

#ONENYC

Our Resilient City

East Side Coastal Resiliency Project
July 9th, 2015 - CB3/CB6 Joint Task Force

CB3/CB6 Joint Waterfront Task Force

July 9, 2015

1. Overview and Project Schedule

2. Progress of Technical Studies

3. Community Feedback

4. Project Area One Update

- **Analysis and Studies**
- **Flood Protection Elements**
- **Bridge Connections**

5. Project Area Two Update

- **Analysis and Studies**
- **Stuyvesant Cove Alignment**

6. Next Steps

OVERVIEW

WHAT IS THE EAST SIDE COASTAL RESILIENCY PROJECT?

The ESCR Project is being designed to mitigate future climate change and flood risks on Manhattan's East Side.



THE EAST SIDE

NOTE: ILLUSTRATIVE DIAGRAM, NOT TO SCALE

WHAT IS THE EAST SIDE COASTAL RESILIENCY PROJECT?

The ESCR Project is being designed to mitigate future climate change and flood risks on Manhattan's East Side.



WHAT HAPPENED DURING SANDY?

NOTE: ILLUSTRATIVE DIAGRAM, NOT TO SCALE

WHAT IS THE EAST SIDE COASTAL RESILIENCY PROJECT?

The ESCR Project is being designed to mitigate future climate change and flood risks on Manhattan's East Side.

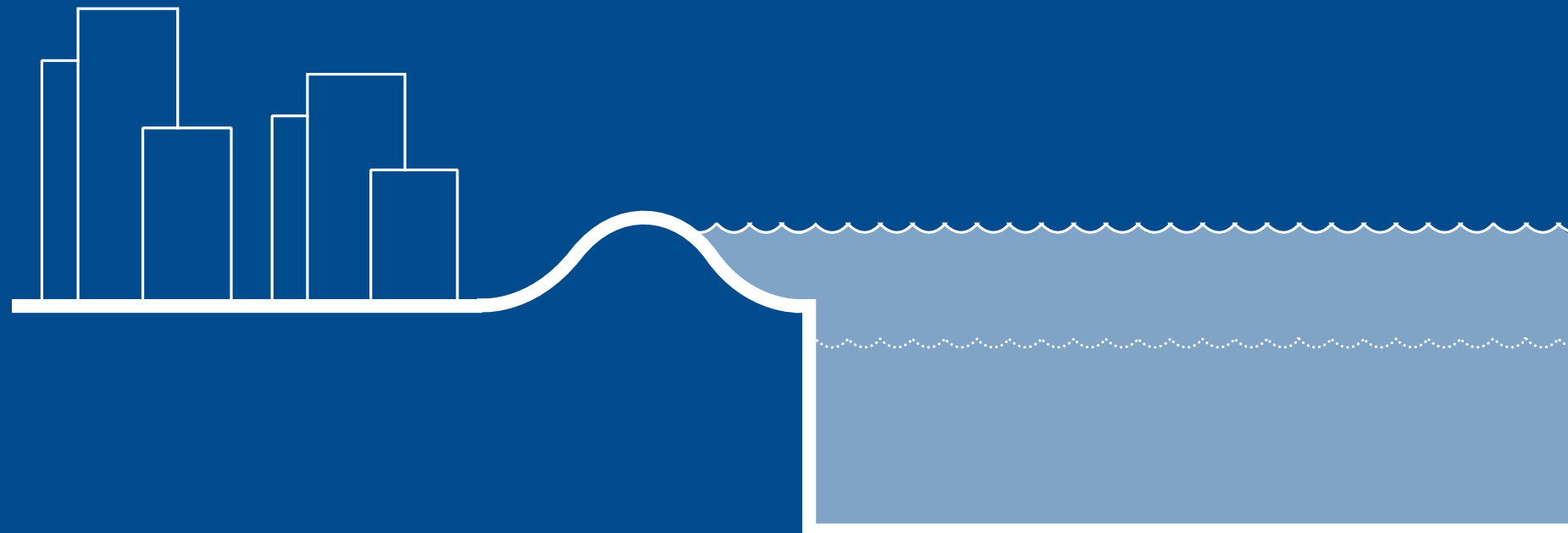


BARRIER

NOTE: ILLUSTRATIVE DIAGRAM, NOT TO SCALE

WHAT IS THE EAST SIDE COASTAL RESILIENCY PROJECT?

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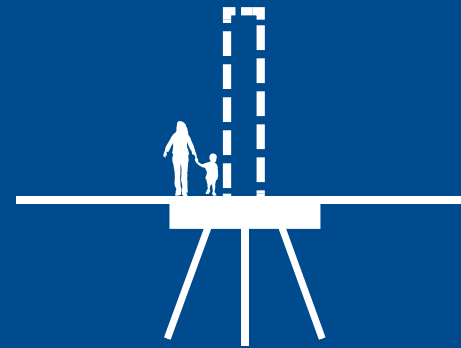


FLOOD PROTECTION

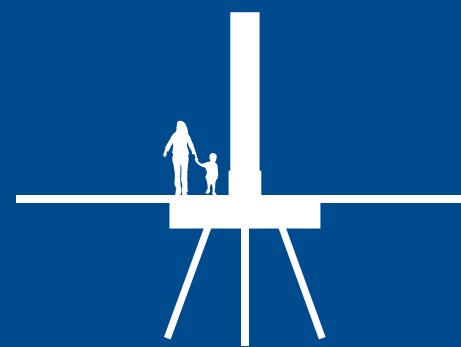
NOTE: ILLUSTRATIVE DIAGRAM, NOT TO SCALE

TYPES OF FLOOD MITIGATION

Options for resiliency have varying forms and levels of reliability: from wide and passive earthen levees to narrow and even removable flood walls and deployable elements.



DEPLOYABLE



FLOOD WALL



BERM / LEVEE

SOCIAL INFRASTRUCTURE

How can resiliency infrastructure double as places and spaces for people?



 PEOPLE

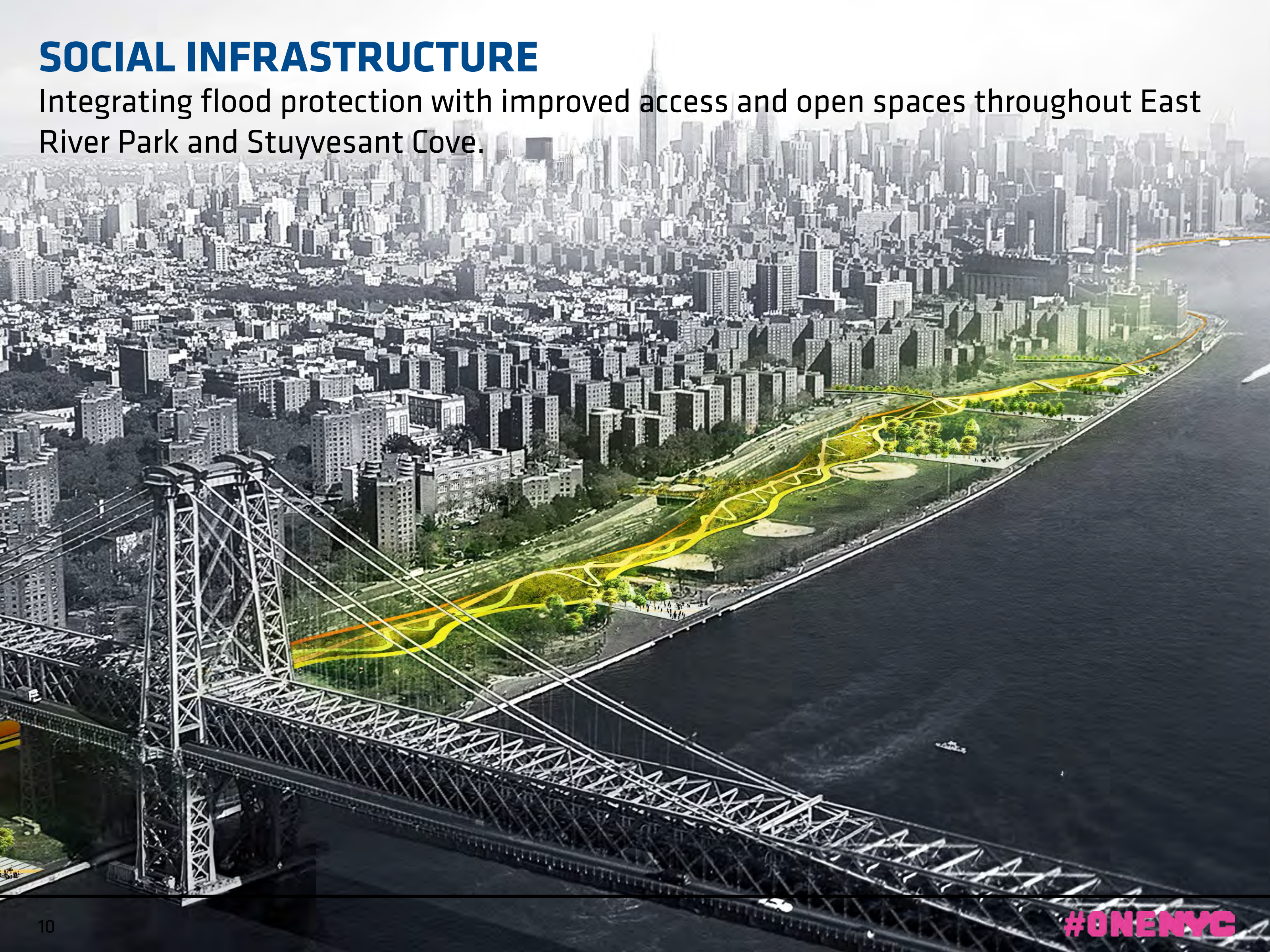
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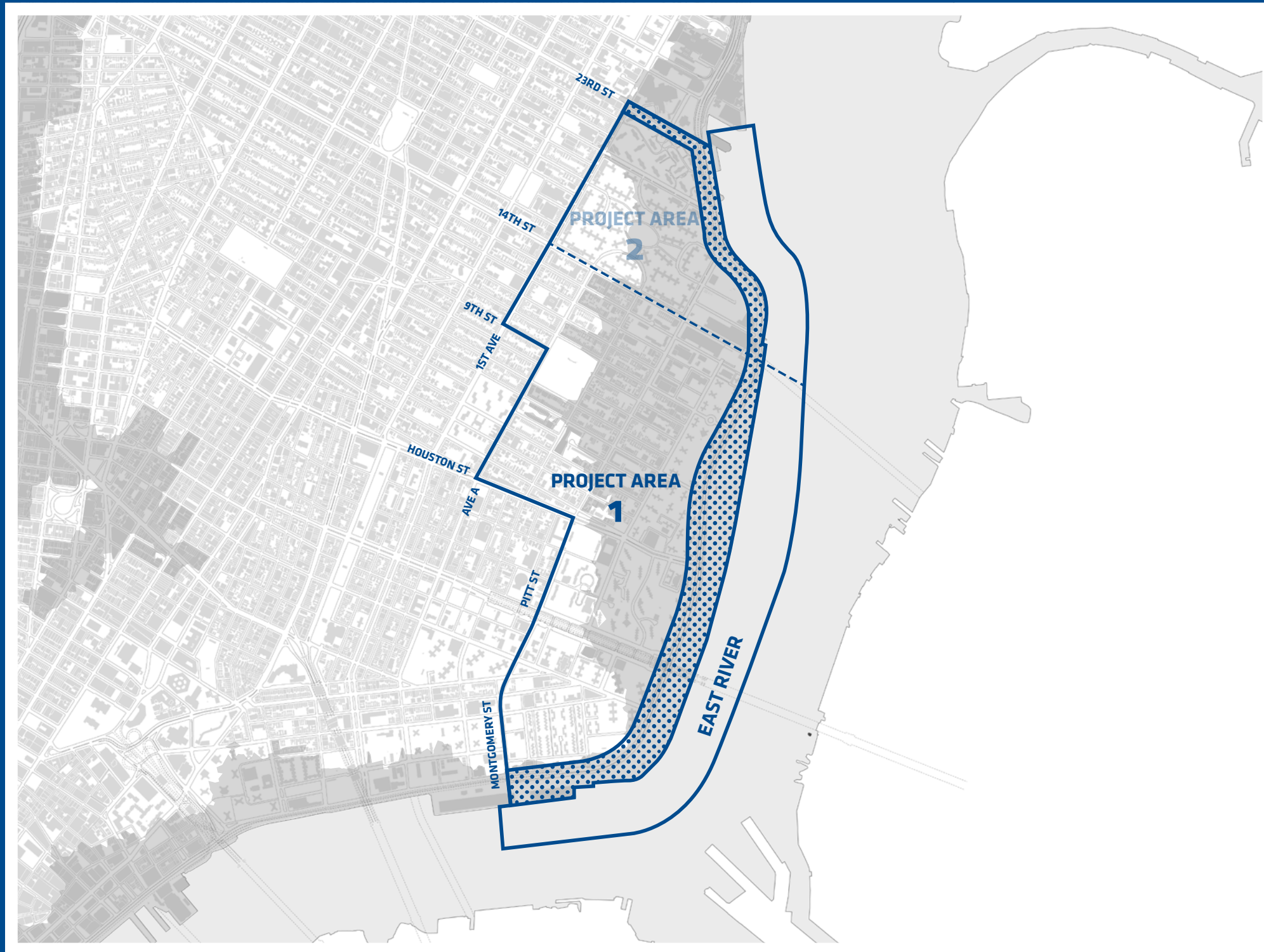
 RESILIENCY
INFRASTRUCTURE

SOCIAL INFRASTRUCTURE

Integrating flood protection with improved access and open spaces throughout East River Park and Stuyvesant Cove.



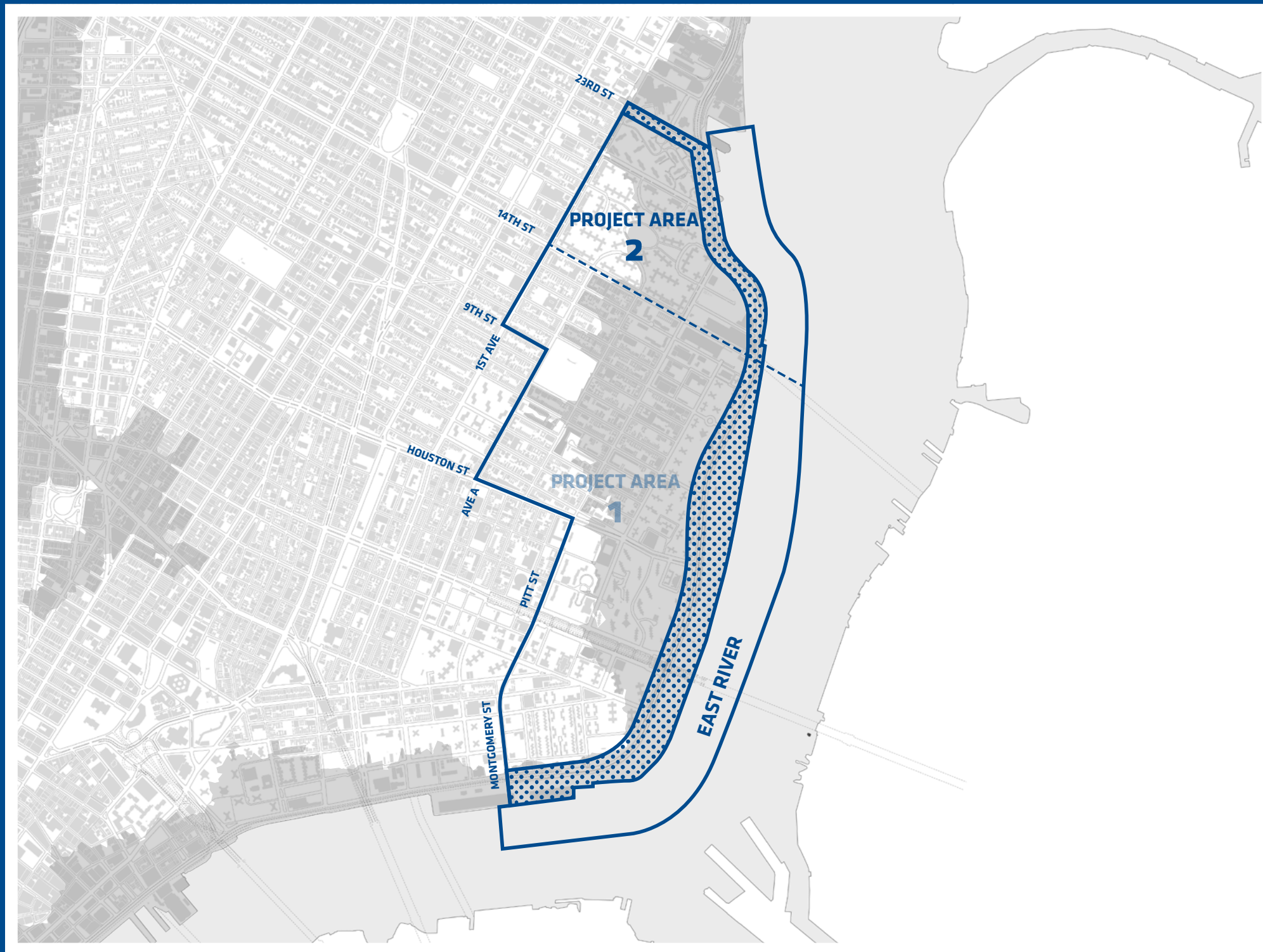
ESCR GOALS AND CHALLENGES - PROJECT AREA 1



AREA GOALS AND CHALLENGES:

- PROVIDE ROBUST FLOOD-RISK MITIGATION
- MAINTAIN EXISTING RECREATIONAL USES
- STRENGTHEN CONNECTIONS AND ACCESS TO EAST RIVER PARK
- ENHANCE OPEN SPACE AND ECOLOGY OF THE AREA

