

East Side Coastal Resiliency

Community Board 3
Parks, Recreation, Waterfront and Resiliency
Committee

30 Delancey Street
(BRC Senior Services Center)

July 11, 2019



PRESENTATION AGENDA

PROJECT OVERVIEW & SCHEDULE

SITE SYSTEMS AND STRATEGY

DESIGN REVIEW

SITE ELEMENTS

An aerial architectural rendering of a city waterfront development. The scene shows a dense urban area with numerous buildings of varying heights. A prominent feature is a large, curved waterfront promenade with several green spaces, including what appears to be a baseball field and other recreational areas. A suspension bridge spans across a body of water, connecting the city to another part of the waterfront. The entire image is overlaid with a semi-transparent teal color, and the title text is centered in white.

PROJECT OVERVIEW & SCHEDULE

PROJECT GOALS & ORIGIN

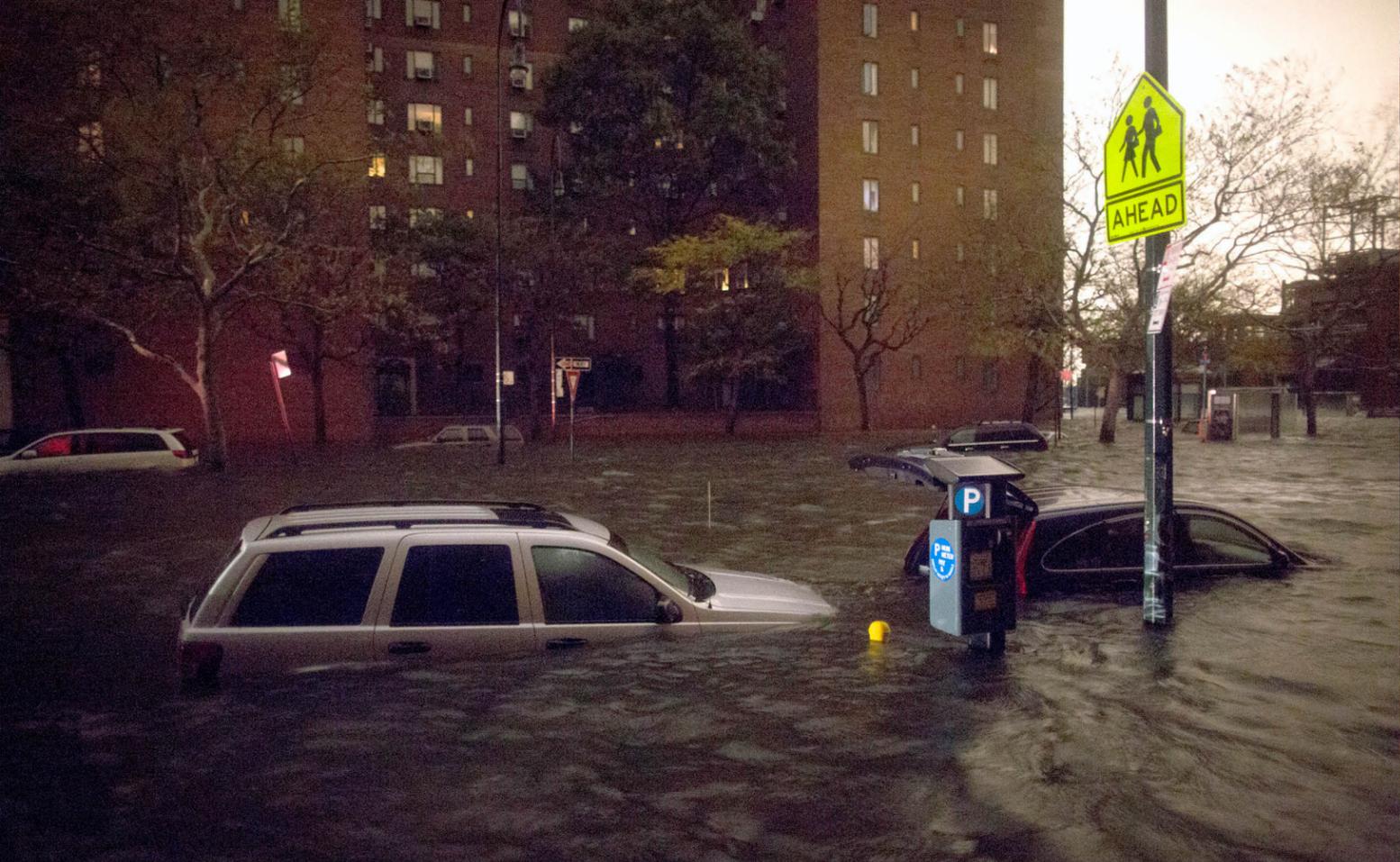
Provide a reliable, integrated flood protection system; minimize use of closure structures.

Improve waterfront open spaces and access.

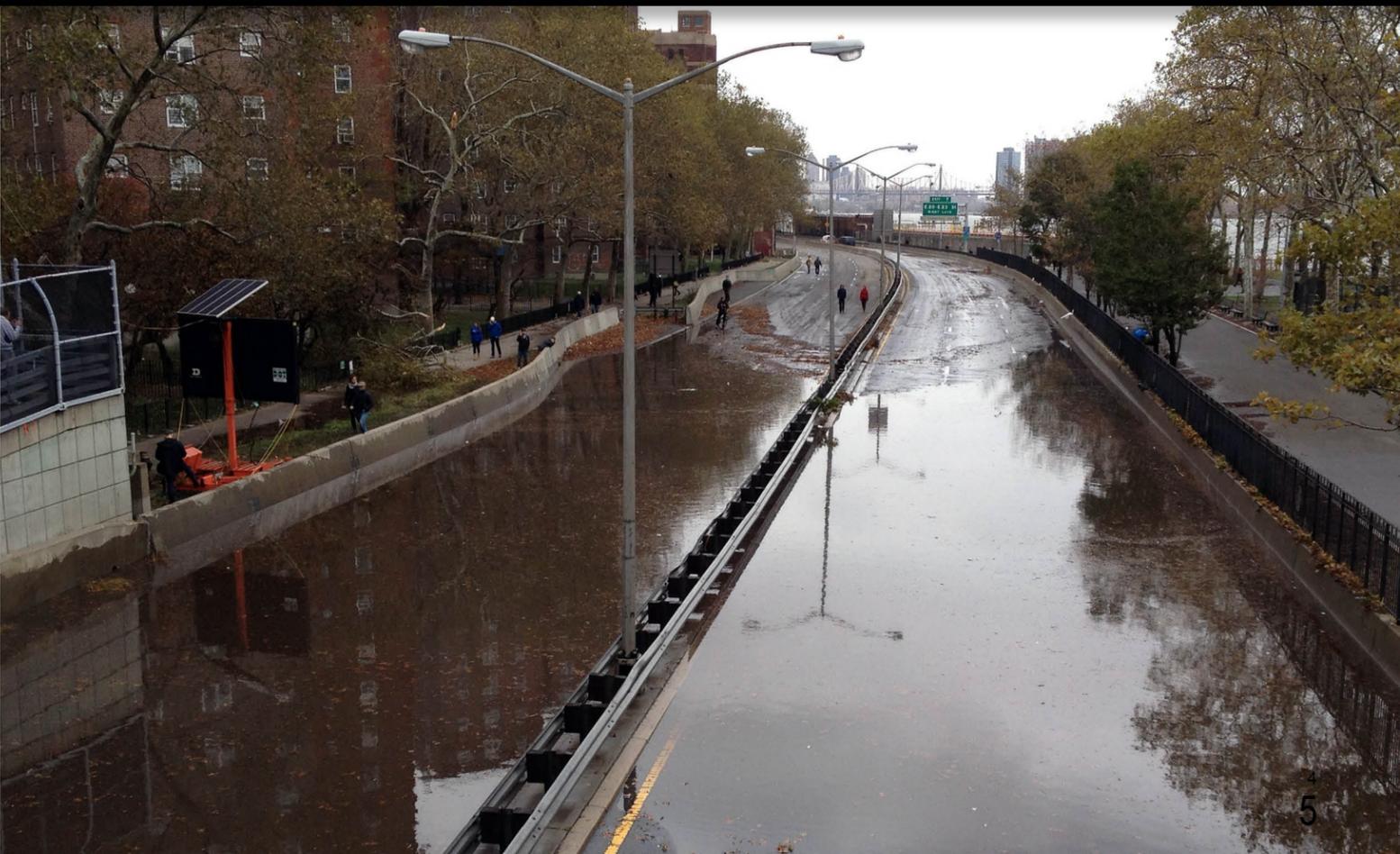
Achieve implementation milestones and project funding allocations as established by HUD.

Respond quickly to the urgent need for increased flood protection and resiliency.





