

# East Side Coastal Resiliency Preliminary Design Update

## Community Board 3 Review

Parks Committee: March 15, 2018

Full Board: March 27, 2018



# **PRESENTATION CONTENTS**

**A. SITE STRATEGY**

**B. SITE DESIGN**



# PRESENTATION CONTENTS

## **A. SITE STRATEGY**

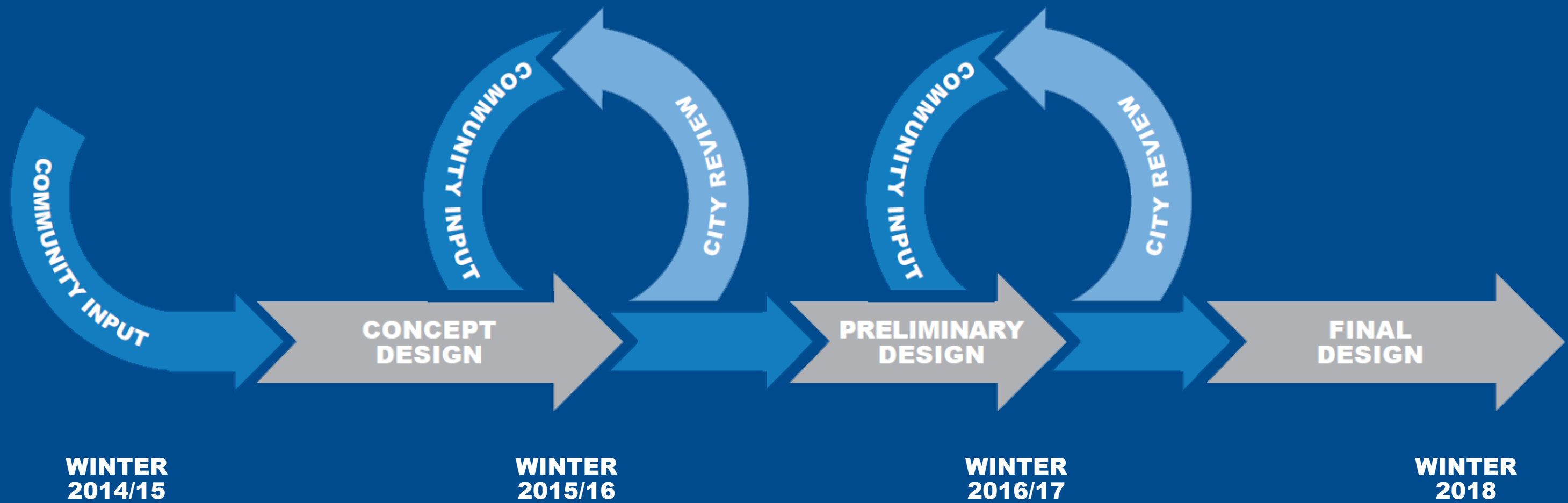
## **B. SITE DESIGN**



- Provide a reliable, integrated flood protection system; minimize use of closure structures
- Improve waterfront open spaces and access
- Respond quickly to the urgent need for increased flood protection and resiliency
- Achieve implementation milestones and project funding allocations as established by HUD

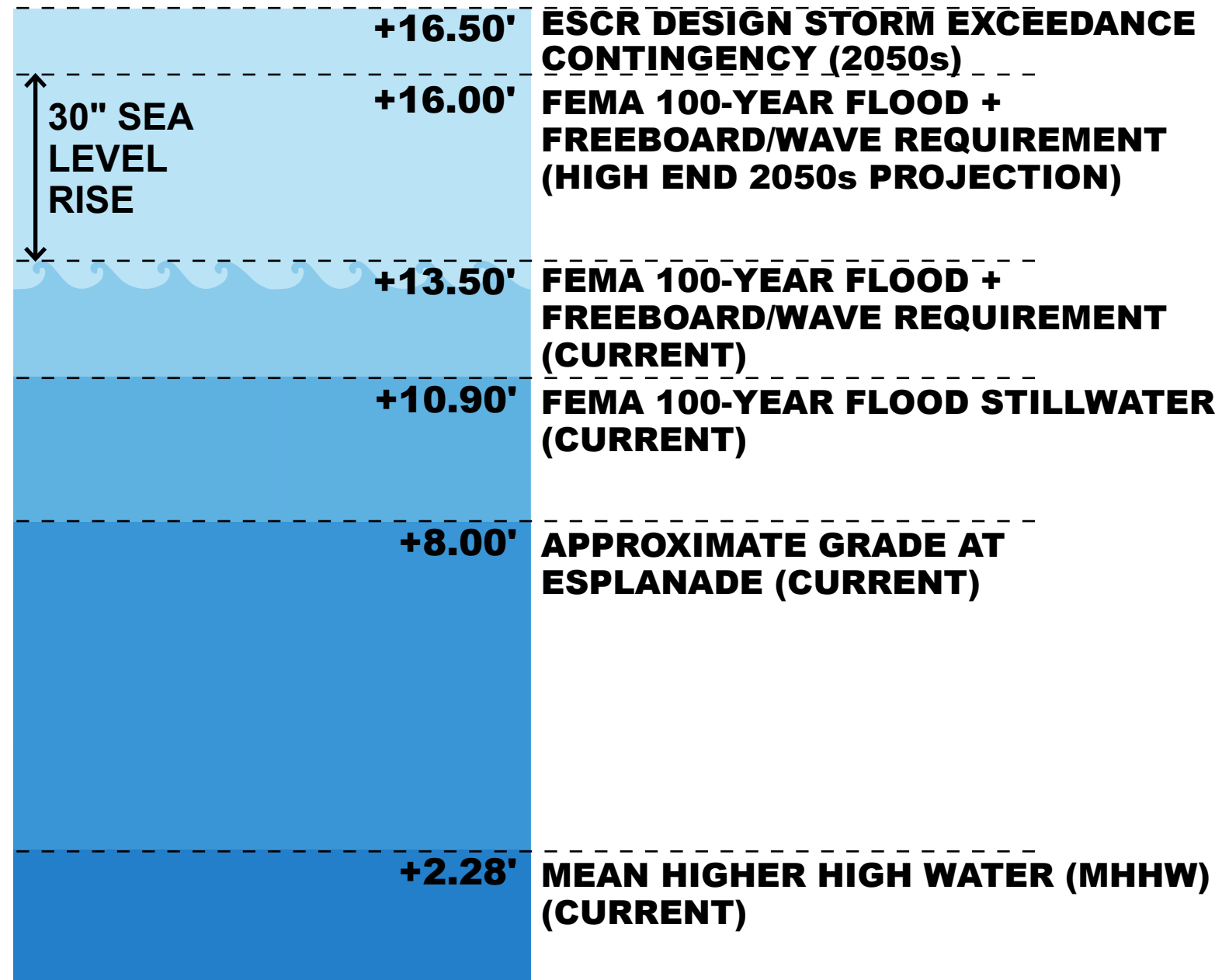






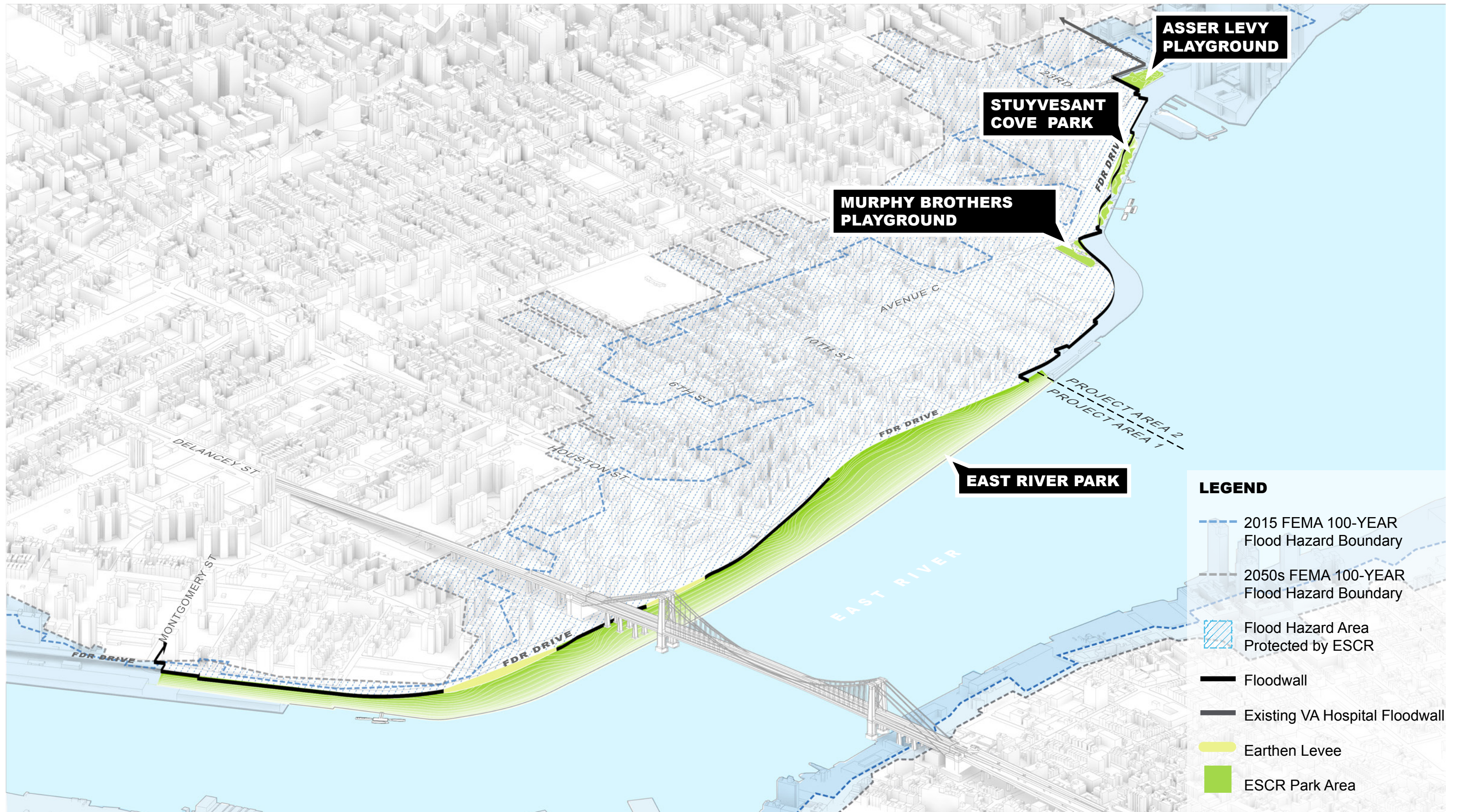


**HUD FUNDING REQUIREMENT:  
THE SYSTEM MUST PURSUE  
FEMA ACCREDITATION WITH  
MINIMUM SYSTEM ELEVATION AT  
CURRENT FEMA 100-YEAR STORM  
ELEVATION + FREEBOARD**