ESCR GOALS AND CHALLENGES - PROJECT AREA 2



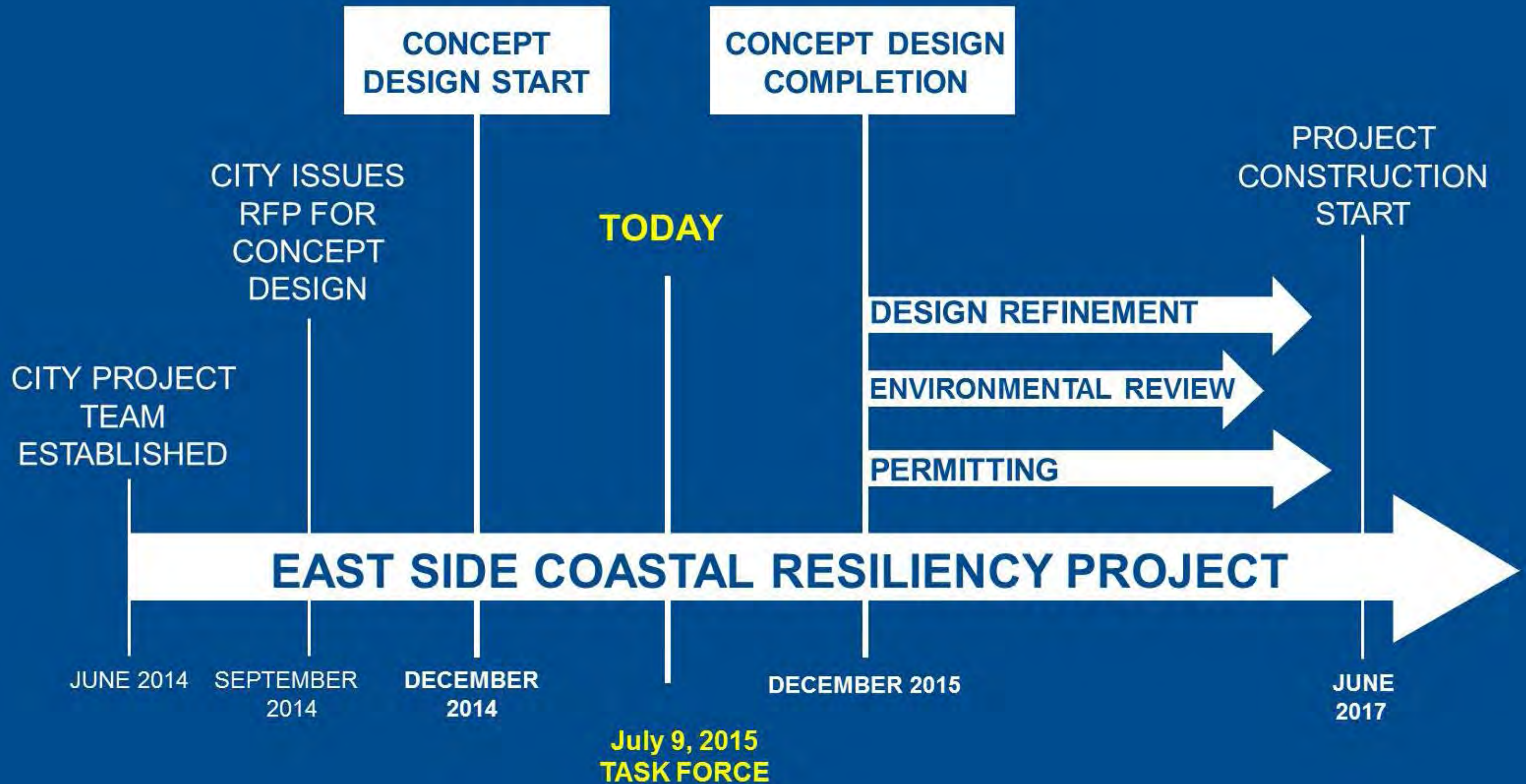
AREA GOALS AND CHALLENGES:

- PRESERVE SIGHTLINES AND CONNECTIONS TO THE WATERFRONT
- ANTICIPATE FUTURE PROGRAMMING AND USES IN STUYVESANT COVE
- STRENGTHEN NORTH-SOUTH ROUTES
- ADDRESS SAFETY AND ACCESS CONCERNS

PROJECT SCHEDULE

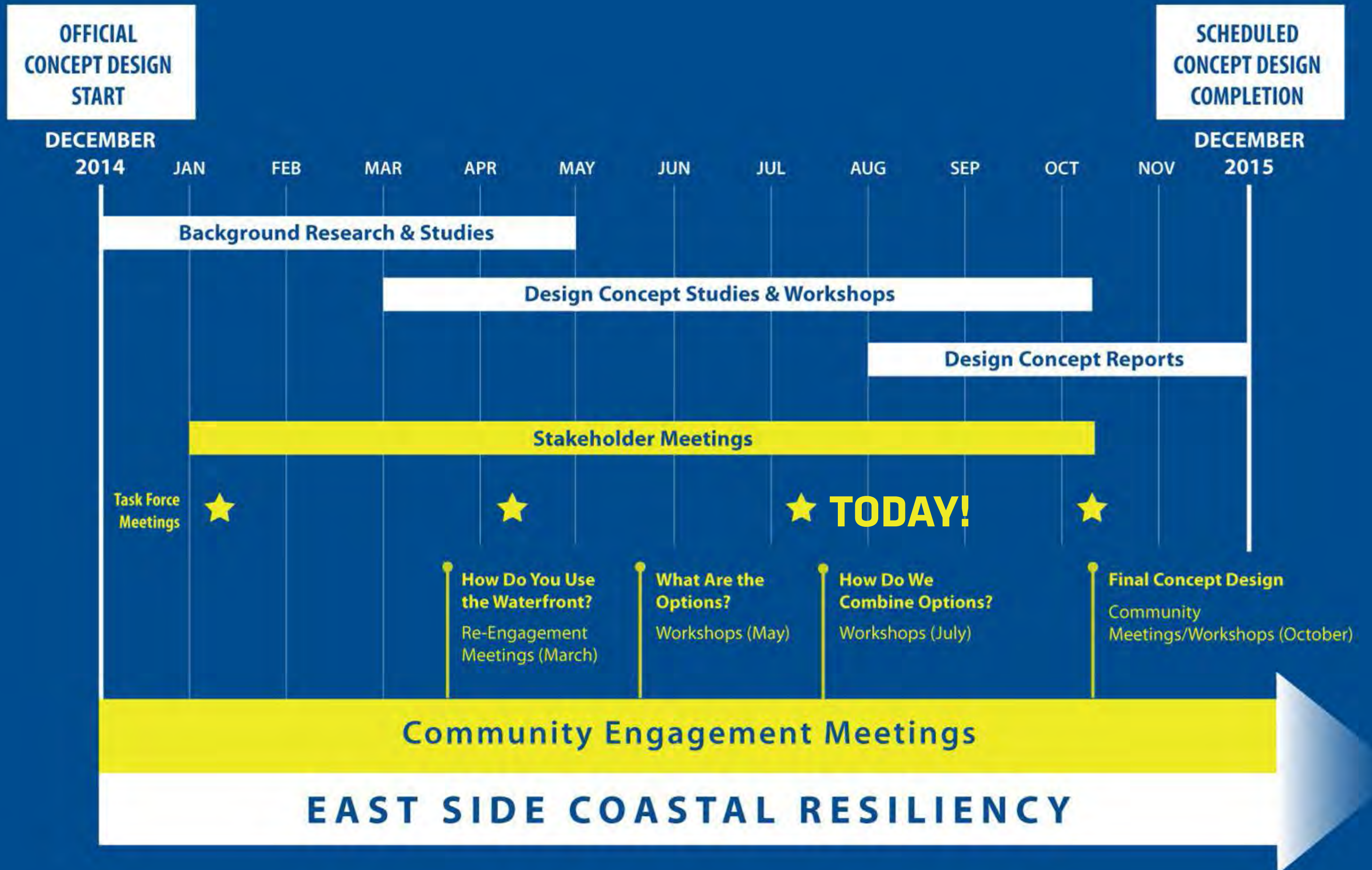
PROJECT TIMELINE

The ESCR Project has an ambitious timeline. We're now past the midpoint of Concept Design, and expect construction commencement in mid-2017.



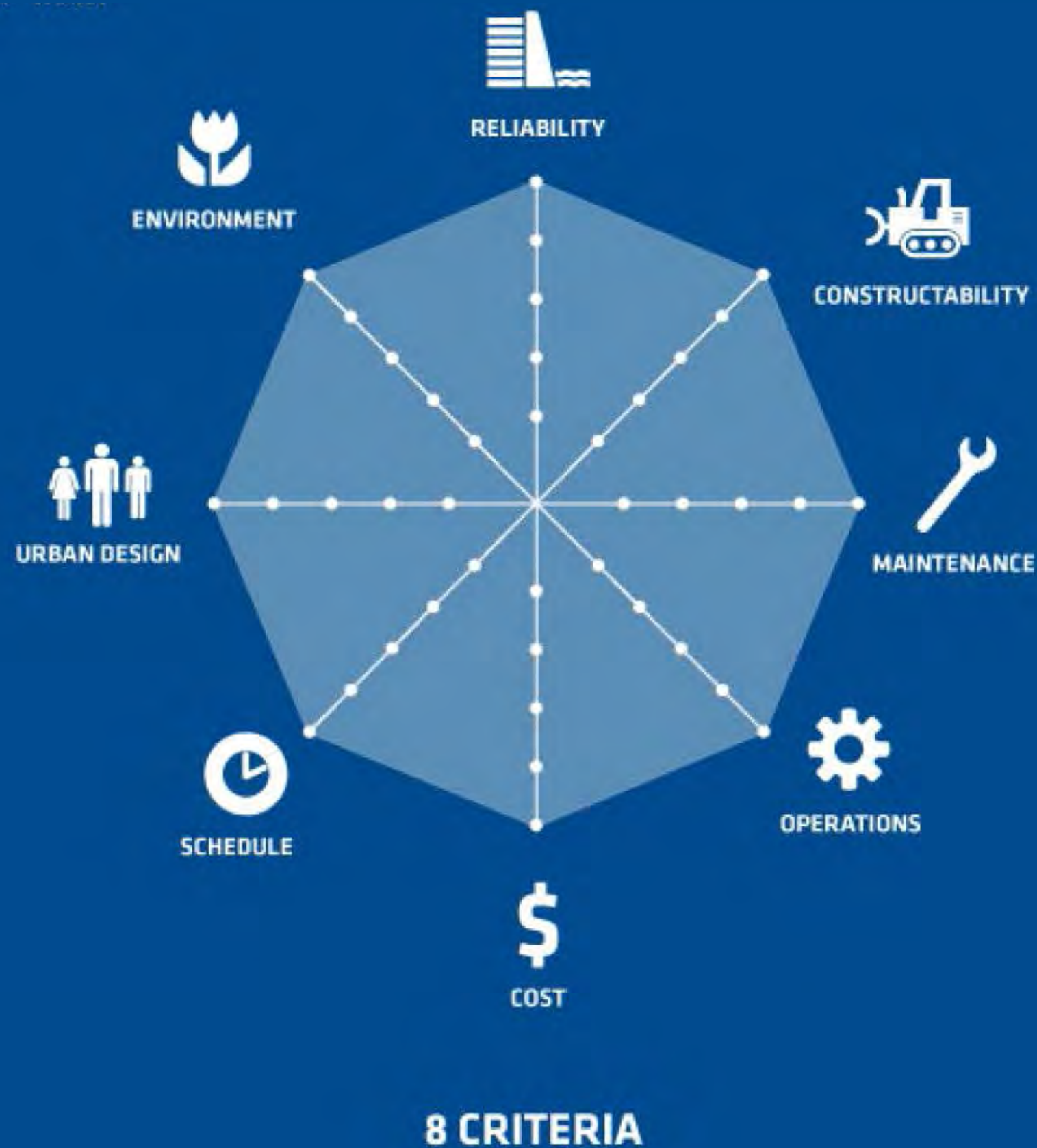
ESCR CONCEPT DESIGN TIMELINE

Project Design Work & Community Engagement - Where are we now?



EVALUATION CRITERIA

Each alternative will be evaluated for eight different criteria.



PROGRESS OF TECHNICAL STUDIES

EXISTING CONDITIONS STUDIES - PROGRESS TO DATE

Sewer Investigations

95% - 100%
APRIL JULY



Inspecting Bridges

60% - 100%
APRIL JULY



Inspecting Waterfront Structures

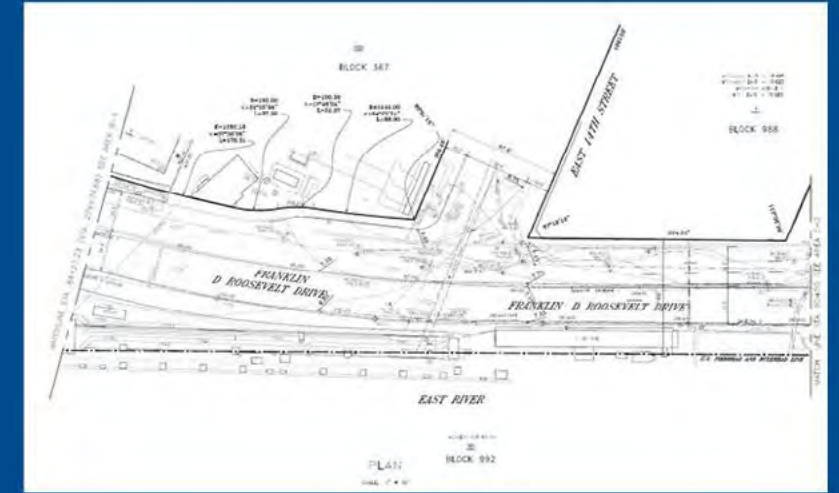
60% - 100%
APRIL JULY



EXISTING CONDITIONS STUDIES - PROGRESS TO DATE

Surveying the Land

95% - 97%
APRIL JULY



Examining Flood Risk and Water Flow

50% - 70%
APRIL JULY



Testing the Soil

10% - 70%
APRIL JULY



EXISTING CONDITIONS STUDIES - PROGRESS TO DATE

**Studying Pedestrian
and Bicycle Usage**

5% - 60%
APRIL JULY



**Making an Inventory
of Existing Trees**

0% - 60%
APRIL JULY



COMMUNITY FEEDBACK

STAKEHOLDER ENGAGEMENT

Over 200 residents attended the second round of community engagement workshops on 05/19, 05/20, and 05/28.



PROJECT AREA 1 WORKSHOP: MAY 28TH, CHURCH OF ST. BRIGID



PROJECT AREA 2 WORKSHOP: MAY 19TH, WASHINGTON IRVING HS

STAKEHOLDER ENGAGEMENT

In addition to the community engagement workshops and the CB3/CB6 Task Force meetings, the ESCR team is also collecting input from local CBOs and stakeholders.



OPEN SPACE & RECREATION, TRANSPORTATION

CB3 & CB6

Hester St Collaborative

Lower East Side Ecology Centre

OLS Sparkle Little League

Partnerships for Parks

Solar One

Transportation Alternatives



NYCHA TENANT ASSOCIATIONS

Baruch

Campos Plaza

Riis

Rutgers

Smith

Vladeck

Wald

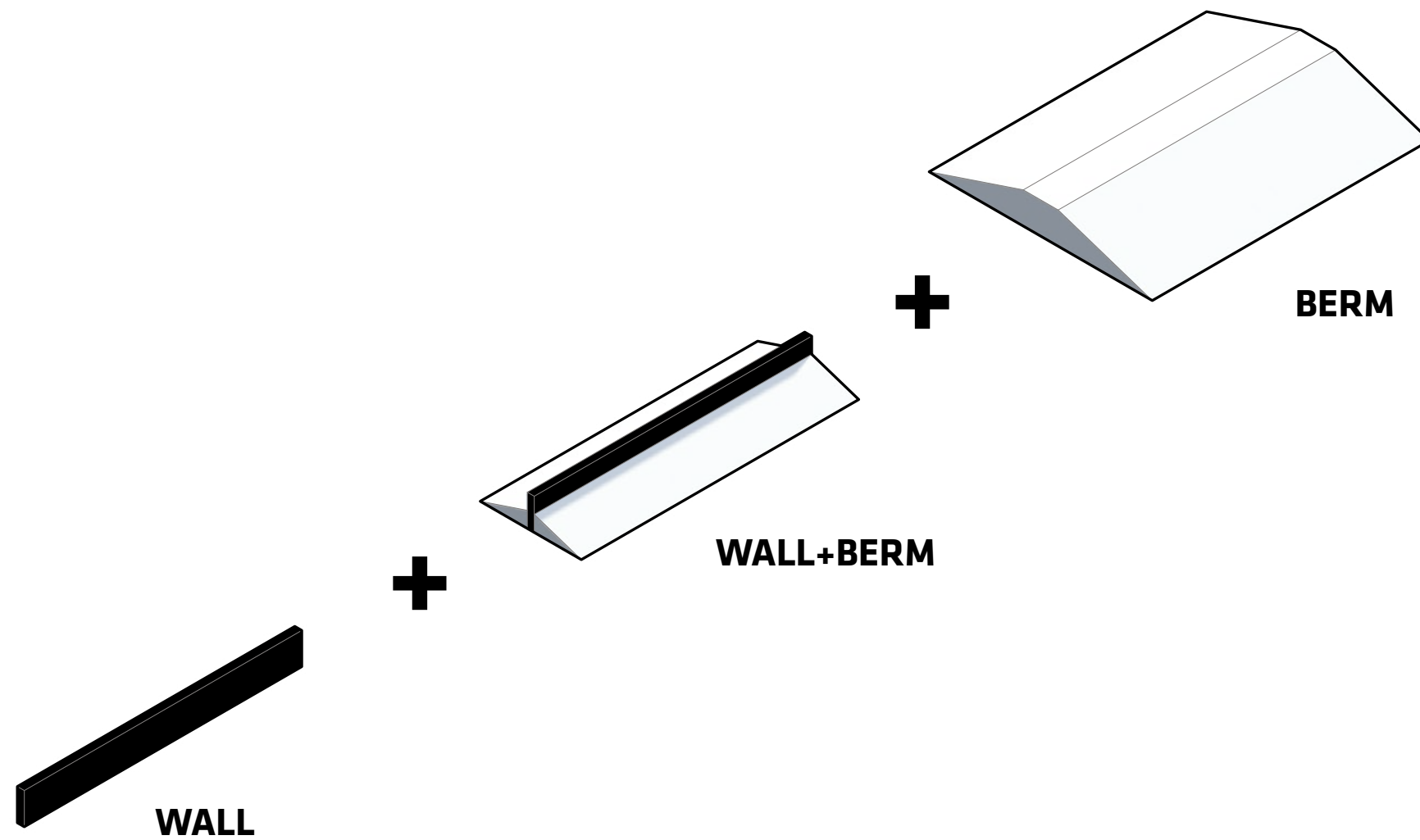
PROJECT AREA ONE
DESIGN ANALYSIS AND STUDIES

