

VAN  
ALEN  
INSTITUTE



# DO LOOK DOWN

NEW YORK CITY'S BROOKLYN BRIDGE, REIMAGINED

SHANNON HUI, KWANS KIM, YUJIN KIM; HONG KONG, BAY AREA, NEW YORK



MEET THE TEAM\*



SHANNON  
HUI

Born and raised in Hong Kong, Shannon (20) is a rising junior at Barnard College studying Architecture and Psychology. She is most passionate about elevating voices that have historically been left to the margins of urban narratives, and creating spaces in which people can feel like they belong.



KWANS  
KIM

Kwans (17) is a 2020 graduate of Foothill High School in the Bay Area. He is passionate about music and film and hopes to work one day in the entertainment industry as a creative force. In the Fall, he will be attending New York University.



YUJIN  
KIM

Yujin (21) is a rising second-year PhD candidate in pure mathematics at the Courant Institute of Mathematical Sciences, specializing in probability theory. He enjoys working on projects with friends from multi-disciplinary backgrounds. He graduated from Columbia University in 2019.

*\*heads not to scale*

# GUIDING PRINCIPLES

PROJECT APPROACH

1

## Preservation.

The current form and aura of the bridge must be preserved: any enhancements should be kept unobstructive or reversible.

2

## A Wide Scope:

As a premier landmark, the bridge has a certain duty to equitably represent the diversity of peoples that it bridges.

3

## The Potential for More:

The proposal should not be static in its capacities, but instead possess enormous potential for future progress and change.



DO LOOK DOWN

REIMAGINING BROOKLYN BRIDGE

# PROJECT OVERVIEW

DESIGN ELEMENTS IN SUMMARY

**Roadway  
reclaimed  
for  
pedestrians  
and cyclists**

**Glass  
walkway  
installed  
above  
girders**

**LED and  
Projection  
system**

**Intervening  
on spaces  
adjacent to  
bridge and  
beyond**

**Old car  
lanes  
remodelled  
as public  
spaces**



1 **GLASS WALKWAY**

2 RECLAIMED ROADWAY

3 KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

4 ACCESS



DO LOOK DOWN

GLASS WALKWAY

# GIRDERS, TODAY





DO LOOK DOWN

GLASS WALKWAY

# GIRDERS, REIMAGINED





DO LOOK DOWN

GLASS WALKWAY

# NEW SPACE = COMMUNITY ENGAGEMENT OPPORTUNITIES

Glass walkway above girder gives  
~30 extra feet of width on each side

Cultural  
performances  
and events

Art installations

Support for vendors





DO NOT LOOK DOWN

GLASS WALKWAY

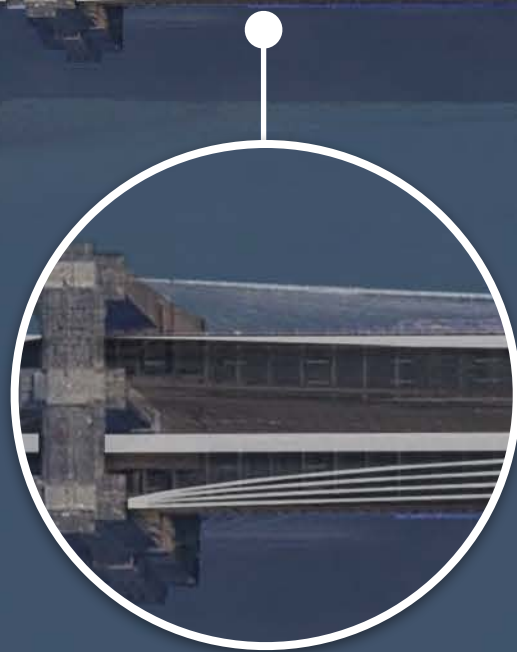
# GLASS WALKWAY PATTERN



TRANSLUCENT



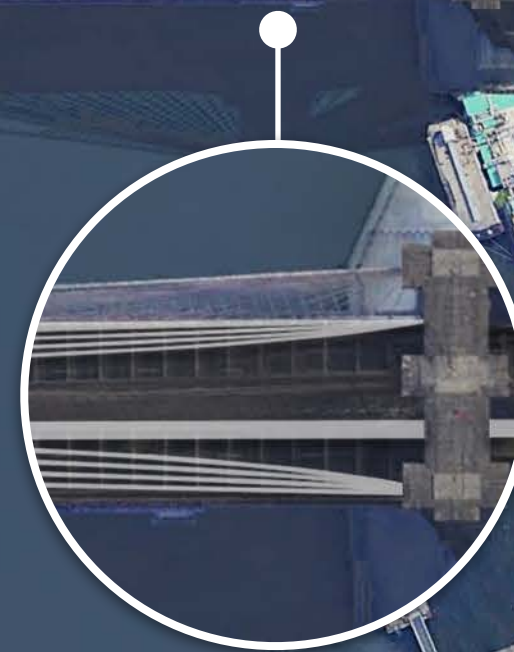
FROSTED



Translucent areas are concentrated at the arches, creating a new commuter and tourist experience



Proportionally higher segments of frosted glass caters to performers and vendors, and offers a route to those uncomfortable with translucent path



Pattern inspired by the bridge's interweaving cables



DO LOOK DOWN

RECLAIMED ROADWAY

## PLAYING WITH COLOR

Standard panels can be swapped or overlaid with removable coloured film

Engages local artists and increases the bridge's dynamism

Glass walkway can be enjoyed looking up or looking down





DO LOOK DOWN

RECLAIMED ROADWAY

## REPLICABILITY: COLORED GLASS ON THE WILLIAMSBURG BRIDGE

Interplay between color,  
glass, and light can enhance  
the experience of bridges  
throughout New York City





DO LOOK DOWN

GLASS WALKWAY

# PRESERVATION: THE BRIDGE WE ALREADY LOVE, AND MORE

Architectural  
form preserved

Expanded  
pedestrian  
space

Opportunities  
for seasonal  
programming

Elevated central  
walkway

Kinetic paving

Pathway  
partitioned for  
safer experience





DO LOOK DOWN

REIMAGINING BROOKLYN BRIDGE

1 GLASS WALKWAY

2 **RECLAIMED ROADWAY**

3 KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

4 ACCESS



DO LOOK DOWN

RECLAIMED ROADWAY

# ROADWAY, TODAY





DO LOOK DOWN

RECLAIMED ROADWAY

# ROADWAY, REIMAGINED





DO LOOK DOWN

RECLAIMED ROADWAY

# A NEW HOME FOR THE BROOKLYN BRIDGE FLEA MARKET

Overhead  
glass walkway

Pedestrians

Access to new  
views of the  
East River

Reclaimed roadway  
for mixed transit  
and programming

Patrons

Shading provided by  
glass walkway pattern

Kinetic paving  
installed throughout  
roadway

Local vendors





DO LOOK DOWN

REIMAGINING BROOKLYN BRIDGE

- 1 GLASS WALKWAY
- 2 RECLAIMED ROADWAY
- 3 **KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS**
- 4 ACCESS



# KINETIC PAVING

THE CONCEPT



## TRAFFIC

Kinetic paving is installed on flooring, processing energy for pedestrian footsteps



## ENERGY

Energy from pavers is harvested and channelled back into the bridge and its adjacent spaces



## USER EXPERIENCE

Data on traffic trends collected to further inform programming. Mobile app allows users to track energy they contribute



# KINETIC PAVING

THE PHILOSOPHY



## REIMAGINES TRAFFIC

Every footstep becomes a small but powerful contribution to the productions that light up the city



