BOSTON HARBOR GARAGE

REDEVELOPMENT CONCEPTS
for the Downtown Waterfront Municipal Harbor Plan

The Chiofaro Company
Kohn Pedersen Fox Associates
ADD, Inc.

July 23, 2014

DEVELOPMENT PROGRAM

PROGRAM

MIXED-USE BUILDING PROGRAM

OFFICE 700,000 GSF

HOTEL 250-300 KEYS

RESIDENTIAL 120 UNITS

RETAIL/ RESTAURANT 3 LEVELS
Including neighborhood amenity retail.

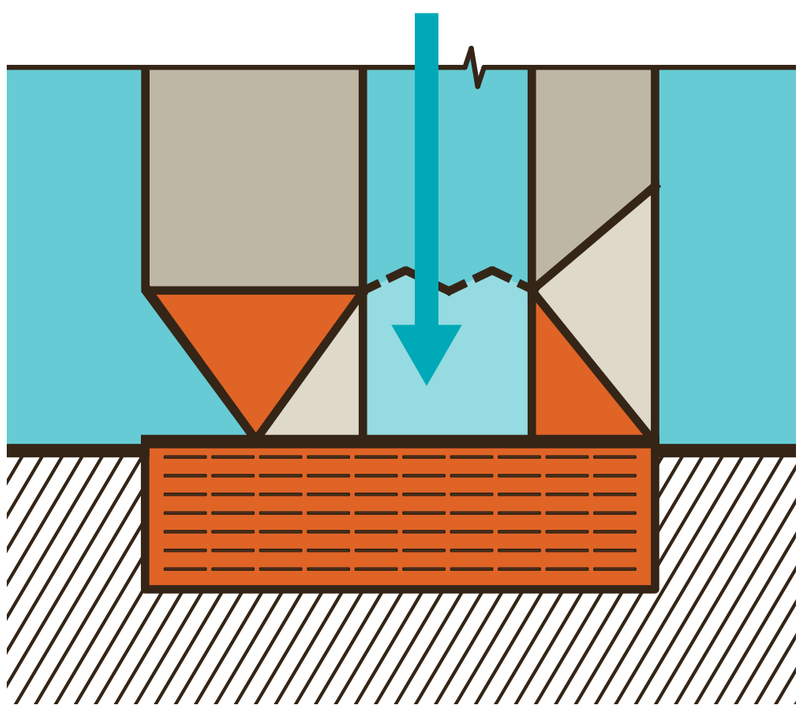
1400 PARKING SPACES
Replacing existing spaces. No additional parking.

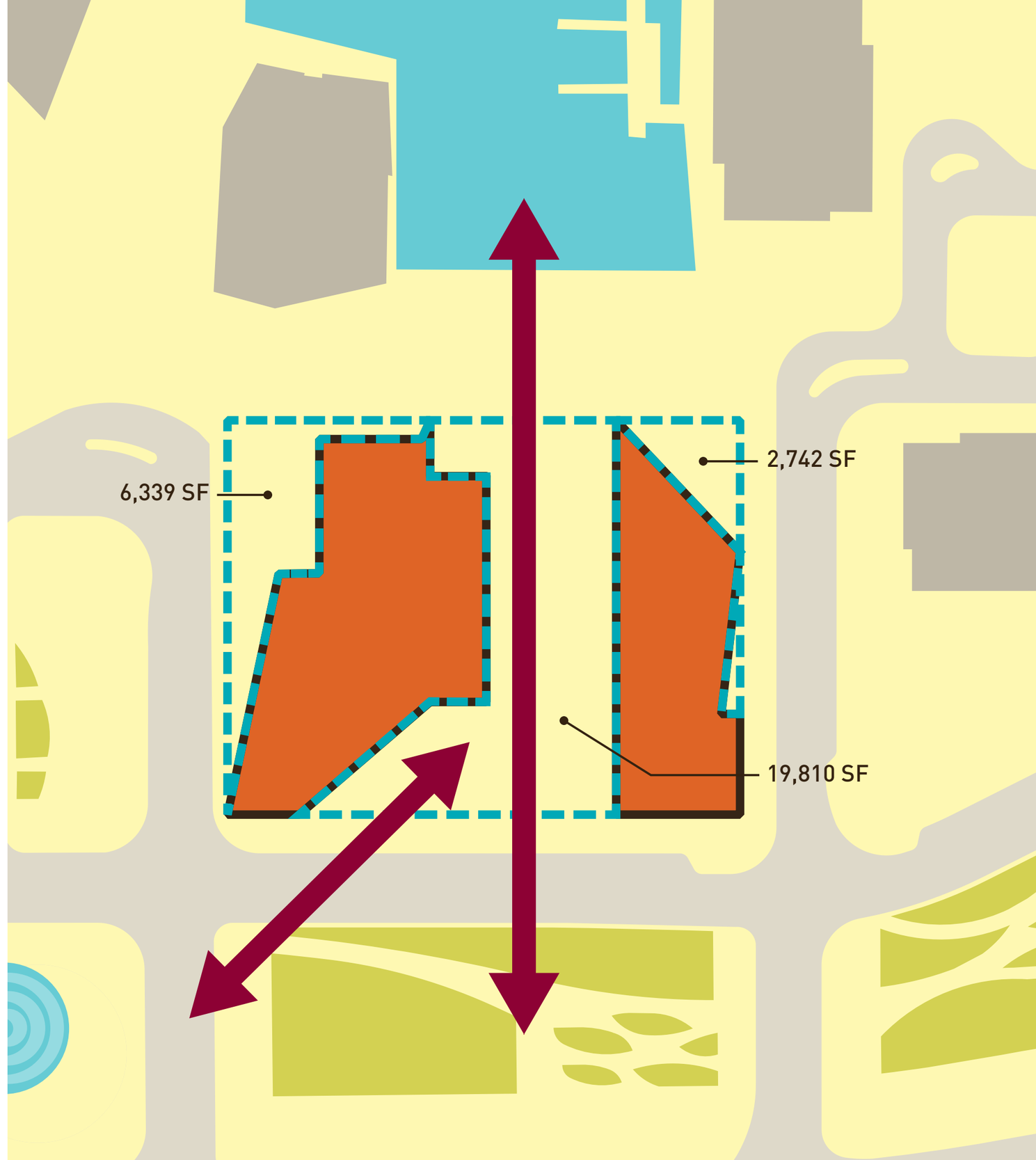
TOTAL SQUARE FOOTAGE : 1.3M SF

(NET NEW SQUARE FOOTAGE : ~900,000 SF)

HARBOR SQUARE

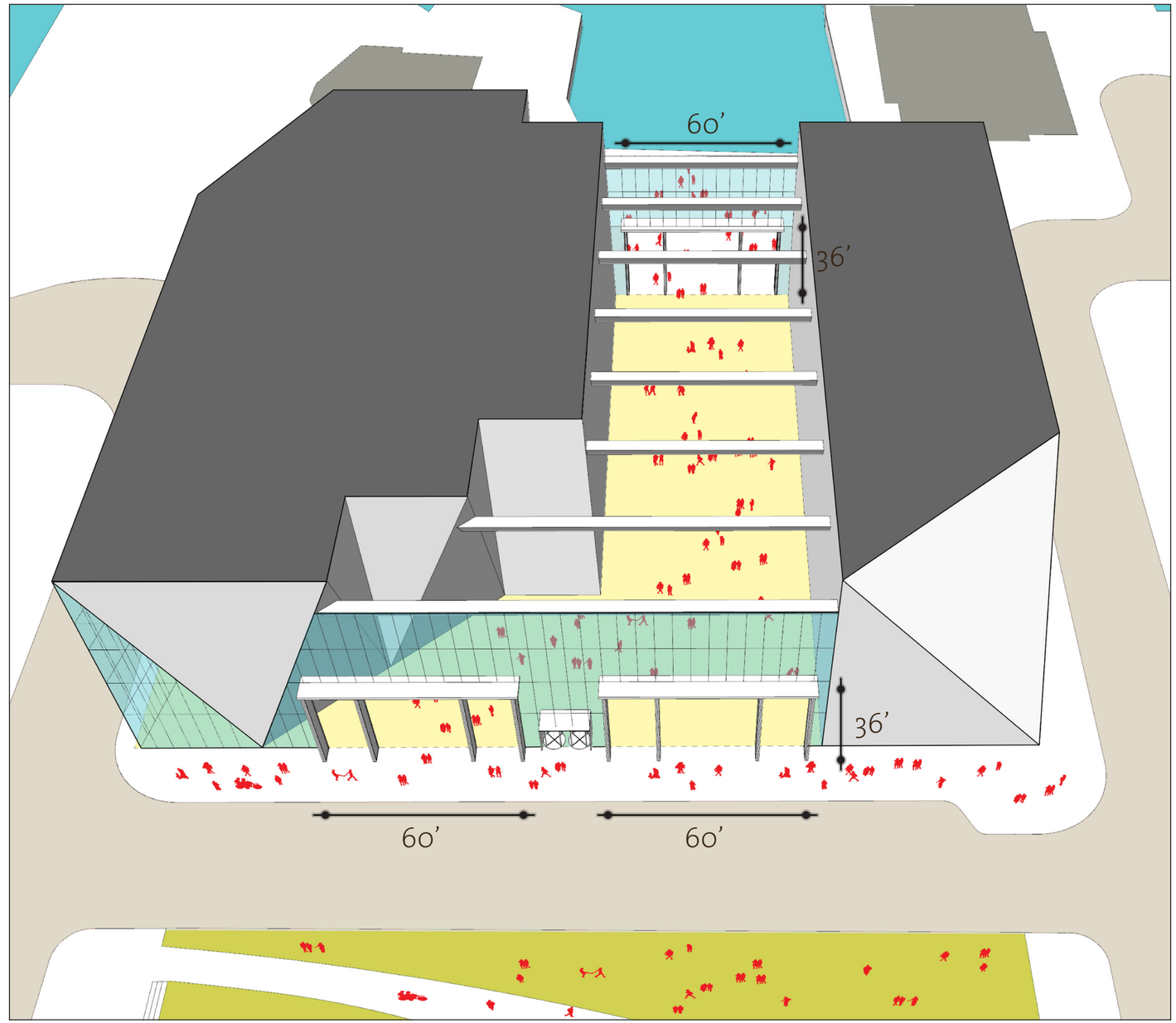
- 28,891 SF open space (50.4%)
- Seasonal open space for activities year round
- Draws population from Faneuil Hall





HARBOR SQUARE
RETRACTABLE CANOPY OPEN

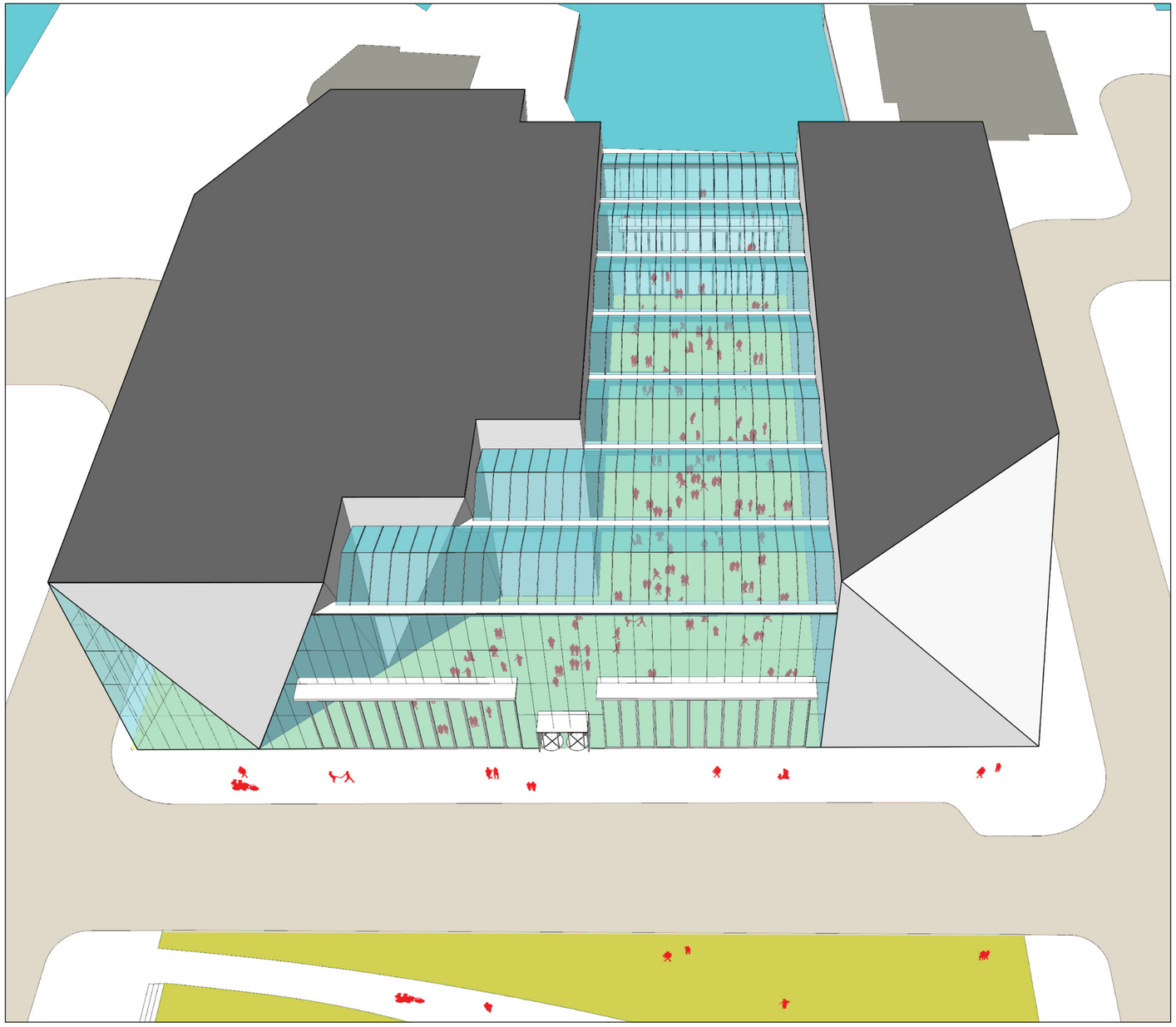
Jane's Carousel Pavilion, Brooklyn Bridge Park
Retractable doors 72'wide by 27' high | Jean Nouvel | 2011



36% of glass walls are folding doors and may be opened.

