PRELIMINARY AND FINAL DESIGN SERVICES FOR BREEZY POINT COASTAL RESILENCY PROJECT

Pre-Proposal Conference, April 4, 2016

Dr. Feniosky PeñaMora
Commissioner

Eric Macfarlane, P.E.
Deputy Commissioner Infrastructure
Pre-Proposal Attendees

- NYC Mayor’s Office of Recovery and Resiliency
- NYC Office of Emergency Management
- NYC Mayor’s Office of Sustainability
- NYC Office of Management and Budget
- NYC Department of Design and Construction
- Agency Chief Contracting Officer
- Infrastructure / Coastal Resiliency
AGENDA

• Background
• Project Area, Breezy Point Community, Funding Background
• Schedule and Timeline
• Design Consultant Responsibilities and Expectations
• Scope of Work
• Proposed Flood Protection
• Community Engagement
• Noteworthy Components
• Related Projects
• Environmental Review
• FEMA Design Requirements
• Contract Requirements
The goal of the project is to provide coastal flood protection to both Breezy Point and Roxbury with a system of dunes and other flood protective structures that work together to create a more resilient community and withstand storm and tidal forces that may impact the coastline in future years.
ADDRESSING SOME KEY COMPONENTS OF THE RFP

SUBMISSION DEADLINE:
By 4:00 PM on Monday, April 18, 2016
DDC entrance is on 30th Place, not Thomson Avenue

TERMS OF CONTRACT:
540 CCDS = APPROXIMATELY 18 MONTHS
INQUIRIES (RFP-2)
 All inquiries must be requested in writing or email the Contract Manager, Nadira Kayharry
 Last day to submit question is one week prior to the submission deadline.

ACKNOWLEDGEMENT OF ADDENDA (RFP-32)
 One addendum has already been issued and posted on DDC’s Website
 All addenda shall become part of the requirements of the RFP
 The addendum issued and Acknowledgement of Addenda must be signed and appended to your Proposal
PROPOSAL PACKAGE CONTENTS (RFP-11) – (FOUR PACKAGES)

The Proposal Package should consist of the following FOUR packages. Each package shall be clearly marked with the Project Name, Project Identification Number and the Name of the Proposer.

1. Schedule B: M/WBE
2. Doing Business Form
3. Fee Proposal
4. Technical Proposal (1 original, 5 copies):
   Sealed envelope, clearly marked as “Technical Proposal”, including
   - Items listed in Section IV B of the RFP
   - Completed Forms 254 and 255
   - Statement of Understanding and Certification (Attachment 1)
   - Completed and Notarized Proposer’s Certification of Compliance with Iran Divestment Act (Attachment 2)
   - Identification of Subconsultants (Attachment 3)
   - Project Schedule in CPM MS Project format (Attachment 4)
   - Current and Anticipated Workload Disclosure (Attachment 5)
   - Acknowledgement of Addenda (Attachment 7)
TECHNICAL PROPOSAL EVALUATION CRITERIA

30% Firm’s Capability
30% Experience
30% Technical Approach
10% Project Schedule
GENERAL INFORMATION TO PROPOSERS (RFP-17)
Proposers are advised to read the entire section.

M/WBE PARTICIPATION GOALS (RFP-ATTACHMENT 9)
Proposers are advised to read the entire section. This will be addressed in more details further along in this presentation.

SUBCONTRACTOR REPORTING (RFP-41)
Payee Information Portal (PIP), available at www.nyc.gov/pip

HireNYC RIDER (RFP-45)
Hiring and Employment Rider: Hirenyc and Reporting Requirements
PAID SICK LEAVE LAW CONTRACT RIDER (RFP-73)
Introduction and General Provisions
On the website www.nyc.gov/PaidSickLeave there are links to the PSLL and the associated Rules as well as additional resources for employers.

CDBG-DR Rider- HUD RIDER (RFP-48-72)
The Project will be funded by a combination of FEMA HMGP funds and Community Development Block Grant Disaster Recovery (CDBG-DR) program funds.

SERVICES TO BE PERFOMED BY THE CONSULTANT (CONTRACT SECTION PAGE 7)
Proposers are advised to read the entire RFP
Climate Change / 21st Century Threats

A changing climate expands our vulnerability as sea levels continue to rise.