EAST RIVER PARK

Existing Conditions - 2050s 100-year floodplain

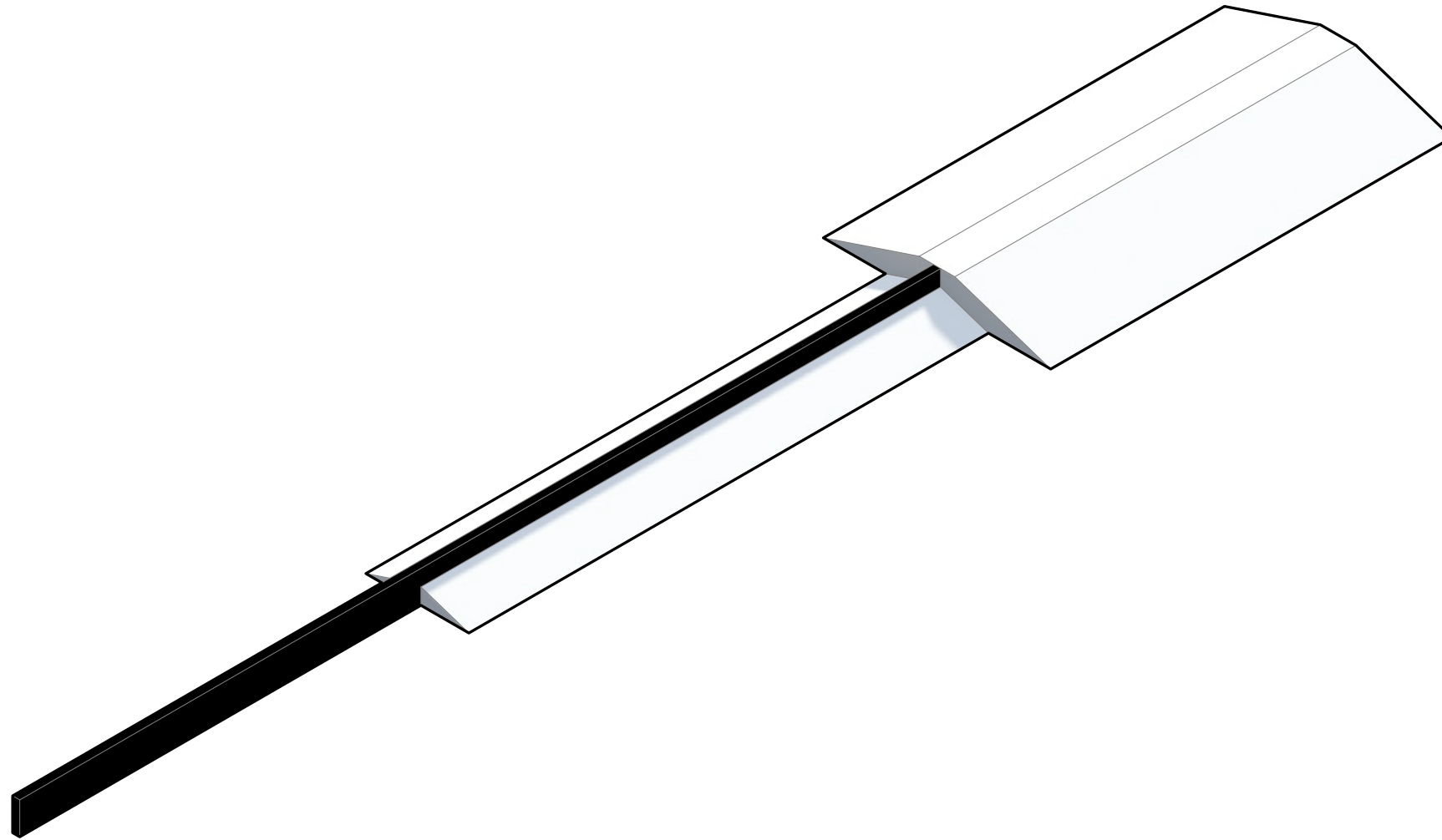


FLOOD PROTECTION ELEMENTS

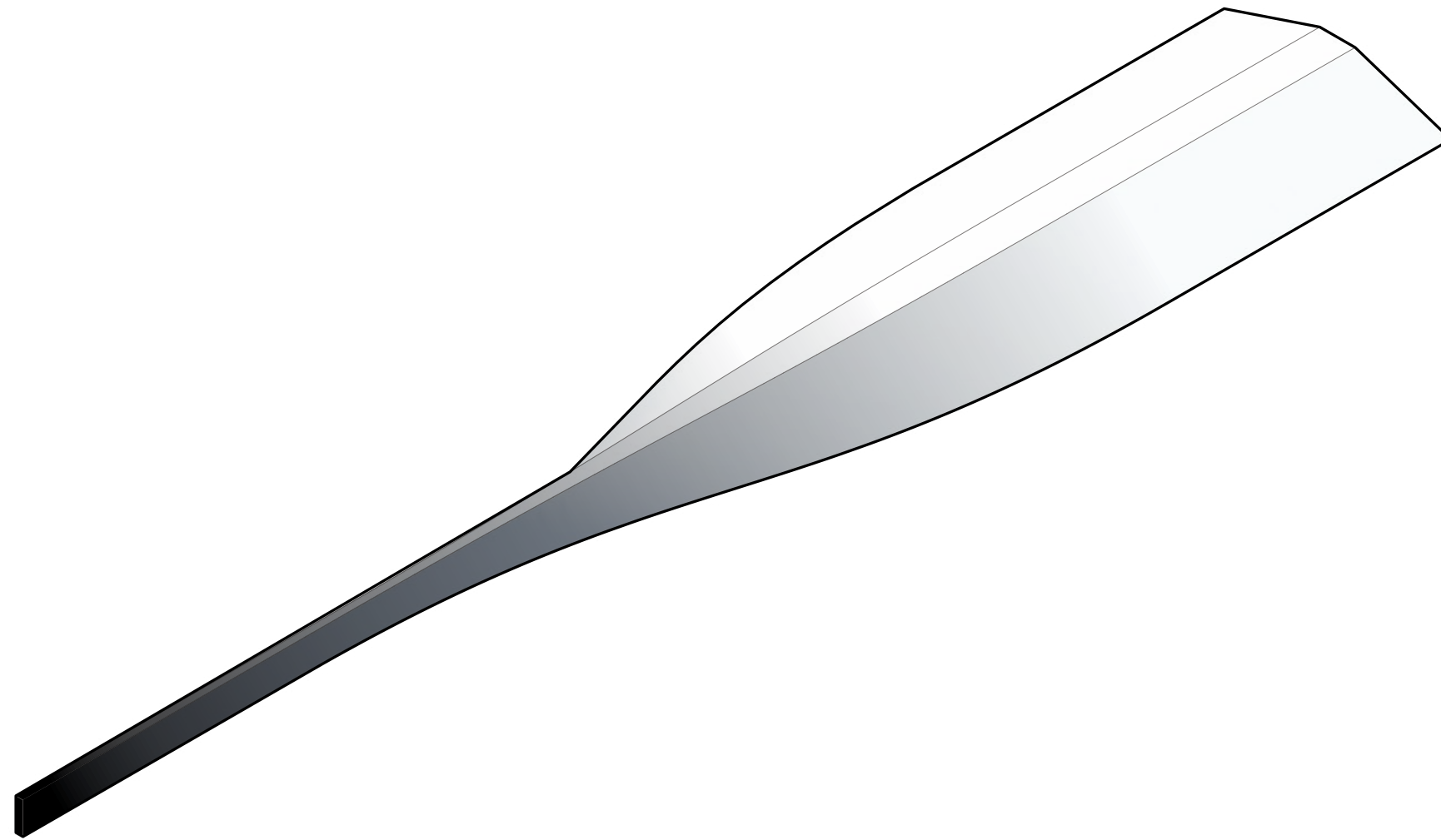


FLOOD PROTECTION ELEMENTS

THREE DIFFERENT ELEMENTS FORM THE TOOLKIT OF FLOOD PROTECTION,
BASED ON PASSIVE SPACE AVAILABLE

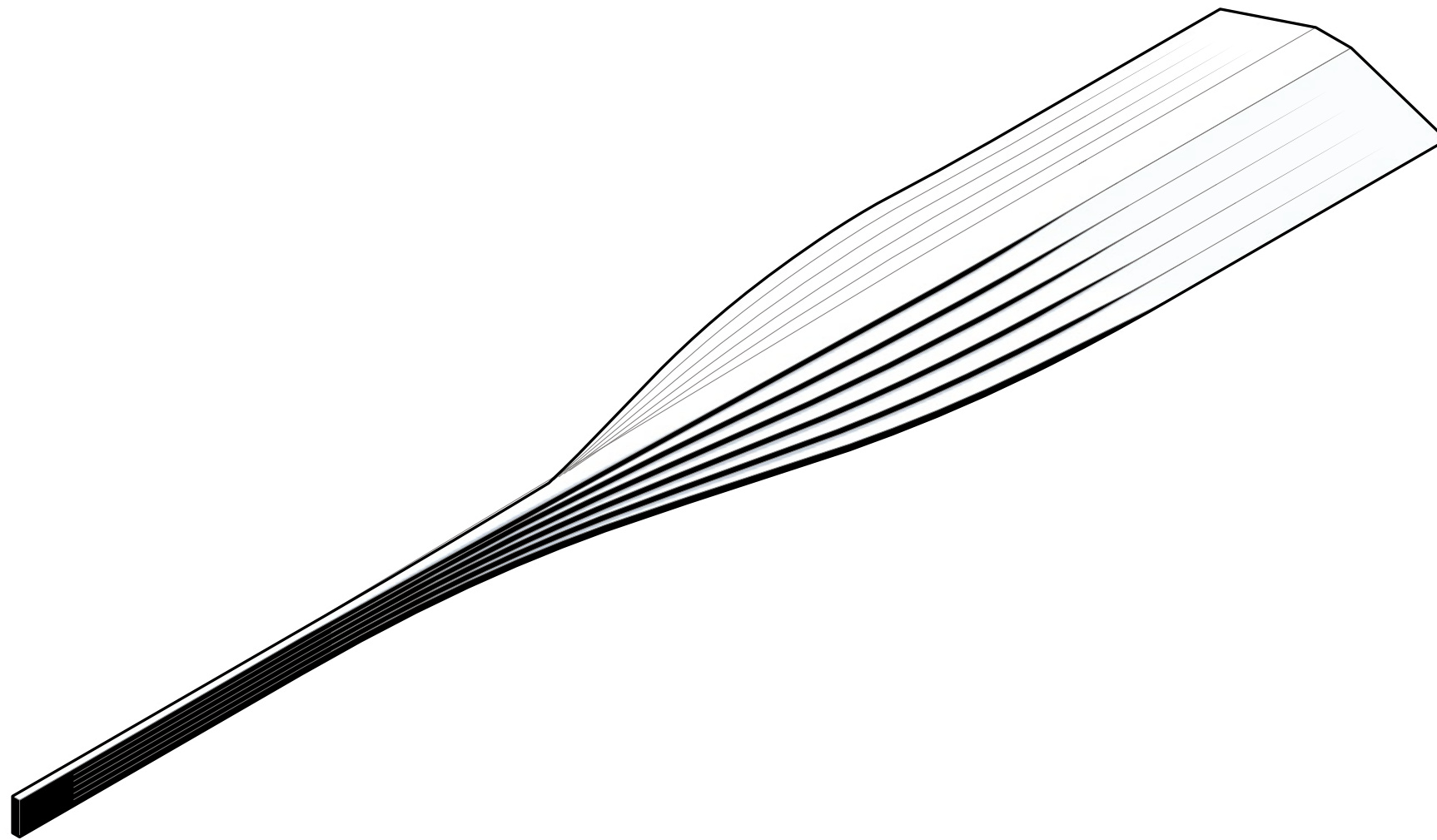


CONNECTING THE ELEMENTS



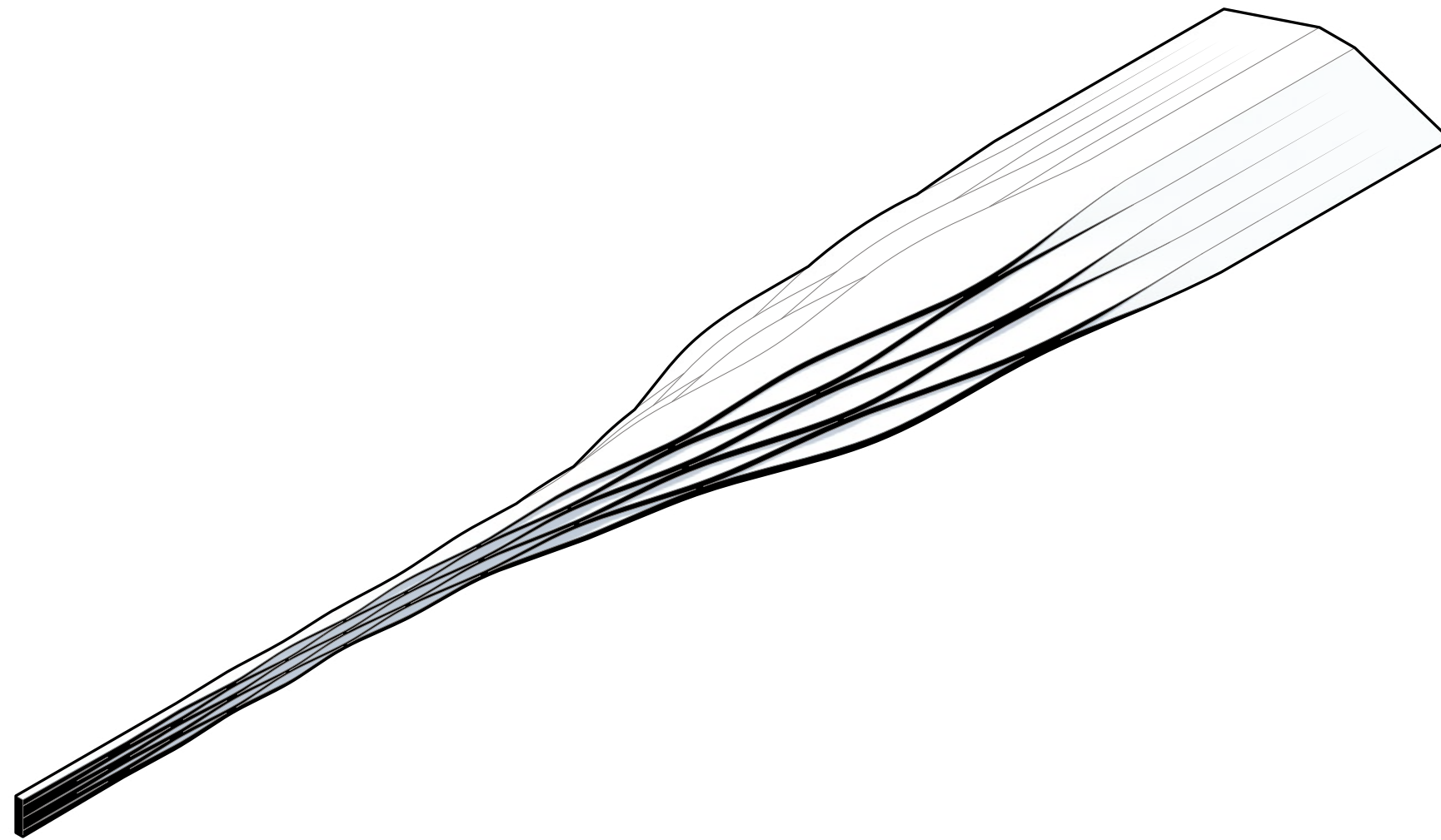
SOFTENING TRANSITIONS

SMOOTHING BETWEEN ELEMENTS



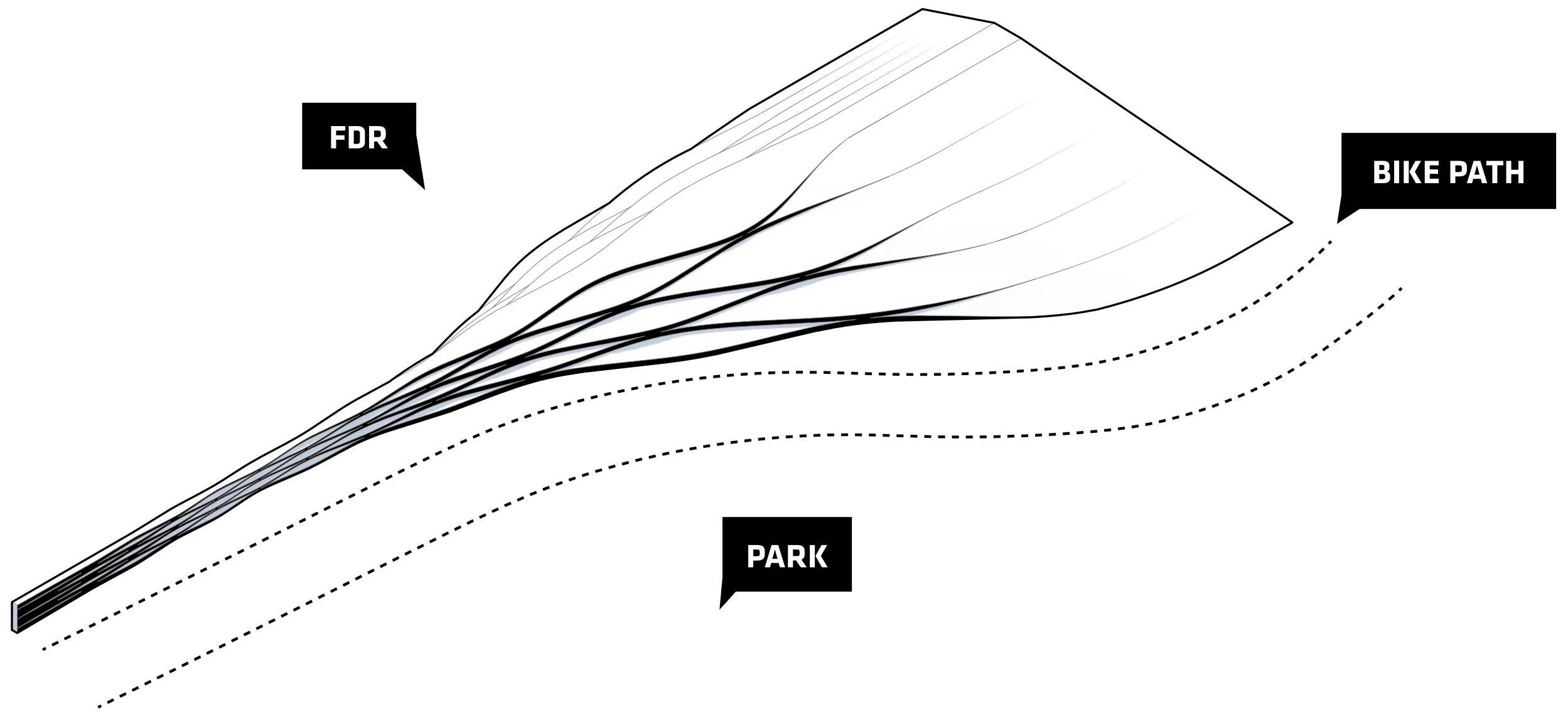
TERRACING

TERRACES STABILIZE THE TERRAIN WHEN SLOPES ARE GREATER THAN 3:1