PROVIDE FLOOD PROTECTION



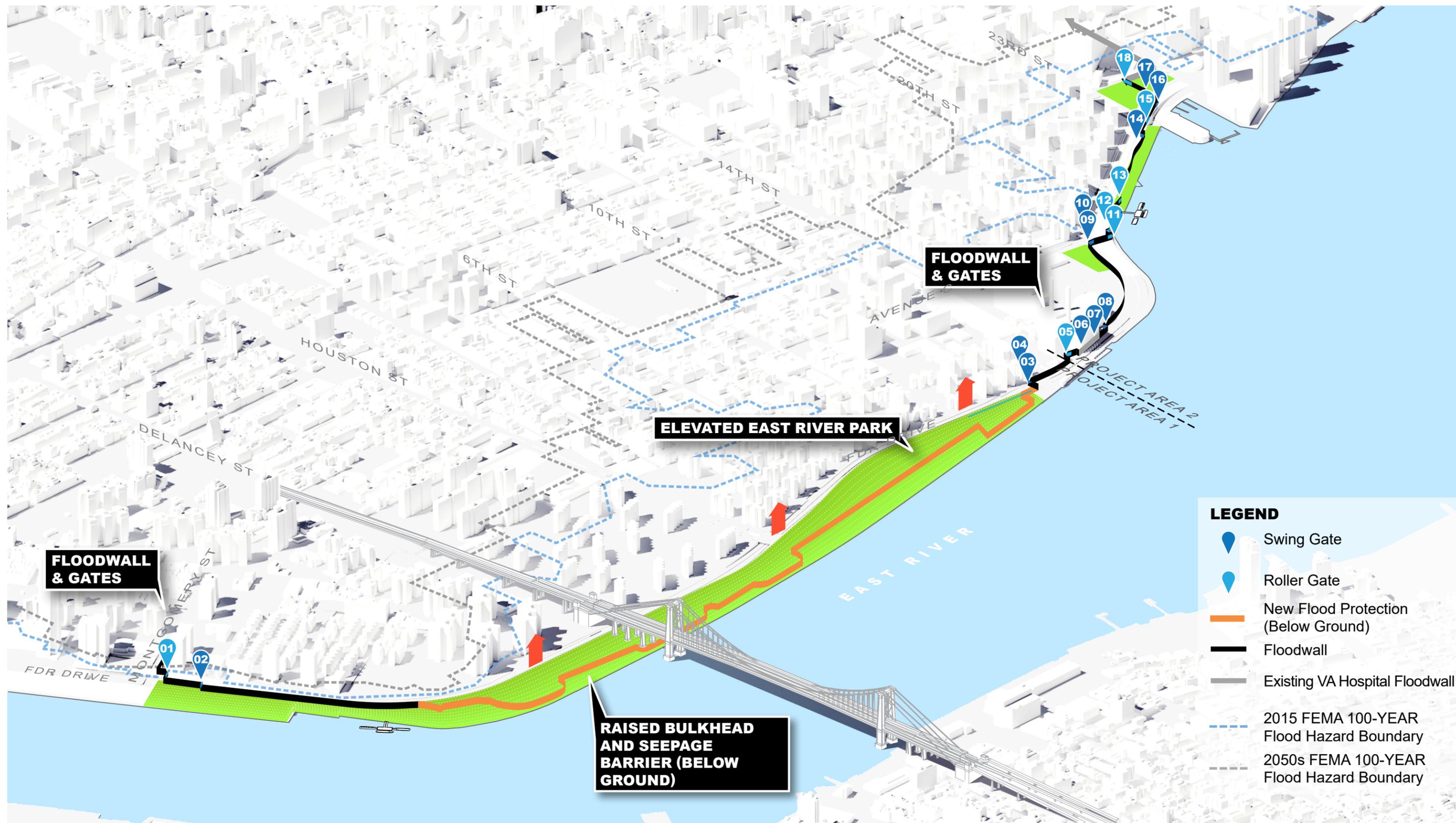
OVERALL PROJECT AREA

PROJECT AREA 1 AND 2



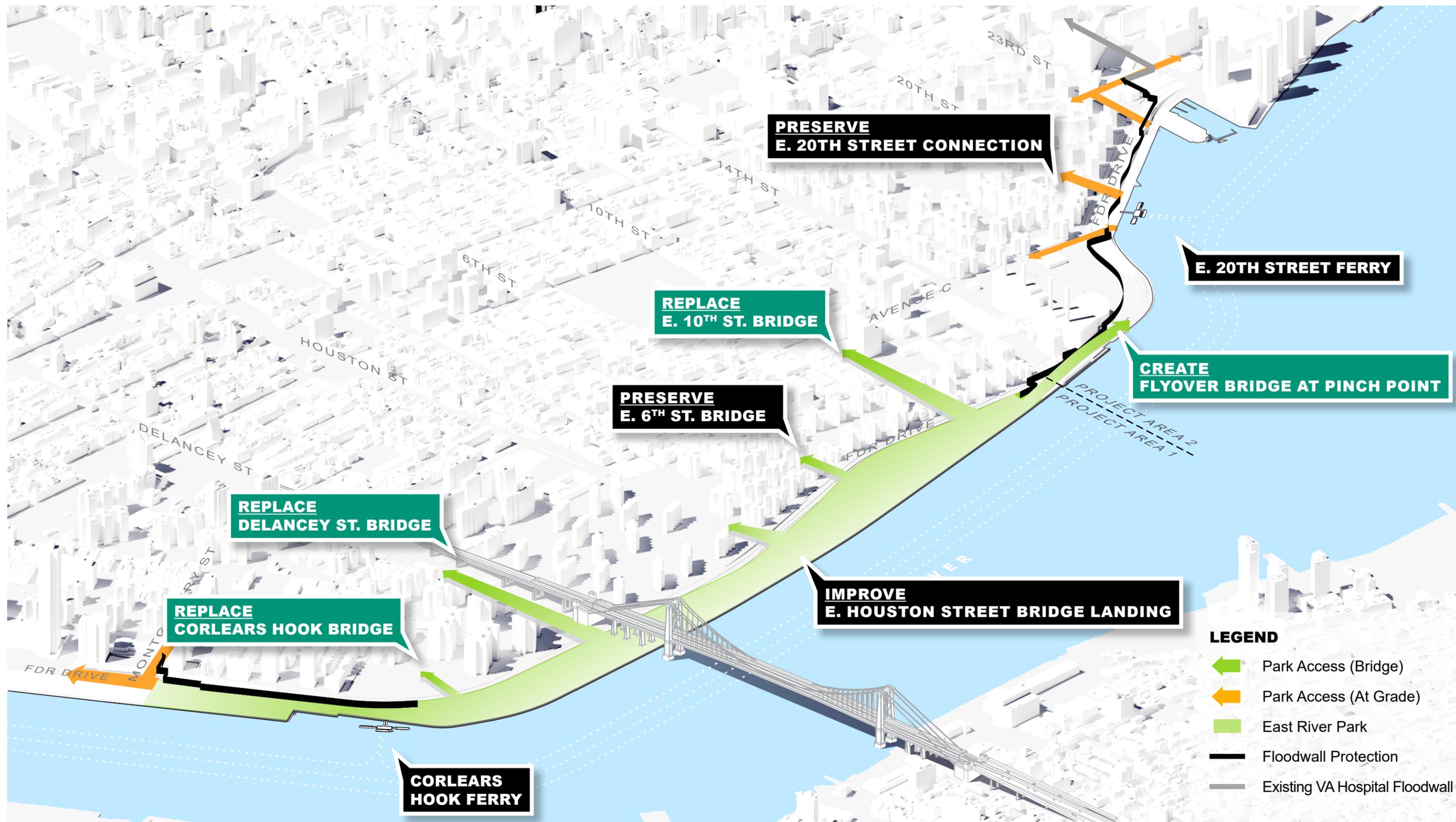
IMPROVED RESILIENCY FOR COMMUNITY

INTEGRATED FLOOD PROTECTION SYSTEM



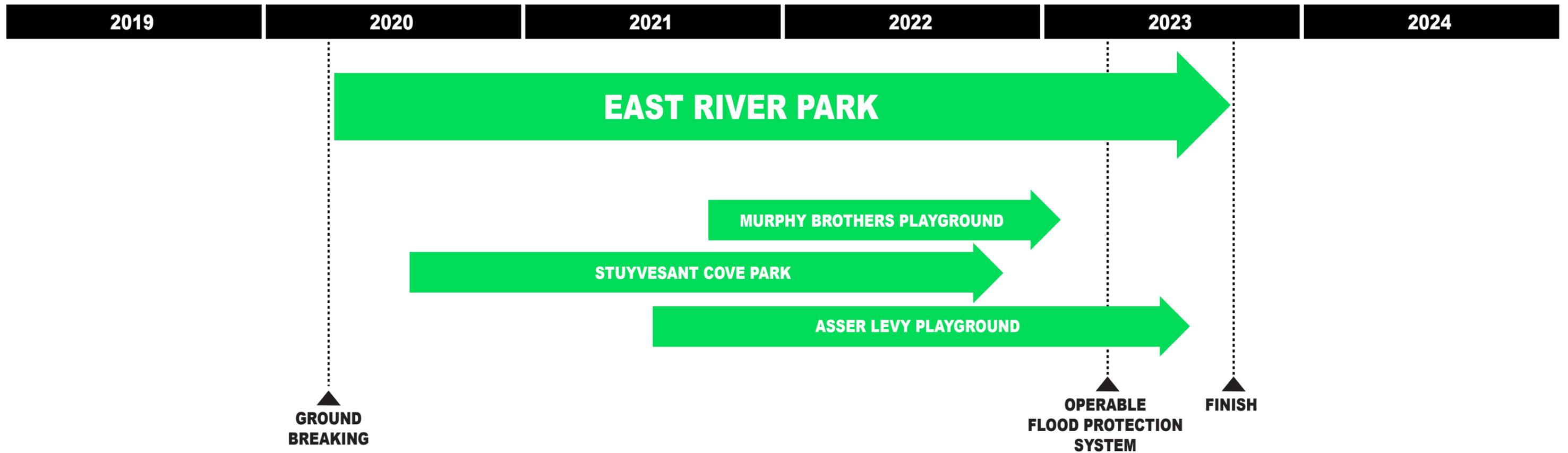
IMPROVED WATERFRONT ACCESS

REPLACING, IMPROVING AND CREATING NEW CONNECTIONS

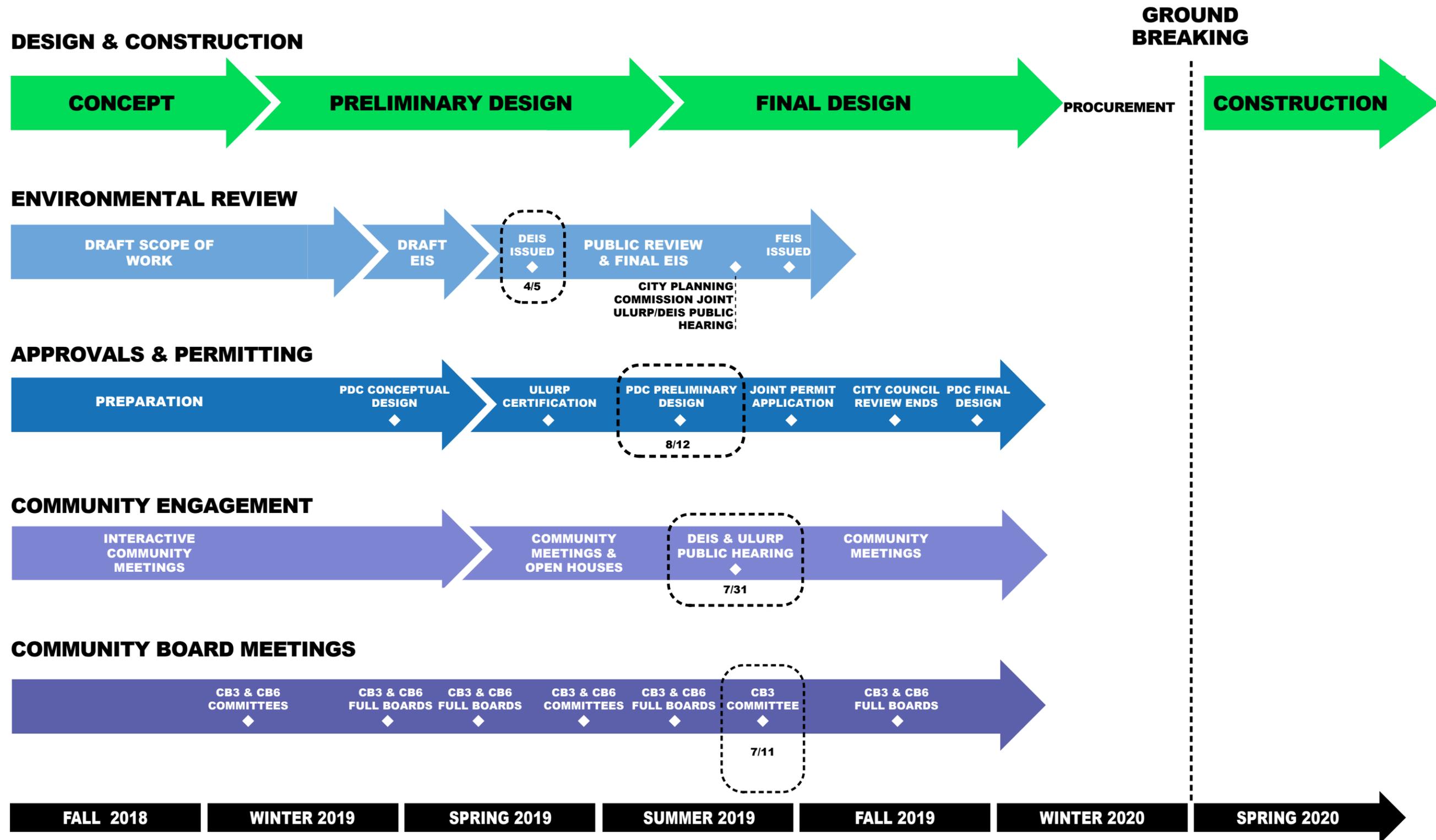


IMPROVED SCHEDULE

OPERABLE SYSTEMS FOR 2023 HURRICANE SEASON



PROJECT SCHEDULE OVERVIEW



An aerial architectural rendering of a city waterfront development. The scene shows a dense urban grid of buildings on the left, transitioning into a waterfront area with a suspension bridge crossing a body of water. Along the waterfront, there are several green sports fields, including what appears to be a baseball field and several soccer fields. The entire image is overlaid with a semi-transparent teal color.