## REIMAGINES HUMAN INTERACTION

Inherent sense of unity conveyed in producing (energy) together



## REIMAGINES TECHNOLOGY

As technology evolves so will its use on the bridge and its adjacent spaces. Inspires proactive sustainability solutions in architecture, and challenges tech to contribute to social welfare



DO LOOK DOWN

KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

# LIGHTING, TODAY





DO LOOK DOWN

KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

# LIGHTING, REIMAGINED





DO LOOK DOWN

KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

## A BEACON FOR THE CITY

Images of civil and  
cultural importance are  
projected on towers  
during exceptional times

Here, the Statue of Liberty  
wearing a surgical mask  
speaks directly to the  
nationwide need for constant  
vigilance against the pandemic

ART BY ANTON PETRUS



DO LOOK DOWN

KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

# ENGAGEMENT THROUGH AUGMENTED REALITY

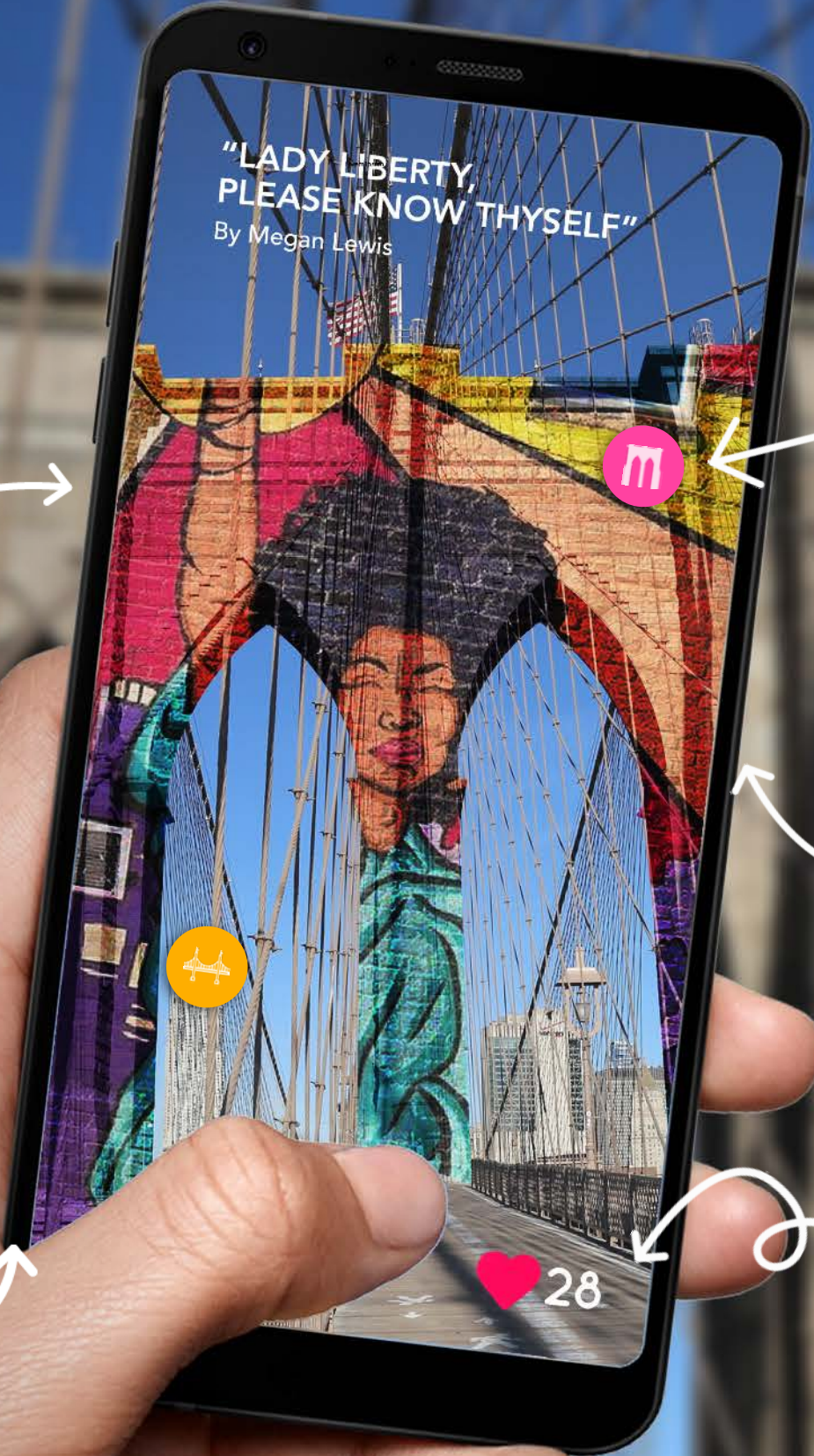
Brooklyn Bridge phone app allows users to interact with the space through their smartphones

Augmented reality allows for non-physical, artistic intervention

Highlights historical and architectural facts

Wide-spread announcements of upcoming events

Gathers feedback through public polls on future programming and interventions



ART: "LADY LIBERTY, PLEASE KNOW THYSELF" BY MEGAN LEWIS (IG @URBANHIPSTA)



## SITE MAP: KINETIC- POWERED INTERVENTIONS

We explore the implementation of light displays in spaces adjacent to the bridge, all of which will be powered by kinetic pavers on nearby walkways. By reimagining the bridge in tandem with its neighbours, we hope to reinforce the intimate relationships shared among them.





DO LOOK DOWN

REIMAGINED

KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

BROOKLYN BRIDGE PARK, BROOKLYN

## JANE'S CAROUSEL

A transparent OLED display is installed on the facade of Jane's Carousel, which is currently closed indefinitely due to COVID-19. This intervention adapts the attraction to the conditions of today while preserving the visibility of its stunning interior.

BEFORE





DO LOOK DOWN

KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

REIMAGINED

BROOKLYN BRIDGE PARK, BROOKLYN

## FULTON FERRY LANDING

Holograms projected onto fountain mist, set against the backdrop of the Brooklyn Bridge and the Lower Manhattan skyline, provide another way for the bridge to be enjoyed at night. This display can be comfortably admired by socially-distanced park-goers, and provides an accessible outlet for artists during a time when museums and galleries are largely shut down.