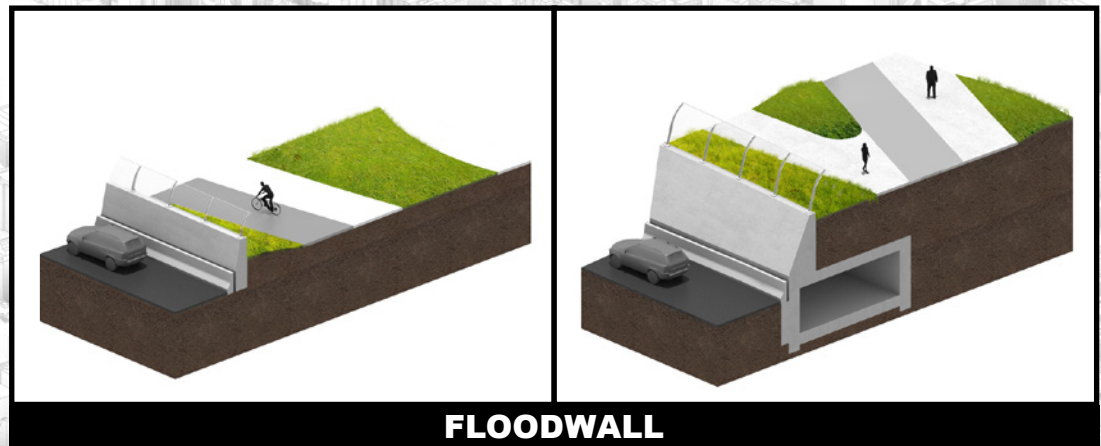


NOTE: ALL ELEVATIONS SHOWN IN NAVD88

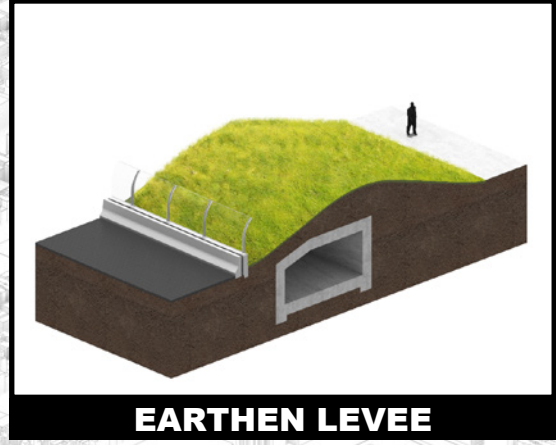








**FLOODWALL**

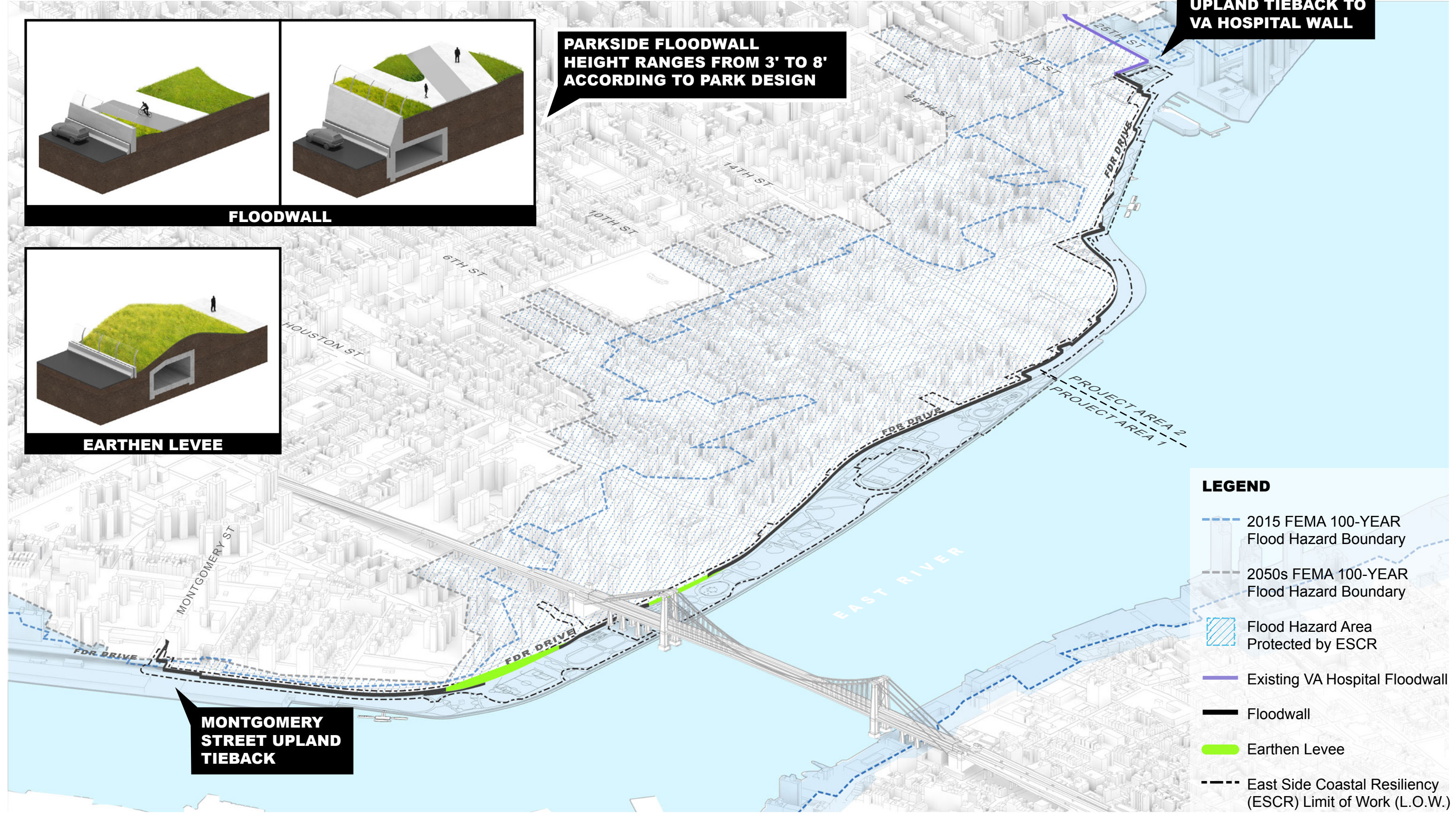


**EARTHEN LEVEE**

**PARKSIDE FLOODWALL HEIGHT RANGES FROM 3' TO 8' ACCORDING TO PARK DESIGN**

**UPLAND TIEBACK TO VA HOSPITAL WALL**

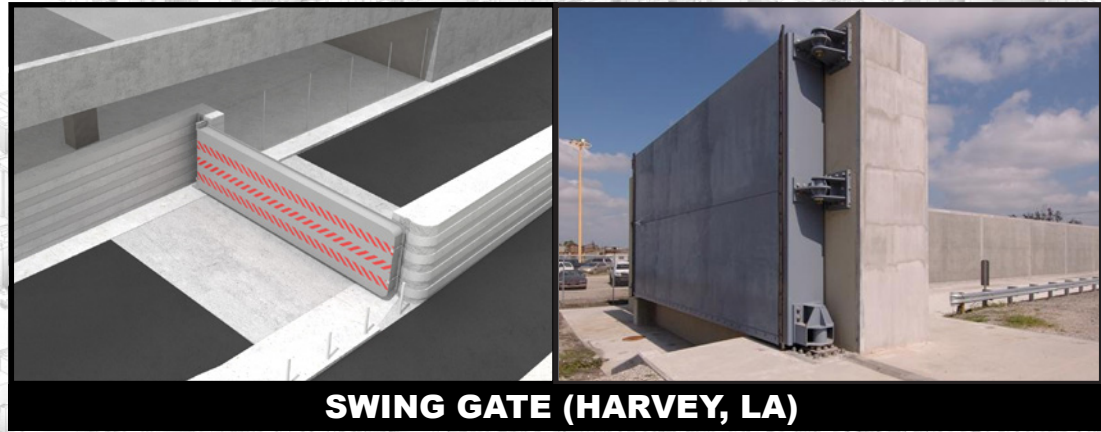
**MONTGOMERY STREET UPLAND TIEBACK**



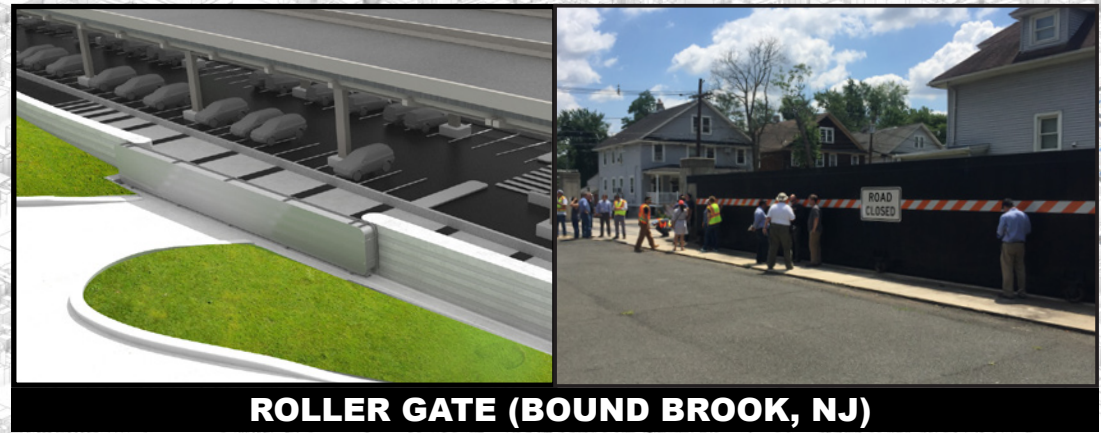
**LEGEND**

- 2015 FEMA 100-YEAR Flood Hazard Boundary
- 2050s FEMA 100-YEAR Flood Hazard Boundary
- Flood Hazard Area Protected by ESCR
- Existing VA Hospital Floodwall
- Floodwall
- Earthen Levee
- East Side Coastal Resiliency (ESCR) Limit of Work (L.O.W.)

