East Side Coastal Resiliency

CB3 Full Board Meeting
166 Essex Street (PS 20)

December 19, 2019
PRESENTATION AGENDA

PROJECT BACKGROUND

DESIGN

PARK MATERIALS & PLANTING

SUSTAINABLE DESIGN

CONSTRUCTION
PROVIDE FLOOD PROTECTION
PROJECT BACKGROUND
PROJECT GOALS & ORIGIN

Provide a reliable, integrated flood protection system; minimize use of closure structures.

Improve waterfront open spaces and access.

Achieve implementation milestones and project funding allocations as established by HUD.

Respond quickly to the urgent need for increased flood protection and resiliency.
WHAT WE’VE HEARD

DESIGN PHASE

• Signage design and neighborhood identity
• Contextually appropriate design for buildings
• Skateboard deterrent
• Waterplay Feature
• Amphitheater design and canopy
• Emergency access: Houston St. and Colears Hook Bridge
• Additional BBQ areas in East River Park
• Tree plantings and shade
• Planted vs hardscape surface (permeable vs impermeable)
• Active vs passive space

CONSTRUCTION PHASE

• Fireboat House
• Accommodating LESEC
• Activate Waterside Pier and Pier 42 deck
• Mitigation strategies for interim rec and district amenities
• Phased construction timeline
• Spring-Summer 2020 construction work
• Noise and dust mitigation during construction
• Outreach and social media during construction
WATER PLAY
NATURE PLAY
EMBAYMENTS
FITNESS FOR DIFFERENT USER GROUPS
BBQ
BASKETBALL COURTS
WATER PLAY FEATURES

EQUIPMENT PALETTE

VORTEX AQUADOME 1

VORTEX AQUADOME 2

VORTEX HELIO 3

VORTEX HELIO 2

VORTEX HELIO 3

ESPLANADE EMBAYMENT AERIAL VIEW
WATER PLAY ENLARGEMENT

WATER PLAY AREA DESIGNED FOR UNIVERSAL ACCESSIBILITY
FITNESS AREA
EQUIPMENT PALETTE

- Balance Beam and Triple Bars (Modified)
- Steps
- High Triple Bars (Modified)
- Push Up and Leg Lift & Universal Chest Press
- Arm Bike
- Hexagon Pull Up Station
- Bench
- Combi 3 (Modified)
- Push Up Bars (Modified)
CHALLENGE COURSE
EQUIPMENT PALETTE

DOUBLE OVERHEAD LADDER

OVER UNDER

CHELSEA OVERHEAD

SQUARE PULL UPS

STEPS

LEDGE HANGER (MODIFIED)

BALANCE BEAM

GLOBE GRASP (MODIFIED)

ROPE CLimb (MODIFIED)

WALL NET
10TH STREET BBQ AREA
AERIAL VIEW
AMPHITHEATER
WHAT WE’VE HEARD

BACKED SEATING
UNIVERSAL ACCESSIBILITY
EVENT POWER
SEATING CAPACITY
EVENT LOADING
AMPHITHEATER
AERIAL VIEW

- Corlears Hook Park
- Re-constructed Corlears Hook Bridge
- Accessible areas of hardscape interspersed with flexible lawn areas
- Backed seating
- Amphitheater structure to be constructed; design is in development
- Amphitheater design supports day-to-day use, community programming & passive recreation
AMPHITHEATER
SEATING

WHEELCHAIR SPACES

110 LF OF ACCESSIBLE BACKED SEATING (65 PEOPLE)

ADDITIONAL DOUBLE ROWS PROVIDE BACKED SEATING FOR 240 PEOPLE

75 LF OF ACCESSIBLE BACKED SEATING (45 PEOPLE)

HARDSCAPE SPACE FOR 180 CHAIRS (HIGH AND LOW T I E RS)

ACCESSIBLE BACKED SEATING
(110 PEOPLE)

BACKED SEATING
(220 PEOPLE)

ACCESSIBLE HARDSCAPE
(180 PEOPLE)

