



# East Boston Municipal Harbor Plan Update

Municipal Harbor Planning  
Committee Meeting

Proposed Substitutions  
and Offsets

*Prepared for:*

Boston Redevelopment Authority

*Prepared by:*

The Cecil Group

April 2, 2008





# MHP Study Area



## Study Parcels:

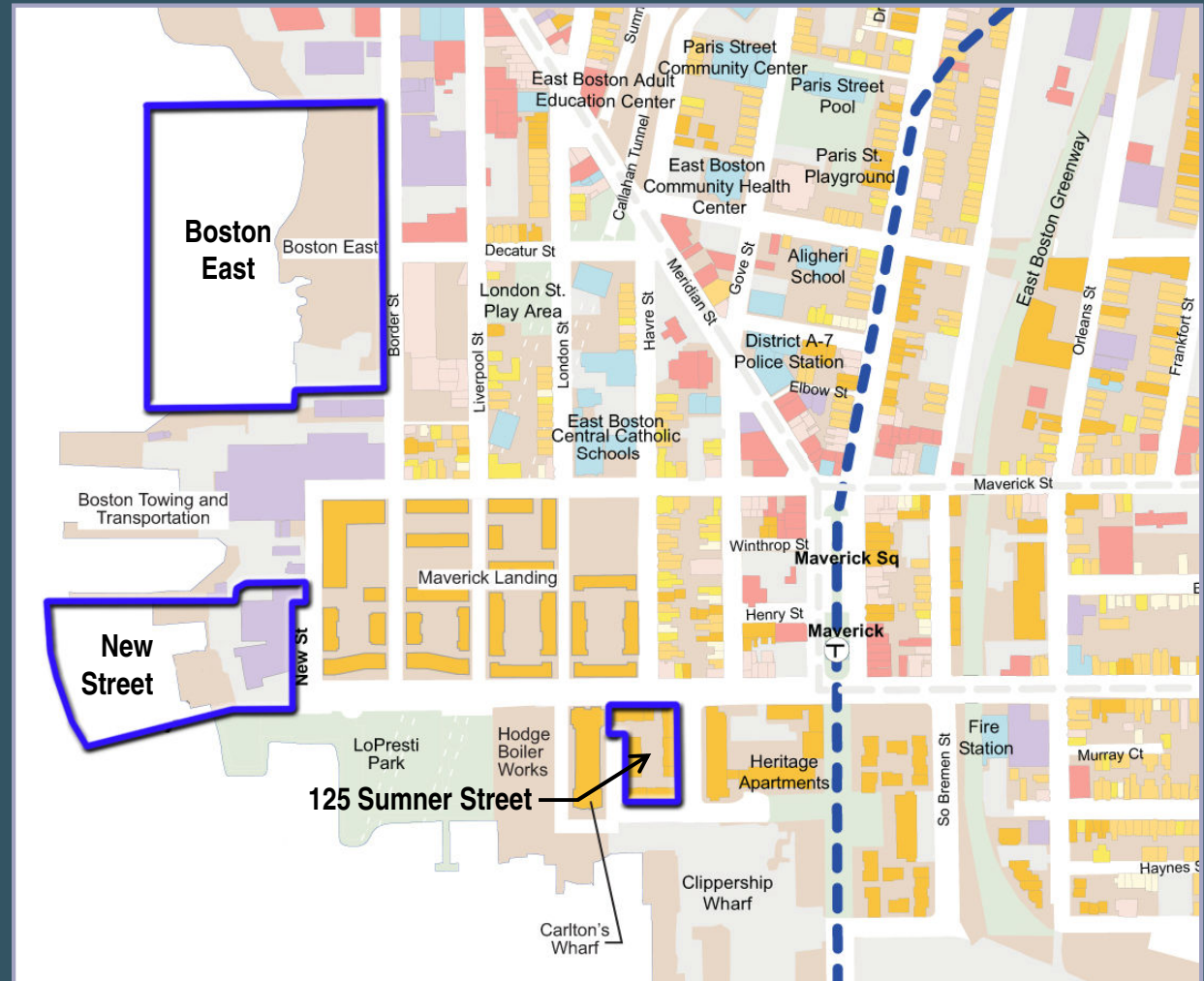
- 6-26 New Street
- Boston East
- 125 Sumner Street



East Boston Waterfront District MHP Amendment



# MHP Amendment Area



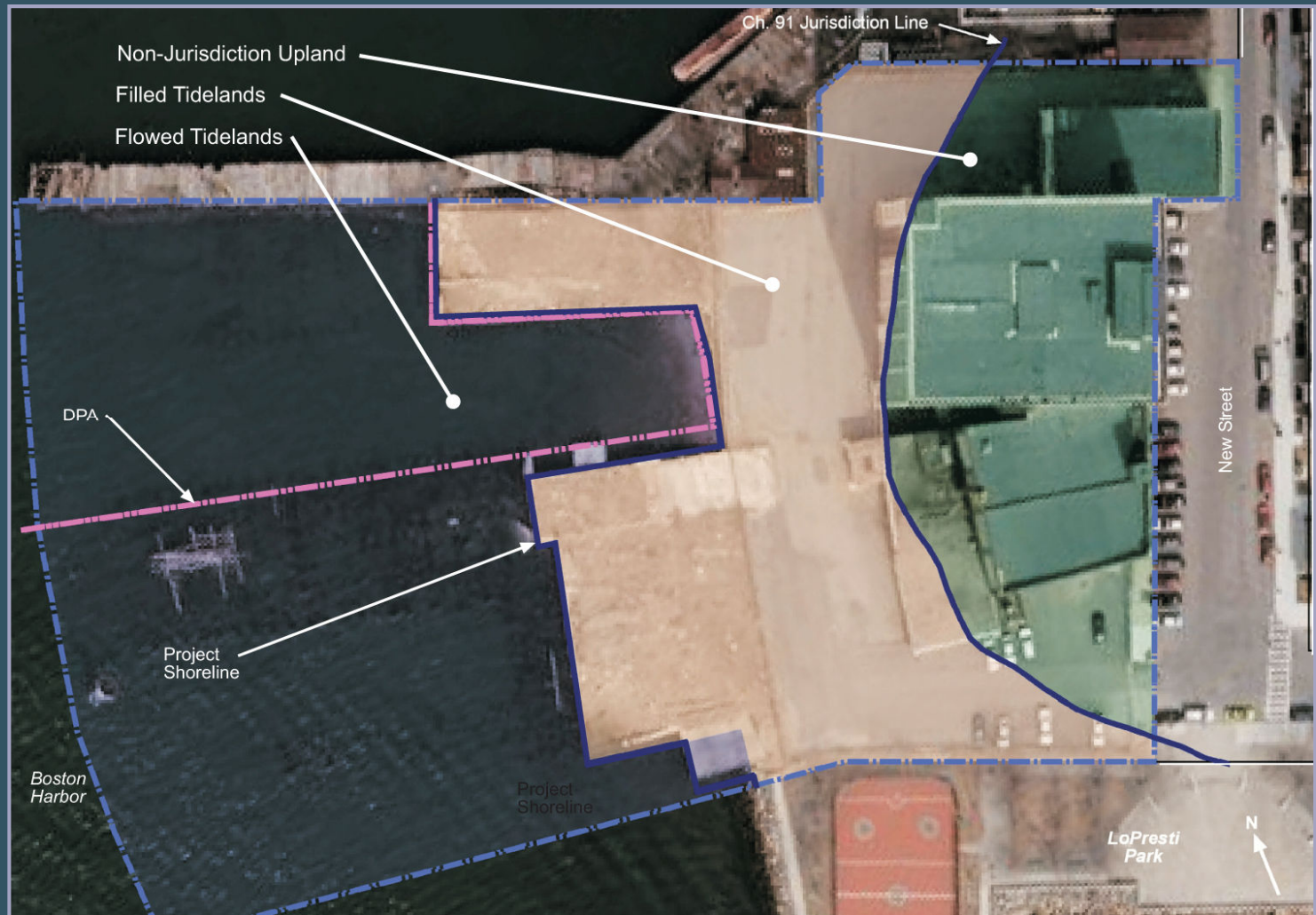


# New Street: Proposed Development





# New Street: Chapter 91 Jurisdiction



# New Street: Commonwealth Tideland







## New Street: Proposed Substitutions

- 310 CMR 9.51(3)(b): Setbacks for Nonwater-dependent Facilities of Private Tenancy (FPT).
- 310 CMR 9.51(3)(e): Height Standards and Related Impacts on Public Use or Access.
- 310 CMR 9.52(1)(b): Public Access Network.





## New Street: Proposed Amplification

- 310 CMR 9.53(2)(b): Activation of Commonwealth Tidelands for Public Use.



## New Street: Setback Substitution

- Proposed Substitution:

Approximately 527 sf of nonwater-dependent FPT will be allowed to be located within 100' of the project shoreline.

- Proposed Offsetting Benefit:

At least an equivalent area of FPAs will be provided, expanding the location of FPAs beyond 100' of the project shoreline.

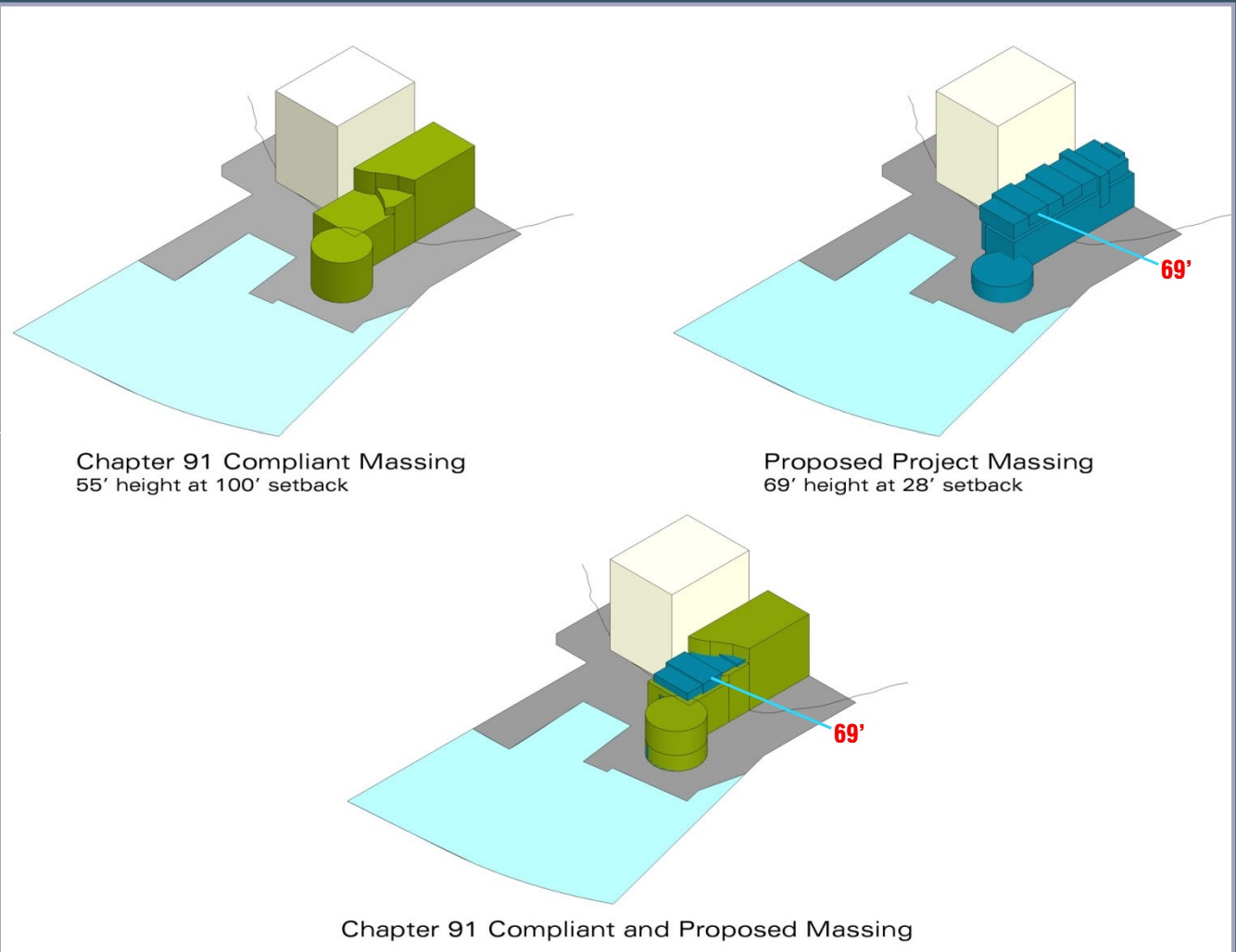


## ■ ■ ■ | New Street: Height Substitution

- Proposed Substitution:  
Building Height not to exceed 69' within 100' landward of the high water mark, as shown by massing.
- The analysis of shadow and wind impacts indicates that there will be no significant adverse effects; no Offsetting Benefits are required.

