

Downtown Waterfront Municipal Harbor Planning Advisory Committee



CITY OF BOSTON
Martin J. Walsh
Mayor



Boston
Redevelopment
Authority
Brian Golden, Acting Director

Consultants:
Utile, Inc.
Durand & Anastas
Noble & Wickersham

Agenda

I. Process Update

II. Review of Area-wide Urban Design Analysis

III. Proposed Maximums for Development Sites

- a. Baseline Ch. 91 build-outs
- b. Long Wharf Marriott Addition
- c. Hook Lobster Site
- d. Harbor Garage

IV. Next Steps

- a. Substitution and Offset Strategies, Framework
- b. Process

V. Comments and Questions

Process Update



Next Steps

The BRA and consultant team will prepare a draft MHP, which

- Will reflect the City's and committee's priorities for the public realm and watershed.
- Will establish baseline requirements.
- Will reflect the City's and committee's thoughts on acceptable substitute provisions (open space, height, FPTs).
- Will propose a hierarchy of offsets for various substitute provisions.

The MHPAC will review and comment on this draft.

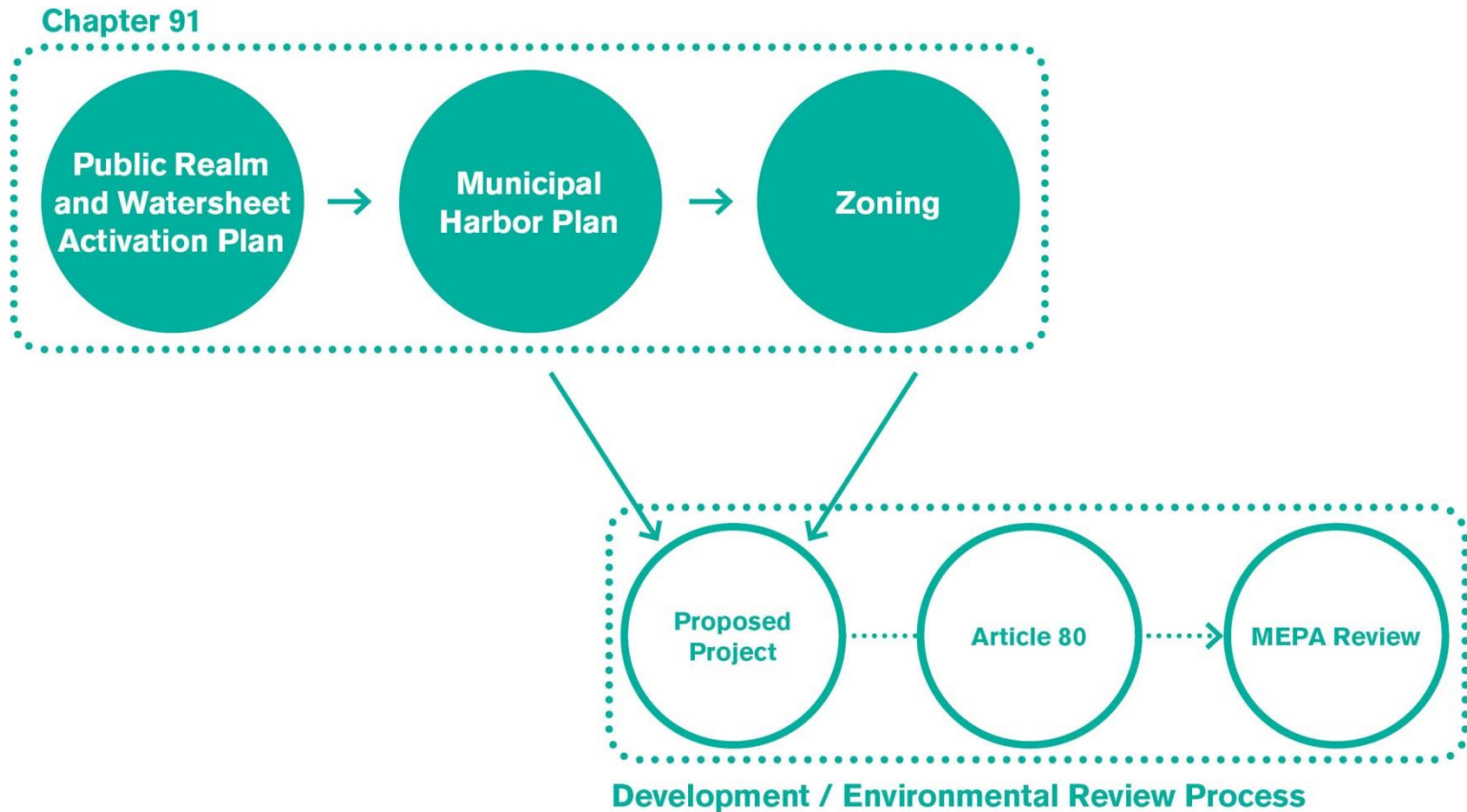
We will also review the revised public realm and watershed activation plan.

The BRA and consultant team will revise the draft, then submit it to the State.

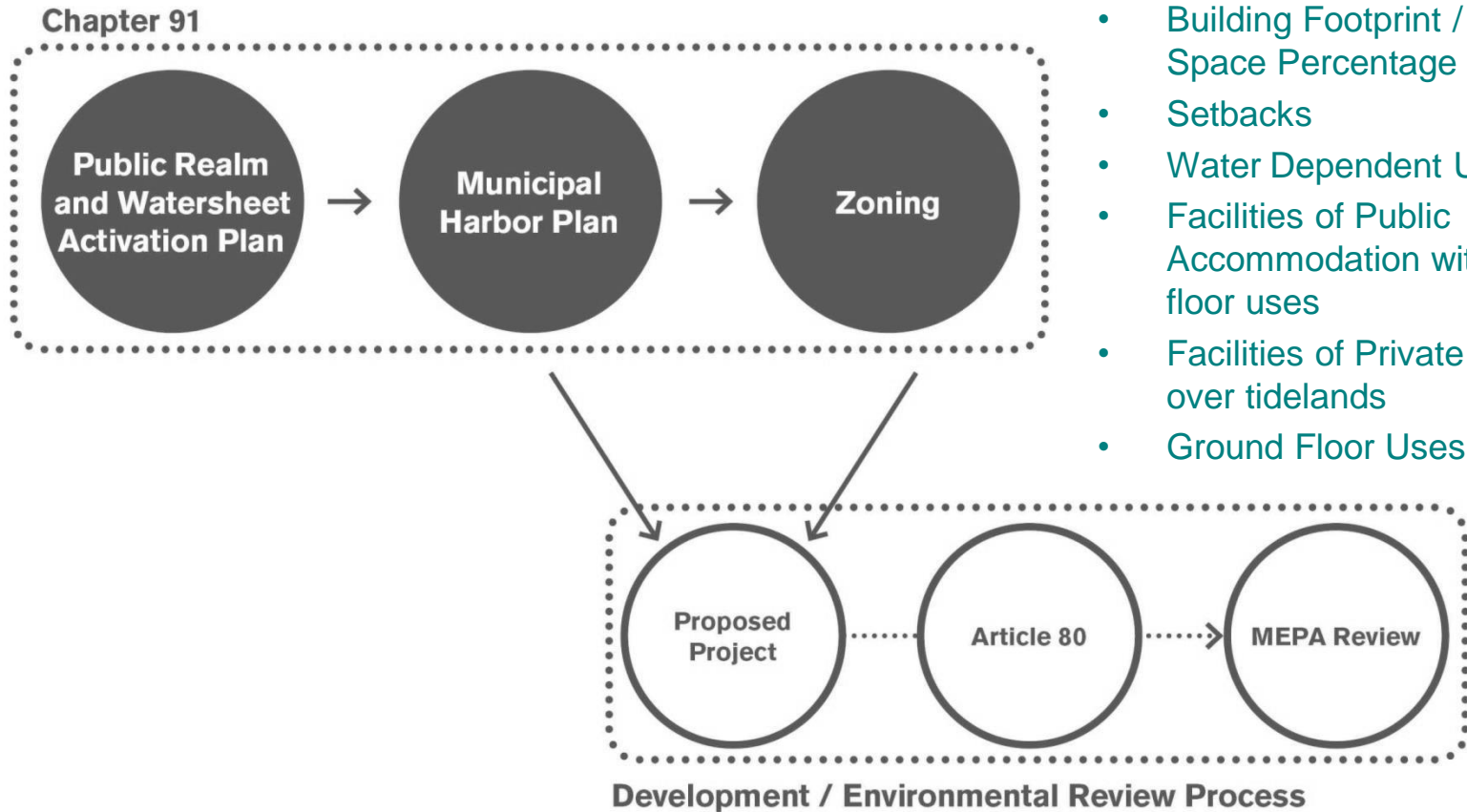
Then the State process includes:

- Public hearing and comment period (30 days)
- Consultation period (30-60 days)
- Secretary issues an MHP decision

Regulatory Framework



Regulatory Framework



Municipal Harbor Plan

- Height
- Density -Built Floor Area & Built Volume
- Shadow Impacts (in Planning Area)
- Building Footprint / Open Space Percentage
- Setbacks
- Water Dependent Use Zone
- Facilities of Public Accommodation with Ground floor uses
- Facilities of Private Tenancy over tidelands
- Ground Floor Uses (general)

Regulatory Framework

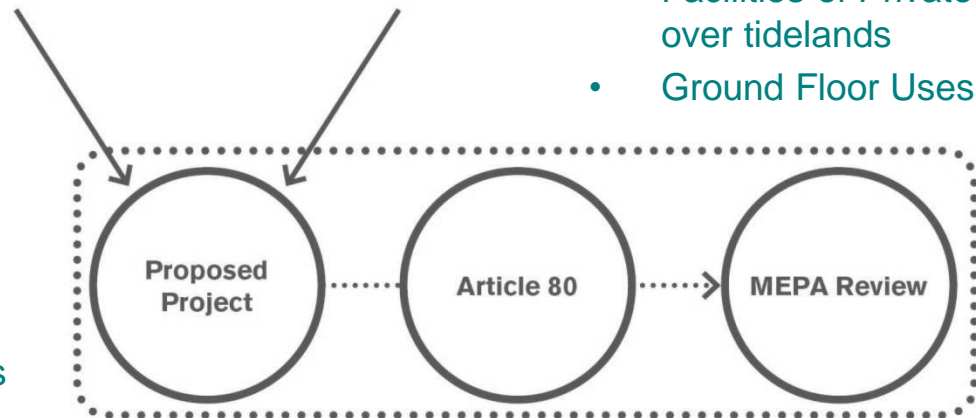
Municipal Harbor Plan

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Article 80

- Urban Design
- Environmental Impacts
 - Shadows & Wind
- Traffic Impacts
 - Counts, Parking, Access
- Architectural Quality/ Aesthetics
- Open Space Details
- Ground Floor Uses (specific)

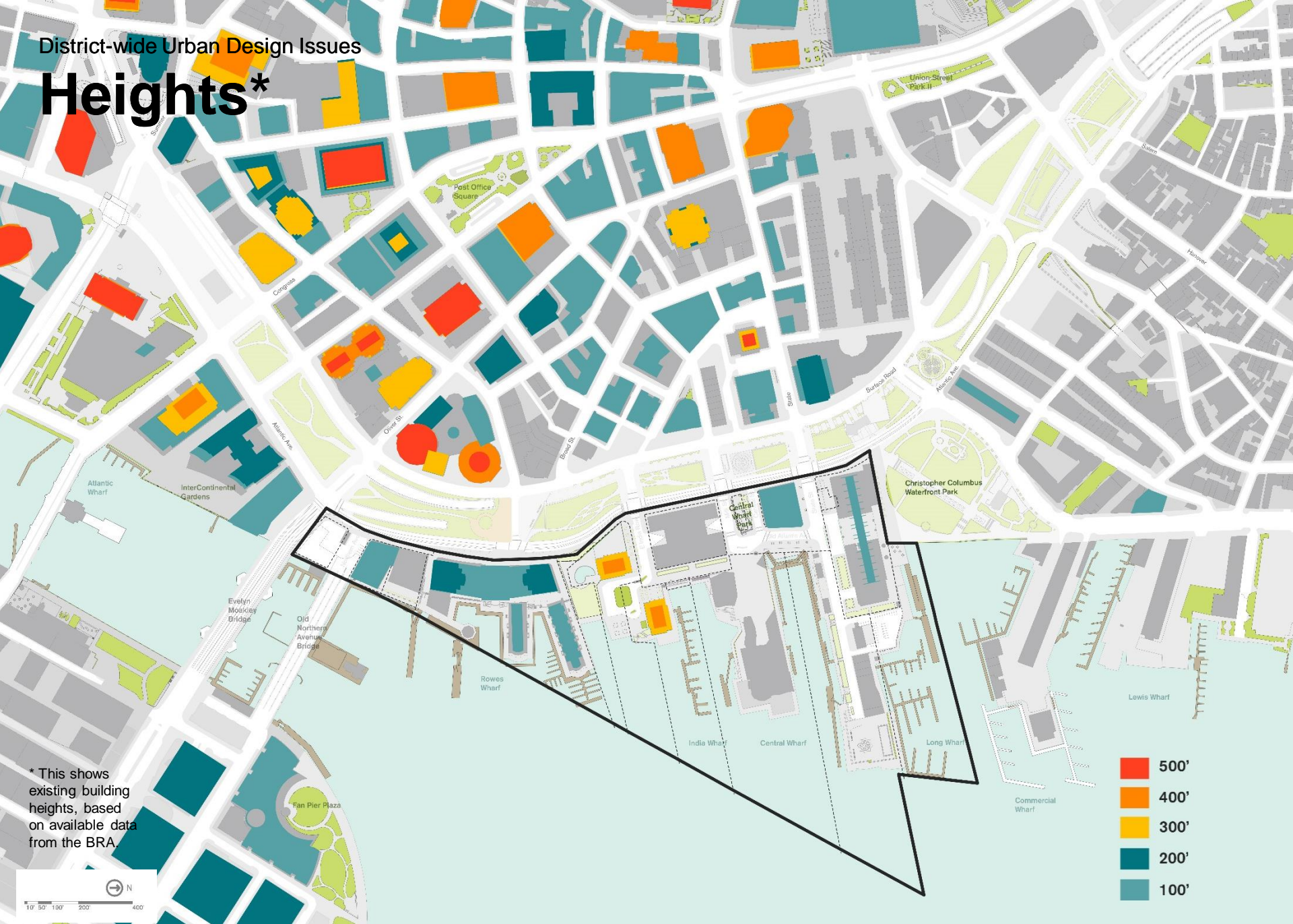


Development / Environmental Review Process

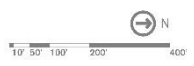
Review of Area-wide Urban Design Issues



Heights*

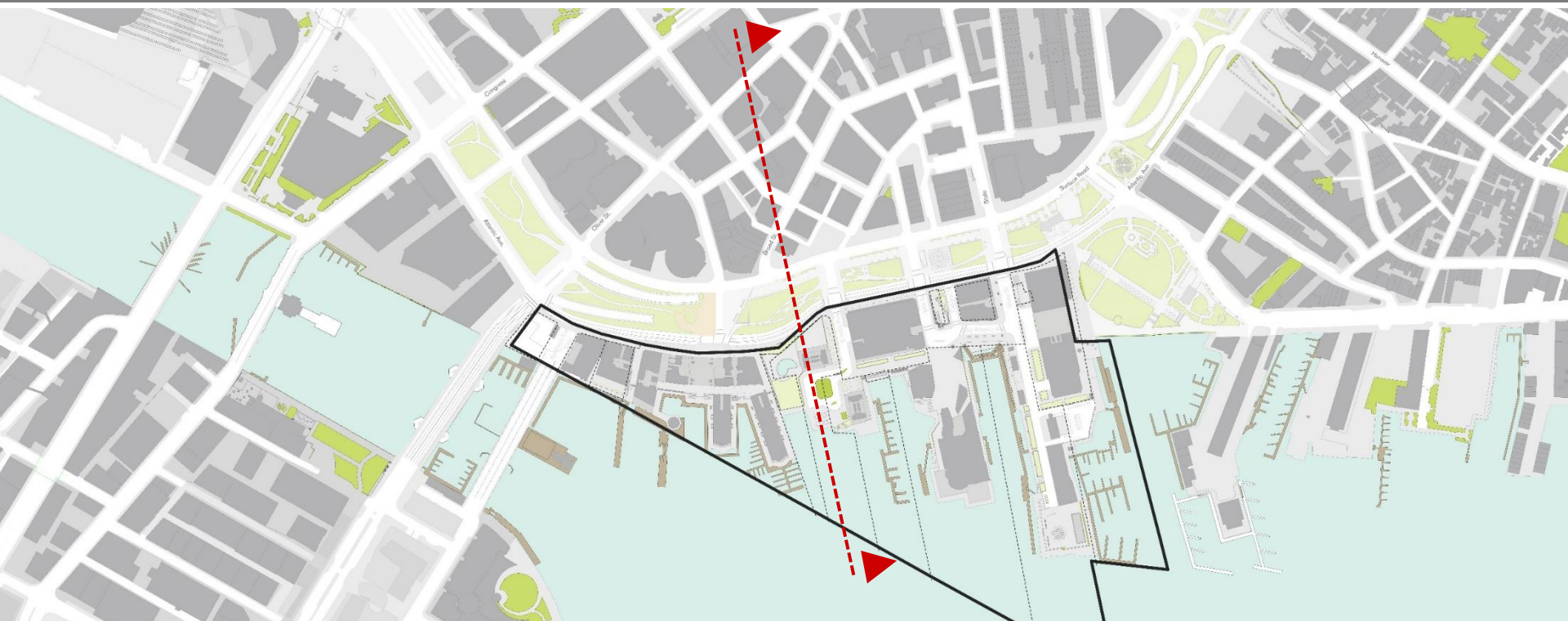


* This shows existing building heights, based on available data from the BRA.



- 500'
- 400'
- 300'
- 200'
- 100'

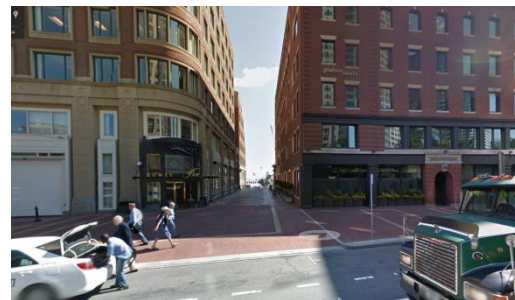
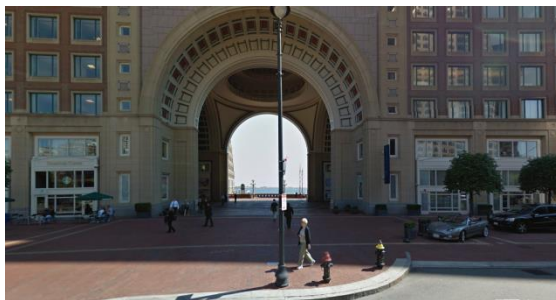
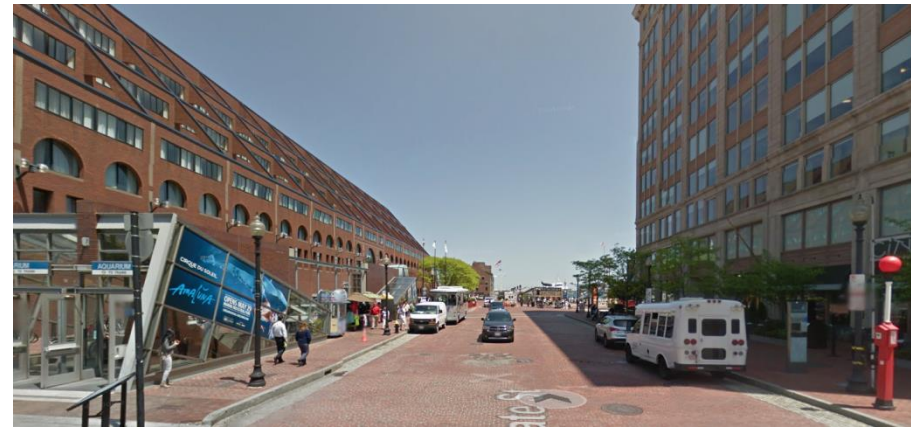
Relationship of Height to Waterfront



What to preserve or enhance? Views of the water.



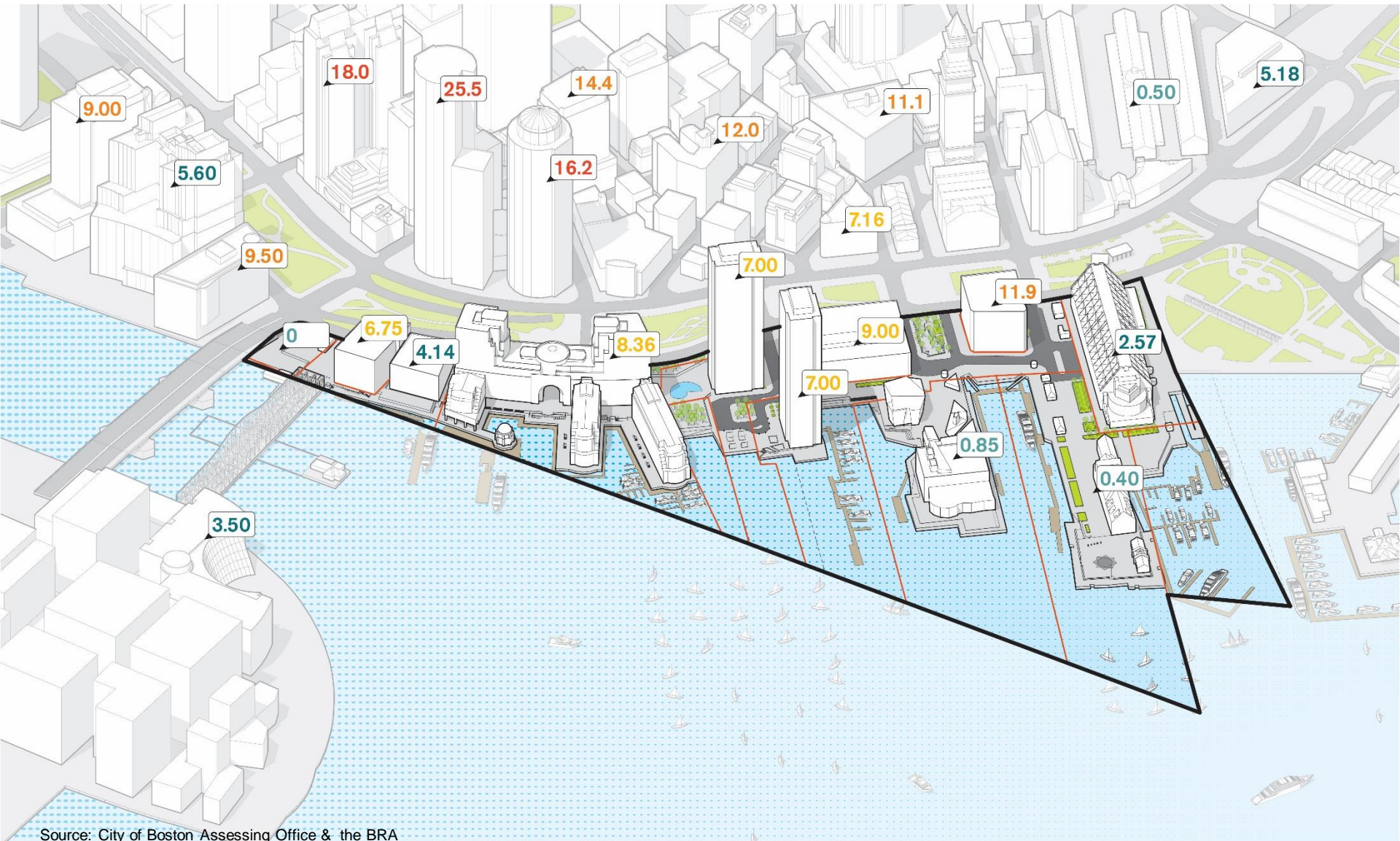
What to preserve or enhance? Views of the water.



What to preserve or enhance? Views of the city.