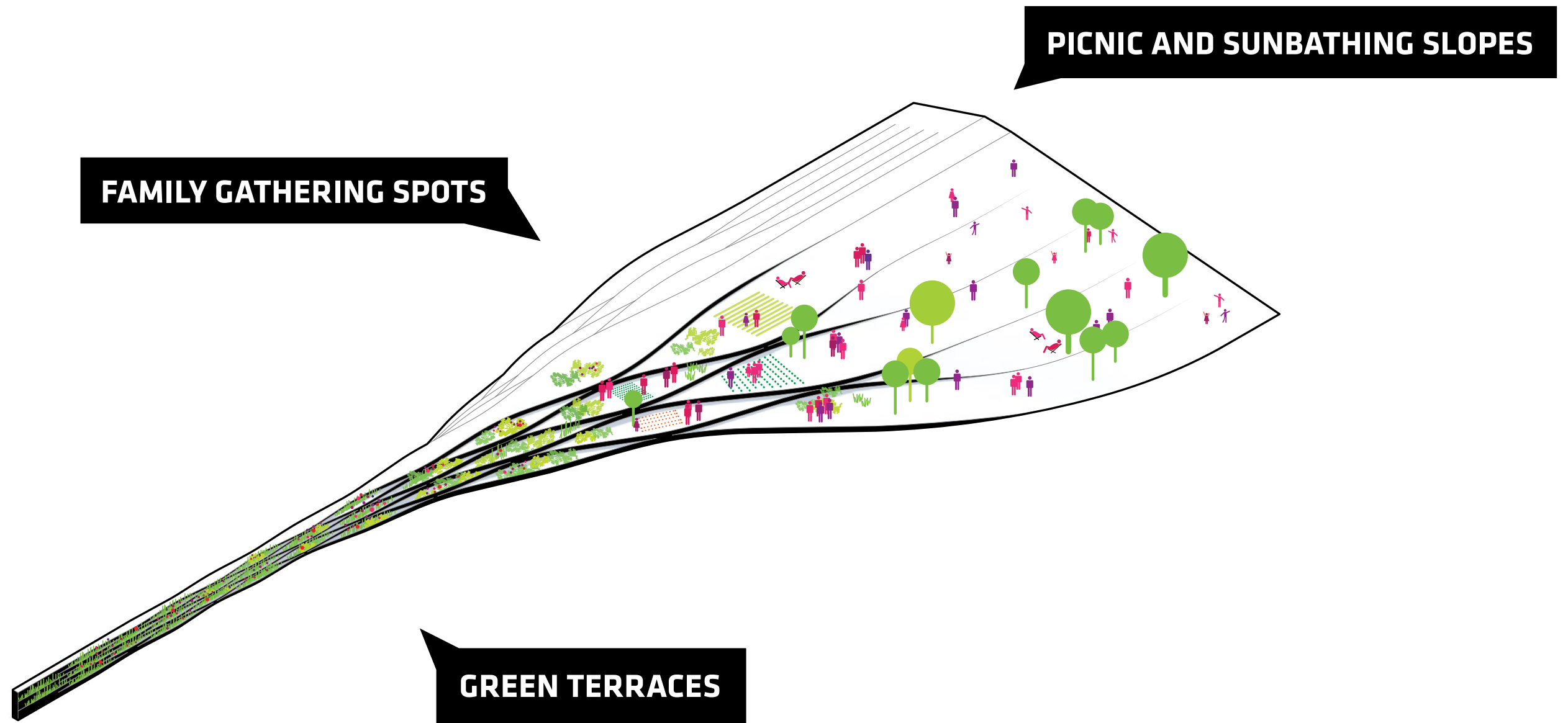


WEAVING

WEAVING CREATES POCKETS AND TERRACES FOR GARDENS AND OTHER ACTIVITIES



ADAPTING TO SITE CONDITIONS



SUPPORTING PARK DIVERSITY

DIFFERENTIATED TERRACES AND SLOPES PROVIDE FOR A DIVERSE AND VIBRANT PARK EXPERIENCE

BRIDGE CONNECTIONS
COMMUNITY FEEDBACK AND DESIGN
STUDIES

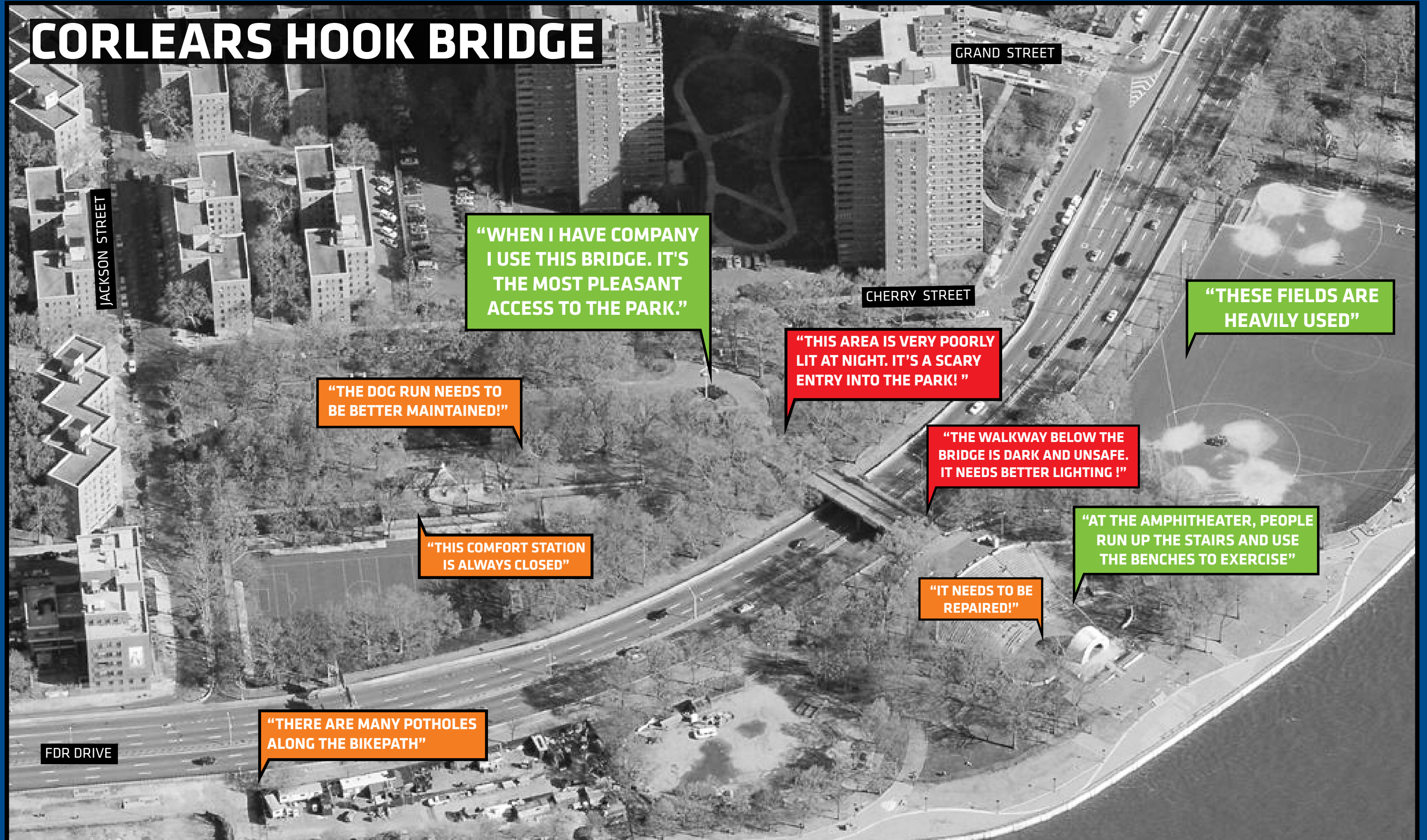
ACCESS TO EAST RIVER PARK

The ESCR team gathered feedback about connections to East River Park during the community engagement workshops on 05/20 and 05/28.