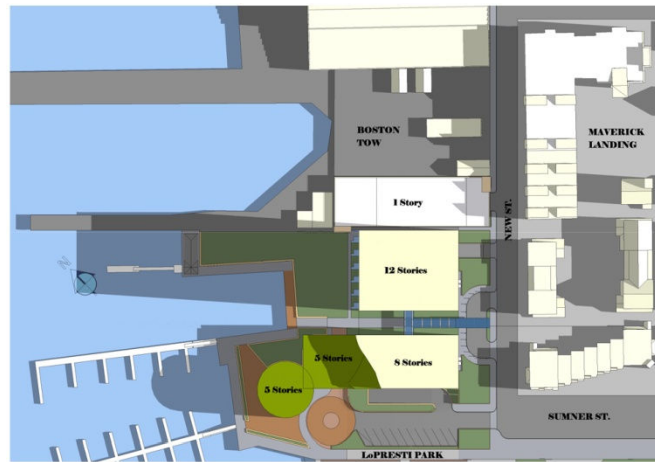


# New Street: Building Massing





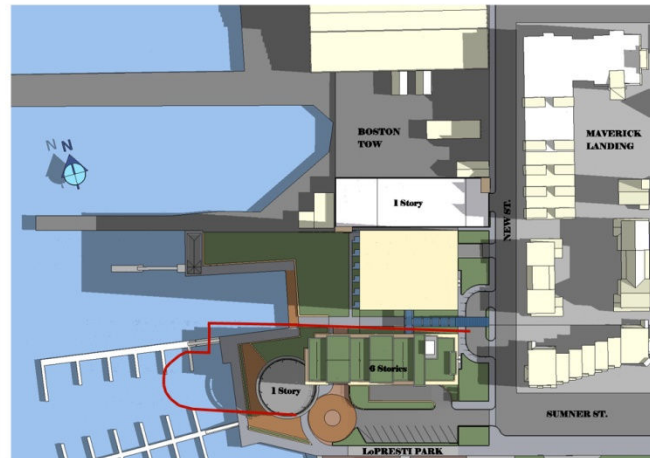
# New Street: Shadow Study – 9 am



Chapter 91 Massing



Proposed Project Massing



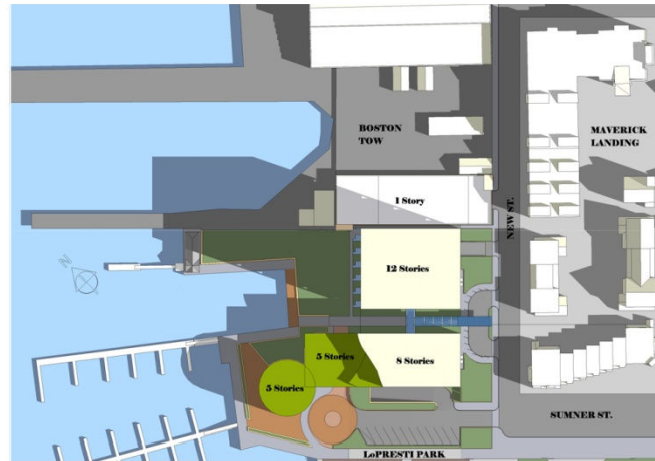
Proposed Massing  
w/ Chapter 91  
Comparison

Chapter 91 shadows 





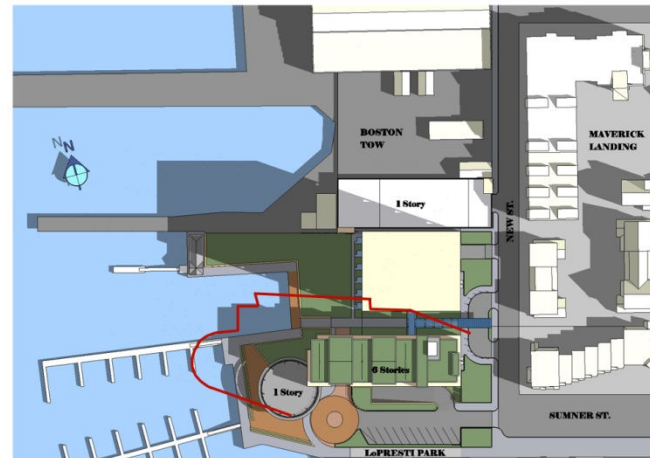
# New Street: Shadow Study – 10 am



Chapter 91 Massing



Proposed Project Massing



Proposed Massing  
w/ Chapter 91  
Comparison

Chapter 91 shadows ———

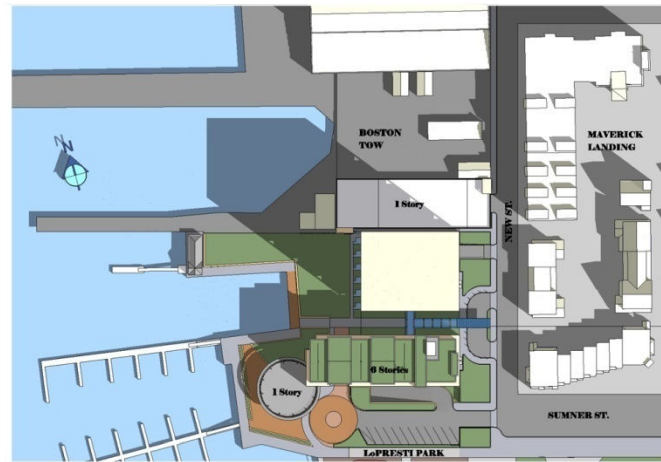




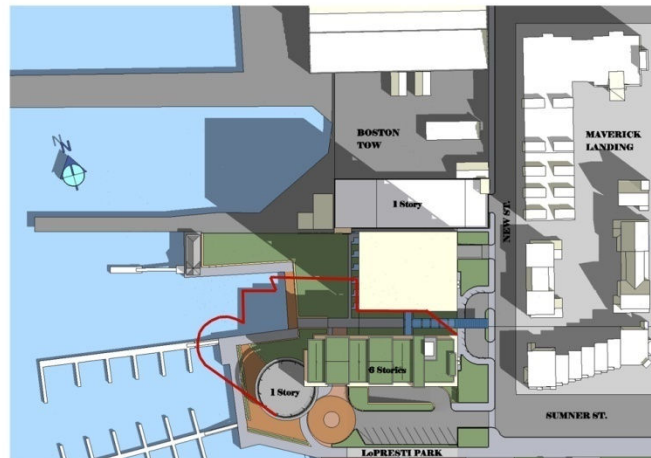
# New Street: Shadow Study – 11 am



Chapter 91 Massing



Proposed Project Massing



Proposed Massing  
w/ Chapter 91  
Comparison

Chapter 91 shadows 

0 50 100 200





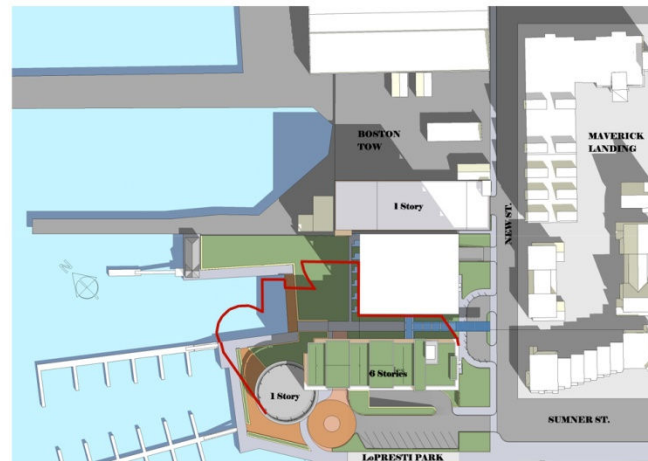
# New Street: Shadow Study – 12 pm



Chapter 91 Massing



Proposed Project Massing



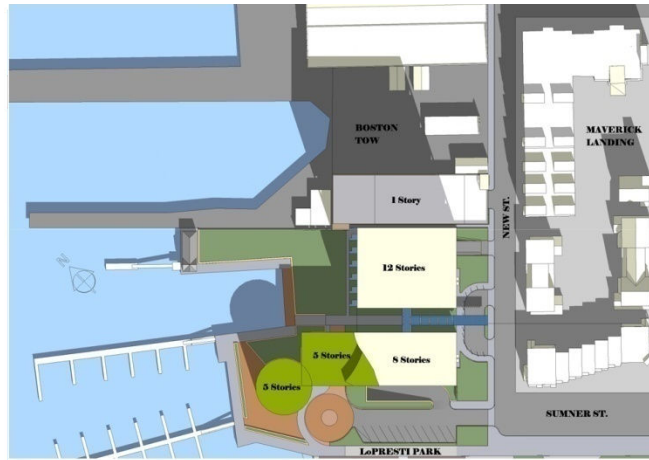
Proposed Massing  
w/ Chapter 91  
Comparison

Chapter 91 shadows ———

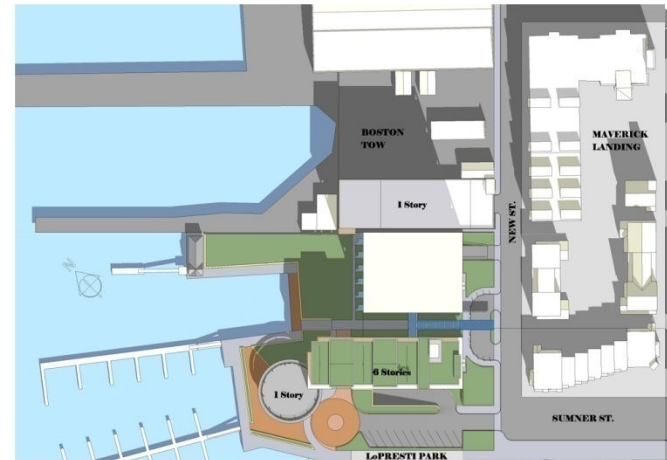




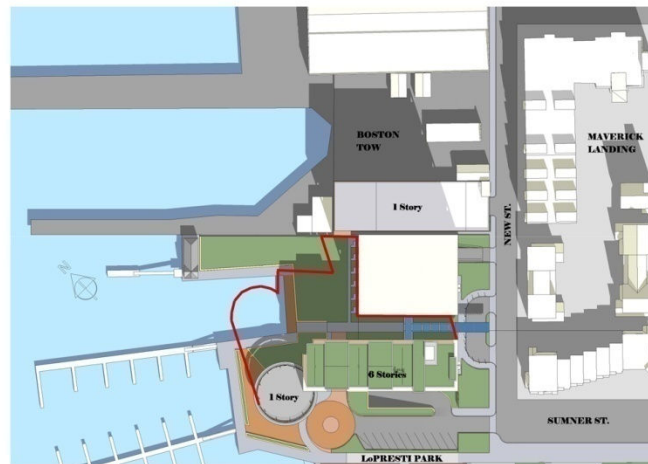
# New Street: Shadow Study – 1 pm



Chapter 91 Massing



Proposed Project Massing



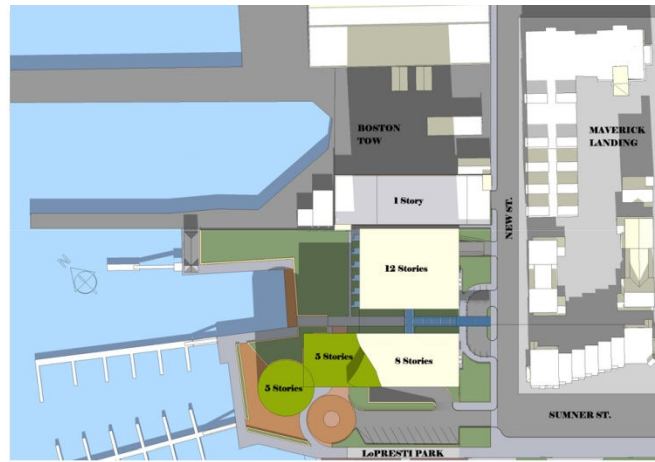
Proposed Massing  
w/ Chapter 91  
Comparison