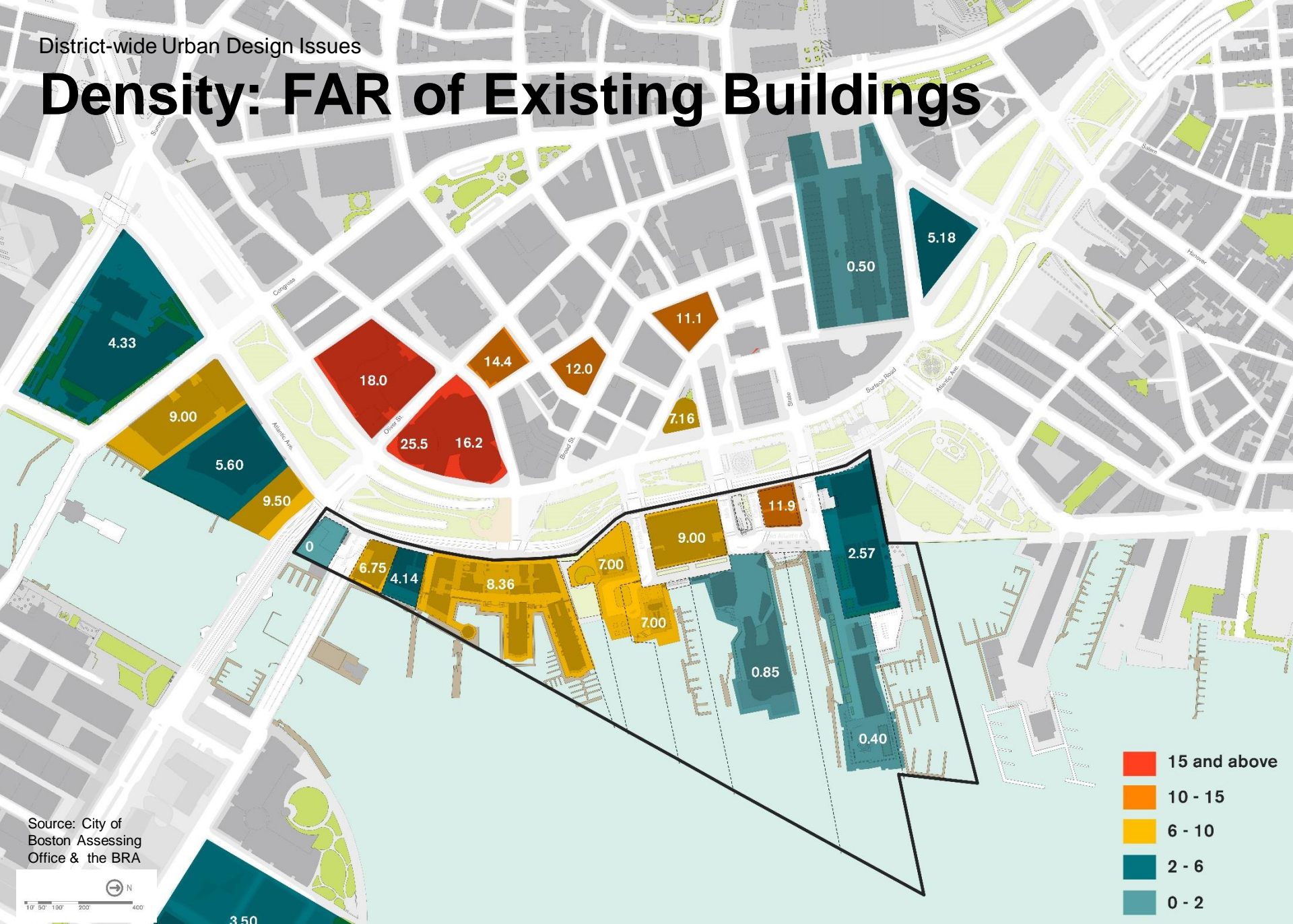


Density: FAR

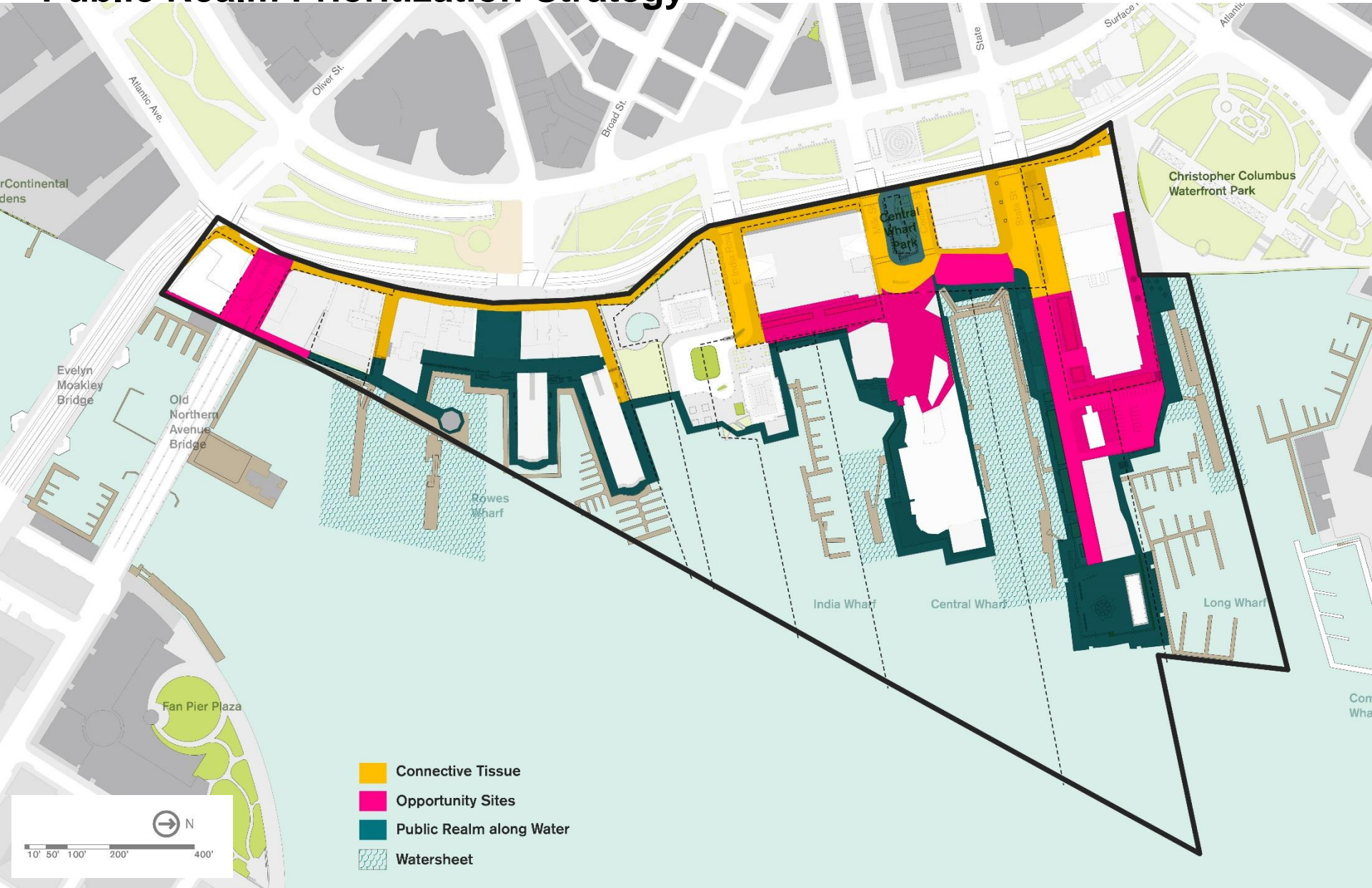


Source: City of Boston Assessing Office & the BRA

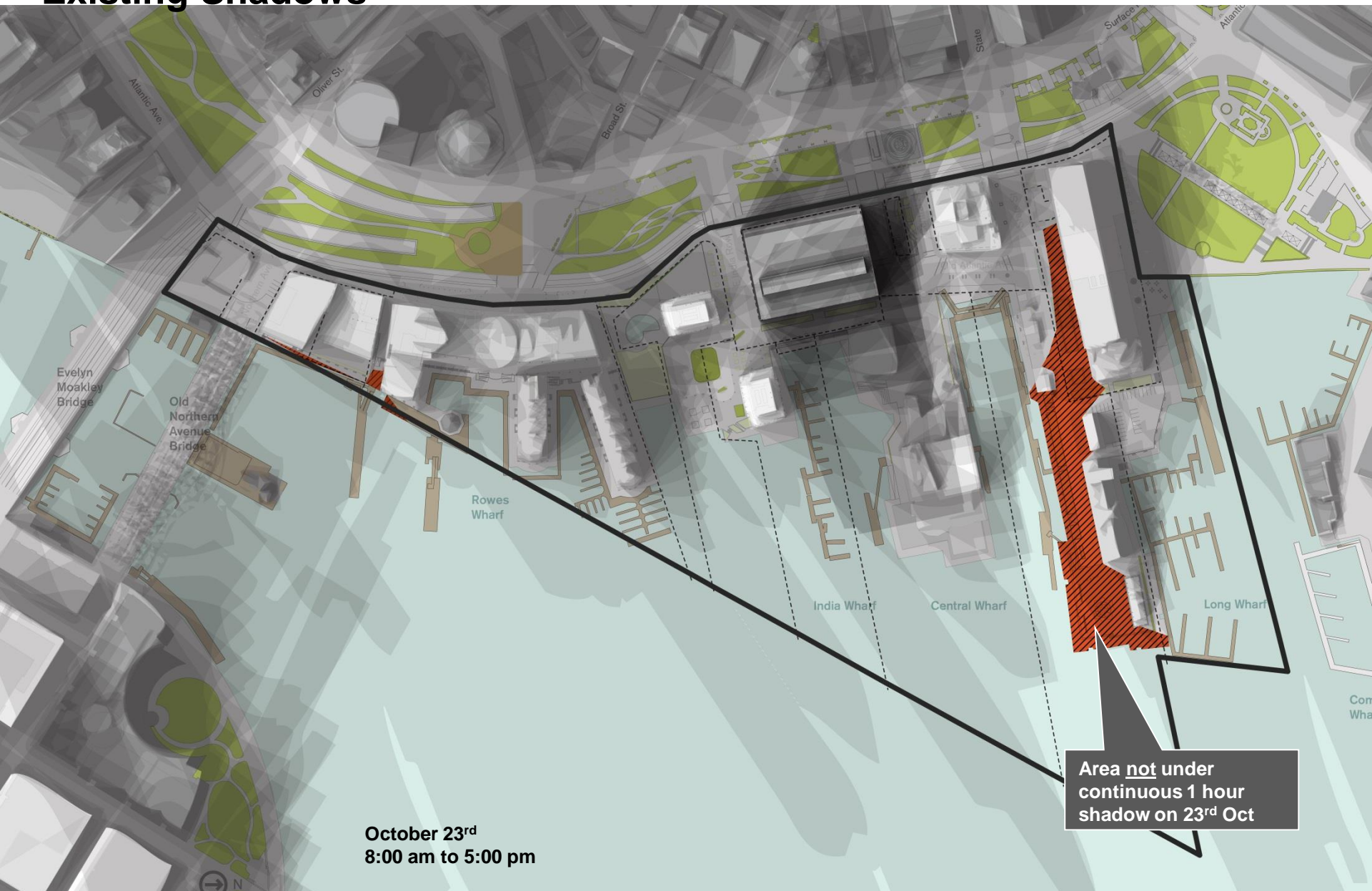
Density: FAR of Existing Buildings



Public Realm Prioritization Strategy



Existing Shadows



October 23rd
8:00 am to 5:00 pm

Area not under continuous 1 hour shadow on 23rd Oct

Public Realm

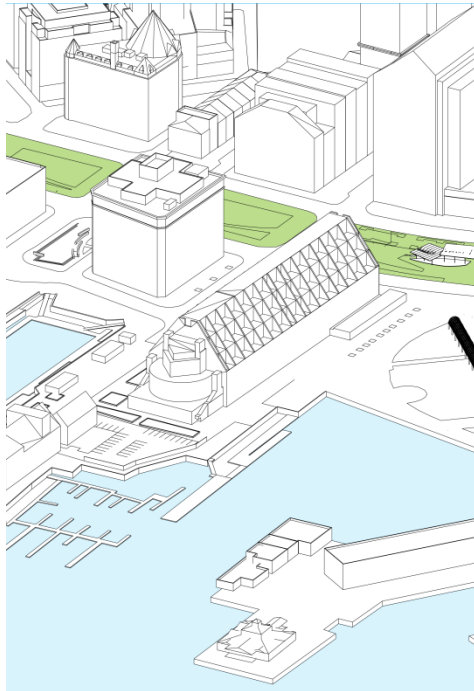


Proposed Maximums for Development Sites



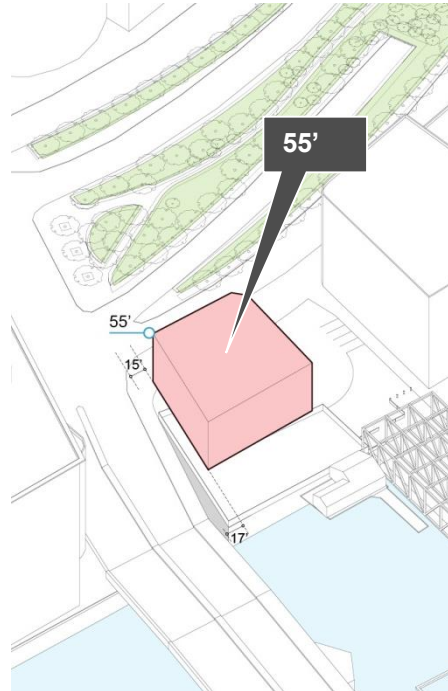
Ch. 91 Baseline

Long Wharf Marriott



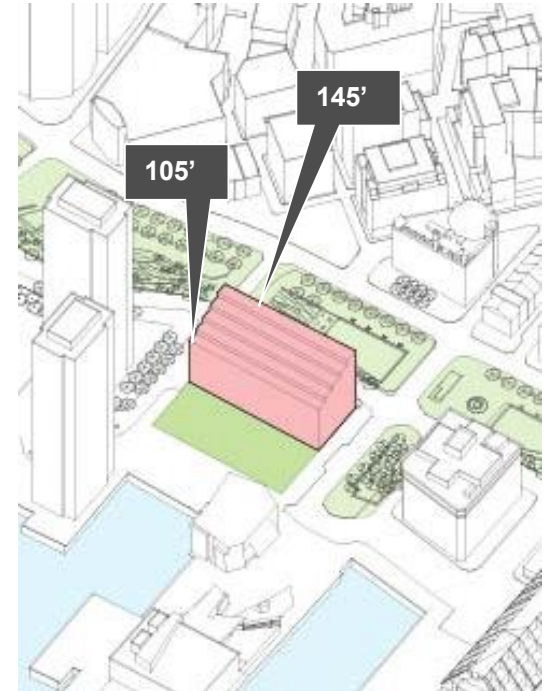
Predates Chapter 91.

Hook Lobster Site



Building Footprint: ~10,000 SF
Total parcel size: 20,056 SF

Harbor Garage Site



Total GSF: 297,550

Building Footprint: 28,500 SF
Total parcel size: ~57,000 SF

Note: These images are not at the same scale.

Proposed Maximums for Development Sites Long Wharf Marriott



Historic and Public Realm Assets: Long Wharf



Historic and Public Realm Assets: Long Wharf



What we heard from the MHPAC and the public

Create Visible and Legible Links/Create View Corridor to the Water

- Concern over general extent of lot coverage, and pedestrian pinch points on north side of Long Wharf
- Open space offsets should not involve improvements to interior public spaces, rather they should relate to broader open space resources in the area such as the Greenway, CCP, and Long Wharf

Add Ground Level Programming and Porosity

- More music and activation in the area
- New retail and restaurant must be public and function to activate the area
- Improved definition to the passageway through the hotel
- Important to maintain quiet, contemplative areas along the waterfront

What we heard from the MHPAC and the public

Improve Hardscape and Add Interpretive Information/Designated Drop-off and Pick-up Areas

- Improve traffic and vehicular circulation – better clarify vehicular and pedestrian zones

Unified Wayfinding and Intelligent Transportation System (ferries)

- Improve facility, pedestrian, ferry and transit signage
- Improve legibility of HARBORWALK, wayfinding, and better lighting

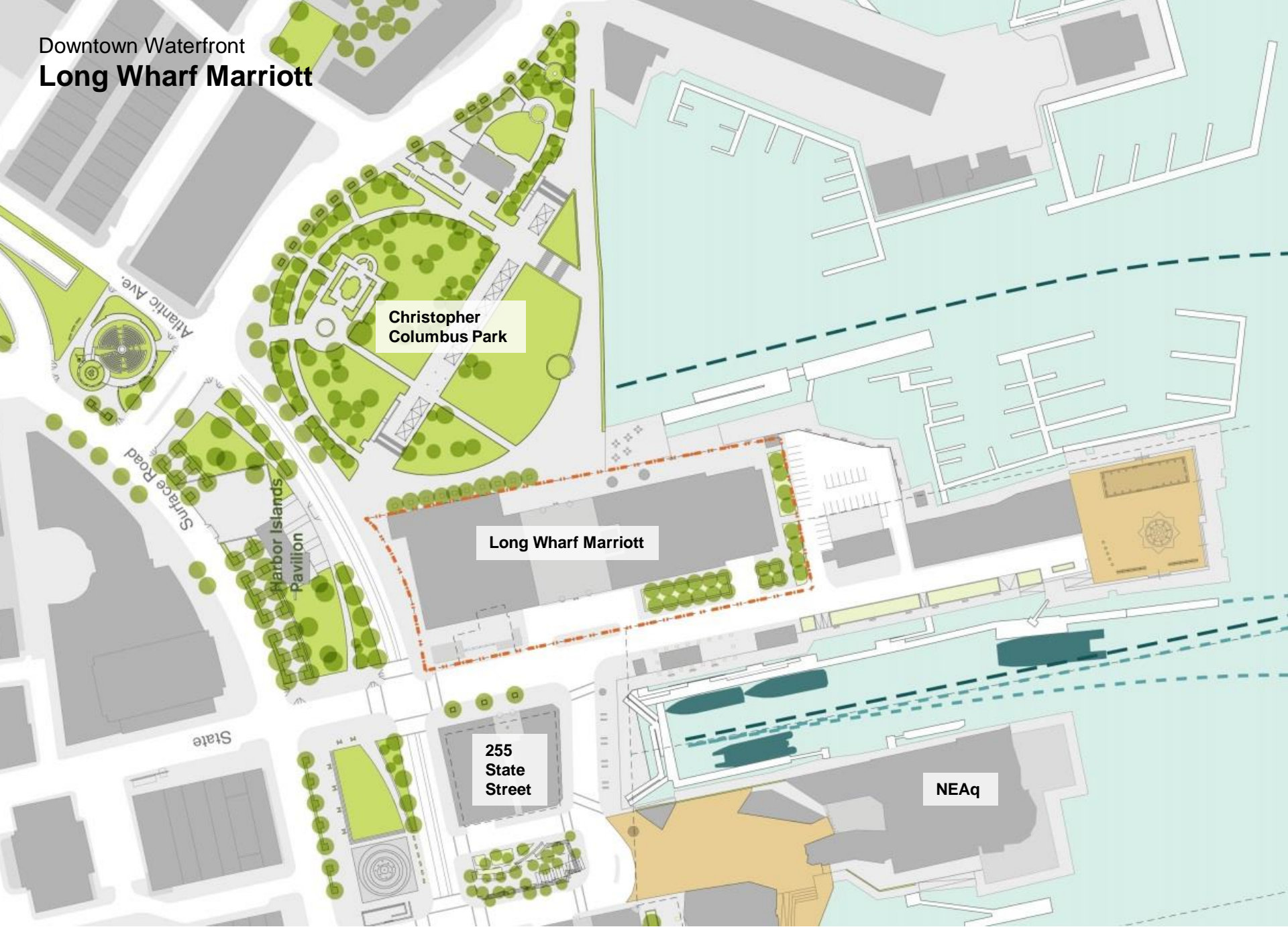
Increase Facilities for Commuters and Transit Passengers

- Improve functionality of the area as a water transportation hub and support water transit
- Better organization of trolley ticketing facilities

Create a Permanent Harbor Islands Gateway

- Establish a Harbor Islands Gateway as part of Marriott expansion

Downtown Waterfront
Long Wharf Marriott



Christopher
Columbus Park

Long Wharf Marriott

255
State
Street

NEAq

Downtown Waterfront
Long Wharf Marriott

Existing Building Footprint
~64% lot coverage
~36% open space

Parcel ~ 107,893 SF
From Assessing Online - City of Boston, excluding MBTA Easement

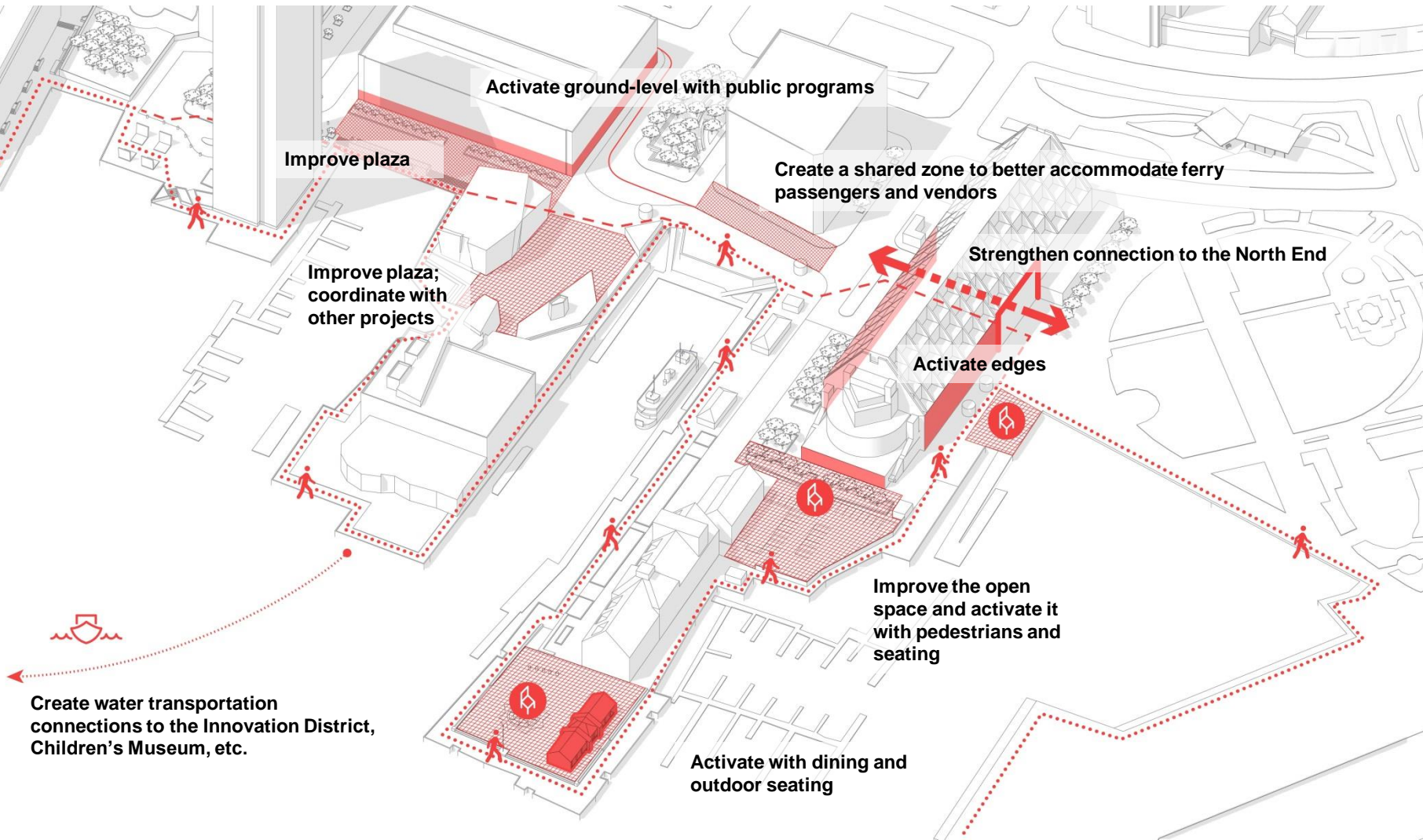
Parcel ~ 13,200 SF

Long Wharf Marriott

Marriott lot coverage ~69,360 SF

MBTA Easement ~ 6,230 SF

Downtown Waterfront: Long Wharf Marriott Public Realm and Watersheet Activation Plan



Central and Long Wharves: Opportunities

Proposed Expansion of the Marriott

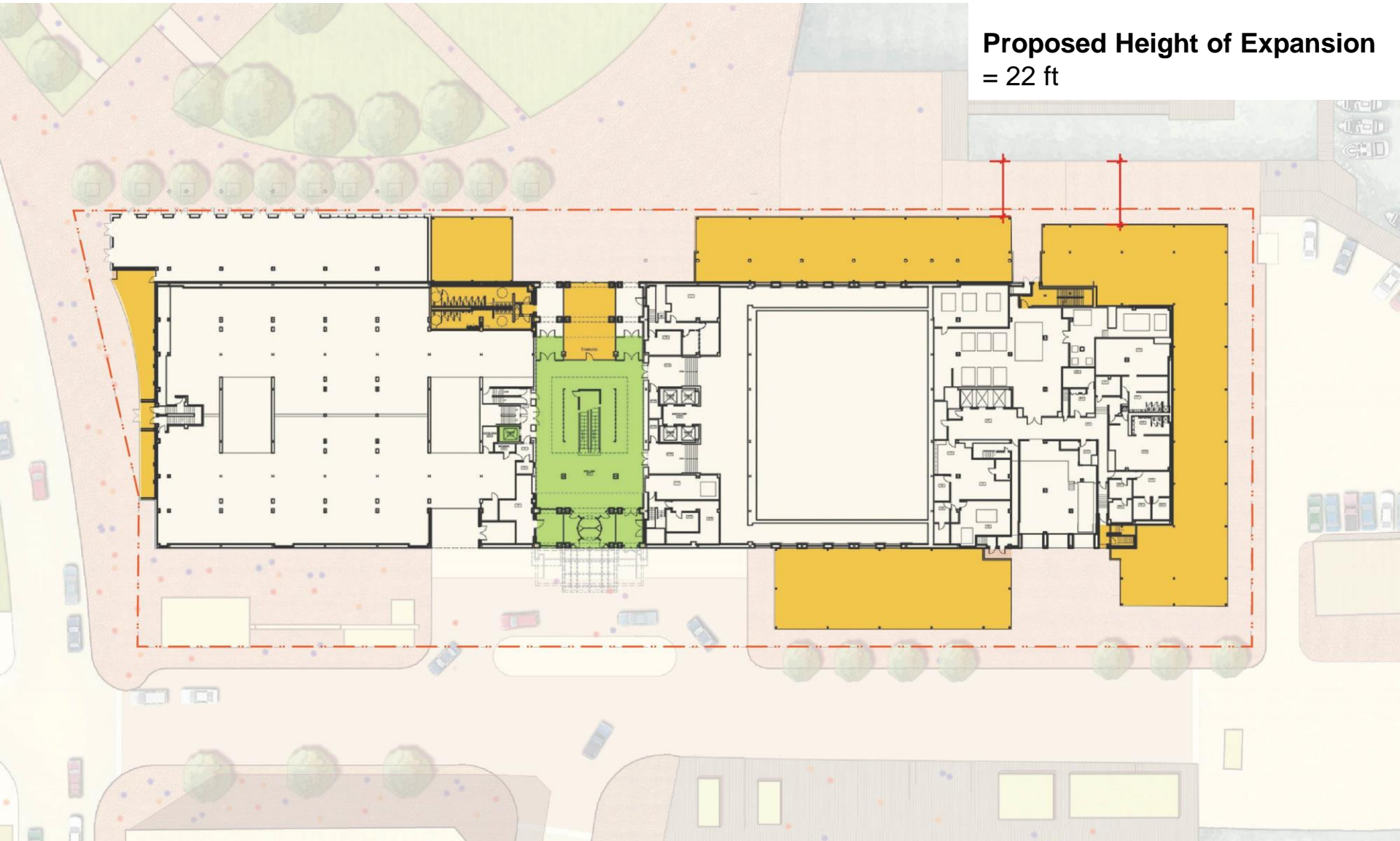
Existing Building Footprint

~64% lot coverage
~36% open space

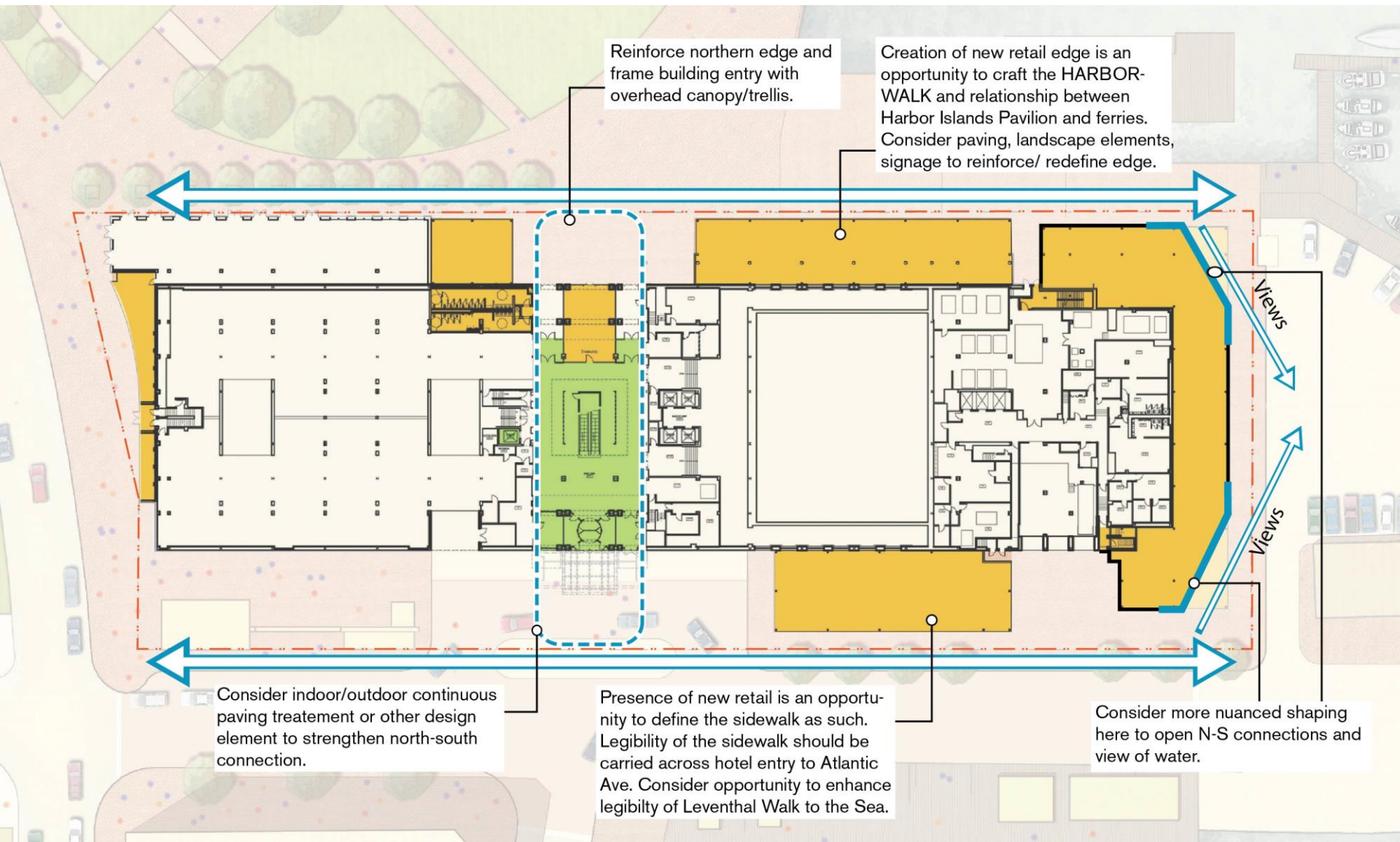
Proposed Building Footprint

~84% lot coverage
~16% open space

Proposed Height of Expansion
= 22 ft



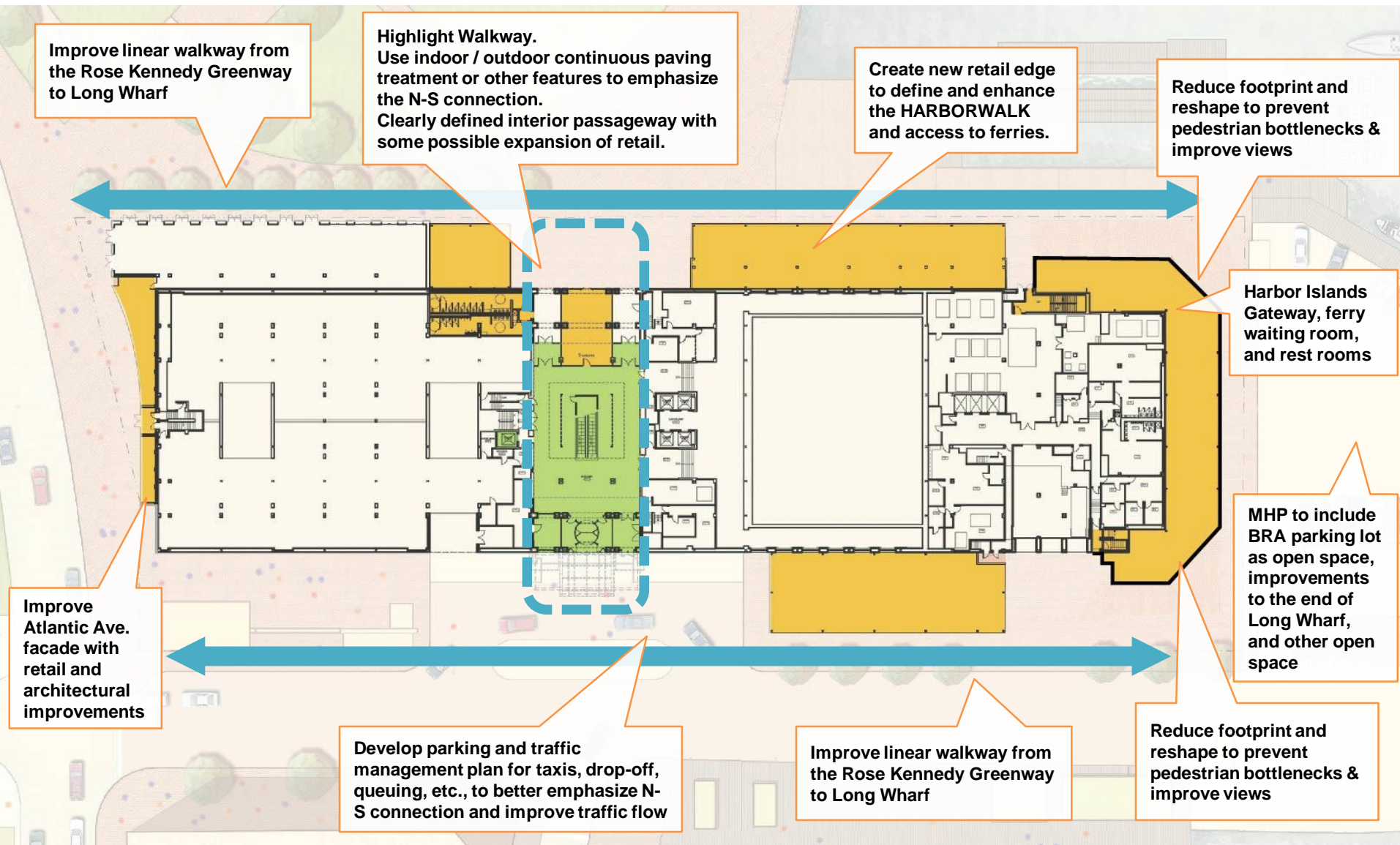
Downtown Waterfront: Long Wharf Marriott
Proposed Expansion of the Marriott:
May 2014 Revisions