BEFORE



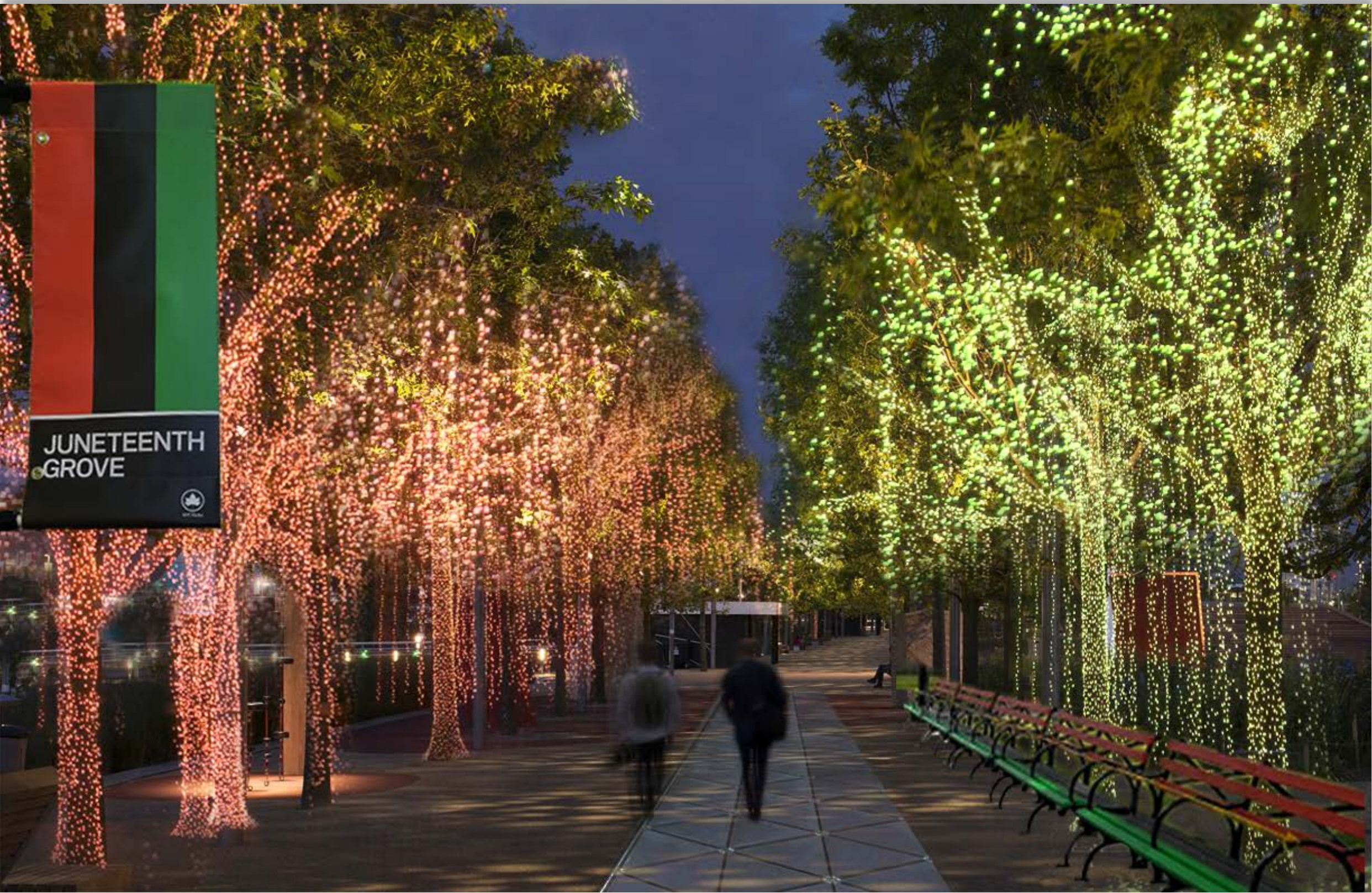


DO LOOK DOWN

KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

REIMAGINED

CADMAN PLAZA PARK, BROOKLYN



**JUNETEENTH GROVE**

Looking forward to a day when Black lives are not just acknowledged but actively celebrated, we believe that the beautification of this symbolic space is a necessary accompaniment to its recent renaming. Here, we have installed red and green lights on the trees to match the park signs, which were temporarily repainted in the colors of the Pan-African flag by NYC Parks. The sustainable character of the lighting fixtures ensures that this display is here to stay.

BEFORE





DO LOOK DOWN

KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

REIMAGINED

CADMAN PLAZA PARK, BROOKLYN



**BROOKLYN  
WAR MEMORIAL  
(SOUTH SIDE)**

This war memorial has long been a source of frustration due to its continued neglect and inaccessibility. Until the structure is restored and reopened for public access, the names of Brooklyn’s WWII service members may be projected on its facade (currently, names are engraved on plaques within the building) as a quick response to the desire for improvements to be made whilst some veterans are still alive.

BEFORE





DO LOOK DOWN

KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

REIMAGINED

CADMAN PLAZA PARK, BROOKLYN

**BROOKLYN  
WAR MEMORIAL  
(WEST SIDE)**

We chose a piece that pays homage to the front-line heroes of the COVID-19 pandemic. By displaying “Front Line” on the West Face of the War Memorial while simultaneously projecting the names of WWII service members at the South, the site transforms from a war memorial to a living “service” memorial, honoring those who have served the city at times of crisis, then and now.

BEFORE



ART: “FRONT LINE” BY TERRANCE OSBORNE (IG @TERRANCEOSBORNE)





DO LOOK DOWN

KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

REIMAGINED

BROOKLYN BRIDGE ANCHORAGE, MANHATTAN

## ART IN THE ANCHORAGES

By reviving the anchorages as a space for local artists to showcase music, art, poetry, and cultural performances, we pay homage to the historical legacy of Creative Time's "Art in the Anchorage"- a series of installations and events hosted inside the cavernous spaces of the bridge's anchorages from 1983 to 2001. Reflecting on the global plight of war refugees, this installation provokes dialogue on displacement and resettlement, as its warm light is alluring yet unreachable.

BEFORE



ART: "THIS IS NOT A REFUGE! (2)" BY ANILA QUAYYUM AGHA (IG @ANILAQUAYYUMAGHA)



DO LOOK DOWN

REIMAGINED

KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS

CITY HALL PARK, MANHATTAN

## CITY HALL

In “Pride is Powerful,” Lynch seeks to make a clear political statement, emphasising that “[the LGBTQ] community must stand with the current Black Lives Matter movement: we must fight against systems that threaten us all... and that starts with protesting.” Like the bridge, City Hall features prominently as a historic venue for activism and protest. Furthermore, City Hall Park leads right to the bridge’s Manhattan entrance, where it hosts a great deal of traffic. These make the park a powerful location for sociopolitical messaging through projection.

BEFORE



ART: “PRIDE IS POWERFUL” BY JOSEPH LYNCH (IG @JOENIGIRI)





- 1 GLASS WALKWAY
- 2 RECLAIMED ROADWAY
- 3 KINETIC PAVERS, PROJECTIONS, LIGHT DISPLAYS
- 4 **ACCESS**



DO LOOK DOWN

ACCESS

## ACCESSIBILITY PROPOSAL AT BRIDGE ARCHES



A ramp and a set of stairs placed on each side of each tower allow for mobility between the upper-deck and the pedestrianized roadway.



DO LOOK DOWN

ACCESS

## ACCESS PROPOSAL AT BRIDGE CENTER



Another set of stairs connects the two levels of the bridge at the bridge center. This will allow for those affected by the sun on hot days to find shade at the promenade's half-way point, or simply for a change in scenery.



DO LOOK DOWN

ACCESS

# EXISTING CAR LANES: BROOKLYN BRIDGE BOULEVARD / PROMENADE

MANHATTAN-TO-BROOKLYN DIRECTION  
EXIT OF INNER-MOST CAR LANE (RECLAIMED AS BIKE LANE)