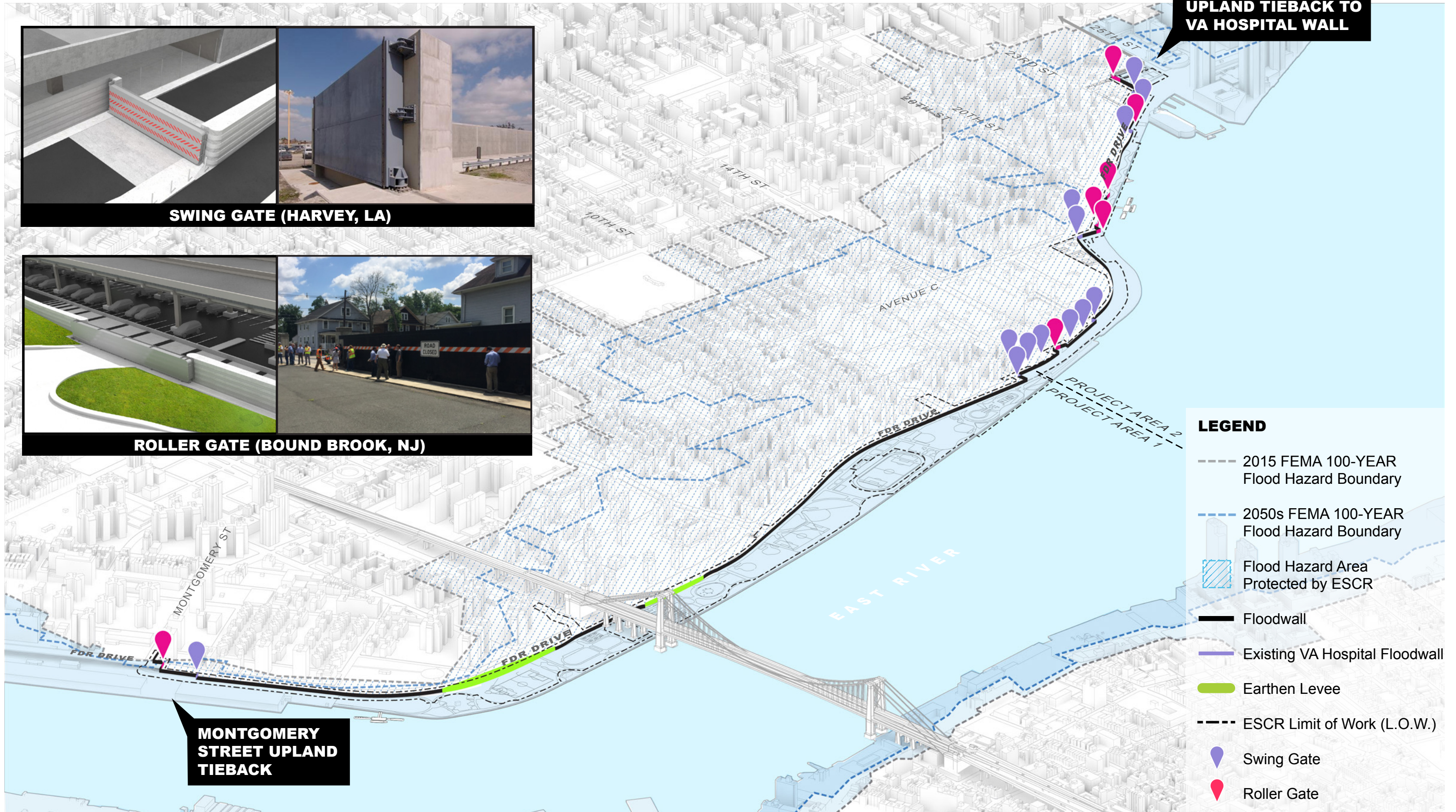




**SWING GATE (HARVEY, LA)**

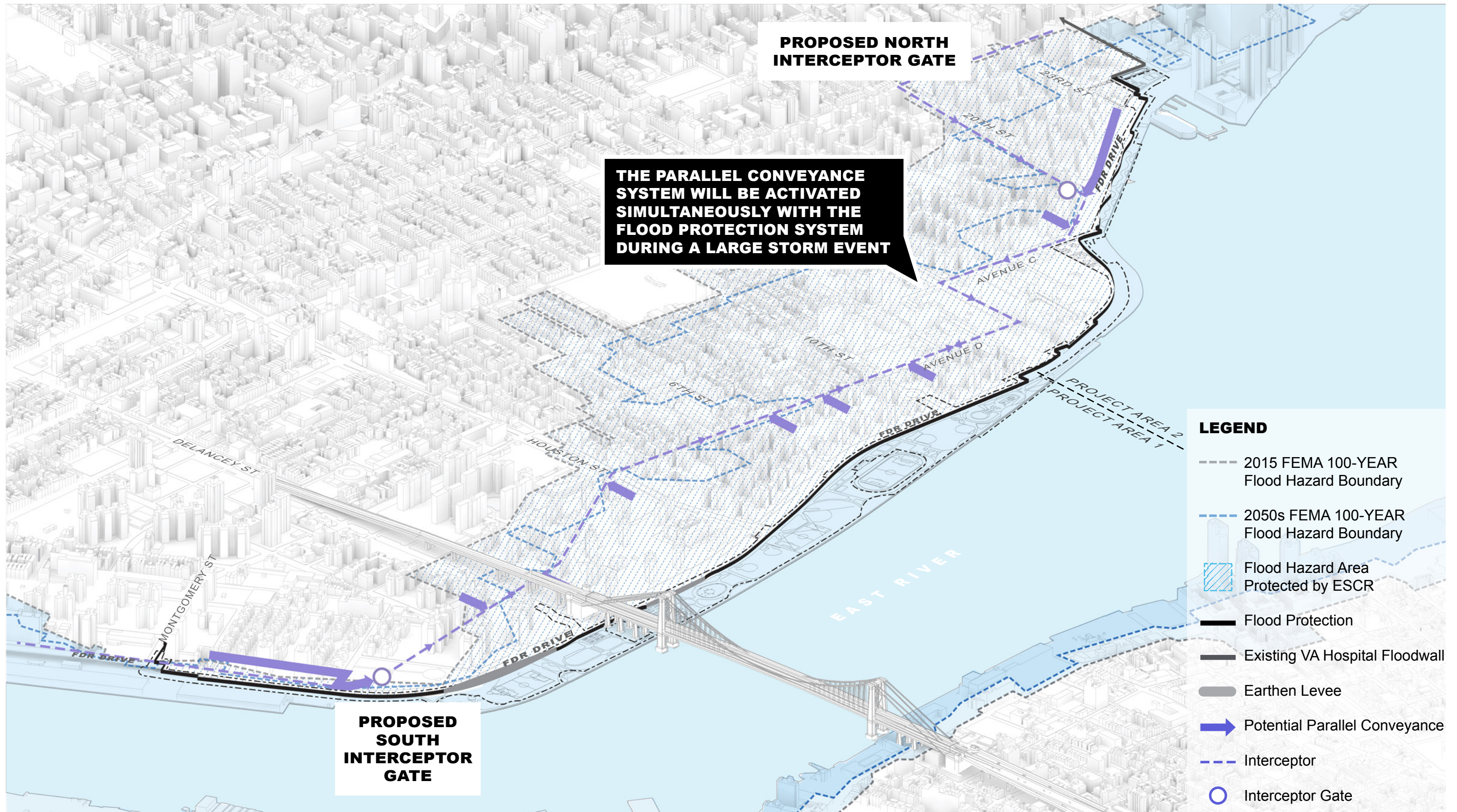


**ROLLER GATE (BOUND BROOK, NJ)**

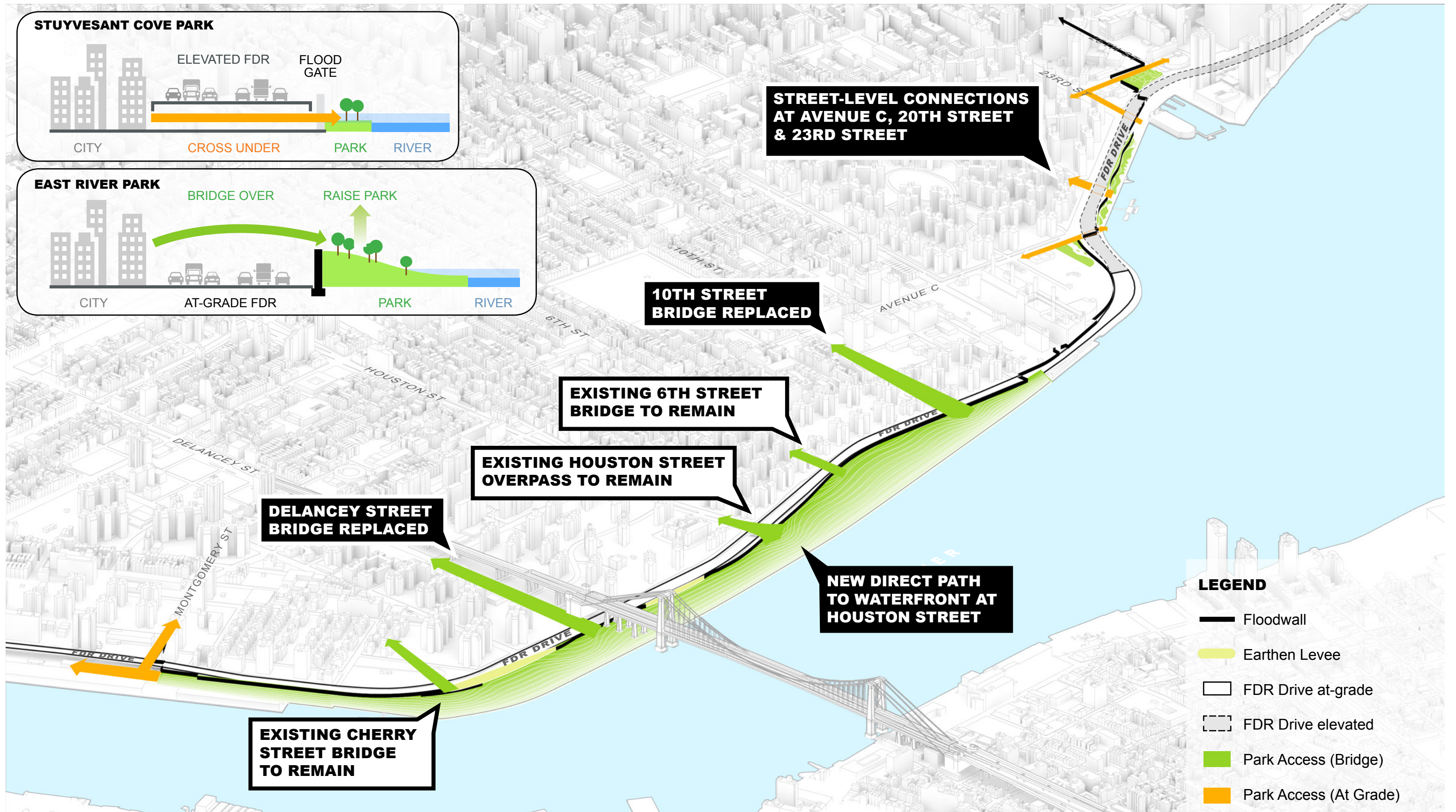


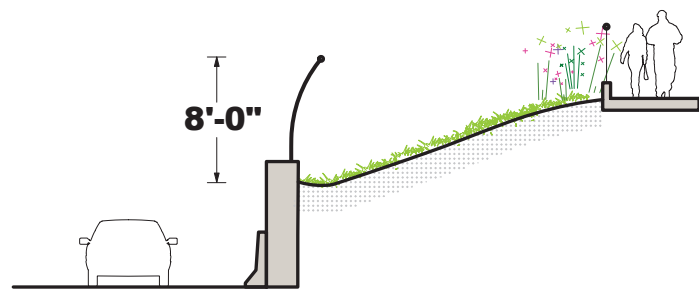
- LEGEND**
- 2015 FEMA 100-YEAR Flood Hazard Boundary
  - - - 2050s FEMA 100-YEAR Flood Hazard Boundary
  - ▨ Flood Hazard Area Protected by ESCR
  - Floodwall
  - Existing VA Hospital Floodwall
  - Earthen Levee
  - - - ESCR Limit of Work (L.O.W.)
  - Swing Gate
  - Roller Gate



