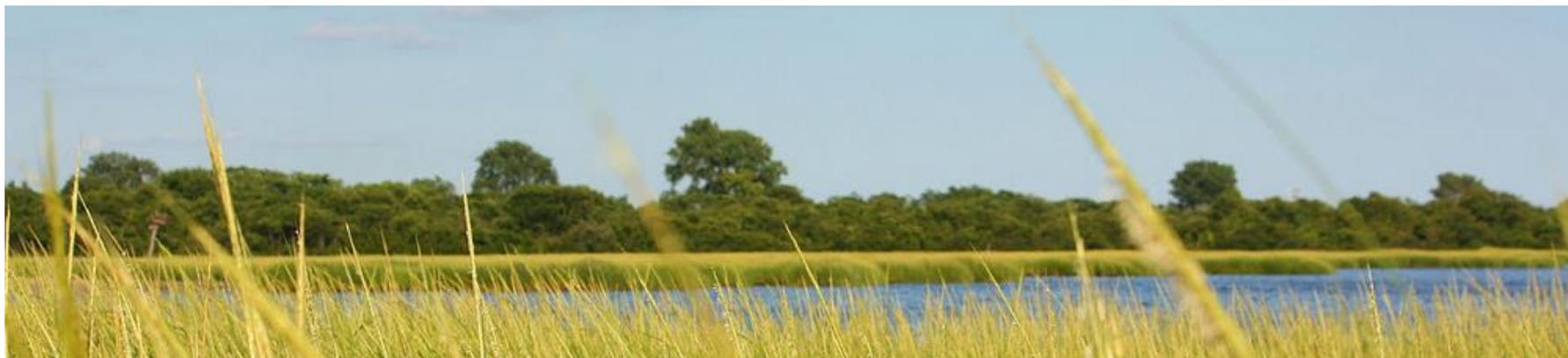
Need to Confirm:

- Approach
- Location options
- Date options

Regional Update

Jamaica Bay Working Group Update

- First meeting occurred on Jan 14th
 - Agreed on shared regional chapter in the final Reconstruction plans, with common positions on:
 - Bay protection measures
 - Gray and green infrastructure
 - Advocate for a surge barrier
 - Coordinate evacuation routes



Public outreach updates

Breezy Point NY Rising Hotline is live: **888-642-8886**

- Received ten calls over the last week

Other updates from committee



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 - Emergency Relief 8:15 - 8:45
3. Next steps 8:45 – 9:00

Breezy Point

- Limit of 100 year floodplain
- Limit of 100 year floodplain

Existing Conditions

- Existing High Ground
- Existing Dune (may need to be enhanced)
- Community Constructed Dune

Proposed Comprehensive Coastal Protection with NPS Coordination

- Seawall
- Berms
- Raised Roadway
- Enhanced Dune
- New Dune
- Habitat Restoration
- Raised Beach Access

Elevation of intervention (NAVD88) required to meet 100-year storm w/ SLR*

Height of intervention above existing grade (ft)

*Intervention elevation determined by BFE (taken from FEMA PFirm) + 2.5' estimated for SLR + 1' Freeboard

Protection for 11' surge

Comprehensive Edge Protection with NPS: Level of Protection



Breezy Point

- Limit of 100 year floodplain
- Limit of 100 year floodplain

Existing Conditions

- Existing High Ground
- Existing Dune (may need to be enhanced)
- Community Constructed Dune

Proposed Comprehensive within Co-op

- Seawall
- Berms
- Enhanced Dune
- New Dune
- Floodwall
- Deployable Floodgate
- Raised Beach Access

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Comprehensive Edge Protection within Co-op

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Protection for 11' surge

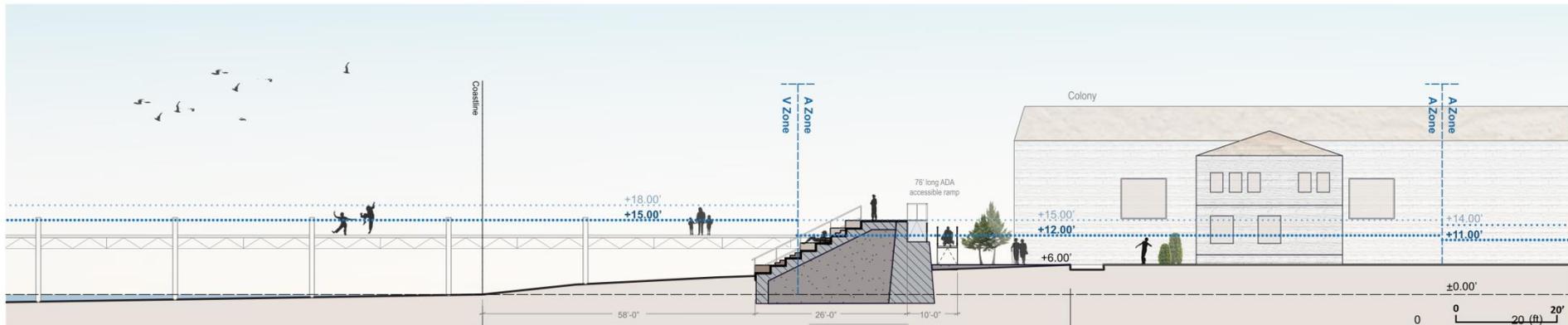
Comprehensive Edge Protection within Co-op: Level of Protection