Chapter 91 shadows 





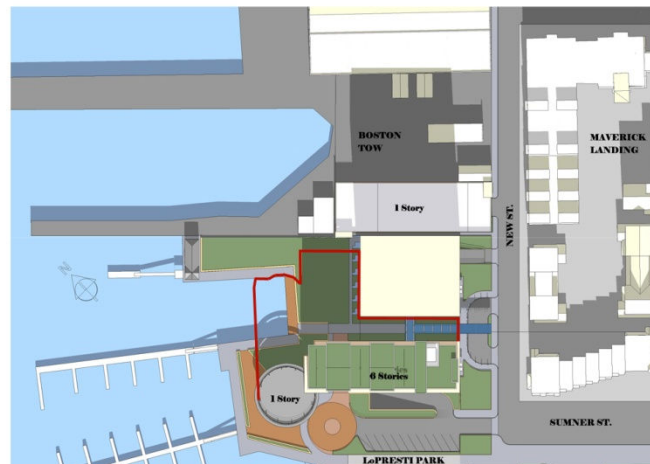
# New Street: Shadow Study – 2 pm



Chapter 91 Massing



Proposed Project Massing



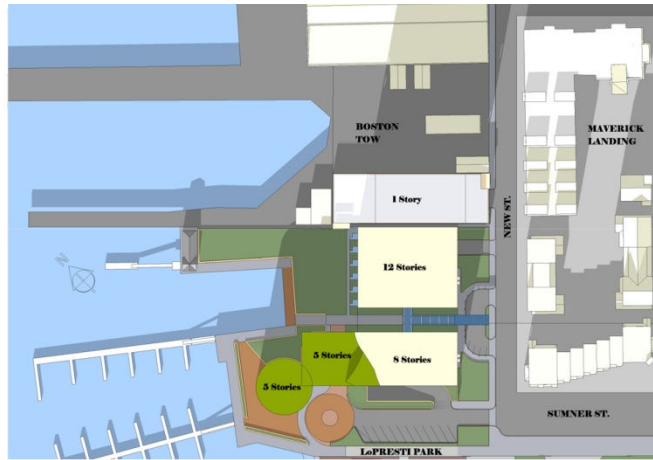
Proposed Massing  
w/ Chapter 91  
Comparison

Chapter 91 shadows —

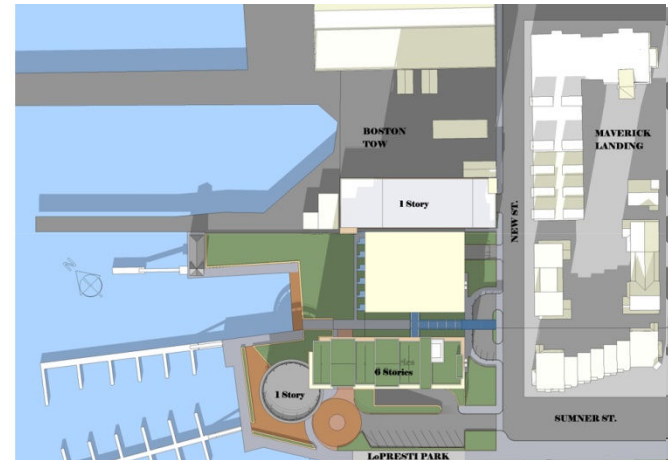




# New Street: Shadow Study – 3 pm



Chapter 91 Massing



Proposed Project Massing



Proposed Massing  
w/ Chapter 91  
Comparison

Chapter 91 shadows ———





# New Street: Shadow Study – 4 pm



Chapter 91 Massing



Proposed Project Massing



Proposed Massing  
w/ Chapter 91  
Comparison

Chapter 91 shadows ———



## ■ ■ ■ | New Street: Shadow Results

- Calculations of net new shadows generated by the proposed building volume indicate that there will be an overall reduction of net new shadow with respect to the shadows that would be cast by the baseline Chapter 91-compliant building volume.



# Pedestrian Level Wind Study

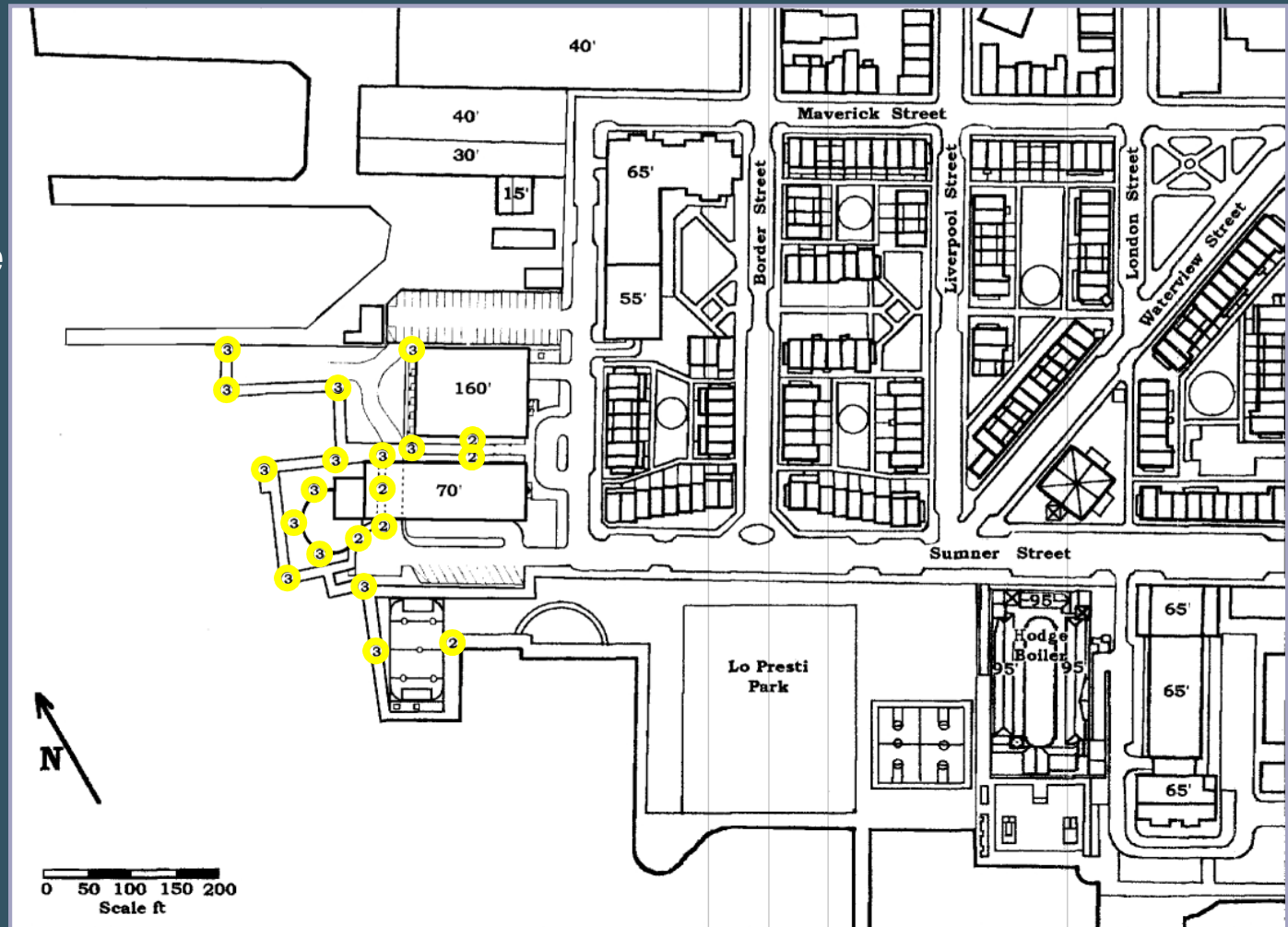
- Qualitative Assessment of Pedestrian Level Winds (PLW) based on records, site visits and evaluation of urban context.
- Assessment Categories:
  1. Comfortable for long periods of standing or sitting
  2. Comfortable for short periods of standing or sitting
  3. Comfortable for walking
  4. Uncomfortable for walking
  5. Dangerous and unacceptable





# New Street: Wind Study - Annual Categories New Build Conditions

- Comfortable
- Uncomfortable





## New Street: Wind Results

Summary of locations that changed category between existing and build conditions:

Direction	NW	SW	Storm	Annual
Up 2 Category	3	0	0	2
Up 1 Category	4	6	9	6
No Change	51	53	49	51
Down 1 Category	3	2	4	3
Down 2 Category	1	1	0	0



## New Street: Wind Results

- None of the 62 locations considered is estimated to have PLWs that exceed BRA guidelines.
- No location is predicted to have dangerous winds as often as once a year.
- No location is predicted to have PLWs higher than Category 3 (comfortable for walking).

## ■ ■ ■ | New Street: Public Access Substitution

- Proposed Substitution:  
Minimum standard width of Harborwalk will be widened from the required 10' to 12' (10' clear).
- The substitution directly benefits the public through enhanced access; no Offsetting Benefit is required.



# Harborwalk

4. A signed connection should be provided along the New Street Waterfront Way if a Harborwalk is not feasible through the DPA





## New Street: Amplification

- Proposed Amplification:

Additional activation of the Harborwalk and waterfront open space will be provided through the use of historic interpretive elements and displays (following guidance provided in the document).

