EAST SIDE COASTAL RESILIENCY PROJECT

NEW YORK CITY DEPARTMENT OF DESIGN + CONSTRUCTION
IN PARTNERSHIP WITH THE NEW YORK CITY DEPARTMENT OF PARKS & RECREATION
AND THE MAYOR’S OFFICE OF RECOVERY & RESILIENCY

PROJECT ID: SANDRESM1
AGENDA

PROJECT BACKGROUND
• Project Goals - A Stronger More Resilient New York
• Past Efforts - The BIG-U & Rebuild by Design
• Where We Are Now - East Side Coastal Resiliency Project
• What Else is Happening - Complementary Processes
• Community Engagement Objectives
• Project Team

PROJECT OVERVIEW
• Where We’re Working - Project Scope
• Project Schedule
• Design Elements

ONGOING ENGINEERING
• What’s There Now - Investigating Existing Conditions
• What Happened During Sandy - Collecting Data and Existing Knowledge

DESIGN AND PUBLIC ENGAGEMENT
• Designing with the Community
• Community Engagement Schedule
• Create Concept Design Options through Workshops and Meetings

QUESTIONS AND ANSWERS
A STRONGER, MORE RESILIENT NEW YORK

The City’s 257 initiatives comprise a comprehensive citywide plan to reduce the risk of extreme weather and climate change.

- Strengthen Coastal Defenses
- Upgrade Buildings
- Protect Infrastructure and Services
- Make Neighborhoods Safer and More Vibrant

Coastal Protection Initiative 21: Install an integrated flood protection system in Lower Manhattan, Including the Lower East Side.
AUGUST 2013

NOVEMBER 2013

APRIL 2014

JUNE 2014

HUD AWARDS $335 MILLION FEDERAL FUNDING TO CITY FOR ONE OF THE THREE COMPARTMENTS

CITY RELEASES A STRONGER MORE RESILIENT NEW YORK

REBUILD BY DESIGN COMPETITION START

HUD SELECTS BIG TEAM TO FOCUS ON MANHATTAN

CITY REQUESTS FOCUS ON EAST SIDE

BIG TEAM PRESENTS TO HUD JURY

PROJECT ID: SANDRESM1
EAST SIDE COASTAL RESILIENCY
EAST SIDE COASTAL RESILIENCY

CITY PROJECT TEAM ESTABLISHED
JUNE 2014

OFFICIAL CONCEPT DESIGN START
DECEMBER 2014

CITY ISSUES RFP FOR CONCEPT DESIGN
SEPTEMBER 2014

Q1 Q2 Q3 Q4

SCHEDULED CONCEPT DESIGN COMPLETION
DECEMBER 2015

DESIGN REFINEMENT
ENVIRONMENTAL REVIEW
PERMITTING

PROJECT CONSTRUCTION START
JUNE 2017

PROJECT ID: SANDRESM1
EAST SIDE COASTAL RESILIENCY
COMPLEMENTARY INITIATIVES

PROJECT LIST

1. INTEGRATED FLOOD PROTECTION STUDY (ORR)
2. MULTI-PURPOSE LEVEE STUDY (EDC)
3. PIER 42 PARK (DPR)
4. LOWER EAST SIDE ECOLOGY CENTER (DPR)
5. EAST SIDE COASTAL RESILIENCY PROJECT
6. RESILIENT NEIGHBORHOODS STUDY (DCP)
7. CON-EDISON
8. SOLAR ONE
9. HOSPITAL ROW INVESTMENTS

PROJECT ID: SANDRESM1
EAST SIDE COASTAL RESILIENCY
COMMUNITY ENGAGEMENT OBJECTIVES

- Continue Public Engagement Begun with Rebuild by Design
- Enable and Facilitate Input from Community Stakeholders through Design
- Collaborate with Community to Establish Design Alternatives in Each Project Area
- Discuss & Balance Opportunities with Project Goals
- Make Team Available as a Resource for Community Planning
CITY

DDC / DPR / ORR

MANAGING LEAD
AKRF

URBAN DESIGN
BIG
LEAD
STARR WHITEHOUSE
LANDSCAPE ARCHITECTURE
ONE ARCHITECTURE
PLANNING
JAMES LIMA P+D
PUBLIC POLICY
FITZGERALD & HALLIDAY
COMMUNITY ENGAGEMENT

COMMUNITY ENGAGEMENT

ENGINEERING DESIGN
ARCADIS
FLOOD PROTECTION + MODELING
CH2MHILL
MARINE ENGINEERING
MATTHEWS NIELSEN
LANDSCAPE ARCHITECTURE