**Projected floodplain for the 2020s and 2050s**

<table>
<thead>
<tr>
<th></th>
<th>2013 PFIRMs</th>
<th>2050s Projected</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents</td>
<td>400,000</td>
<td>808,900</td>
<td>102%</td>
</tr>
<tr>
<td>Jobs</td>
<td>290,800</td>
<td>555,700</td>
<td>91%</td>
</tr>
<tr>
<td>Buildings</td>
<td>71,500</td>
<td>118,000</td>
<td>65%</td>
</tr>
<tr>
<td>1-4 Family</td>
<td>57,400</td>
<td>89,000</td>
<td>55%</td>
</tr>
<tr>
<td>Floor Area (Sq Ft.)</td>
<td>534M</td>
<td>855M</td>
<td>42%</td>
</tr>
</tbody>
</table>

*Numbers are rounded for clarity

**Over 171,000 buildings and 1.2 million New Yorkers projected to live in the floodplain by 2100.**
Our Resilient City: Coastal Defense

With OneNYC, New York City’s coastal defenses will be strengthened against flooding and sea level rise.

**INITIATIVES**

- Continue to implement the city’s coastal protection plan
- Secure new funds for flood risk reduction
- Implement nature-based strategies for resiliency

**INDICATORS + TARGETS**

- Increase the linear feet of coastal defenses completed
- Increase the acres of coastal ecosystems restored
- Increase the number of residents with coastal defenses and restored ecosystems
Project Background

Breezy Point Coastal Resiliency

- Hurricane Sandy 2012 – community damaged by storm surge coastal flooding and fire, barrier island susceptible to hurricanes and nor’easters
- Recipient of Hazard Mitigation Grant Program (HMGP–Project #: 4085-058)
  - Risk Mitigation System to provide protection from a 100-year flood event

Involved Local, State and Federal Agencies

- NYC ORR
- NYC EM
- NYC MOS
- NYC OMB
- NYC DOT
- NYC DPR
- NYC DEP
- NYC DCP
- NYS DHSES
- NYS GOSR
- FEMA
- NPS
Project Area

Legend
- Breezy Point Project Area
- Roxbury Project Area
- National Park Service
Breezy Point Community

- Private beach community (covering over 500 acres)
- Comprised of approximately 2,600 homes (families have been there for many generations)
- Self contained and owned by the Breezy Point Cooperative, managed by a Cooperative Board
- Bounded by Jamaica Bay to the north and Atlantic Ocean to the south
- Adjacent areas – Fort Tilden and Gateway National Recreation Area (protected wildlife, nature preserves and fishery owned and operated by Federal government)
- Part of Community Board 14
- Elected Officials
  - Borough President Melinda Katz, Senator Joseph Addabbo, Assemblyman Phillip Goldfeder,
  Councilman Eric Ulrich
Funding Structure

• Total funding from
  • FEMA Hazard Mitigation Grant Program (HMGP)
  • HUD Community Development Block Grant Disaster Recovery Program (CDBG-DR)

• NYS Division of Homeland Security and Emergency Services (DHSES) is the administrator of HMGP and manages grant reimbursements / reporting

• Breezy Point Risk Coastal Resiliency is a two phase HMGP project:
  • Phase I - Design
  • Phase II - Construction
Funding Structure (cont.)

• CDBG-DR Funding eligibility dependent on 3 criteria:
  1. Project must tie back to Hurricane Sandy
  2. Project must be an eligible activity
  3. Project must meet a national objective

• HMGP requirements:
  1. Project must be a stand-alone system
  2. Must be cost-effective (using the FEMA Benefit Cost Analysis toolkit)
  3. Must not exceed the budget
Schedule

- **Summer 2016** - Site Topographic Survey and Geotechnical Investigation to be completed

- **Fall 2016** – Winning preliminary and final design consultant notified

- **Spring/Summer 2018** – Complete Preliminary and Final Design, and Environmental Assessment (anticipated 18 month contract)

- **Spring/Summer 2019** – Expected construction groundbreaking
Design Consultant Responsibilities

- Provide reliable design for coastal flood protection for the FEMA 100-year storm criteria including sea level rise for the entire community