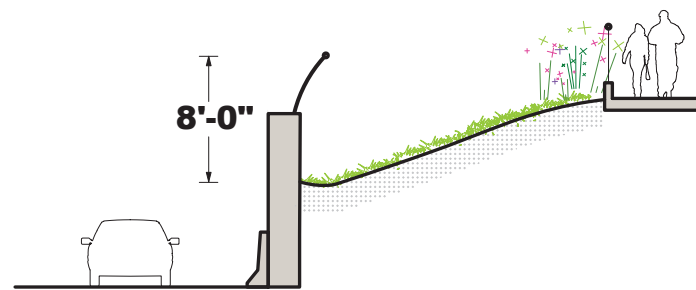




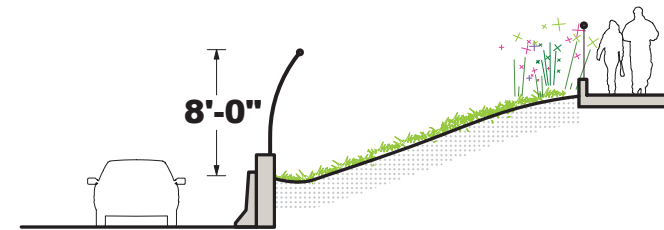




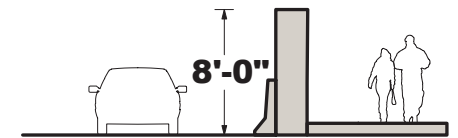
**LOW WALL + HIGH FENCE**



**HIGH WALL + LOW FENCE**



**RETAINING WALL + FENCE  
(AT LEVEE)**



**NO FENCE**





**ELEVATION MARKER**

The floodwall finish responds to the overall project intent by registering elevation markers. Water Level Meter, Chicago, IL

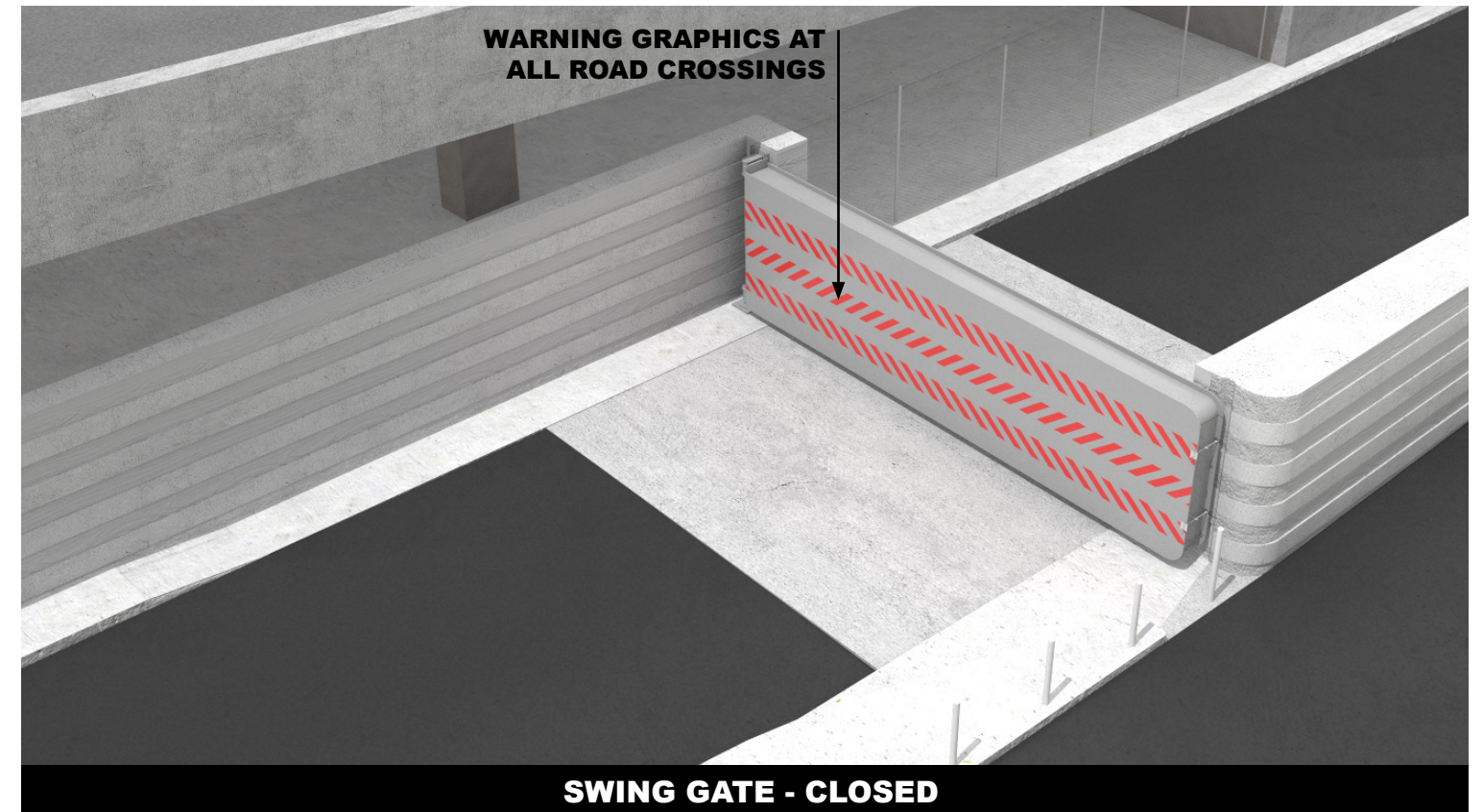
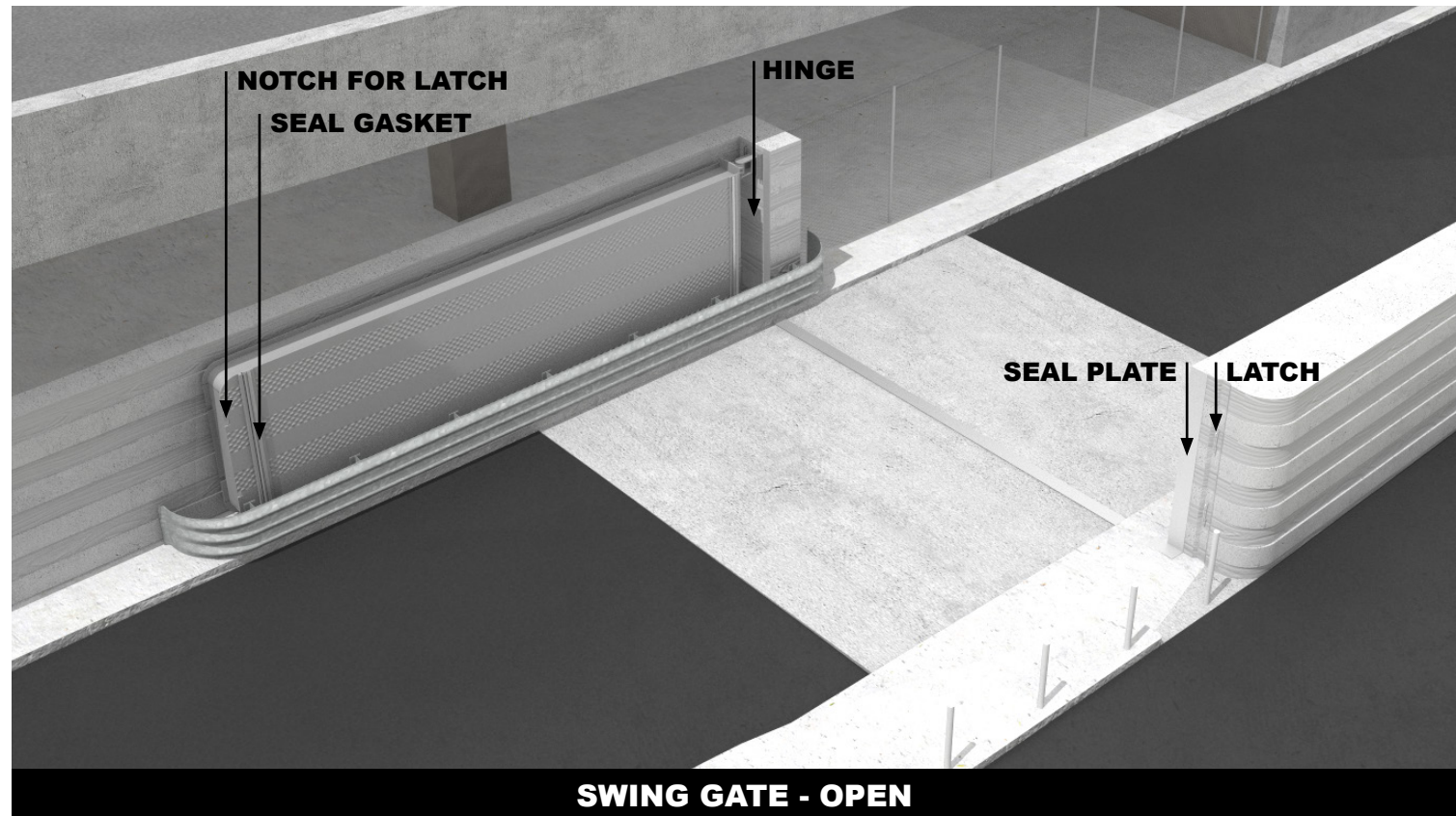
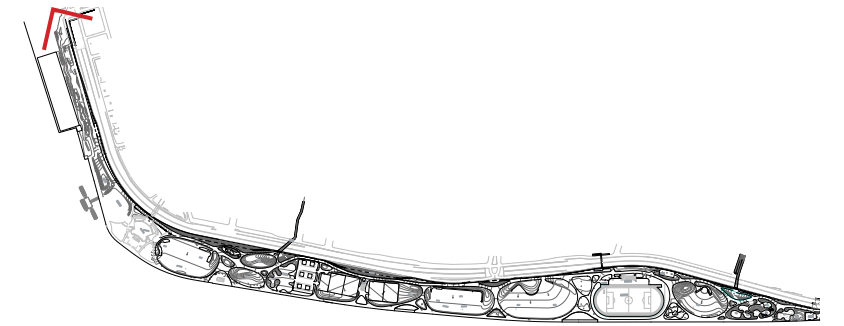