Weighing the Comprehensive Approaches

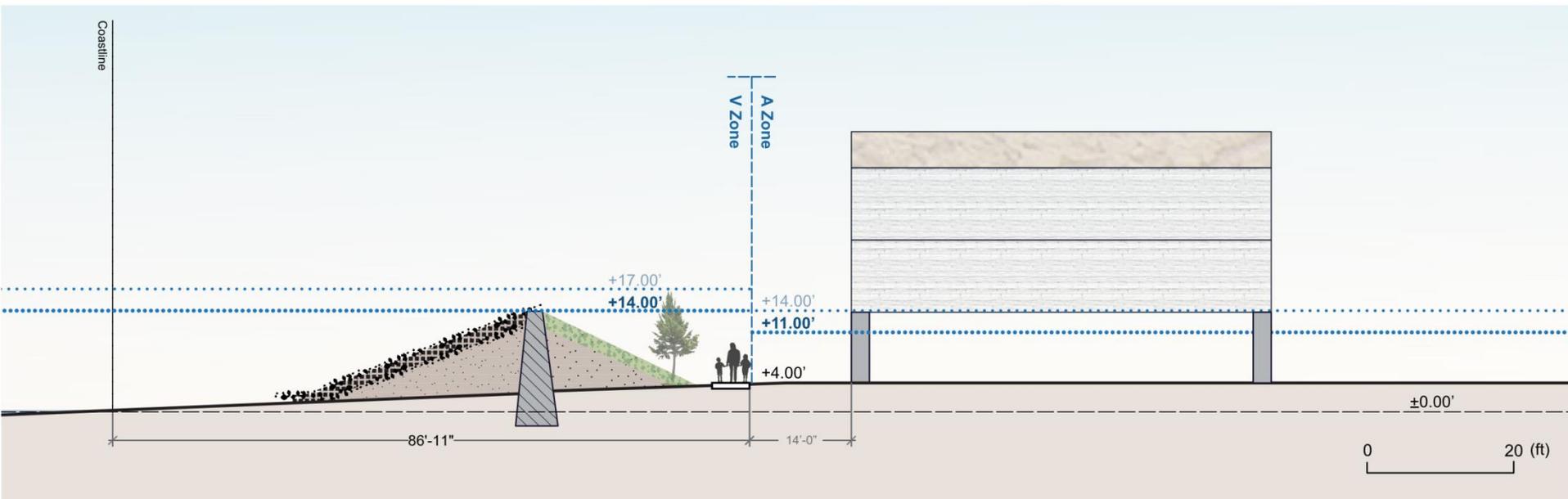
Approach	Pros	Cons
Comprehensive Edge Protection	<ul style="list-style-type: none"> • Protects against 100 year storm without changing to buildings • Cost not born by individual homeowners 	<ul style="list-style-type: none"> • Blocks views • Limits access to the water • Protects only up to the 100-year storm • Catastrophic damage from stronger storms or failure of one piece • Uncertainty over potential for reduction in flood insurance (potential, timing, etc.)
Raise Individual Buildings	<ul style="list-style-type: none"> • Protects against 100 year storm • Preserves views of water • Preserves access to water • Only marginal damage from a storm that exceeds 100-year level • Each investment reduces risk for the home addressed • Certainty that raising utilities and buildings can reduce flood insurance 	<ul style="list-style-type: none"> • Doesn't address damage to public space and infrastructure • Cost born at individual homeowner level • May not be feasible to raise all homes in current footprint and lots • Possibility that not everyone raises their home

Baywall: Conceptual Section



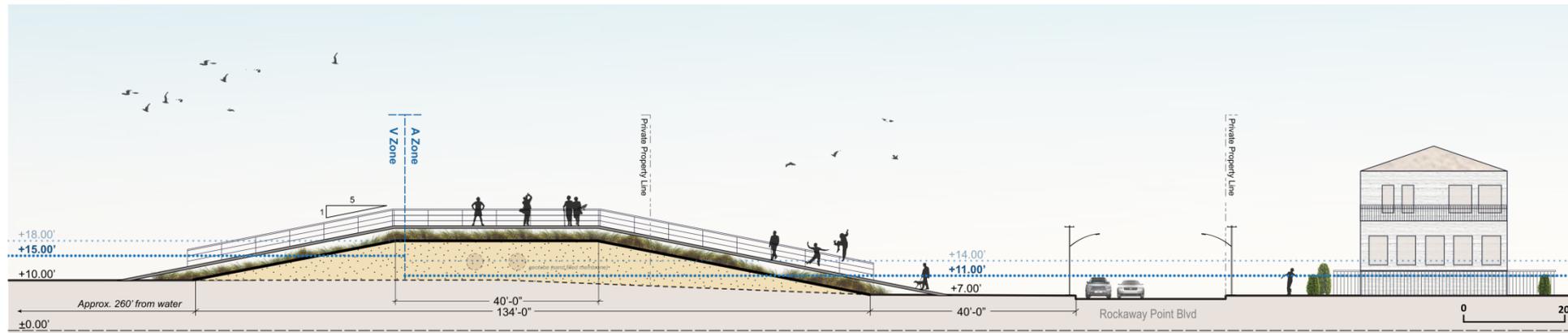
CONCEPTUAL DIAGRAM FOR ILLUSTRATIVE PURPOSES ONLY. SUBJECT TO FURTHER ENGINEERING & TECHNICAL ANALYSIS & VERIFICATION.