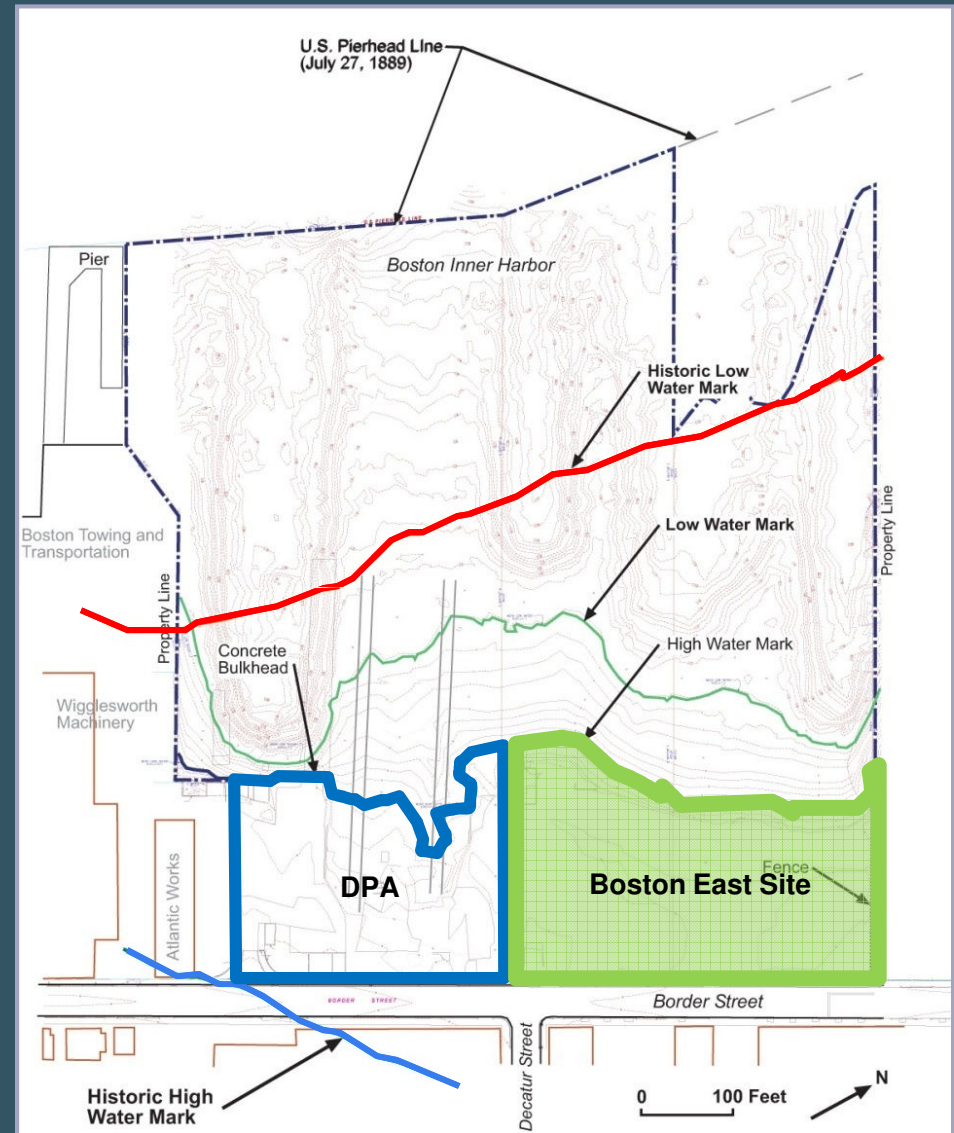


# Boston East: Proposed Development



# Boston East: Chapter 91 Jurisdiction

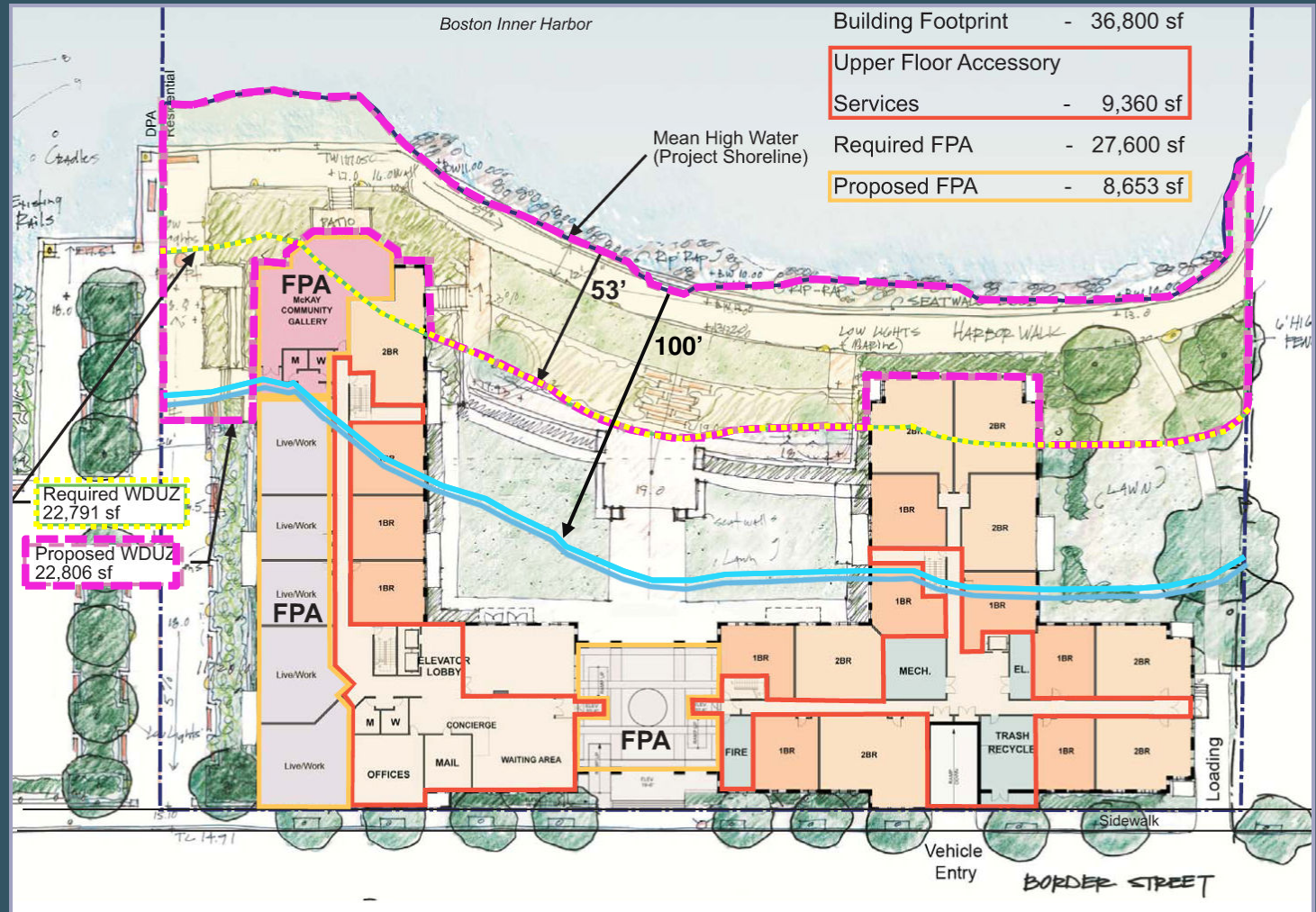
- Commonwealth Tidelands due to public ownership







# Boston East: Chapter 91 Compliance



## ■ ■ ■ | Boston East: Proposed Substitutions

- **310 CMR 9.51(3)(b)**: Setbacks for Nonwater-dependent Facilities of Private Tenancy (FPT).

*(Note: This substitution was not included in the 3/5/2008 Draft MHP Amendment)*

- **310 CMR 9.51(3)(c)**: Setbacks from a Water-dependent Use Zone (WDUZ).
- **310 CMR 9.51(3)(e)**: Height Standards and Related Impacts on Public Use or Access.



## Boston East: Proposed Substitutions

- 310 CMR 9.52(1)(b): Public Access Network.
- 310 CMR 9.53(2)(c): Activation of Commonwealth Tidelands for Public Use.



## Boston East: Setbacks Substitution

- Proposed Substitution:

Approximately 5,800 sf of nonwater-dependent FPT will be allowed to be located within 100' of the project shoreline.

- Proposed Offsetting Benefits:

At least an equivalent area of FPAs will be provided; approximately 2,500 sf of open area within the proposed archway of the building will be animated with historic exhibits and interpretive displays.





## Boston East: WDUZ Substitution

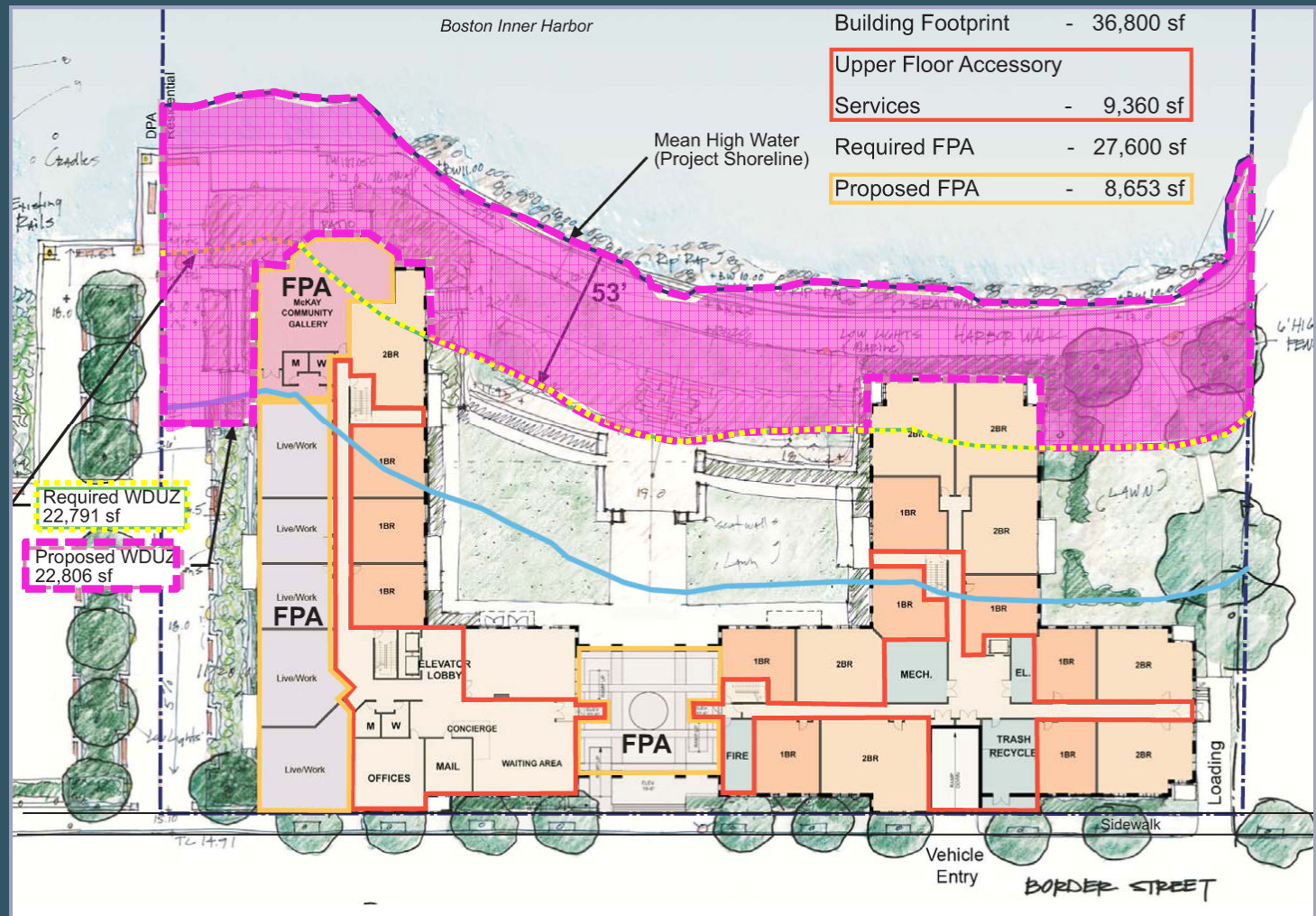
- Proposed Substitution:

A reconfigured WDUZ will allow for a minimum setback from the project shoreline of 25' for buildings containing nonwater-dependent uses.

- Proposed Offsetting Benefits:

The same overall area than the standard WDUZ requirement will be maintained (approximately 22,800 sf) by providing wider setbacks in other areas of the site.