- Respond quickly to the urgent need for increased flood protection and resiliency within the flood hazard area

- Be familiar with the prescreening requirements, what is needed for the submittal of data and technical information, and the sequence of the process as per the FEMA Hazard Mitigation Assistance Guidance, “Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, and Flood Mitigation Assistance Program”, dated February 27, 2015
Design Consultant Expectations

- Responsiveness to City agency and Breezy Point Cooperative comments and concerns
- Focus on maintainability and high quality design
- Work within tight schedule and budget constraints
- Managing expectations throughout community engagement
Services To Be Performed By The Consultant
A. Preliminary Design Services

- **TASK 1**: Project Development / Identification
- **TASK 2**: Environmental Assessment Statement
- **TASK 3**: Community Outreach
- **TASK 4**: Hydrologic, Hydraulic and Scour Analysis
- **TASK 5**: Shorefront Investigation
- **TASK 6**: Hardware and Basin Condition Inventory
- **TASK 7**: Subsurface Exploration Program
- **TASK 8**: Embankment Protection Study
- **TASK 9**: Study of Existing Reports and Erosion of the Dune (Feasibility Report)
- **TASK 10**: Preliminary Design of Retaining Walls and Bulkheads
- **TASK 11**: Preliminary Design of Dual Dune and Planting Program
- **TASK 12**: Tree Inventory
- **TASK 13**: Schematic Geometric Design
- **TASK 14**: Schematic Landscape/Urban Design
- **TASK 15**: Preliminary Quantity and Cost Estimating
- **TASK 16**: Preliminary Maintenance and Operations Manual
Services To Be Performed By The Consultant

B. Final Design Services

- **TASK 17:** Community Outreach
- **TASK 18:** Street Design Including Study & Design of Street Grades, Study & Design of Street Drainage, Permanent Street Signs and Preparation of Grade Change
- **TASK 19:** Tree Impact Mitigation and Tree Planting Program
- **TASK 20:** Final Landscape/Urban Design
- **TASK 21:** Final Design of Dune and Plantings
- **TASK 22:** Final Design of Retaining Walls and Bulkheads

- **TASK 23:** Construction Staging and Maintenance and Protection of Traffic
- **TASK 24:** Final Maintenance and Operations Manual
- **TASK 25:** Final Quantity and Cost Estimating
- **TASK 26:** Preparation of Specifications
- **TASK 27:** Review and Analysis of Bids
- **TASK 28:** Electronic Archiving and Indexing
Proposed Flood Protection

HMGП Technical Feasibility Report included a conceptual design that proposed a coastal flood protection system consisting of double dune system on the Atlantic Ocean coastline, a floodwall along the Jamaica Bay side, erosion control structures on Jamaica Bay side of Roxbury, and polyvinyl chloride (PVC) sheet pile on Eastern and Western boundaries. Design basis from feasibility report to be verified in design phase.

1. Double Dune
   – On the Atlantic Ocean within Breezy Point the configuration of a double dune has been proposed to protect against flooding and erosion.
   – The proposed dune configuration is two + 20 NAVD88 high crests with crest widths of 35 feet and dune slopes of 1 on 5 to exceed the FEMA 100 year storm criteria plus SLR.

2. Flood Wall
   – For the Jamaica Bay side of the Breezy Point Cooperative (Point Breeze and Roxbury) a flood wall has been proposed to protect against bay side flooding.
   – The flood wall is proposed to be a vertical wall with a minimum elevation of +13.683 NAVD88 (+13.7 NAVD88) in order to exceed the FEMA 100 year storm criteria including sea level rise (SLR) projected to the 2050s.
Proposed Flood Protection (cont.)

3. T-Groins, Detached Breakwater, and Terminal Groins
   - On the Jamaica Bay side of Roxbury Beach, erosion control structures are being proposed to provide needed flood and erosion protection to the west end of Roxbury.
   - The structures consist of a series of T-groins, a detached breakwater and two terminal groins to maintain and stabilize the western shoreline of Roxbury.
   - This will provide a stable landform to place the required flood walls that provide storm protection.