Baywall: Conceptual Section



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Protect ocean beach access trails: Section



CONCEPTUAL DIAGRAM FOR ILLUSTRATIVE PURPOSES ONLY. SUBJECT TO FURTHER ENGINEERING & TECHNICAL ANALYSIS & VERIFICATION.

Comprehensive Edge Protection: Precedents



Precedent: Rockaways, 106th Street



Precedent: Melbourne, Australia



Precedent: Glenelg Beach, Australia



Precedent: Ocean City, NJ



Precedent: Atlantic City, NJ



Precedent: Bradley Beach, NJ

Breezy Point baywall: Proposed Access



CONCEPTUAL DIAGRAM FOR ILLUSTRATIVE PURPOSES ONLY. SUBJECT TO FURTHER ENGINEERING & TECHNICAL ANALYSIS & VERIFICATION.

Roxbury baywall: Existing and Proposed Access



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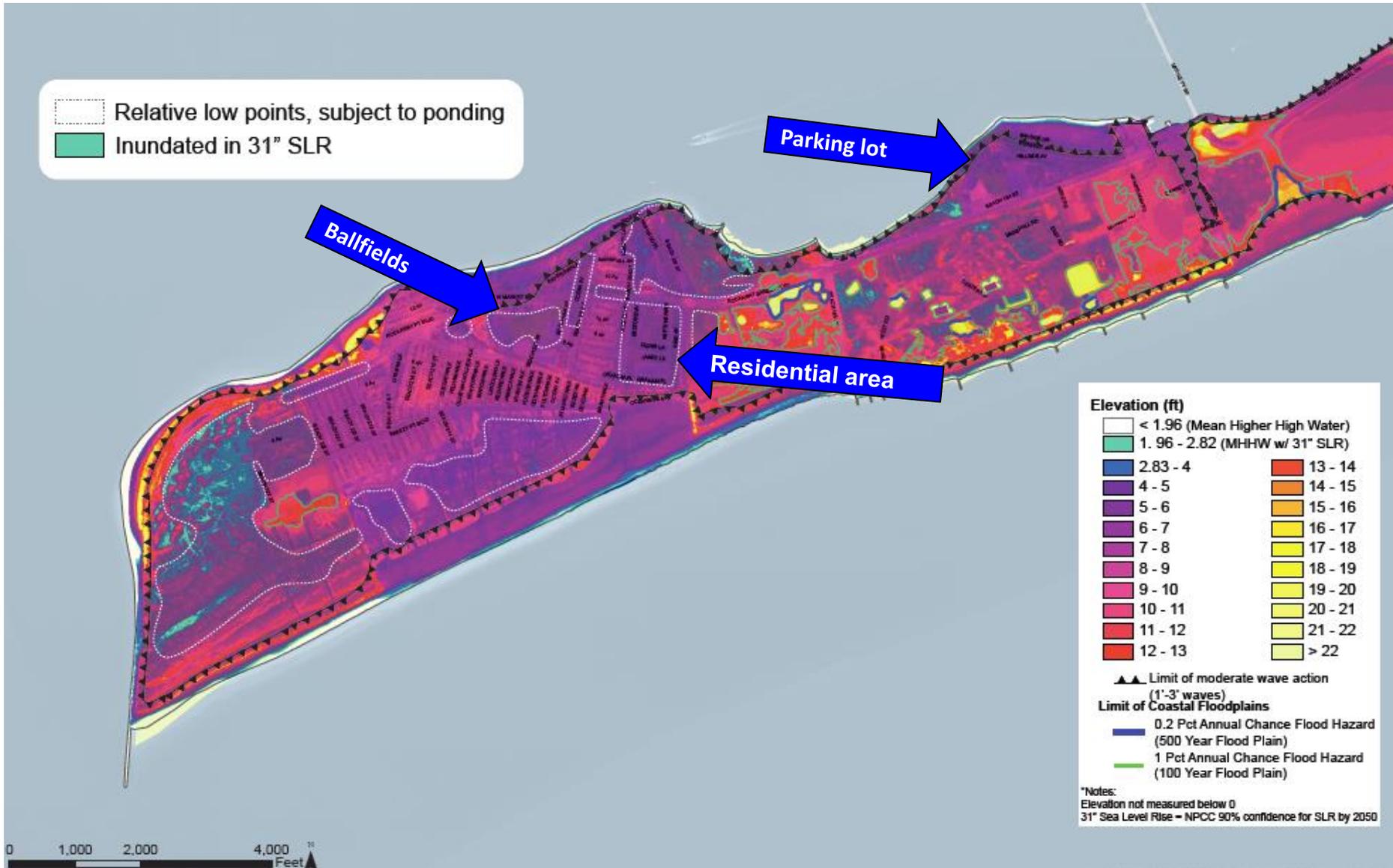
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3. Next steps 8:45 – 9:00