DO LOOK DOWN

ACCESS

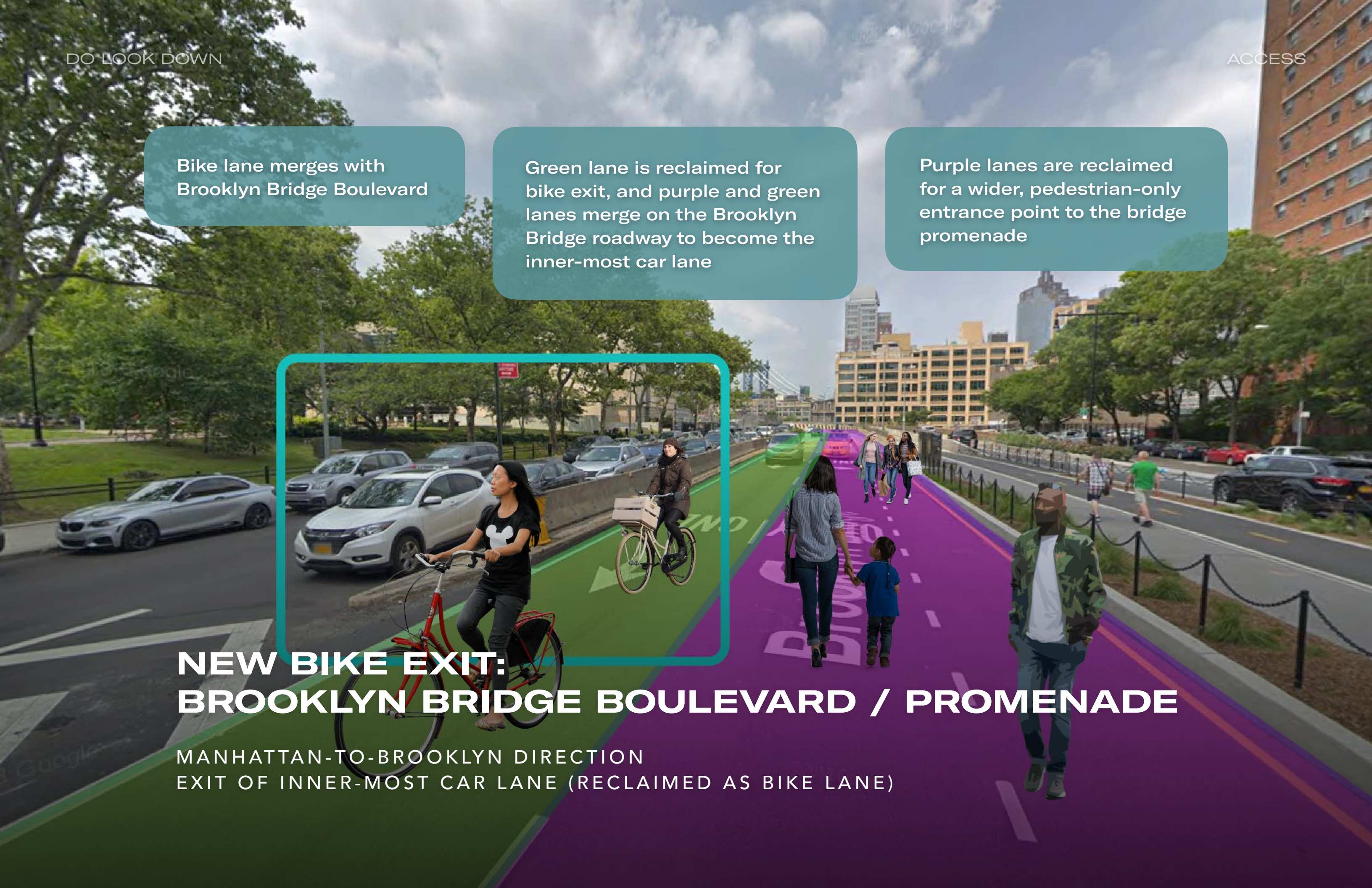
Bike lane merges with  
Brooklyn Bridge Boulevard

Green lane is reclaimed for  
bike exit, and purple and green  
lanes merge on the Brooklyn  
Bridge roadway to become the  
inner-most car lane

Purple lanes are reclaimed  
for a wider, pedestrian-only  
entrance point to the bridge  
promenade

# NEW BIKE EXIT: BROOKLYN BRIDGE BOULEVARD / PROMENADE

MANHATTAN-TO-BROOKLYN DIRECTION  
EXIT OF INNER-MOST CAR LANE (RECLAIMED AS BIKE LANE)





DO LOOK DOWN

ACCESS

## EXISTING CAR LANES: CENTRE STREET

MANHATTAN-TO-BROOKLYN DIRECTION  
ENTRANCE OF OF INNER-MOST CAR LANE (RECLAIMED AS BIKE LANE)



DO LOOK DOWN

ACCESS

Existing “Left-turn only”  
lane will be converted into  
a “bike-only” lane

Cyclists from both lanes  
may turn into the bridge

Signage and removable barriers  
keep cars from mistakenly  
entering the new bike lane while  
accommodating for emergency  
and vendor vehicle access

## NEW BIKE ENTRY: CENTRE STREET

MANHATTAN-TO-BROOKLYN DIRECTION  
ENTRANCE OF OF INNER-MOST CAR LANE (RECLAIMED AS BIKE LANE)