PROJECT ID: SANDRESM1
EAST SIDE COASTAL RESILIENCY
HUD AWARDS $335 MILLION FEDERAL FUNDING FOR ONE OF THREE COMPARTMENTS

OFFICIAL CONCEPT DESIGN START

CITY ISSUES RFP FOR CONCEPT DESIGN

SEPTEMBER 2014

DECEMBER 2014

Q1

Q2

Q3

Q4

DECEMBER 2014

MARCH 2015

JUNE 2015

SEPTEMBER 2015

DECEMBER 2015

SCHEDULED CONCEPT DESIGN COMPLETION

EAST SIDE COASTAL RESILIENCY

RBD

PROJECT ID: SANDRESM1
EAST SIDE COASTAL RESILIENCY

HUD AWARDS $335 MILLION FEDERAL FUNDING FOR ONE OF THREE COMPARTMENTS

OFFICIAL CONCEPT DESIGN START

CITY ISSUES RFP FOR CONCEPT DESIGN

SEPTEMBER 2014

DECEMBER 2014

Q1

Q2

Q3

Q4

DECEMBER 2014

MARCH 2015

JUNE 2015

SEPTEMBER 2015

DECEMBER 2015

SCHEDULED CONCEPT DESIGN COMPLETION

EAST SIDE COASTAL RESILIENCY

RBD

PROJECT ID: SANDRESM1
EAST SIDE COASTAL RESILIENCY
EAST SIDE COASTAL RESILIENCY

PROJECT ID: SANDRESM1

MAJOR DELIVERABLES

OFFICIAL CONCEPT DESIGN START

SCHEDULED CONCEPT DESIGN COMPLETION

DECEMBER 2014

FEBRUARY 2015

MARCH 2015

APRIL 2015

MARCH 2015

APRIL 2015

JUNE 2015

AUGUST 2015

NOVEMBER 2015

DECEMBER 2015

Q1

Q2

Q3

Q4
PROJECT AREA 1
1.1 PROTECTIVE BERM
1.2 BRIDGES AND ACCESS
1.3 WATERFRONT AND CONNECTIONS
1.4 PIER 42 PARK/MONTGOMERY CLOSURE
1.5 STORMWATER PLAN

PROJECT AREA 2
2.1 CON-ED
2.2 ELEVATED FDR
2.3 23RD STREET CLOSURE
2.4 STORMWATER PLAN

PROJECT ID: SANDRESM1
EAST SIDE COASTAL RESILIENCY
LAND SURVEY

(AFFILIATED INITIATIVE DDC)

SEPTEMBER 2014 - FEBRUARY 2015

PROJECT ID: SANDRESM1
EAST SIDE COASTAL RESILIENCY
Q1 + Q2: SITE ANALYSIS / NEW DATA COLLECTION
JANUARY - JULY 2015
Q1 + Q2: HYDROLOGY AND FLOOD RISK ASSESSMENT
JANUARY - JULY 2015
Q1 + Q2: SUBSURFACE EXPLORATION PROGRAM
JANUARY - JULY 2015
Q1 + Q2: PEDESTRIAN AND BICYCLE TRAFFIC STUDIES

JANUARY - JULY 2015
Q1 + Q2: BRIDGE INSPECTIONS
JANUARY - JULY 2015
PROJECT ID: SANDRESM1
EAST SIDE COASTAL RESILIENCY
Q1 + Q2: TREE INVENTORY
JANUARY - JULY 2015
PROJECT ID: SANDRESM1
EAST SIDE COASTAL RESILIENCY
Q1: REVIEW AND INTEGRATION OF RELEVANT STUDIES

DECEMBER 2014 - MARCH 2015

PROJECT ID: SANDRESM1
EAST SIDE COASTAL RESILIENCY
CONTINUAL PUBLIC INPUT
KEY ISSUES IDENTIFIED BY THE COMMUNITY DURING RBD

PEDESTRIAN BRIDGE CONNECTIONS
- Locations
- Landing Design
- Bridge Design

EAST RIVER PARK BIKEWAY/WALKWAY AND RECREATIONAL FACILITIES
- Addressing narrow segments
- Allowance for Emergency and Maintenance Access
- Programming and Connections

WATERFRONT VIEW CORRIDORS
- Height and Width of Flood Protection Elements
- Finishes