Stormwater Pilot Projects: Address Areas of Ponding



Stormwater Pilot Project: Residential Area

■ Issues

- Low elevation
- Damming effect of Rockaway Point Boulevard
- Water ponded for weeks after Sandy

■ Potential approach

- Collect stormwater and pump out of area into dune system
- Storm Sewer: Network of collection pipes and pump station – \$3.2M*



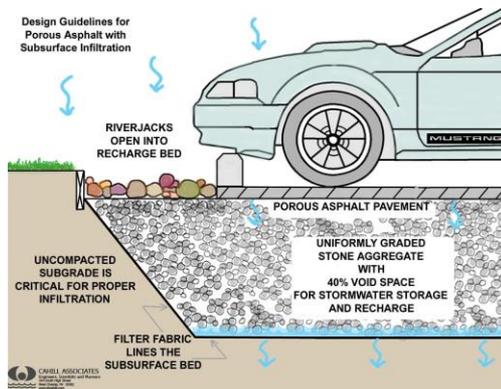
Stormwater Pilot Project: Ballfields

■ Issues

- Low elevation
- Impermeable areas surrounding ballfields
- Regularly experience ponding

■ Potential approaches

- Multi-pronged
 - Raise ballfield - \$200K*
 - Storm drain w/ Pump Station - \$1.2M*
 - Permeable Pavers in surrounding parking lots - \$1.2M*
- Each approach has independent utility but also work together



Stormwater Pilot Project: Roxbury Parking Area

■ Issues

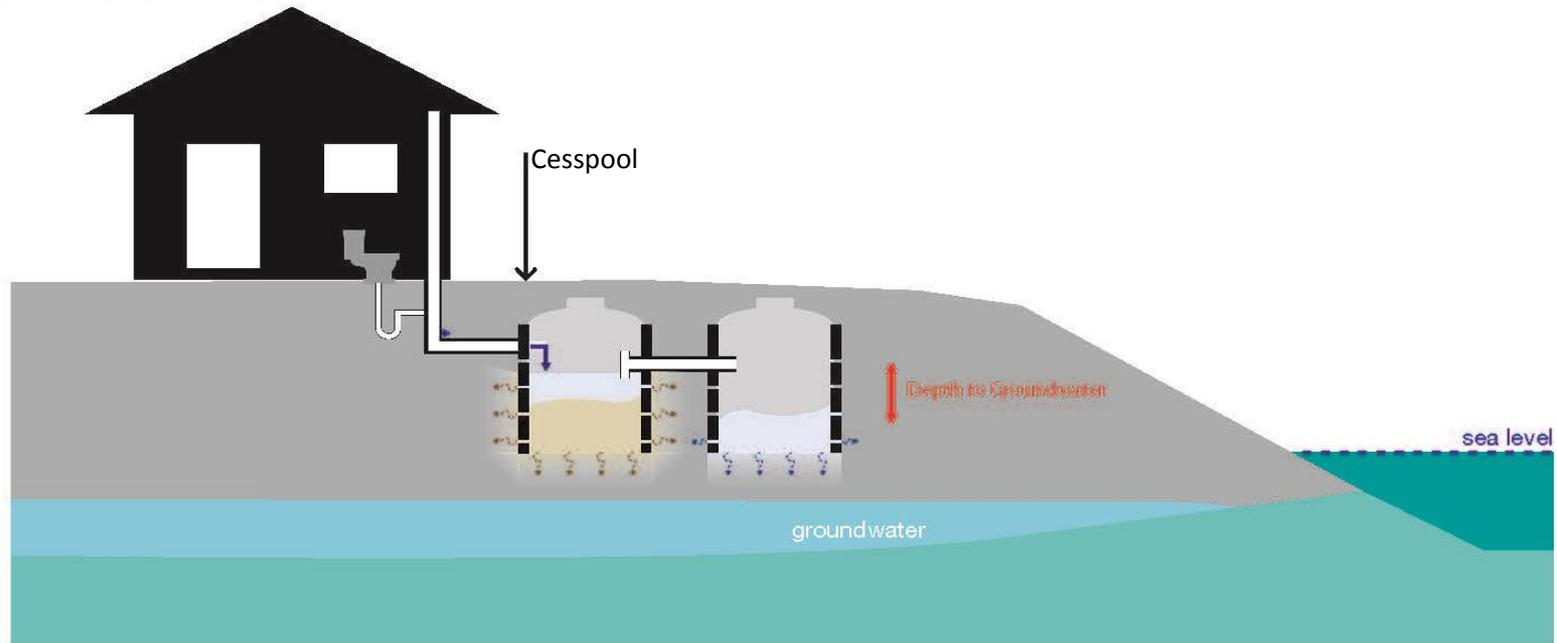
- Low elevation
- Almost entirely paved with impermeable materials