HARBOR SQUARE
RETRACTABLE CANOPY CLOSED

Jane's Carousel Pavilion, Brooklyn Bridge Park
Retractable doors 72'wide by 27' high | Jean Nouvel | 2011

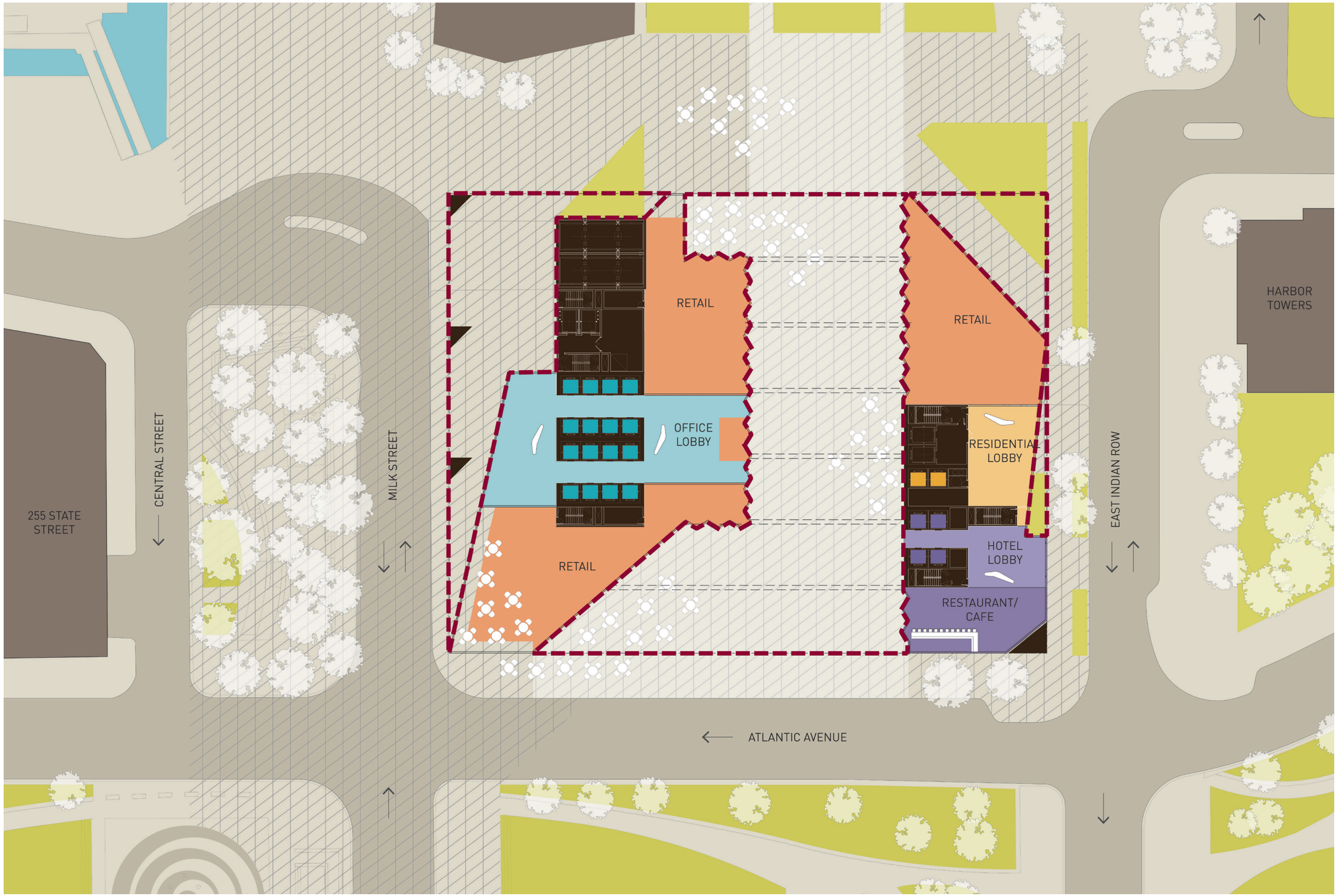


Three seasons open, one season closed.