Downtown Waterfront: Long Wharf Marriott
**Proposed Expansion of the Marriott:
 Oct. 2014 Revisions**

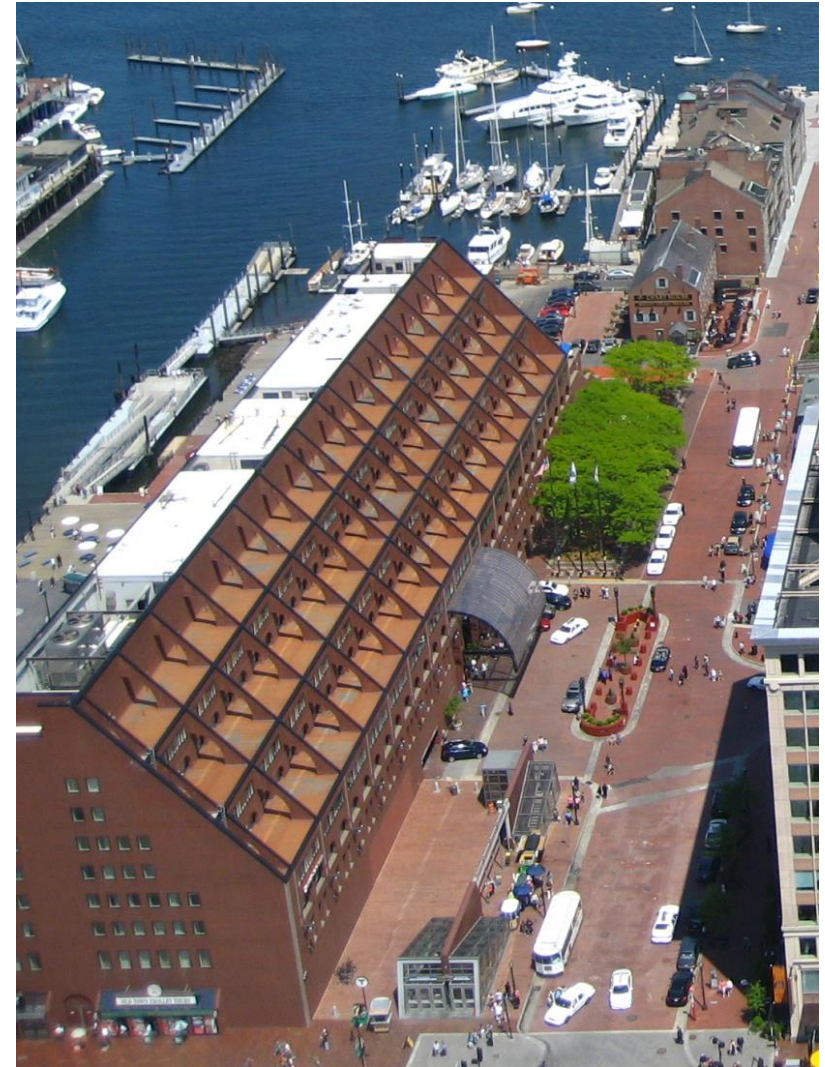
Existing Building Footprint
 ~64% lot coverage
 ~36% open space

Revised Proposal Footprint
 ~80% lot coverage
 ~20% open space



Long Wharf Marriott: Proposed Maximums

Long Wharf Marriott	
Height (<i>maximum height, including mechanicals</i>)	-
Density	-
GFA	-
Cubic Volume	-
Shadows	-
Open Space Min.	20%



Proposed Maximums for Development Sites Hook Lobster Site



Hook Lobster Site

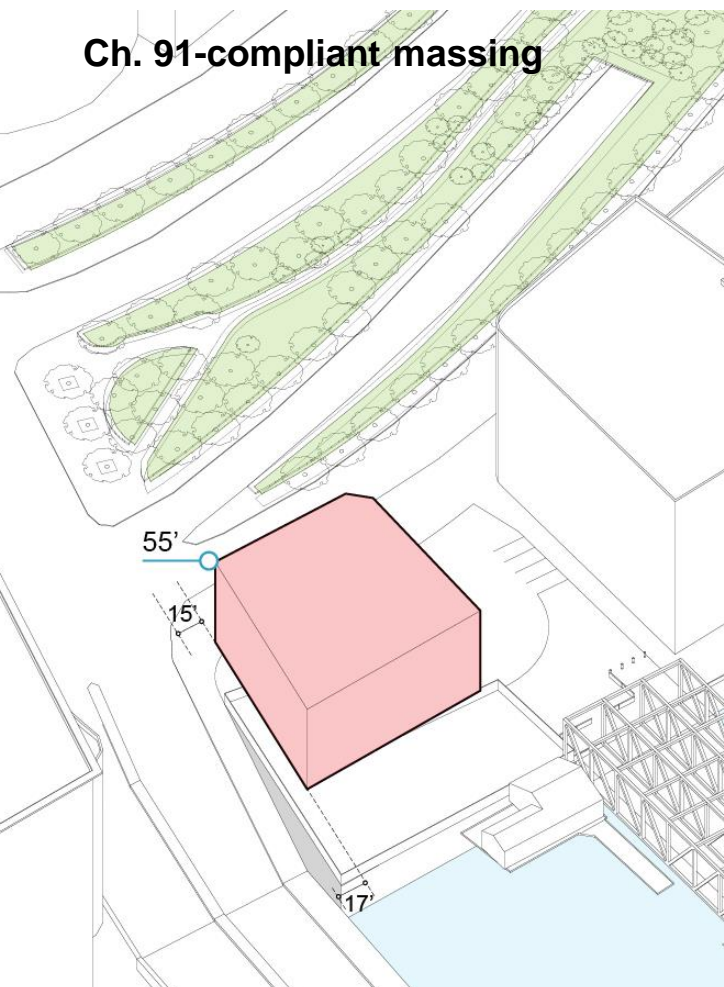


What to preserve or enhance?



Downtown Waterfront: Hook Lobster Site
Hook Lobster Proposal: Building Footprint

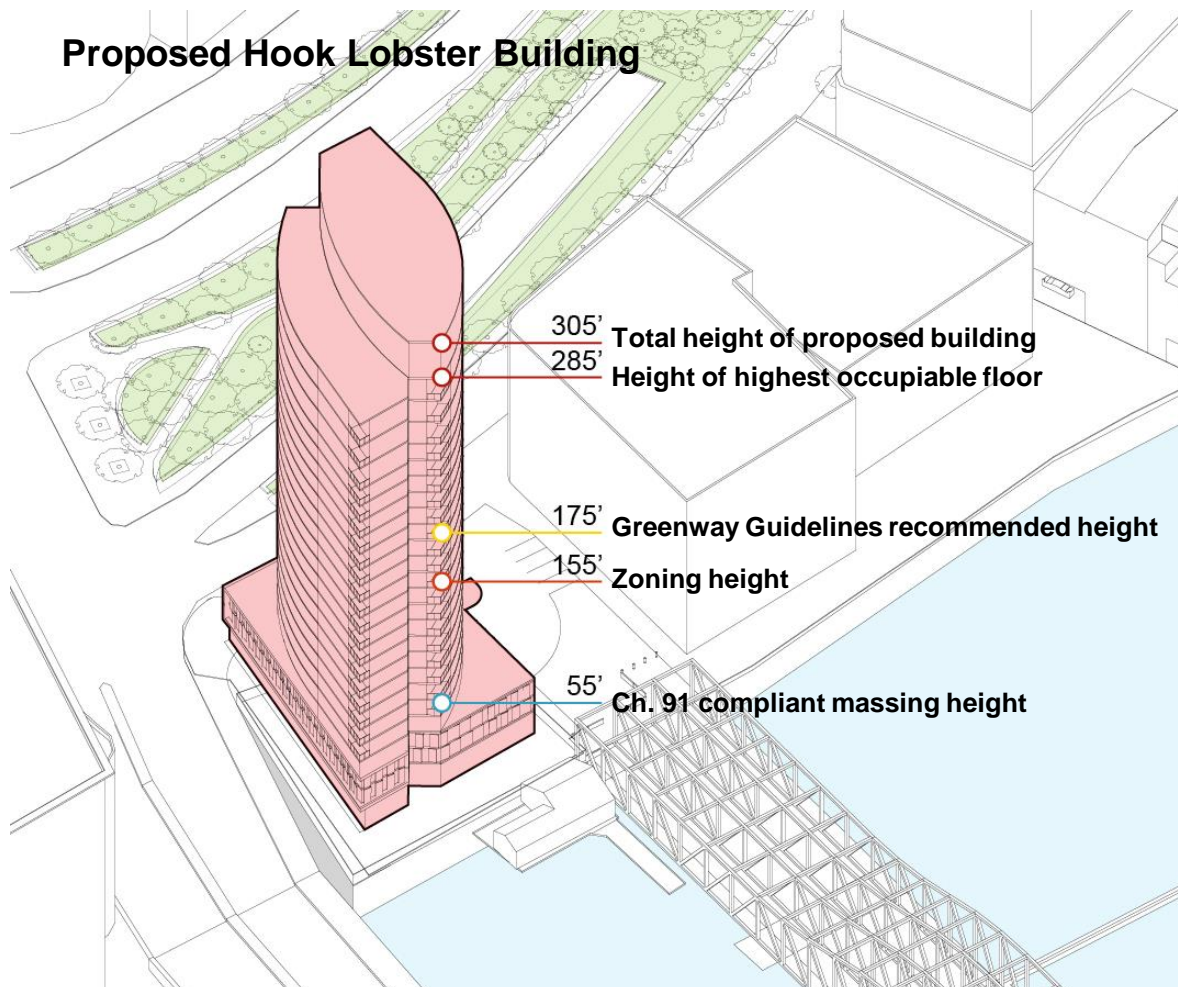
Ch. 91-compliant massing



Lot Coverage: 50%

Building Footprint: ~10,000 SF
 Total parcel size: 20,056 SF

Proposed Hook Lobster Building



Lot Coverage: 67.3%

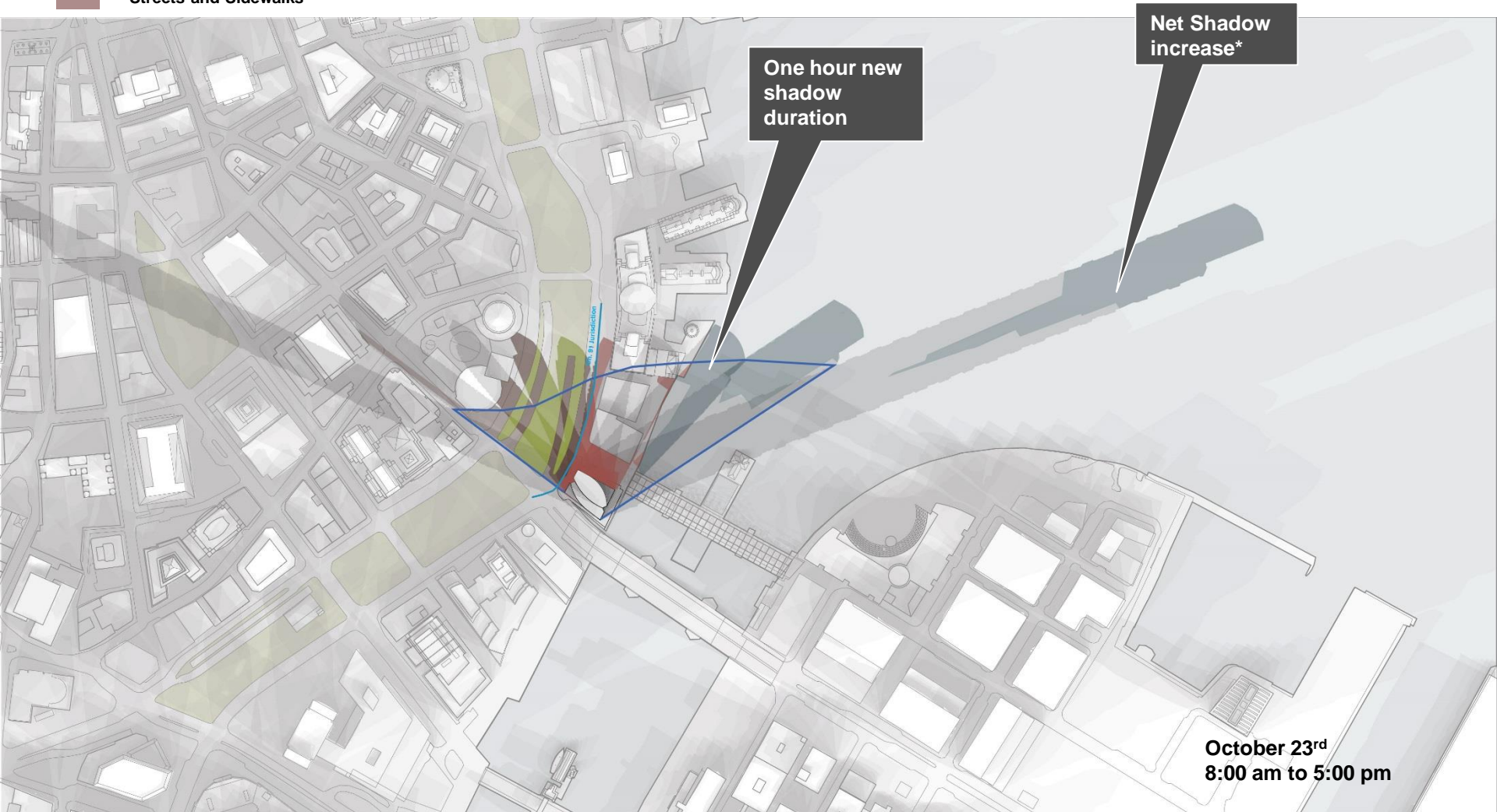
Building Footprint: ~13,500 SF
 Total parcel size: 20,056 SF

Downtown Waterfront: Hook Lobster Site

Hook Lobster Site development proposal

- Net New Shadow over Greenway
- Net New Shadow over public realm sidewalks / plazas
- Net New Shadow over watersheet
- Streets and Sidewalks

Net Shadow* increase over Chapter 91 Baseline Scenario (taking into account existing shadows)

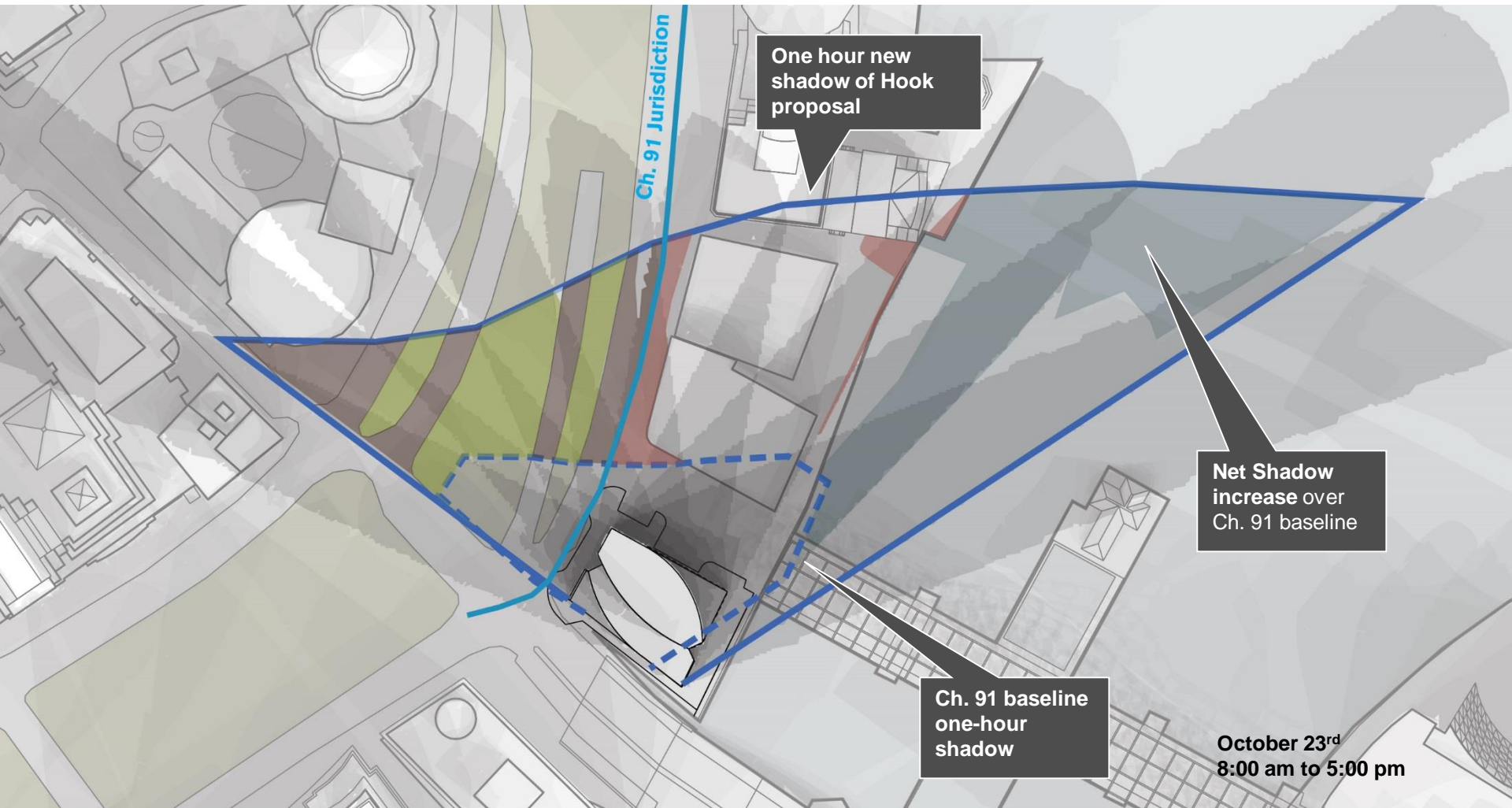


Downtown Waterfront: Hook Lobster Site

Hook Lobster Site development proposal

- Net New Shadow over Greenway
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Net Shadow* increase over Chapter 91 Baseline Scenario (taking into account existing shadows)



MHP Framework

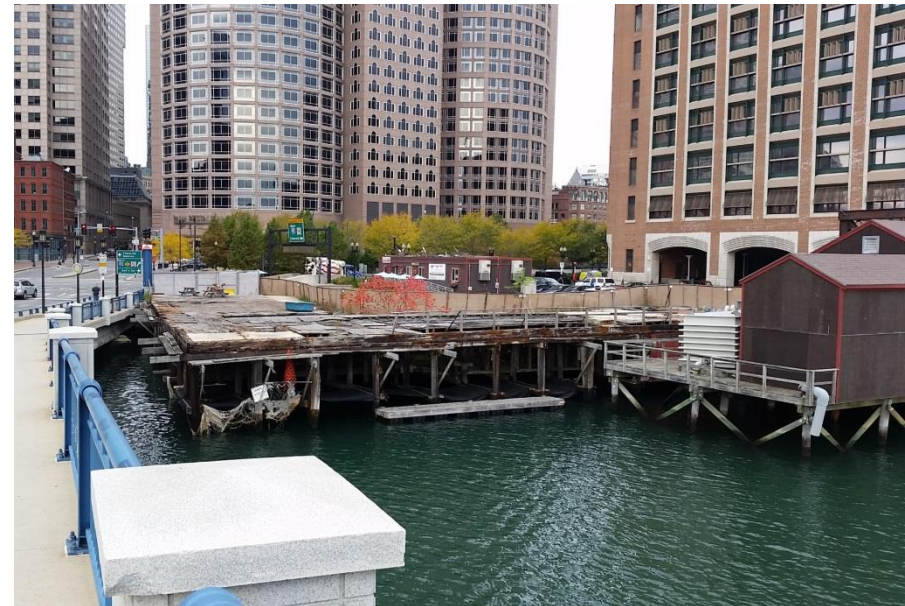
MHP Substitute Provisions

- Water Dependent Use Zone: proposed building exceeds standard WDUZ dimensions by approx. 500 SF
- Building Height: net new shadow impacts from 285' proposed highest occupied floor (305' total height)
- Building Footprint: building footprint is approx. 2/3 of the site, or approx. 3500 SF more than the Chapter 91 standard
- Facilities of Private Tenancy (FPTs) over Flowed Tidelands: FPTs on several levels over flowed Commonwealth tidelands



Hook Lobster Site: Proposed Maximums

Hook Lobster Site	
Height (<i>maximum height, including mechanicals</i>)	305'
Density	
GFA	275,000 sf
Cubic Volume	3.1M cu.ft.
Shadows	No net new 1hr. Shadow Long Wharf
Open Space Min.	30%



Proposed Maximums for Development Sites Harbor Garage Site



Harbor Garage Site



Harbor Garage

Harbor Towers

Rows Wharf

What to preserve or enhance? views of the water.



What to preserve or enhance? Views of the water.



What to preserve or enhance? Views of the water.



What to preserve or enhance?

Views of the Custom House Tower.



Evaluating the proposed Harbor Garage redevelopment

MHPAC members asked....

Please review **alternate building envelope scenarios** to better understand what the **incremental differences would be with shadow and differing heights**.

Expressed concern with the bulk of the proposed buildings and whether there are **other design options and massing variations** that could be reviewed.

What are the **views from the ground level** from a number of different vantage points? How will the massing be viewed from various pedestrian level vantage points?

What is a proposal closer to the **50% lot coverage standard**?

What about establishing of **shadow protection zones**? But not extending out into the middle of the harbor.