■ Potential approach

- Multi-pronged
 - Permeable materials - \$800K*
 - Permeable pavers for parking areas
 - Permeable asphalt for travel ways
 - Storm drain w/ Pump Station - \$1.1M*
- Each approach has independent utility but also work together

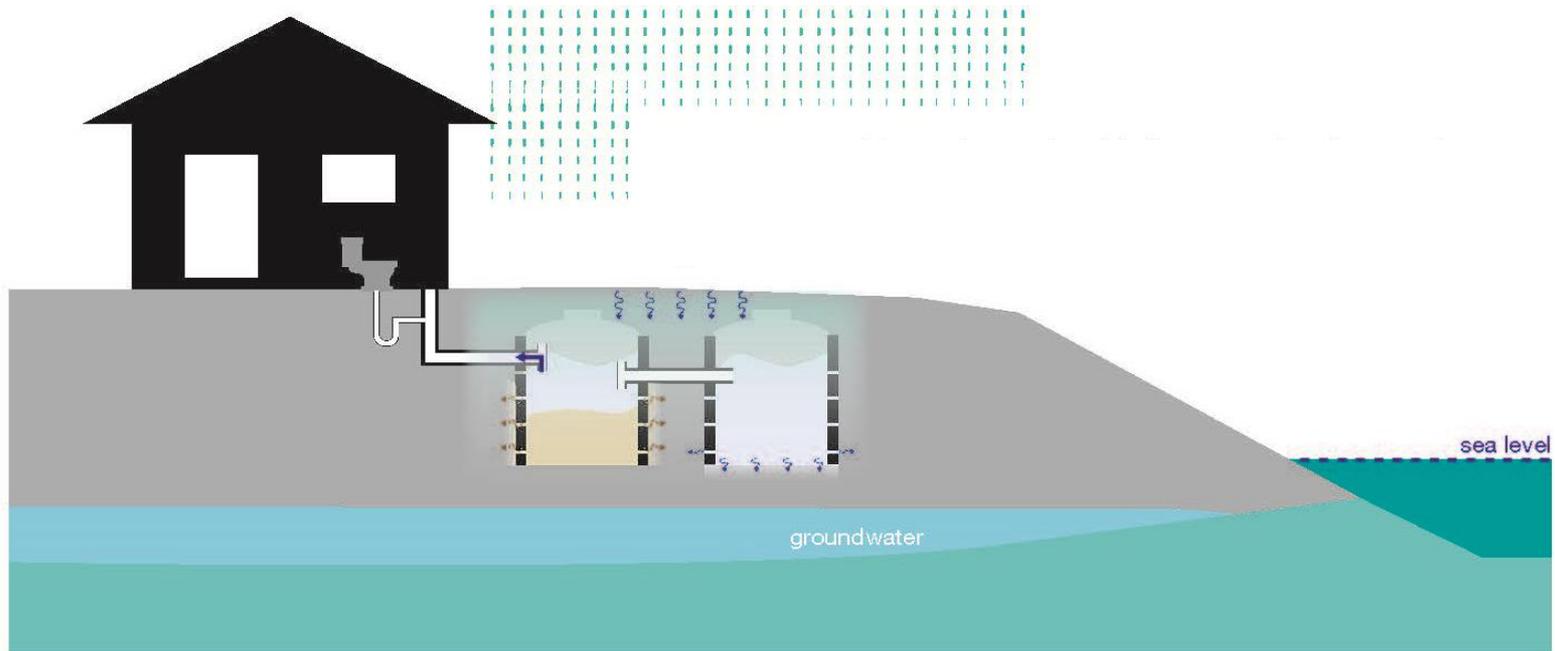


Cesspool system: Typical conditions



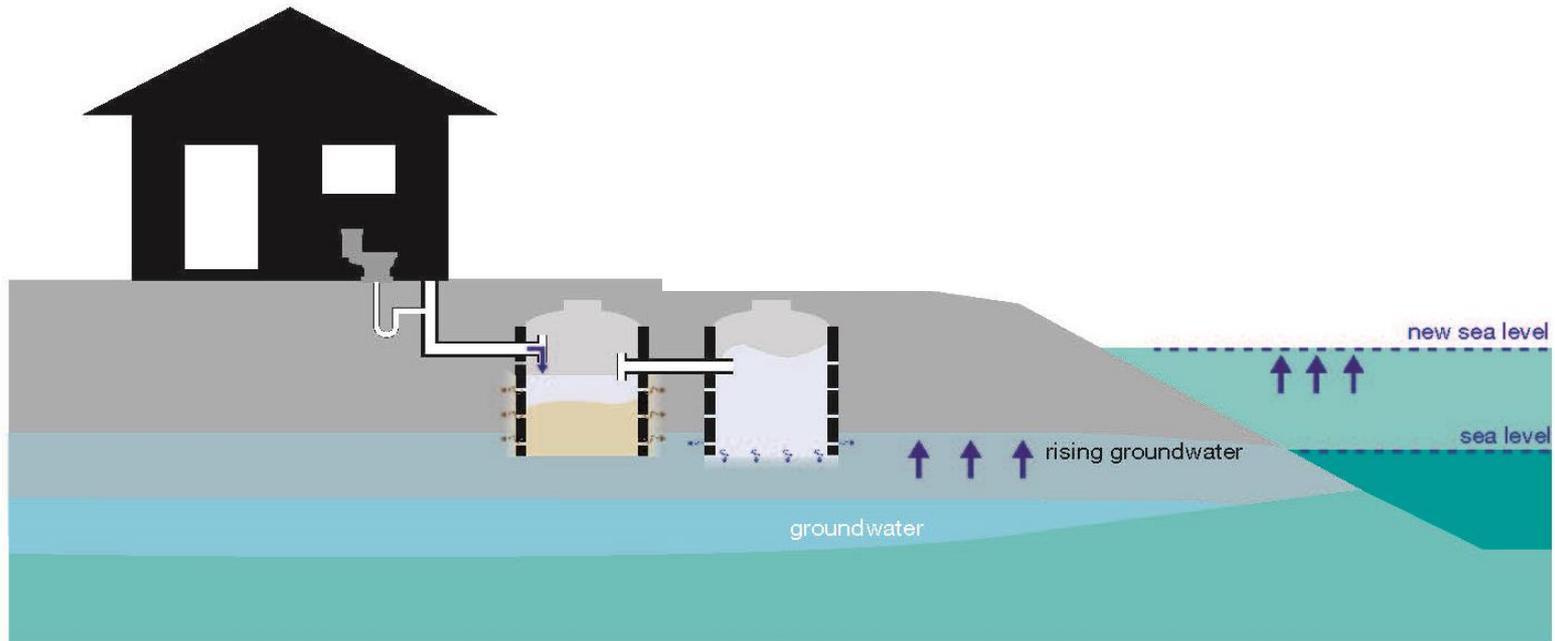
- Household waste flows into the cesspool
- Naturally occurring bacteria in the cesspool converts organic solids to liquid
- Remaining liquids are able to percolate into the surrounding soil through the perforated walls of the tank
- Additional liquids can flow into an overflow tank, connected to the main cesspool by a pipe

Cesspool system failure: Storm event



- As heavy rains inundate the ground with water, cesspool contents are unable to percolate into the surrounding saturated soil
- This results in overflow/backup problems

Cesspool system failure: Rising ground water



- As ground water levels rise, the depth to ground water decreases
- This reduces the amount of soil available for liquids to percolate into the ground
- As the cesspool reaches capacity, this can lead to overflow/backup problems

Wastewater Management: Issues

- Cesspool system
 - Relies on infiltration into ground
 - Fails in heavy storm events
 - Fails in residential areas that experience ponding
 - Long-term issue of rising groundwater

- Extension of city sewer system off the table

Wastewater Management: Potential Solution

- “Decentralized Wastewater Management”
 - Set up smaller, independent wastewater system in unsewered areas
- NYCDEP interested in Breezy pilot
- Options:
 - Provide letters of support for grant application
 - Support pilot grant application with matching funds
 - Work with DEP to implement pilot



Potential Water Management Projects