GROUND LEVEL ACTIVATION

BUILT AREA
28,455 SF

OPEN SPACE
28,891 SF

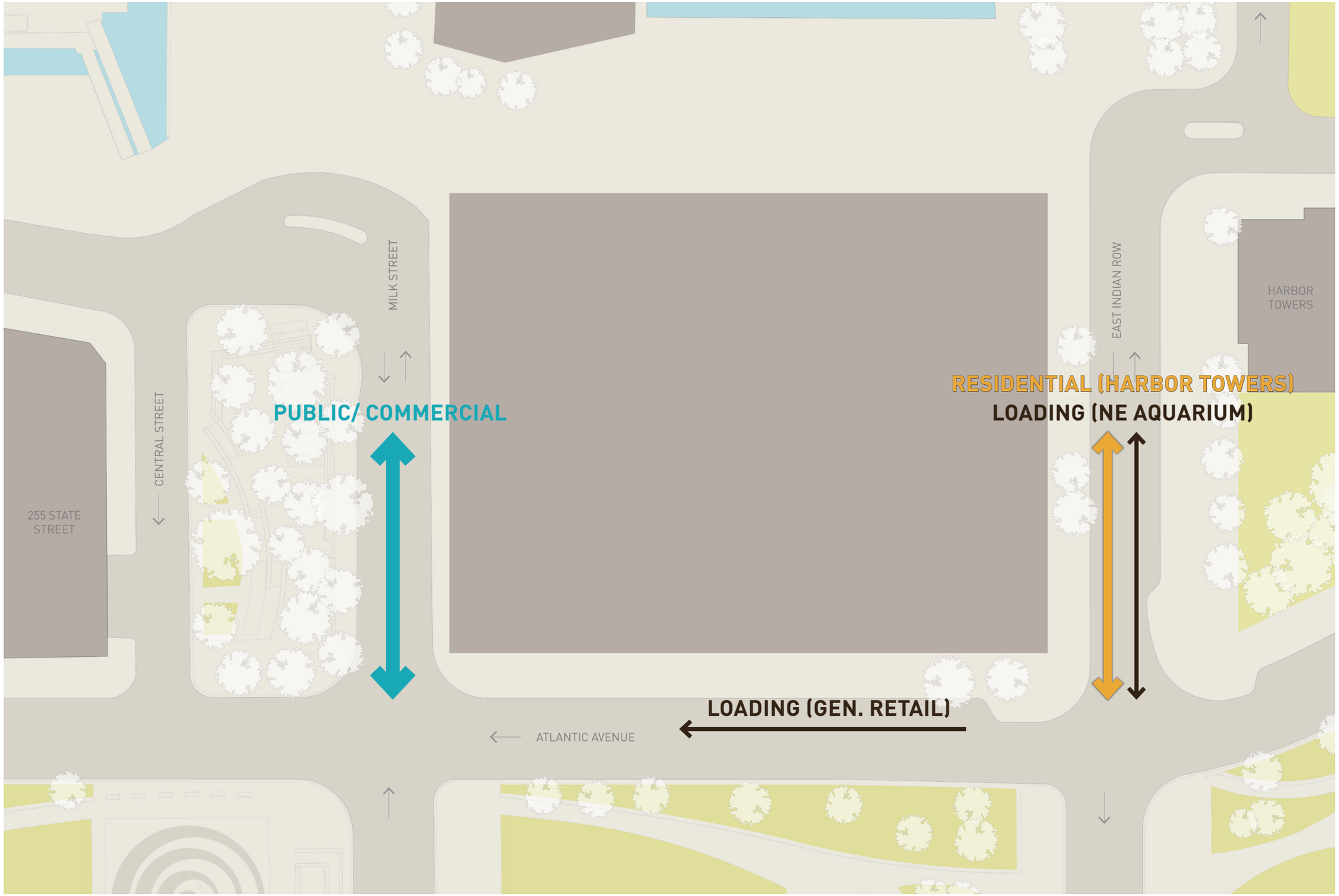


HARBOR SQUARE

SERVICE PATTERNS

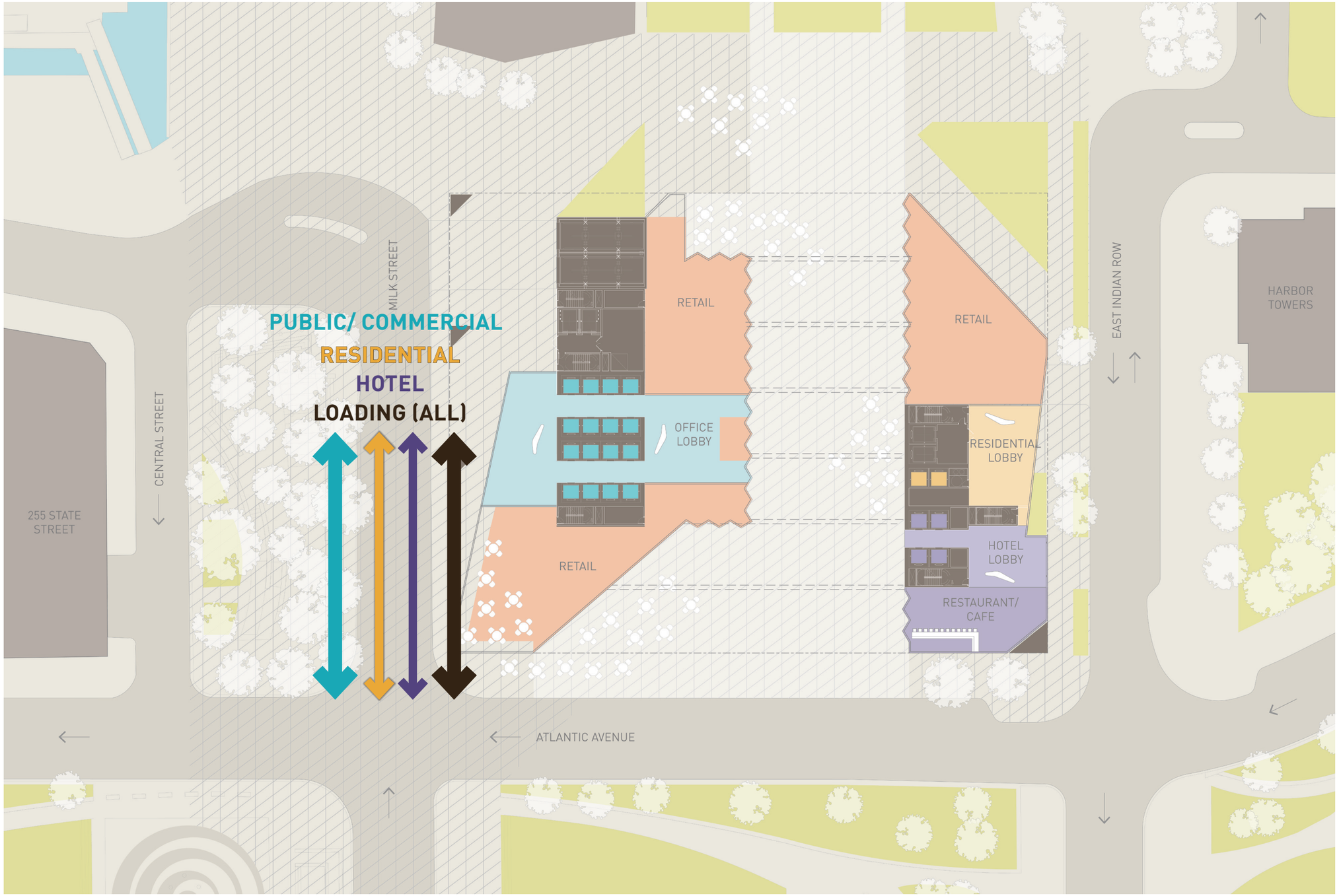
CONCEPTUAL SERVICE PATTERNS

EXISTING BUILDING



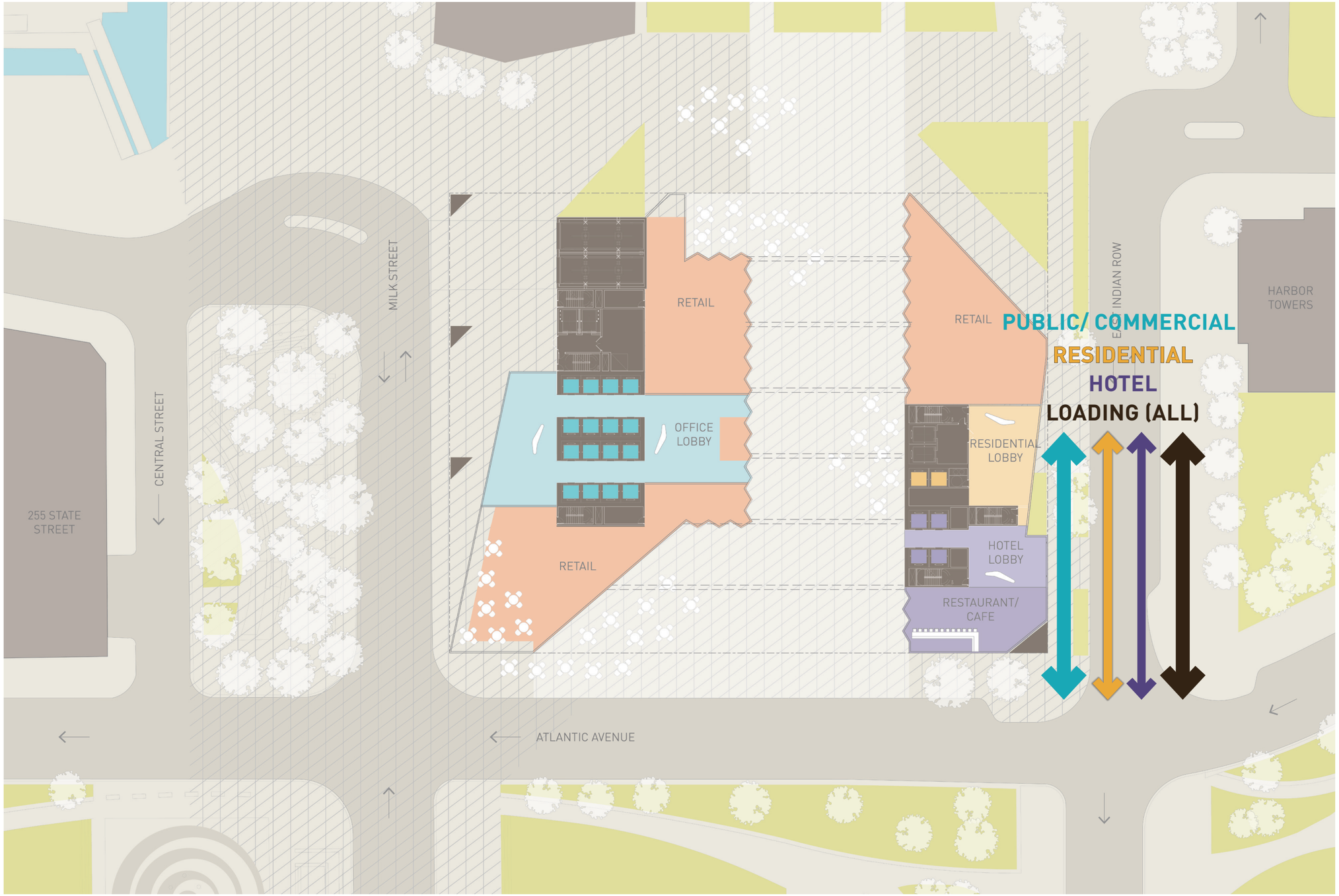
CONCEPTUAL SERVICE PATTERNS

2008-09 PROPOSAL - MILK STREET ORIENTATION



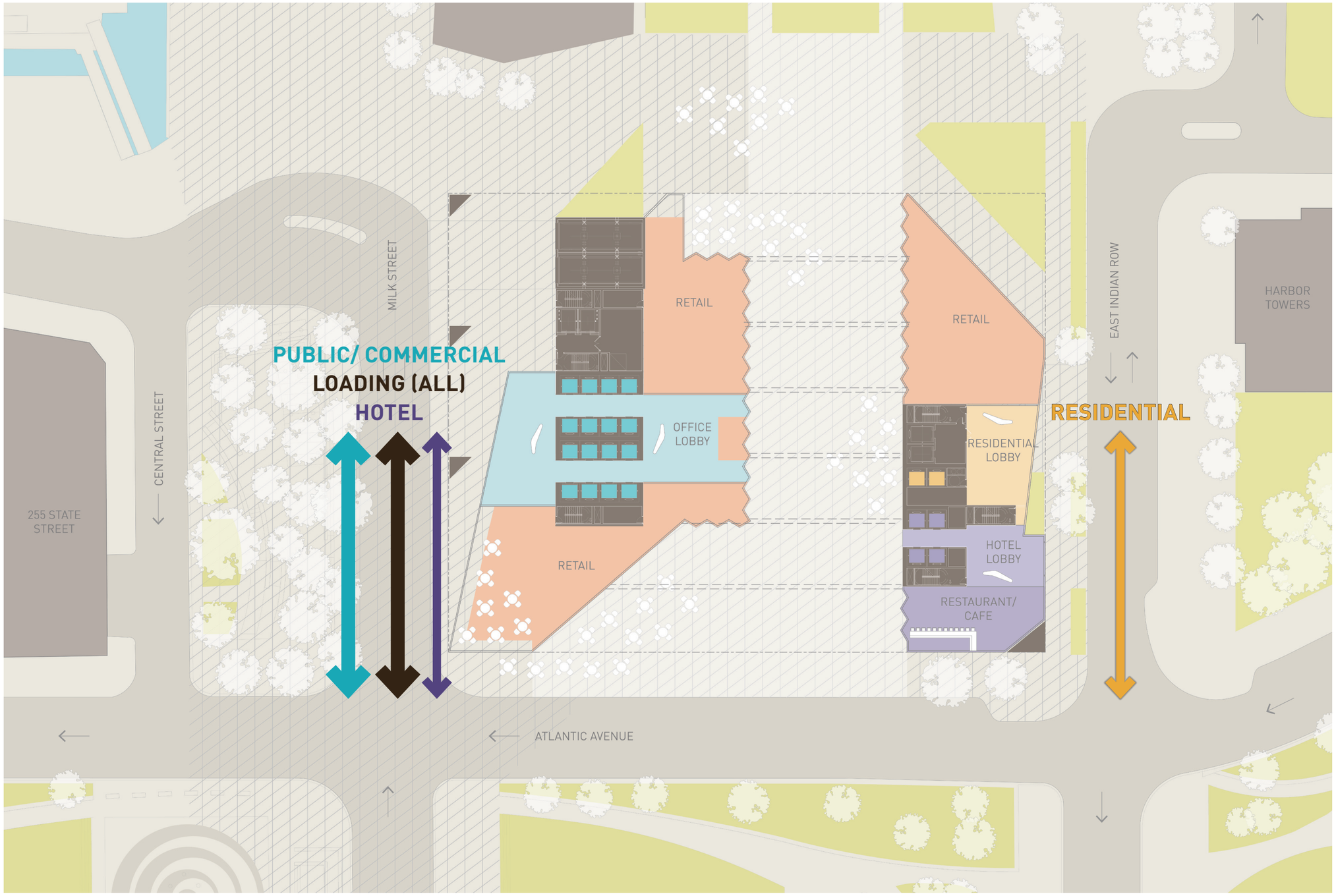
CONCEPTUAL SERVICE PATTERNS

EAST INDIA ROW ORIENTATION



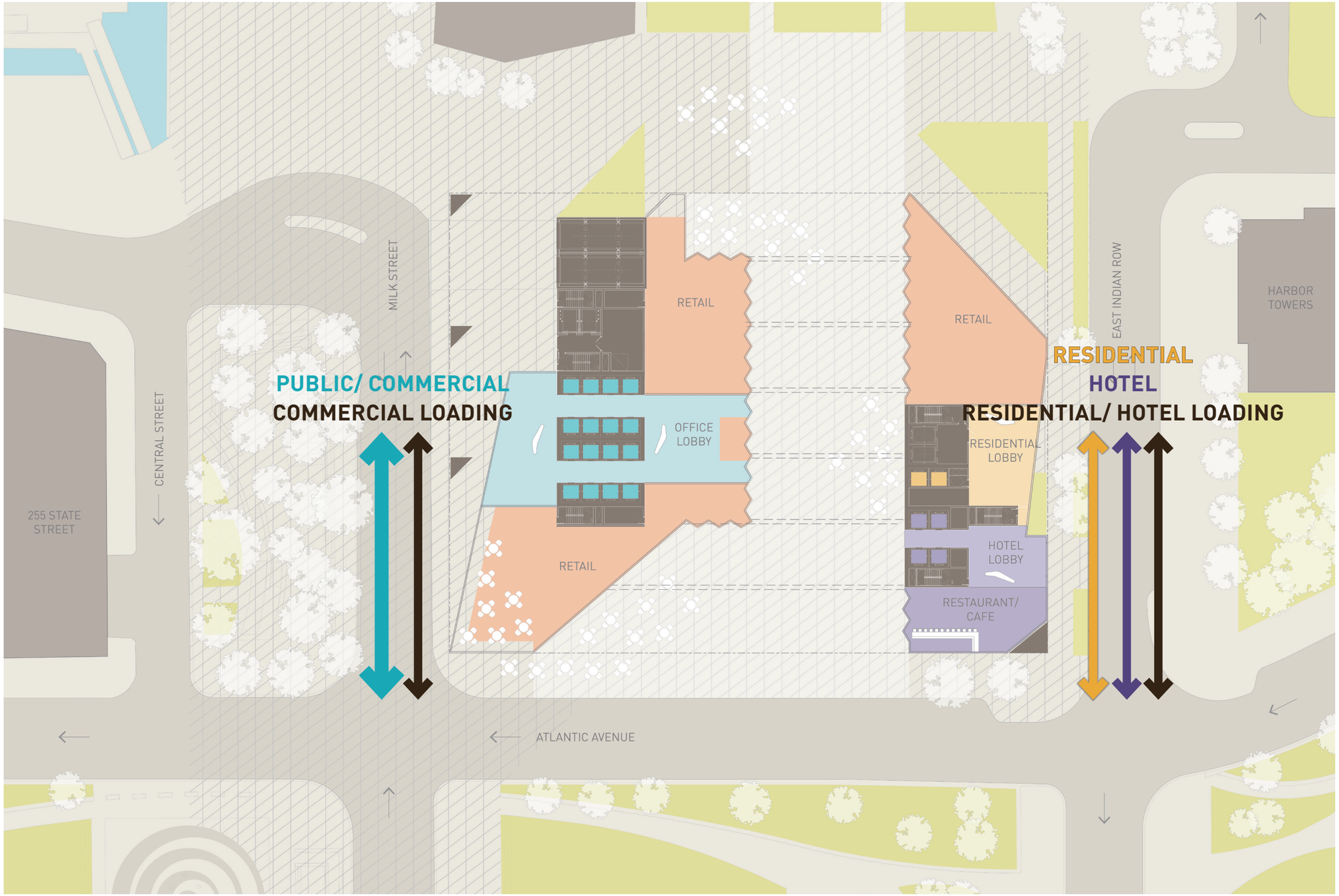
CONCEPTUAL SERVICE PATTERNS

RESIDENTIAL SEPARATION MODEL



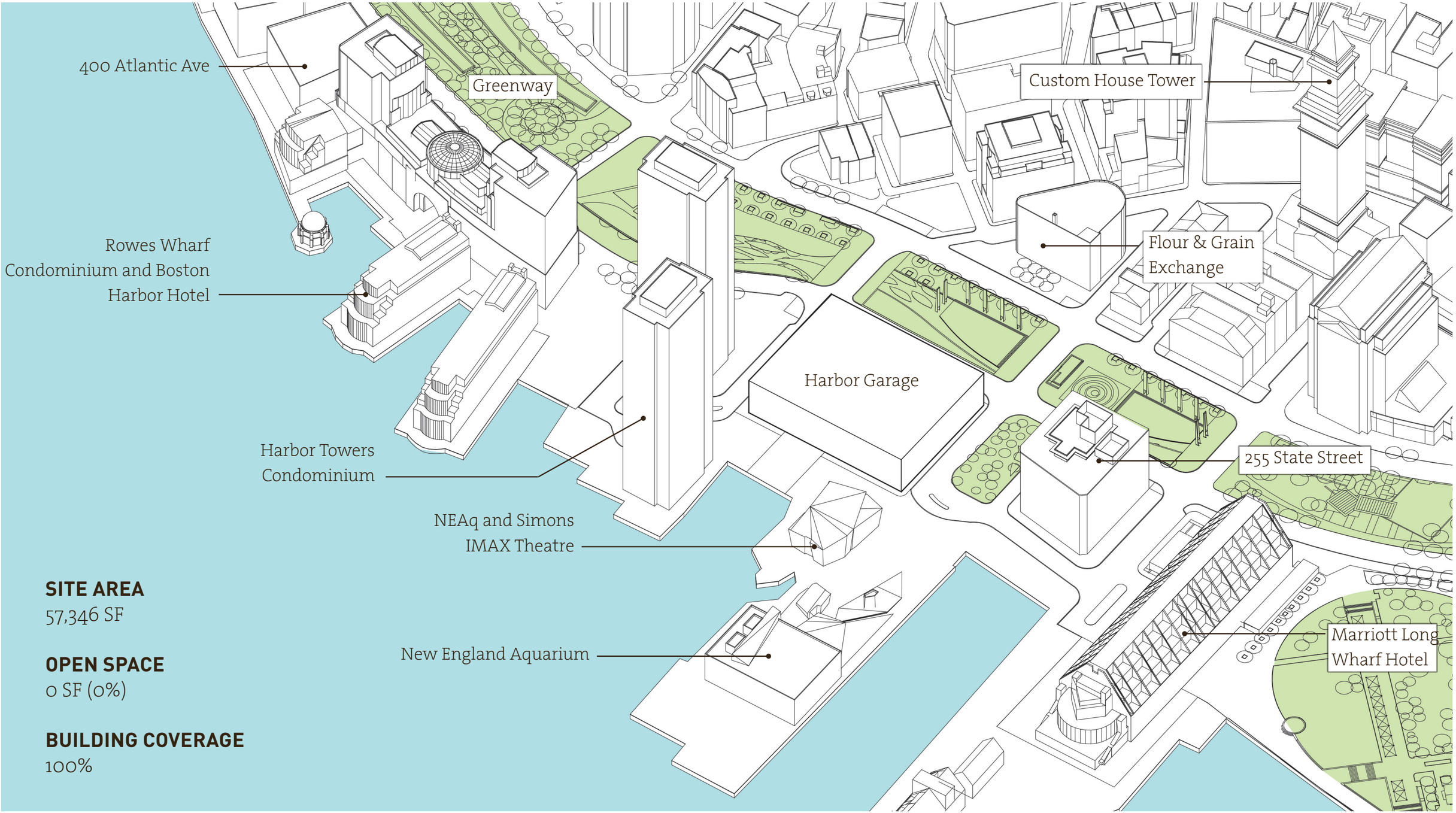
CONCEPTUAL SERVICE PATTERNS

USE SEPARATION MODEL



CONCEPTUAL MASSING

EXISTING CONDITIONS



SITE AREA
57,346 SF

OPEN SPACE
0 SF (0%)