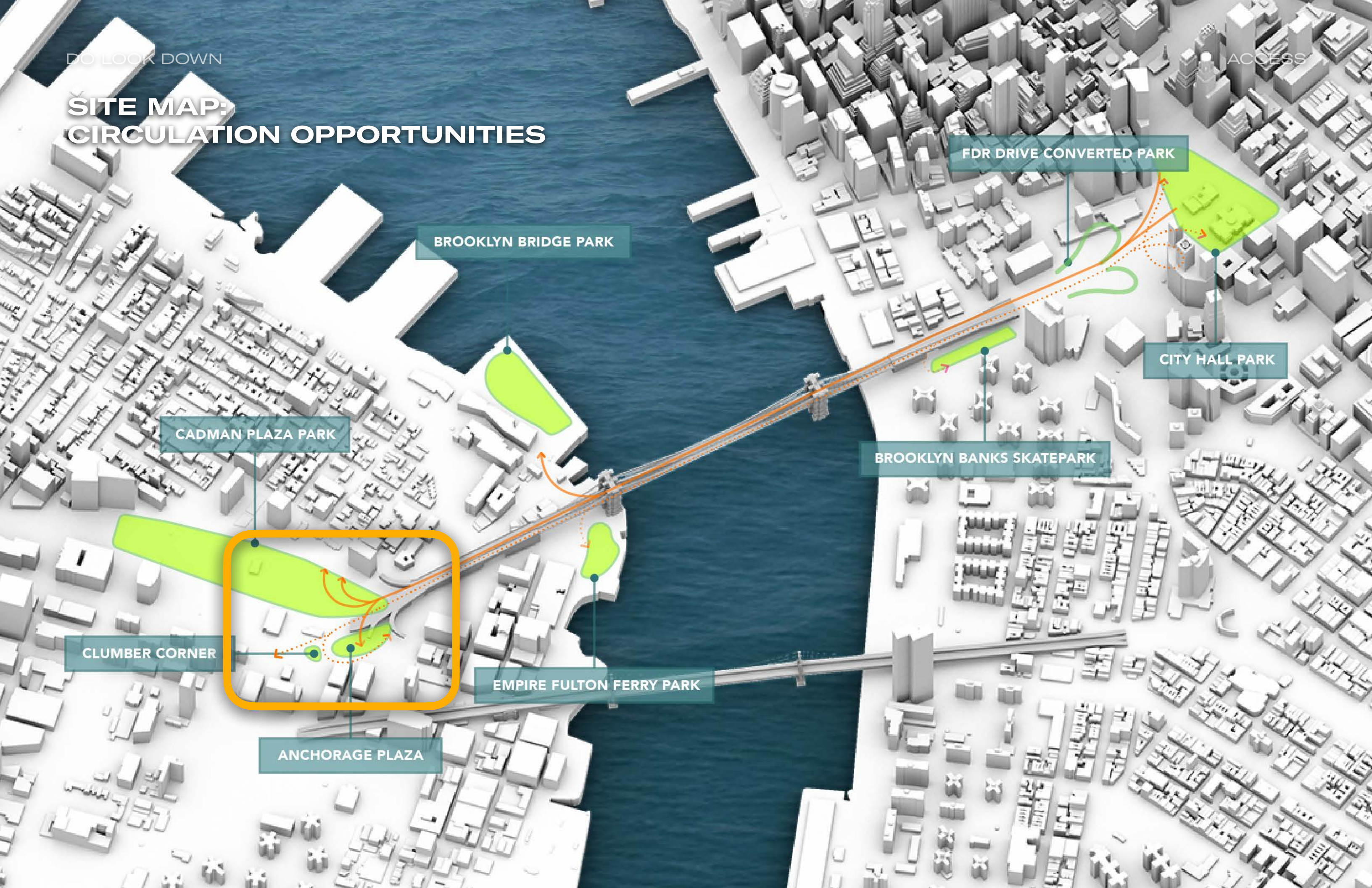




DO LOOK DOWN

# SITE MAP: CIRCULATION OPPORTUNITIES

ACCESS



BROOKLYN BRIDGE PARK

FDR DRIVE CONVERTED PARK

CITY HALL PARK

CADMAN PLAZA PARK

BROOKLYN BANKS SKATEPARK

CLUMBER CORNER

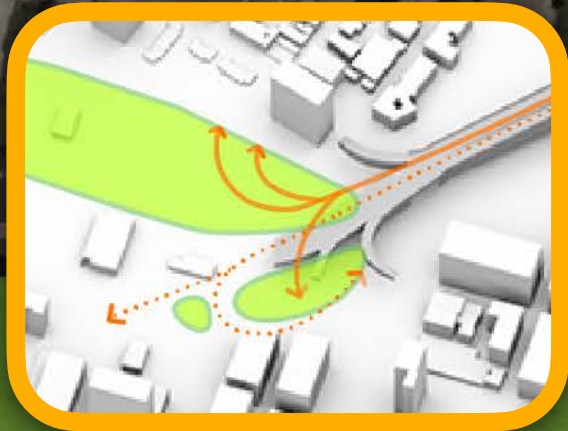
EMPIRE FULTON FERRY PARK

ANCHORAGE PLAZA



DO LOOK DOWN

ACCESS



CADMAN PLAZA PARK



HENRY STREET

CADMAN PLAZA W

ANCHORAGE PLAZA

WASHINGTON STREET

CLUMBER CORNER

CADMAN PLAZA E

RED CROSS PL

PROSPECT STREET

BROOKLYN QUEENS EXPY

ADAMS ST



CYCLISTS



PEDESTRIANS, SCOOTERS, SKATEBOARDS, ETC.