**INFORMATION**

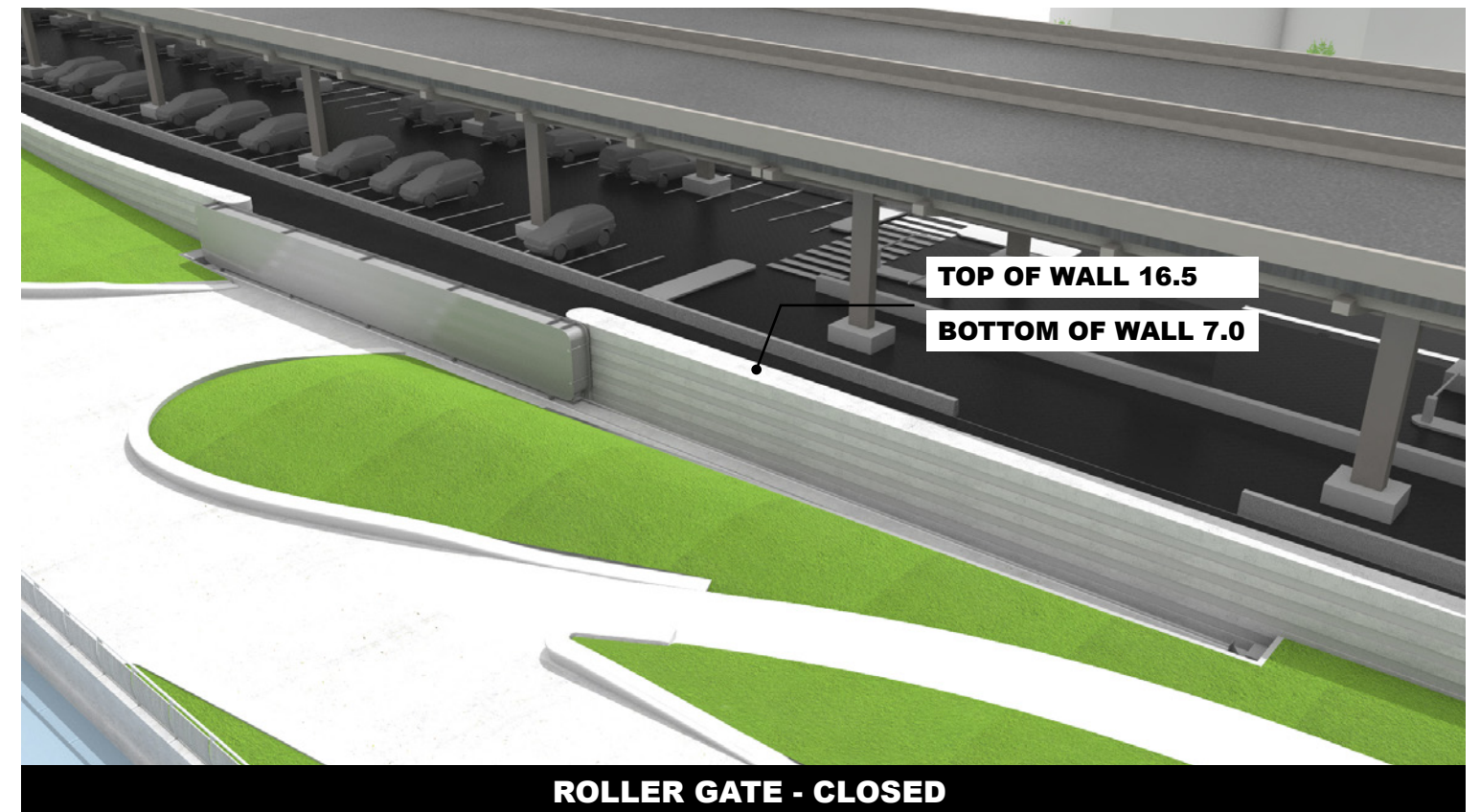
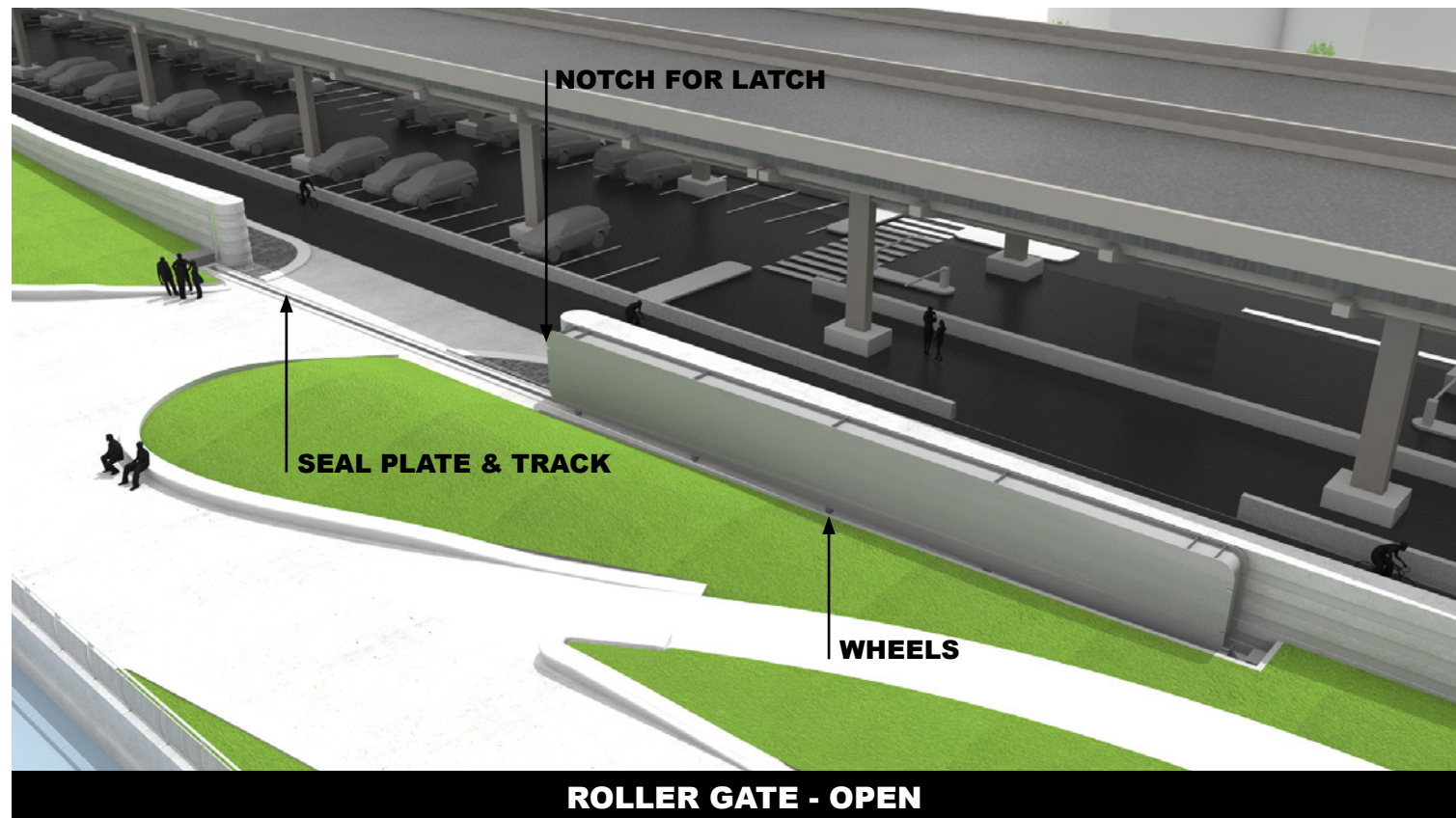
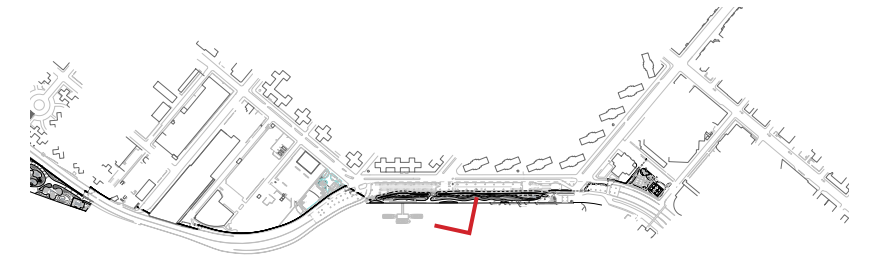
The wall texture expresses each foot of wall height. At select locations, such as entry locations and bridge abutments, elevation letterforms are recessed into the wall face.