# Boston East: WDUZ Substitution





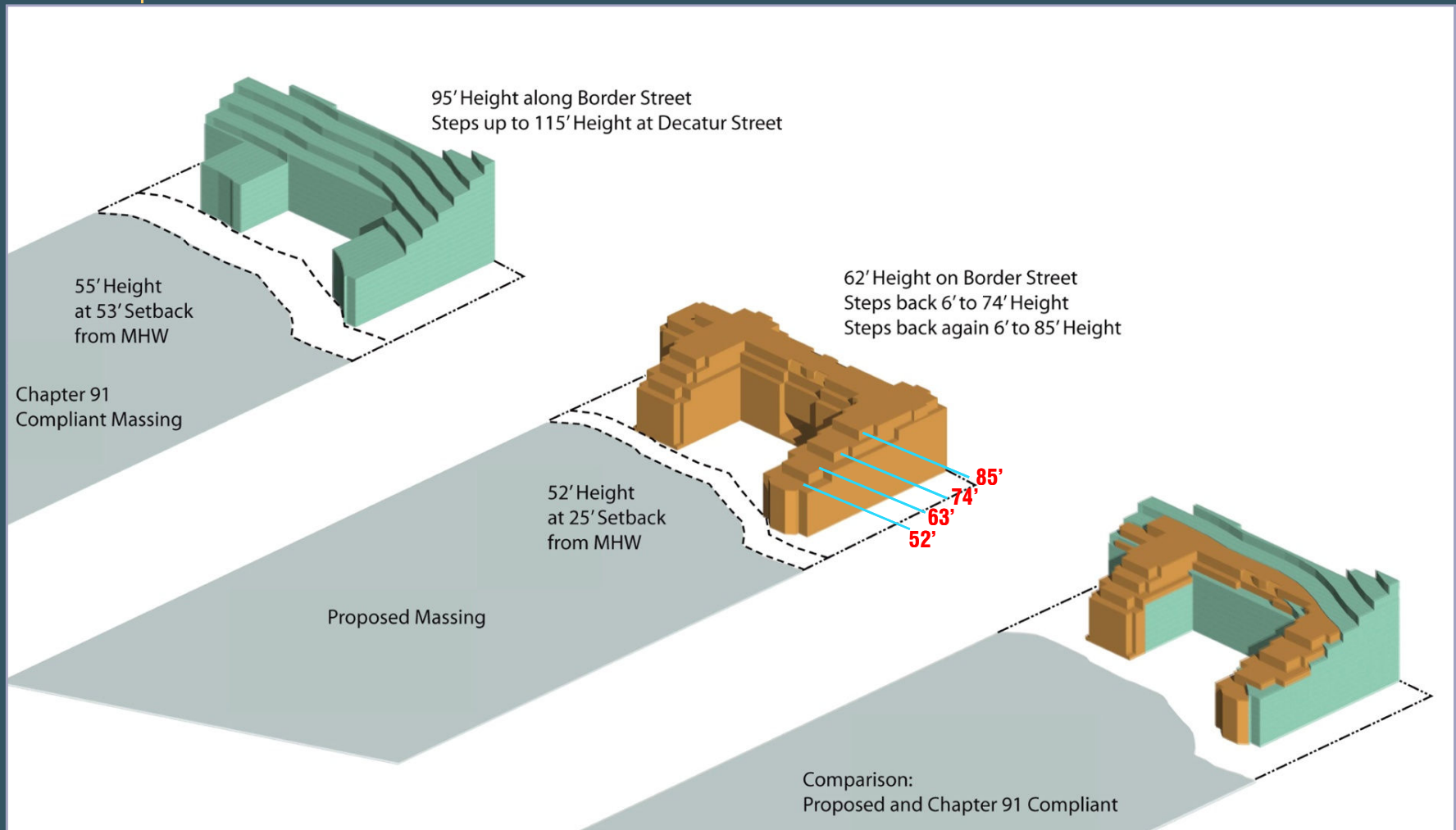
## Boston East: Height Substitution

- Proposed Height Substitution:  
85' Maximum Building Height, as shown by massing
- Proposed Offsetting Benefit:  
2,201 sf of open space to offset approximately  
4,202 sf of net new shadow  
Open space will include access and amenities