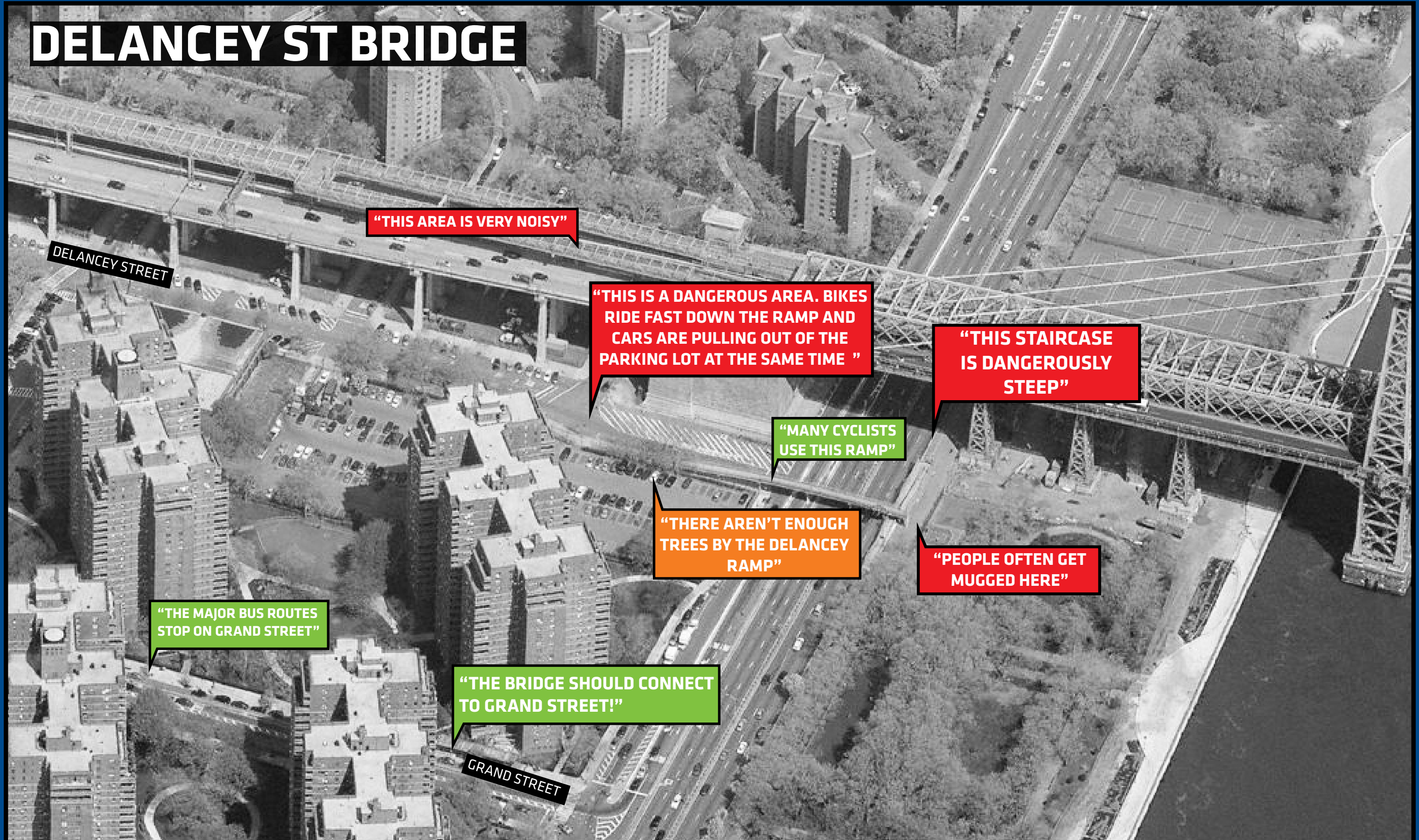
ACCESS TO EAST RIVER PARK

Community feedback on the Corlears Hook bridge



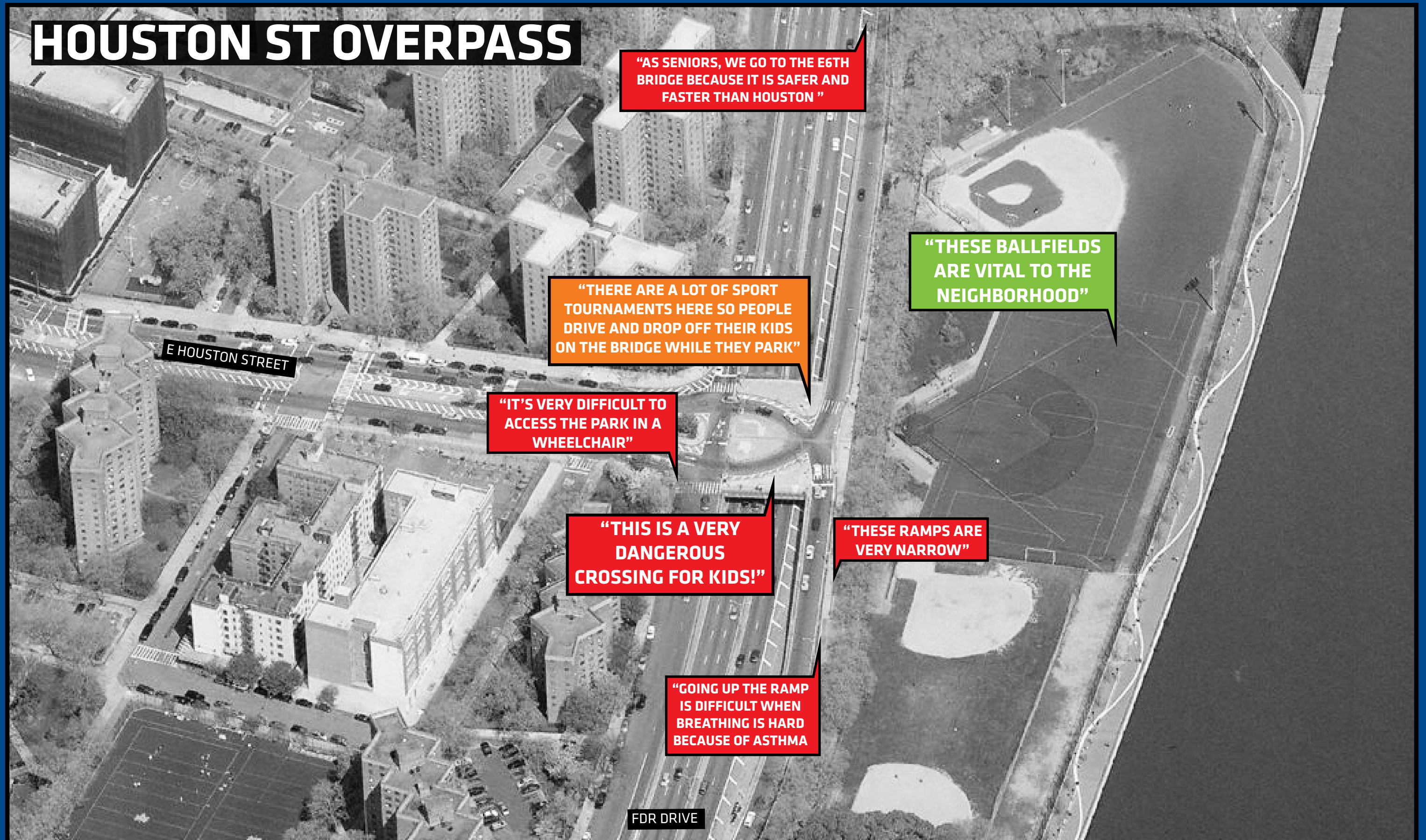
ACCESS TO EAST RIVER PARK

Community feedback on the Delancey St bridge



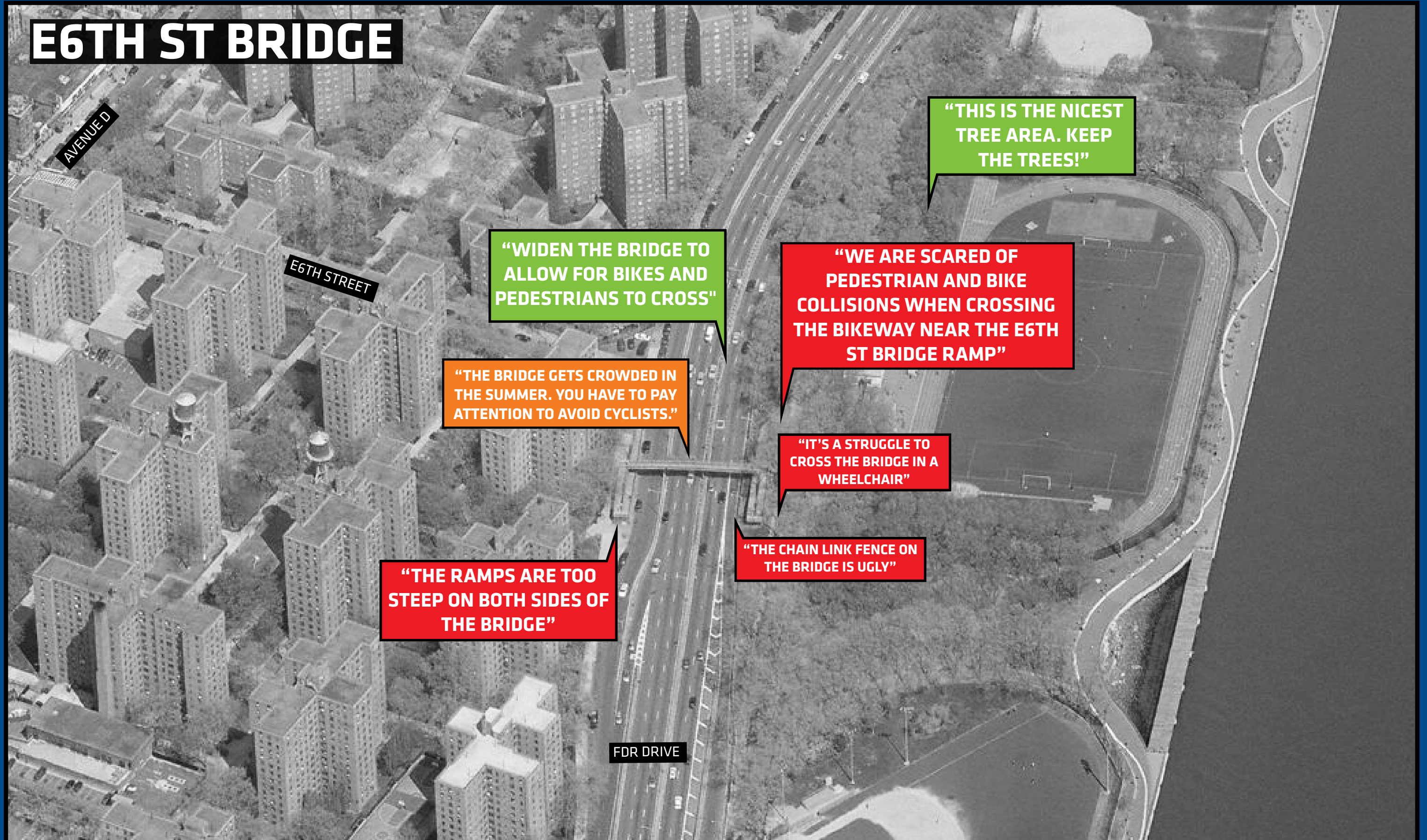
ACCESS TO EAST RIVER PARK

Community feedback on the Houston St overpass



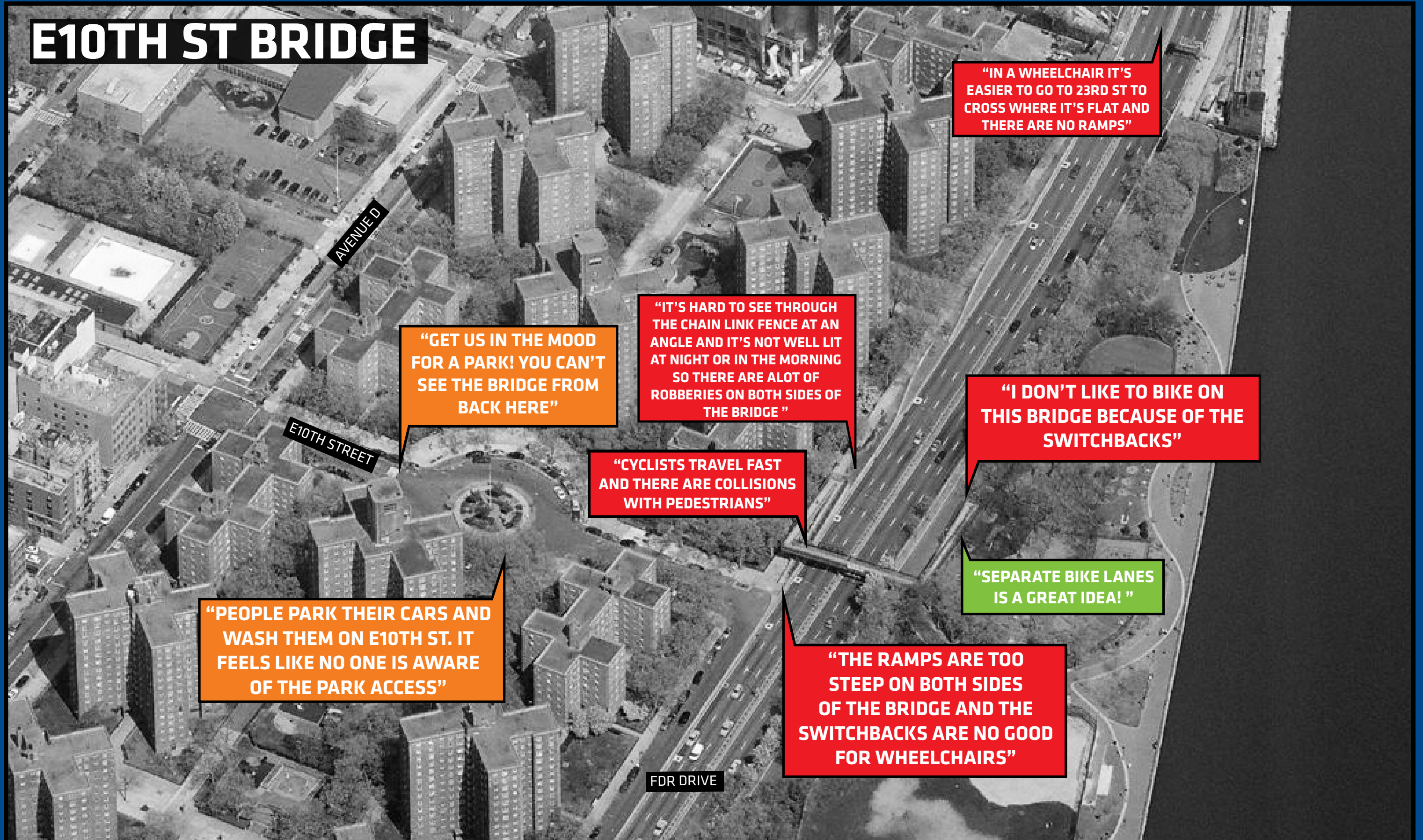
ACCESS TO EAST RIVER PARK

Community feedback on the E6th St bridge



ACCESS TO EAST RIVER PARK

Community feedback on the E10th St bridge



ACCESS TO EAST RIVER PARK

Community feedback - Suggestions for improved access to East River Park

COMMUNITY SUGGESTIONS :



1) PROVIDE FLUID ACCESS TO THE PARK VIA GENTLE RAMPS



2) WIDEN THE BRIDGES TO ALLOW FOR SEPARATE BIKE AND PEDESTRIAN CIRCULATION



3) ANNOUNCE ACCESS TO THE PARK THROUGH LANDSCAPING



4) ADDRESS SAFETY CONCERNS BY IMPROVING LIGHTING



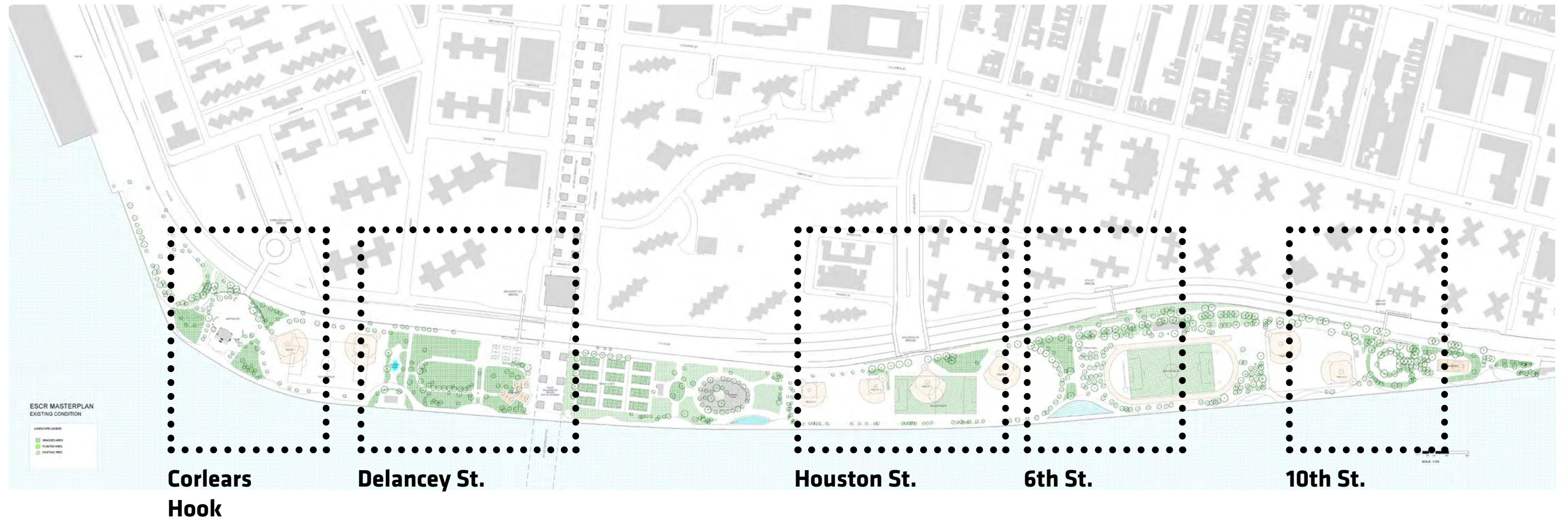
5) INCORPORATE SIGNAGE



6) CONSIDER PROGRAMMING ASSOCIATED WITH ACCESS POINTS

MAY WORKSHOPS

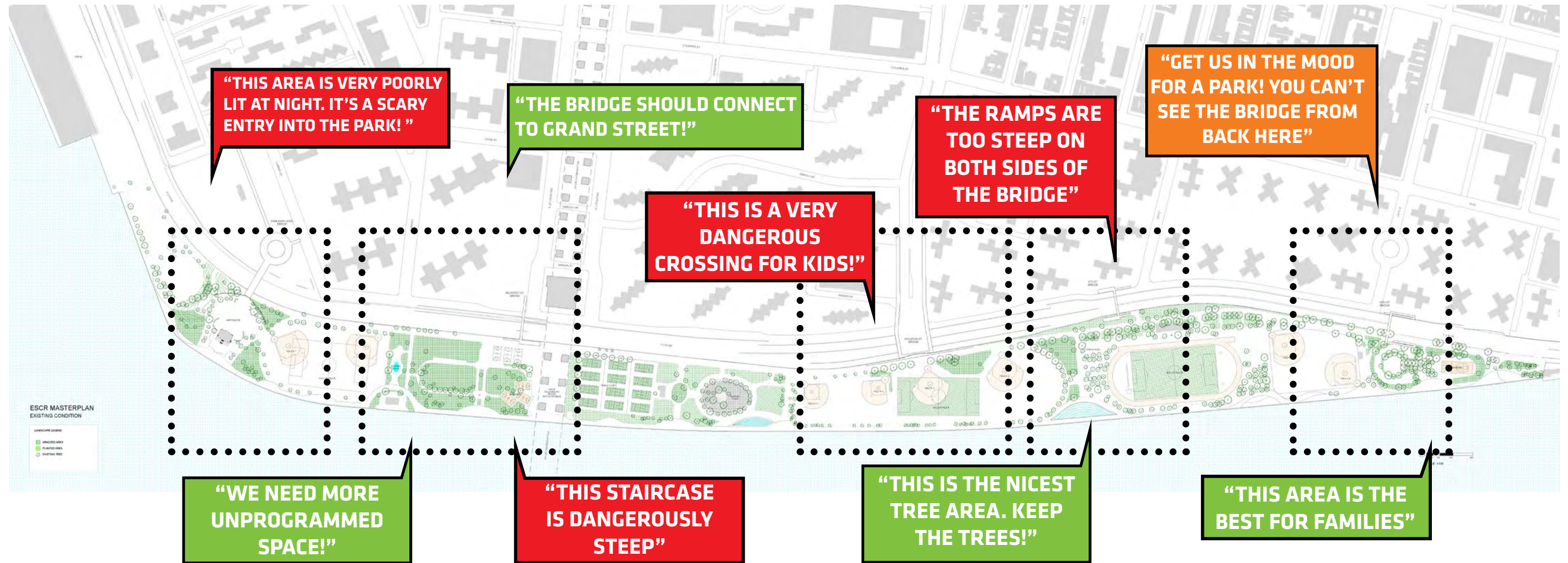
Five connection points were discussed during May design workshops:



ACCESS POINTS

COMMUNITY FEEDBACK

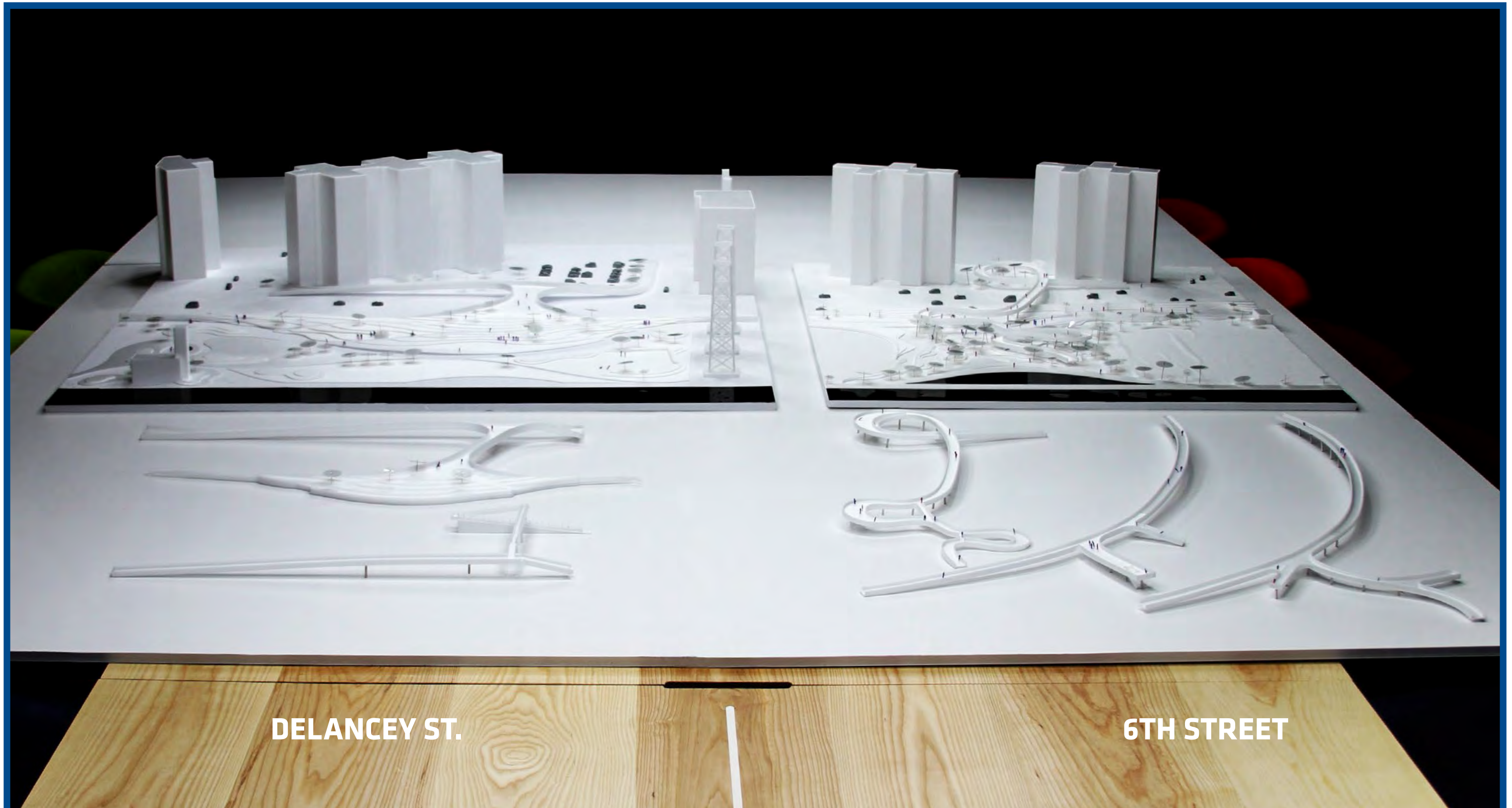
Concerns, likes, and dislikes were voiced about existing conditions in these areas of the park:



COMMUNITY FEEDBACK

JULY WORKSHOPS - DESIGN STUDIES

Physical models are being developed to engage residents and stakeholders in discussion of trade-offs, pros, and cons of the options with respect to cost, reliability, urban design value, and other factors.