PEDESTRIAN



PUBLIC SPACE OPPORTUNITY



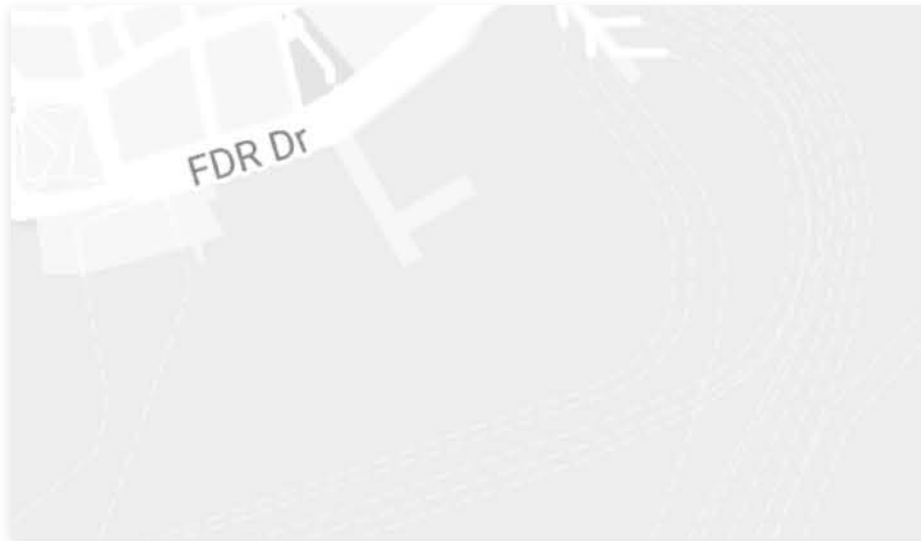
BROOKLYN

OLD CAR LANES  
REMODELLED AS  
PUBLIC SPACES

BEFORE



SITE MAP



AFTER

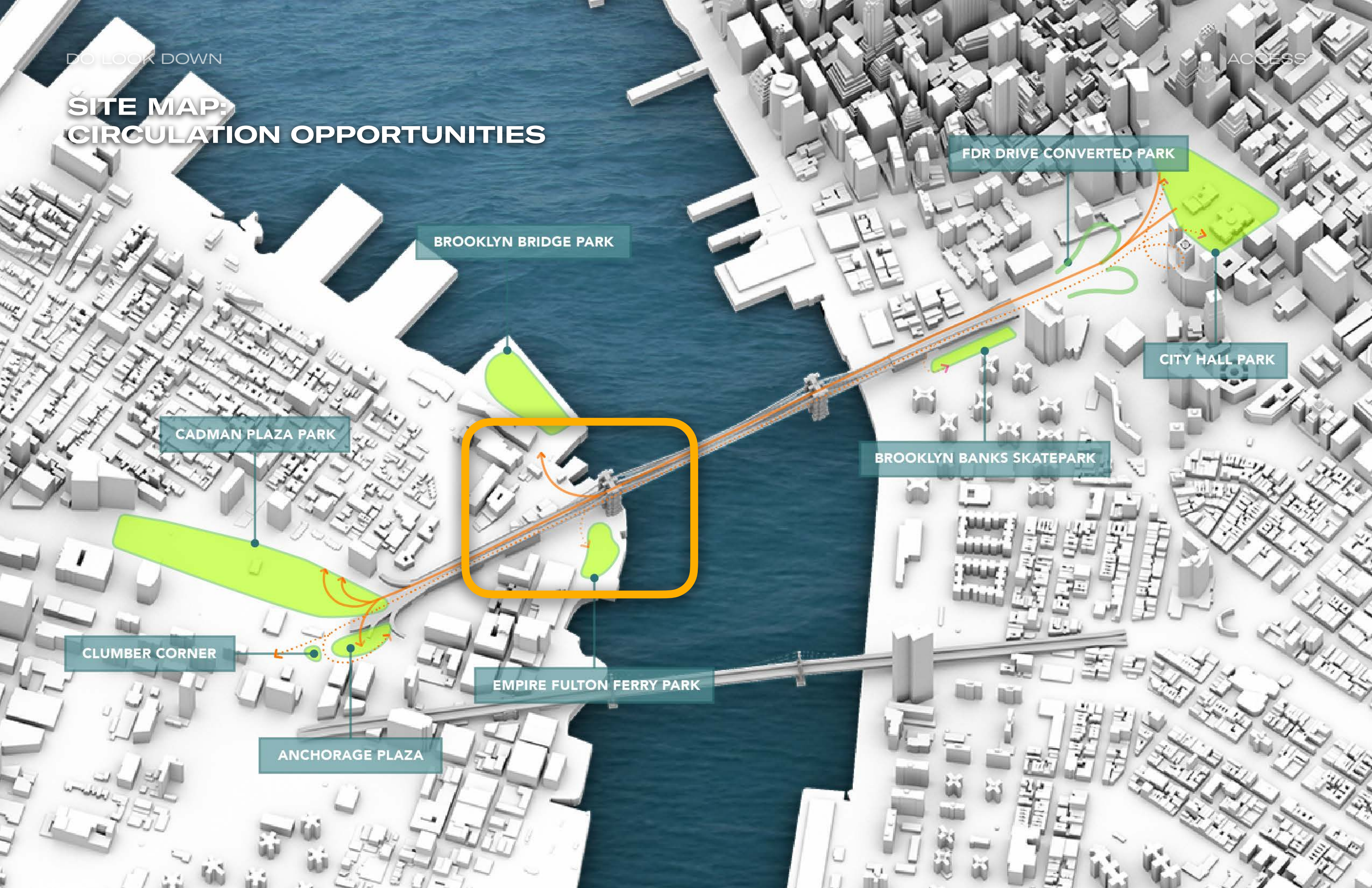




DO LOOK DOWN

# SITE MAP: CIRCULATION OPPORTUNITIES

ACCESS



BROOKLYN BRIDGE PARK

FDR DRIVE CONVERTED PARK

CITY HALL PARK

CADMAN PLAZA PARK

BROOKLYN BANKS SKATEPARK

CLUMBER CORNER

EMPIRE FULTON FERRY PARK

ANCHORAGE PLAZA



DO LOOK DOWN



BROOKLYN BRIDGE PARK



ACCESS





FURMAN STREET

OLD FULTON STREET

NEW DOCK STREET

WATER STREET

EMPIRE FULTON FERRY PARK

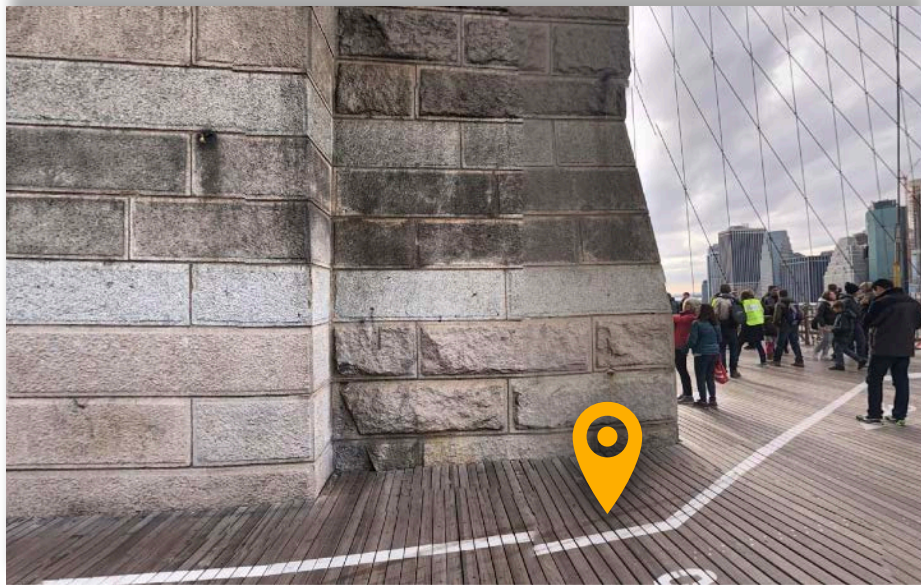
-  CYCLISTS
-  PEDESTRIANS, SCOOTERS, SKATEBOARDS, ETC.
-  PEDESTRIAN
-  PUBLIC SPACE OPPORTUNITY