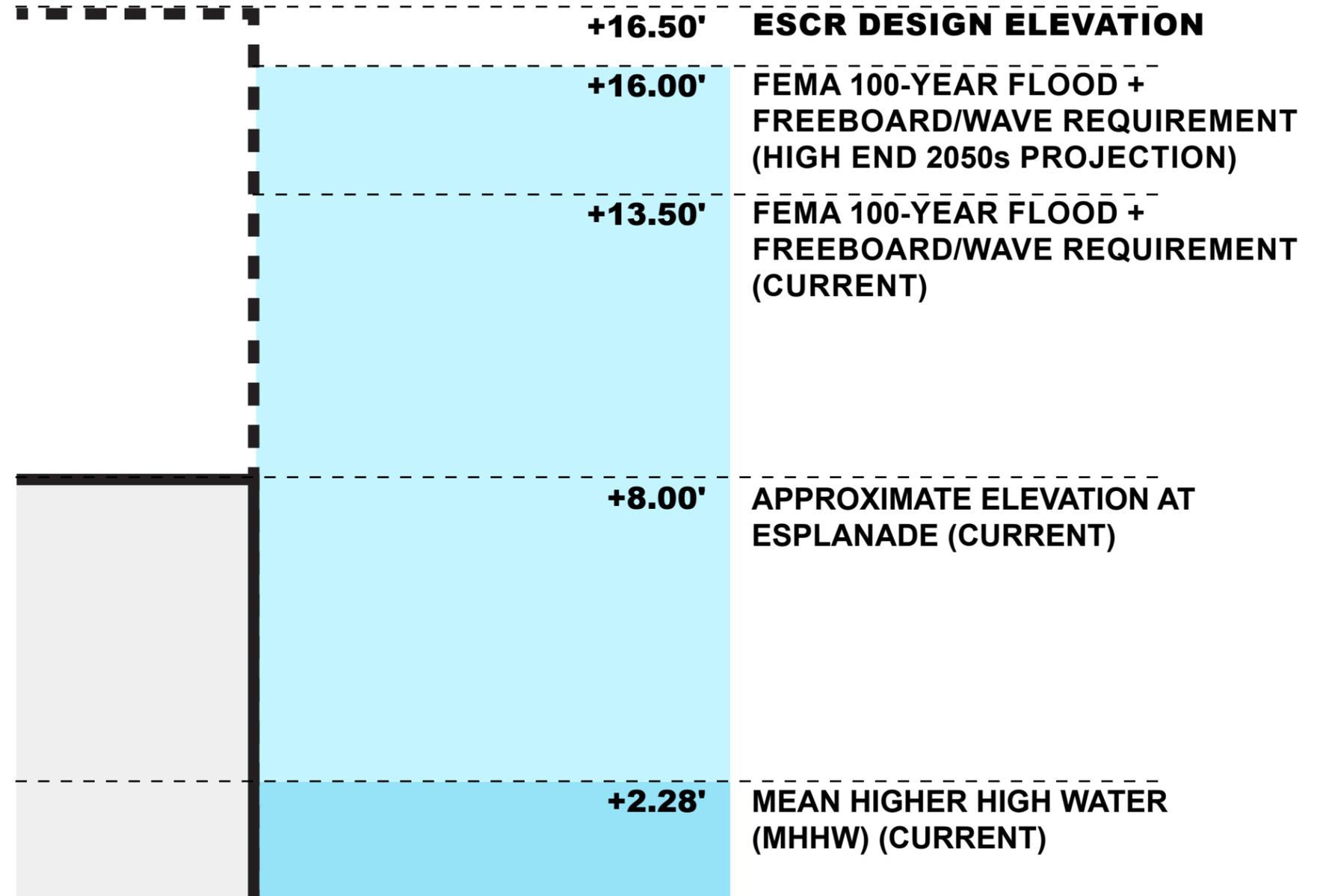
SITE STRATEGY

SITE STRATEGY

FLOOD DESIGN ELEVATIONS

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

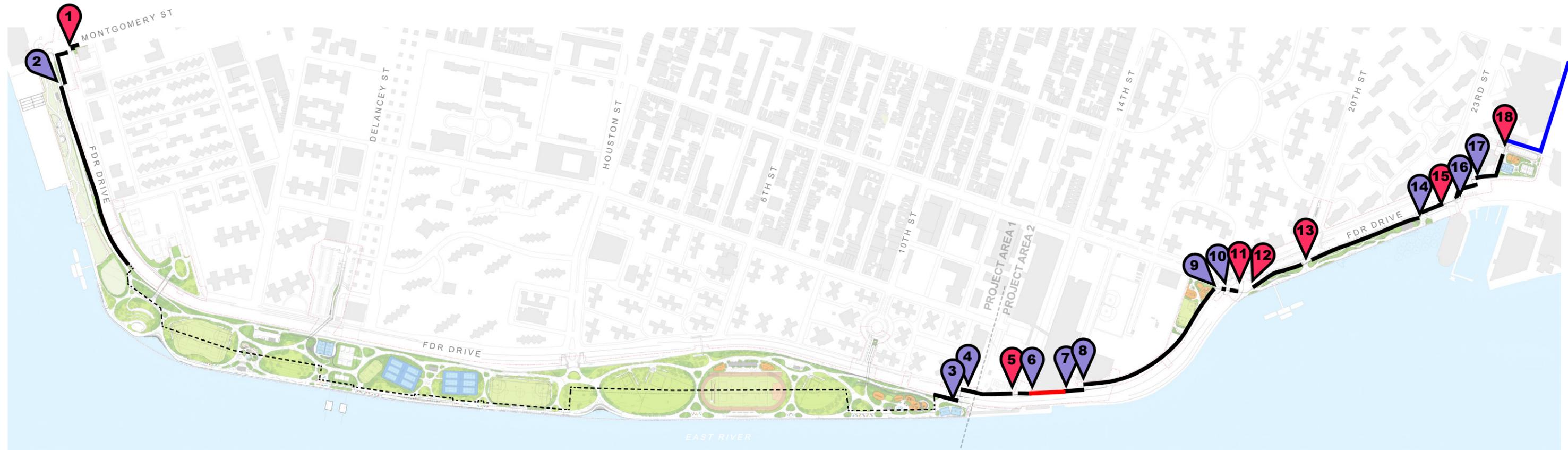
DESIGN HEIGHT: DESIGN HEIGHT DETERMINED BY 2050s 100-YEAR STORM ELEVATION (INCL 30" SEA LEVEL RISE) + WAVE ACTION



NOTE: ALL ELEVATIONS SHOWN IN NAVD88

SITE STRATEGY

FLOOD GATES



(NOT TO SCALE) 

-  SWING GATE (11)
-  ROLLER GATE (7)

-  FLOOD PROTECTION (ABOVE GRADE)
-  FLOOD PROTECTION (BELOW GRADE)
-  CON EDISON PERIMETER PROTECTION (CLOSURE NOT SHOWN)
-  VA MEDICAL CENTER PERIMETER PROTECTION (CLOSURE NOT SHOWN)



TYPICAL SWING GATE



TYPICAL ROLLER GATE

SITE STRATEGY

UTILITIES



SOUTH INTERCEPTOR GATE



NORTH INTERCEPTOR GATE

SOUTH INTERCEPTOR GATE BUILDING AND CHAMBER

NORTH INTERCEPTOR GATE BUILDING AND CHAMBER (PA2 BEYOND)

CARBON FIBER WRAPPING WILL BE USED WHERE NECESSARY TO PROTECT CON EDISON ELECTRICAL LINES BELOW AREAS OF PROPOSED FILL

ALL EXISTING NYCDEP INFRASTRUCTURE WILL BE REPLACED IN EAST RIVER PARK. RECONSTRUCTED SEWERS WILL BE SIZED UP IN ACCORDANCE WITH NYCDEP'S DRAINAGE PLAN CRITERIA.

- ||||| ESPLANADE PIERS (LOADING CONSTRAINTS)
- ESPLANADE TIEBACKS & DEADMAN (ESTIMATED ZONE)
- ESPLANADE CUTOFF WALL
- FLOODWALL 15' PLANTING OFFSET
- FLOOD PROTECTION (ABOVE GRADE)
- - - FLOOD PROTECTION (BELOW GRADE)
- CONED ELECTRIC LINES
- DEP STRUCTURES
- DEP 15' PLANTING OFFSET
- PARALLEL CONVEYANCE