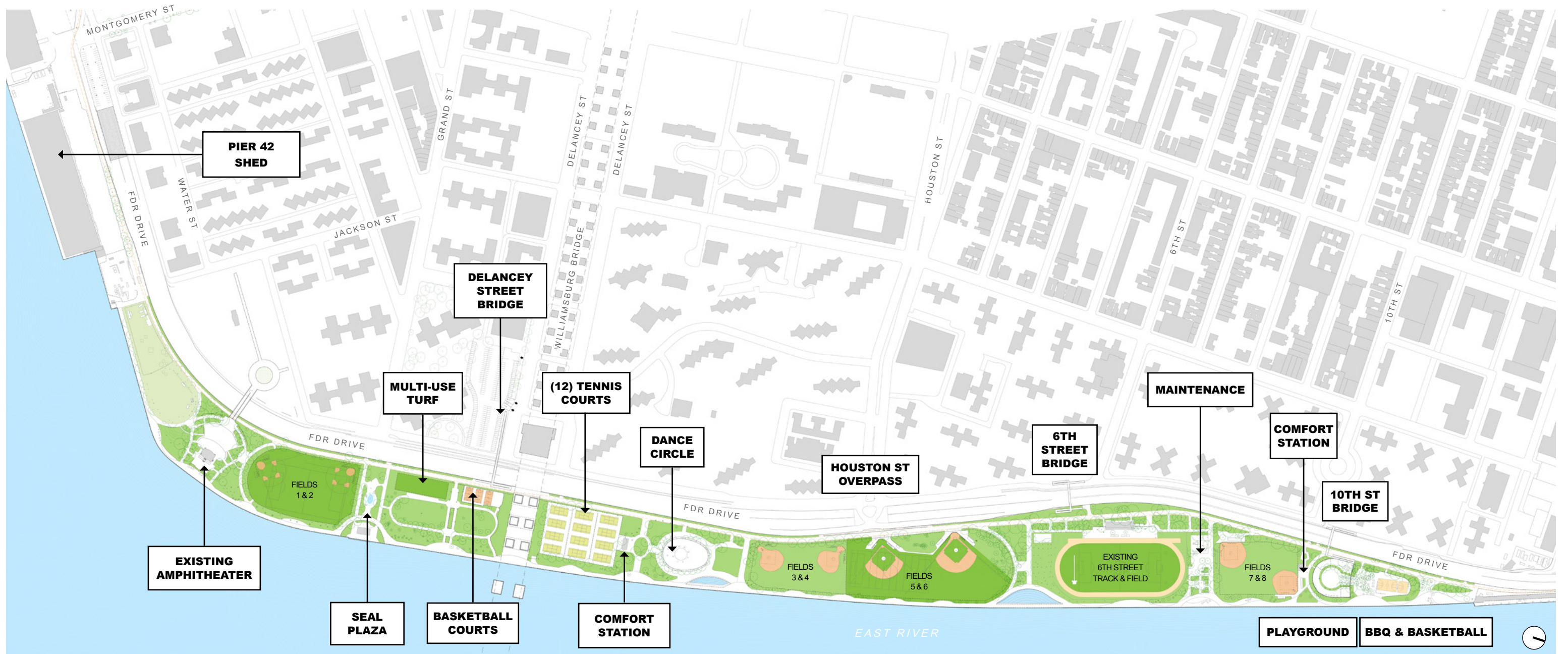


# COMMUNITY BOARD PROJECT UPDATES

## A. SITE STRATEGY

## **B. SITE DESIGN**

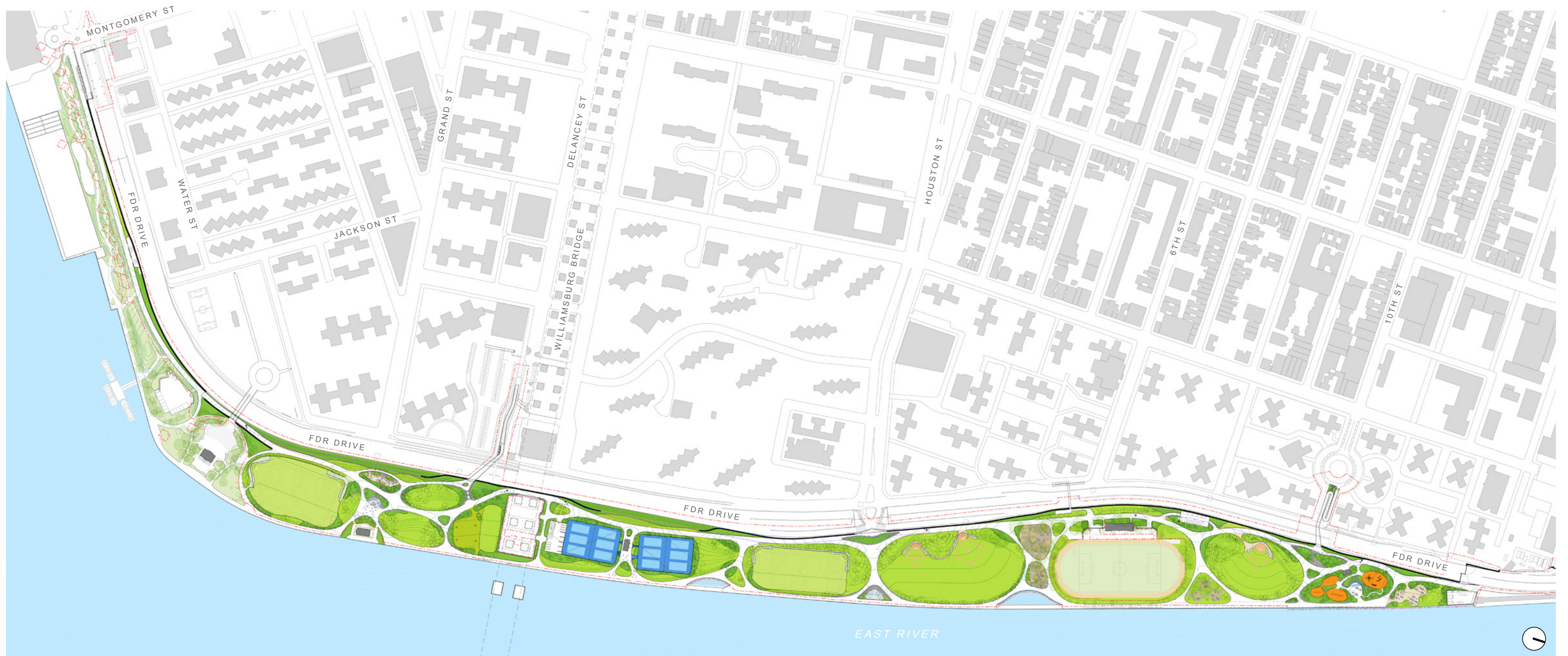




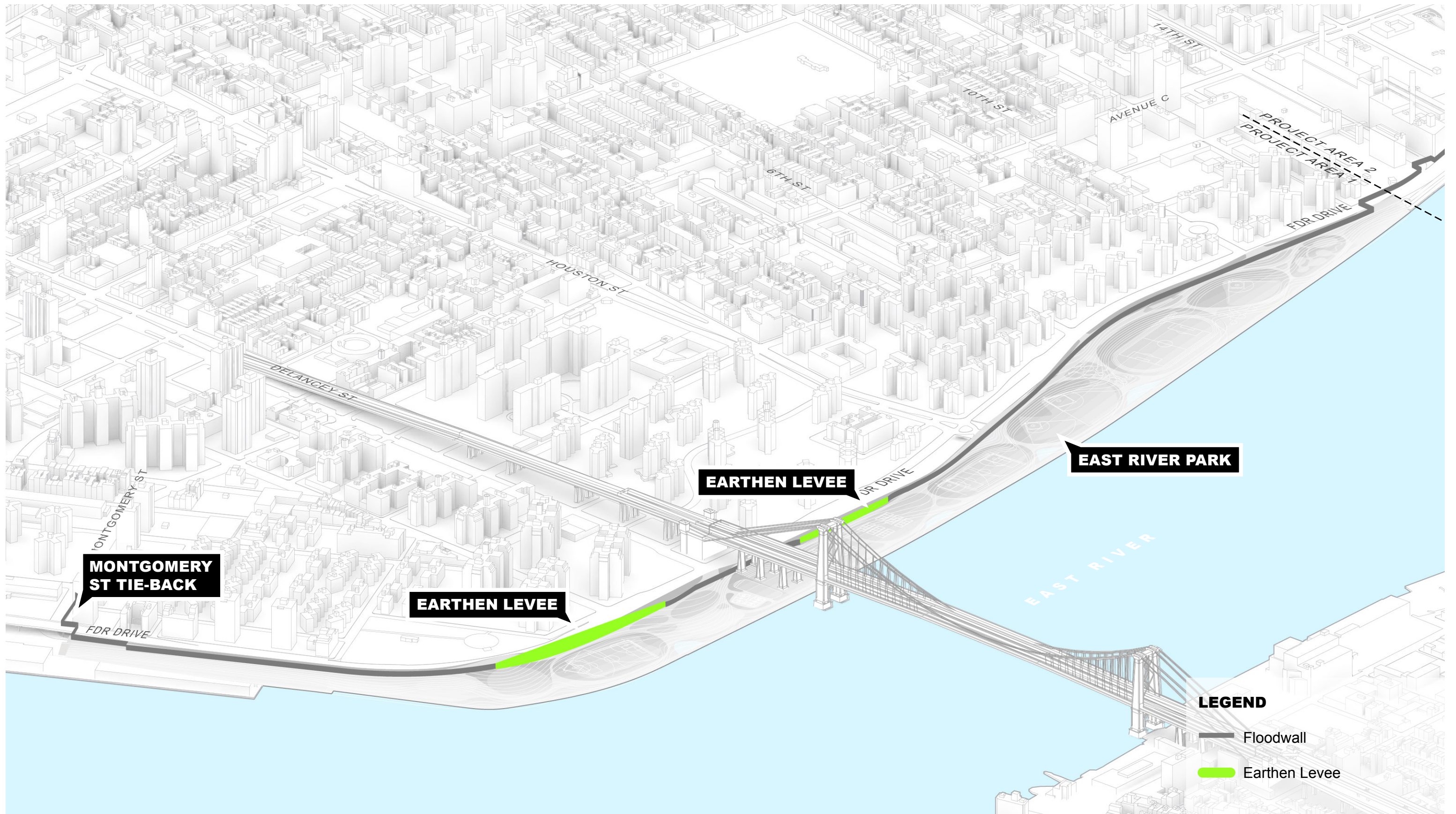




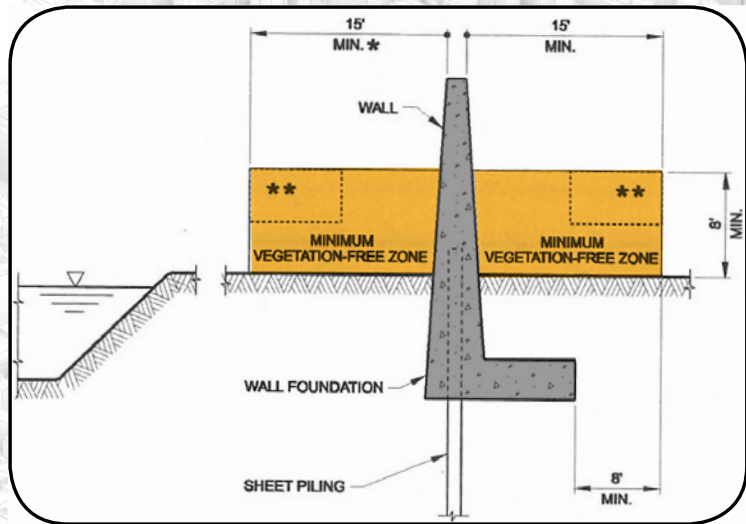




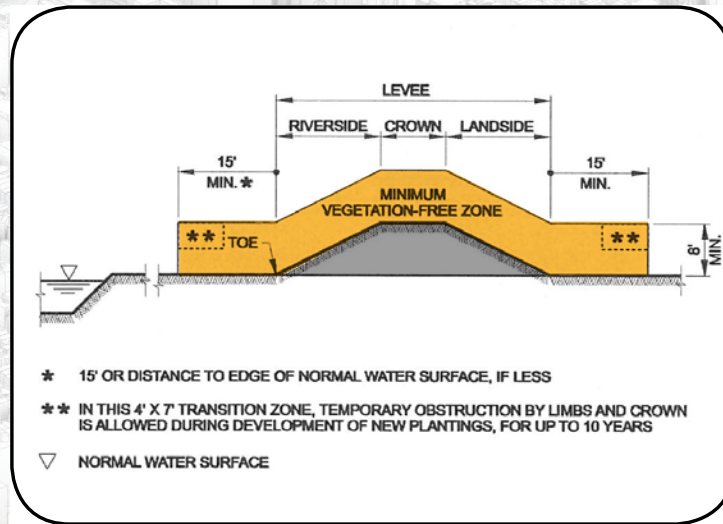








**FLOODWALL**



**LEVEE**

\* 15' OR DISTANCE TO EDGE OF NORMAL WATER SURFACE, IF LESS  
 \*\* IN THIS 4' X 7' TRANSITION ZONE, TEMPORARY OBSTRUCTION BY LIMBS AND CROWN IS ALLOWED DURING DEVELOPMENT OF NEW PLANTINGS, FOR UP TO 10 YEARS  
 ▽ NORMAL WATER SURFACE