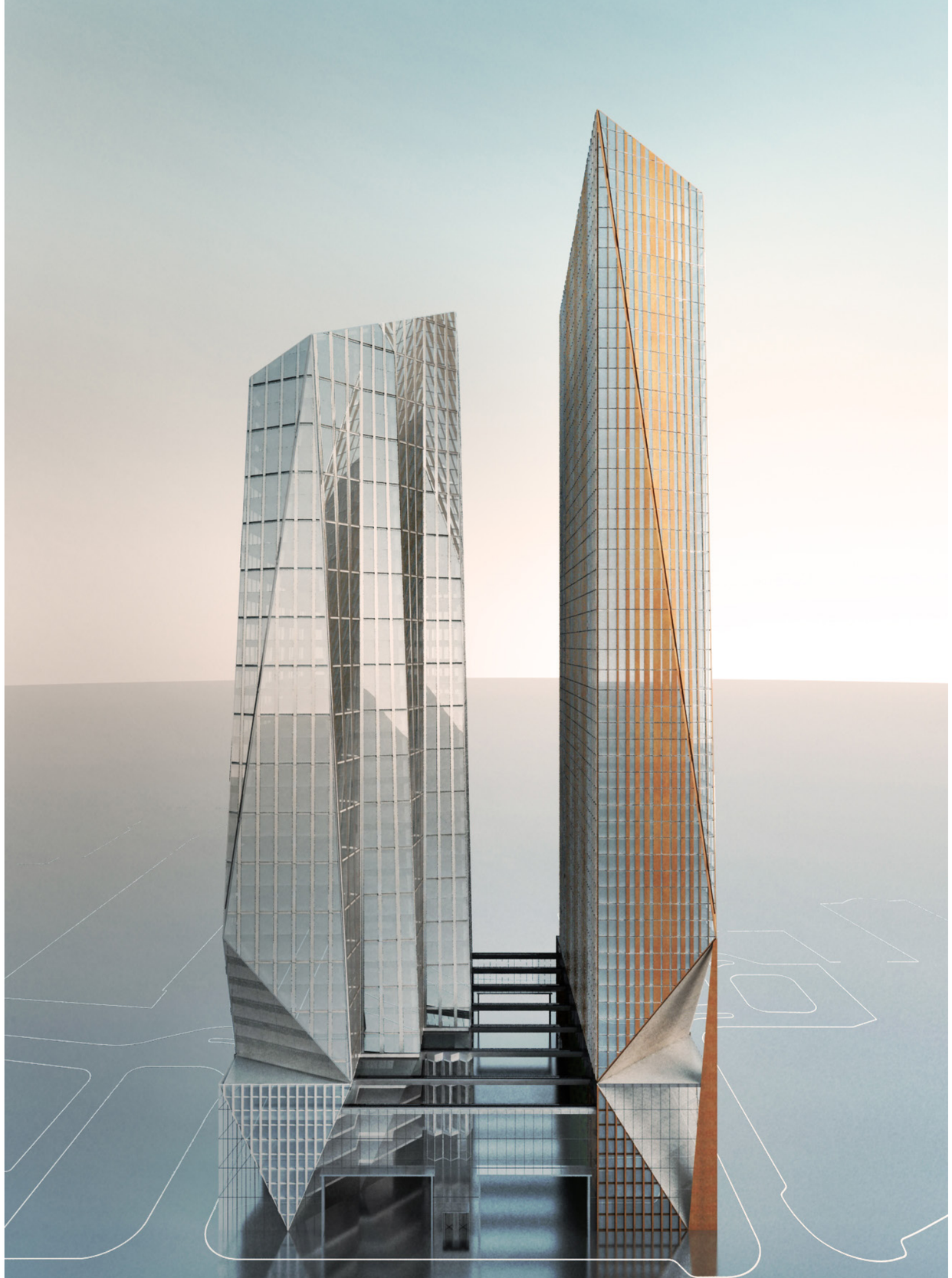
BUILDING COVERAGE
100%

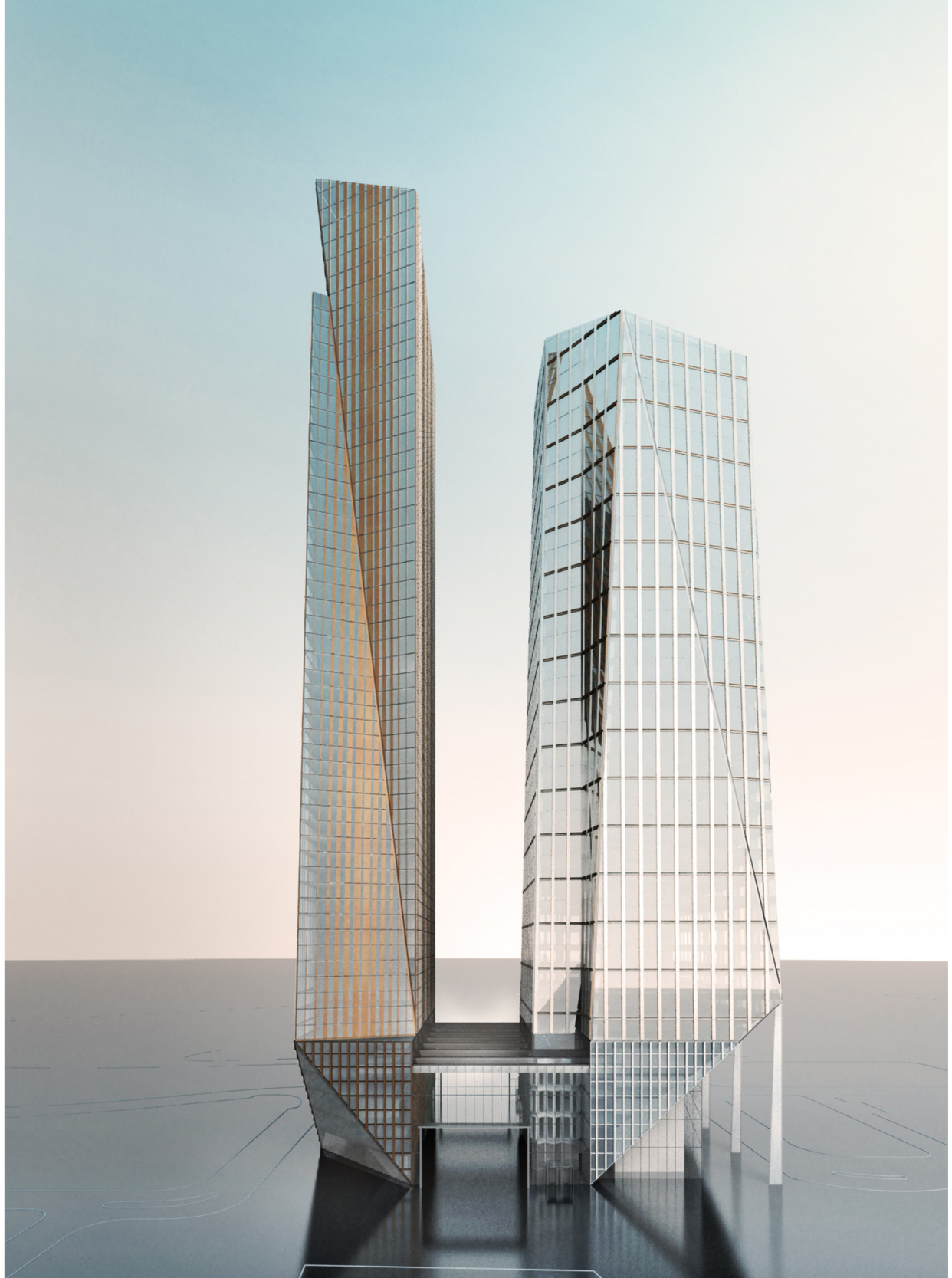
EXISTING GARAGE

VIEW FROM THE GREENWAY TO THE WATERSHEET

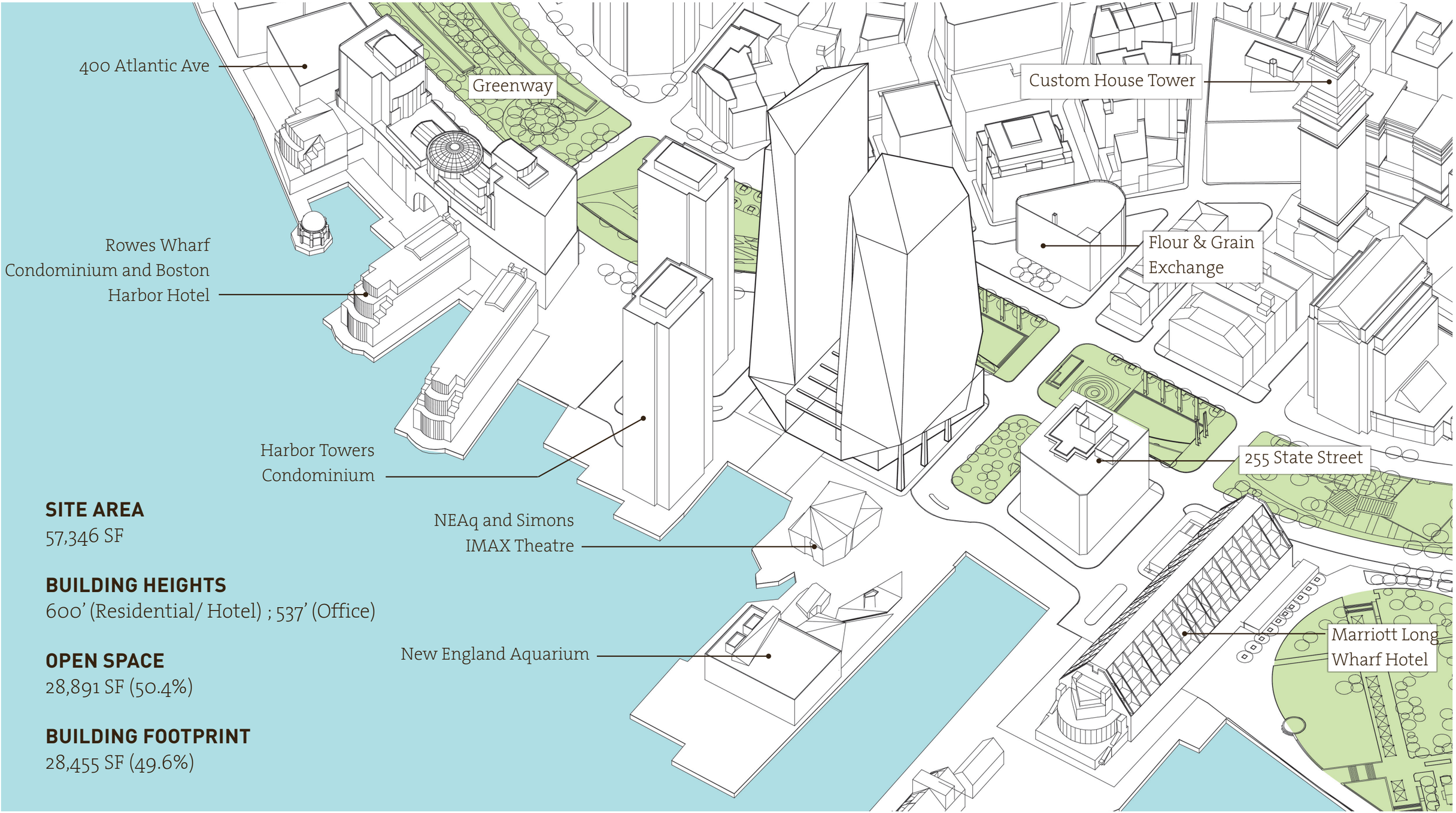
PODIUM

VIEW FROM THE GREENWAY TO THE WATERSHEET





MASSING IN CONTEXT



SITE AREA
57,346 SF

BUILDING HEIGHTS
600' (Residential/ Hotel) ; 537' (Office)

OPEN SPACE
28,891 SF (50.4%)

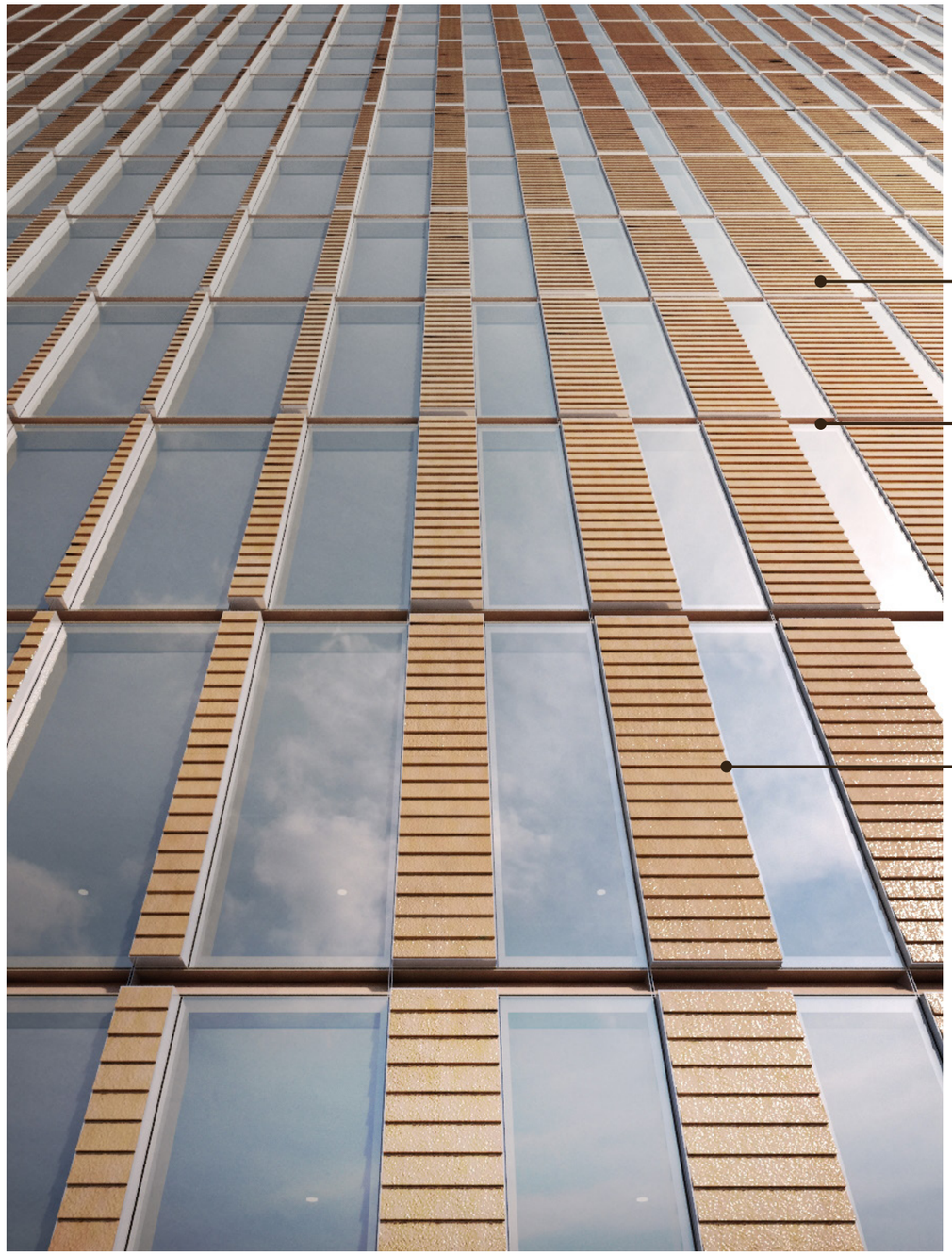
BUILDING FOOTPRINT
28,455 SF (49.6%)

Four Seasons
South Station
MIlennium Tower
North Station
Harbor Garage Development