PROJECT AREA TWO
DESIGN ANALYSIS AND STUDIES

SEGMENT A - CON-ED NARROWS

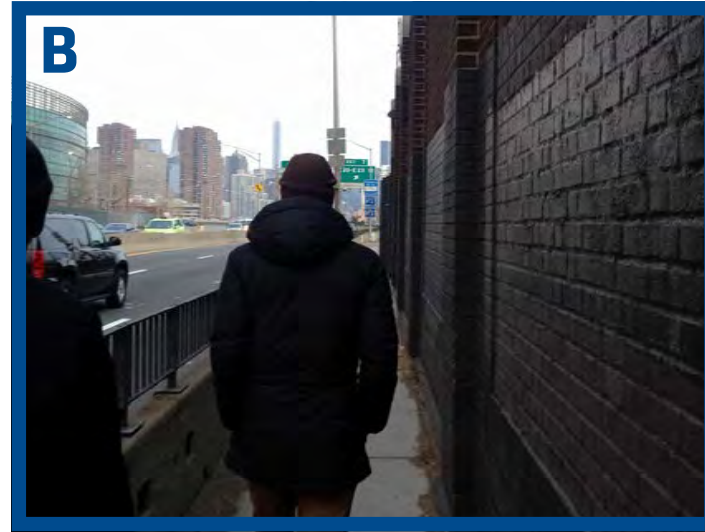


SEGMENT A - CON-ED NARROWS

EXISTING CONDITIONS



FDR



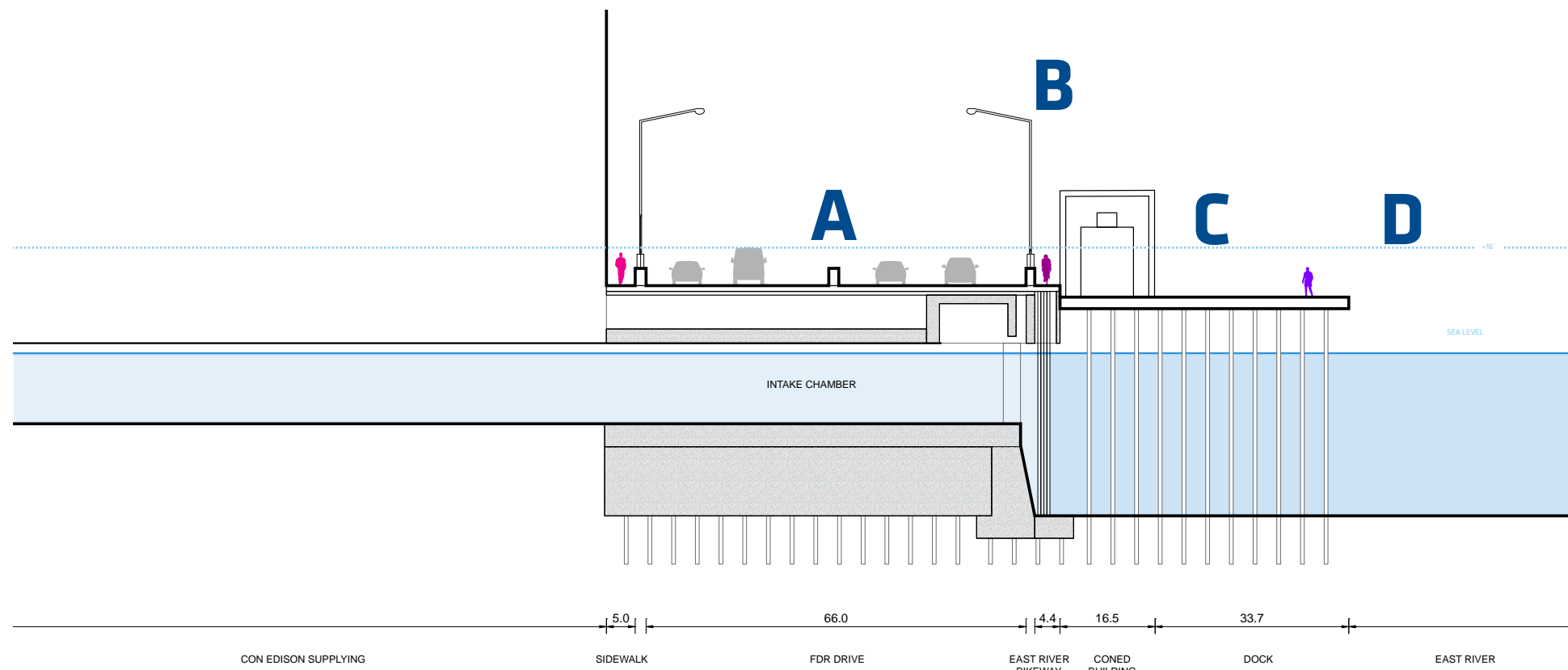
30" NARROWS ALONG
CON-ED HEAD HOUSE



CON-ED RECEIVING PIER



VIEWS ACROSS EAST RIVER



SEGMENT B - CAPT. PATRICK J. BROWN WALKWAY



SEGMENT B - CAPT. PATRICK J. BROWN WALKWAY

EXISTING CONDITIONS



CON-ED PARKING LOT



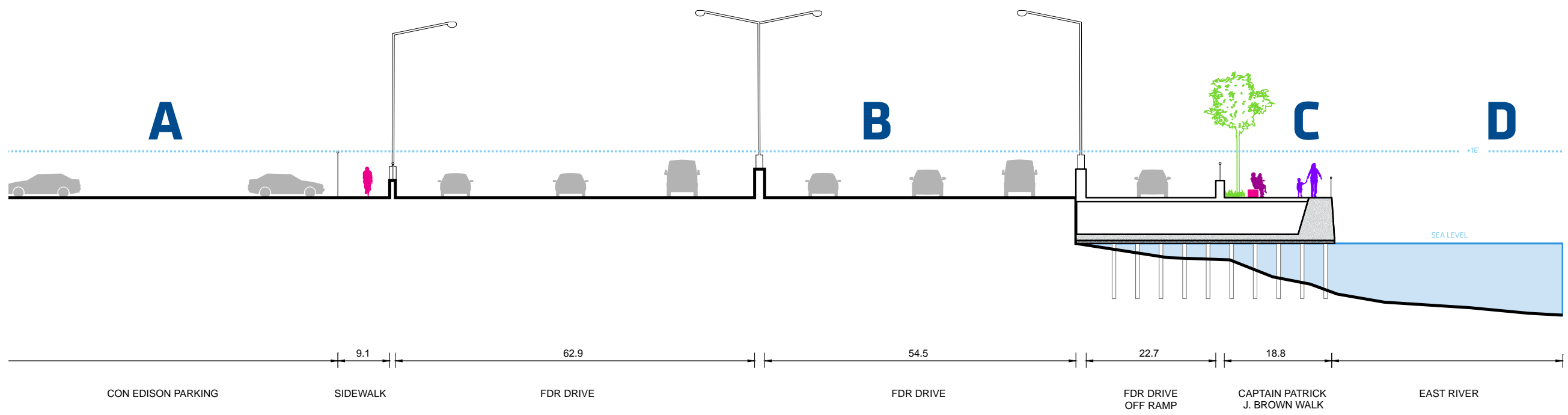
FDR DRIVE



CAPT. PATRICK J BROWN WALK

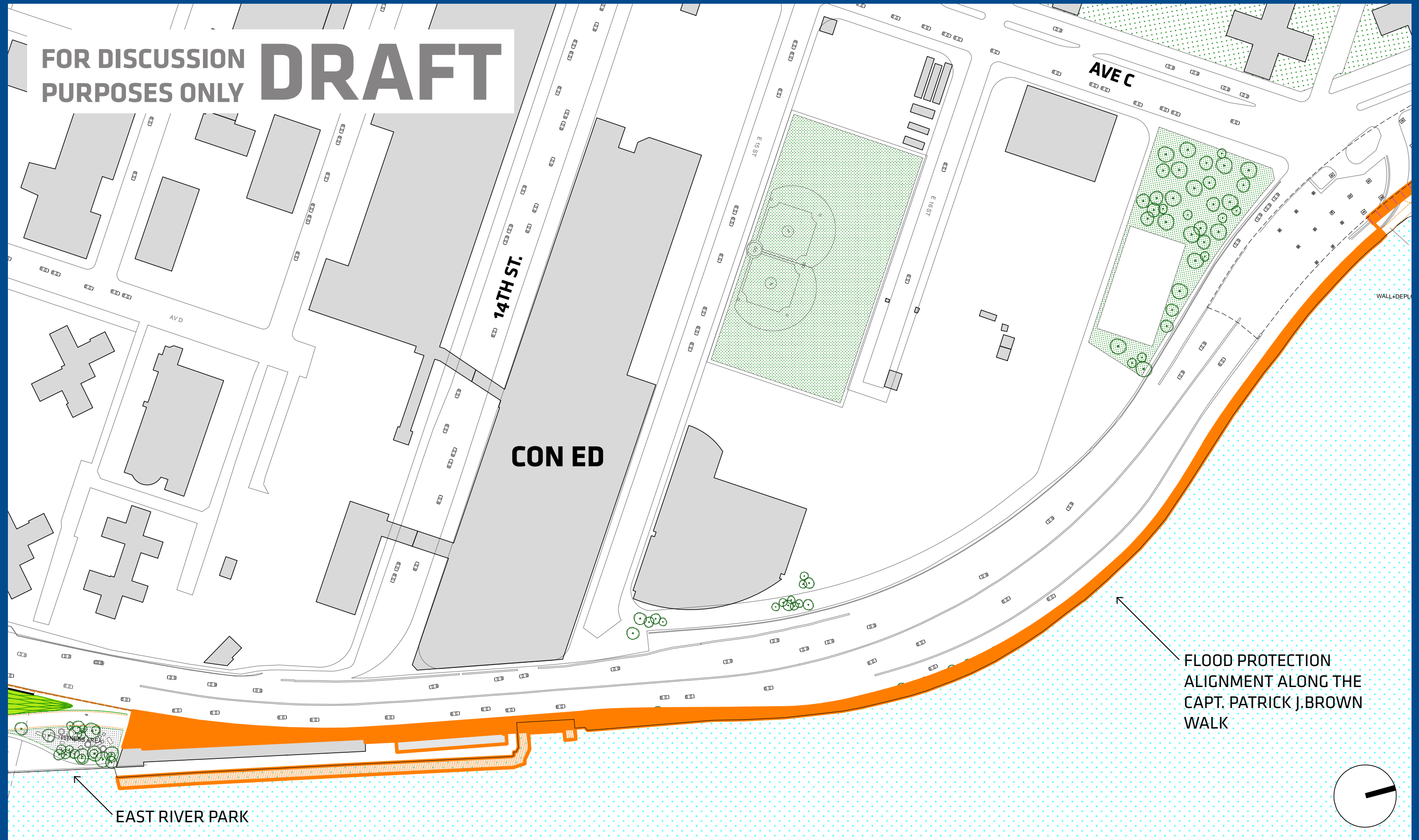


DISTANT VIEWS TO U.N. AND EAST RIVER



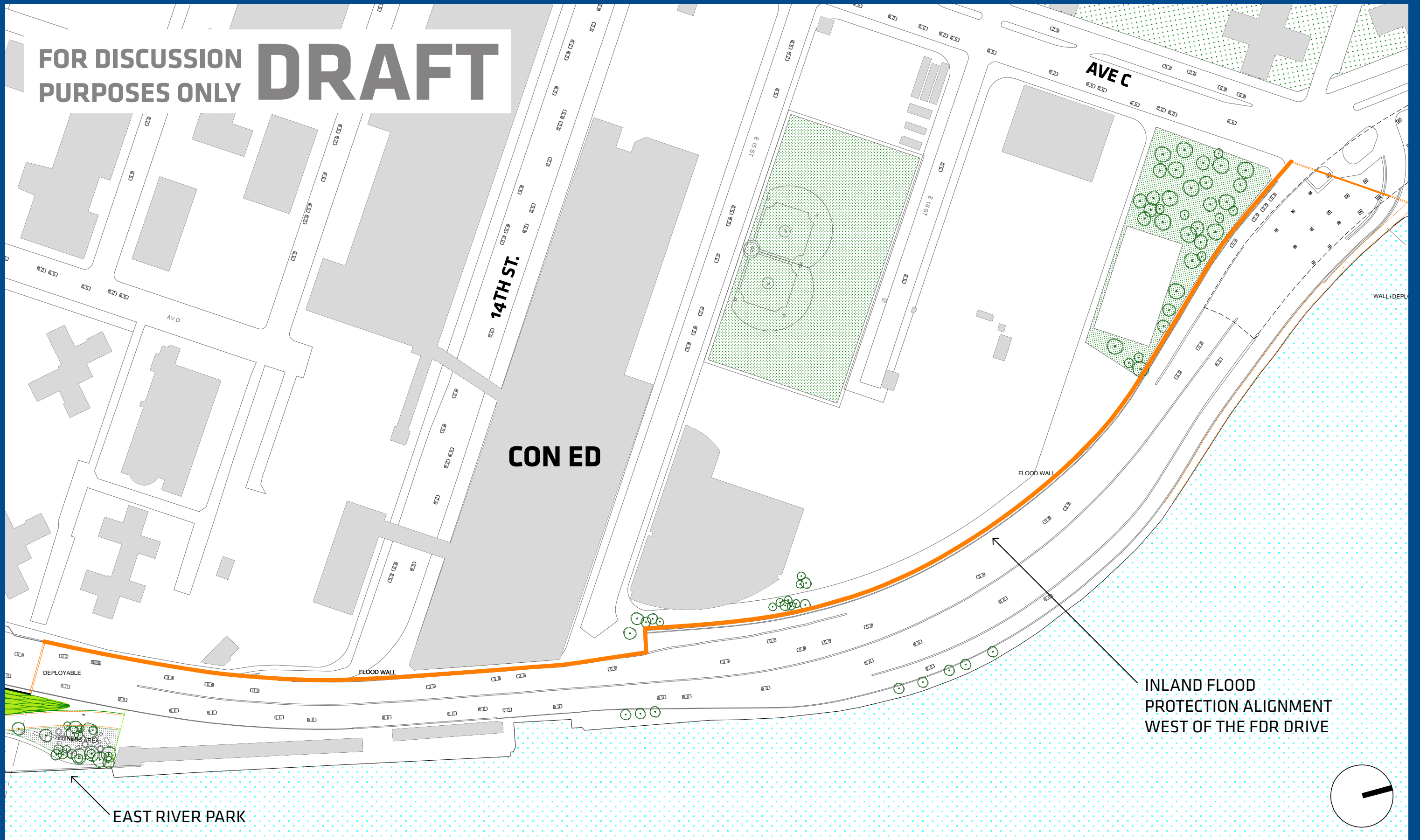
SEGMENTS A+B - ALIGNMENT STUDY

After much investigation, sub-surface constraints have presented a number of technical and cost constraints to an alignment along the Capt. Patrick J. Brown Walk.



SEGMENTS A+B - ALTERNATIVE ALIGNMENT

As a result, a more feasible alignment for this area has been identified inland - allowing for cost savings that could be transferred to other areas of the project.

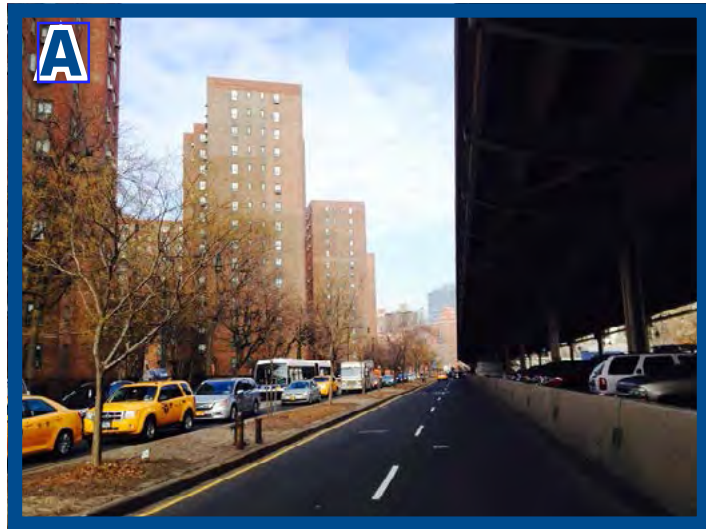


SEGMENTS C+D - STUYVESANT COVE PARK AND FDR VIADUCT



SEGMENTS C+D - STUYVESANT COVE PARK AND FDR VIADUCT

EXISTING CONDITIONS



AVENUE C



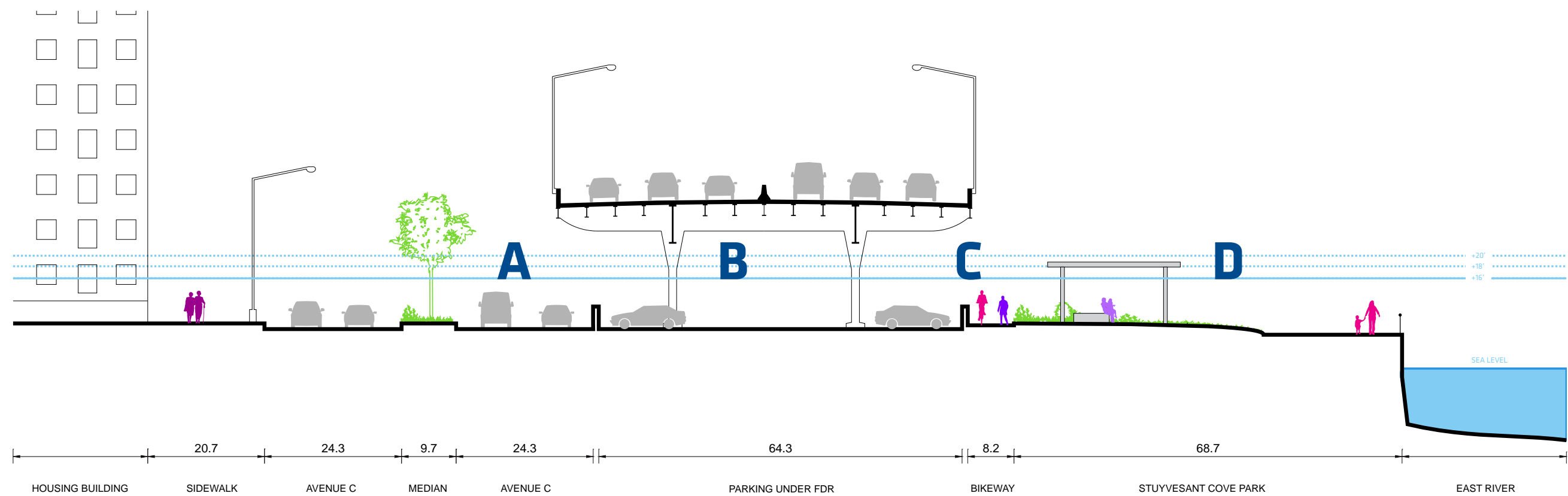
UNDER-FDR



BIKE PATH



STUYVESANT COVE PARK



**STUYVESANT COVE ALIGNMENT
COMMUNITY ENGAGEMENT FINDINGS**

ACCESS TO EAST RIVER PARK

The ESCR team gathered feedback about the pros and cons of each flood protection type for Stuyvesant Cove during the community engagement workshop on 05/19.