ACCESSIBLE PATH
AMPHITHEATER

SECTION

50' LAWN

85' AMPHITHEATER SEATING

16' PATH

55' STAGE

FLOODWALL
UNDER GROUND

BACKED SEATING

Scale: 1" = 20'-0"
CONTEXTUALLY APPROPRIATE BUILDING DESIGN
SUSTAINABLE DESIGN
CONCESSION SPACES
ADDITIONAL COMFORT STATIONS
SOUTH INTERCEPTOR GATE BUILDING
Final Design

MATERIALS
- Extremely Durable & Vandal Resistant
- Scale & Character Respond to Neighboring Context
- Dynamic & Changing Appearance

MASSING
- Minimize Overall Building Height & Footprint
- Prevent Climbing from Park Side

PERFORMANCE
- Critical Infrastructure & Emergency Preparedness Standards
- Exceeds Energy Code Insulation Values
- Natural Daylighting

SOLID GLASS BRICK
Facade
(Pictured: Office Mockup)

BARRE GREY GRANITE
Stone Base

STAINLESS STEEL
Back Up Wall, Doors, & Trim Elements

METAL TILE
Sloped Roof Assembly

FACADE DETAIL
Enlarged Elevation
DELANCEY ST. MAINTENANCE AREA
PLAN VIEW AND ELEVATION

Delancey Maintenance Area Plan

Delancey Maintenance Area Elevation
E. 10th St. Comfort Station

PARK VIEW

Perforated metal panel with clerestory window behind

Stainless steel door and wall panel

Glazed brick
PARK OVERVIEW & BRIDGES
CORLEARS HOOK TO DELANCEY ST.
AERIAL OVERVIEW
DELANCEY ST. TO HOUSTON
AERIAL VIEW
HOUSTON TO E. 10TH ST.
AERIAL VIEW
E. 10TH ST. BRIDGE
CITY-SIDE LANDING
E. 10TH ST. BRIDGE
RENDERING
MATERIALS & PLANTING
PERMEABLE SURFACE AREA TODAY: 15.4 ACRES
PROPOSED PERMEABLE SURFACE AREA WITH ESCR: 19.3 ACRES
TOTAL EAST RIVER PARK AREA: 45.88 ACRES

Park Materials
Key Plan PA1
**Tree Size at Planting**

- Average height at 3'-3.5' caliper: 14'-16'
- Typical maximum height: 18'

(per ANSI 230.1)

- Flood protection and DEP infrastructure offsets located in courts and fields to allow for more planting areas.

- Shared use path shifts east away from fdr edge allowing space to grow healthy trees on both sides of the pathway.

**Areas with Greater Sun (such as the esplanade) are designed to be in close proximity of areas with greater shade.**

**Proposed Trees**

- *Existing trees to remain*

**Notes:**

- Tree growth will vary by species, but in nursery settings a rule of thumb is that trees will often add 1/2 caliper per year with 1'-2' of growth in the canopy.

- The design team is working with parks procurement to identify whether some species may be able to be sourced at larger sizes without compromising tree health.

**Shade Strategy PA1**

**Tree Canopy**
The proposed lighter colored exposed aggregate concrete and concrete pavers will reduce heat gain on paved surfaces.

Permanent metal umbrellas are located in areas where planting is limited due to structural limitations, in the offset areas and BBQ areas.

Benches and tables are placed in close proximity to shade trees wherever possible.

The design includes a picnic area to benefit from Williamsburg Bridge shadow.
SHADE
ADAPTABILITY & RESILIENCY
DIVERSITY
HABITAT
POLLINATORS
991 trees to be removed in project areas 1 and 2

1,815 new trees are proposed for escr in project areas 1 and 2

Additional planting opportunities being studied
HIGH, FULL CANOPY CREATES CONNECTED, DAPPLED SHADE

- Location: Western urban edge of park
  Ornamental understory trees, conifers, shrubs, and perennials provide visual interest along paths and slopes while buffering views
  Maintenance: Trees, shrubs, groundcovers