SITE STRATEGY

PARK CIRCULATION



ESPLANADE STRATEGY



GREENWAY STRATEGY



BRIDGE STRATEGY



- ESPLANADE CIRCULATION
- BIKE + PEDESTRIAN
- BIKE LANE ONLY
- BRIDGE CONNECTIONS
- EMBAYMENT

NEW PARK BUILDINGS

PRELIMINARY DESIGN



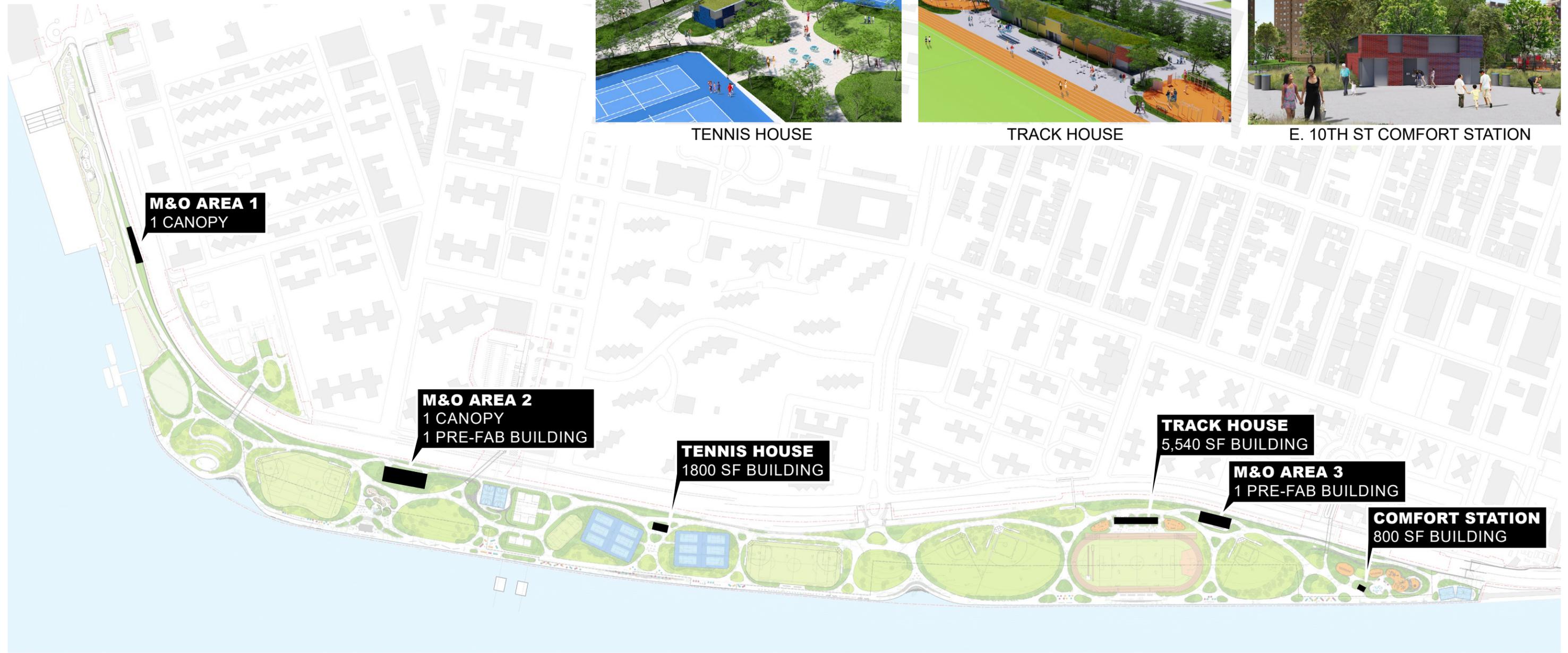
TENNIS HOUSE



TRACK HOUSE



E. 10TH ST COMFORT STATION



M&O AREAS

PRELIMINARY DESIGN



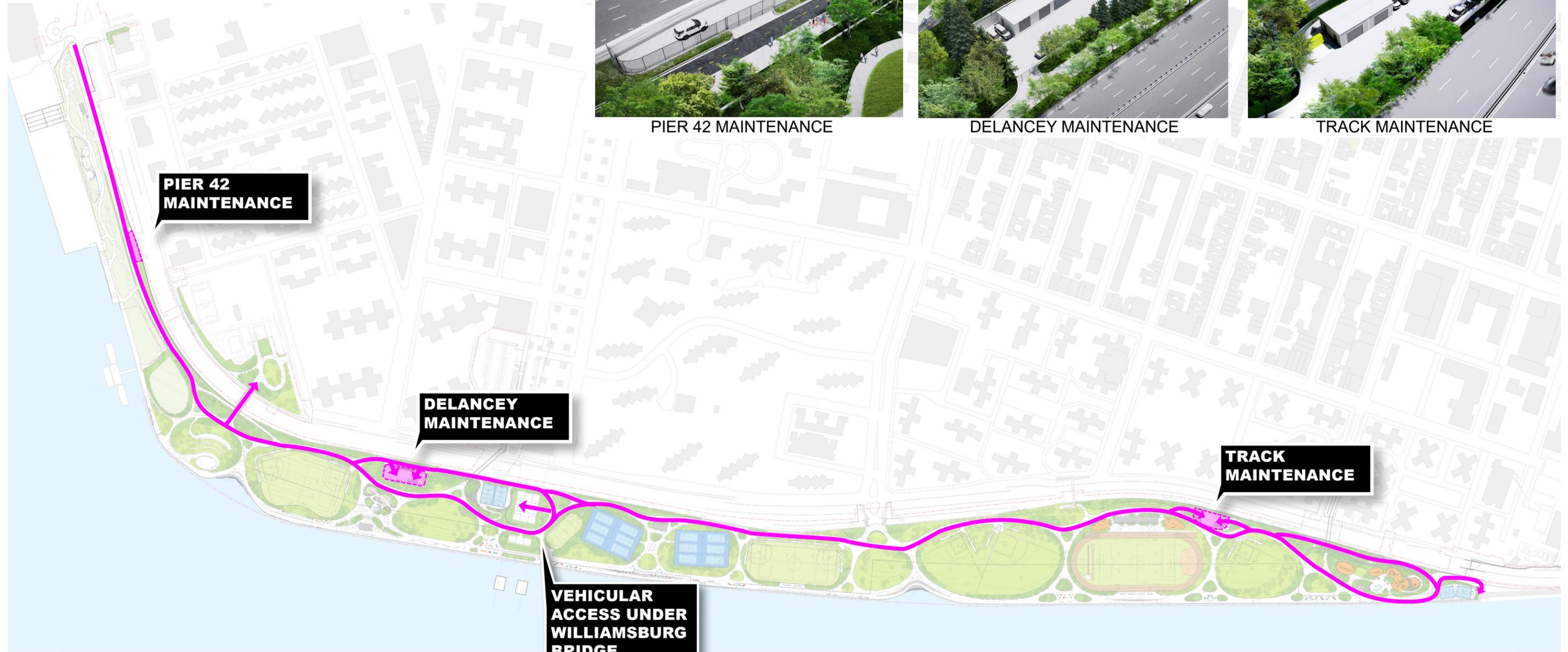
PIER 42 MAINTENANCE



DELANCEY MAINTENANCE



TRACK MAINTENANCE



**PIER 42
MAINTENANCE**

**DELANCEY
MAINTENANCE**

**TRACK
MAINTENANCE**

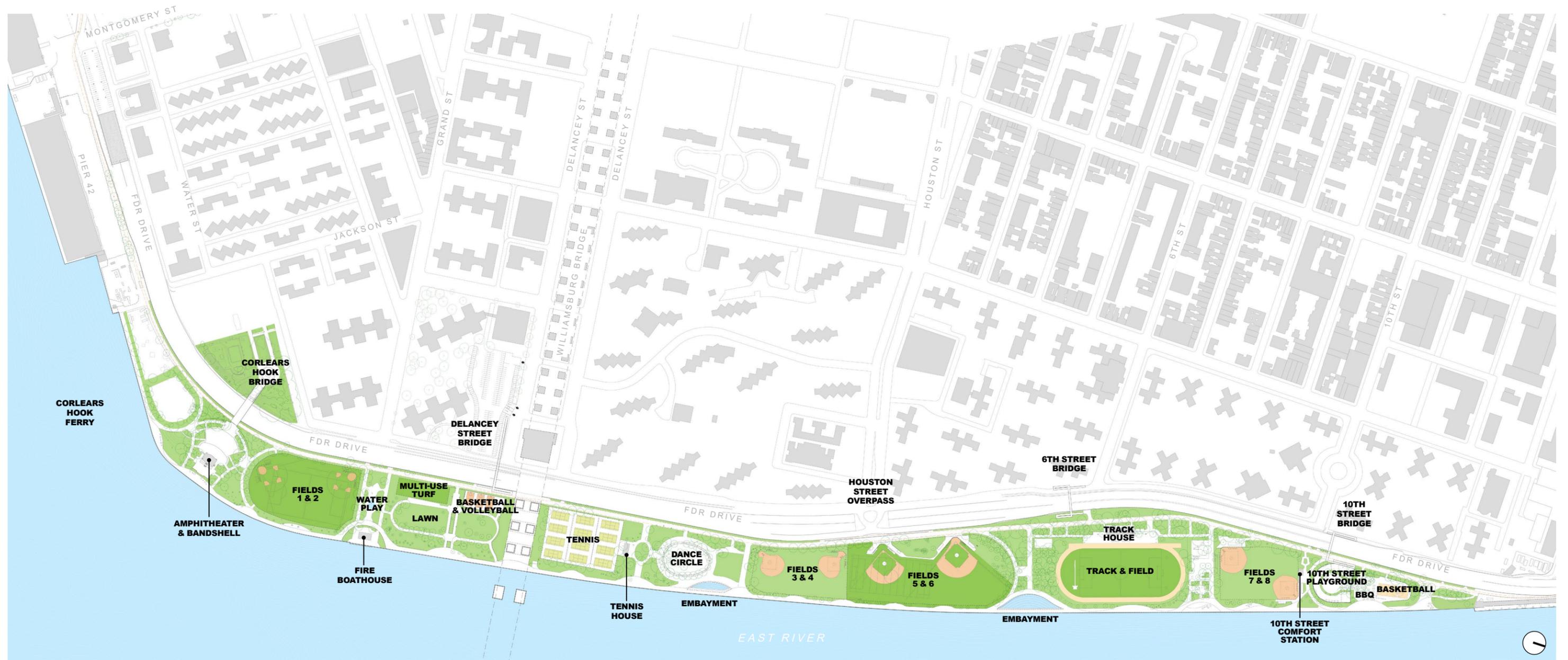
**VEHICULAR
ACCESS UNDER
WILLIAMSBURG
BRIDGE**

An aerial architectural rendering of a city waterfront development project. The scene shows a dense urban grid of buildings along a riverbank. A prominent bridge with a suspension structure crosses the river. In the foreground, there are landscaped areas with green lawns, trees, and what appears to be a sports field or park. The entire image is overlaid with a semi-transparent teal color.

SITE DESIGN: PROJECT AREA 1

PA1 SITE DESIGN

EXISTING CONDITIONS



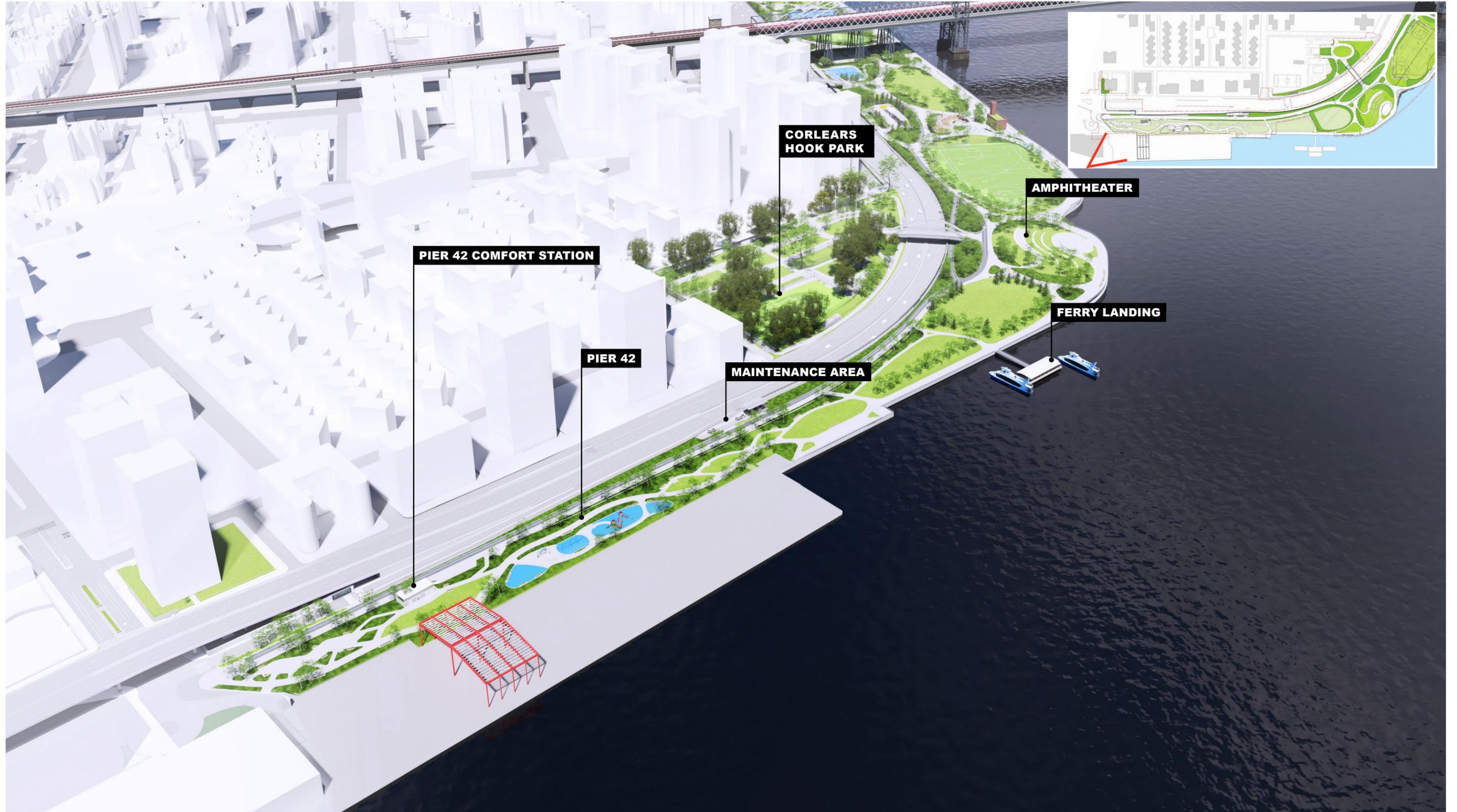
PA1 SITE DESIGN

PRELIMINARY DESIGN



PIER 42 AREA

PRELIMINARY DESIGN



MONTGOMERY STREET TIE-BACK

FLOOD GATE IN OPEN POSITION



FLOODWALL
TOP OF WALL: EL. +16.5
WALL HT: APPROX. 1.5'