4. PVC Sheet Wall
   - Boundary protection in the form of a PVC sheet wall is being proposed for the flanks (eastern, western boundaries) of Breezy Point Cooperative to interconnect the Atlantic Ocean and Jamaica Bay flood and erosion protection structures providing 360 degrees of flood protection.
   - The boundary protection will create a unified flood and erosion protection structure that is intended to create a consistent level of flood protection for the community.
Community Engagement

- Stakeholder meetings
- Community Engagement Sessions
  - Briefings
  - Presentations
  - Quarterly Town Halls
- Community Board
- Website
Noteworthy Components

• Sensitive species
  • Variety of nesting birds on the ocean beaches, including piping plovers, black skimmer, American oyster catcher
• NPS – Gateway National Recreation Area
  • Fort Tilden and Gateway Breezy Point Tip
• Community pedestrian and vehicular access to waterfront
  • Community has stressed importance of accessibility to beaches
• Sightlines
  • Efforts should be made to preserve sightlines for community
On-Going and Related Projects

• Build It Back
  • Multiple locations under way through Summer 2016, completed by September 2016
• New York Rising Community Reconstruction Program (NYRCR)
  • March 2014 NYRCR Plan
  • Housing elevation study
• USACE
  • Multiple wetland, estuary, and marsh restoration projects within Jamaica Bay area
Environmental Review

• Lead Agency

The NYC Mayor’s Office of Recovery and Resiliency (ORR) will act as the lead agency for the Breezy Point Project on behalf of the New York City Mayor’s Office. New York City Mayor’s Office of Sustainability (NYC MOS) will conduct the review and coordination on behalf of and in collaboration with ORR.

• Tentative Tasks (Approximately 18 Months)

<table>
<thead>
<tr>
<th>Environmental Assessment (EA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Baseline Data Conditions</td>
</tr>
<tr>
<td>Prepare Preliminary Draft EA with Screening Analyses</td>
</tr>
<tr>
<td>NEPA/SEQR Planning &amp; Screening of Alternatives/Project Description</td>
</tr>
<tr>
<td>Agency Review</td>
</tr>
<tr>
<td>EA Review/FONSI/Negative Declaration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Permitting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine Land Ownership</td>
</tr>
<tr>
<td>Agency Outreach (USACE/NYDEC)</td>
</tr>
<tr>
<td>Prepare USACE/NYSDEC Draft Joint Permit Application</td>
</tr>
<tr>
<td>Coordinate with USACE/NYSDEC on Permit Review</td>
</tr>
</tbody>
</table>
Requirement: Levee/Dune Certification and FEMA Accreditation

• The Consultant shall certify that the design of flood protection system meets FEMA levee/dune requirements

• DDC/ORR-facilitated coordination with reviewing agencies and entities:
  
  U.S. Army Corps, FEMA, NYS DEC, U.S. Coast Guard, Harbor Operations Committee, etc.

• Consolidation of all required documentation:
  
  • Design
  
  • Interior Drainage Plan
  
  • Maintenance and Operation Plan
Contract Summary

• Anticipated Contract Term: 18 months

• M/WBE Participation Goal: 5% and require State M/WBE certification
M/WBE Goals and Subcontractors Participation Plan

- **M/WBE Participation Goal**: 5%

- **Firms must be certified as M/WBE by the State in order to count toward goal**

- **Respondents must submit an M/WBE Subcontractors Participation Plan (Schedule B of RFP) demonstrating how they will achieve their proposed level of M/WBE participation**
  - Respondents must also submit Intent to Perform as Subcontractor forms for each of the firms on the M/WBE Subcontractors Participation Plan, providing confirmation that the firms have been contacted and plan to work on the project
  - If awarded, your proposed goal will become a contractual obligation

- **Final M/WBE Goals will be incorporated into the Consultant Contract**
  - Selected Respondents will be required to meet the stated M/WBE goals or demonstrate good faith efforts
Please note that if the proposer cannot meet the stated M/WBE percentage, the waiver must be submitted to DDC’s Office of Contract Opportunity Unit seven (7) days prior to the RFP Deadline submission.
RFP Schedule Overview

• Question/Clarification Deadline: April 11, 2016
• Proposal Submission Deadline: 4:00 PM, April 18, 2016
• Contact E-mail Address: Nadira Kayharry: NansaraN@ddc.nyc.gov