- Location: Open lawns and spectator areas
  Lawn groundplane maintains open sight lines and open circulation
  Maintenance: Trees, lawn

- Location: Clearing edges and special areas
  Ornamental understory trees and a low perennial groundplane maintain veiled, eye-level sight lines
  Maintenance: Trees, garden beds

- Location: Maritime edges of open spaces and esplanade
  Mid and Understory trees, maritime evergreens, shrubs, and grasses provide shade and interest along the river edge
  Maintenance: Trees, shrubs, grasses

Planting
Spatial Concept PA1
SUSTAINABLE DESIGN
ENVISION AND ESCR

A framework that includes 64 sustainability and resilience indicators, called ‘credits’, organized around 5 categories:

- Quality Of Life: 14 Credits
- Leadership: 12 Credits
- Resource Allocation: 14 Credits
- Natural World: 14 Credits
- Climate and Resilience: 10 Credits

**Project’s Envision Pre-Assessment Checklist**

Preliminary Results, conducted by PM/CM:

<table>
<thead>
<tr>
<th>Credit Category</th>
<th>Applicable</th>
<th>Pre-Assessment Review</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Quality of Life</td>
<td>200</td>
<td>159</td>
<td>80%</td>
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<tr>
<td>Leadership</td>
<td>182</td>
<td>99</td>
<td>54%</td>
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<tr>
<td>Resource Allocation</td>
<td>196</td>
<td>25</td>
<td>13%</td>
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<tr>
<td>Natural World</td>
<td>194</td>
<td>64</td>
<td>33%</td>
</tr>
<tr>
<td>Climate and Resilience</td>
<td>146</td>
<td>121</td>
<td>83%</td>
</tr>
<tr>
<td>Total Points/%</td>
<td>918</td>
<td>468</td>
<td>51%</td>
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</table>
CONSTRUCTION
CONSTRUCTION PHASING FOR EAST RIVER PARK: 2020

- **Spring and Summer 2020**: East River Park remains open with early construction packages:
  - Tree Transplants
  - Interim Passive Recreation Space
- **Fall 2020 – Summer 2022**: ~40% will remain open
- **Fall 2020**: ~60% will close
- **Summer 2023**: ~50% will re-open
- **Esplanade to be fully closed for only one year**
- **Mid-2023**: flood protection to be completed; **End of 2025**: project to be completed
PROJECT SCHEDULE OVERVIEW

DESIGN & CONSTRUCTION

CONCEPT

PRELIMINARY DESIGN

FINAL DESIGN

GROUND BREAKING

PROCUREMENT

CONSTRUCTION

ENVIRONMENTAL REVIEW

DRAFT SCOPE OF WORK

DRAFT EIS

DEIS ISSUED

PUBLIC REVIEW & FINAL EIS

FSIS ISSUED

TECH MEMO ISSUED

FEIS ROD ISSUED

APPROVALS & PERMITTING

PREPARATION

PDC CONCEPTUAL DESIGN

ULURP CERTIFICATION

PDC PRELIMINARY DESIGN

JOINT PERMIT APPLICATION

CITY COUNCIL REVIEW ENDS

PDC FINAL DESIGN

COMMUNITY ENGAGEMENT

INTERACTIVE COMMUNITY MEETINGS

COMMUNITY MEETINGS & OPEN HOUSES

DEIS & ULURP PUBLIC HEARING

COMMUNITY MEETINGS

COMMUNITY BOARD MEETINGS

CB3 & CB6 COMMITTEES

CB3 & CB6 FULL BOARDS

CB3 & CB6 COMMITTEES

CB3 & CB6 FULL BOARDS

CB3 COMMITTEE

CB3 FULL BOARDS

CB3 & CB6 COMMITTEES

CB3 & CB6 FULL BOARDS

FALL 2018

WINTER 2019

SPRING 2019

SUMMER 2019

FALL 2019

WINTER 2020

SPRING 2020

OPERABLE FLOOD PROTECTION BY MID 2023

PROJECT COMPLETION IN LATE 2025
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