- **Proposal:** *Consider funding stormwater pilot projects to provide better stormwater drainage in areas that experience regular ponding problems*
- **Consider funding project** to help improve stormwater drainage in residential area of Breezy Point
- **Consider funding project** to help improve stormwater drainage in ballfields area
- **Consider funding project** to help improve stormwater drainage in Roxbury parking lot

- **Proposal:** *Support new techniques to manage household wastewater and consider funding pilot project for decentralized wastewater management*
- **Recommend** NYCDEP submit grant application for decentralized wastewater management pilot for Breezy Point
- **Consider providing matching funds** to NYCDEP grant application for decentralized wastewater management pilot to address ongoing and long-term failures of current approach

Other? Revisions?

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Creating a Breezy Point relief center

Proposed priority project

Create a relief center to provide emergency services during a disaster

What is a relief center?

- Provides emergency services (access to health and social services, food, water, supplies)
- Information hub during an emergency
- Gathering place for evacuation
- *It is not a shelter or evacuation center*

Considerations

- How the center functions 365 days a year (stewardship, maintenance, programming)
- Location within community
- Overall ownership and governance—day-to-day and in an emergency



Red Hook Initiative volunteers serve meals during Sandy

Multipurpose programming – Day-to-Day

There are Volunteer Fire Departments, the Co-Op office, and the security barracks in Breezy Point/Roxbury today, which play a number of important roles within the community and could be considered for a relief center.