**NO TREES, SHRUBS, OR WOODY VEGETATION IS ALLOWED WITHIN THE "VEGETATION-FREE" ZONE**

**PLANTING RESTRICTIONS KEEP FLOOD PROTECTION INTACT AND VISIBLE FOR INSPECTION**

LOW CREEPING FESCUES PROVIDE DENSE COVERAGE TO PREVENT EROSION

FLOOD PROTECTION ZONES

PERENNIALS ADD COLOR, TEXTURE & SEASONAL INTEREST

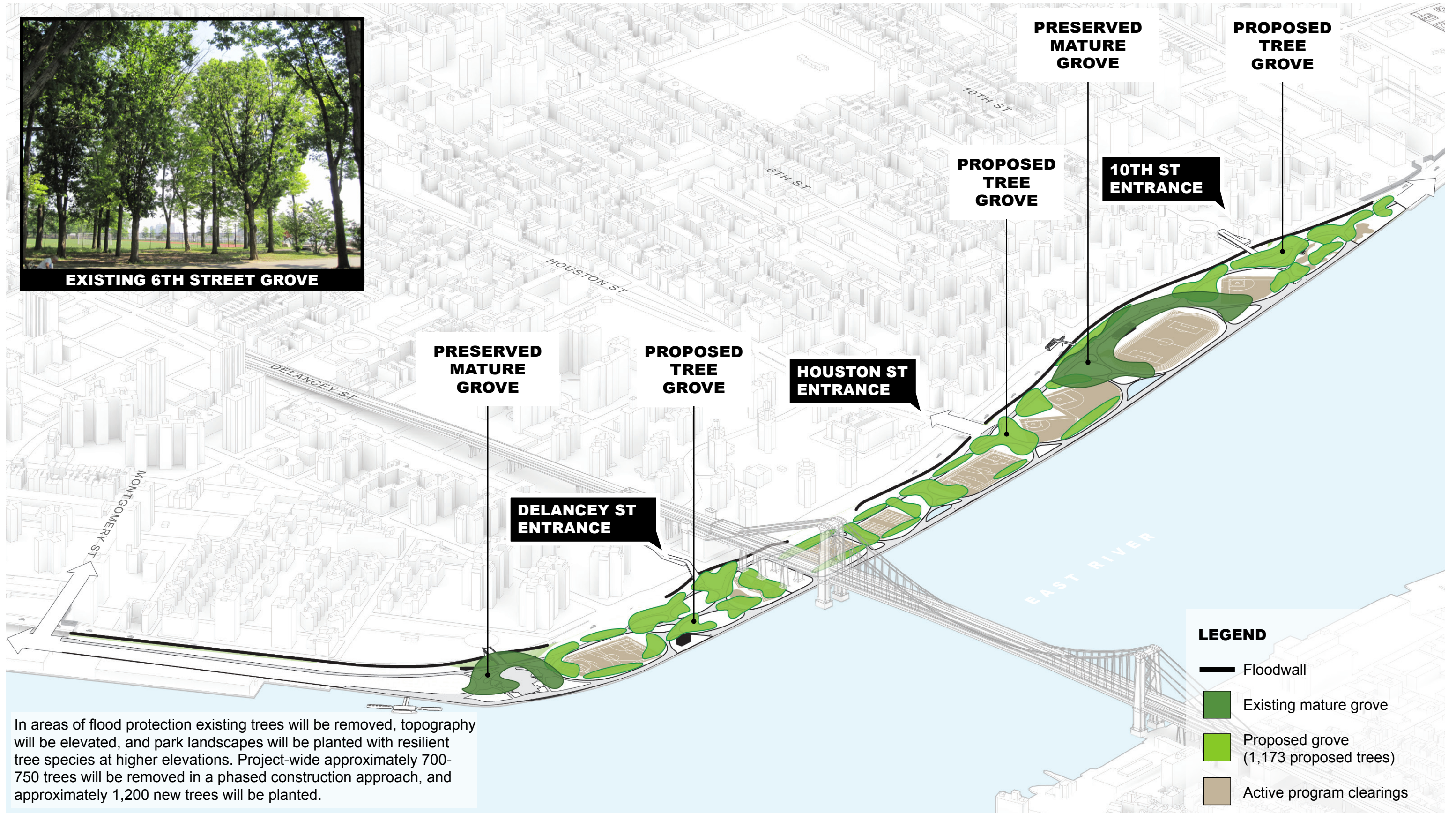
TALL GRASS ROOTS HOLD SOILS, PROVIDE TEXTURE & SEASONAL INTEREST

- LEGEND**
- Floodwall
  - █ Levee
  - ▨ Flood Protection Planting Zone



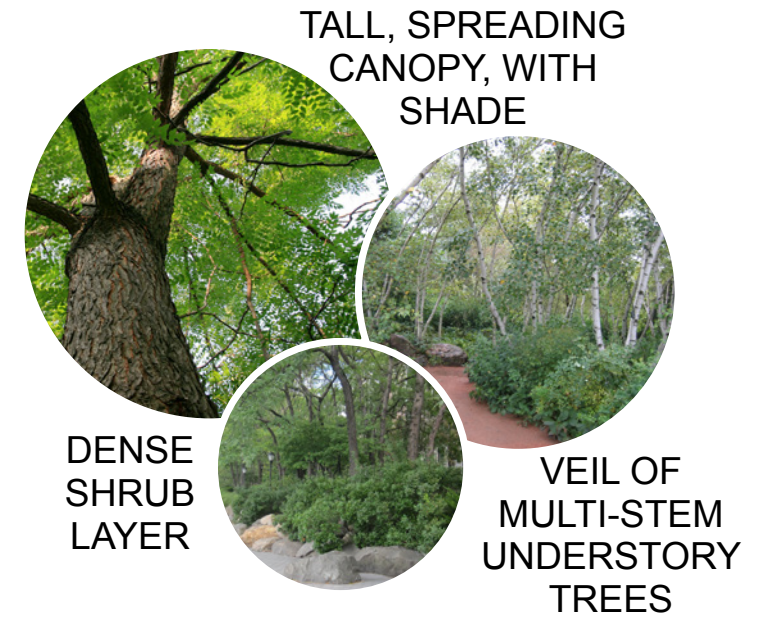
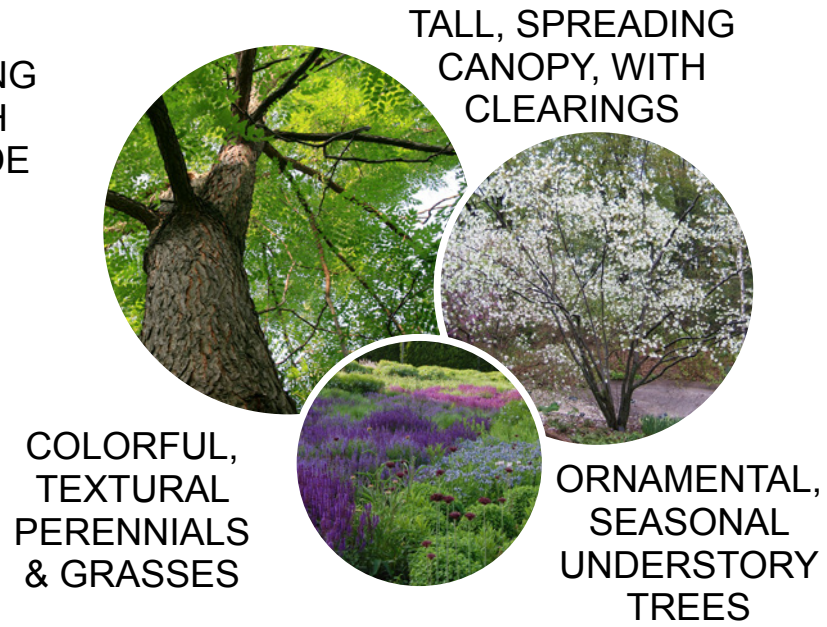


**EXISTING 6TH STREET GROVE**



In areas of flood protection existing trees will be removed, topography will be elevated, and park landscapes will be planted with resilient tree species at higher elevations. Project-wide approximately 700-750 trees will be removed in a phased construction approach, and approximately 1,200 new trees will be planted.