FLOODWALL
TOP OF WALL: EL. +16.5
WALL HT: APPROX. 4.5'

**FLOOD GATE IN
OPEN POSITION**

**DESIGN TEAM IS STUDYING
FLOODWALL FINISHES**

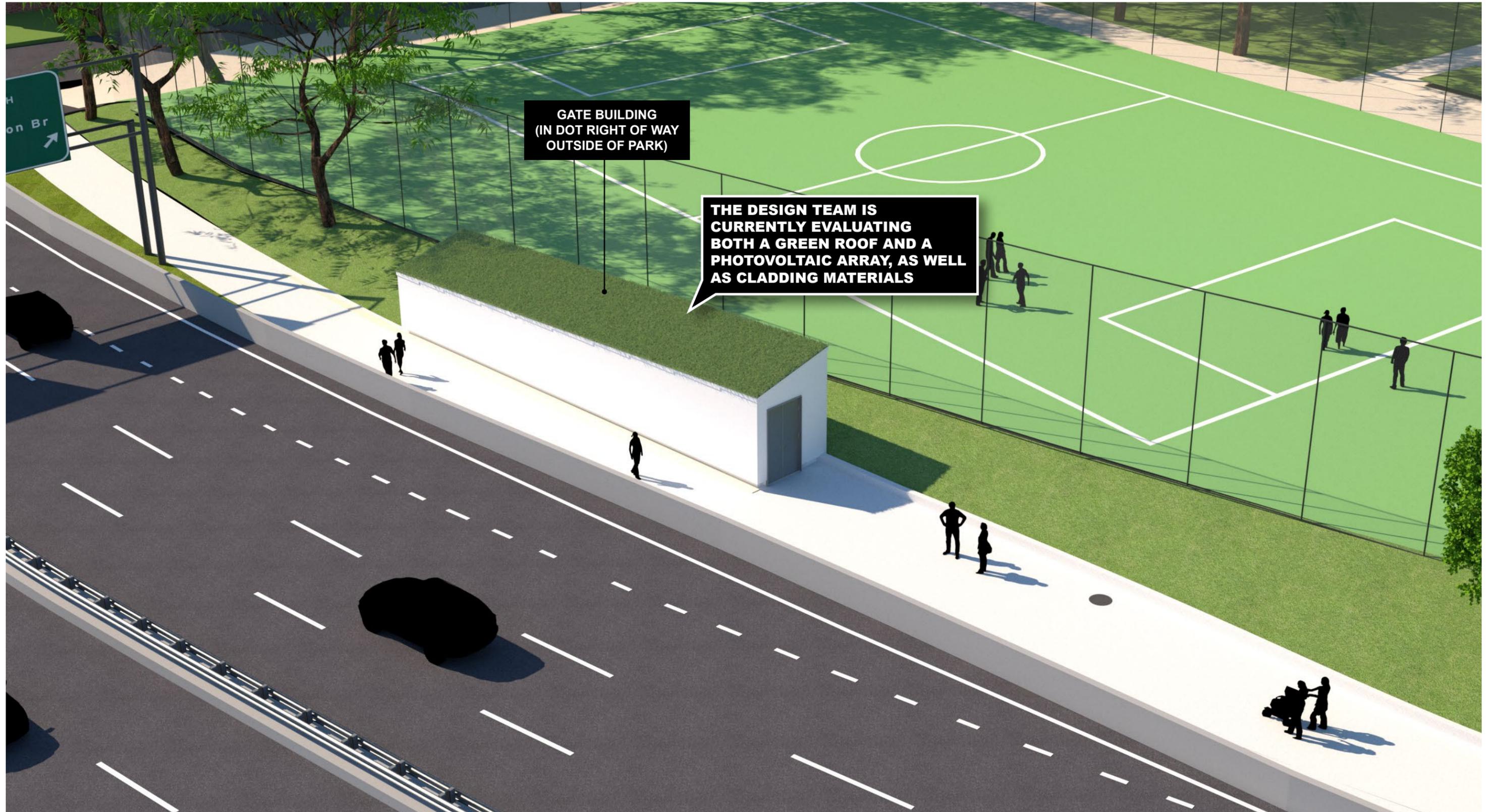
MONTGOMERY STREET TIE-BACK

FLOOD GATE IN CLOSED POSITION



SOUTH GATE BUILDING

PRELIMINARY DESIGN



CORLEARS HOOK TO DELANCEY STREET

PRELIMINARY DESIGN



CORLEARS SHARED USE PATH

PRELIMINARY DESIGN



AMPHITHEATER

PRELIMINARY DESIGN



IMPACTS TO EXISTING TREES AND PROPOSED PLANTING IN CORLEARS HOOK PARK ARE BEING FURTHER STUDIED

CORLEARS HOOK PARK

RE-CONSTRUCTED CORLEARS HOOK BRIDGE

RECONSTRUCTED AMPHITHEATER

AMPHITHEATER DESIGN SUPPORTS DAY-TO-DAY USE, COMMUNITY PROGRAMMING & PASSIVE RECREATION



CORLEARS HOOK BRIDGE LANDING

PRELIMINARY DESIGN



AMPHITHEATER DESIGN IS IN PROGRESS

NATURE EXPLORATION & WATER PLAY

PRELIMINARY DESIGN



NATURE EXPLORATION & WATER PLAY

PRELIMINARY DESIGN



DELANCEY BRIDGE

PRELIMINARY DESIGN



DELANCEY BRIDGE LANDING

PRELIMINARY DESIGN



HOUSTON STREET

PRELIMINARY DESIGN



TENNIS HOUSE

PRELIMINARY DESIGN



TENNIS HOUSE

PARK VIEW



HOUSTON STREET ENTRANCE

PRELIMINARY DESIGN



ESPLANADE EMBAYMENT

PRELIMINARY DESIGN



TRACK & EAST 10TH STREET

PRELIMINARY DESIGN



TRACK AND FIELD

PRELIMINARY DESIGN



TRACK AND FIELD

PRELIMINARY DESIGN



FITNESS AREA DESIGN IS IN PROGRESS

CHALLENGE COURSE DESIGN IS IN PROGRESS

TRACK HOUSE

PARK VIEW



10TH STREET BRIDGE

FDR VIEW



10TH STREET BRIDGE

PARK VIEW



10TH STREET BBQ

PRELIMINARY DESIGN



10TH STREET COMFORT STATION

PRELIMINARY DESIGN



10TH STREET PLAYGROUND

PRELIMINARY DESIGN



FDR DRIVE GATE

GATE IN OPEN POSITION



FDR DRIVE GATE

GATE IN CLOSED POSITION