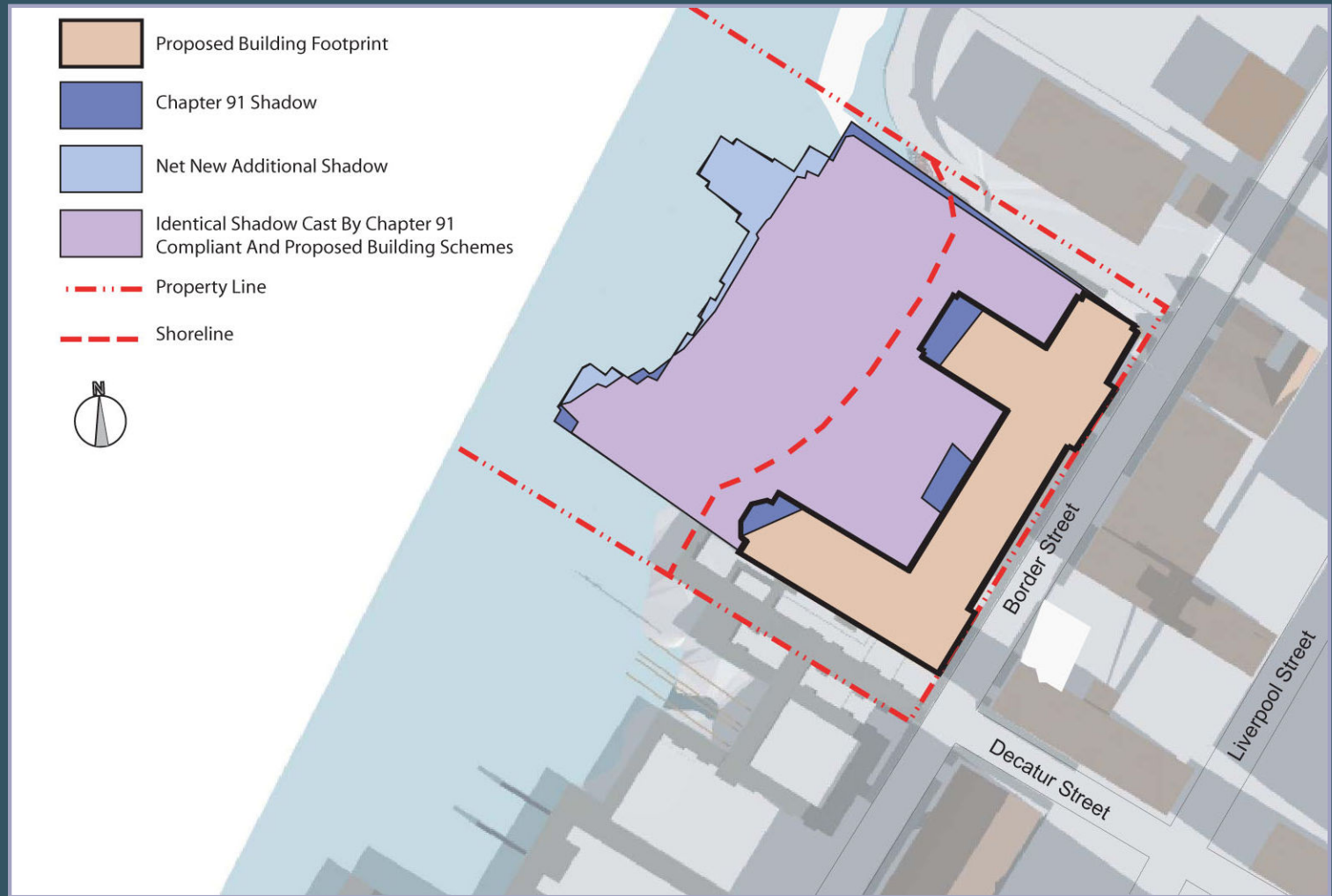


# Boston East: Building Massing



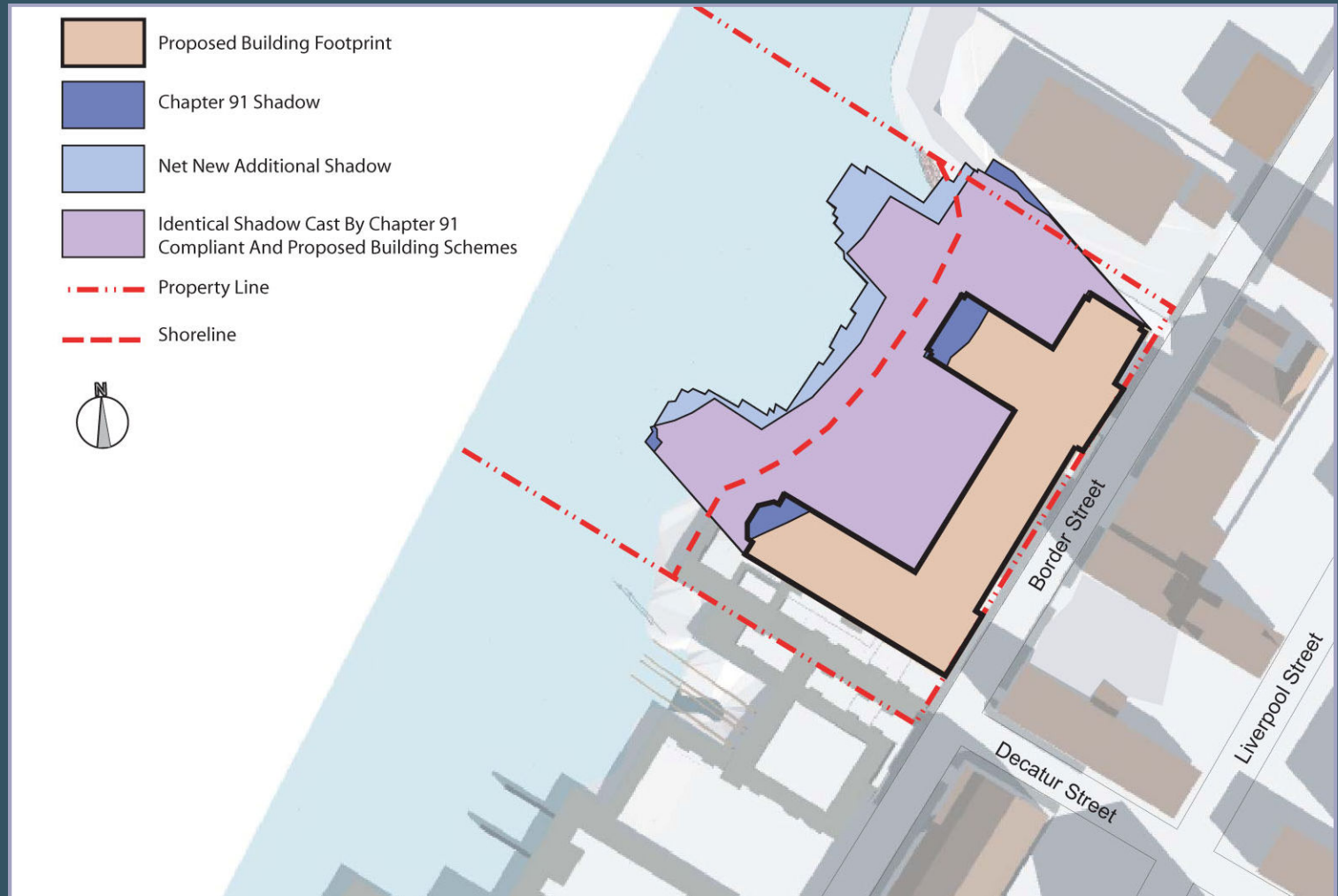


# Boston East: Shadow Study – 9 am



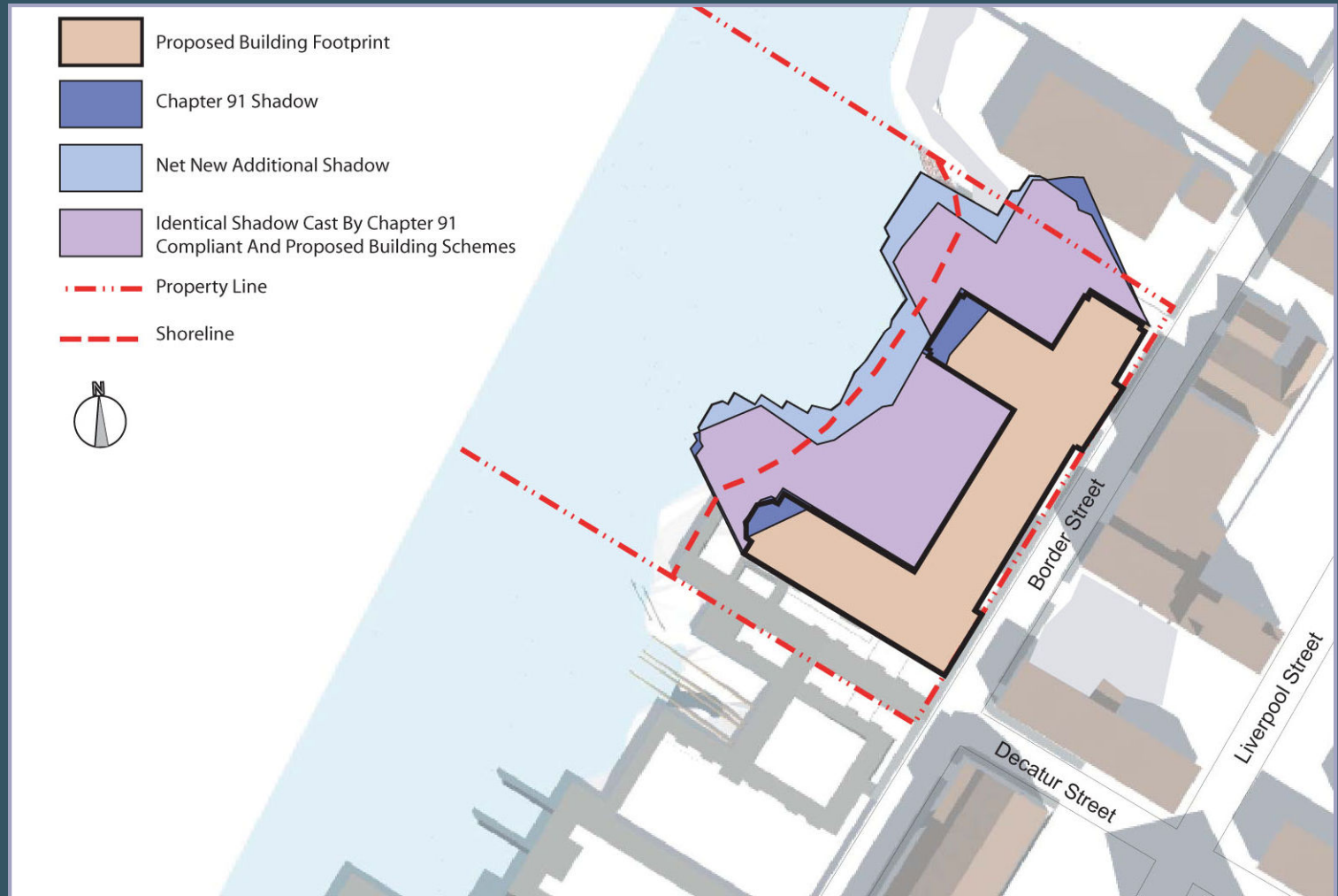


# Boston East: Shadow Study – 10 am



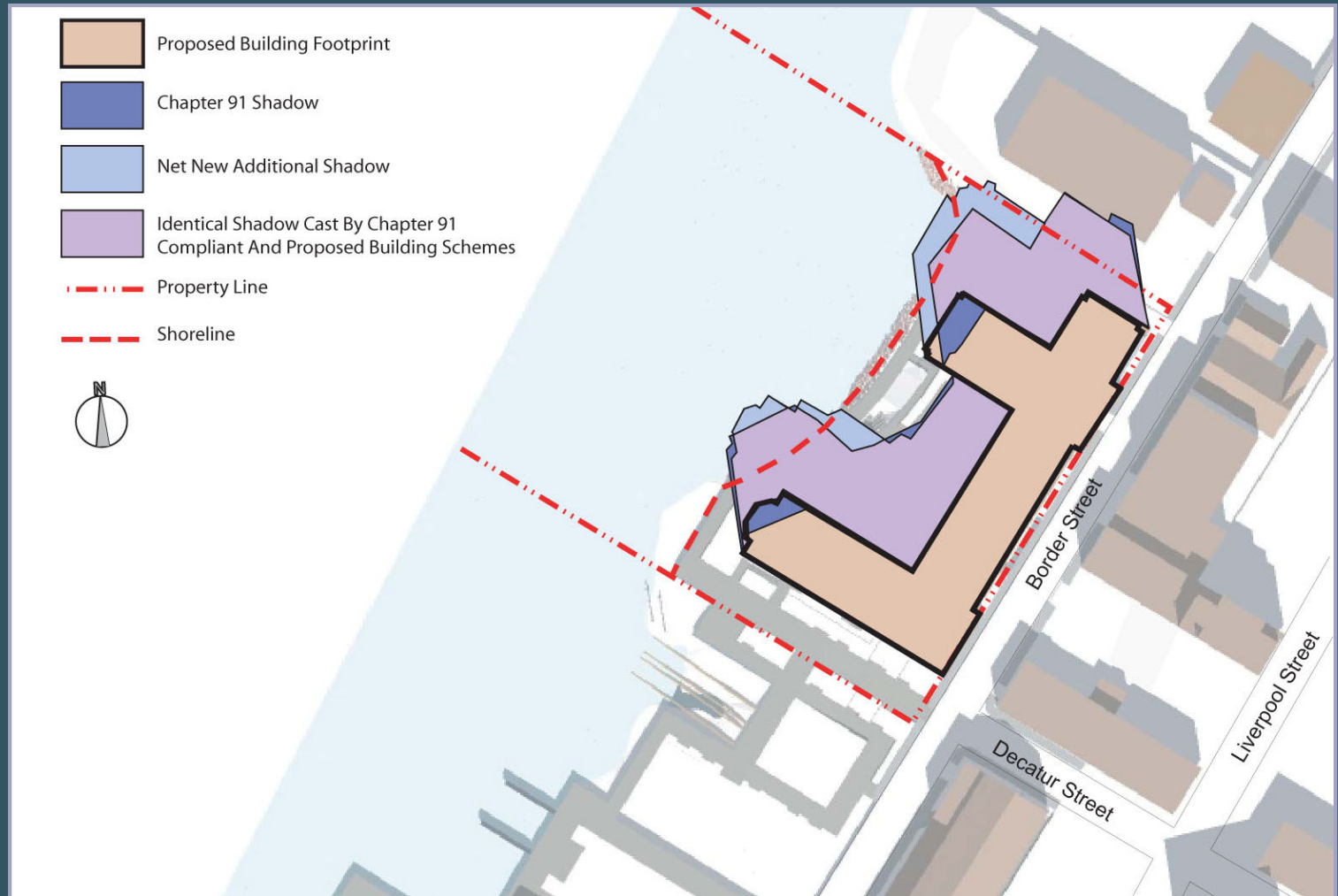


# Boston East: Shadow Study – 11 am



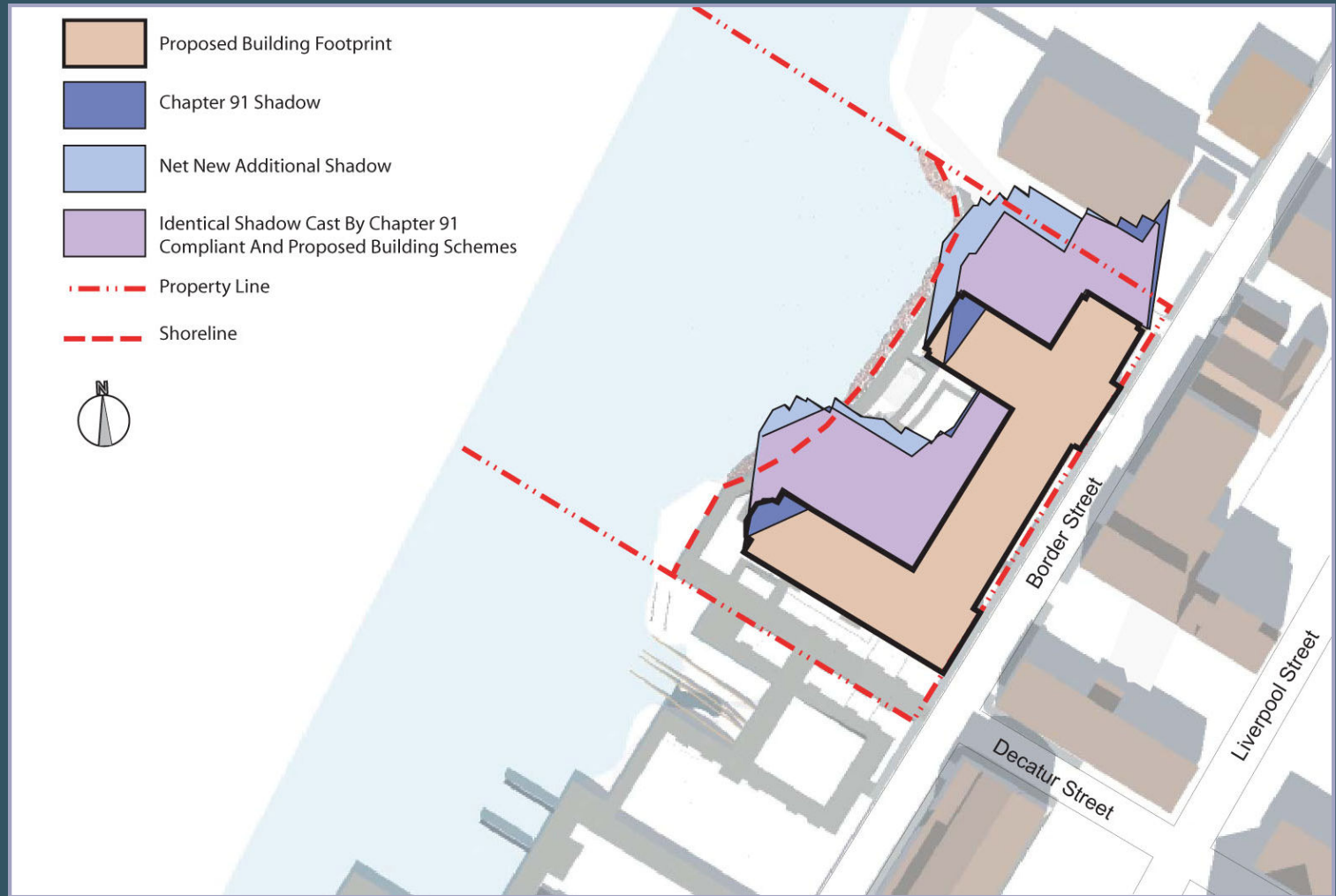


# Boston East: Shadow Study – 12 pm



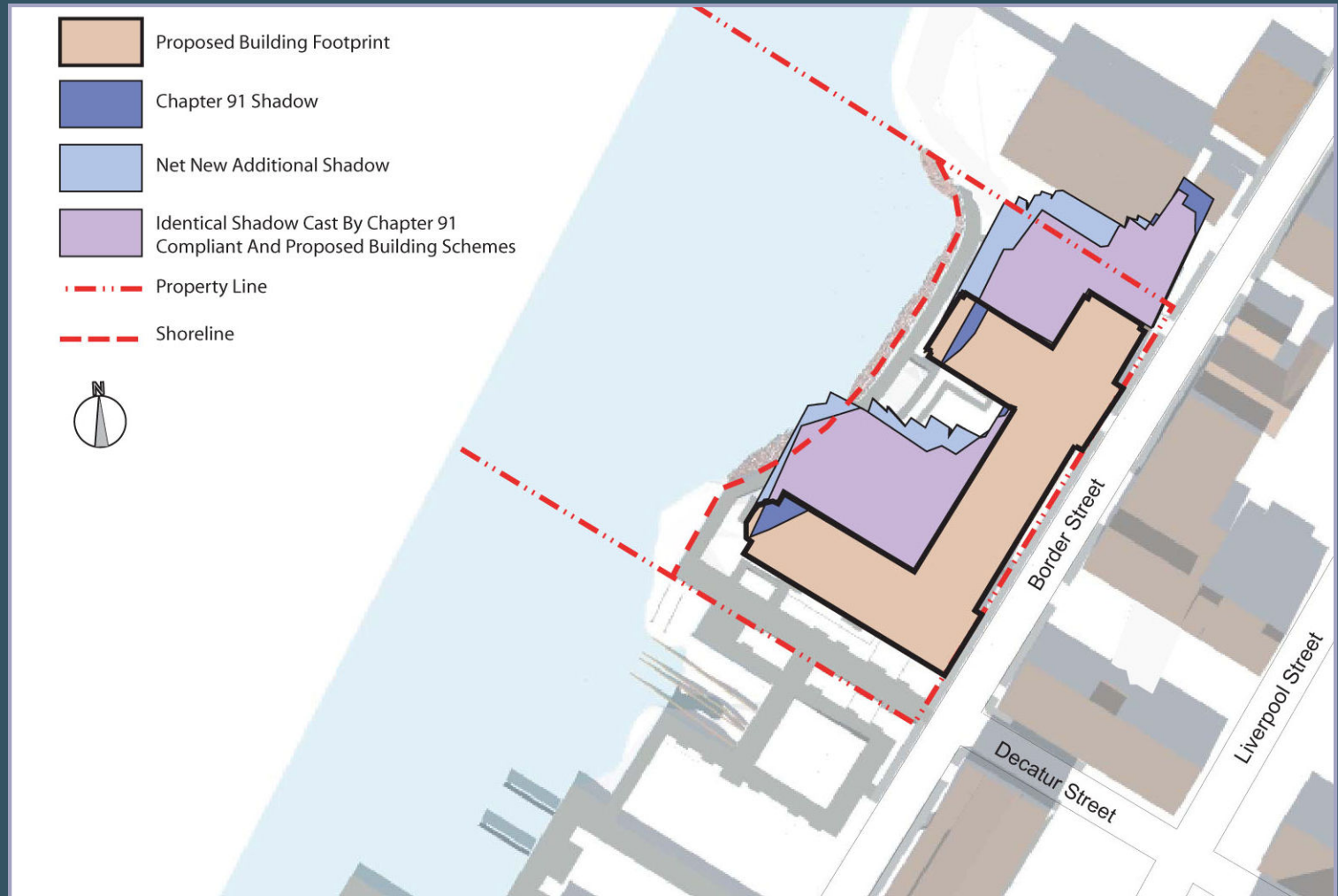