DETAILS

DETAILS

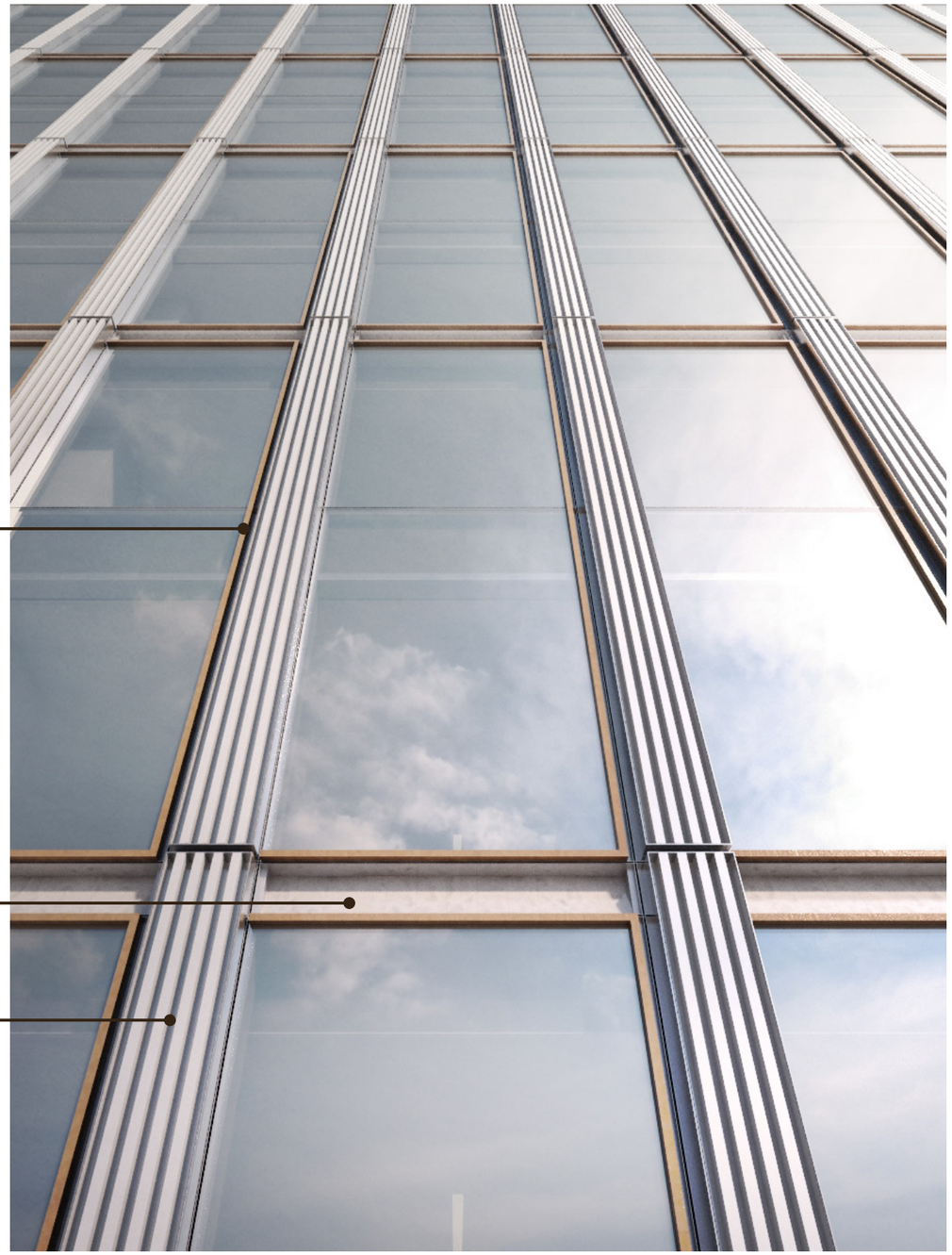
OFFICE AND RESIDENTIAL/HOTEL WALL TYPE



Terracotta Vertical Piers

Terracotta Reveal

Silver Aluminum Frame



Bronze Painted Frame

Silver Reveal

White Corrugated Metal Piers

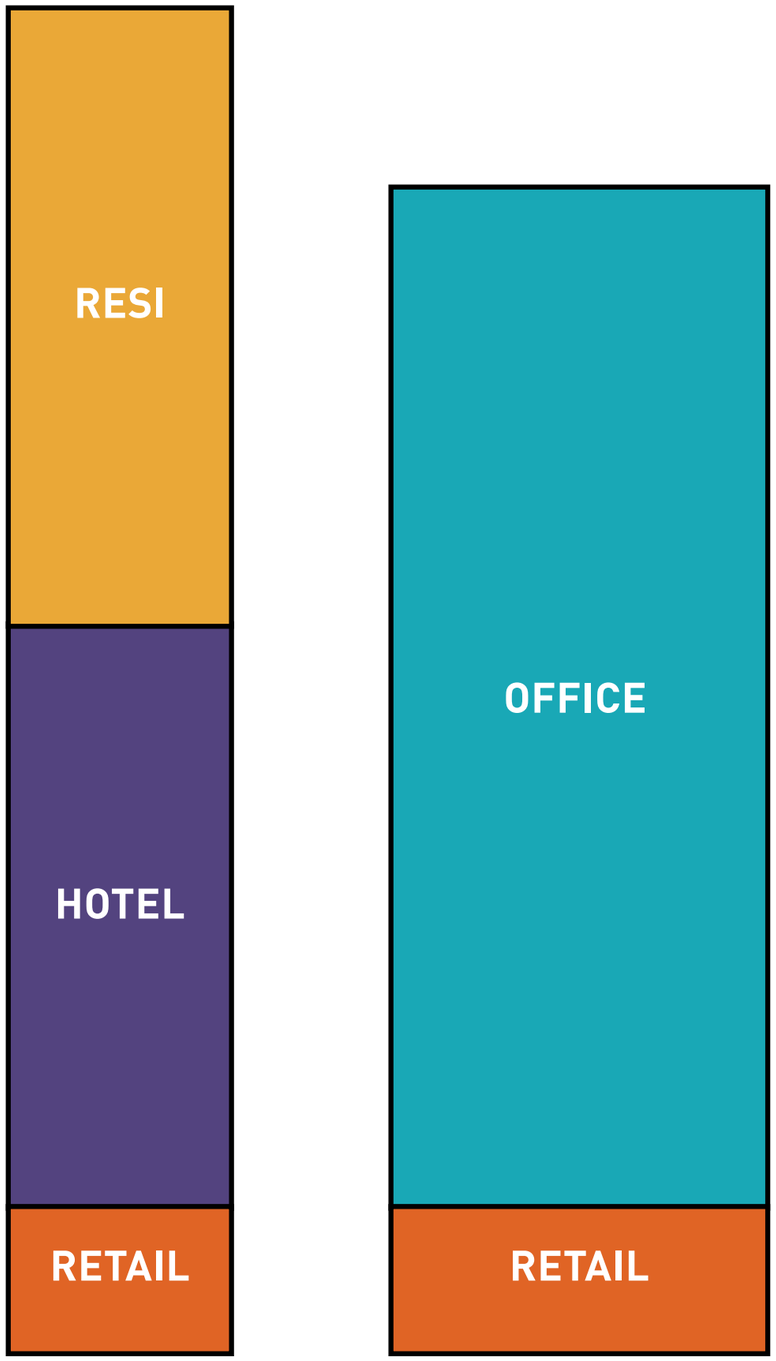
STACKING CHART

OFFICE 700,000 GSF

HOTEL 250-300 KEYS

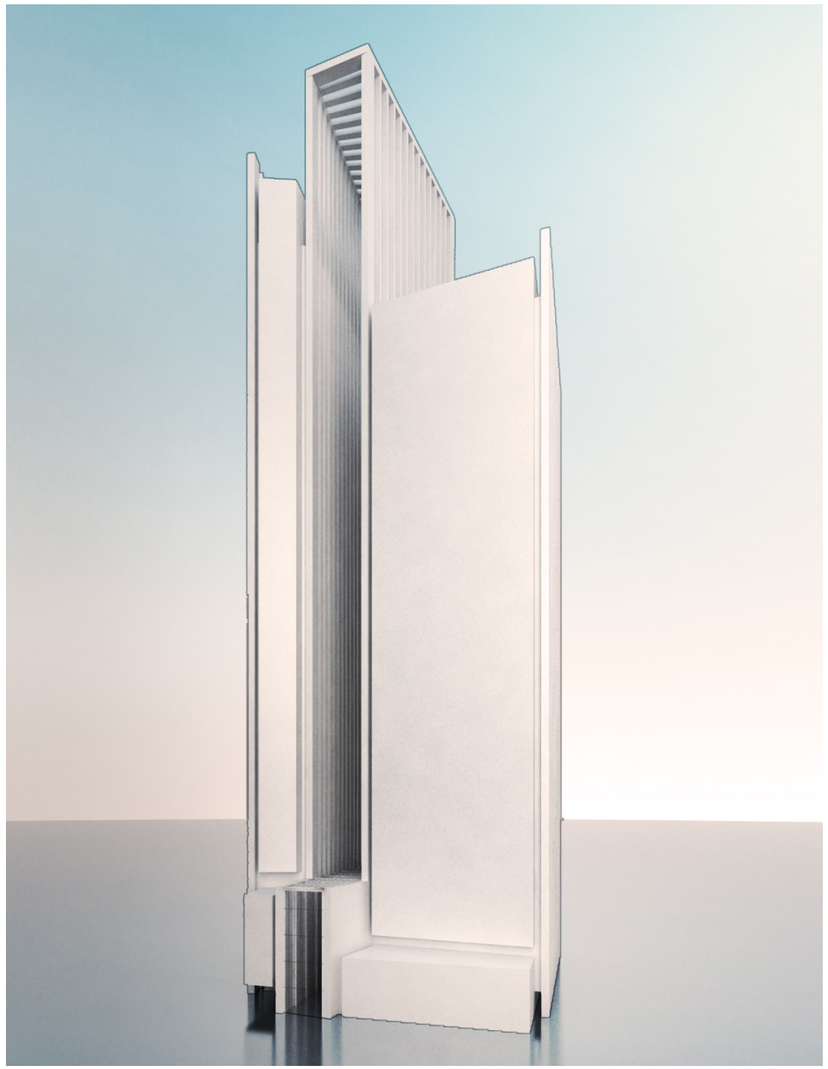
RESIDENTIAL 120 UNITS

RETAIL/ RESTAURANT 3 LEVELS
Including neighborhood amenity retail.



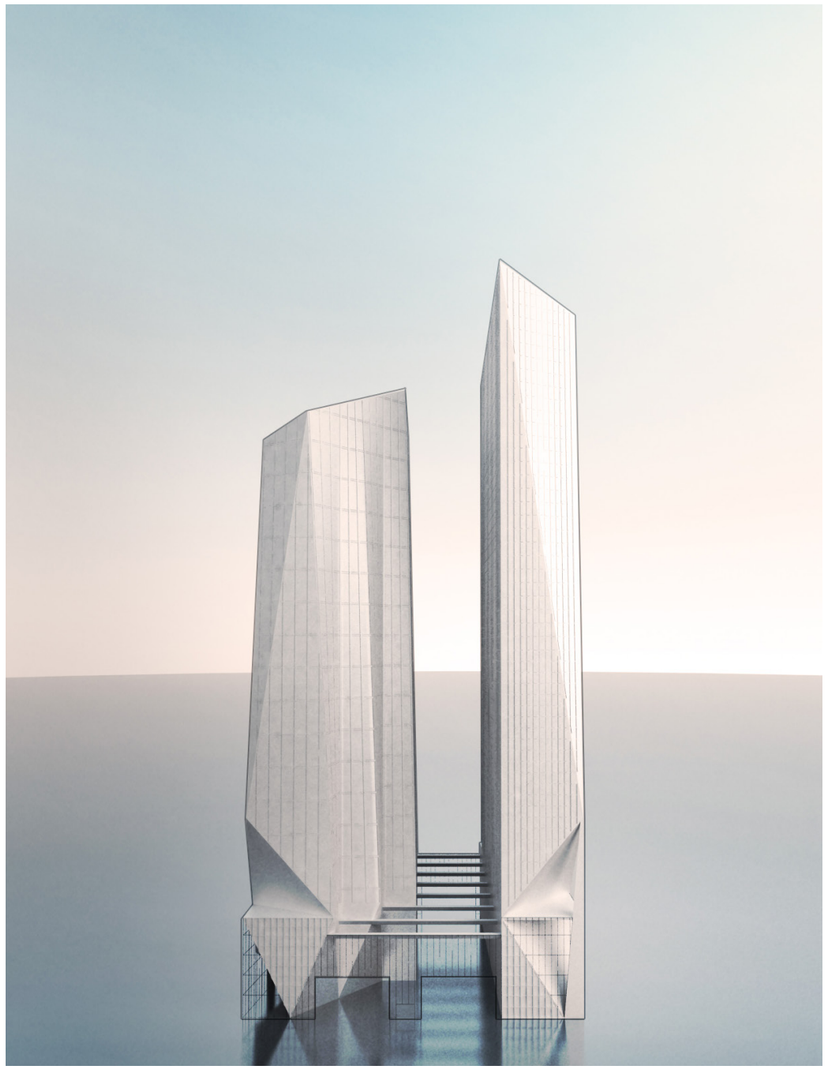
PROPOSAL COMPARISON

2008-09 PROPOSAL VS 2014 CONCEPT



2008-09 PROPOSAL

- 1.5M GSF
- 770'
- 4,000 SF open space (7% of site)
- Office/ Residential/ Hotel/ Retail/ Civic

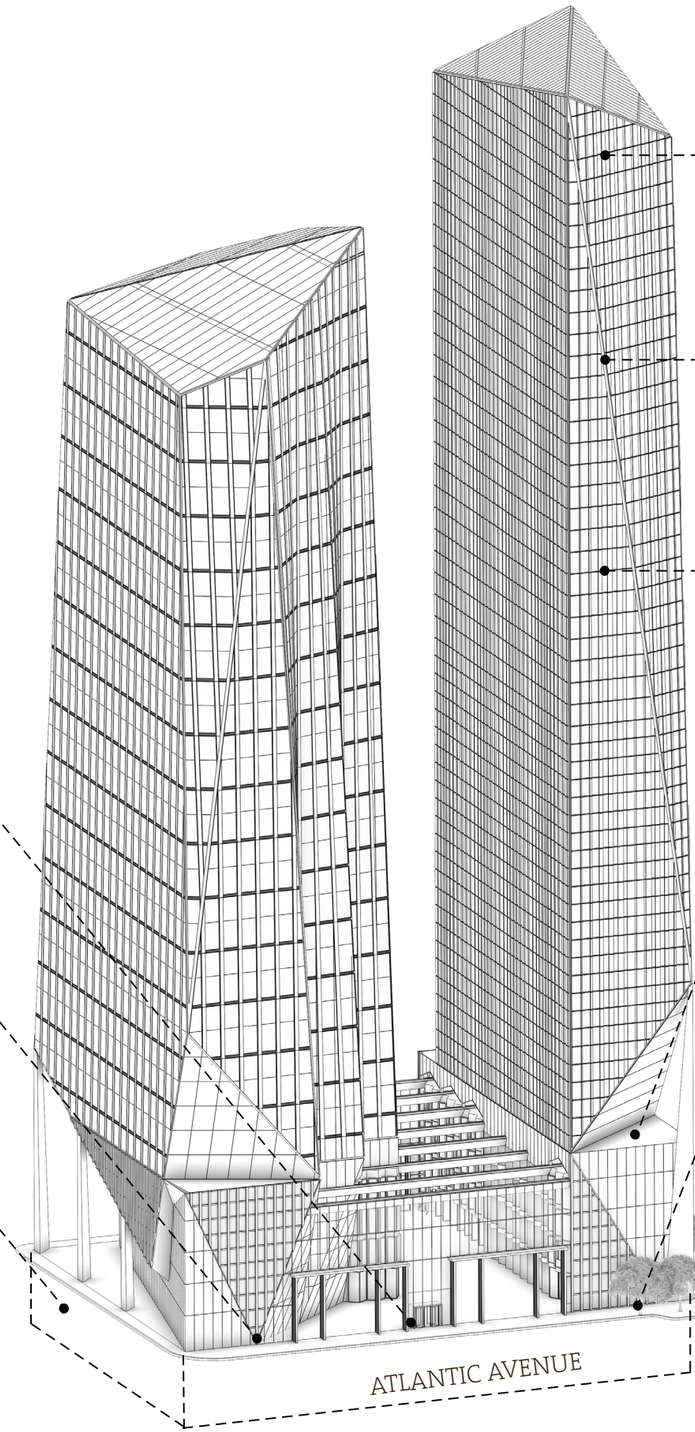


2014 CONCEPT

- 1.3M GSF (13% less)
- 600' (20% less)
- 28,891 SF open space (50.4% of site; 722% added)
- Office/ Residential/ Hotel/ Retail/ Civic