Massing Alternatives

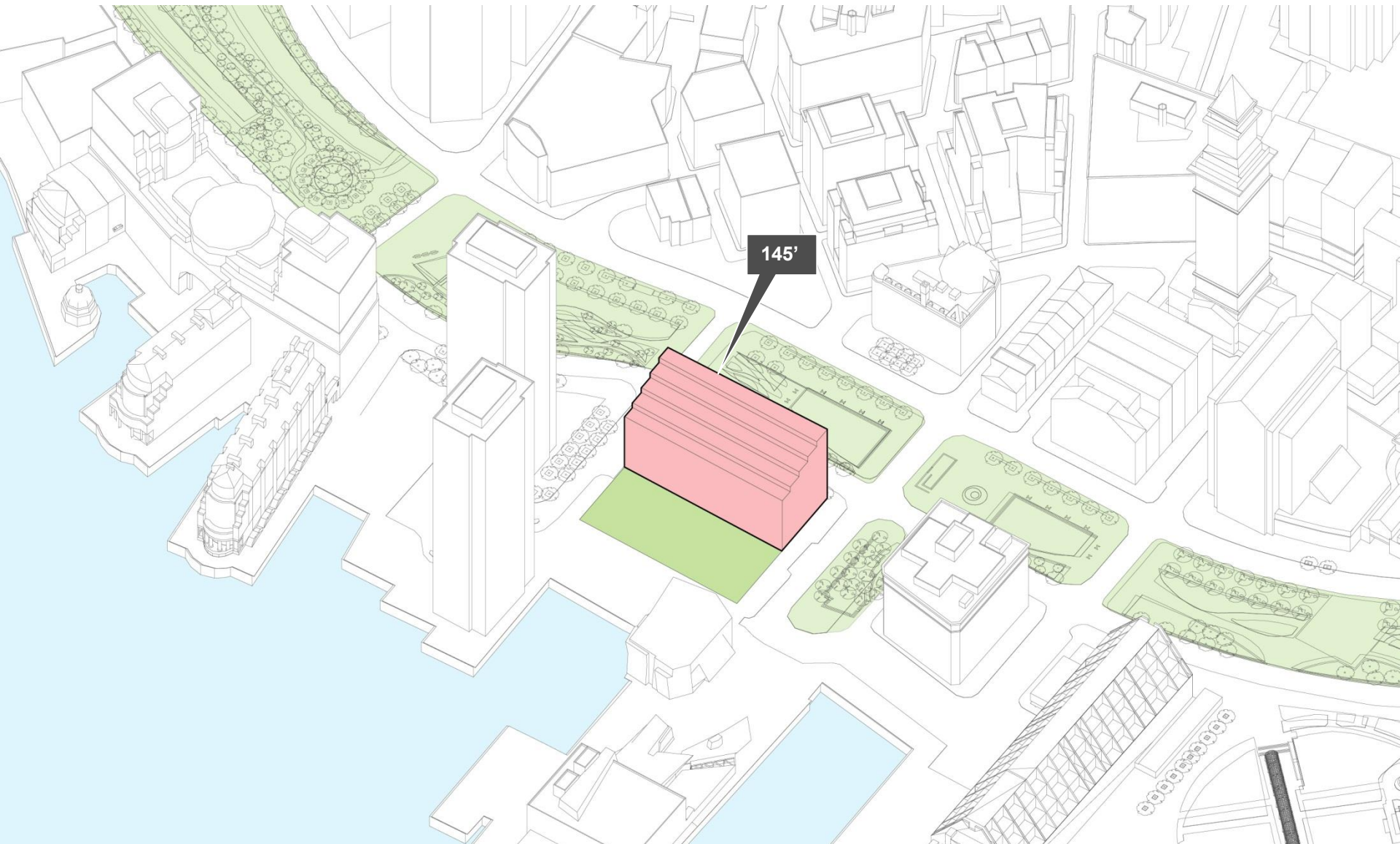
presented November 19, 2014

Variables considered for alternative scenarios:

- Height
- One tower vs two towers
- Building Orientation
- Location of open space

Downtown Waterfront: Harbor Garage Site
Chapter 91 Compliant Scenario

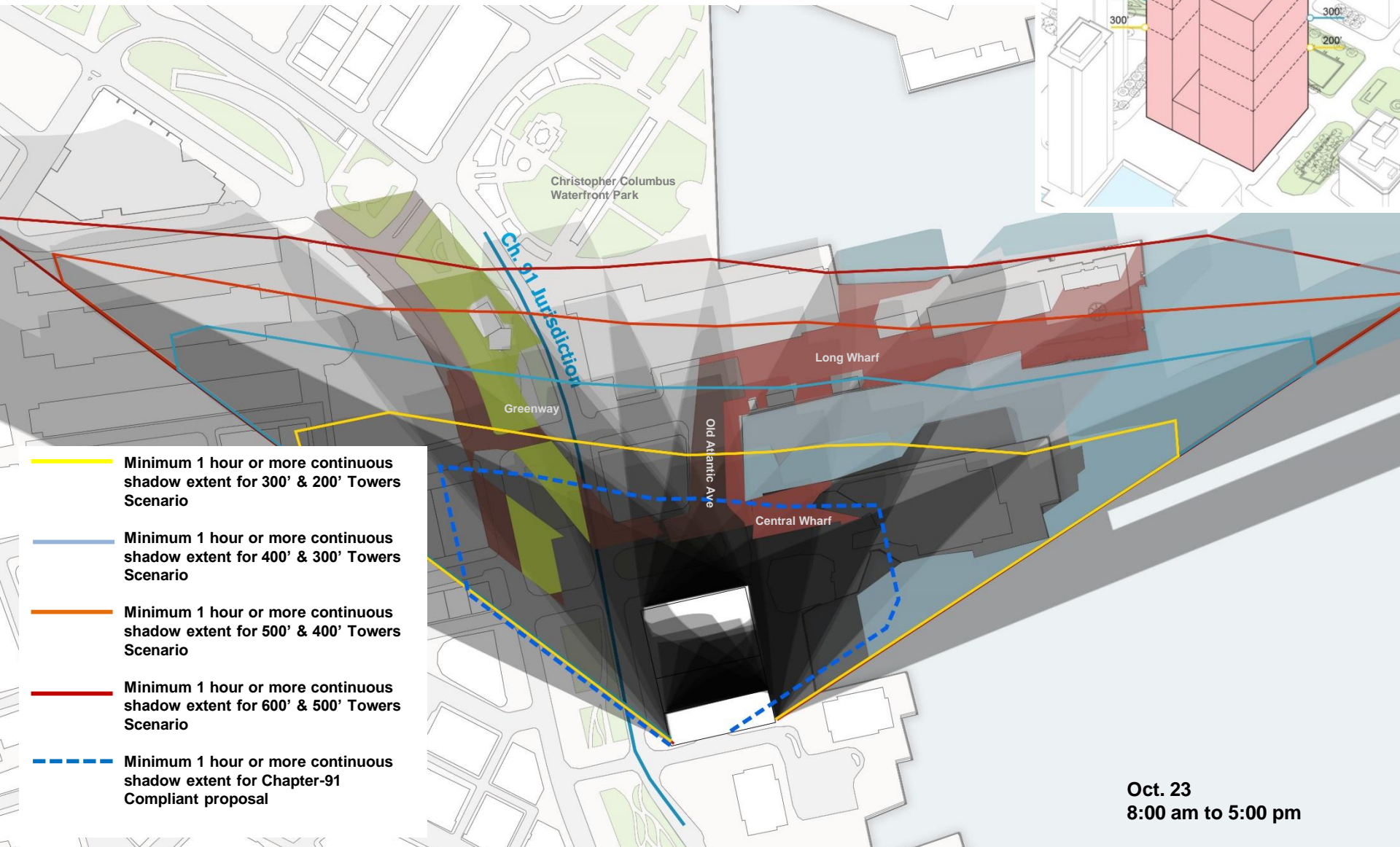
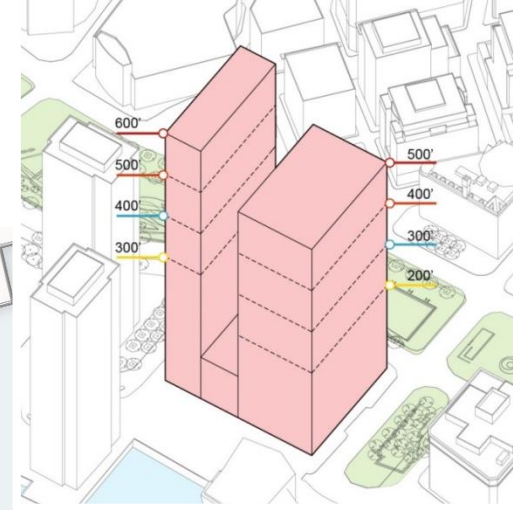
50% Building Coverage
50% Open Space



Downtown Waterfront: Harbor Garage Site

Two Towers – Oct. 23

- Net New Shadow over Greenway
- Net New Shadow over Central Wharf and Long Wharf
- Net New Shadow over watersheet
- Streets and Sidewalks

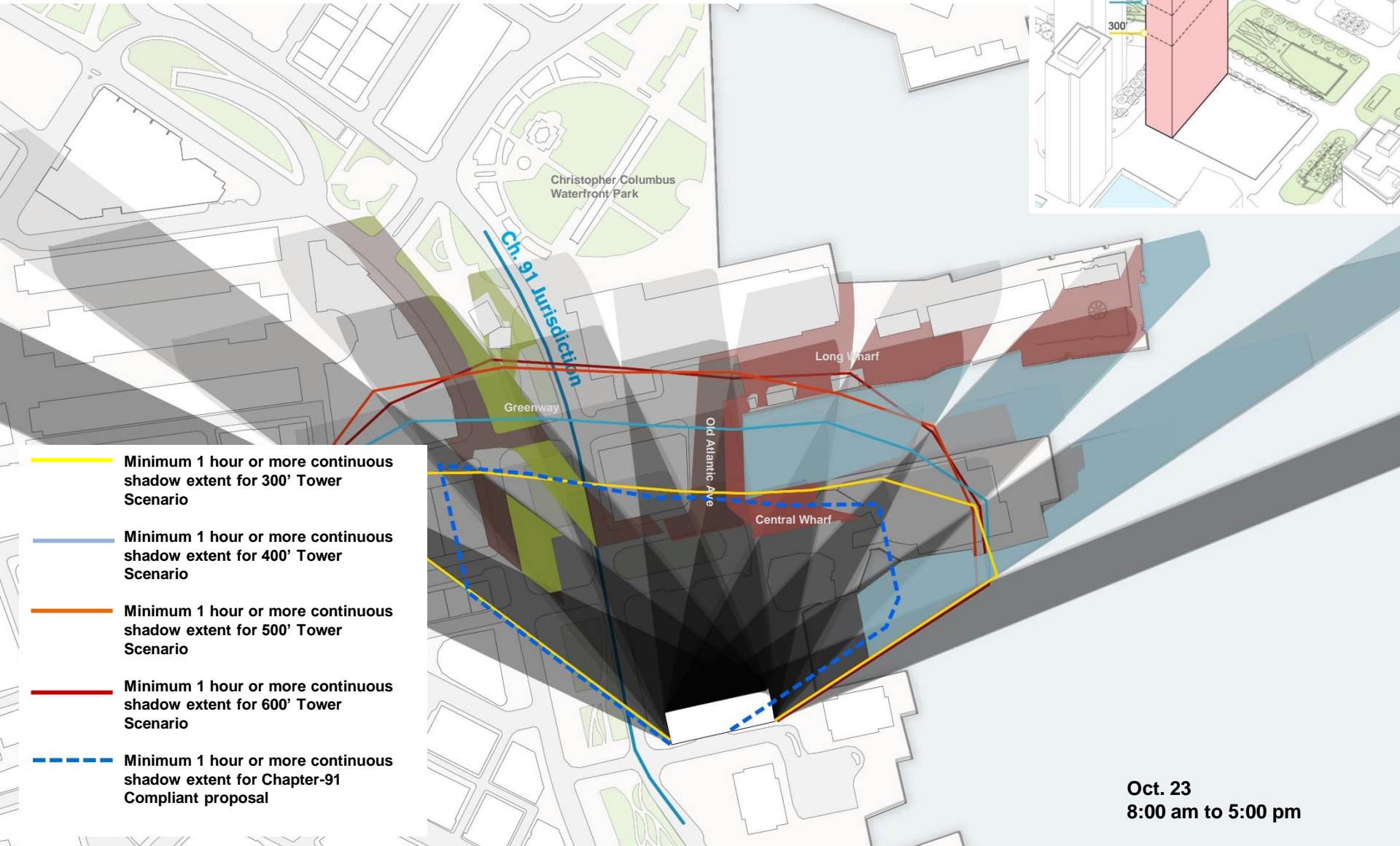
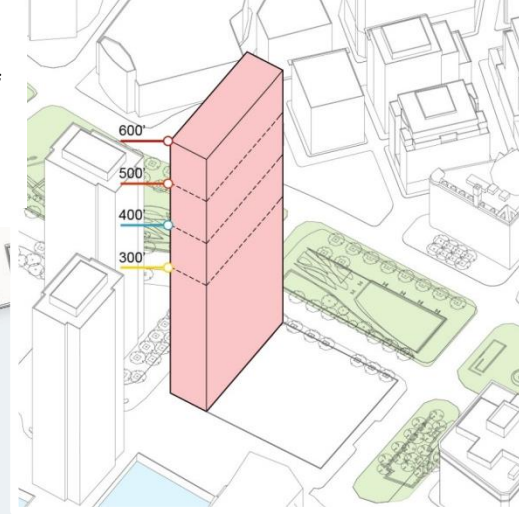


- Minimum 1 hour or more continuous shadow extent for 300' & 200' Towers Scenario
- Minimum 1 hour or more continuous shadow extent for 400' & 300' Towers Scenario
- Minimum 1 hour or more continuous shadow extent for 500' & 400' Towers Scenario
- Minimum 1 hour or more continuous shadow extent for 600' & 500' Towers Scenario
- Minimum 1 hour or more continuous shadow extent for Chapter-91 Compliant proposal

Oct. 23
8:00 am to 5:00 pm

Downtown Waterfront: Harbor Garage Site Single South Tower – Oct. 23

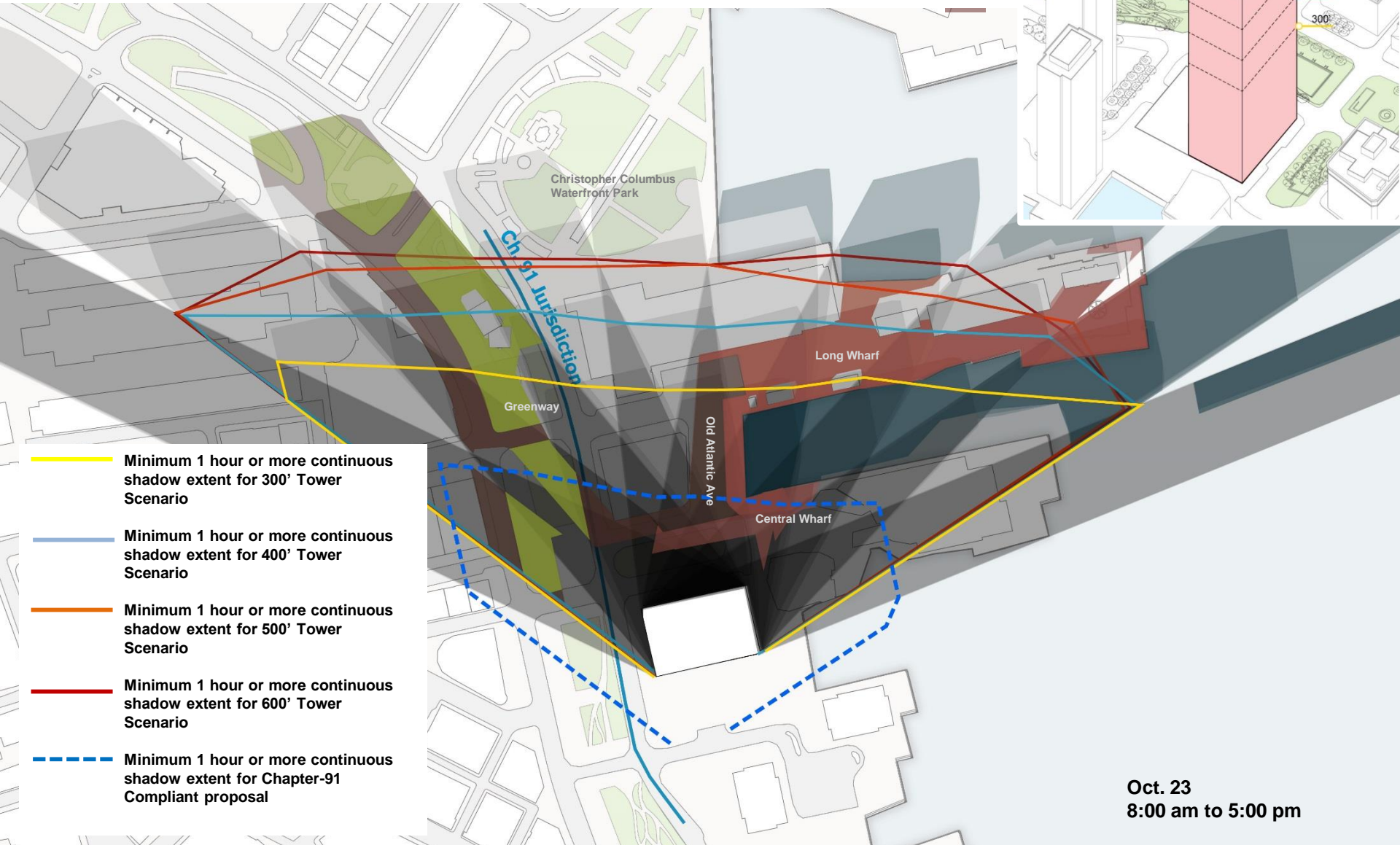
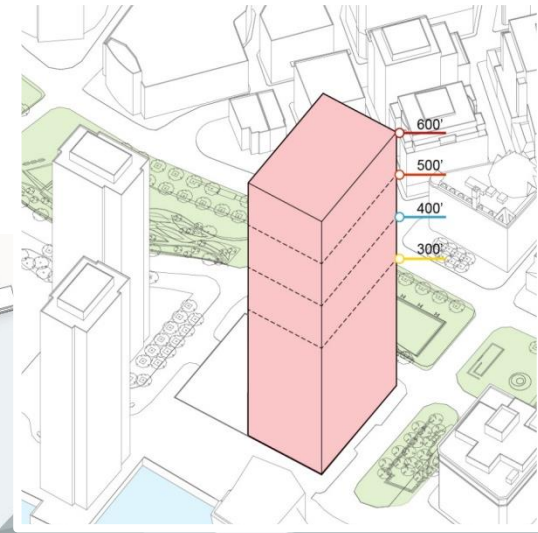
- Net New Shadow over Greenway
- Net New Shadow over Central Wharf and Long Wharf
- Net New Shadow over watersheet
- Streets and Sidewalks



Oct. 23
8:00 am to 5:00 pm

Downtown Waterfront: Harbor Garage Site Single North Tower – Oct 23

- Net New Shadow over Greenway
- Net New Shadow over Central Wharf and Long Wharf
- Net New Shadow over watersheet
- Streets and Sidewalks

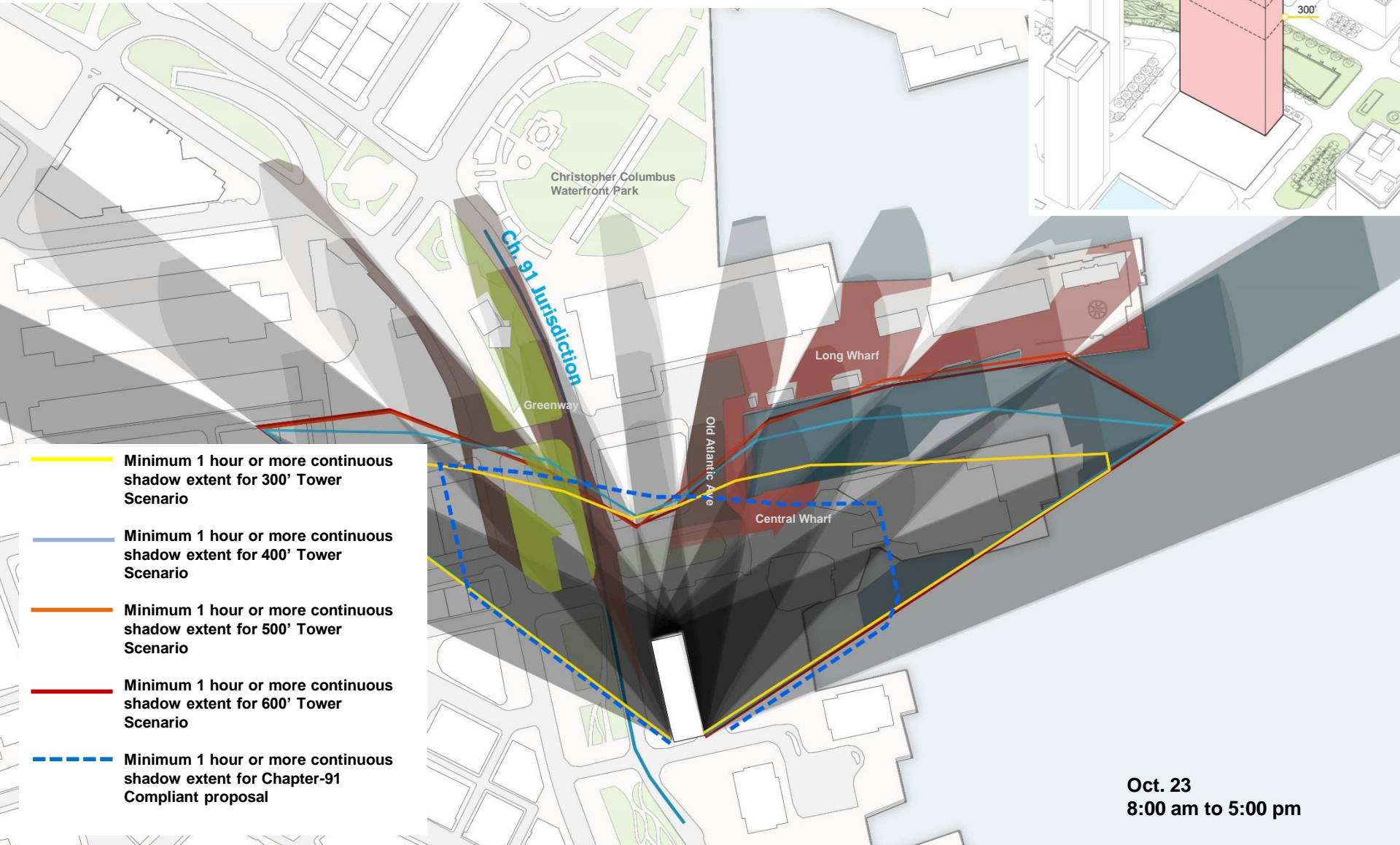
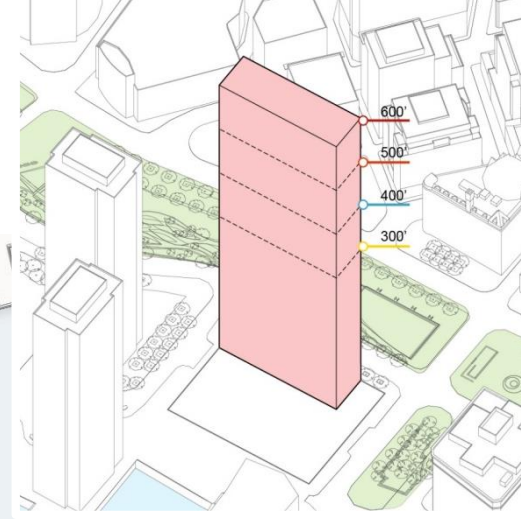


- Minimum 1 hour or more continuous shadow extent for 300' Tower Scenario
- Minimum 1 hour or more continuous shadow extent for 400' Tower Scenario
- Minimum 1 hour or more continuous shadow extent for 500' Tower Scenario
- Minimum 1 hour or more continuous shadow extent for 600' Tower Scenario
- Minimum 1 hour or more continuous shadow extent for Chapter-91 Compliant proposal

Oct. 23
8:00 am to 5:00 pm

Downtown Waterfront: Harbor Garage Site Single West Tower – Oct. 23

- Net New Shadow over Greenway
- Net New Shadow over Central Wharf and Long Wharf
- Net New Shadow over watershed
- Streets and Sidewalks



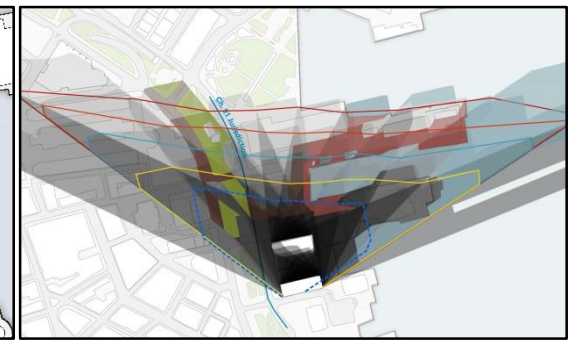
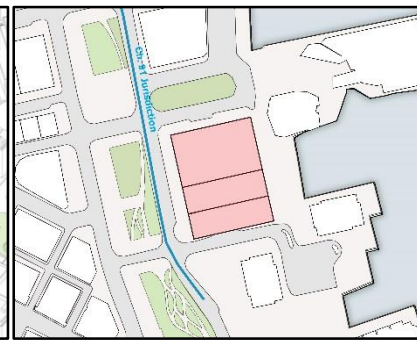
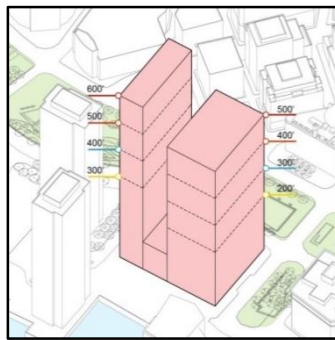
- Minimum 1 hour or more continuous shadow extent for 300' Tower Scenario
- Minimum 1 hour or more continuous shadow extent for 400' Tower Scenario
- Minimum 1 hour or more continuous shadow extent for 500' Tower Scenario
- Minimum 1 hour or more continuous shadow extent for 600' Tower Scenario
- Minimum 1 hour or more continuous shadow extent for Chapter-91 Compliant proposal

Oct. 23
8:00 am to 5:00 pm

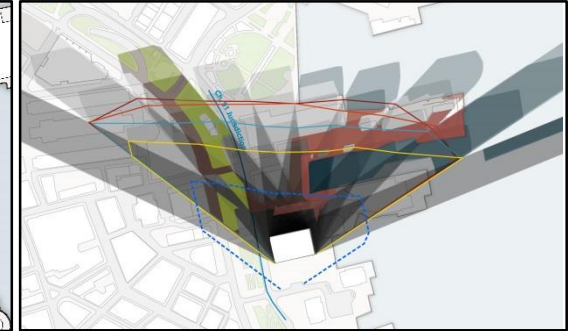
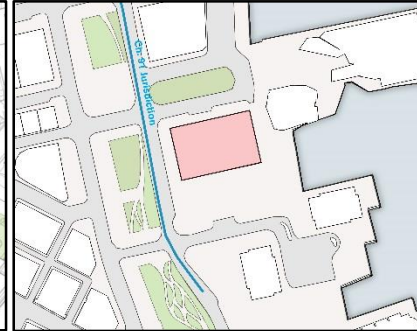
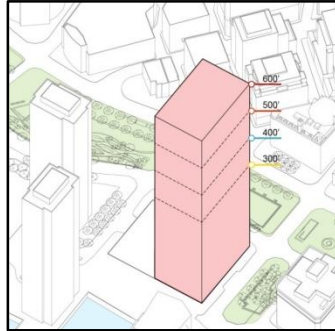
Downtown Waterfront: HG Site Comparison

Oct. 23
8:00 am to 5:00 pm

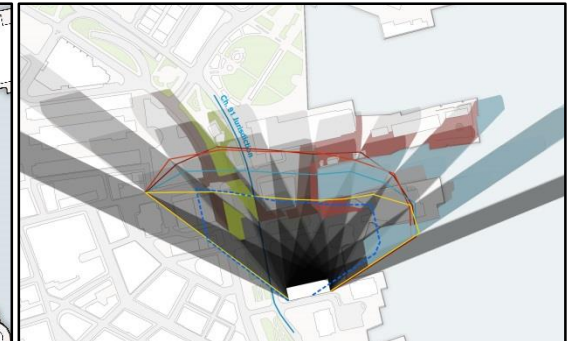
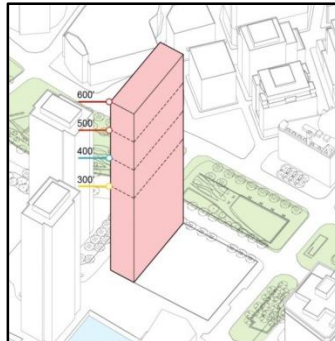
Two Tower