**HIGH, FULL CANOPY CREATES CONNECTED, DAPPLED SHADE**



**EXISTING GROVE**

- Location: Existing groves
- Mulch groundplane maintains open sight lines and open circulation
- Maintenance: Mature trees, mulch



**PASTORAL GROVE**

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



**LAYERED GROVE**

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



**THICKENED GROVE**

- Location: Paths and thresholds to frame views and buffer spaces
- Understory trees and shrub layer frame views and guide circulation forward
- Maintenance: Trees, shrubs









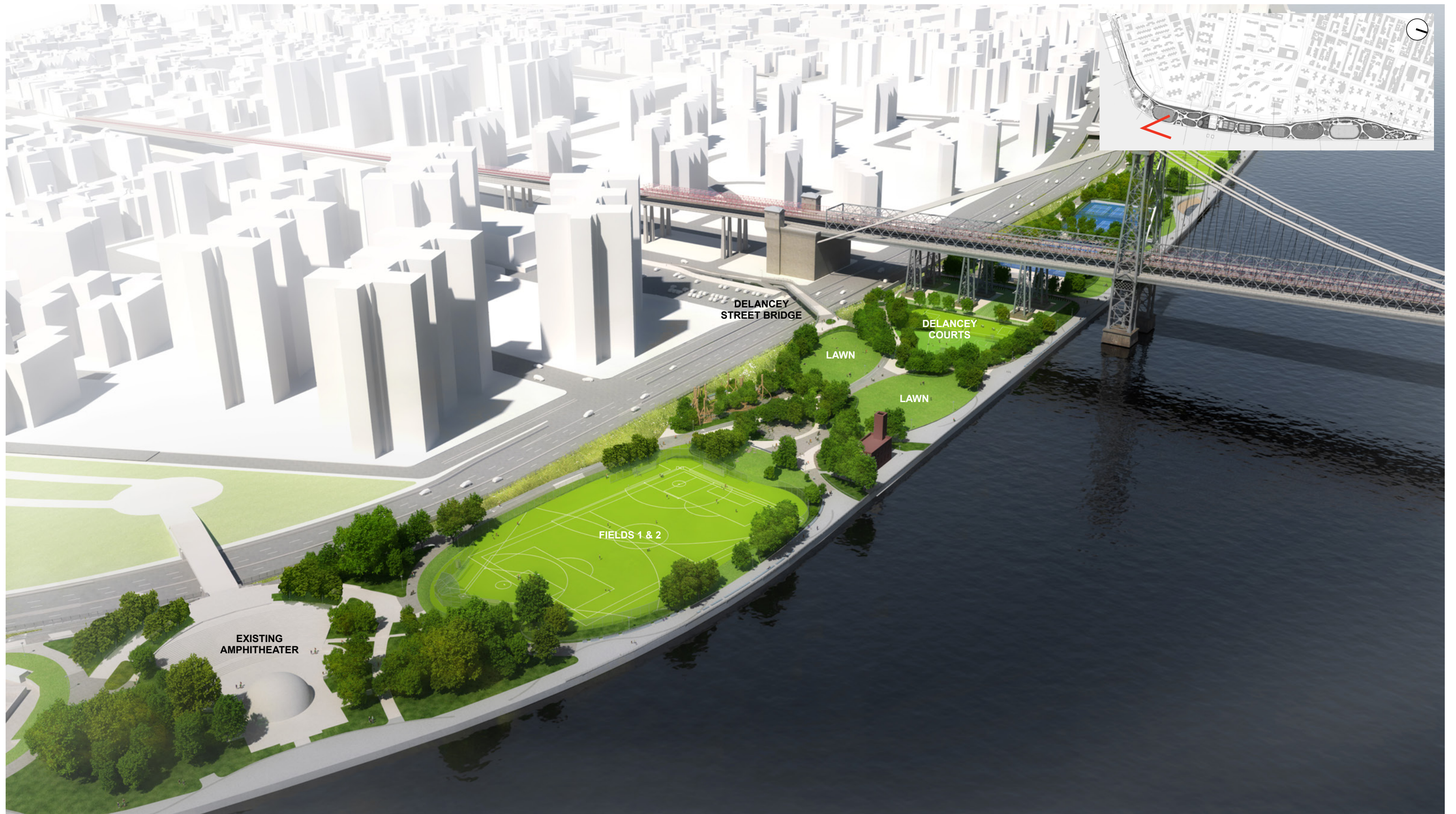
















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**COMMUNITY BOARD PROJECT UPDATE**  
**EAST SIDE COASTAL RESILIENCY PROJECT**  
MARCH 27, 2018

**Delancey Street Bridge**  
**Aerial: Preliminary Review** B-14





**SIDEWALK**

**6.6'**

**BRIDGE**

**12'**





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MARCH 27, 2018

**Delancey Street Bridge**  
**Preliminary Review** B-16





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**EAST SIDE COASTAL RESILIENCY PROJECT**  
MARCH 27, 2018

**Delancey Street Bridge**  
**Existing Conditions** B-17





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**EAST SIDE COASTAL RESILIENCY PROJECT**  
MARCH 27, 2018

**Delancey Street Bridge**  
**Preliminary Review** B-18









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**EAST SIDE COASTAL RESILIENCY PROJECT**  
MARCH 27, 2018

**Delancey Bridge Landing**  
**Preliminary Review** B-20





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**EAST SIDE COASTAL RESILIENCY PROJECT**  
MARCH 27, 2018

**Delancey St. Area**  
**Ecology Plaza View** B-21





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**EAST SIDE COASTAL RESILIENCY PROJECT**  
MARCH 27, 2018

**Delancey St. Area**  
**Existing Conditions View** B-22









**DELANCEY GREAT LAWN**



**DELANCEY SPORTS AREA**



**NATURE EXPLORATION**



**DELANCEY WATERFRONT**





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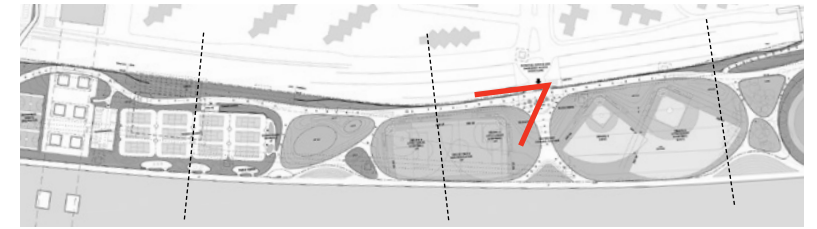
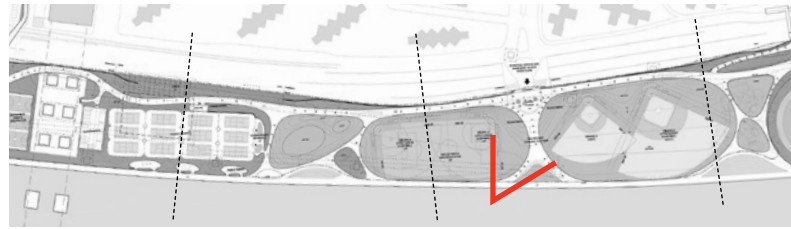
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**EAST SIDE COASTAL RESILIENCY PROJECT**  
MARCH 27, 2018

**Tennis Courts / Fields 3&4**  
**Aerial View B-25**





**HOUSTON STREET CONNECTION AERIAL**



**HOUSTON STREET CONNECTION**









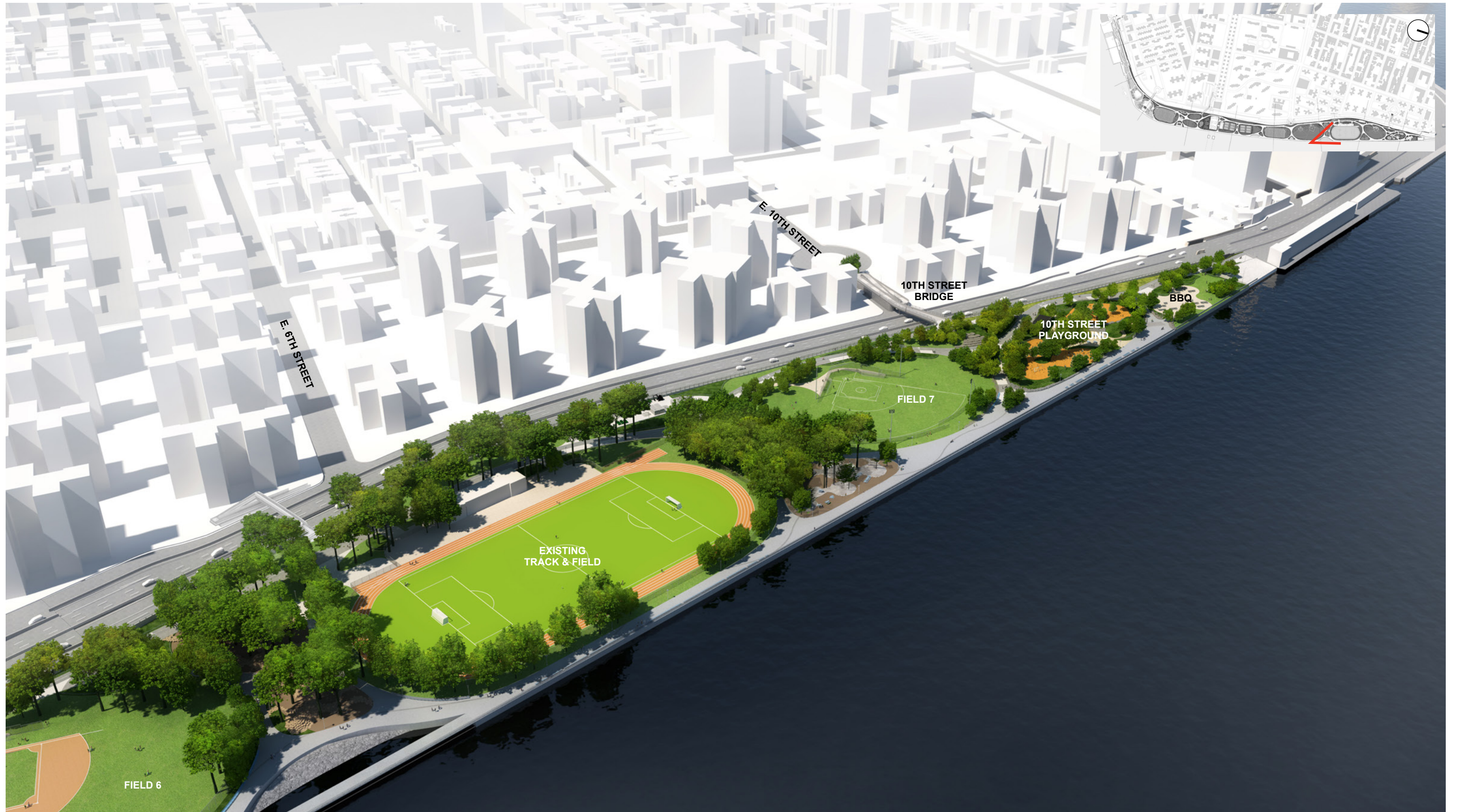
















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MARCH 27, 2018

**10th Street Bridge**  
**Aerial: Preliminary Review** B-32













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**10th Street Bridge**  
**Preliminary Review** B-35



















# NEXT STEPS

- **Final design advancement**
  - **Finalize materials and finishes**
  - **Continue coordination with City Agencies, Utilities Community Boards, and PDC**
- **Advance construction phasing and sequencing studies**
- **Release draft EIS - anticipated July 2018**
- **Submit ULURP application - anticipated July 2018**
- **Final Design - PDC and Community Board review**



# UPCOMING MEETINGS

- **PDC - Preliminary Design Review**
  - **CB6 Full Board Meeting (4/11/18)**
  
- **Community Engagement Meetings (TBD - late April / May)**
  - **Study Area 1 South (Montgomery St to Houston St)**
  - **Study Area 1 North (Houston St to 14th St)**
  - **Study Area 2 (14th St to 25th St)**





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