STUYVESANT COVE ALIGNMENT - WIGGLE WALL

COMMUNITY ENGAGEMENT FEEDBACK

"IT'S ALREADY A DESOLATE AREA AND THE WALL WILL MAKE IT MORE DANGEROUS"

"IT WOULD MASK THE UGLY PARKING"

"IT WILL CREATE ONE LONG CLAUSTROPHOBIC AND DANGEROUS ALLEYWAY ALONG AVE. C !"

"I PREFER THIS PERMANENT TYPE OF STRUCTURE, IT'S MORE RELIABLE"

"IT WILL BLOCK LIGHT AND AIR TO AVENUE C FOR PEDESTRIANS"

STUYVESANT COVE ALIGNMENT - FLIP-DOWN CANOPY

COMMUNITY ENGAGEMENT FEEDBACK

"IF ONE OF THE FLIP-DOWN GATES IS BLOCKED THEN IT WOULD COMPROMISE THE WHOLE SYSTEM. THE #1 PRIORITY IS FLOOD PROTECTION!"

"THE ART COULD BE AN INTERESTING ADDITION BUT THERE'S A BIG CHANCE IT WOULD GET DESTROYED. VANDALISM IS AN ISSUE!"

"IT WOULD PRESERVE THE VIEW TO THE WATER"

"THEY WON'T BE MAINTAINED PROPERLY"

"IT'S VERY EXPENSIVE!"

STUYVESANT COVE ALIGNMENT - PROTECTIVE PAVILIONS

COMMUNITY ENGAGEMENT FEEDBACK

"I WOULD USE THE PAVILIONS IN THE SUMMER BUT NOT IN WINTER. A LITTLE CAFE OR A FREE BIKE COMFORT STATION WOULD BE NICE!"

"THERE ISN'T ENOUGH ACTIVITY AROUND HERE TO SUSTAIN COMMERCIAL USE"

"THE PARKING SPACES MUST BE MAINTAINED!"

"IT WOULD CREATE ACTIVITY UNDER THE FDR DRIVE. A CAFE WOULD GIVE PEOPLE A REASON TO COME!"

"ELIMINATING THE PARKING IS A GOOD IDEA!"

STUYVESANT COVE ALIGNMENT - BIG BENCH

COMMUNITY ENGAGEMENT FEEDBACK

“OUTDOOR EXERCISE EQUIPMENT LIKE DOWN AT TWO BRIDGES UNDER THE FDR DRIVE WOULD BE GREAT. IT WOULD CREATE MORE ACTIVITY IN THE AREA!”

“SOCIAL SPACES ARE SAFER!”

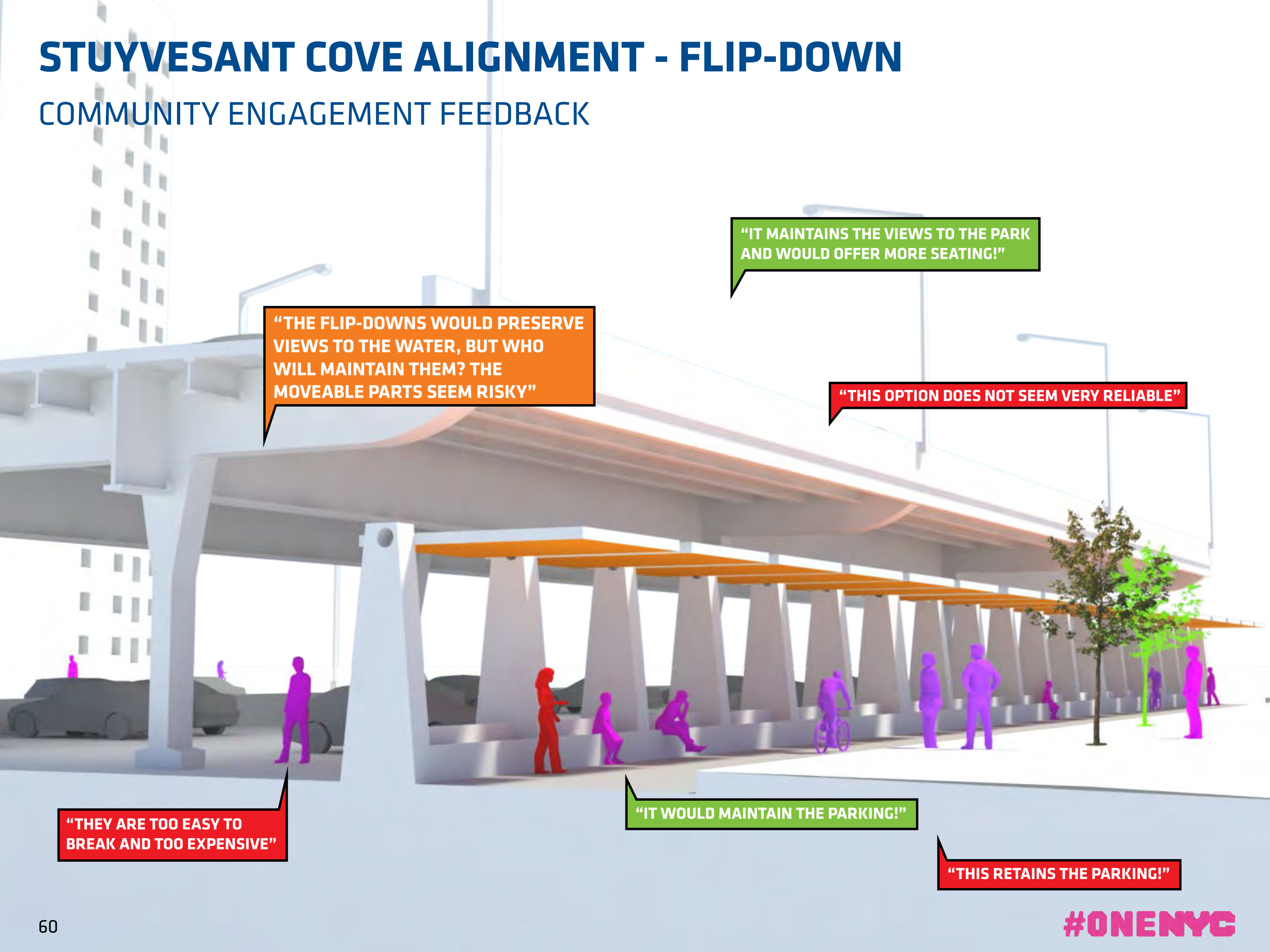
“WHO WANTS TO SIT UNDER THE FDR? IT WILL ATTRACT HOMELESS PEOPLE”

“WE NEED MORE PARKING SPACES NOT LESS!”

“THE ACTIVITIES SOUND APPEALING BUT DEPLOYABLES ARE NOT A GOOD OPTION”

STUYVESANT COVE ALIGNMENT - FLIP-DOWN

COMMUNITY ENGAGEMENT FEEDBACK



“THE FLIP-DOWNS WOULD PRESERVE VIEWS TO THE WATER, BUT WHO WILL MAINTAIN THEM? THE MOVEABLE PARTS SEEM RISKY”

“IT MAINTAINS THE VIEWS TO THE PARK AND WOULD OFFER MORE SEATING!”

“THIS OPTION DOES NOT SEEM VERY RELIABLE”

“THEY ARE TOO EASY TO BREAK AND TOO EXPENSIVE”

“IT WOULD MAINTAIN THE PARKING!”

“THIS RETAINS THE PARKING!”

STUYVESANT COVE ALIGNMENT - FLIP-DOWN CANOPY

COMMUNITY ENGAGEMENT FEEDBACK

“THESE COULD PROVIDE SHADE AND BECOME PART OF THE WATERFRONT LANDSCAPE. I LIKE IT!”

“IT’S AN EYESORE AND WOULD BREAK EASILY”

“IT WOULD PROTECT MORE OF THE AREA: THE PARKING AND THE RESIDENTIAL BUILDINGS”

“VERY RELIANT ON MANUAL MAINTENANCE AND OPERATION”

STUYVESANT COVE ALIGNMENT - ELEVATED PARK

COMMUNITY ENGAGEMENT FEEDBACK

“ELEVATING STUYVESANT COVE PARK IS THE BEST SOLUTION BECAUSE IT IS PERMANENT AND HAS MASS TO ADD THINGS TO. THE TERRACED BERM CAN BE USED FOR EXERCISING OR PICNICS!”

“MOST RELIABLE AND AESTHETICALLY PLEASING!”

“YES!”

“THE PARK WILL BECOME NARROWER AND ACCESS COULD BE CHALLENGING FOR SENIORS”

“YOU CAN’T SEE THE WATER FROM THE STREET BUT ELIMINATING THE SIGHTLINES ISN’T AN ISSUE IF WE GET BETTER VIEWS FROM THE TOP!”

STUYVESANT COVE: PRINCIPLES

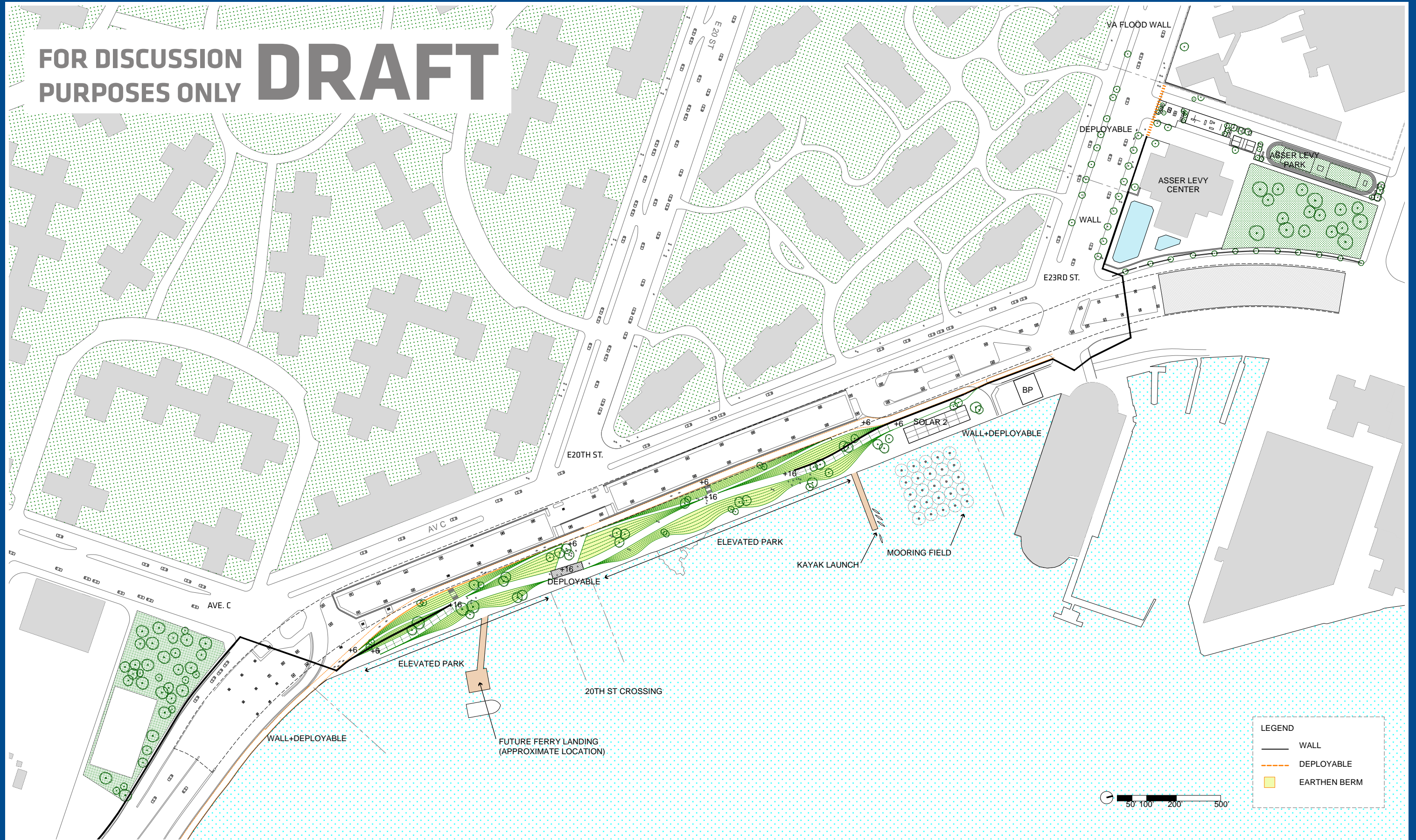
- Minimize use of deployables.
- Maintain at-grade crossing at key junctures.
- Ensure safety and security adjacent to and under the FDR viaduct.
- Support future developments such as the 20th St. ferry landing and Solar Two.

STUYVESANT COVE ALIGNMENT - ELEVATED PARK CONCEPT

DESIGN STUDY

FOR DISCUSSION
PURPOSES ONLY






DRAFT



STUYVESANT COVE ALIGNMENT - E20TH ST CONNECTION

COMMUNITY ENGAGEMENT FEEDBACK

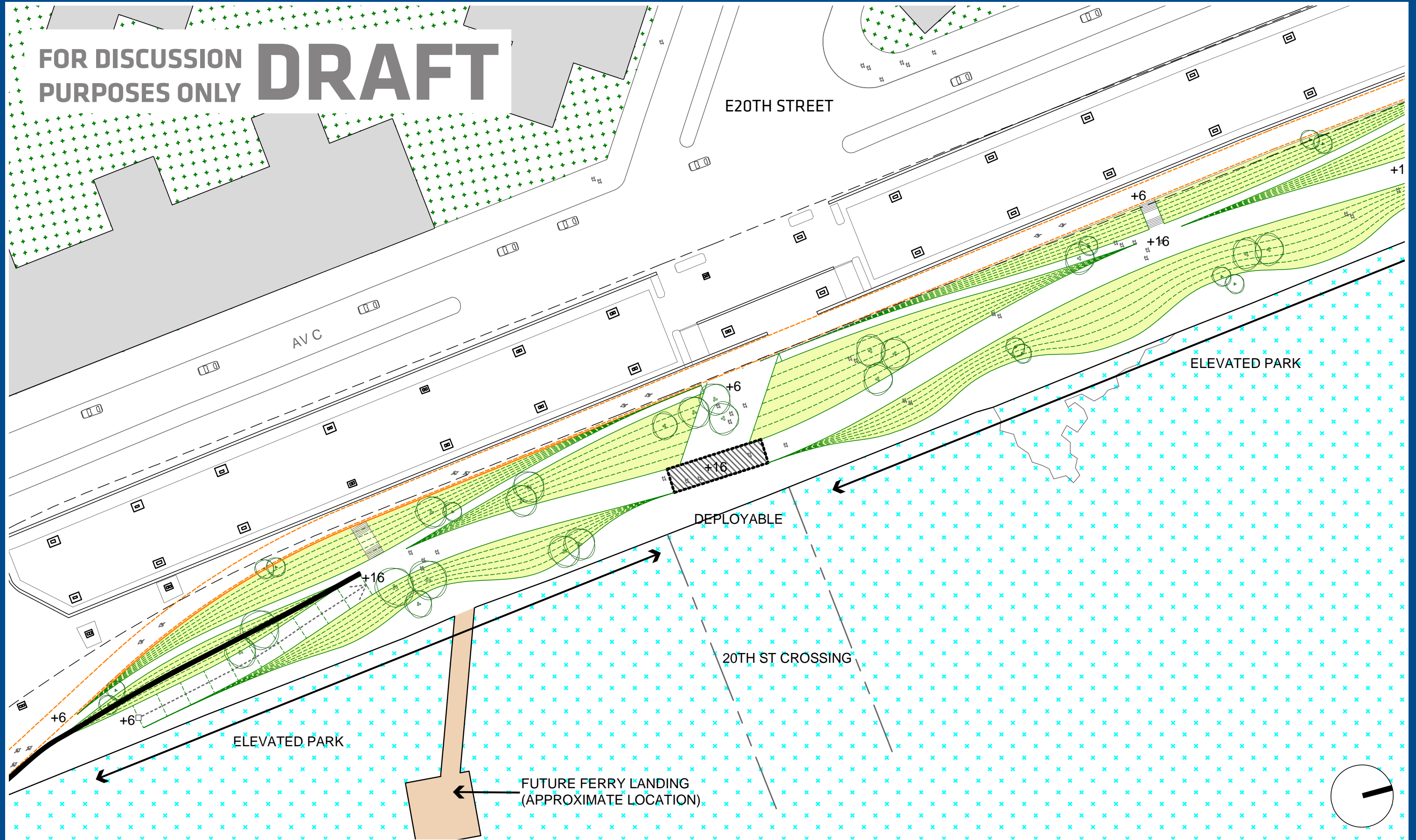
At which intersection do you feel most comfortable crossing...