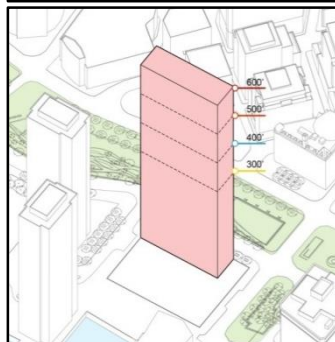
Single North Tower



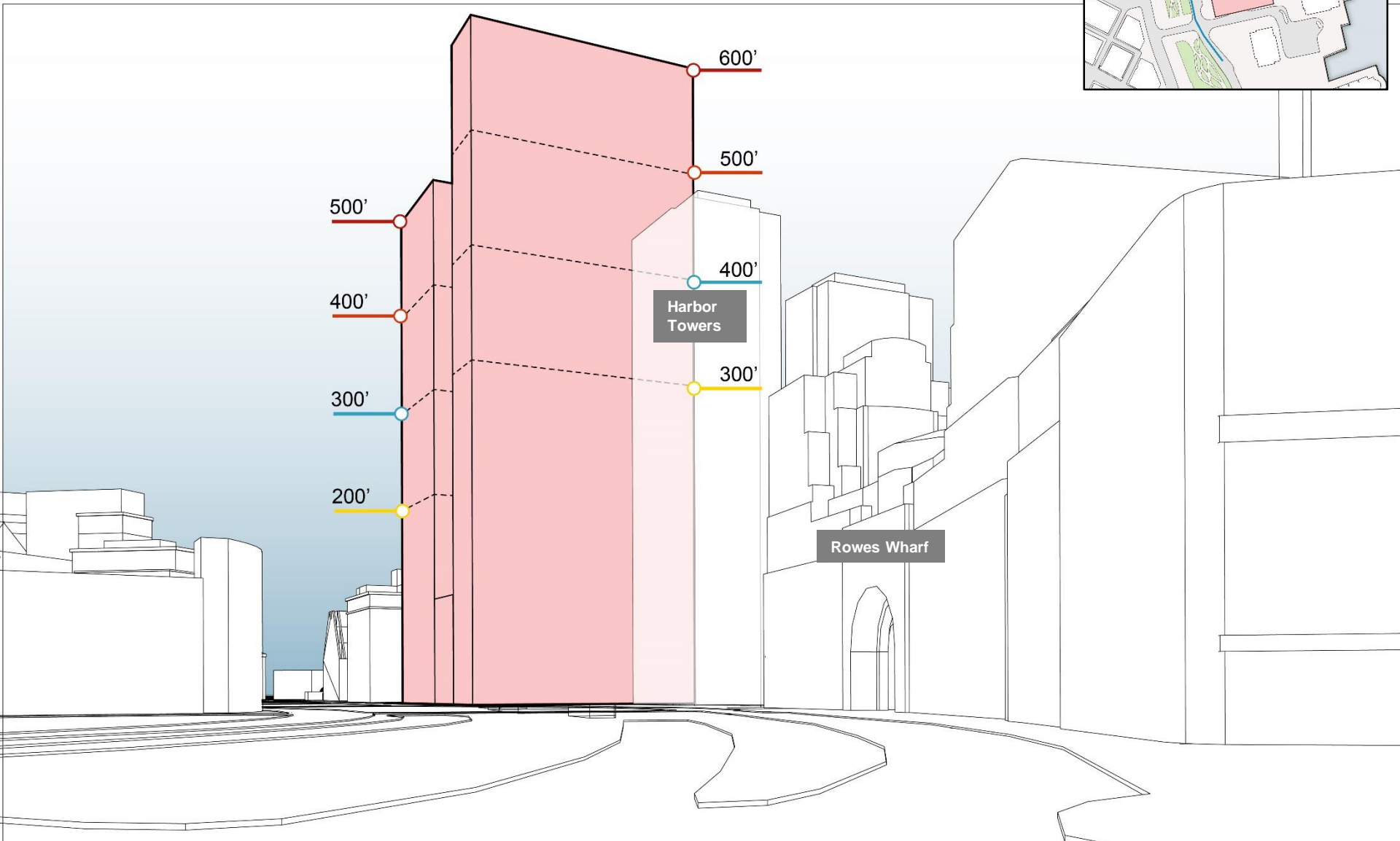
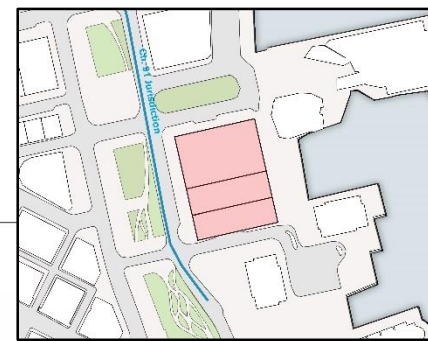
Single South Tower



Single West Tower

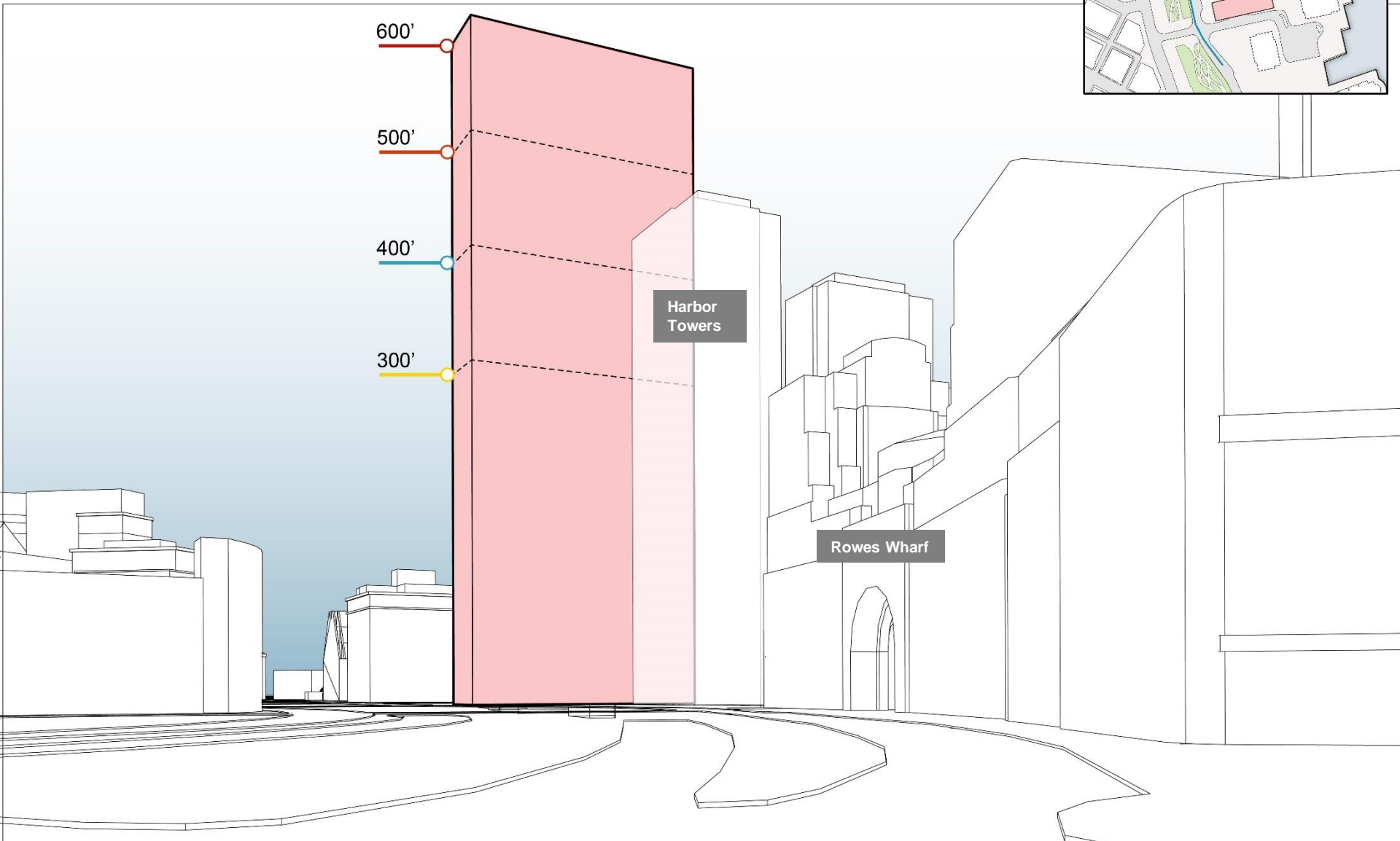
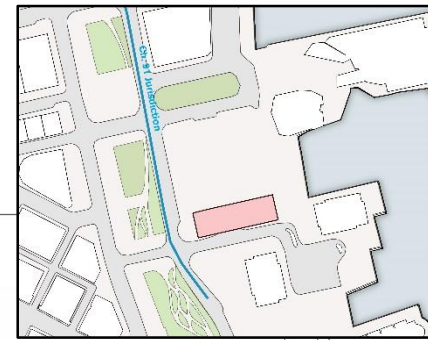


Two Towers



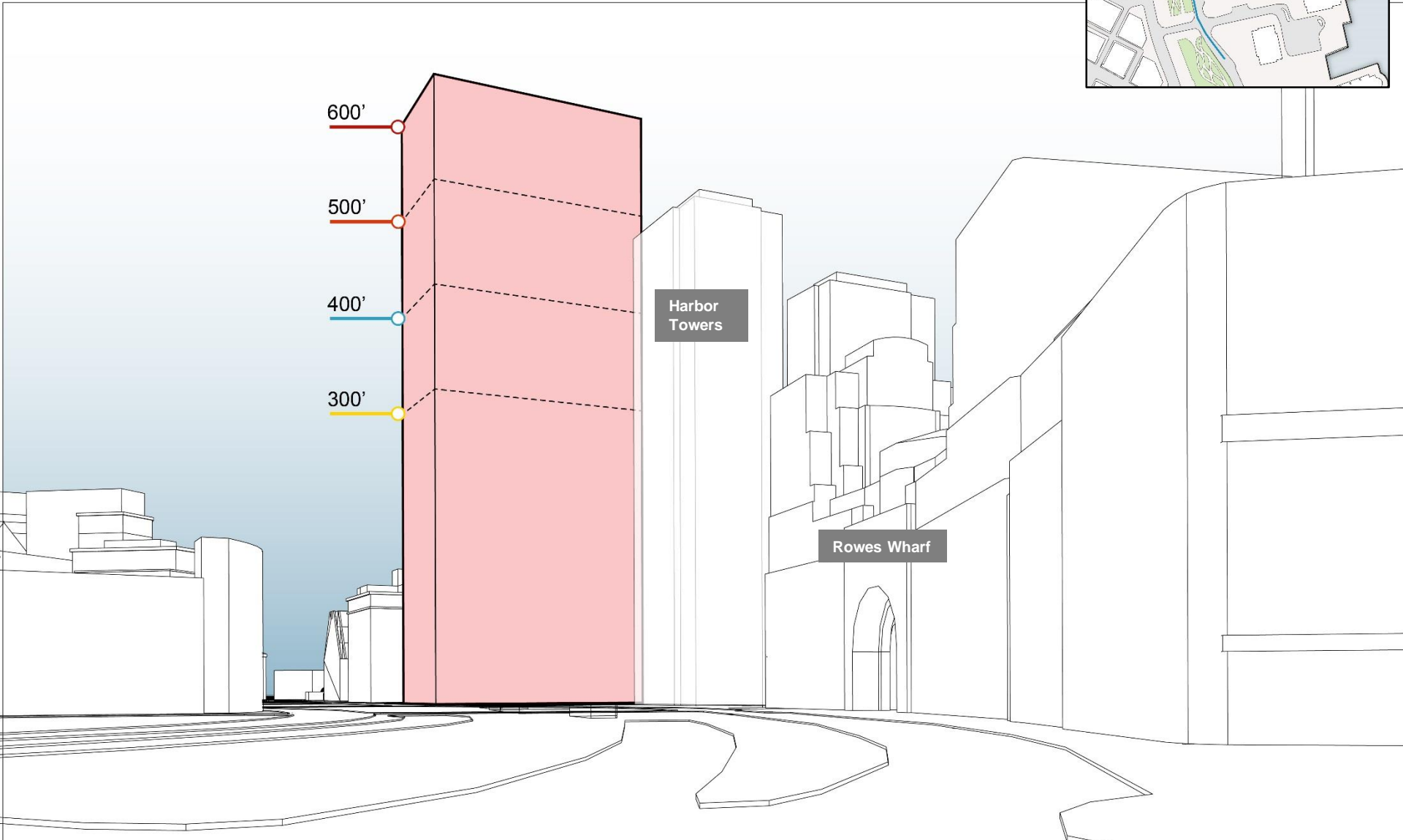
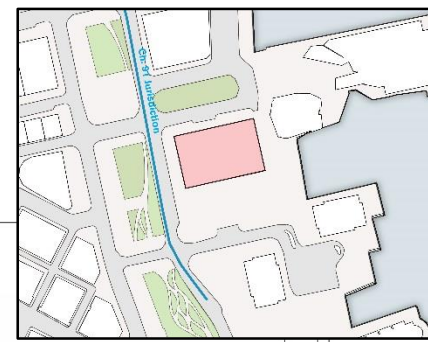
Downtown Waterfront: Harbor Garage Site

Single South Tower

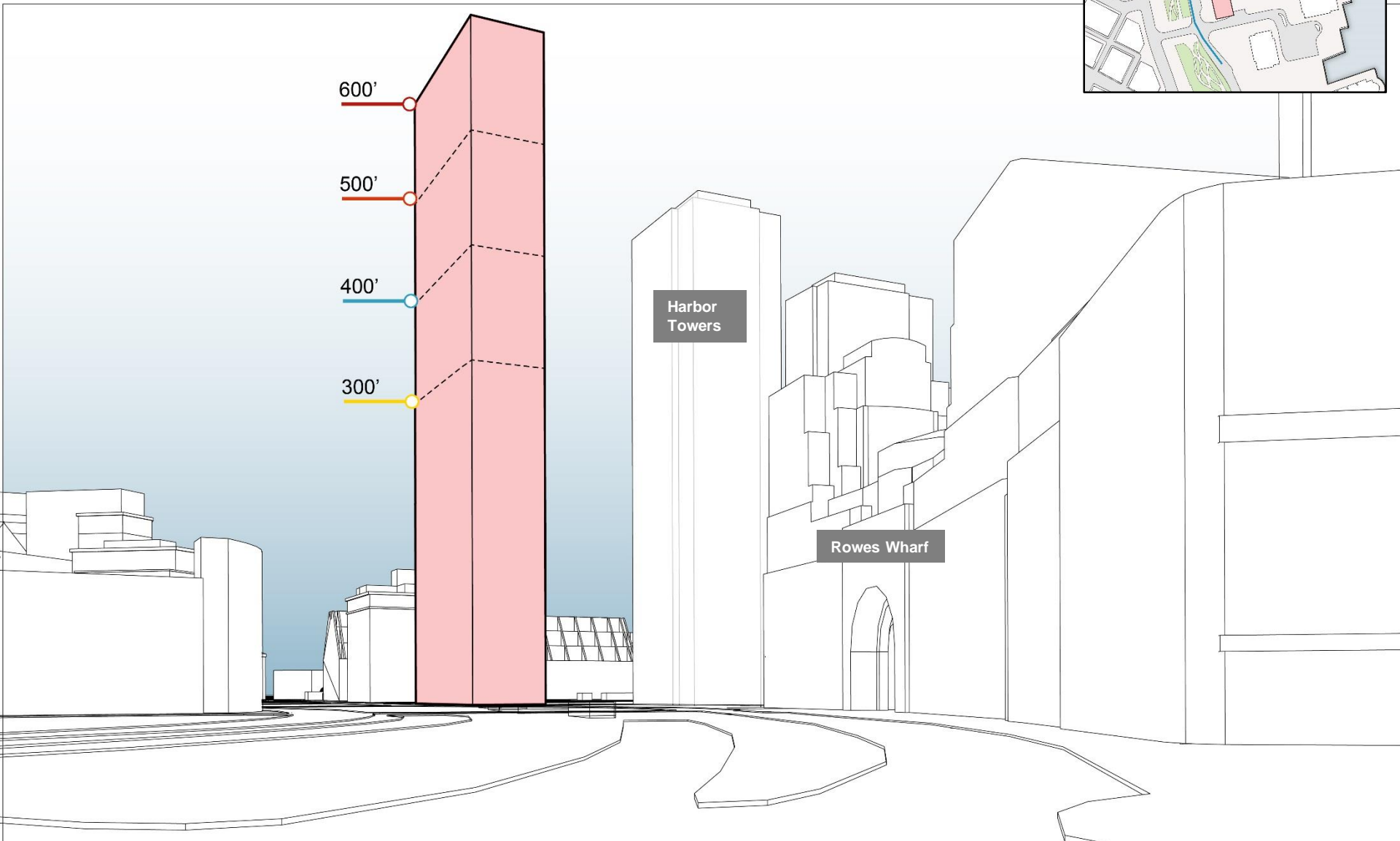
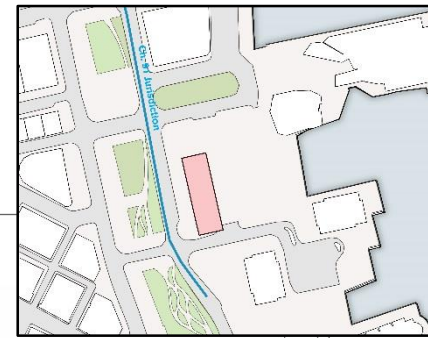


Downtown Waterfront: Harbor Garage Site

Single North Tower



Downtown Waterfront: Harbor Garage Site
Single West Tower



Additional Studies

Limiting Factors:

- **Height** – 600' maximum
- **Open Space** – 30% minimum
- **Gross Floor Area** – 875,000 sf
- **Cubic Volume** – 9.5M cu.ft.
- **Shadow** – No net new 1hr. on Long Wharf

Methodology for Analysis of Various Massings

The following scenarios are tests to determine the appropriateness of various dimensional constraints on the site:

- Height,
- Floor area,
- Volumetric density
- Open space
- Shadow impacts

A variety of uses (office, residential, retail) and building configurations (single towers, two towers, podiums) were explored to better understand the impacts of the various controls on the scale of possible development.

The following assumptions were used for various program components based on common development rules of thumb for particular typologies:

- Residential towers : 12,000sf floor plates for point towers, 65' width for double-loaded "bar" buildings (length variable), 9'-7" floor to floor heights.
- Office: Approximately 20,000+ sf floor plates, 13'-6" floor to floor heights.
- Retail: Predominately at lower levels in podium, 20' floor to floor.

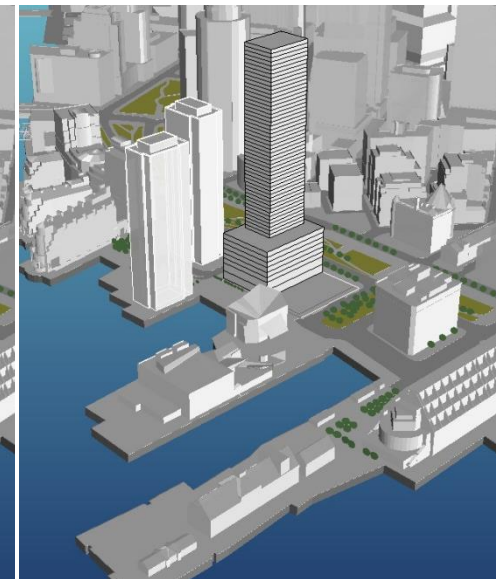
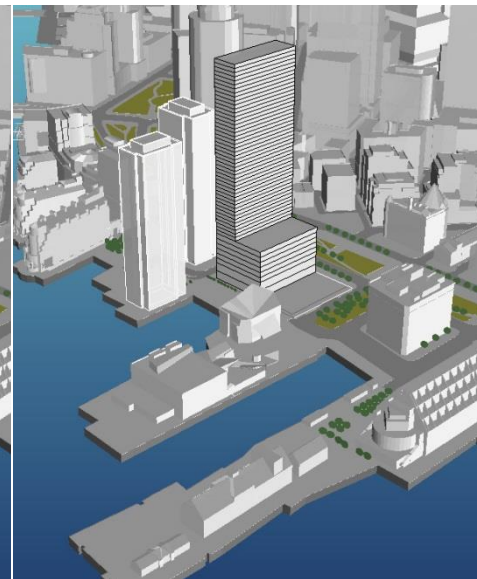
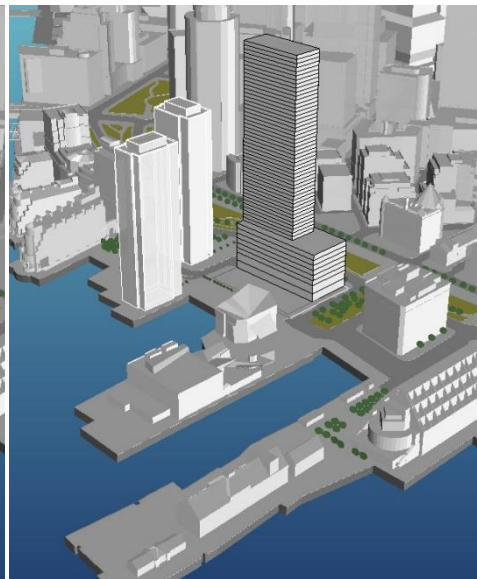
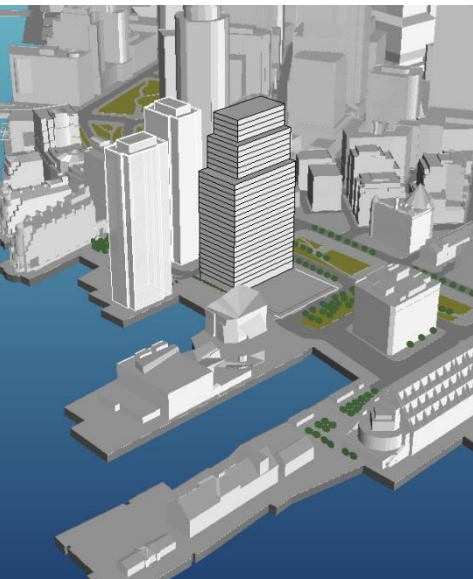
It should be noted that nearly all schemes containing office are limited by the ceiling on volume, because the higher floor to floor heights typical of that use occupy more space. The residential schemes more typically reach a limit imposed by shadows or floor area, as the efficient floor to floor heights and smaller floor plates allow greater height within the imposed system of constraints. Mechanical spaces were not accounted for.

Build-out Calculations of Various Massings

A number of massing configurations at various scales were tested to understand the relationship between the proposed dimensional controls and the use and arrangement of buildings on the site. The schemes are not recommended as specific urban design proposals. They are intended to demonstrate the variety of massing options that would be possible under a specific set of dimensional and performative criteria.

	1 Tower				2 Towers				2 Towers Podium							
	Office-Step	Res-Bar	Res-Bar-90	Res-Point	Res_Office	Res_Office_b	Res_Office_flip	Office_Res	Pt_Res	Pt_Pt_flip	Pt_Res_flip	Pt_Res	Pt_Res_90	Pt_Pt	Pt_Pt_90	Pt_Pt_Flip
GFA	688206	838611	838001	739800	804000	823744	774660	756000	868401	863250	858201	846521	872826	874000	874000	874000
Volume (ft3)	9504800	9500900	9480800	8539700	9455900	9890300	9504700	9418900	8903300	8766100	8800600	9490700	9164500	9553600	9553600	9553600
FAR	12.0	14.6	14.6	12.9	14.0	14.3	13.5	13.1	15.1	15.0	14.9	14.7	15.2	15.2	15.2	15.2
OS (sf)	32359	27241	27535	27535	25535	5791	25795	25535	34135	37670	34335	20775	25323	29035	29035	29035
OS %	56	47	48	48	44	10	45	44	59	65	60	36	44	50	50	50
Footprint (sf)	25176	30294	30000	30000	32000	51744	31740	32000	23400	19865	23200	36760	32212	28500	28500	28500
Height (ft)	427	585	566	595	415	415	405	306	514	504	514	409	437	528	528	528

Single Tower Scenarios



Office – Step

Res - Bar

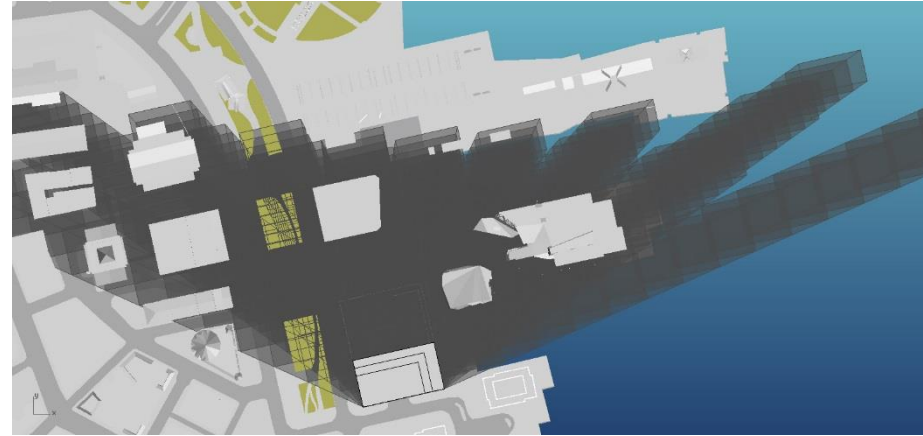
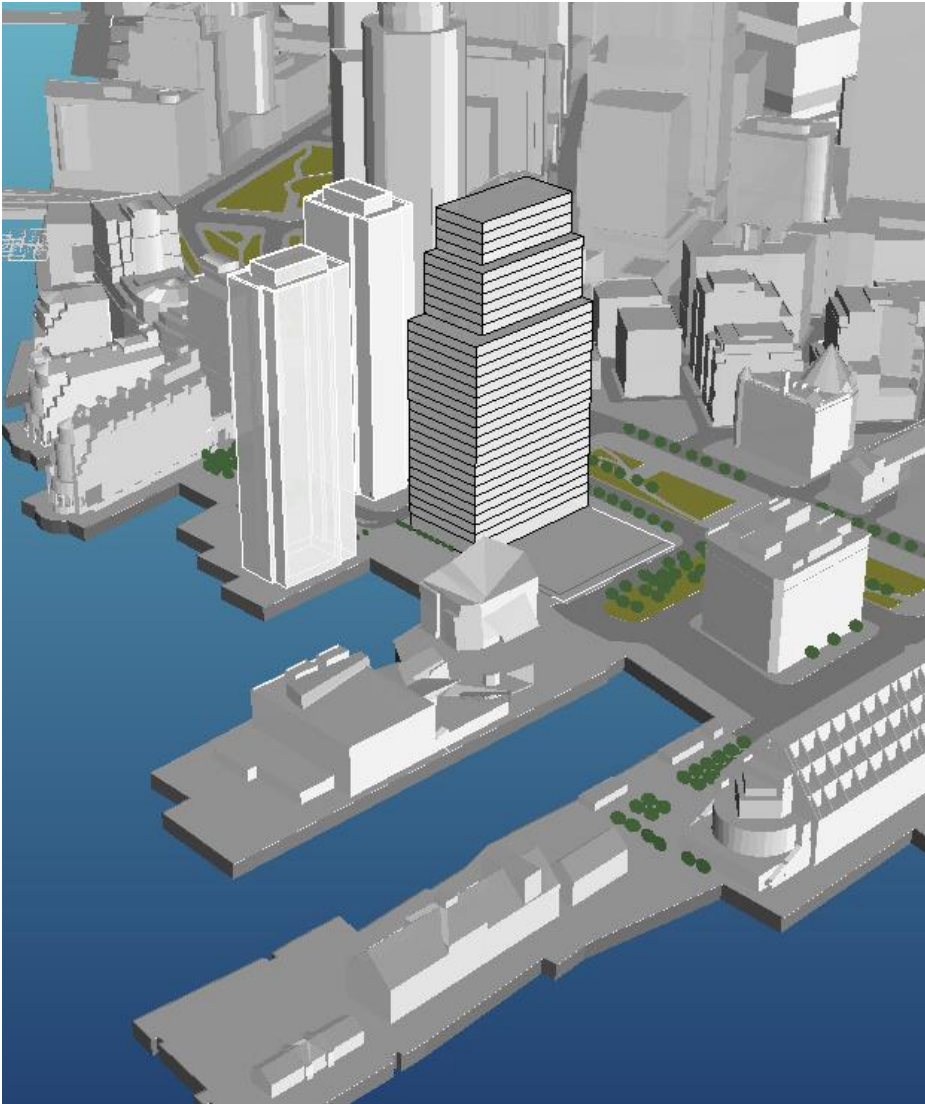
Res – Bar – 90

Res – Point

	1 Tower			
	Office-Step	Res-Bar	Res-Bar-90	Res-Point
GFA	688206	838611	838001	739800
Volume (ft3)	9504800	9500900	9480800	8539700
FAR	12.0	14.6	14.6	12.9
OS (sf)	32359	27241	27535	27535
OS %	56	47	48	48
Footprint (sf)	25176	30294	30000	30000
Height (ft)	427	585	566	595