CLIMATE CHANGE/ STORM SURGE RESILIENCE

CONCEPTUAL PROJECT FEATURES



SANDBAGS
PART OF A BUILDING'S EMERGENCY PREPAREDNESS PLAN, SANDBAGS ARE AN INEXPENSIVE WAY TO PROTECT AGAINST FLOODING

FLOOD BARRIERS
TEMPORARY SIDEWALK BARRIERS CAN PROTECT AGAINST FLOODS

SEWAGE VALVES
VALVES PREVENT SEWAGE BACK FLOW INTO BASEMENTS DURING RAINSTORMS AND FLOODS

RELIABLE SANITATION
WITH A MANUAL OVERRIDE OR LONG-LASTING BATTERIES, AUTOMATIC TOILETS WILL STILL FLUSH DURING BLACKOUTS

NATURAL GAS GENERATORS
PROVIDES CLEANER POWER THAT CAN BE USED FOR LIGHTING, FIRE SAFETY, ELEVATORS, AND OTHER BUILDING SYSTEMS

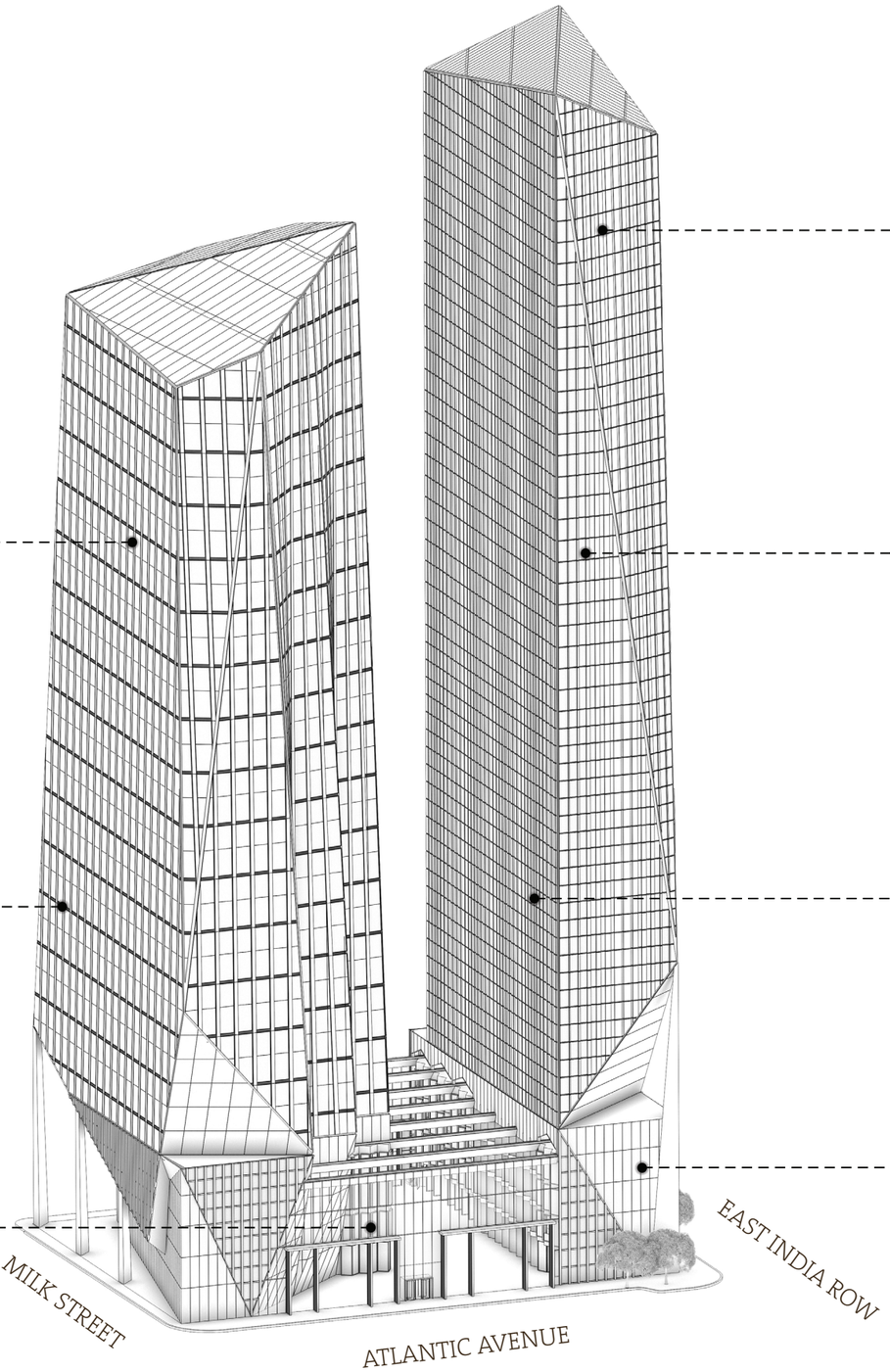
ELEVATED EQUIPMENT
RAISING BUILDING EQUIPMENT TO A HIGHER FLOOR ENSURES IT WILL NOT BE DAMAGED BY FLOODWATERS

ROOFTOP PAVERS
UNLIKE SMALL GRAVEL, HEAVY PAVERS WILL NOT BECOME AIRBORNE DURING HIGH WINDS

SLOPED SIDEWALKS & TREE PITS
SIDEWALKS SLOPED INTO TREE PITS ABSORB RAIN, REDUCING FLOODING FROM RAINSTORMS

QUICK CONNECTS
EXTERIOR HOOKUPS ALLOW EASY CONNECTION TO PORTABLE GENERATORS

SUSTAINABILITY
CONCEPTUAL PROJECT FEATURES



HEALTHY BUILDING
- ADVANCED DAYLIGHTING
- IMPROVED INDOOR AIR QUALITY
- IMPROVED ENVIRONMENTAL QUALITY

ENERGY EFFICIENCY AND CONSERVATION
- HIGHLY EFFICIENT BUILDING SYSTEMS
- HIGH PERFORMANCE FACADE
- HIGH EFFICIENCY LIGHTING
- BUILDING CONTROLS AND MONITORING
- GREEN POWER
- GREEN TENANT GUIDELINE

COMMUNITY CONNECTIVITY
- GREEN BUILDING EDUCATION
- PUBLIC AMENITIES
- ACTIVE STREETSCAPE
- URBAN PLAZA

BENCHMARKING
- LEED CERTIFIED RATING

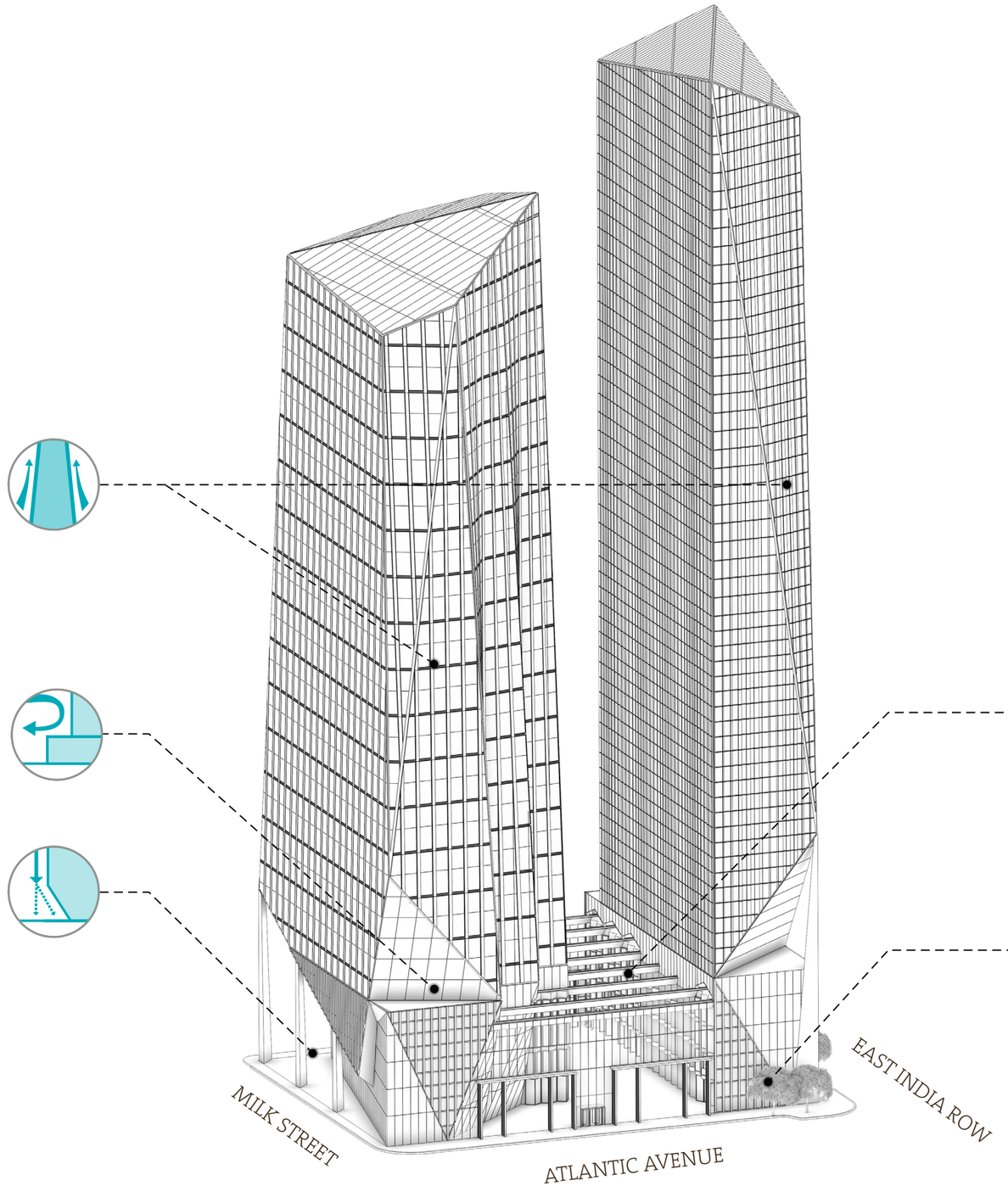
MATERIALS AND RESOURCES
- RECYCLED CONTENT
- RECYCLING PROGRAM
- REGIONAL MATERIALS
- SUSTAINABLE MATERIAL SELECTION
- CONSTRUCTION WASTE MANAGEMENT

WATER RESOURCES
- LOW-FLOW FIXTURES
- GREYWATER RECYCLING
- STORMWATER CAPTURE AND USE
- WATER RETENTION
- GREEN ROOF

SUSTAINABLE TRANSPORTATION
- PUBLIC TRANSPORTATION ACCESS
- ALTERNATIVE TRANSPORTATION FACILITIES

WIND CONTROL FEATURES

CONCEPTUAL PROJECT FEATURES



TAPERED FORM
THE TAPER REDUCES WIND LOAD

TERRACES
INSET FLOORS ABOVE PROJECTING FLOORS REDUCE DOWN-WASHING WINDS

CHAMFERED CORNER
CHAMFERING A CORNER REDUCES THE SIZE OF STRONG WIND AREA IN THE CORNER STREAM

CANOPY
A WELL PLACED CANOPY ABOVE THE HARBOR SQUARE WILL ENHANCE WIND COMFORT

TREES
TREES DAMPEN WIND SPEED ALONG SIDEWALKS

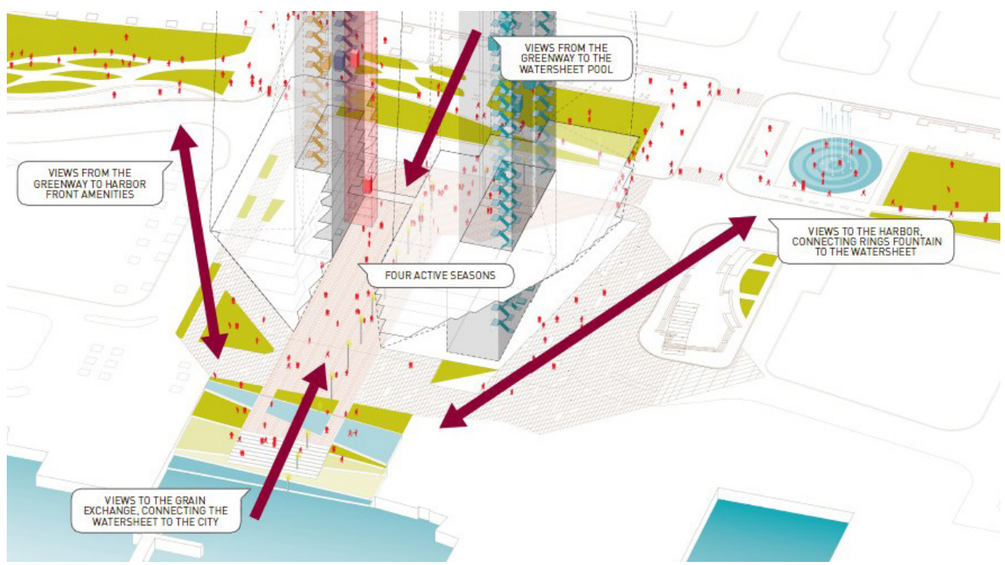
RESPONSIVENESS TO PLANNING GUIDANCE

MUNICIPAL HARBOR PLAN OBJECTIVES

PROJECT RESPONSIVENESS

Increase **public access** to the waterfront

Improve **activation** & **year-round** programming



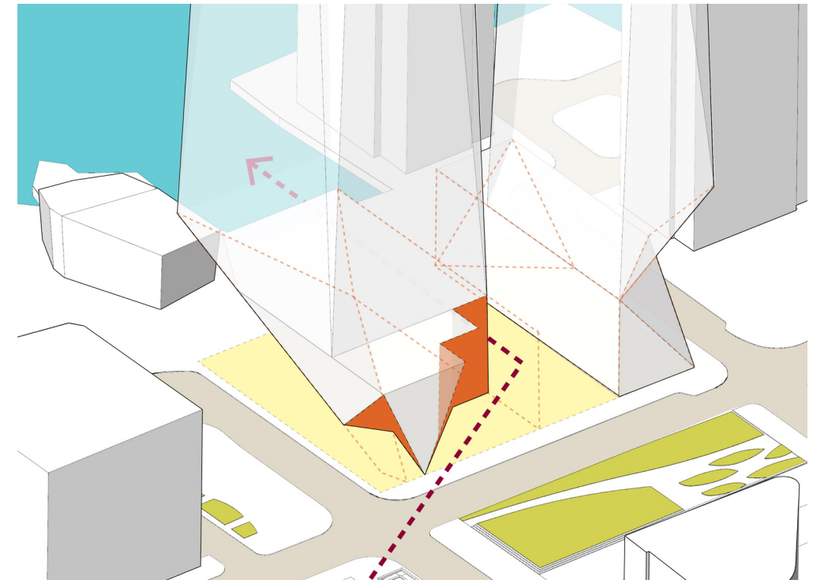
Enhance **connections** between the waterfront, Greenway and adjacent communities