# Boston East: Shadow Study – 1 pm



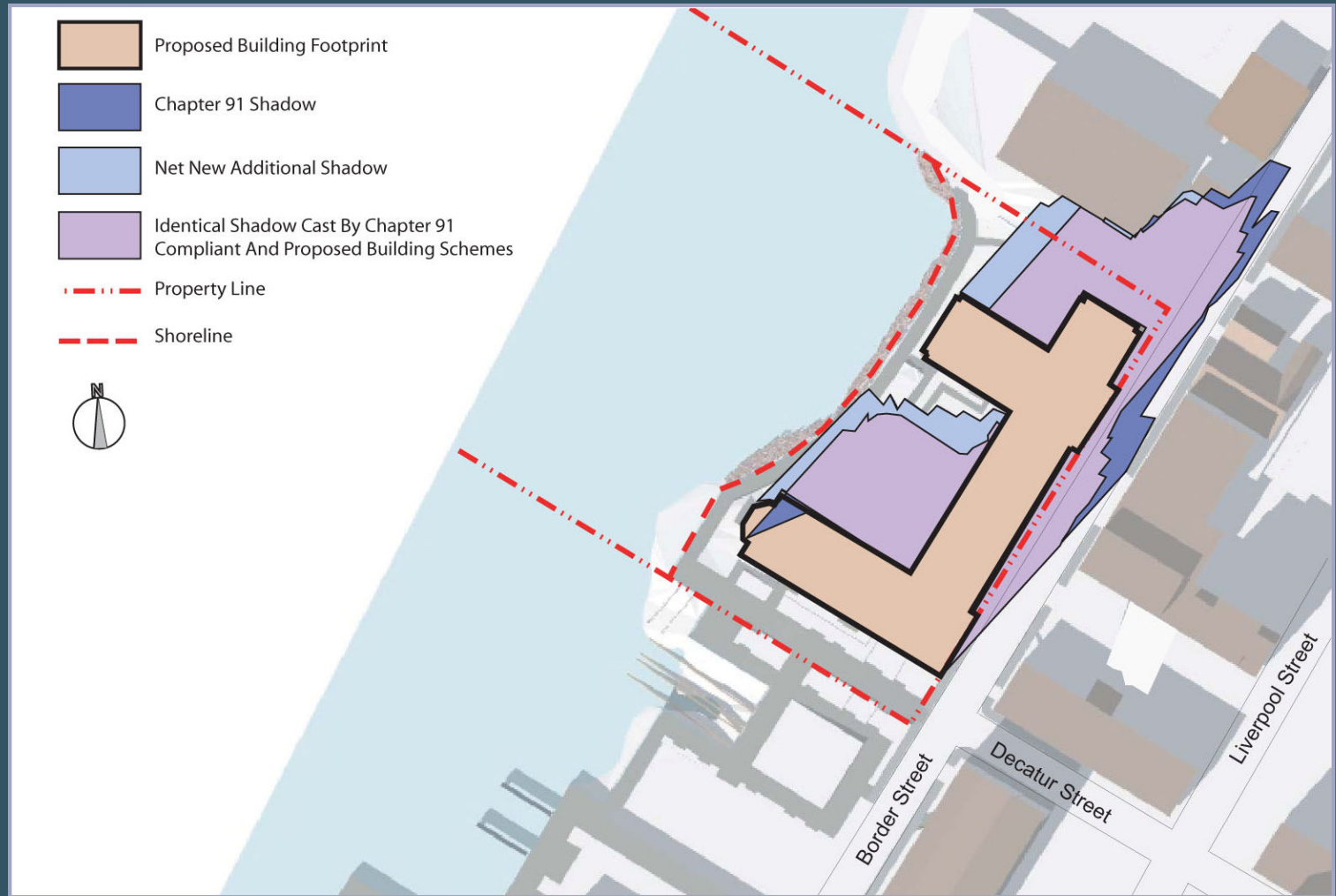


# Boston East: Shadow Study – 2 pm





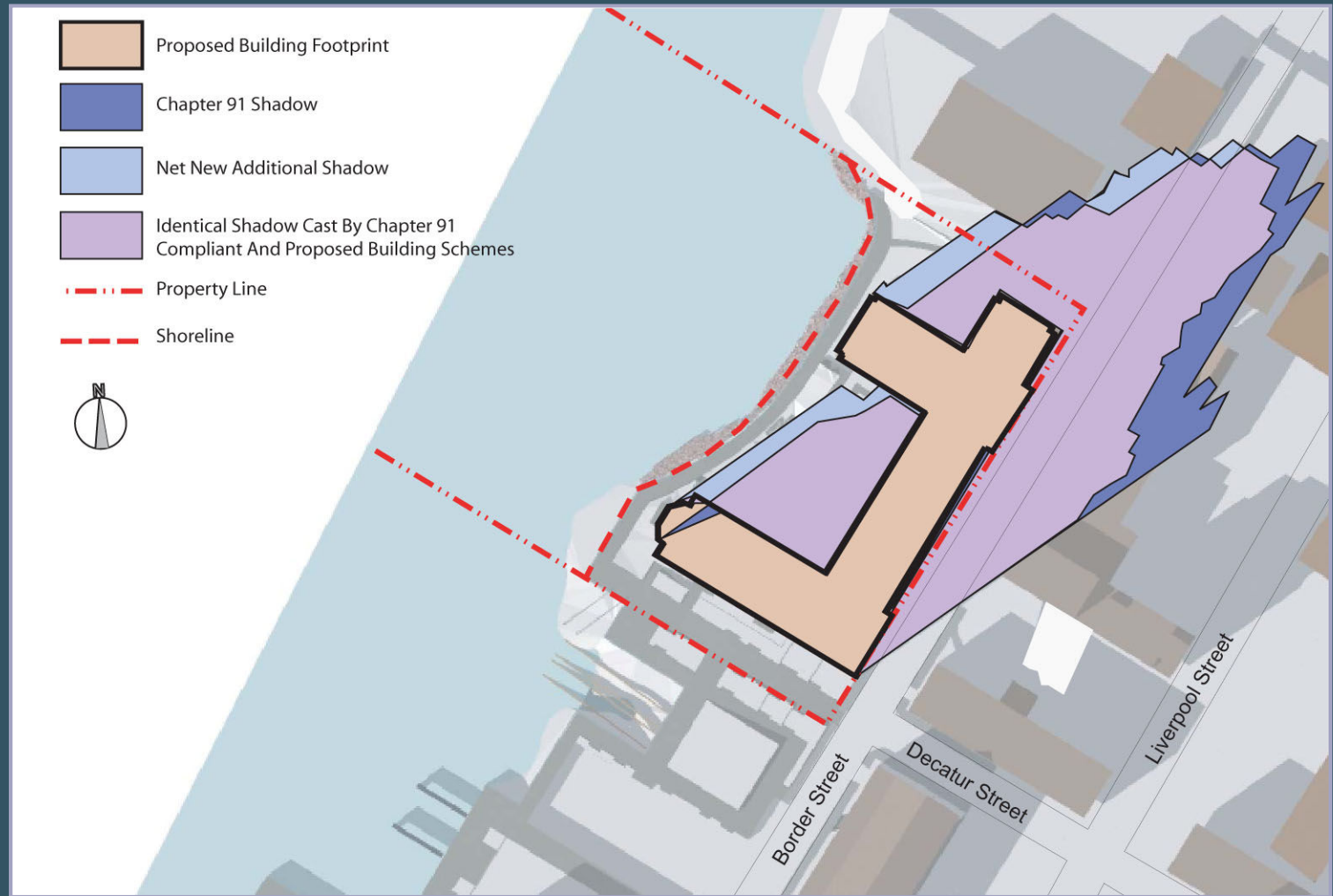
# Boston East: Shadow Study – 3 pm







# Boston East: Shadow Study – 4 pm



## ■ ■ ■ | Boston East: Shadow Results

- Calculations indicate that approximately 4,402 sf of net new shadow will be generated by the proposed building volume with respect to the shadows that would be cast by the baseline Chapter 91-compliant building volume.