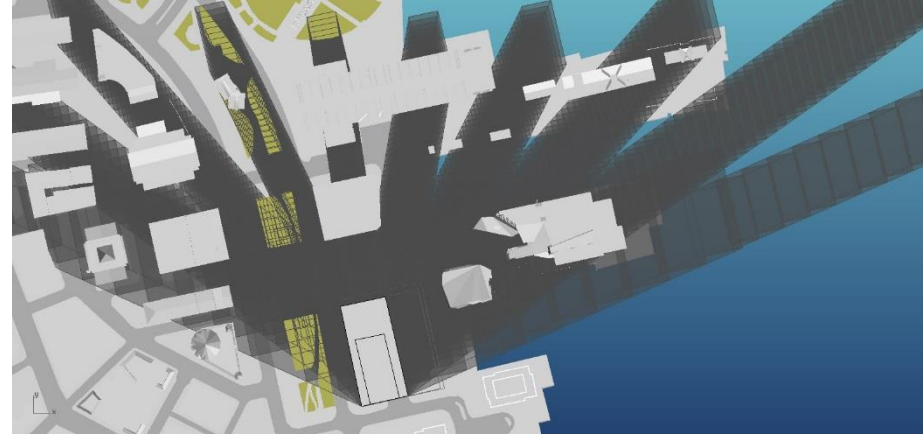
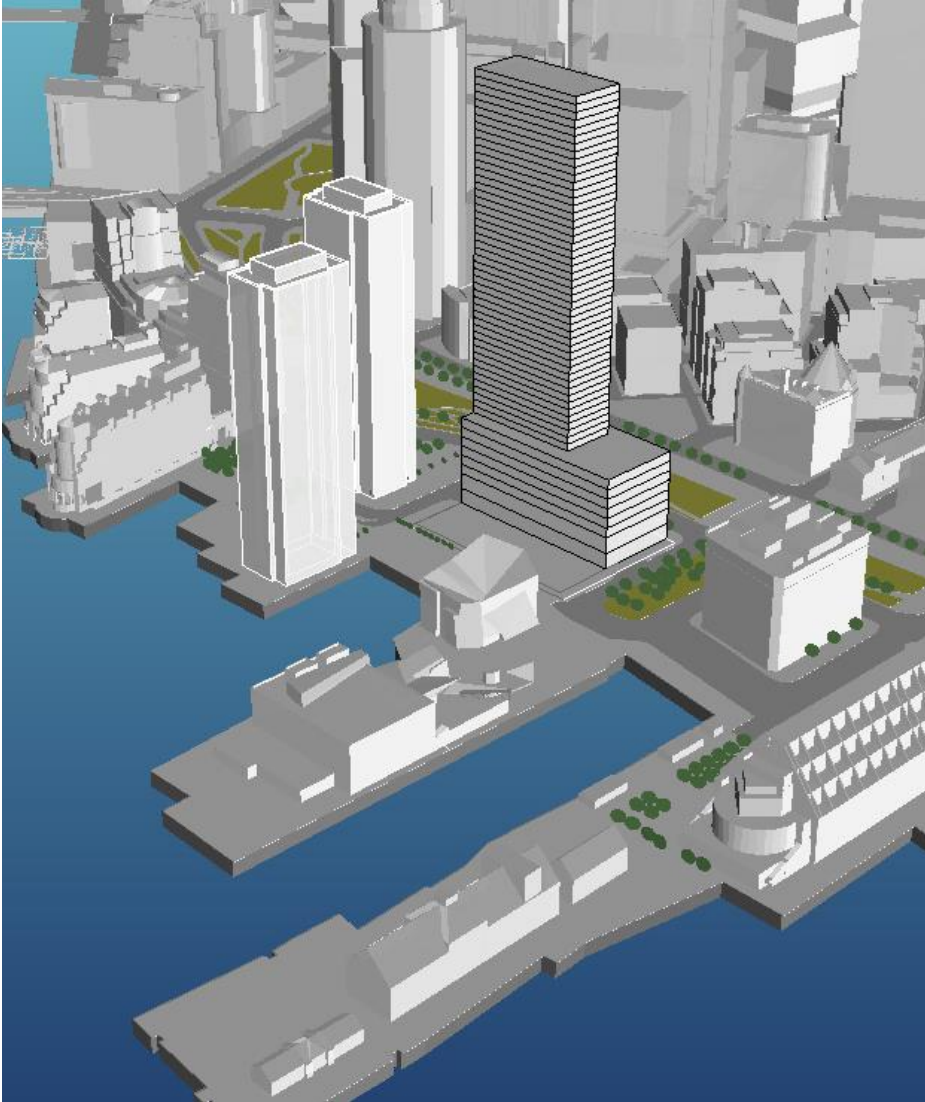
Limiting Variable

Stepped Tower open space on north



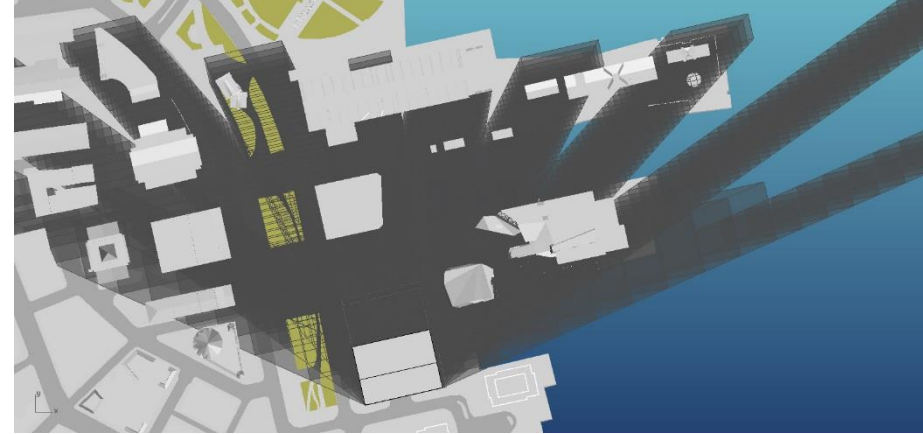
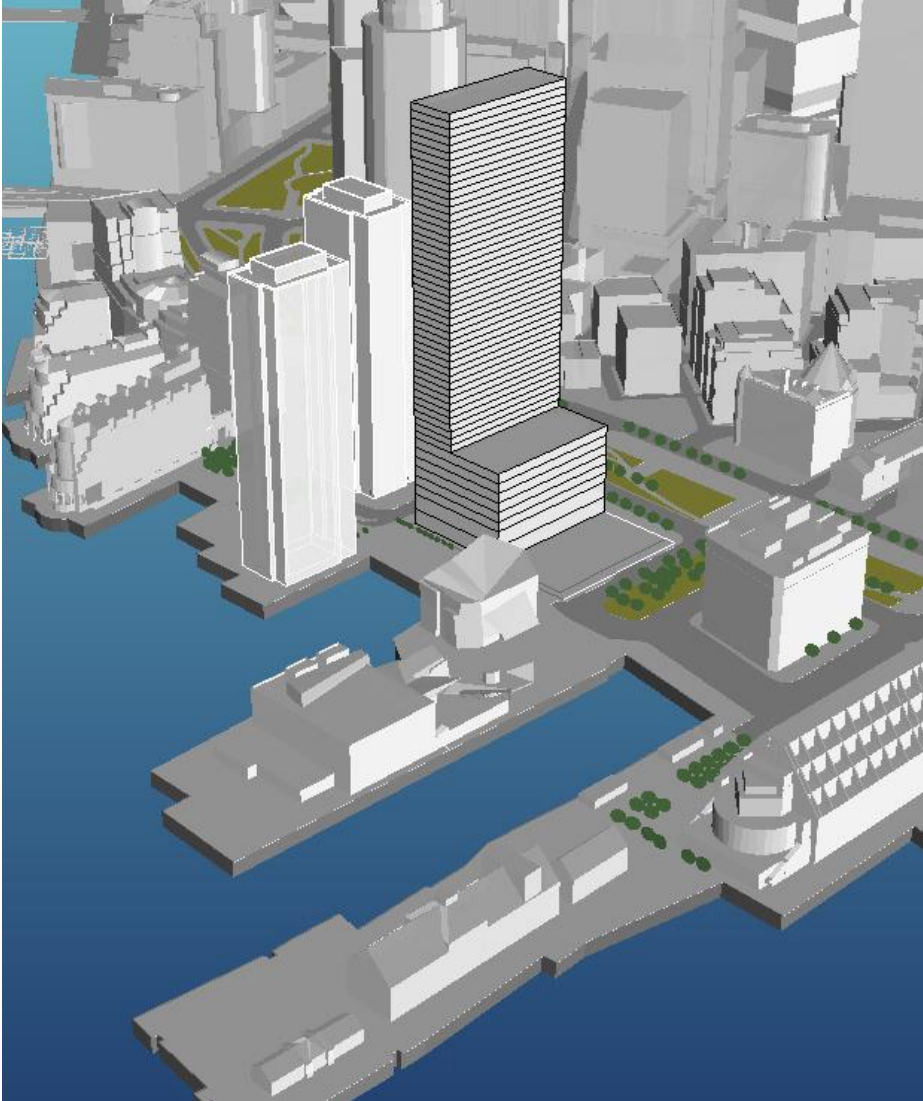
	1 Tower			
	<i>Office-Step</i>	<i>Res-Bar</i>	<i>Res-Bar-90</i>	<i>Res-Point</i>
GFA	688206	838611	838001	739800
Volume (ft3)	9504800	9500900	9480800	8539700
FAR	12.0	14.6	14.6	12.9
OS (sf)	32359	27241	27535	27535
OS %	56	47	48	48
Footprint (sf)	25176	30294	30000	30000
Height (ft)	427	585	566	595

Residential Bar Tower open space on east



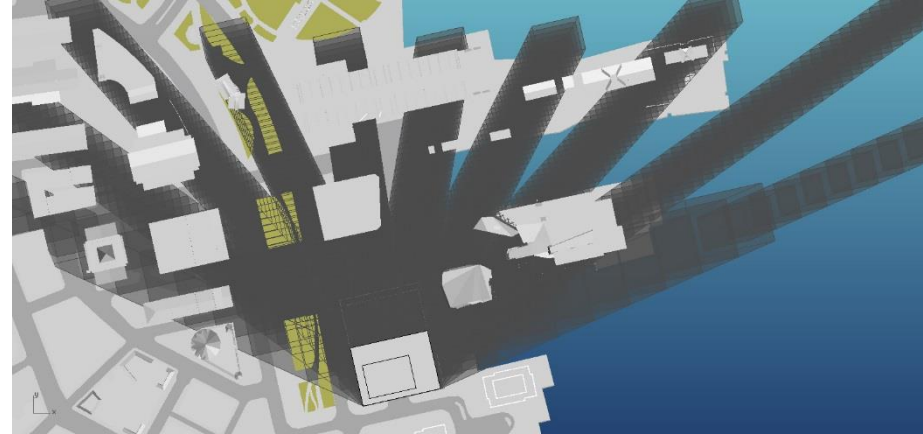
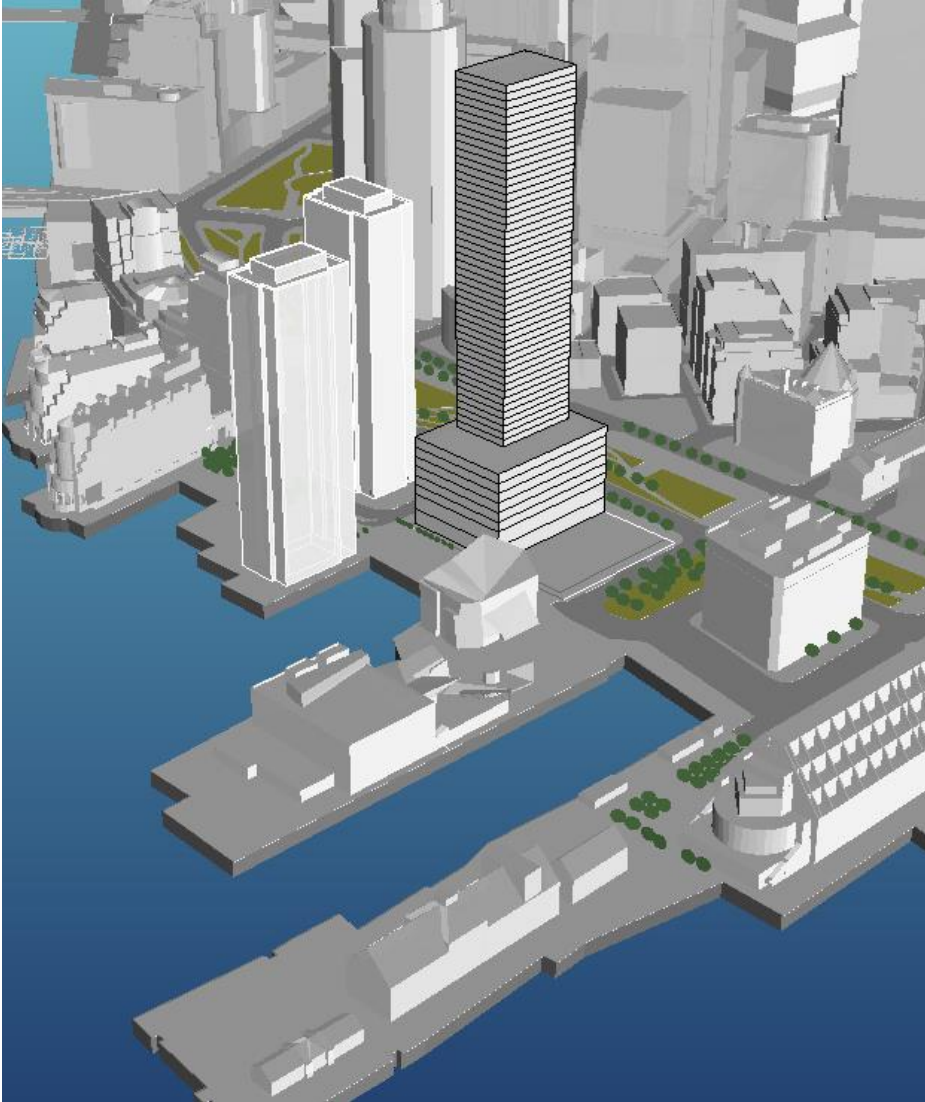
	1 Tower			
	<i>Office-Step</i>	<i>Res-Bar</i>	<i>Res-Bar-90</i>	<i>Res-Point</i>
GFA	688206	838611	838001	739800
Volume (ft3)	9504800	9500900	9480800	8539700
FAR	12.0	14.6	14.6	12.9
OS (sf)	32359	27241	27535	27535
OS %	56	47	48	48
Footprint (sf)	25176	30294	30000	30000
Height (ft)	427	585	566	595

Residential Bar Tower open space on north



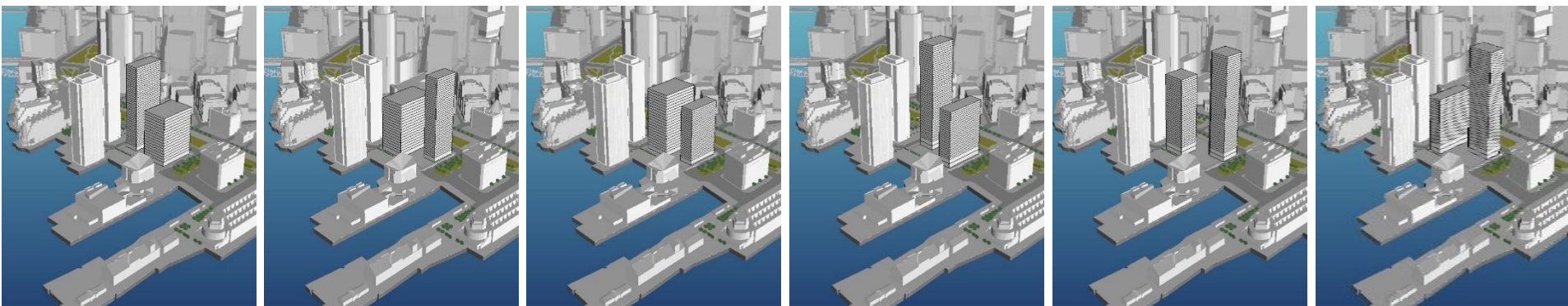
	1 Tower			
	<i>Office-Step</i>	<i>Res-Bar</i>	<i>Res-Bar-90</i>	<i>Res-Point</i>
GFA	688206	838611	838001	739800
Volume (ft3)	9504800	9500900	9480800	8539700
FAR	12.0	14.6	14.6	12.9
OS (sf)	32359	27241	27535	27535
OS %	56	47	48	48
Footprint (sf)	25176	30294	30000	30000
Height (ft)	427	585	566	595

Residential Point Tower open space on north



	1 Tower			
	<i>Office-Step</i>	<i>Res-Bar</i>	<i>Res-Bar-90</i>	<i>Res-Point</i>
GFA	688206	838611	838001	739800
Volume (ft3)	9504800	9500900	9480800	8539700
FAR	12.0	14.6	14.6	12.9
OS (sf)	32359	27241	27535	27535
OS %	56	47	48	48
Footprint (sf)	25176	30294	30000	30000
Height (ft)	427	585	566	595

Two Tower Scenarios

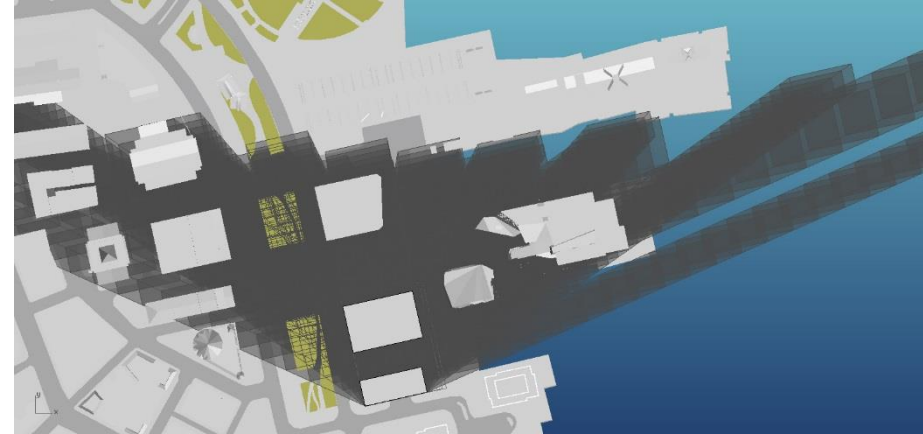
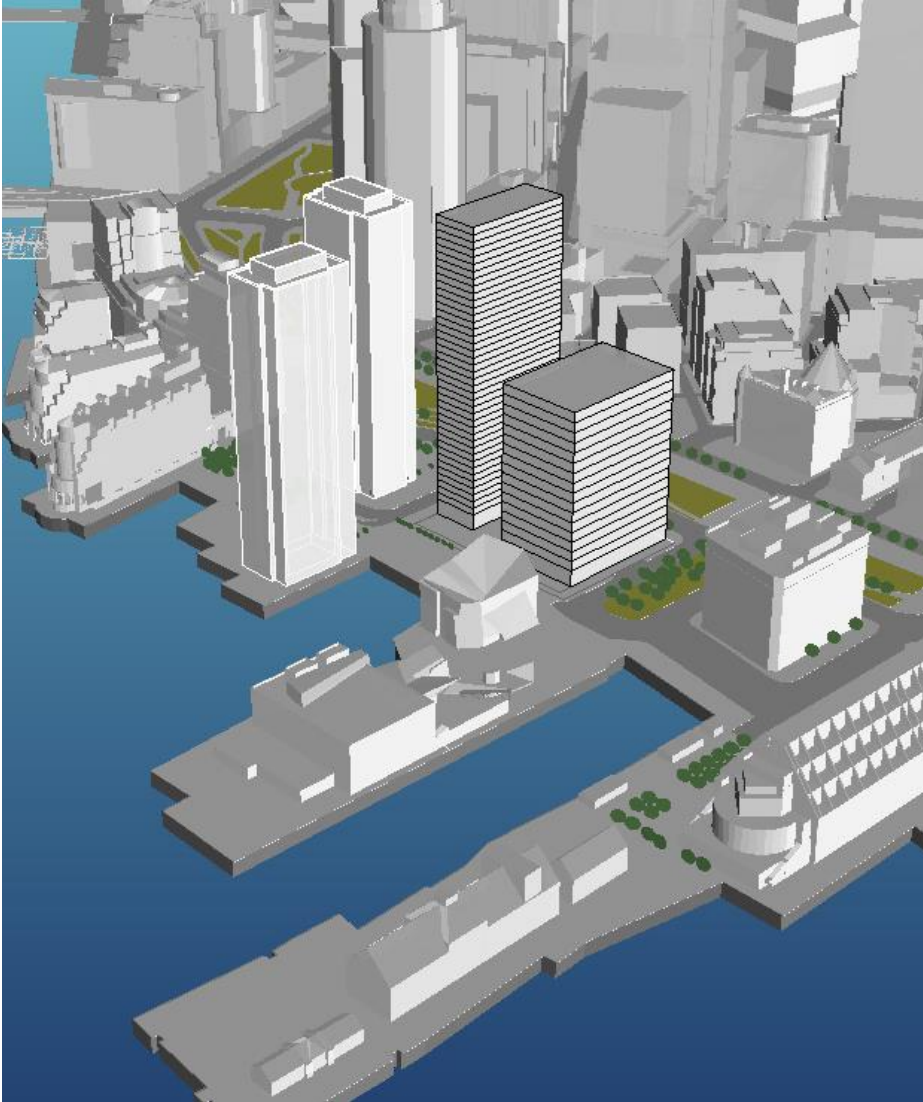


Res - Office Res – Office - flip Office - Res Point - Res Point – Point - flip Point – Res - flip

	2 Towers						
	<i>Res_Office</i>	<i>Res_Office_b</i>	<i>Res_Office_flip</i>	<i>Office_Res</i>	<i>Pt_Res</i>	<i>Pt_Pt_flip</i>	<i>Pt_Res_flip</i>
GFA	804000	823744	774660	756000	868401	863250	858201
Volume (ft3)	9455900	9890300	9504700	9418900	8903300	8766100	8800600
FAR	14.0	14.3	13.5	13.1	15.1	15.0	14.9
OS (sf)	25535	5791	25795	25535	34135	37670	34335
OS %	44	10	45	44	59	65	60
Footprint (sf)	32000	51744	31740	32000	23400	19865	23200
Height (ft)	415	415	405	306	514	504	514
					Shadow	Shadow	Shadow

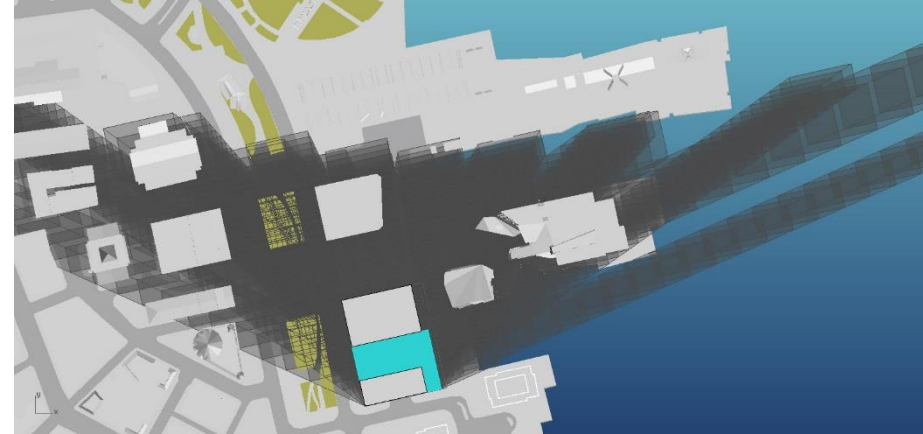
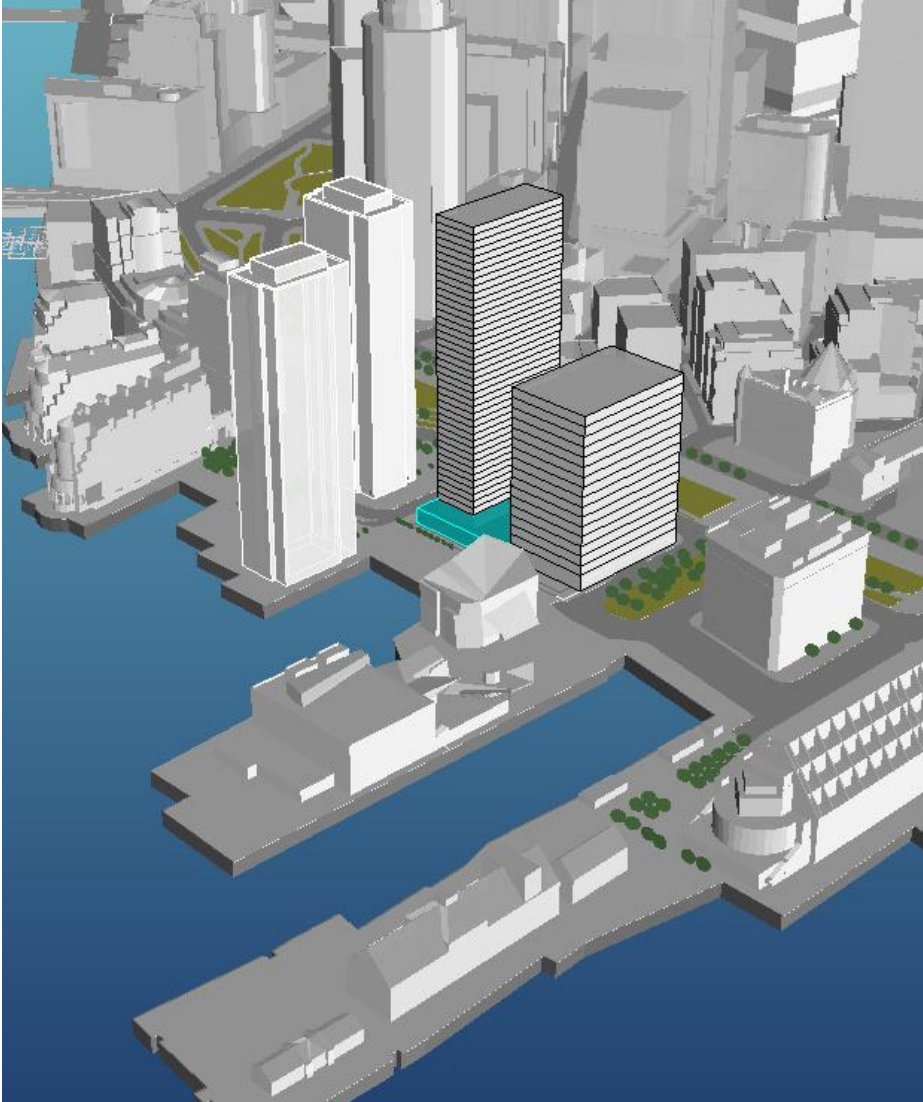
Limiting Variable