Facilitate **greater building density and diversity of uses** that complement the District's unique open space resources

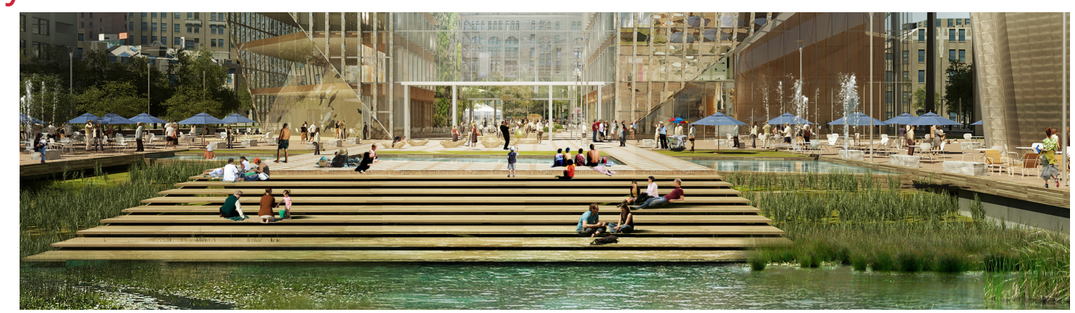
PUBLIC REALM PLAN VISION

PROJECT RESPONSIVENESS

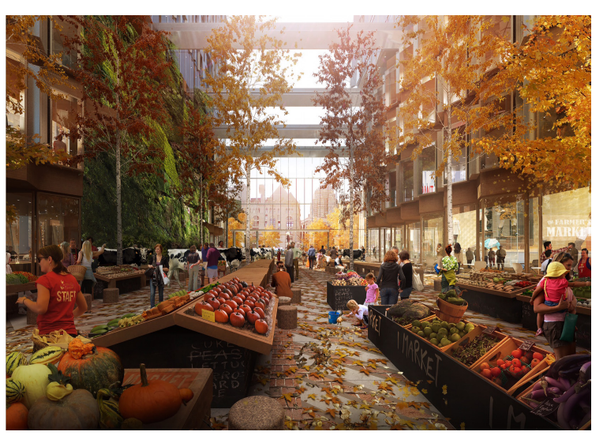
Multi-Modal **Accessibility**



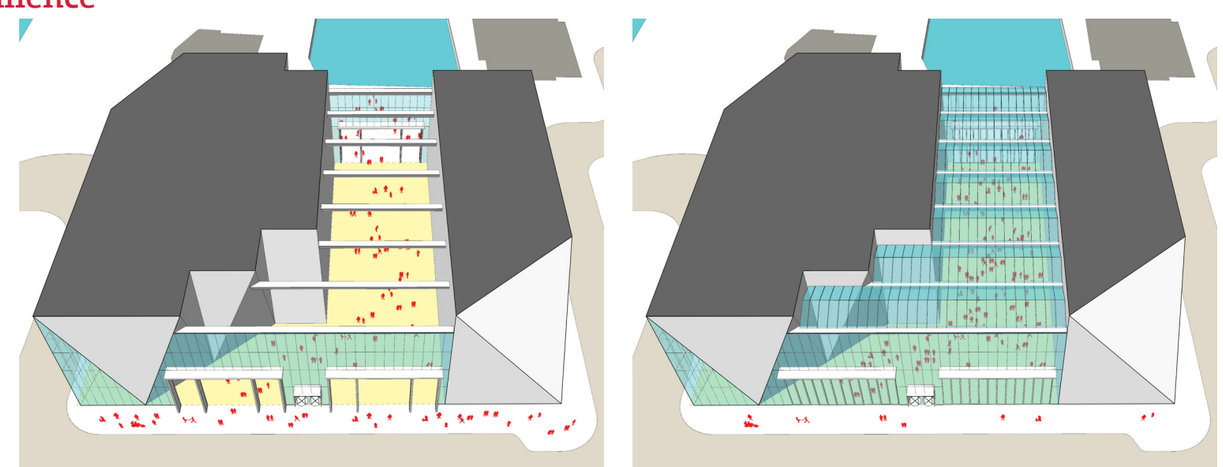
Clearly defined **connections**



Climate change **resilience**

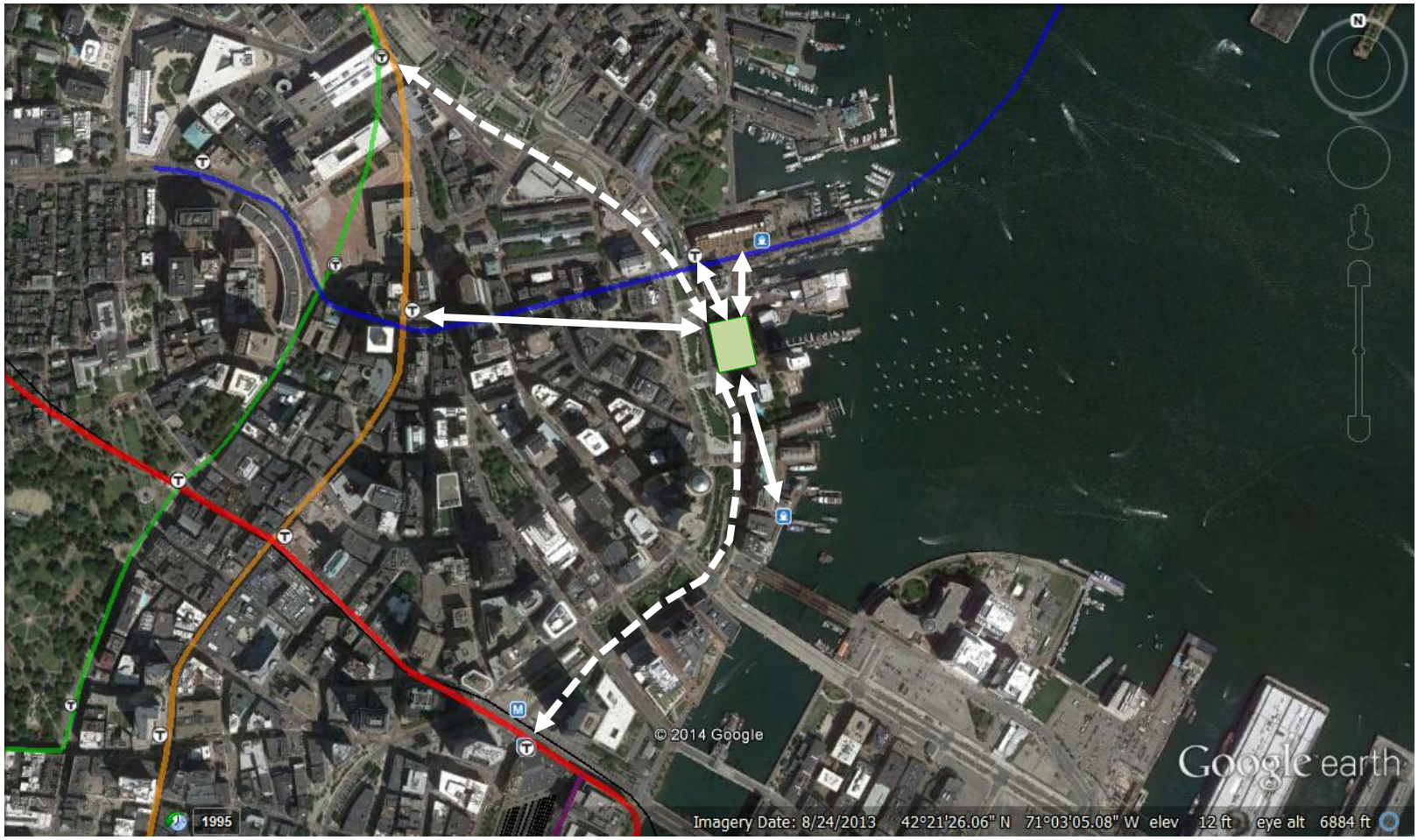


Four-season destinations & programming



Flexibility to accommodate innovation

Multi-Modal Access



GREENWAY DISTRICT GUIDELINES
PROJECT RESPONSIVENESS

New development at Harbor Garage site should feature **active uses at NW corner**
p. 21, GDG

Reinforce Atlantic Avenue **street edge**; significant breaks should **open connections to waterfront**
p. 21, GDG

New **uses on Atlantic Avenue** edge of Harbor Garage should offer uses complementary to Greenway: **restaurants, cafes, retail**
p. 21, GDG

Enhance **continuity and accessibility** of Harborwalk by providing **additional connections from Greenway**
p. 21, GDG

GREENWAY DISTRICT GUIDELINES

PROJECT RESPONSIVENESS

New development should **emulate pier-like patterns**
p. 20, *Greenway District Planning Study Use & Development Guidelines ("GDG")*

Create & enhance **access to the waterfront**
p. 20, GDG

Facilitate the **accessibility of the Harborwalk**
p. 20, GDG

Further **diversify abutting uses**
p. 20, GDG

GREENWAY DISTRICT GUIDELINES

PROJECT RESPONSIVENESS

All developments, and the Harbor Garage in particular, should increase visual access to the waterfront either at the building edges or through-building connections.
p.21 GDG

THIS PROJECT DOES BOTH

POTENTIAL PROJECT OFFSETS

STATE MHP APPROVAL STANDARD

301 CMR 23.05(d)

Any determination…shall be based on a demonstration…that the substitute provisions set forth in the plan will promote, with **comparable or greater effectiveness**, the state tidelands policy objectives.

The substitute provisions may include alternative use limitations or numerical standards that are less restrictive than [the default Chapter 91 provisions]… provided that the plan includes other requirements that, considering the **balance of effects on an areawide basis**, will mitigate, compensate, or otherwise offset adverse effects on water-related public interests.

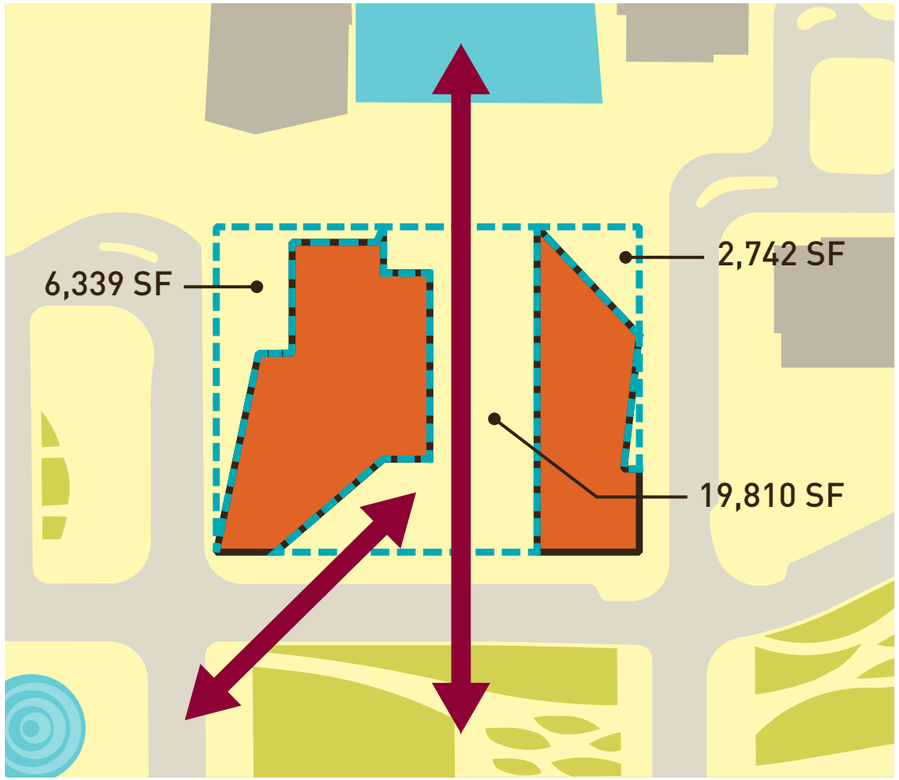
TRANSLATION: At the end of the day, if approved, will this project result in a Downtown Waterfront that is equal or better to what's there now or what Chapter 91 would allow for a new development?

BUILDING FOOTPRINT OFFSETS

UTILE/ DURAND & ANASTAS PRESENTATION, 6/25/14

STANDARD

The MHP "...must specify alternative site coverage ratios and other requirements that ensure that, in general, buildings for non-water-dependent use will be relatively condensed in footprint... to accommodate water-dependent activity and public access."
[Emphasis added]



OPEN SPACE OFFSET PRIORITY

First, identify potential areas of new open space (e.g., parking lots or streets) adjacent to the parcel or within the MHP Planning Area.

Second, identify improvements to existing open space areas for the Public Realm Plan that are adjacent to the parcel or within the MHP Planning Area.

Third, identify other nearby waterfront areas for acquisition or improvements.

Fourth, contribute to a fund for waterfront open space.

"...[O]ther requirements..." to offset more subjective impacts

BUILDING HEIGHT OFFSETS

UTILE/ DURAND & ANASTAS PRESENTATION, 6/25/14

OBJECTIVE

Offsets to impacts of building height must make the ground-level environment conducive to water dependent uses, including public access/ Harborwalk, & so may be applied to a broader range of public benefits.