Multipurpose programming – Emergency & Daily

Many services are common to both community centers and emergency centers, including information on community resources, water and meals, childcare and senior care, and translation services.

	Program	
	Daily	Emergency
Services		<ul style="list-style-type: none">• Information• Communication equipment (radio, power for cell charging)• Water and meals• Power (access to alternative sources)• Sanitation• Supplies (including basic office)• Medical services• Childcare and senior care• Additional services?

Relief center screening criteria

LOCATION

- Outside of extreme flood-risk zone
- Proximity to:
 - Evacuation route or near road with quick, reliable access to route
 - Vulnerable populations
 - Commercial centers, corridors
- Has a large outdoor space to accommodate possible building expansion and outdoor space
- Ease of access and approachability from street

BUILDING

- Flood-proof: building must be able to be hardened
 - Should not be an unreinforced masonry building or made of lightweight materials
- Reliable source of power and heat/cooling
- Potable water system
- Restrooms with showers
- Parking lot/car-accessible
- Large space on ground floor
- Must be capable of accommodating and providing services to people within designated catchment area
- ADA-accessible

ORGANIZATION

- Manages programming and operations
- Has a long history of community engagement
- Provides regular programming and has capacity to provide emergency programming
- Conducts outreach to vulnerable populations
- Has capacity to provide social and health services
- Has a long-term occupancy agreement
- Is open 6 days a week
- Has a business continuity plan
- Is financially stable

Location considerations – Hub and Satellites

HUB – Large community space where logistics, communications, and supplies can be managed and distributed

- Outside of extreme flood-risk zone
- Proximity to:
 - Evacuation route or near road with quick, reliable access to route
 - Essential services and supplies
 - Commercial centers, corridors
 - Vulnerable populations
- Large space for residents to gather
- Ease of access and approachability from street

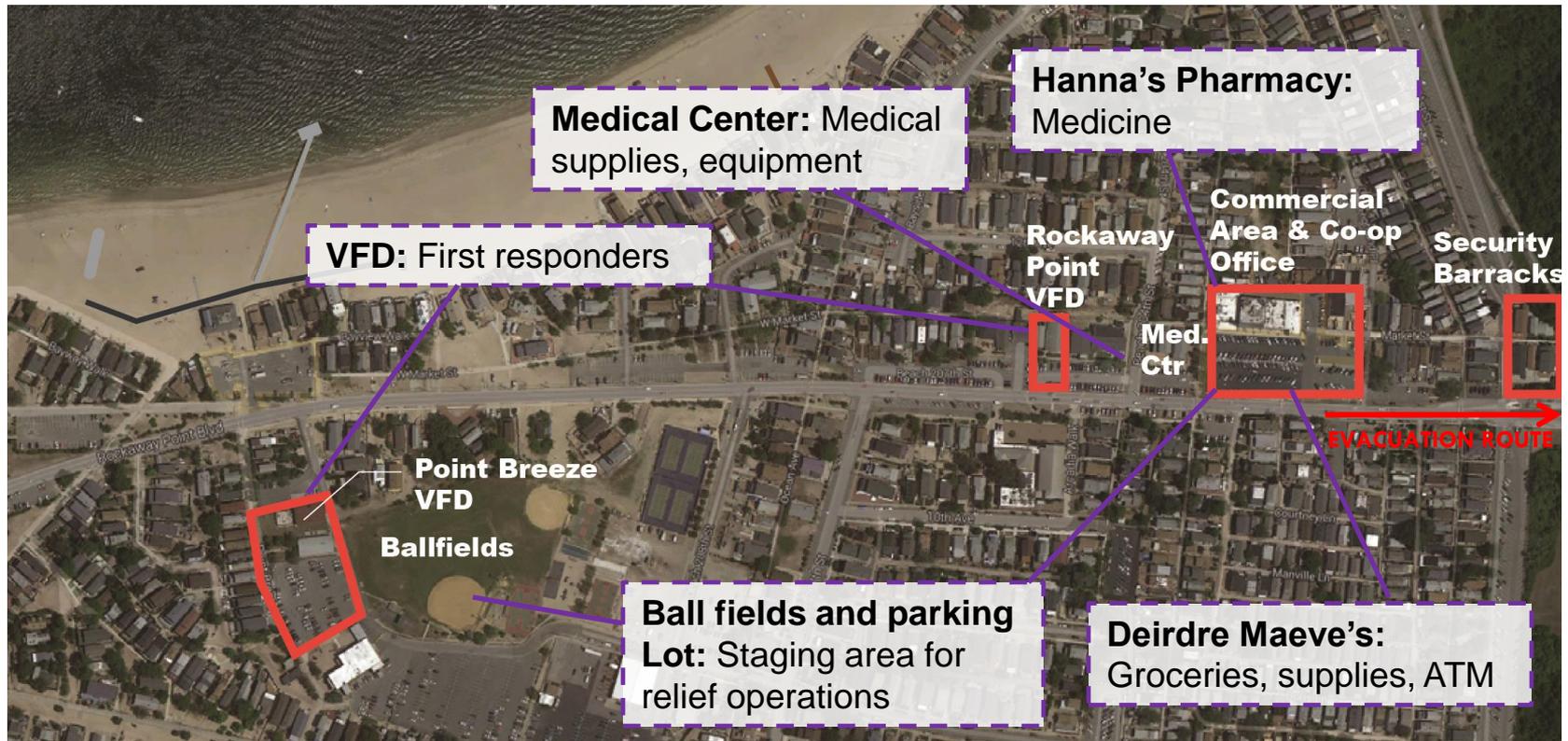
SATELLITE – Smaller locations throughout community that can serve as distribution center for supplies and information