PARK ECOLOGY
- Planting Plans
- Trees
- Upland Connections

NEW ISSUES...
Q2+Q3+Q4: CONCEPT DESIGN DEVELOPMENT
MARCH - DECEMBER 2015

BERM OPTION
BRIDGE OPTION
BENCH OPTION
COMMUNITY ENGAGEMENT / CONCEPT DESIGN

1. ENGAGE COMMUNITY/STAKEHOLDERS
   - OVERARCHING DESIGN PRINCIPLES AND OBJECTIVES
   - WHERE THE DESIGN COMPETITION WORK LEFT OFF
   - KEY DESIGN OBJECTIVES FOR PROJECT AREAS ONE AND TWO
   - ENGINEERING OBJECTIVES
   - CONCEPT DESIGN ISSUES, INCLUDING NEED TO CONSIDER ALTERNATIVES

2. COORDINATE WITH FEASIBILITY ANALYSIS
   - INPUT THROUGH ENGAGEMENT SESSIONS
   - PUBLIC AND STAKEHOLDER NEEDS
   - PRIORITIES FOR CONSIDERATION IN CONCEPT DESIGN

3. DETERMINE INPUT TO CONCEPT DESIGN
   - OPTIONS AND ALTERNATIVES
   - ENGINEERING FEASIBILITY
   - BENEFIT/COST IMPLICATIONS
   - TARGETED DESIGN CONCEPTS

FINAL CONCEPT DESIGN
   - BALANCE COMMUNITY PRIORITIES WITH OPPORTUNITIES AND CONSTRAINTS
   - RISK MITIGATION
   - URBAN IMPACT + QUALITY OF LIFE
   - COST

COMMUNITY ENGAGEMENT / CONCEPT DESIGN
KEY COMMUNITY / STAKEHOLDERS WORKING GROUPS
KEY COMMUNITY / STAKEHOLDERS WORKING GROUPS
## COMMUNITY ENGAGEMENT

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
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</thead>
<tbody>
<tr>
<td><strong>STAKEHOLDER MTGS</strong></td>
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<td><strong>INITIAL ENGAGEMENT MTGS</strong></td>
<td><strong>ENGAGEMENT MTGS/DESIGN WORKSHOPS</strong></td>
<td><strong>DESIGN WORKSHOPS</strong></td>
<td><strong>SHARE DESIGN RESULTS</strong></td>
</tr>
<tr>
<td><strong>DATA GATHERING</strong></td>
<td><strong>IMAGINE ALTERNATIVES</strong></td>
<td><strong>PRESENT ALTERNATIVES</strong></td>
<td><strong>SHARE DESIGN RESULTS</strong></td>
</tr>
<tr>
<td><strong>INSPECTION &amp; TESTING</strong></td>
<td><strong>ESTABLISH PRIORITIES</strong></td>
<td><strong>RECEIVE FEEDBACK</strong></td>
<td><strong>SHOW EFFECT OF FEEDBACK</strong></td>
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<tr>
<td><strong>(STRUCTURAL, GEOTECHNICAL, UTILITIES, TRAFFIC)</strong></td>
<td><strong>FOREST AND LAND USE</strong></td>
<td><strong>DISCUSS PRIORITIES</strong></td>
<td><strong>SHOW COST-RISK COMPARISONS</strong></td>
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<tr>
<td><strong>HYDROLOGY STUDIES</strong></td>
<td><strong>FLOOD/RISK ASSESSMENT</strong></td>
<td><strong>FINAL HYDROLOGY AND FLOOD RISK REPORT</strong></td>
<td><strong>OPERATIONS AND MAINTENANCE</strong></td>
</tr>
<tr>
<td><strong>PROJECT AREA 2 FEASIBILITY STUDY</strong></td>
<td><strong>COMPLETE FEASIBILITY STUDY PROJECT AREA 2</strong></td>
<td><strong>REFINE ALTERNATIVE</strong></td>
<td><strong>FINAL CONCEPT DESIGN</strong></td>
</tr>
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<td><strong>ENGINEERING DESIGN</strong></td>
<td><strong>DEVELOP PROJECT AREA 1 AND 2 ALTERNATIVES</strong></td>
<td><strong>DRAFT CONCEPT DESIGN REPORT</strong></td>
<td><strong>COST-RISK-IMPACT ANALYSIS</strong></td>
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<td><strong>DECEMBER 2014</strong></td>
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<td><strong>URBAN DESIGN</strong></td>
<td><strong>COMMUNITY ENGAGEMENT</strong></td>
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<td><strong>EAST SIDE COASTAL RESILIENCE</strong></td>
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QUESTIONS / DISCUSSION