		E23rd St	E20th St	Ave. C & FDR
...on foot?			✓ 11/17	
...on a bike?				✓ 2/3
...with children?			✓ 3/5	
...with/as a senior?			✓ 4/6	
...with a wheelchair?			✓ 4/4	

* Small sample size: Total number of participants: 17 out of 49 workshop attendees

STUYVESANT COVE ALIGNMENT - E20TH ST CONNECTION

DESIGN STUDY



SEGMENT E - 23RD STREET TIE-BACK



SEGMENT E - 23RD STREET TIE-BACK

EXISTING CONDITIONS



**23RD STREET LOOK-
ING WEST**



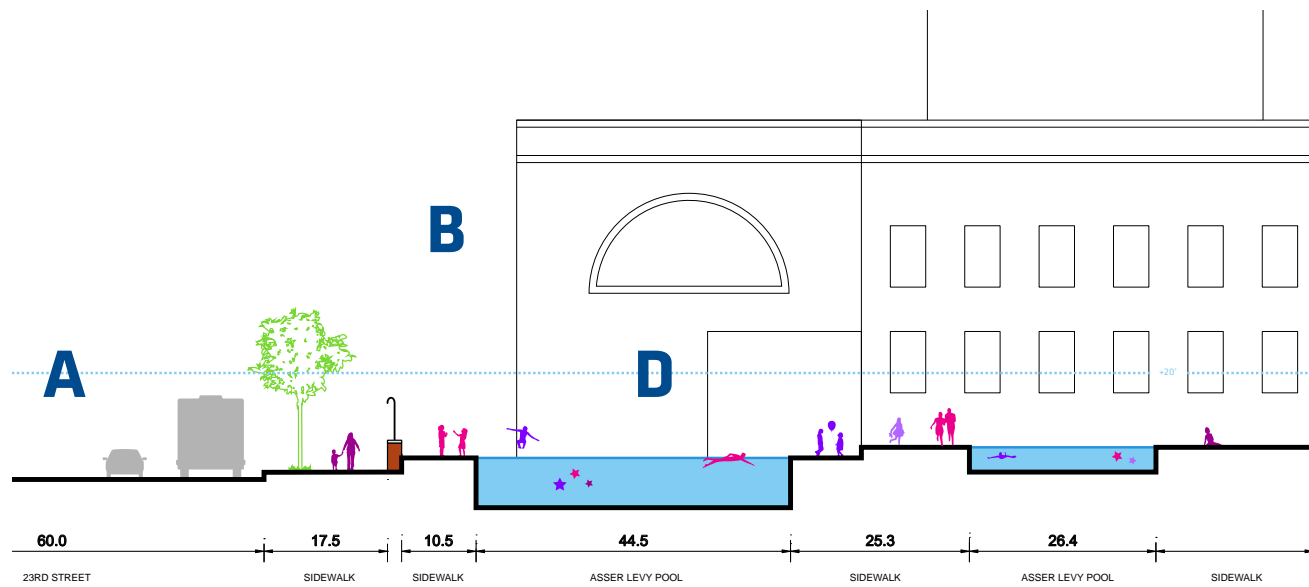
**HISTORIC ASSER-LEVY
PUBLIC BATHHOUSE**



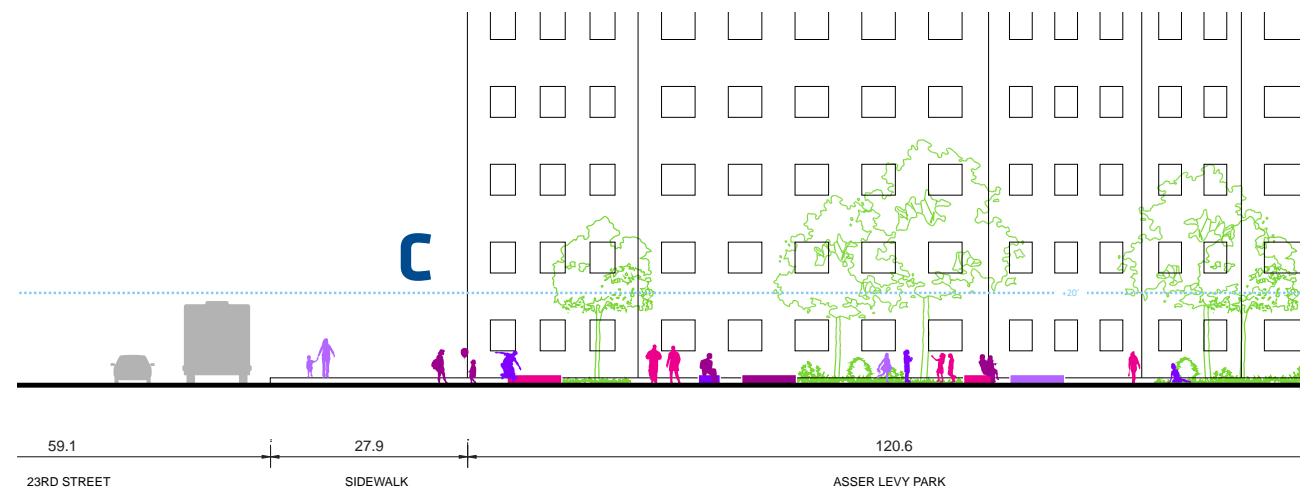
**ASSER-LEVY PARK FROM
ACROSS 23RD STREET**



ASSER LEVY POOL, SUMMER



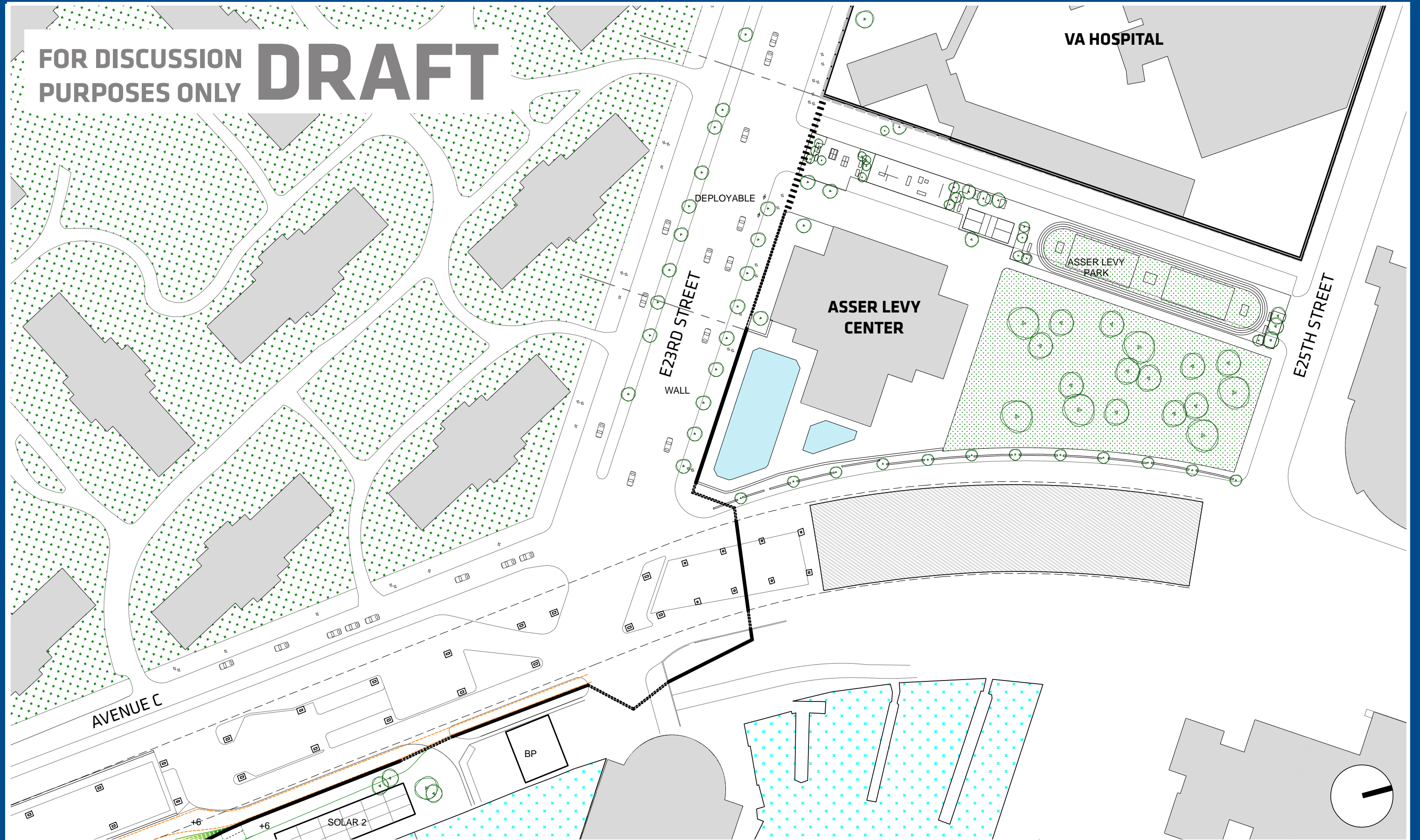
Section - Asser Levy Pool



Section - Asser Levy Park

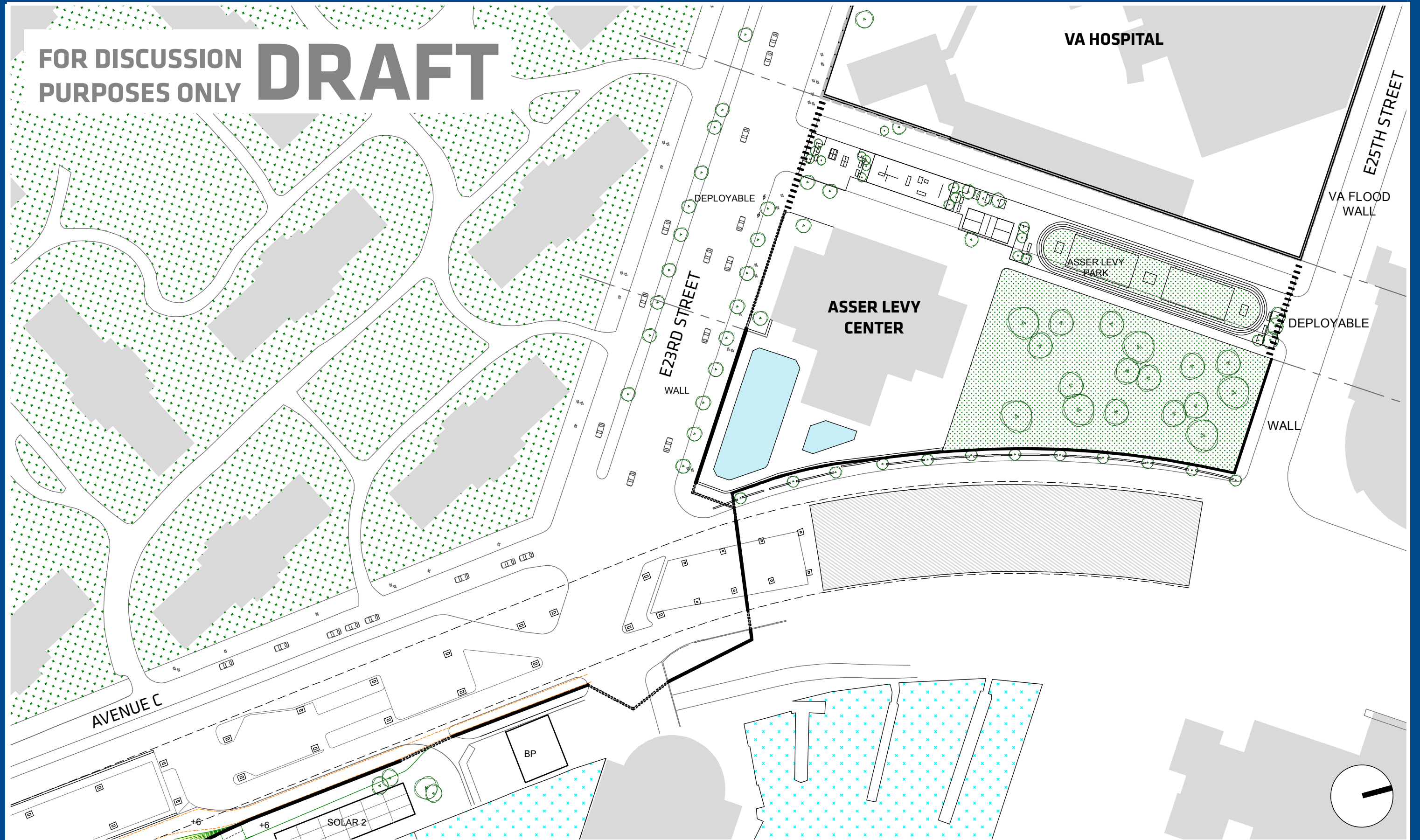
SEGMENT E - 23RD STREET TIE-BACK

DESIGN STUDY



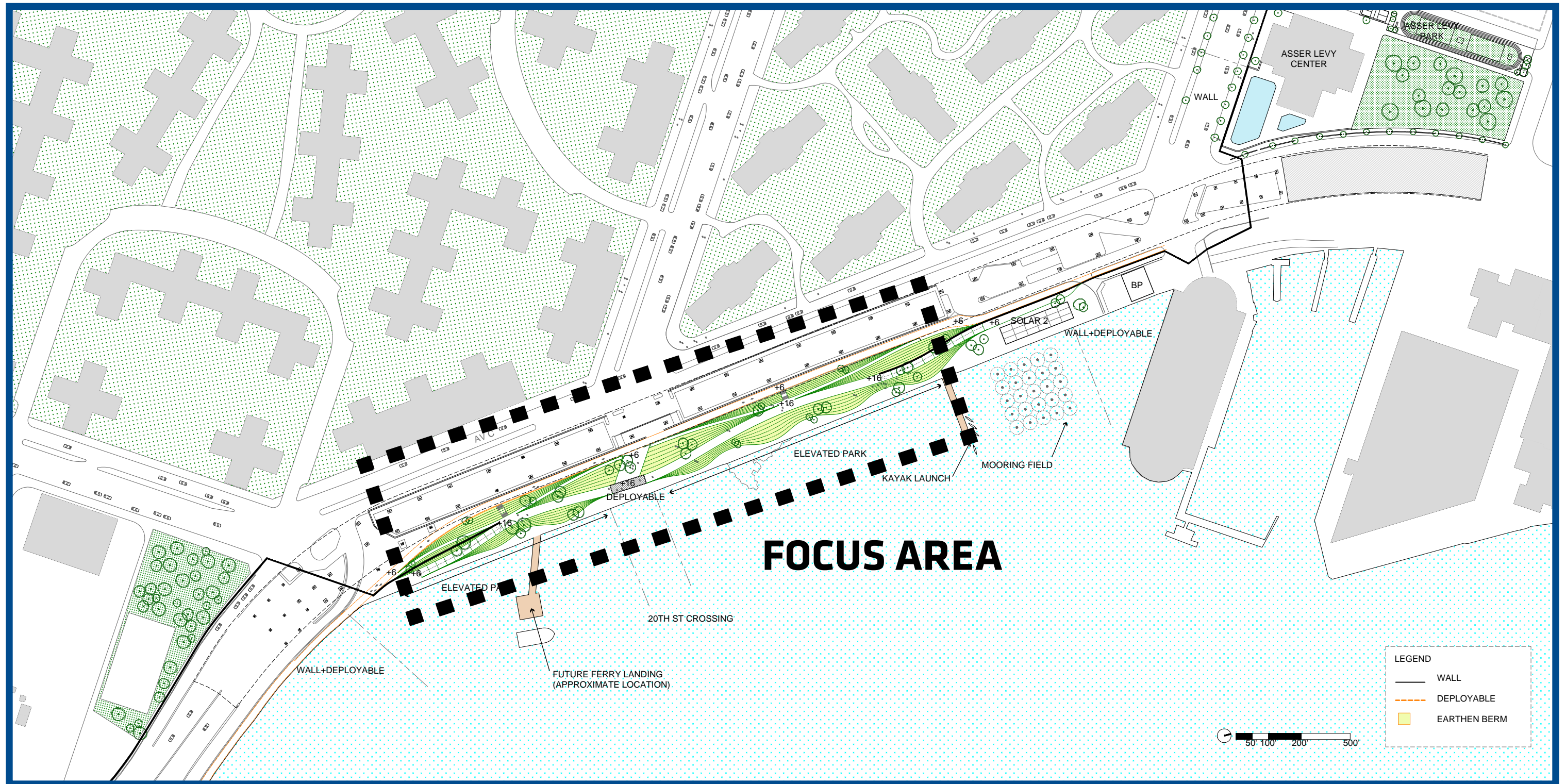
SEGMENT E - ALTERNATIVE UNDER STUDY

25TH STREET



JULY WORKSHOPS - 20TH STREET AND ELEVATED PARK

Focus for the July CE workshops will be on the Elevated Park concept and 20th Street crossing. Physical models are being developed to engage residents in discussion of trade-offs, pros, and cons of various options being investigated.



NEXT STEPS

NEXT STEPS

STAKEHOLDER ENGAGEMENT

The ESCR team will be participating in the following event:

PATHS TO PIER 42 SUMMER WATERFRONT CELEBRATION

**ORGANIZED BY
THE HESTER ST COLLABORATIVE**

JULY 18TH FROM 2:00-6:00PM
AT PIER 42, EAST RIVER PARK

JOIN US AND TELL YOUR FRIENDS!

NEXT STEPS

STAKEHOLDER ENGAGEMENT

The next set of community engagement workshops will be held on:

JULY 28TH FROM 5:30-7:30PM
AT STEIN SENIOR CENTER
204 E 23RD ST

JULY 29TH FROM 6:30-8:30PM
AT CHURCH OF ST. BRIGID
119 AVENUE B

JULY 30TH FROM 6:30-8:30PM
AT MANNY CANTOR CENTER
197 EAST BROADWAY



#ONENYC

nyc.gov/resiliency

QUESTIONS/DISCUSSION

E: nycresiliency@nyc.cityhall.gov

Twitter: [@NYClimate](https://twitter.com/NYClimate)