Residential – Office Scenario open space in center of parcel



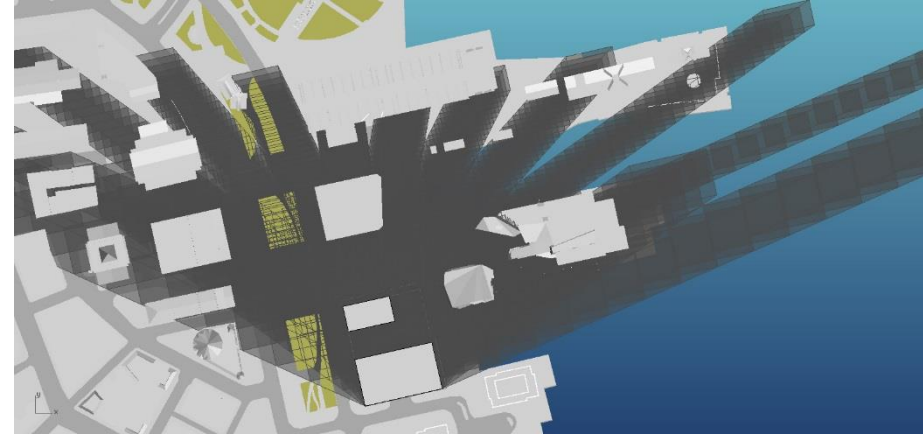
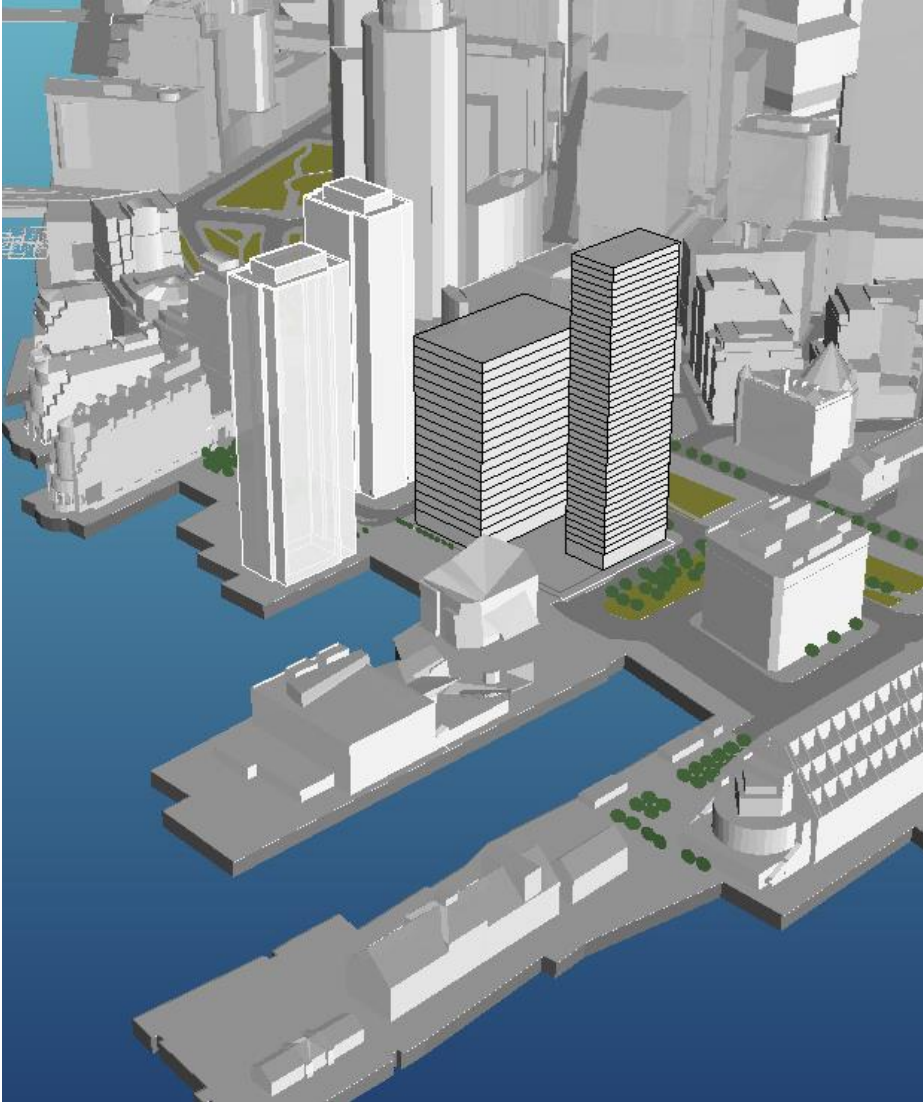
	2 Towers						
	<i>Res_Office</i>	<i>Res_Office_b</i>	<i>Res_Office_flip</i>	<i>Office_Res</i>	<i>Pt_Res</i>	<i>Pt_Pt_flip</i>	<i>Pt_Res_flip</i>
GFA	804000	823744	774660	756000	868401	863250	858201
Volume (ft3)	9455900	9890300	9504700	9418900	8903300	8766100	8800600
FAR	14.0	14.3	13.5	13.1	15.1	15.0	14.9
OS (sf)	25535	5791	25795	25535	34135	37670	34335
OS %	44	10	45	44	59	65	60
Footprint (sf)	32000	51744	31740	32000	23400	19865	23200
Height (ft)	415	415	405	306	514	504	514

Residential – Office with open space under glass concept



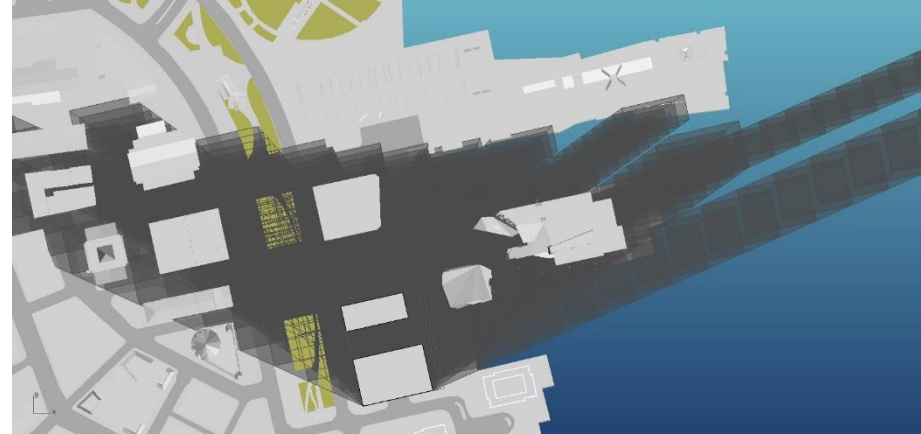
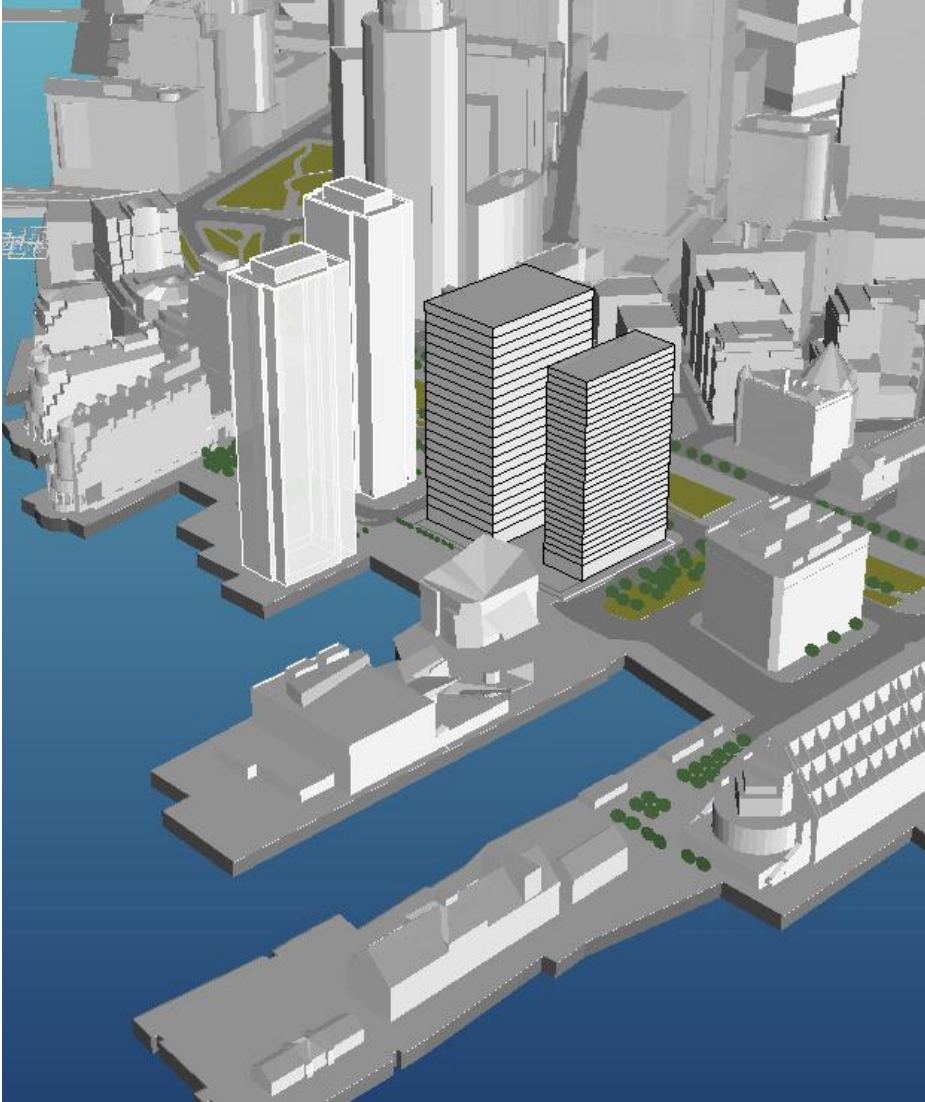
	2 Towers						
	<i>Res_Office</i>	<i>Res_Office_b</i>	<i>Res_Office_flip</i>	<i>Office_Res</i>	<i>Pt_Res</i>	<i>Pt_Pt_flip</i>	<i>Pt_Res_flip</i>
GFA	804000	823744	774660	756000	868401	863250	858201
Volume (ft3)	9455900	9890300	9504700	9418900	8903300	8766100	8800600
FAR	14.0	14.3	13.5	13.1	15.1	15.0	14.9
OS (sf)	25535	5791	25795	25535	34135	37670	34335
OS %	44	10	45	44	59	65	60
Footprint (sf)	32000	51744	31740	32000	23400	19865	23200
Height (ft)	415	415	405	306	514	504	514

Residential – Office with open space in center and east



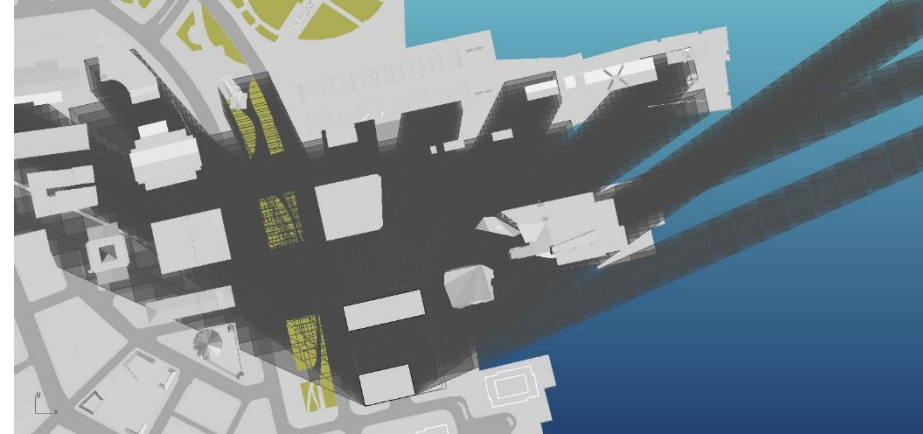
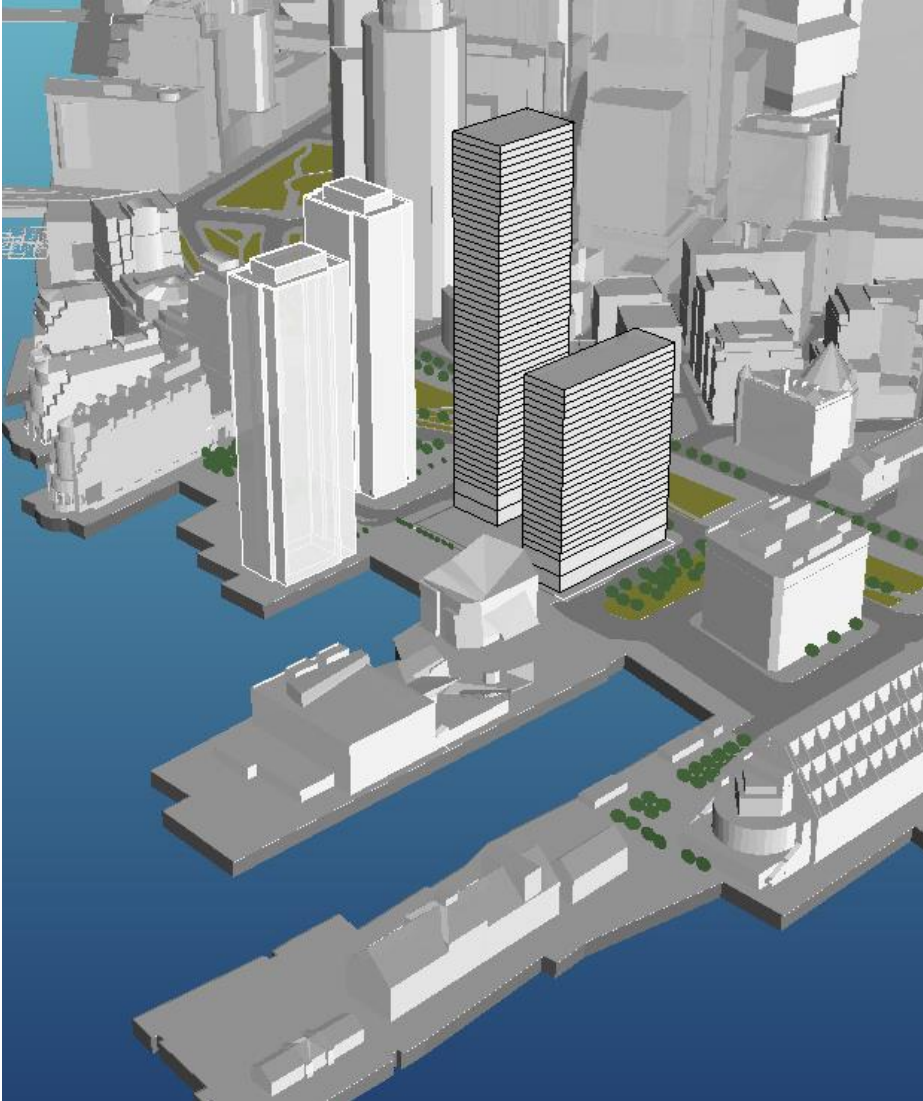
	2 Towers						
	<i>Res_Office</i>	<i>Res_Office_b</i>	<i>Res_Office_flip</i>	<i>Office_Res</i>	<i>Pt_Res</i>	<i>Pt_Pt_flip</i>	<i>Pt_Res_flip</i>
GFA	804000	823744	774660	756000	868401	863250	858201
Volume (ft3)	9455900	9890300	9504700	9418900	8903300	8766100	8800600
FAR	14.0	14.3	13.5	13.1	15.1	15.0	14.9
OS (sf)	25535	5791	25795	25535	34135	37670	34335
OS %	44	10	45	44	59	65	60
Footprint (sf)	32000	51744	31740	32000	23400	19865	23200
Height (ft)	415	415	405	306	514	504	514

Residential – Office alternative



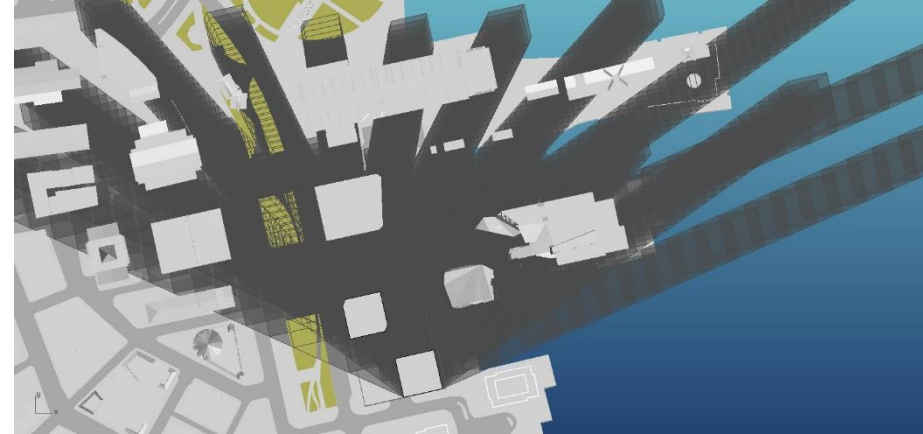
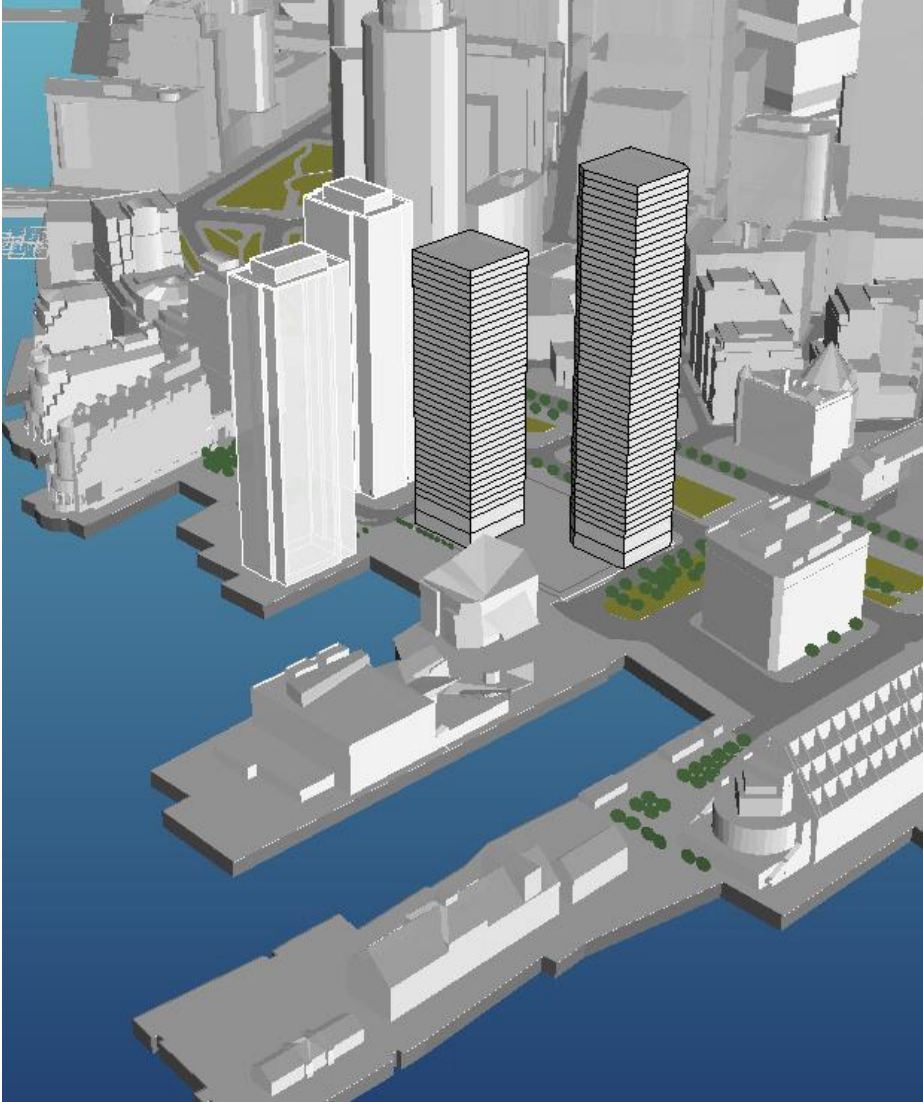
	2 Towers						
	<i>Res_Office</i>	<i>Res_Office_b</i>	<i>Res_Office_flip</i>	<i>Office_Res</i>	<i>Pt_Res</i>	<i>Pt_Pt_flip</i>	<i>Pt_Res_flip</i>
GFA	804000	823744	774660	756000	868401	863250	858201
Volume (ft3)	9455900	9890300	9504700	9418900	8903300	8766100	8800600
FAR	14.0	14.3	13.5	13.1	15.1	15.0	14.9
OS (sf)	25535	5791	25795	25535	34135	37670	34335
OS %	44	10	45	44	59	65	60
Footprint (sf)	32000	51744	31740	32000	23400	19865	23200
Height (ft)	415	415	405	306	514	504	514

Point Residential Towers



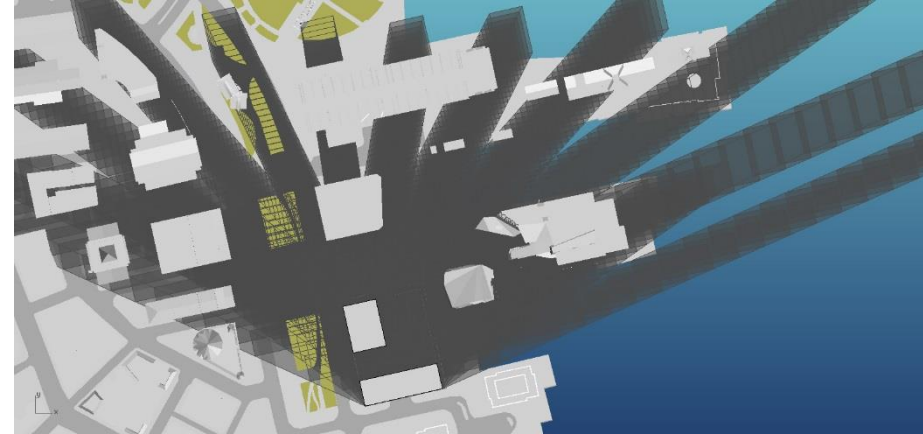
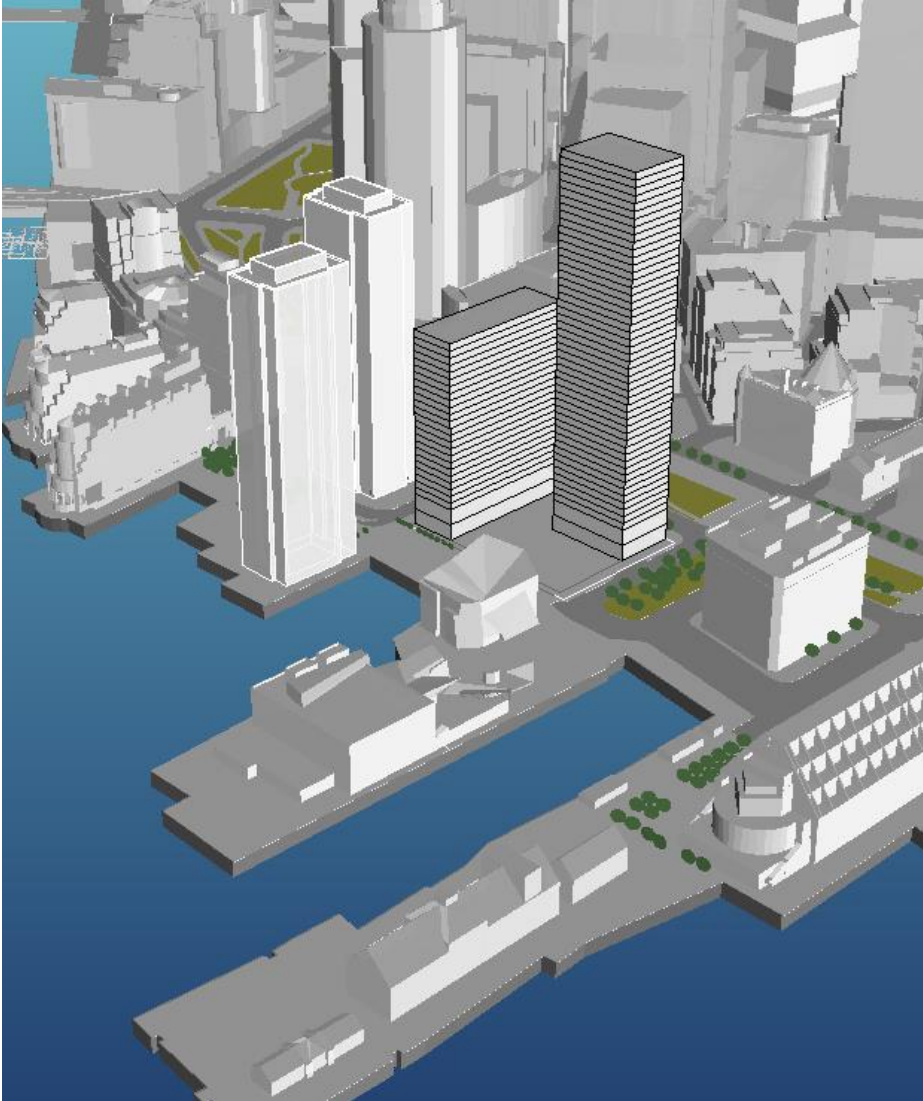
	2 Towers						
	<i>Res_Office</i>	<i>Res_Office_b</i>	<i>Res_Office_flip</i>	<i>Office_Res</i>	<i>Pt_Res</i>	<i>Pt_Pt_flip</i>	<i>Pt_Res_flip</i>
GFA	804000	823744	774660	756000	868401	863250	858201
Volume (ft3)	9455900	9890300	9504700	9418900	8903300	8766100	8800600
FAR	14.0	14.3	13.5	13.1	15.1	15.0	14.9
OS (sf)	25535	5791	25795	25535	34135	37670	34335
OS %	44	10	45	44	59	65	60
Footprint (sf)	32000	51744	31740	32000	23400	19865	23200
Height (ft)	415	415	405	306	514	504	514

Point Towers



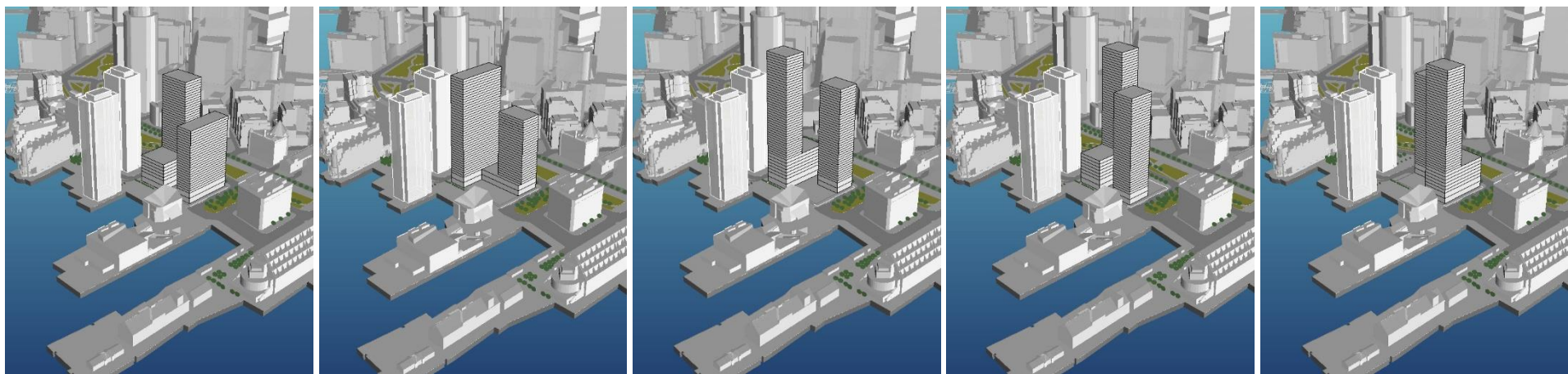
	2 Towers						
	<i>Res_Office</i>	<i>Res_Office_b</i>	<i>Res_Office_flip</i>	<i>Office_Res</i>	<i>Pt_Res</i>	<i>Pt_Pt_flip</i>	<i>Pt_Res_flip</i>
GFA	804000	823744	774660	756000	868401	863250	858201
Volume (ft3)	9455900	9890300	9504700	9418900	8903300	8766100	8800600
FAR	14.0	14.3	13.5	13.1	15.1	15.0	14.9
OS (sf)	25535	5791	25795	25535	34135	37670	34335
OS %	44	10	45	44	59	65	60
Footprint (sf)	32000	51744	31740	32000	23400	19865	23200
Height (ft)	415	415	405	306	514	504	514

Point Residential Towers Alternative



	2 Towers						
	<i>Res_Office</i>	<i>Res_Office_b</i>	<i>Res_Office_flip</i>	<i>Office_Res</i>	<i>Pt_Res</i>	<i>Pt_Pt_flip</i>	<i>Pt_Res_flip</i>
GFA	804000	823744	774660	756000	868401	863250	858201
Volume (ft3)	9455900	9890300	9504700	9418900	8903300	8766100	8800600
FAR	14.0	14.3	13.5	13.1	15.1	15.0	14.9
OS (sf)	25535	5791	25795	25535	34135	37670	34335
OS %	44	10	45	44	59	65	60
Footprint (sf)	32000	51744	31740	32000	23400	19865	23200
Height (ft)	415	415	405	306	514	504	514