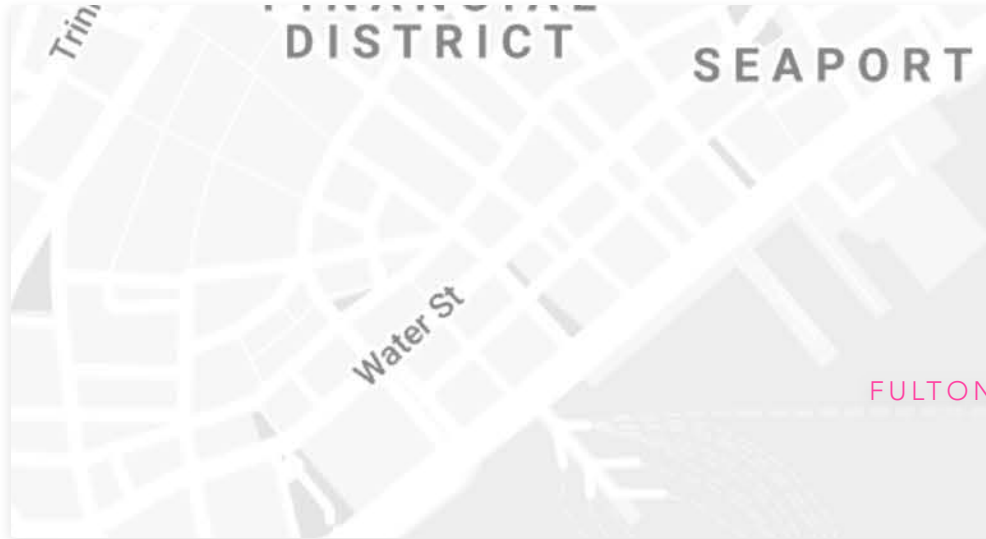
BROOKLYN

CREATING GROUND-LEVEL ACCESS POINTS AT CENTER OF BRIDGE

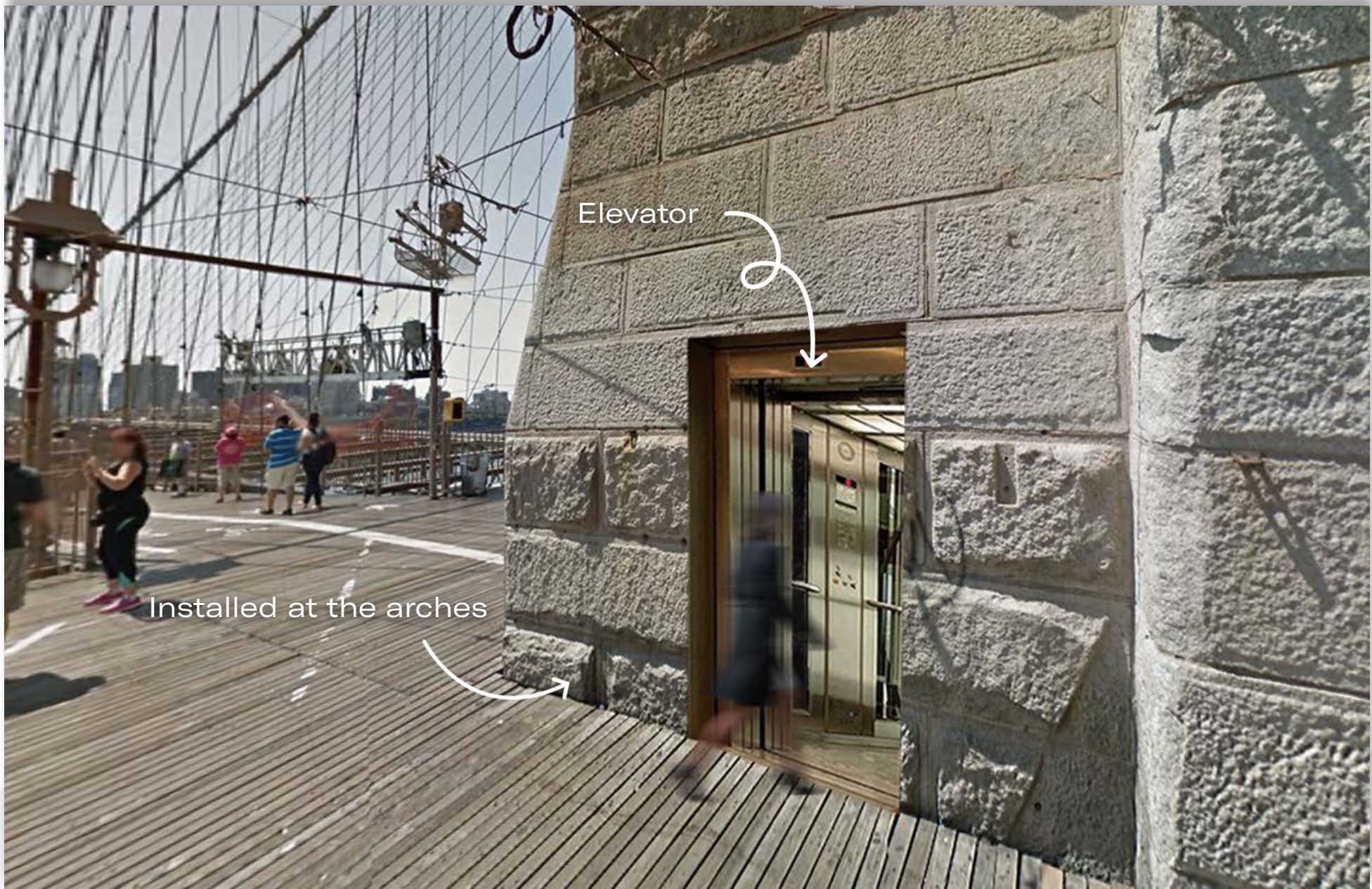
BEFORE



SITE MAP



AFTER

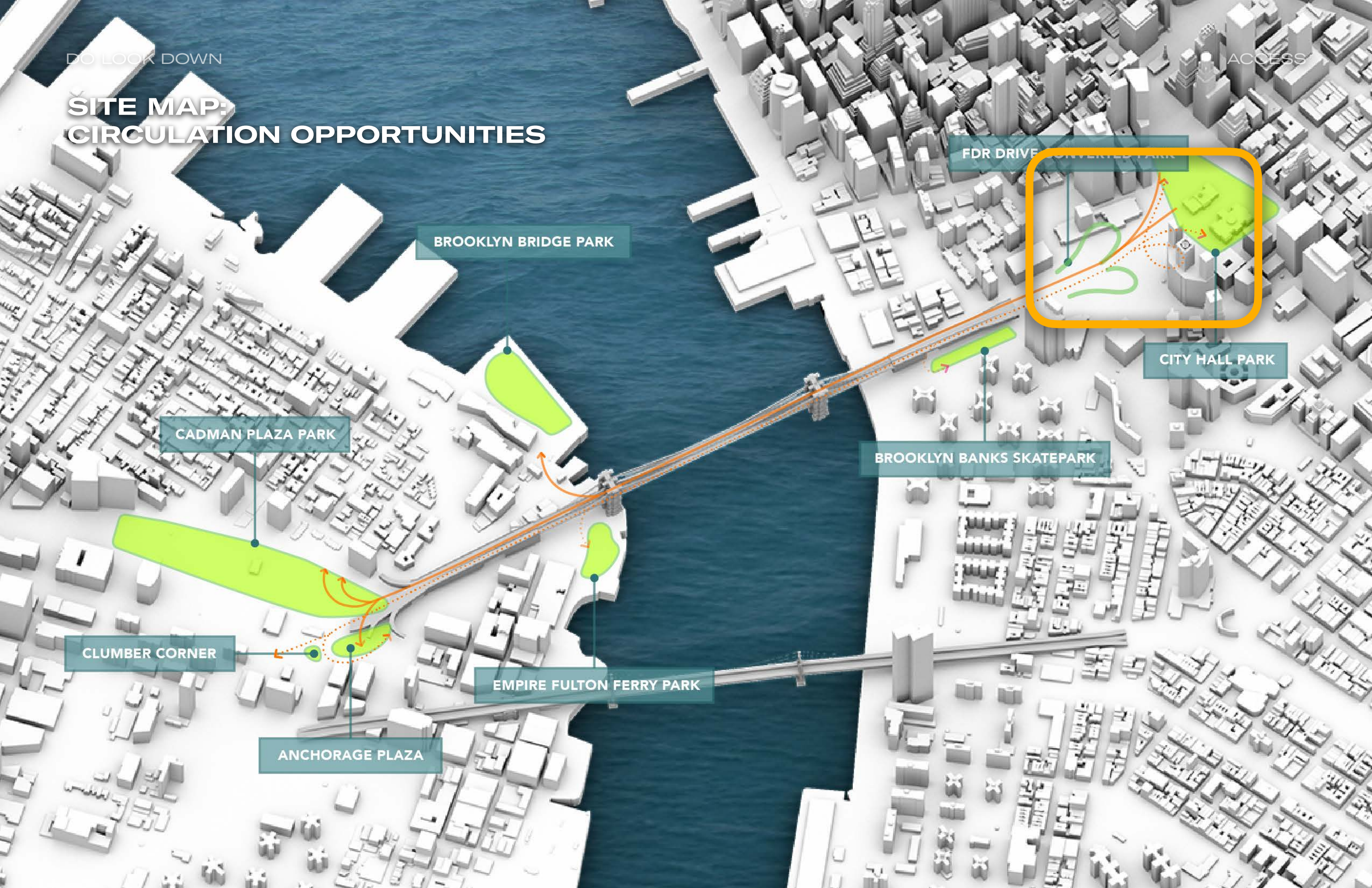




DO LOOK DOWN

# SITE MAP: CIRCULATION OPPORTUNITIES

ACCESS



BROOKLYN BRIDGE PARK

CADMAN PLAZA PARK

CLUMBER CORNER

ANCHORAGE PLAZA

EMPIRE FULTON FERRY PARK

BROOKLYN BANKS SKATEPARK

CITY HALL PARK

FDR DRIVE



DO LOOK DOWN



CITY HALL PARK

ACCESS

FDR DRIVE CONVERTED PARK

GOLD STREET

PARK ROW

CENTRE STREET

CHAMBERS STREET

BROOKLYN BANKS SKATEPARK

AVENUE OF THE FINEST



CYCLISTS



PEDESTRIANS, SCOOTERS, SKATEBOARDS, ETC.