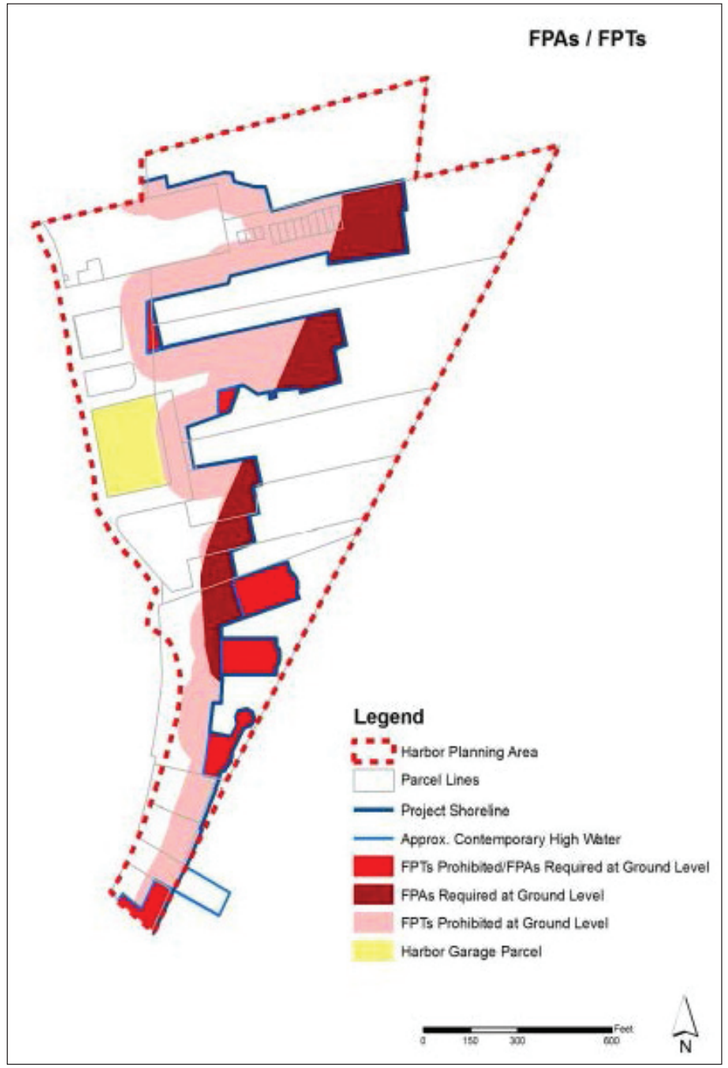
EXAMPLES

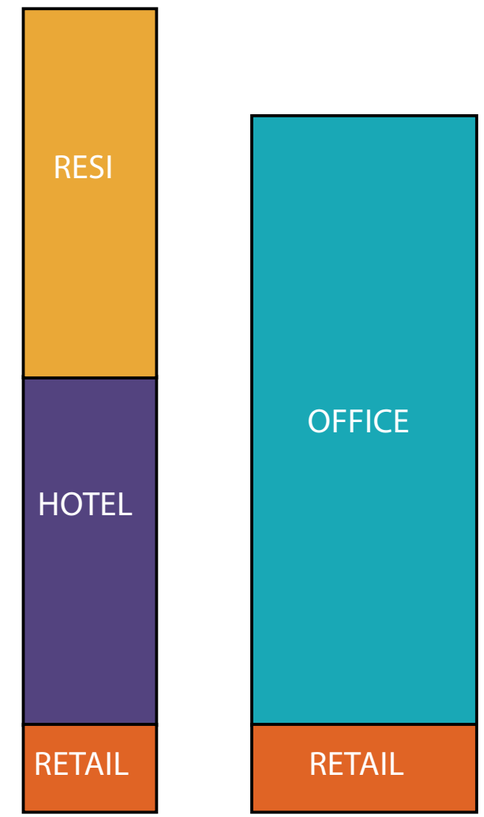
- Open space
- Water transportation facilities and/or subsidies, above those required for a Chapter 91 license
- Climate change adaptation measure with direct public benefits
- Special Public Destination Facilities, FPAs that enhance the waterfront by:

  - Serving significant community needs;
  - Attracting a broad range of people;
  - Providing innovative amenities for public use

POTENTIAL OFFSETS

EXPANSIVE, HIGH-QUALITY FACILITIES OF PUBLIC ACCOMMODATION (FPAs)





PUBLIC REALM PLAN REFERENCE: "Active uses on the Harbor Garage site" – p. 36

Only de minimis FPAs required at Harbor Garage site.
Program includes three levels of retail and 250-300 key hotel.

POTENTIAL OFFSETS

ENHANCED OPEN SPACE NOT REQUIRED ON PRIVATE TIDELANDS

310 CMR 9.52(2)(b) requires enhanced open space only on **Commonwealth Tidelands**

Though located wholly on **Private Tidelands**, Harbor Square provides significantly enhanced open space amenities

PUBLIC REALM PLAN REFERENCE:
"Create a range of open spaces"
– p. 24

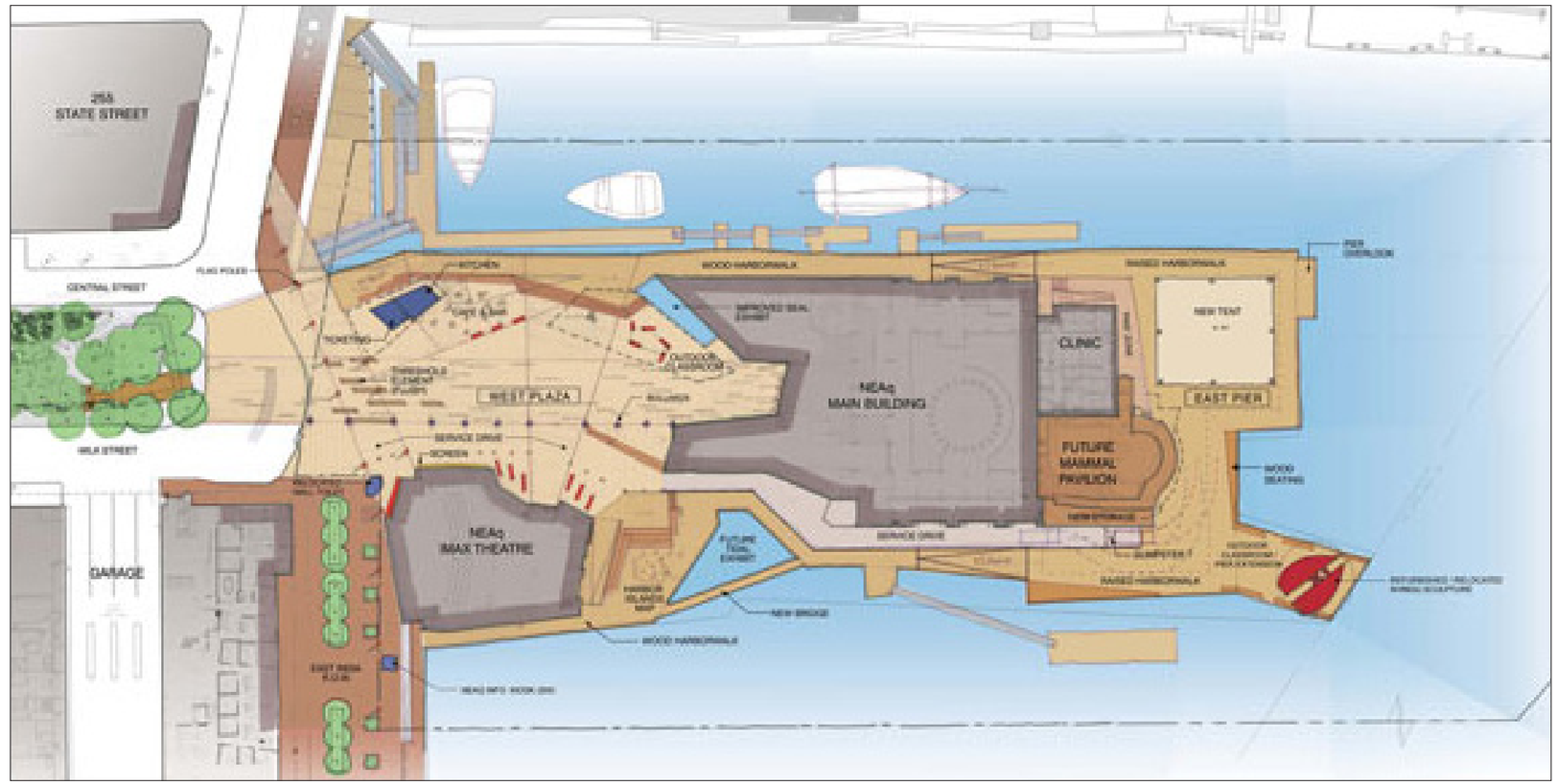
POTENTIAL OFFSETS

IMPROVEMENT AND PROGRAMMING OF BRA-OWNED LAND

PUBLIC REALM PLAN REFERENCE: "More and higher-quality places to access the water. For example, the BRA-owned land in front of the Harbor Garage." – p. 31

POTENTIAL OFFSETS
IMPROVEMENTS TO THE AQUARIUM PLAZA

PUBLIC REALM PLAN REFERENCE:
"Improve Aquarium Plaza through unified materials, way-finding and visibility from the Greenway" – p. 36



Cambridge Seven Associates & Halvorson Design, New England Aquarium Master Plan

POTENTIAL OFFSETS

LONG WHARF PARKING LOT CONVERSION

PUBLIC REALM PLAN REFERENCE: "Currently, a surface parking lot exists on Long Wharf. This underutilized space could become a new pocket park." – p. 29

POTENTIAL OFFSETS

WATER TRANSPORTATION SUBSIDY

PUBLIC REALM PLAN REFERENCE: "Subsidize Harbor Island ferries" – p. 38

POTENTIAL OFFSETS

STORM SURGE/ SEA LEVEL RISE ADAPTION OF PUBLIC INFRASTRUCTURE

PUBLIC REALM PLAN REFERENCE: "Develop a clear climate change resilience plan that addresses sea level rise and storm surges" – p. 31

POTENTIAL OFFSETS

CONTRIBUTION TO BENEFIT ROSE KENNEDY GREENWAY

PUBLIC REALM PLAN REFERENCE:

"Strengthened connections from the Greenway to the waterfront" – p. 13

POTENTIAL OFFSETS

CONTRIBUTION TO BENEFIT CHRISTOPHER COLUMBUS PARK

PUBLIC REALM PLAN REFERENCE: "Improve connections to Christopher Columbus Park" – p. 24

POTENTIAL OFFSETS
SUMMARY

- Enhanced open space not required on Private Tidelands
- Improvement, programming of BRA-owned land
- Expansive, high-quality FPAs
- Aquarium Plaza improvements
- Long Wharf parking lot conversion
- Water transportation subsidy
- Public infrastructure sea level / storm surge resiliency adaptation
- Contribution to benefit Greenway
- Contribution to benefit Christopher Columbus Park

CONCLUDING REMARKS

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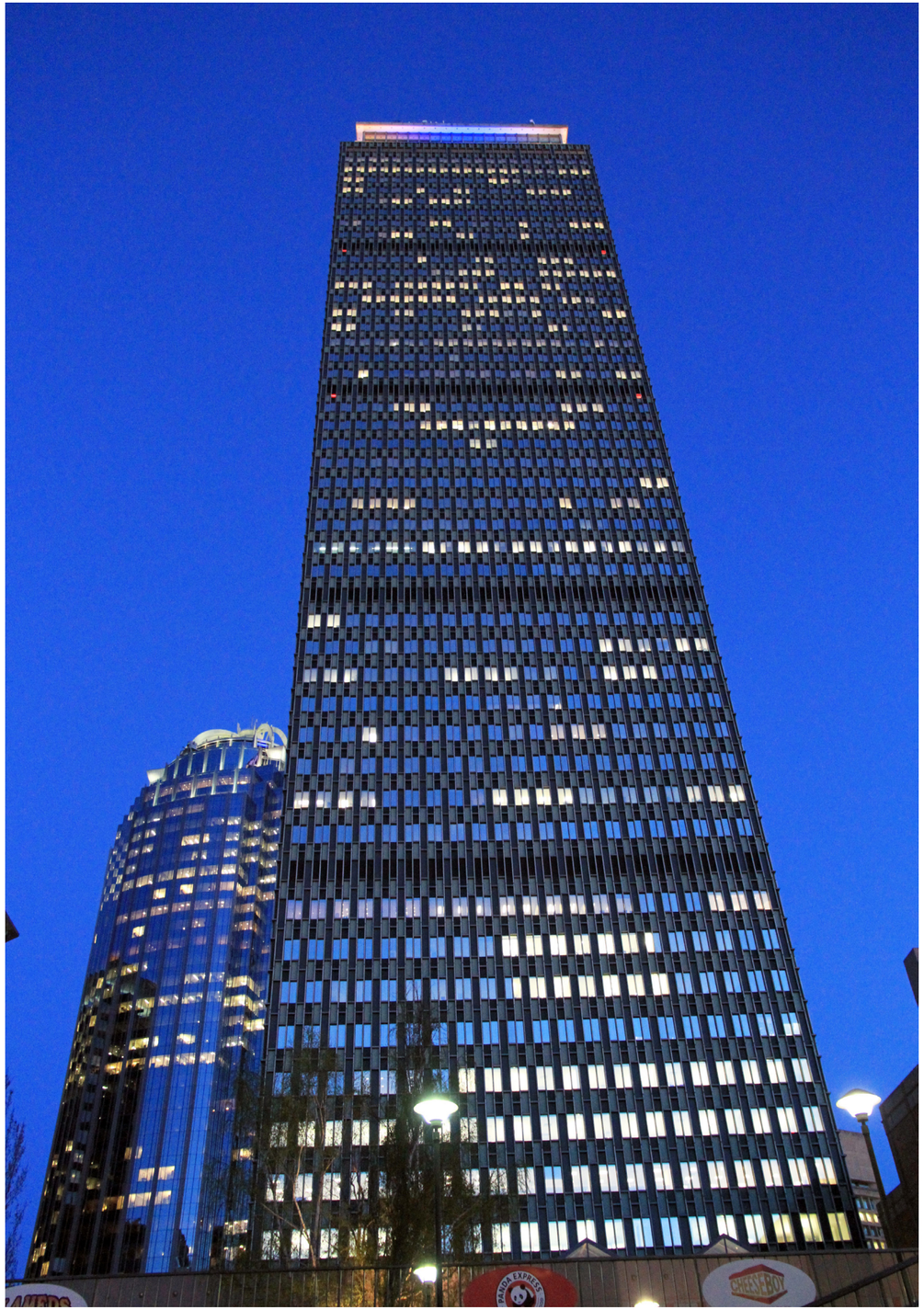

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