E. 13TH ST. FLOOD PROTECTION

FUTURE FLYOVER AERIAL VIEW

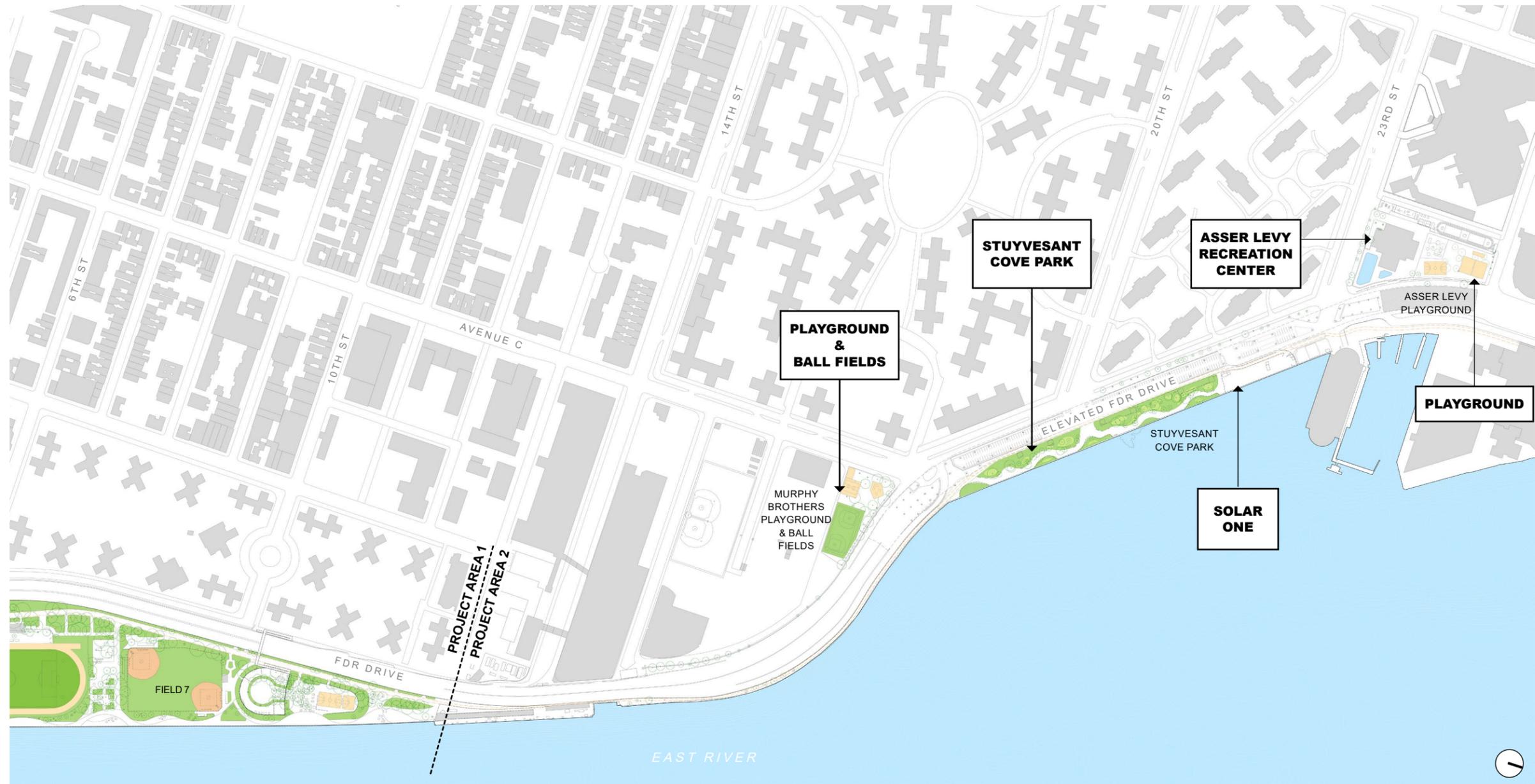




**SITE DESIGN:
PROJECT AREA 2**

SITE DESIGN PA 2

EXISTING CONDITIONS



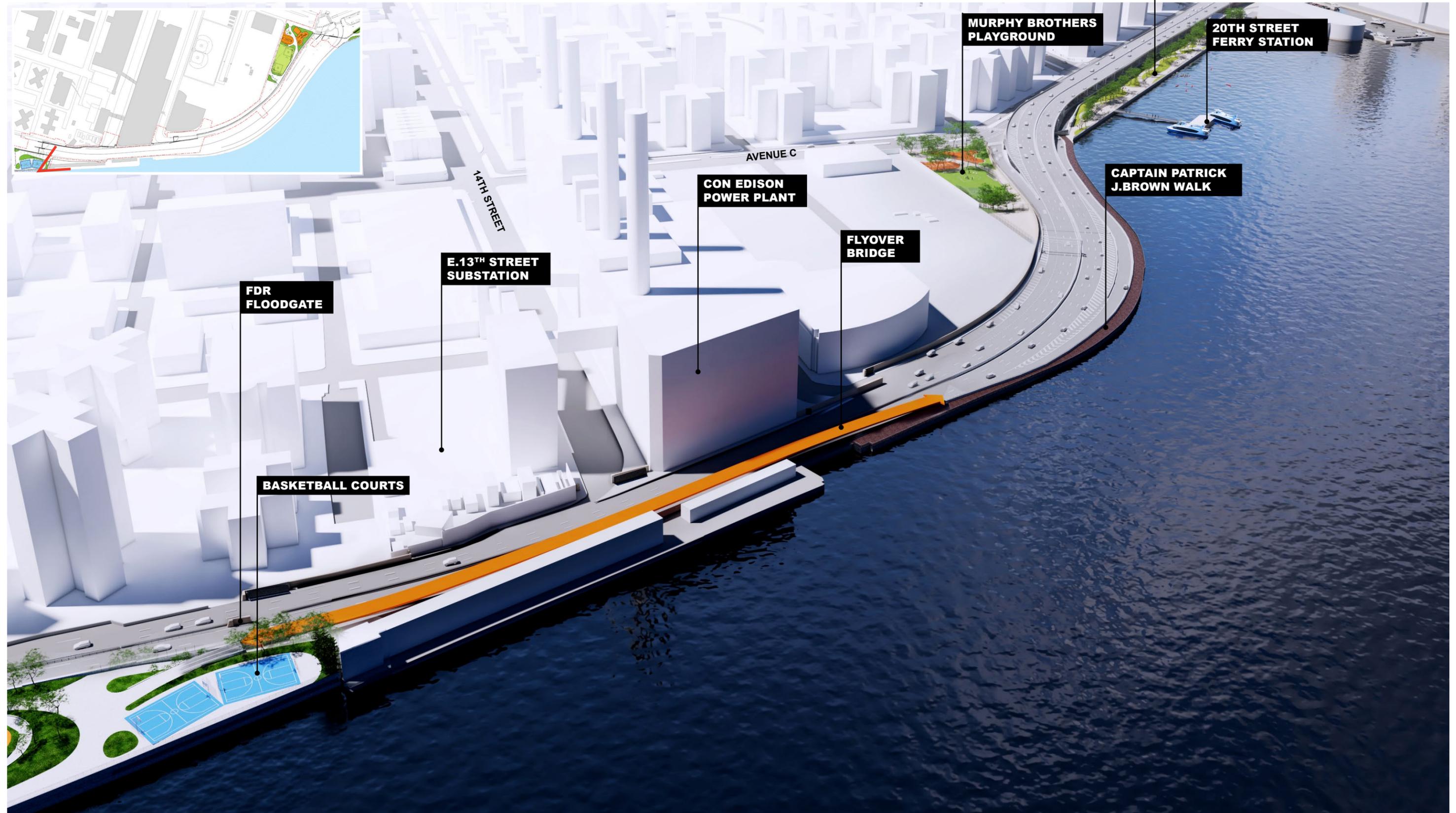
SITE DESIGN PA 2

PRELIMINARY DESIGN



FLYOVER BRIDGE

PRELIMINARY DESIGN



PROJECT AREA 2

PRELIMINARY DESIGN



MURPHY BROTHERS PLAYGROUND

PRELIMINARY DESIGN



MURPHY BROTHERS PLAYGROUND

PRELIMINARY DESIGN



STUYVESANT COVE PARK

PRELIMINARY DESIGN



STUYVESANT COVE PARK

PRELIMINARY DESIGN



NORTH GATE BUILDING

PRELIMINARY DESIGN

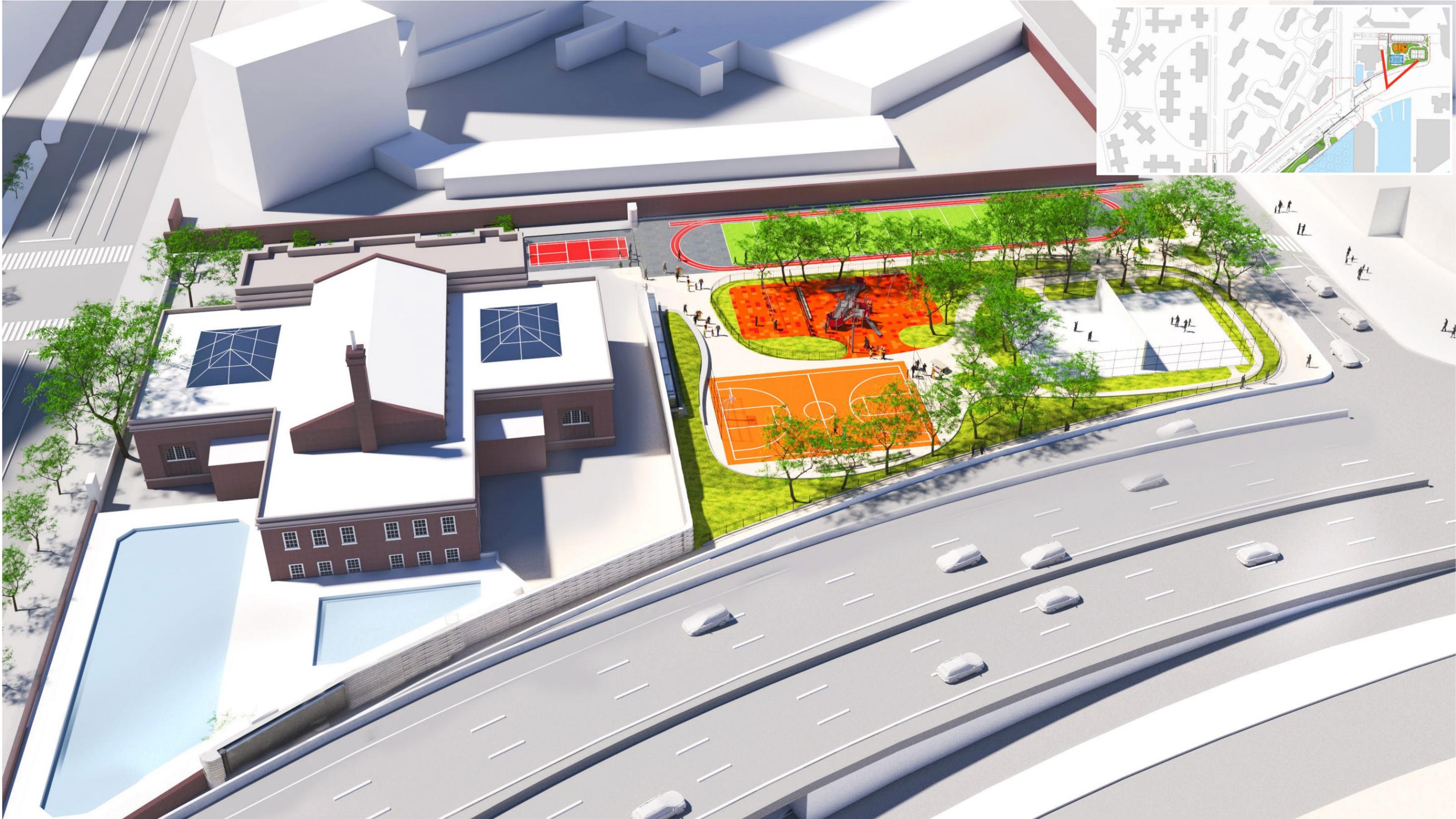


GATE BUILDING

THE DESIGN TEAM IS CURRENTLY EVALUATING BOTH A GREEN ROOF AND A PHOTOVOLTAIC ARRAY, AS WELL AS CLADDING MATERIALS

ASSER LEVY PLAYGROUND

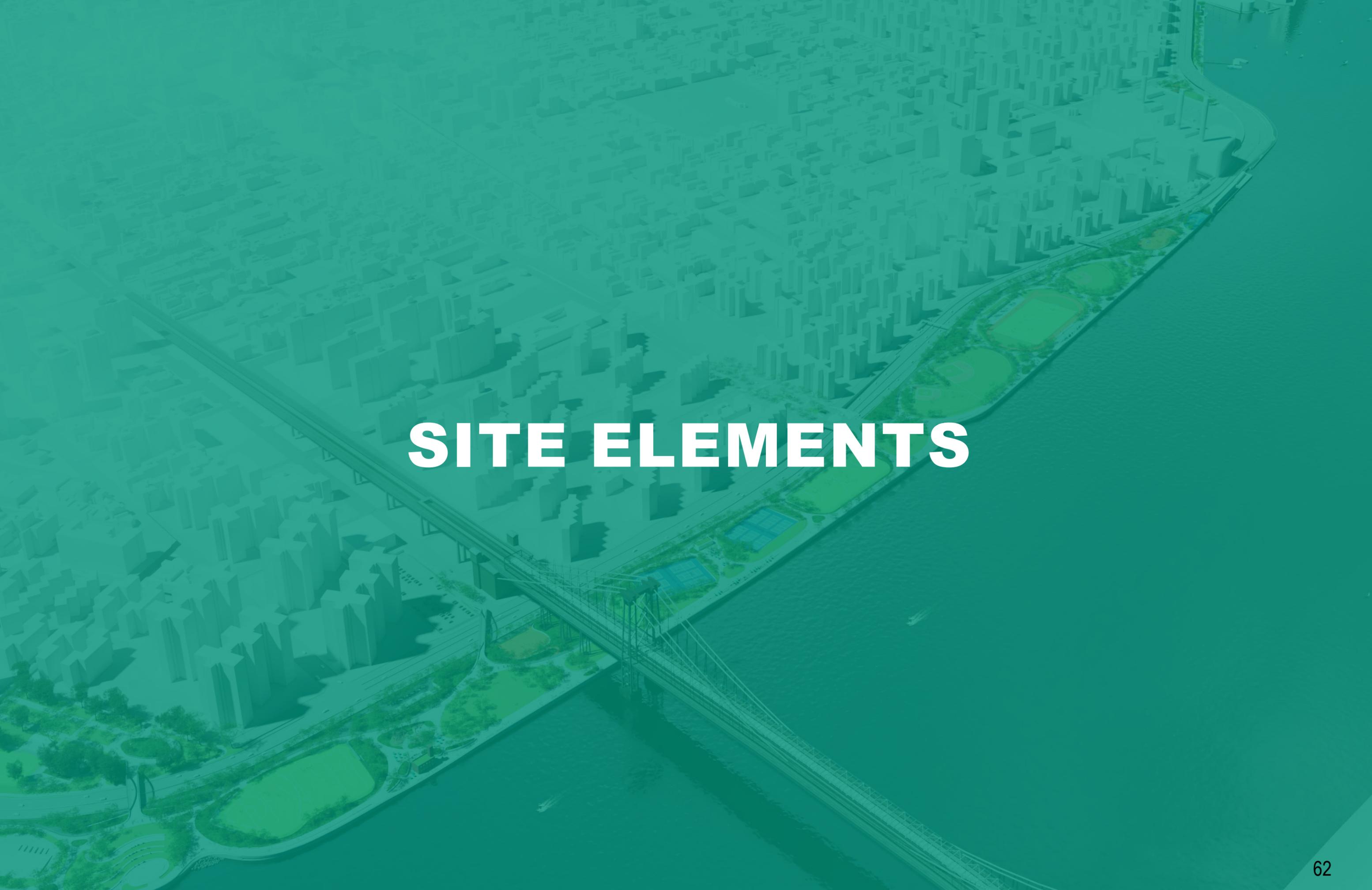
PRELIMINARY DESIGN



DESIGN RESPONSE TO COMMUNITY INPUT

PRELIMINARY DESIGN

- **NEW LIGHTING** INTRODUCED THROUGHOUT THE PARK INCLUDING EVEGEN SOLAR, FLUSHING MEADOW, TYPE B, SPORTS TOWER, DOT DAVIT AND TYPE M LIGHTS;
- **SOLAR LIGHTING** ADDED ALONG THE ESPLANADE IN EAST RIVER PARK (UNDER REVIEW);
- **FLYOVER BRIDGE** TO BE BUILT BY THE CITY AS A SEPARATE PROJECT TO CONNECT EAST 13TH & EAST 15TH STREETS;
- **PREVENTATIVE MEASURES TO DISCOURAGE SKATEBOARDING** INCLUDED IN DESIGN CRITERIA;
- **NEW AMPHITHEATER, TWO BBQ AREAS, OUTDOOR FITNESS AREA & CHALLENGE COURSE** ADDED WITHIN EAST RIVER PARK;
- **BASKETBALL COURTS** ARE PROVIDED BOTH AT DELANCEY AND 10TH STREETS;
- **TREES** PLANTED TO MAXIMIZE SHADE WHEREVER POSSIBLE;
- **THE HIGHWAY FENCE** HAS BEEN REVISED TO A DESIGN BASED ON NYC PARKS' STANDARD STEEL FENCE. THE DESIGN ALSO MINIMIZES THE EXTENT OF THE HIGHWAY FENCE TO ONLY THOSE LOCATIONS REQUIRED BY DOT TRAFFIC PROTECTION STANDARDS.