Two Towers with Podium



Point - Res

Point - Res - 90

Point - Point

Point - Point - 90

Point - Point - flip

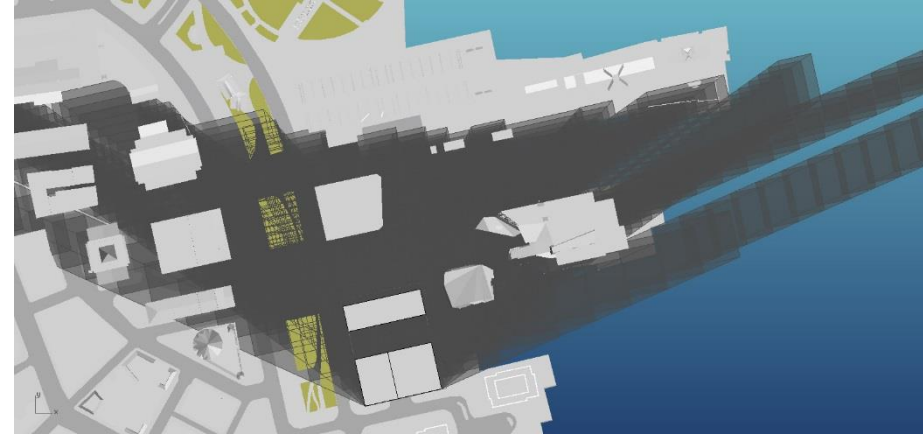
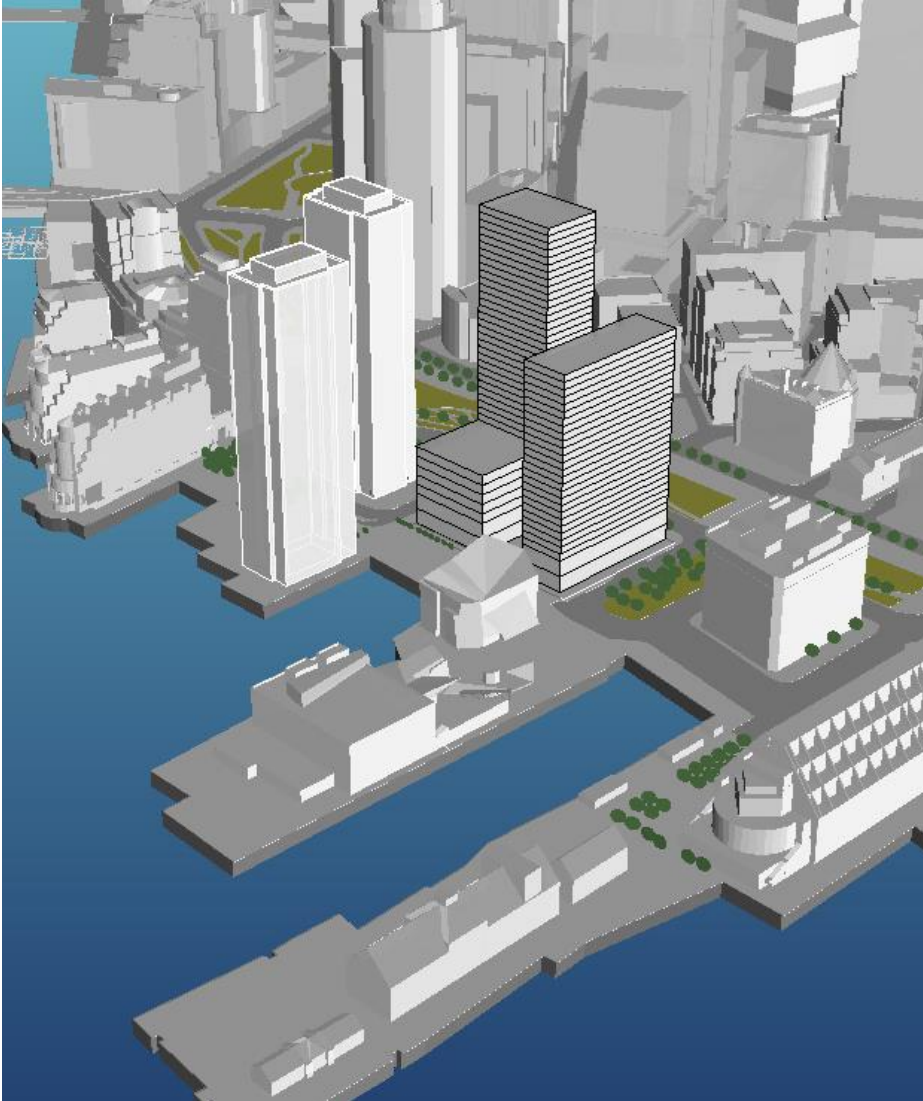
	2 Towers_Podium				
	<i>Pt_Res</i>	<i>Pt_Res_90</i>	<i>Pt_Pt</i>	<i>Pt_Pt_90</i>	<i>Pt_Pt_Flip</i>
GFA	846521	872826	874000	874000	874000
Volume (ft3)	9490700	9164500	9553600	9553600	9553600
FAR	14.7	15.2	15.2	15.2	15.2
OS (sf)	20775	25323	29035	29035	29035
OS %	36	44	50	50	50
Footprint (sf)	36760	32212	28500	28500	28500
Height (ft)	409	437	528	528	528

Shadow

Shadow

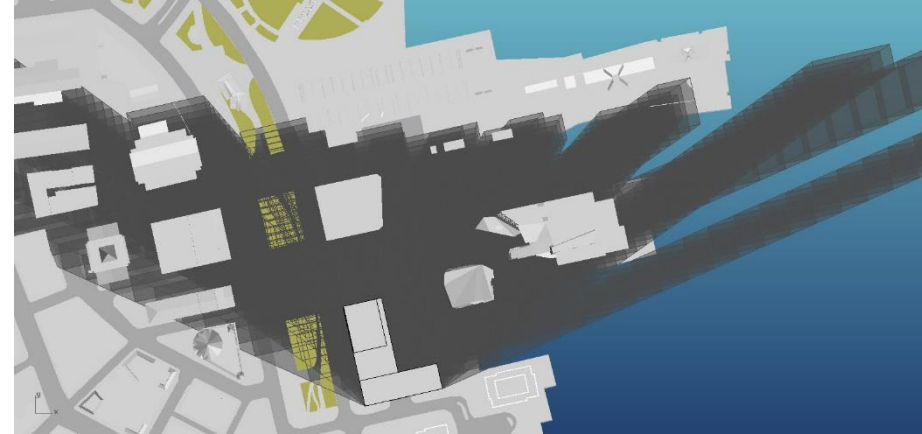
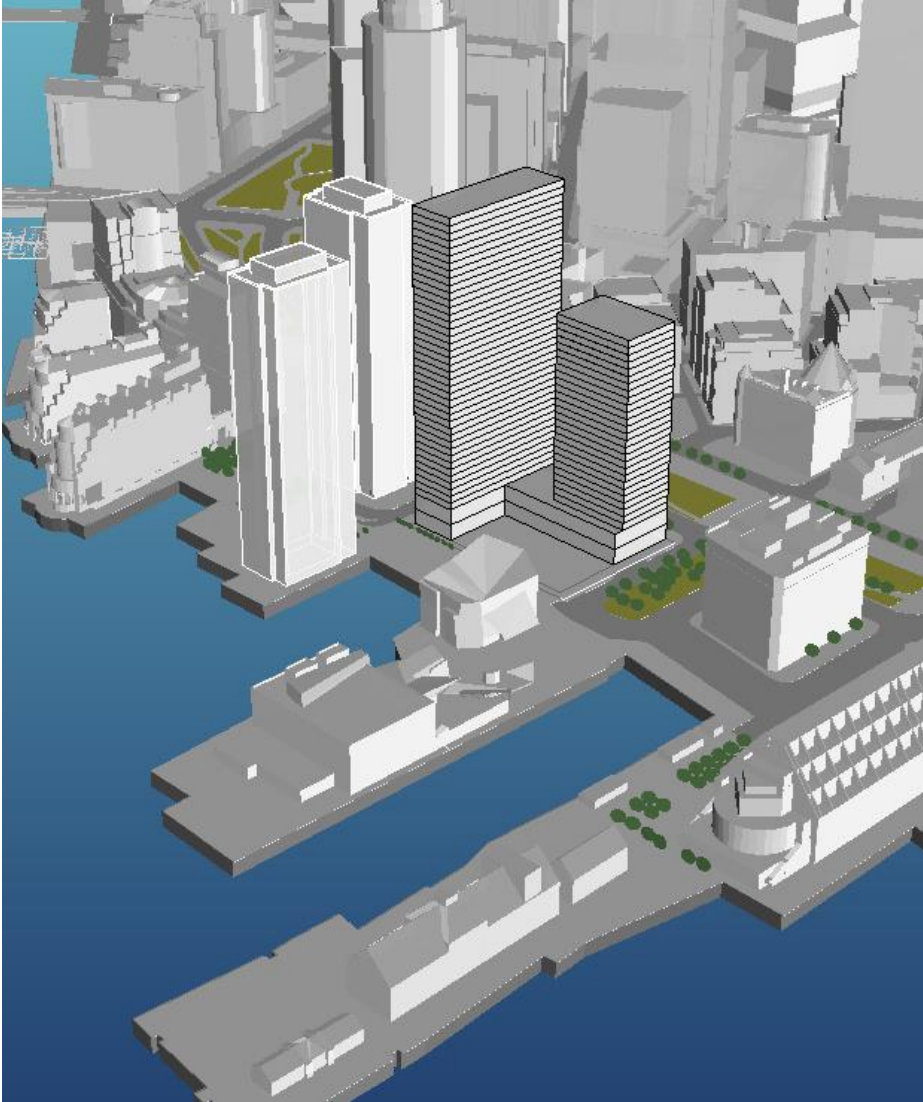
Limiting Variable

Point Residential with Podium



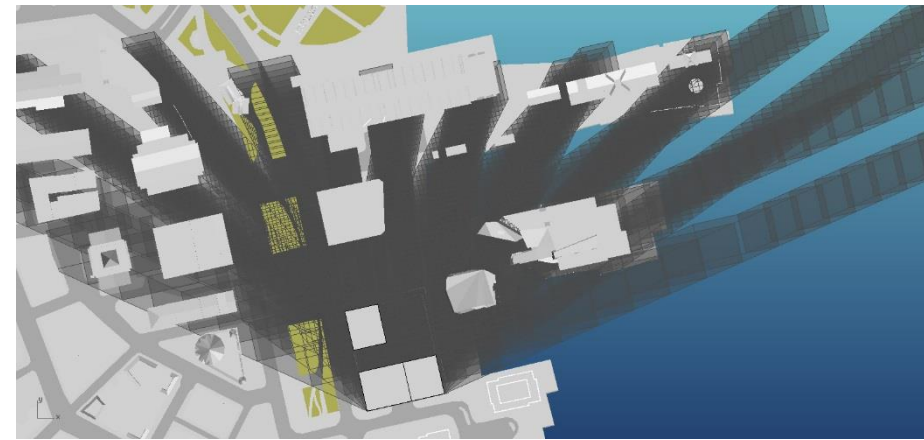
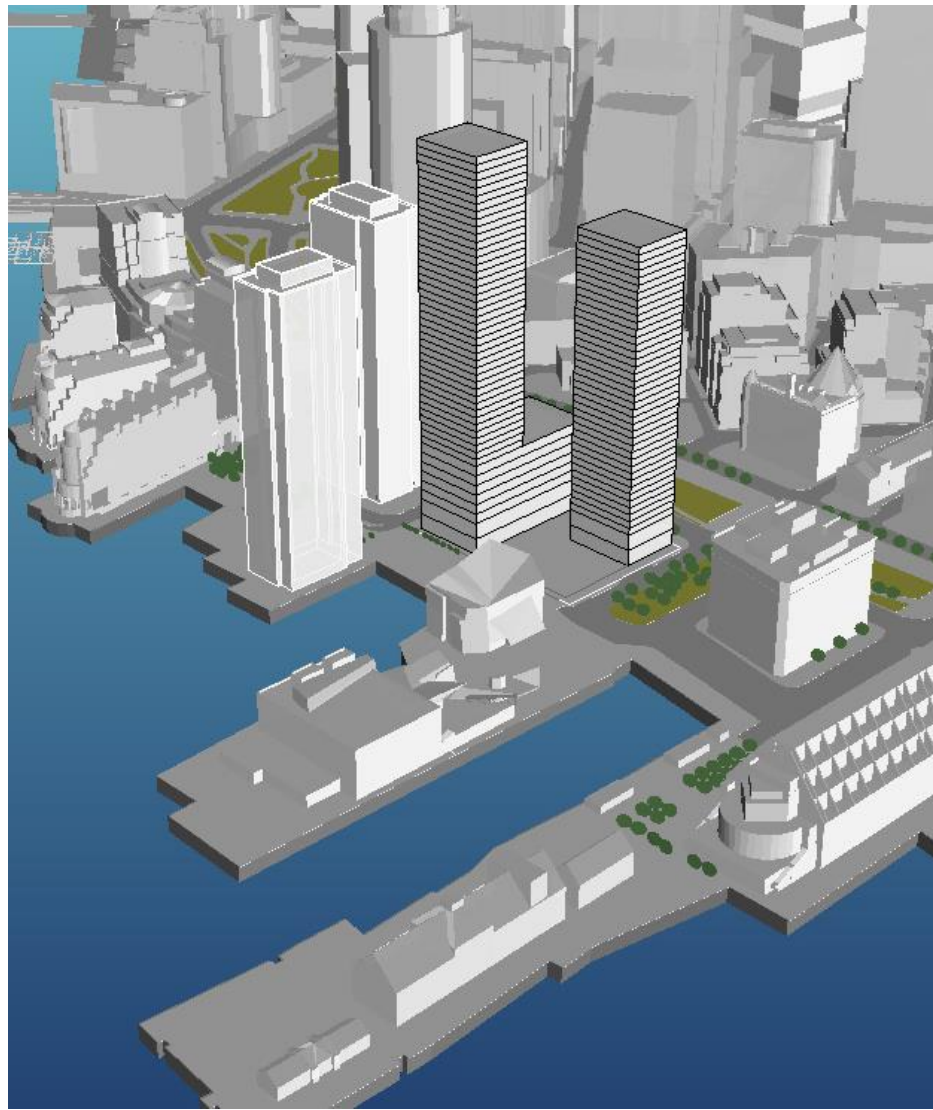
	2 Towers_Podium				
	Pt_Res	Pt_Res_90	Pt_Pt	Pt_Pt_90	Pt_Pt_Flip
GFA	846521	872826	874000	874000	874000
Volume (ft3)	9490700	9164500	9553600	9553600	9553600
FAR	14.7	15.2	15.2	15.2	15.2
OS (sf)	20775	25323	29035	29035	29035
OS %	36	44	50	50	50
Footprint (sf)	36760	32212	28500	28500	28500
Height (ft)	409	437	528	528	528

Point Residential with Podium Alternative



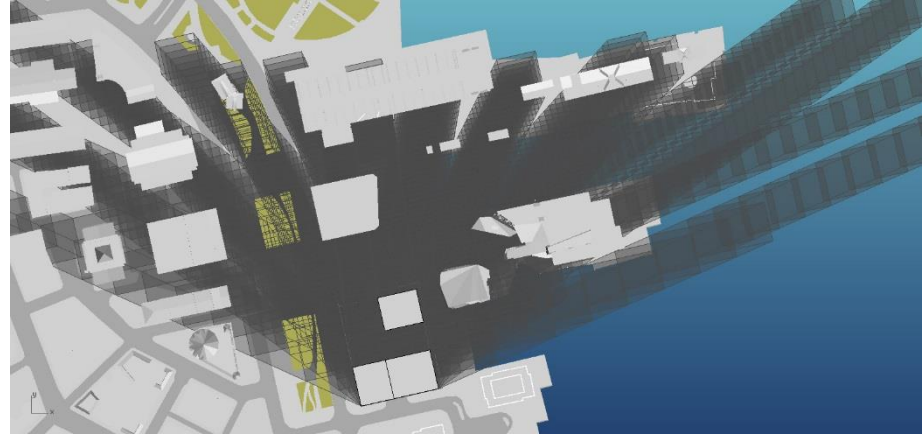
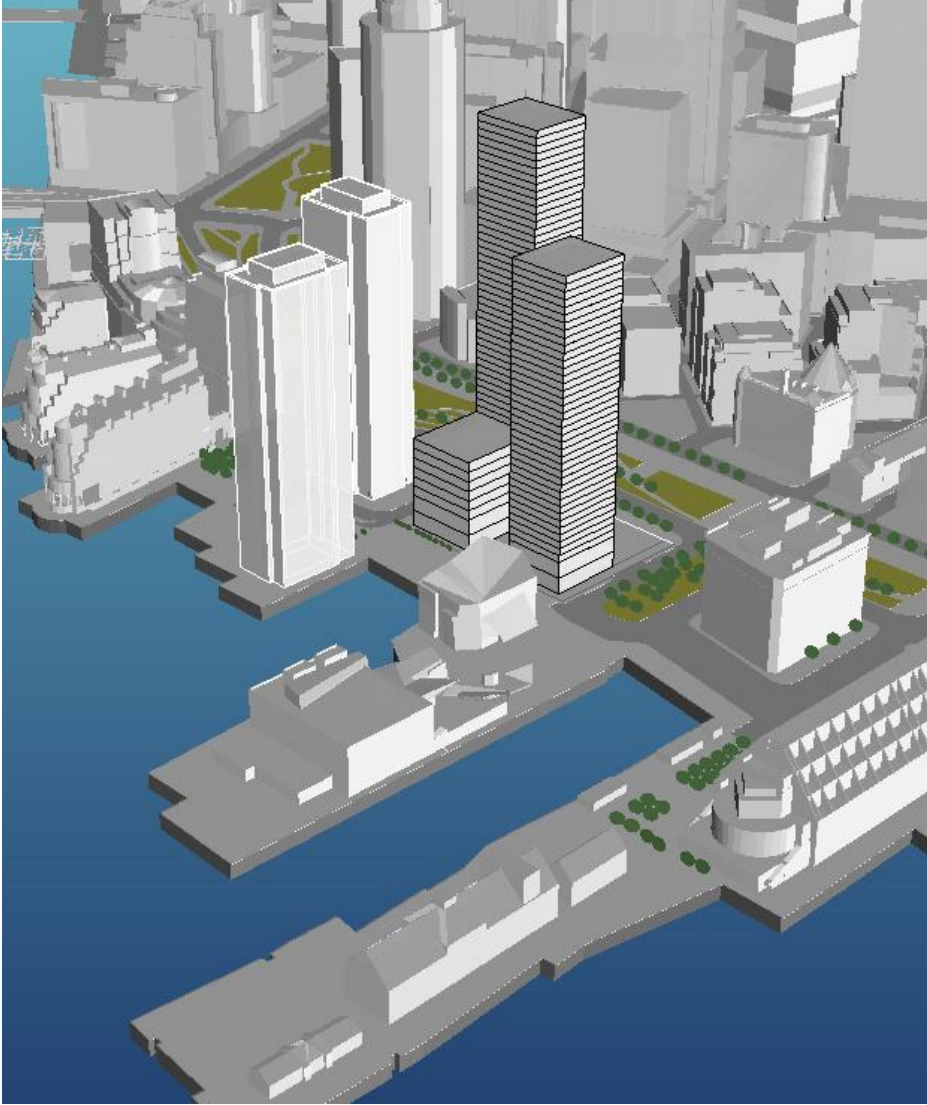
	2 Towers_Podium				
	Pt_Res	Pt_Res_90	Pt_Pt	Pt_Pt_90	Pt_Pt_Flip
GFA	846521	872826	874000	874000	874000
Volume (ft3)	9490700	9164500	9553600	9553600	9553600
FAR	14.7	15.2	15.2	15.2	15.2
OS (sf)	20775	25323	29035	29035	29035
OS %	36	44	50	50	50
Footprint (sf)	36760	32212	28500	28500	28500
Height (ft)	409	437	528	528	528

Point Towers



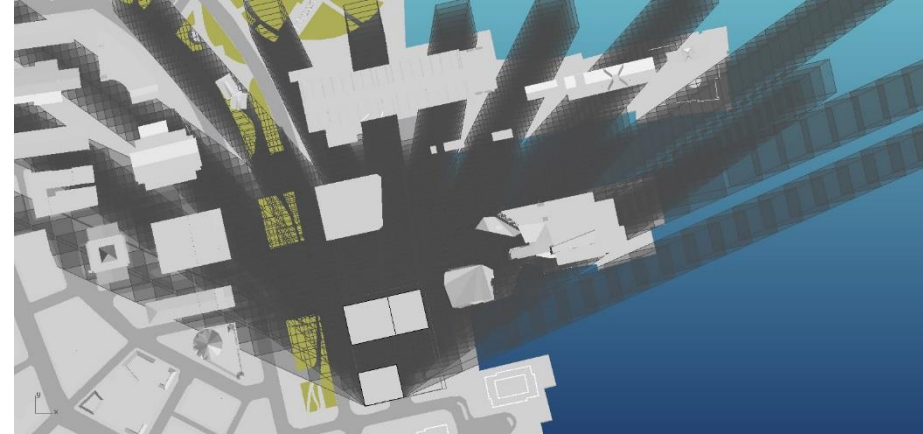
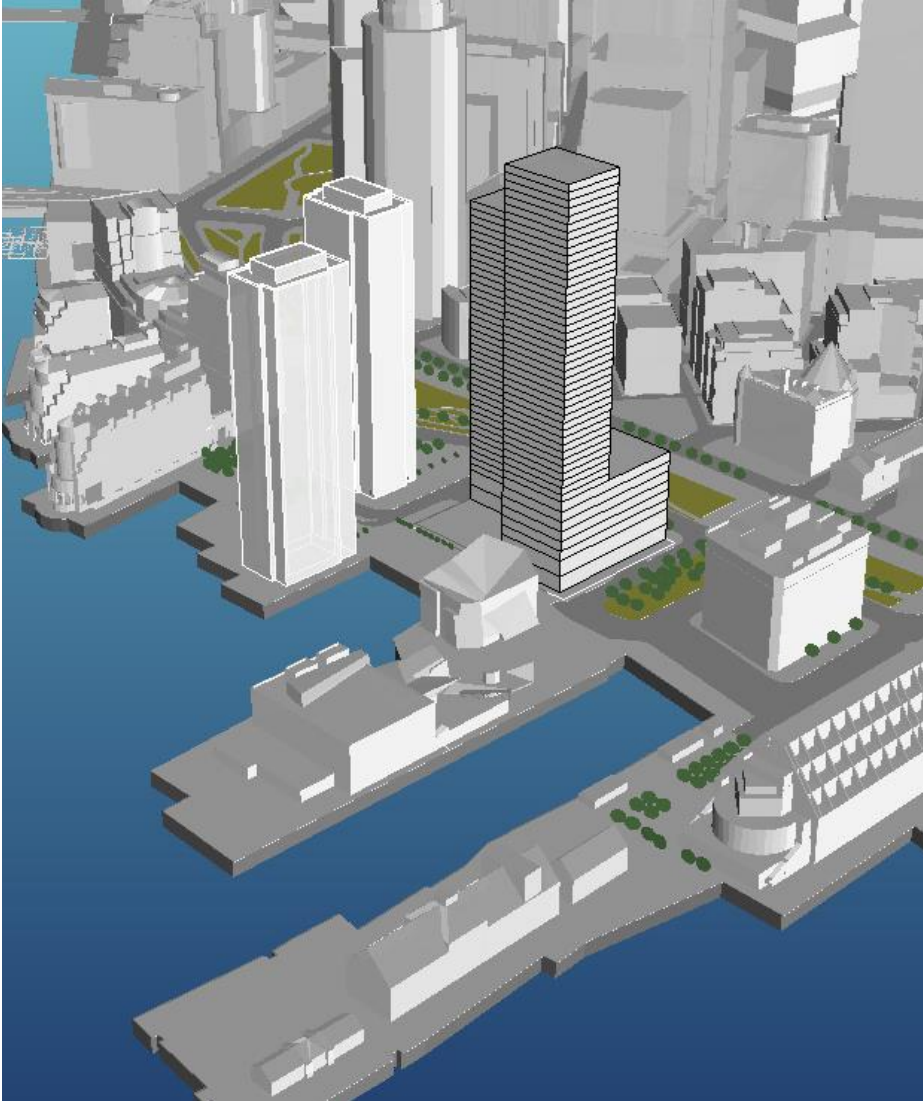
	2 Towers_Podium				
	Pt_Res	Pt_Res_90	Pt_Pt	Pt_Pt_90	Pt_Pt_Flip
GFA	846521	872826	874000	874000	874000
Volume (ft3)	9490700	9164500	9553600	9553600	9553600
FAR	14.7	15.2	15.2	15.2	15.2
OS (sf)	20775	25323	29035	29035	29035
OS %	36	44	50	50	50
Footprint (sf)	36760	32212	28500	28500	28500
Height (ft)	409	437	528	528	528

Point Towers Alternative



	2 Towers_Podium				
	Pt_Res	Pt_Res_90	Pt_Pt	Pt_Pt_90	Pt_Pt_Flip
GFA	846521	872826	874000	874000	874000
Volume (ft3)	9490700	9164500	9553600	9553600	9553600
FAR	14.7	15.2	15.2	15.2	15.2
OS (sf)	20775	25323	29035	29035	29035
OS %	36	44	50	50	50
Footprint (sf)	36760	32212	28500	28500	28500
Height (ft)	409	437	528	528	528

Point Towers Alternative



	2 Towers_Podium				
	<i>Pt_Res</i>	<i>Pt_Res_90</i>	<i>Pt_Pt</i>	<i>Pt_Pt_90</i>	<i>Pt_Pt_Flip</i>
GFA	846521	872826	874000	874000	874000
Volume (ft3)	9490700	9164500	9553600	9553600	9553600
FAR	14.7	15.2	15.2	15.2	15.2
OS (sf)	20775	25323	29035	29035	29035
OS %	36	44	50	50	50
Footprint (sf)	36760	32212	28500	28500	28500
Height (ft)	409	437	528	528	528

Matrix of Limiting Factors

	1 Tower				2 Towers								2 Towers_Podium			
	Office-Step	Res-Bar	Res-Bar-90	Res-Point	Res_Office	Res_Office_b	Res_Office_flip	Office_Res	Pt_Res	Pt_Pt_flip	Pt_Res_flip	Pt_Res	Pt_Res_90	Pt_Pt	Pt_Pt_90	Pt_Pt_Flip
GFA	688206	838611	838001	739800	804000	823744	774660	756000	868401	863250	858201	846521	872826	874000	874000	874000
Volume (ft3)	9504800	9500900	9480800	8539700	9455900	9890300	9504700	9418900	8903300	8766100	8800600	9490700	9164500	9553600	9553600	9553600
FAR	12.0	14.6	14.6	12.9	14.0	14.3	13.5	13.1	15.1	15.0	14.9	14.7	15.2	15.2	15.2	15.2
OS (sf)	32359	27241	27535	27535	25535	5791	25795	25535	34135	37670	34335	20775	25323	29035	29035	29035
OS %	56	47	48	48	44	10	45	44	59	65	60	36	44	50	50	50
Footprint (sf)	25176	30294	30000	30000	32000	51744	31740	32000	23400	19865	23200	36760	32212	28500	28500	28500
Height (ft)	427	585	566	595	415	415	405	306	514	504	514	409	437	528	528	528
Shadow									No new 1-hour shadow on Long Wharf				No new 1-hr shadow on Long Wharf			

Note: Red box indicates the control that limits the size of a particular scenario

Harbor Garage Site: Proposed Maximums

Harbor Garage Site	
Height (<i>maximum height, including mechanicals</i>)	600'
Density	
GFA	875,000 sf
Cubic Volume	9.5 mil. cu.ft.
Shadows	No net new 1hr. shadow Long Wharf
Open Space Min.	30%*

*with potential consideration of public spaces under glass or open to exterior



Qualitative Design Issues addressed within the MHP

Public spaces

- Orientation, Physical Qualities, Porosity, Accessibility

Ground floor uses

- Adjacencies, sizes, etc.

Buildings

- Material qualities, transparency, etc.

Views

- Skyline, visibility of historic assets, key corridors



Source: BPL, photographer Leslie Jones, c. 1929

Quantitative Design Issues: Proposed Maximums

	Long Wharf Marriott	Hook Lobster Site	Harbor Garage Site
Height (<i>maximum height, including mechanicals</i>)	-	305'	600'
Density			
GFA	-	275,000 sf	875,000 sf
Cubic Volume	-	3.1M cu.ft.	9.5 mil. cu.ft.
Shadows	No net new 1hr. Shadow Long Wharf		
Open Space Min.	20%	30%	30%*

*with potential consideration of public spaces under glass or open to exterior

Downtown Waterfront

Next Meeting

Wednesday, June 24th, 6-8 pm