PEDESTRIAN



PUBLIC SPACE OPPORTUNITY



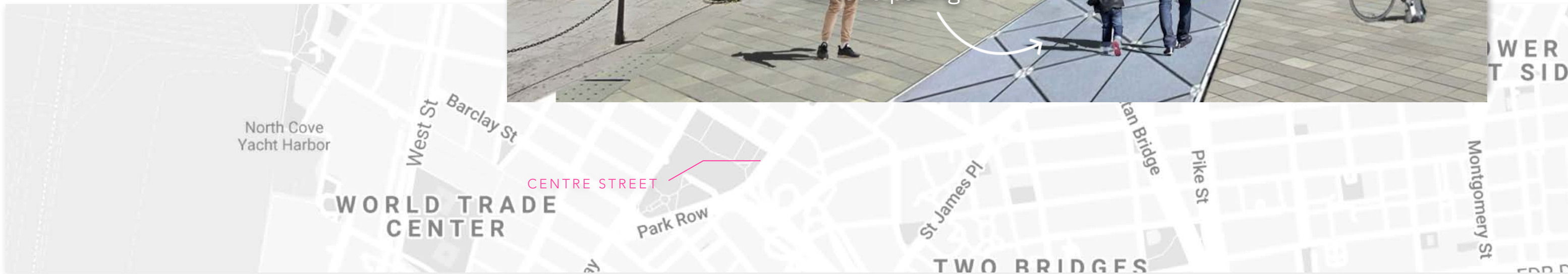
MANHATTAN

BLENDING BOUNDARIES  
BETWEEN BRIDGE AND  
ADJACENT SPACES

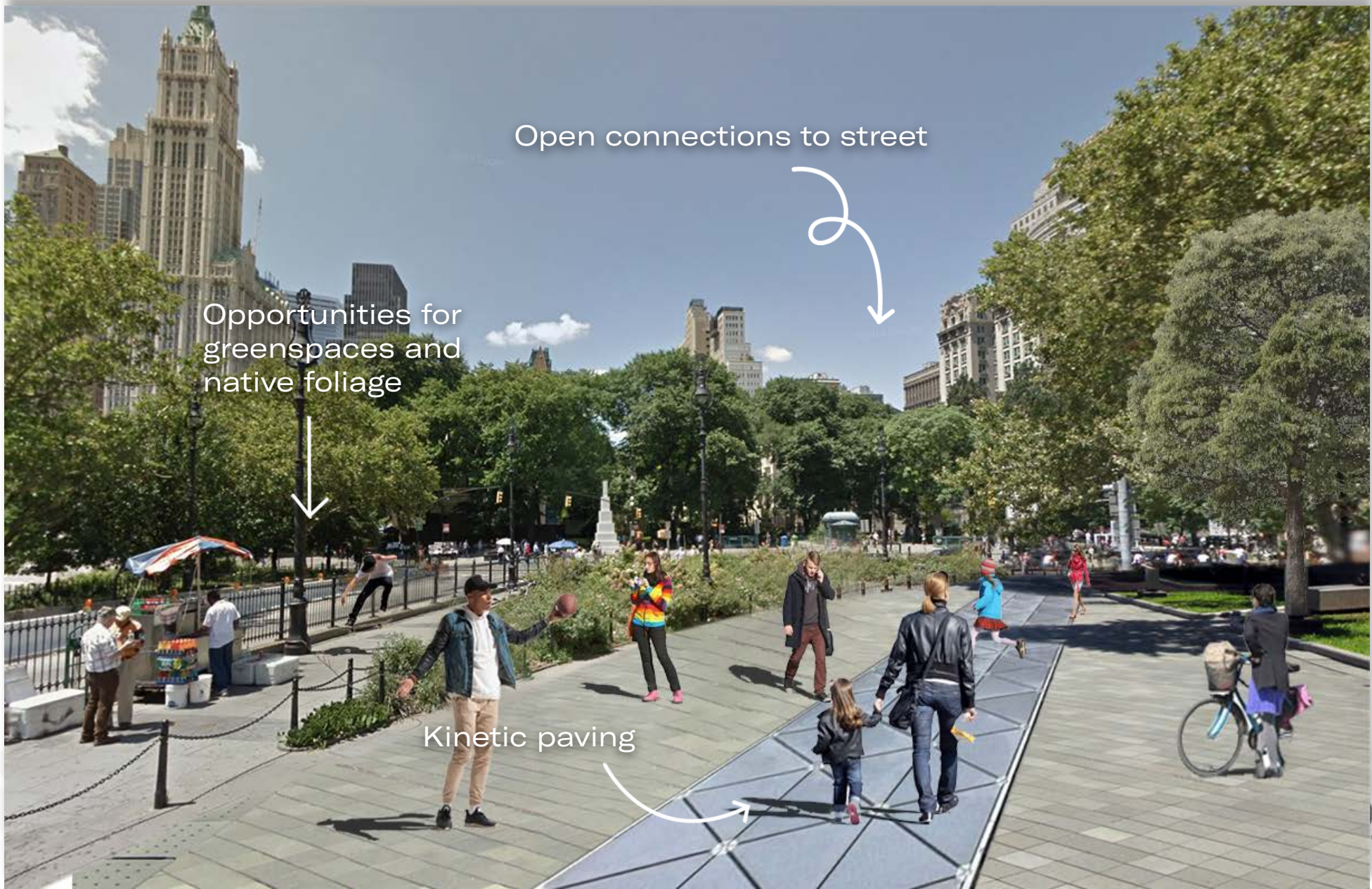
BEFORE



SITE MAP



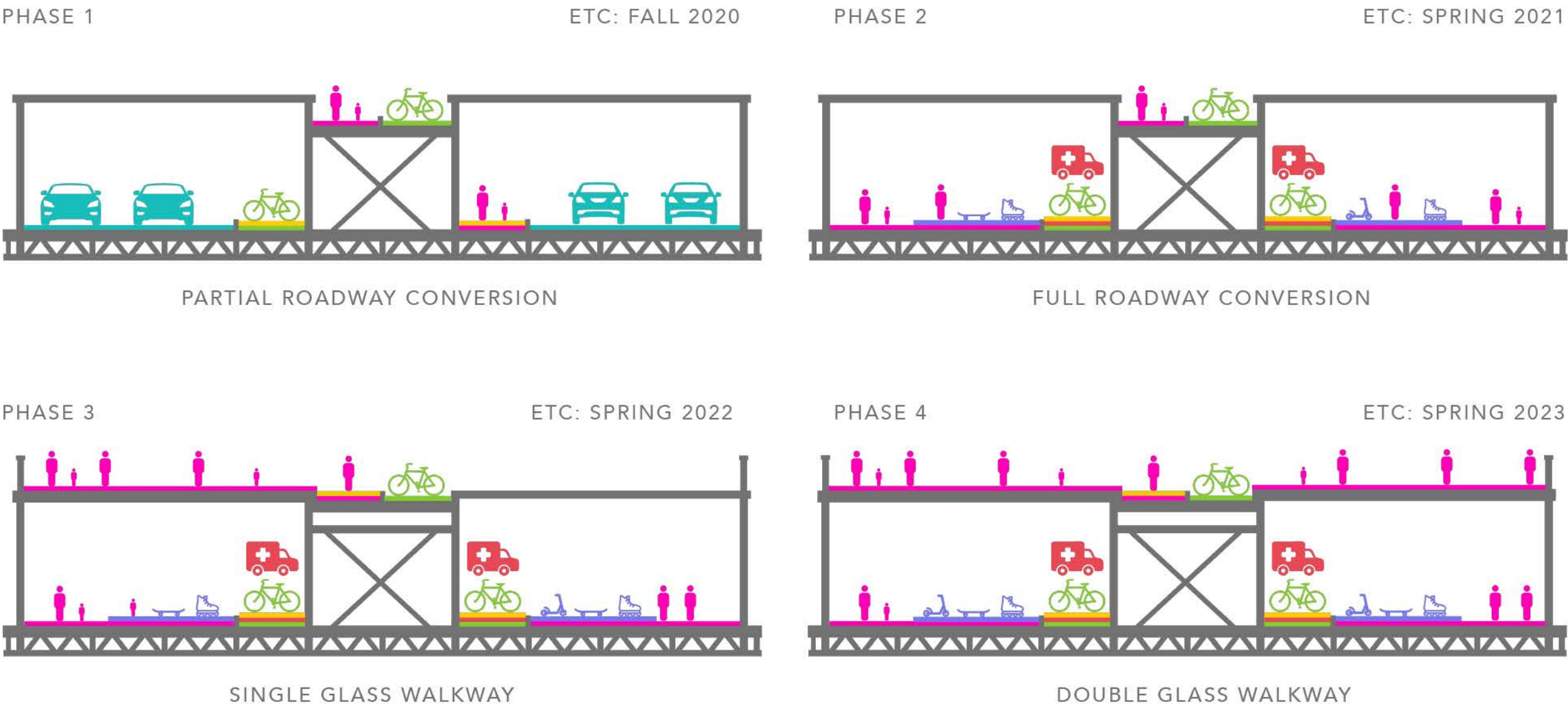
AFTER





DO LOOK DOWN

PHASING OF USER AND SPATIAL DISTRIBUTION



ETC: ESTIMATED TIME TO COMPLETE



DO LOOK DOWN

REIMAGINING BROOKLYN BRIDGE



SHANNON HUI

KWANS KIM

YUJIN KIM