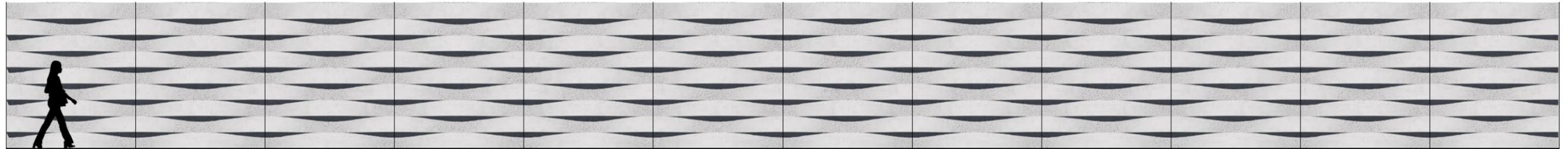
An aerial architectural rendering of a city waterfront development. The scene shows a dense urban grid of buildings on the left, transitioning into a waterfront area on the right. A prominent suspension bridge spans across a body of water, connecting the two areas. Along the waterfront, there are several green spaces, including what appear to be sports fields or parks, and a road with a median. The entire image is overlaid with a semi-transparent teal color. The text 'SITE ELEMENTS' is centered in the middle of the image in a bold, white, sans-serif font.

SITE ELEMENTS

FLOOD AND HIGHWAY WALLS

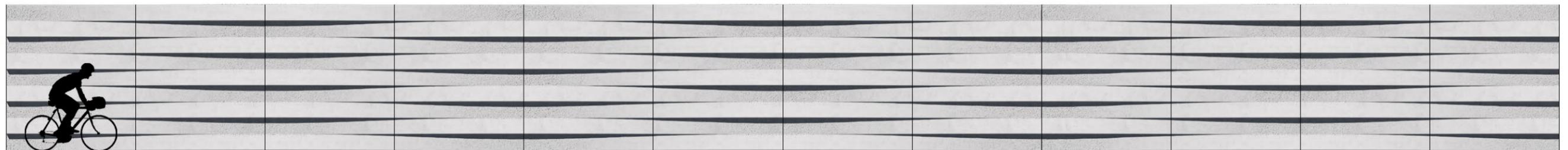
WALL FINISH TOOLKIT

SHORT MODULES



PEDESTRIAN PATH 3.1 MPH = 4.5 FT/S

MEDIUM MODULES



BIKING PATH 9.6 MPH = 14 FT/S

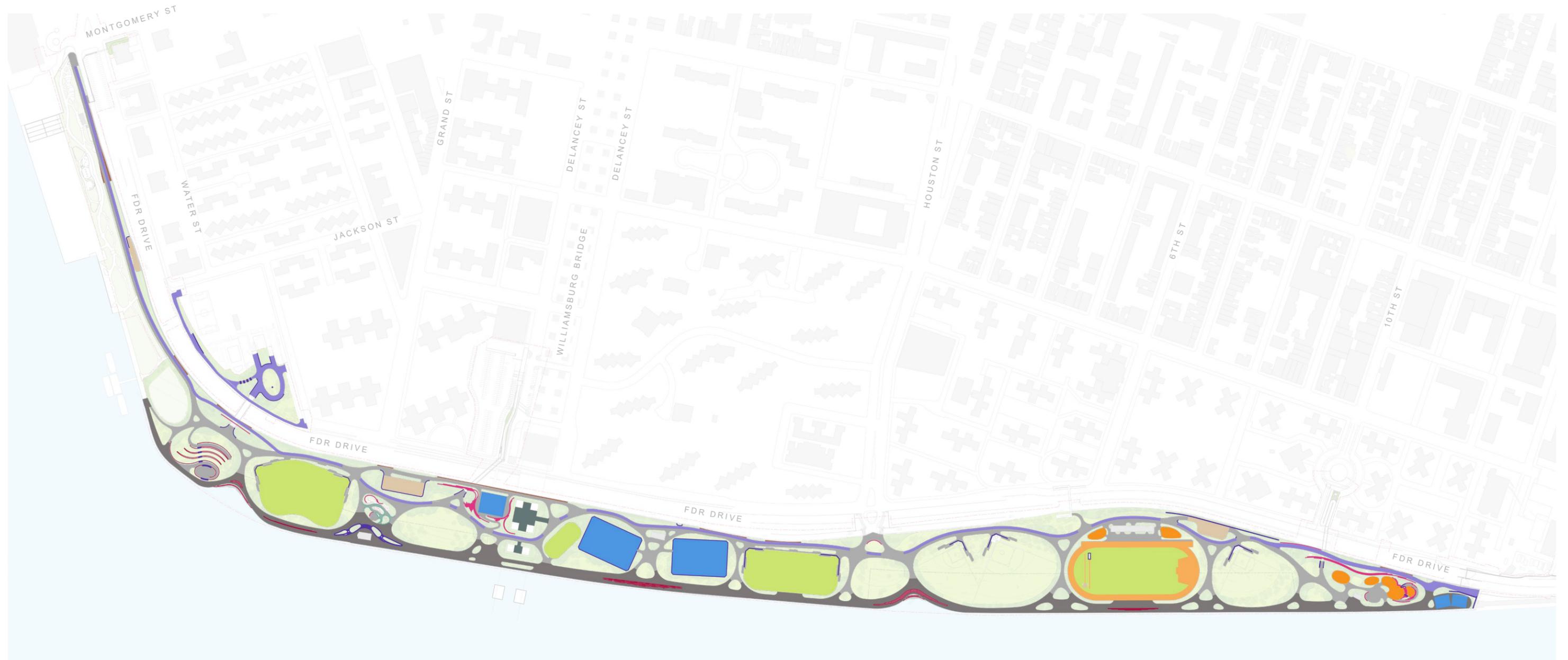
LONG MODULES



FDR DRIVE 40 MPH = 58.6 FT/S

PARK MATERIALS

KEY PLAN



- EXPOSED AGGREGATE CONCRETE PAVEMENT (PATHWAYS)
- CONCRETE UNIT PAVERS (ESPLANADE)
- ASPHALT PAVEMENT (BIKE LANE, PATHWAYS)
- CEMENT CONCRETE PAVEMENT (MAINTENANCE)
- GRANITE BLOCK PAVEMENT (ALONG FLOODWALL)
- PERMEABLE PAVERS
- SYNTHETIC TURF (FIELDS 1, 2, 3, 4 & TRACK INFIELD)

- SAFETY SURFACE (PLAY AND FITNESS AREAS)
- RESILIENT SPORT SURFACE
- ASPHALT PAVEMENT WITH COLOR SEAL (SPORTS COURTS)
- PRECAST CONCRETE (SEATWALLS)
- POURED IN PLACE CONCRETE (WALLS AND STAIRS)
- STONE (SLOPE AND EDGES)
- STEEL EDGE (NATURE EXPLORATION AREA)

LIGHTING

KEY PLAN



--- ESCR LIMIT OF WORK

● EVERGEN M SERIES SOLAR LIGHT 18' POLE
(UNDER REVIEW)