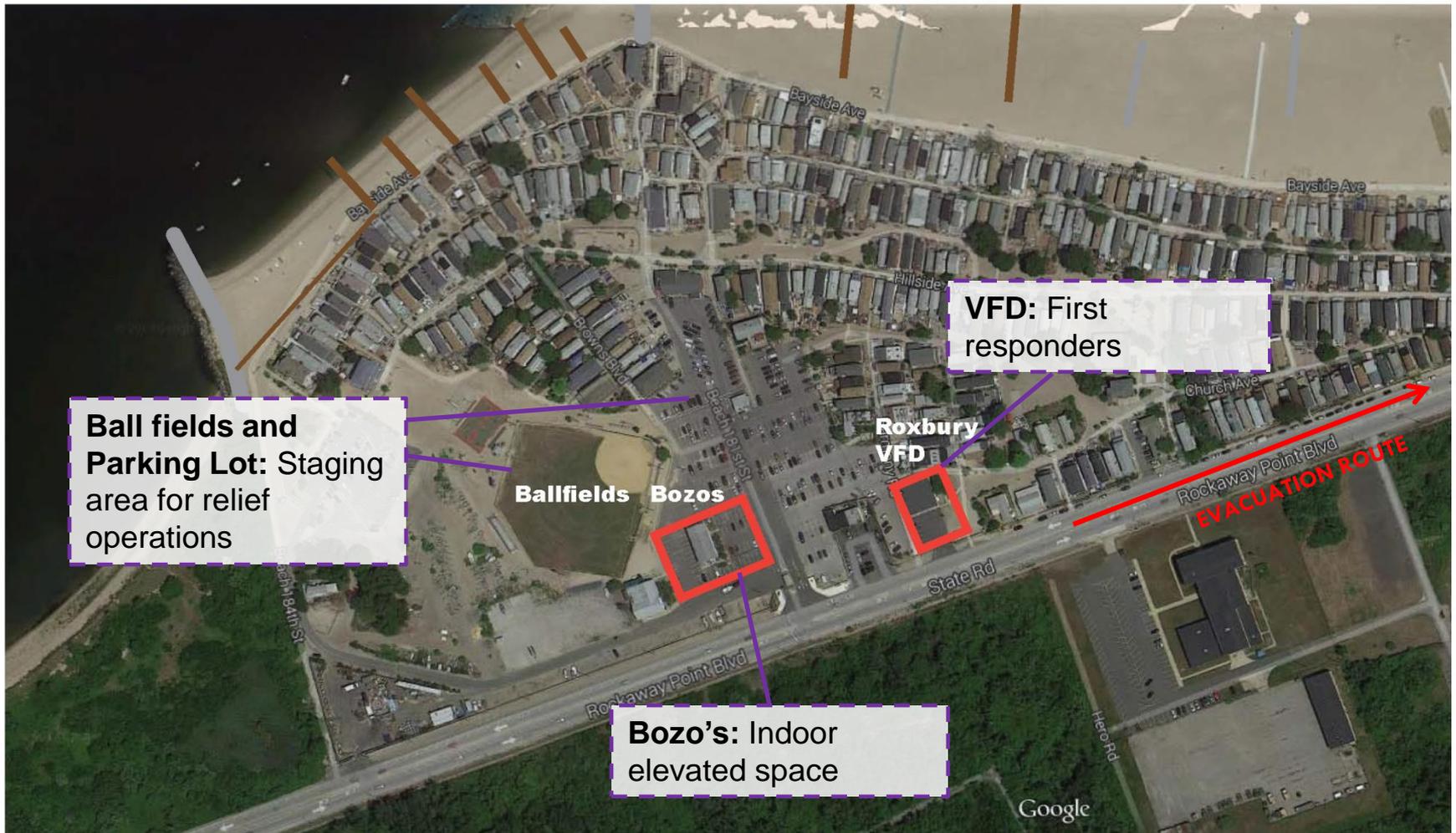
Siting a potential relief center



Siting a potential relief center – Breezy Point



Siting a potential relief center – Roxbury



Discussion

What are the key services you would like to see in a relief center?

What locations would you like to consider?

- Hub?
 - Existing sites
 - New Development Opportunities
- Satellite?

What organizations may be able to support a relief center?

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