● FLUSHING MEADOWS 12' POLE

● TYPE B LIGHT 12' POLE

▲ SPORTS TOWER 60'-80' POLE

▲ SPORTS TOWER 30' POLE

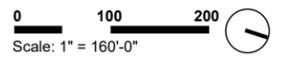
● DOT DAVIT 30' POLE

● DOT DAVIT 14' POLE

● EXISTING LIGHT TO REMAIN

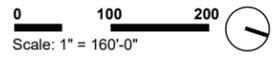
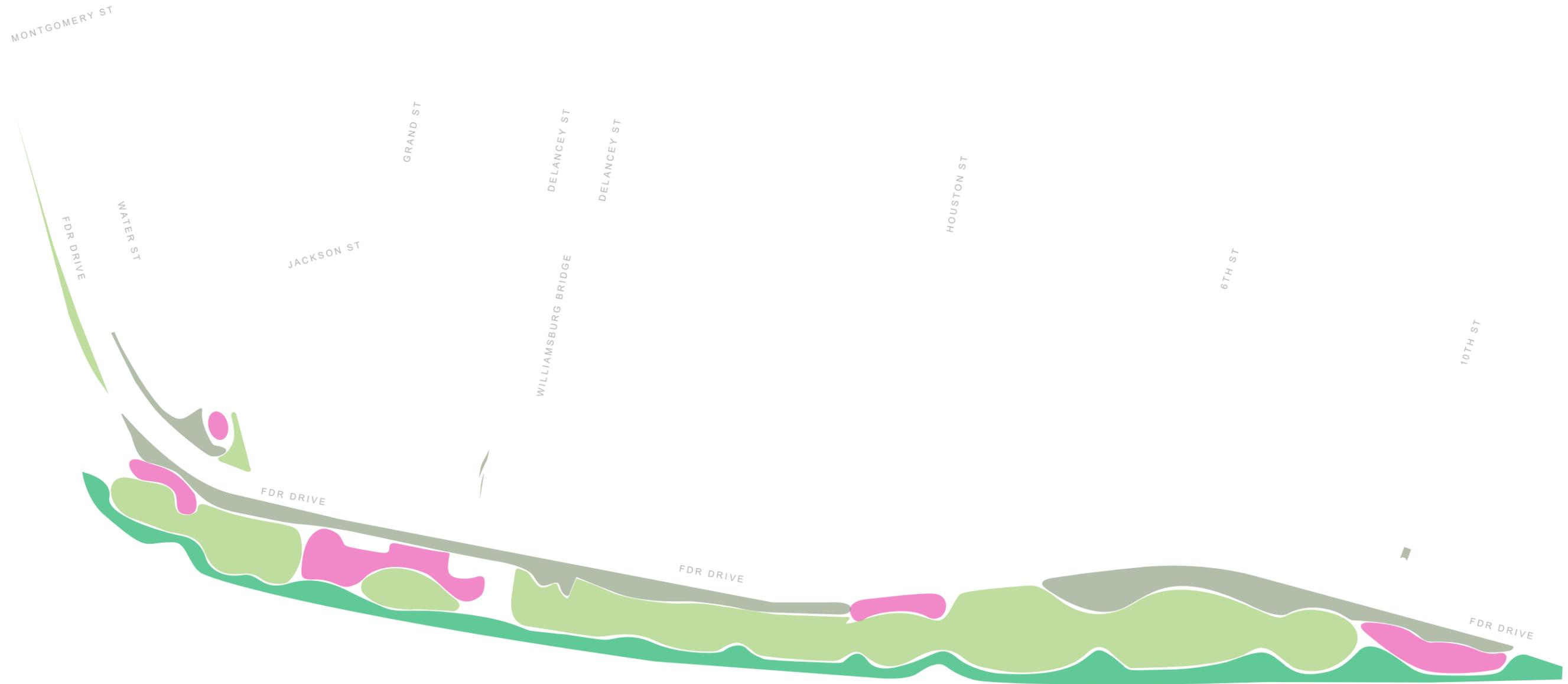
● TYPE M LIGHT

● TYPE M LIGHT MOUNTED ON FLOODWALL



PLANTING

SPATIAL CONCEPT KEY PLAN



**WOODLAND
EDGES**

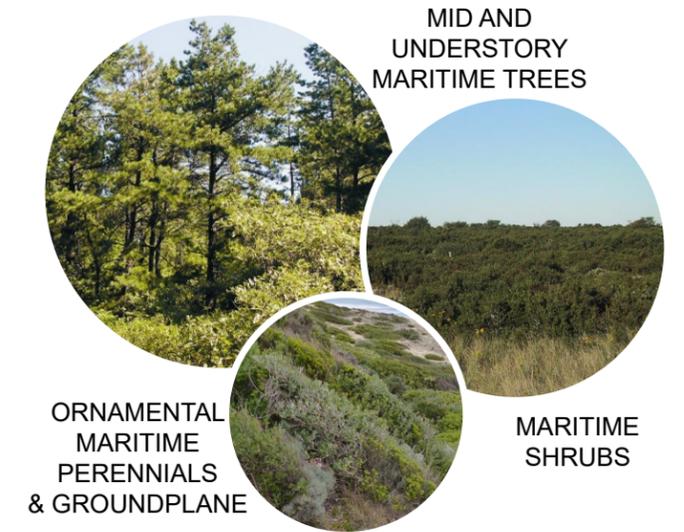
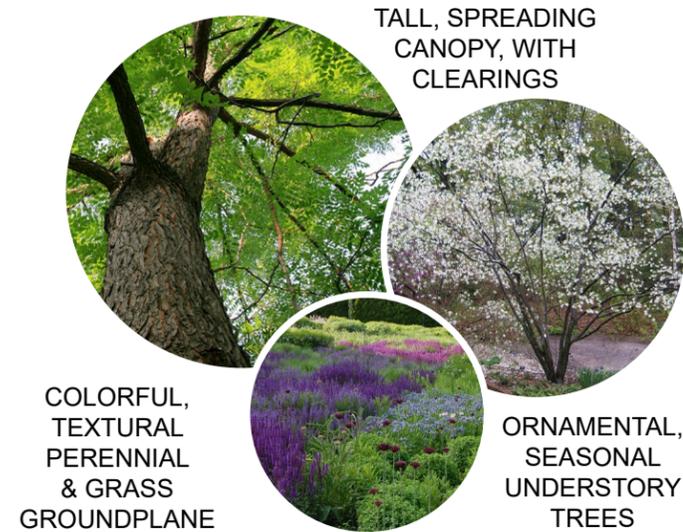
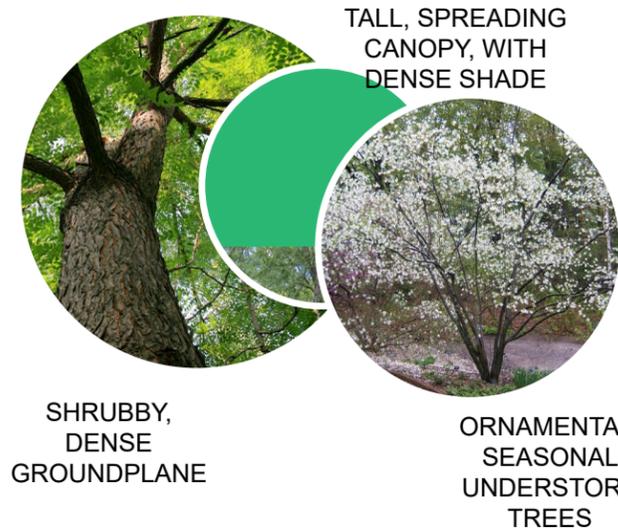
**PASTORAL
OPENINGS**

**LAYERED
GROVES**

**MARITIME
EDGES**

PLANTING

SPATIAL CONCEPT



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



WOODLAND EDGES

- 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

PASTORAL OPENINGS

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

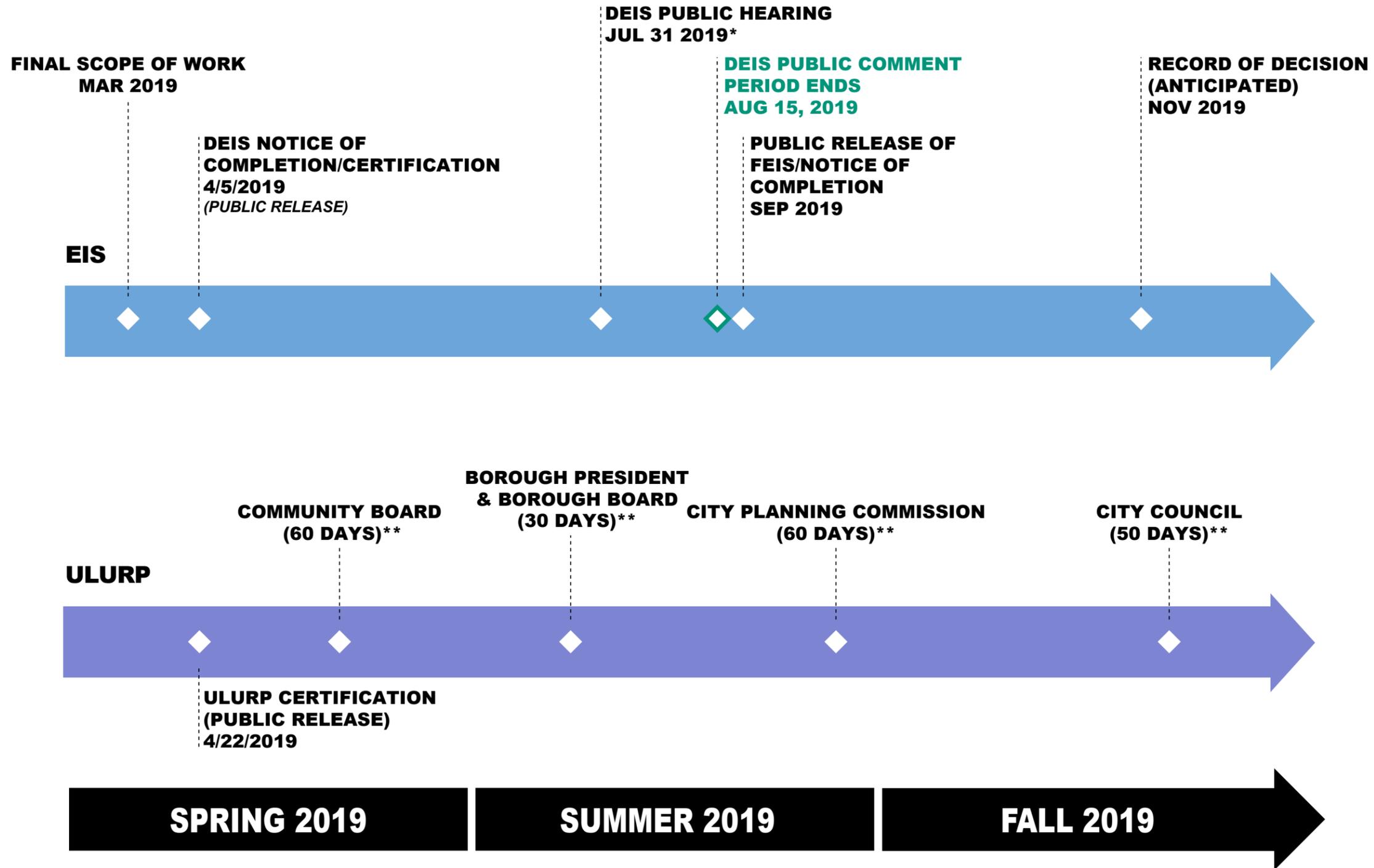
LAYERED GROVES

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

MARITIME EDGES

- 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

NEXT STEPS: PUBLIC INPUT TO THE EIS/ULURP PROCESSES



* DEIS COMMENT PERIOD EXTENDS 15 DAYS AFTER PUBLIC HEARING

** INCLUDES PUBLIC HEARING

Website

NYC East Side Coastal Resiliency 311 Search all NYC.gov websites

NYC
The East Side Coastal Resiliency Project

Italiano Translate Text-Size

Home Vision Background Progress Get Involved Resources Search

Draft Environmental Impact Statement (DEIS) Now Available for Review and Comments

The East Side Coastal Resiliency Project

The East Side Coastal Resiliency (ESCR) Project is a coastal protection initiative, jointly funded by the City of New York and the federal government, aimed at reducing flood risk due to coastal storms and sea level rise on Manhattan's East Side from East 25th Street to Montgomery Street.

The ESCR Project is a priority of the City of New York as outlined in the 2015 *One New York: The Plan for a Strong and Just City* and by the innovative Rebuild by Design competition sponsored by the U.S. Department of Housing and Urban Development (HUD). The project design intends to integrate flood protection into the community fabric, improving access to the waterfront rather than walling off the neighborhood.

Partners

NYC DDC
Department of Design and Construction

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