# Boston East: Annual Categories - Existing Conditions

 Comfortable

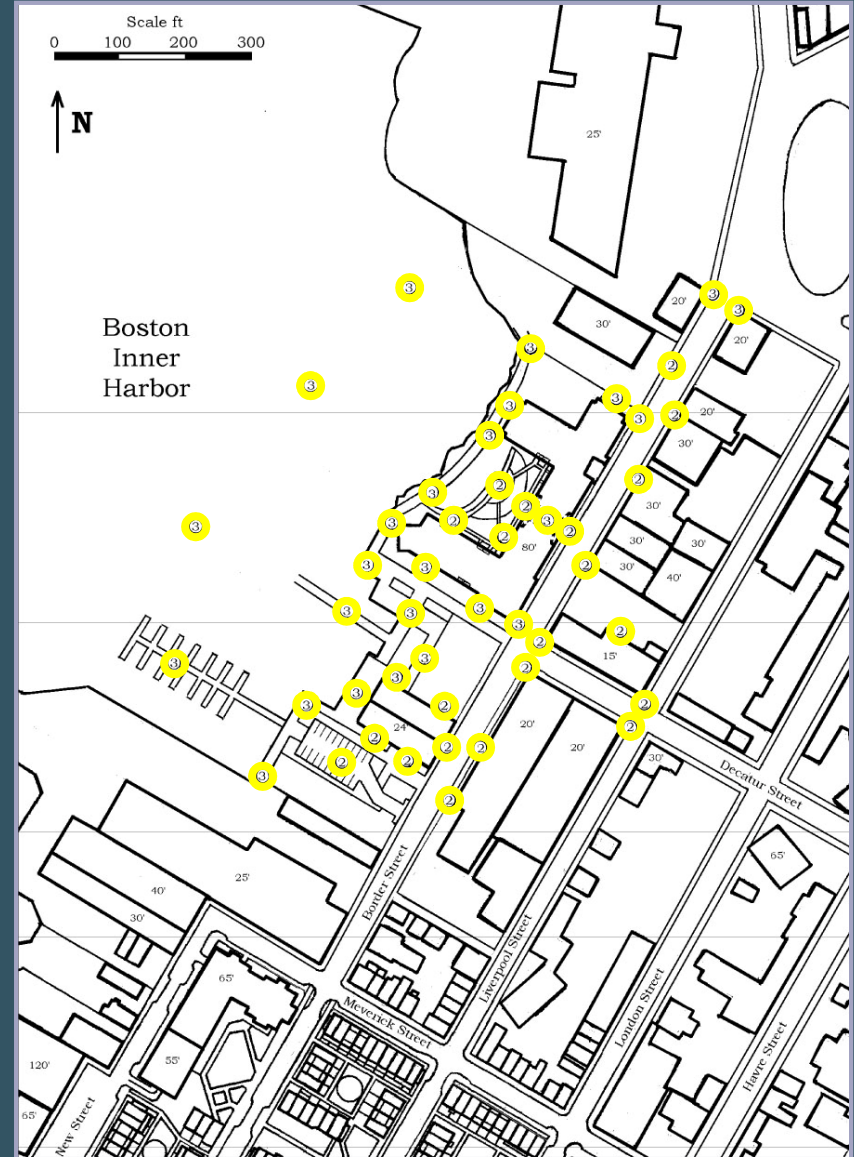
 Uncomfortable



# Boston East: Annual Categories - New Build Conditions

○ Comfortable

○ Uncomfortable





# Boston East: Wind Results

Summary of locations that changed category between existing and build conditions:

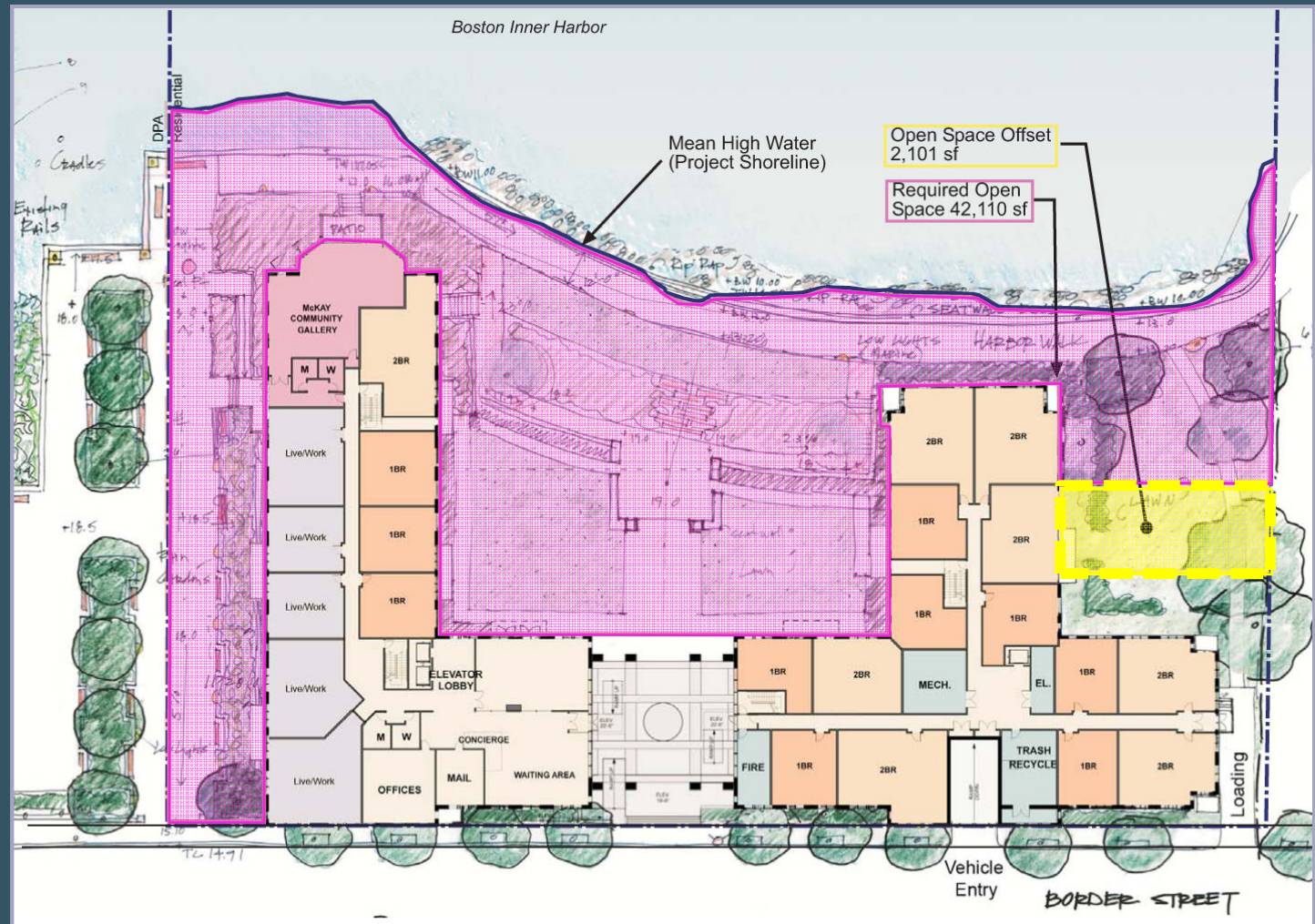
Direction	NW	SW	Storm	Annual
Up 2 Category	0	0	0	0
Up 1 Category	0	0	5	1
No Change	32	28	20	32
Down 1 Category	10	14	15	13
Down 2 Category	4	4	6	0



## Boston East: Wind Results

- None of the 46 locations is estimated to have PLWs that exceed BRA guidelines.
- No location is predicted to have dangerous winds as often as once a year.
- No location is predicted to have PLWs higher than Category 3 (comfortable for walking)

# Boston East: Height Offsetting Benefit





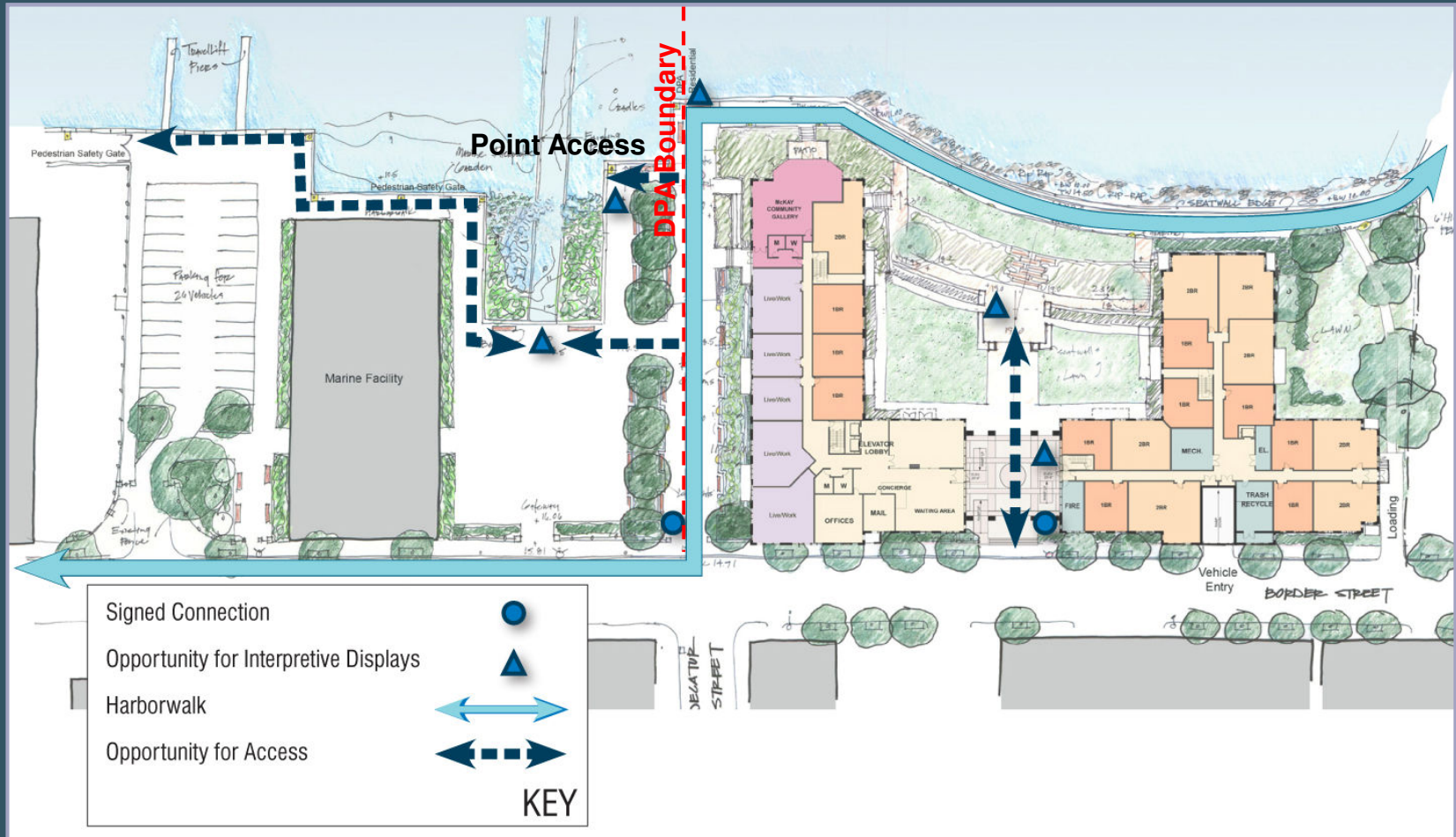
## Boston East: Public Access Substitution

- Proposed Substitution:  
Minimum standard width of Harborwalk will be widened from the required 10' to 12' (10' clear).
- The substitution directly benefits the public through enhanced access; no Offsetting Benefit is required.





# Boston East: Harborwalk Access





## Boston East: Activation Substitution

- Proposed Substitution:

Permit FPTs to occupy up to 75% of the ground floor (excluding upper floor accessory uses) in Commonwealth tidelands that are publicly owned.



## Boston East: Activation Offset

- Proposed Offsetting Public Benefits:

A minimum of 25% of the ground floor (excluding upper floor accessory uses) shall be devoted to civic and cultural facilities, including:

1. Artist live/work and artist work space (certified through the BRA certification process), open to the public no less than two times per year.
2. Gallery exhibition space.



## Boston East: Activation Offset

- Proposed Offsetting Public Benefits:

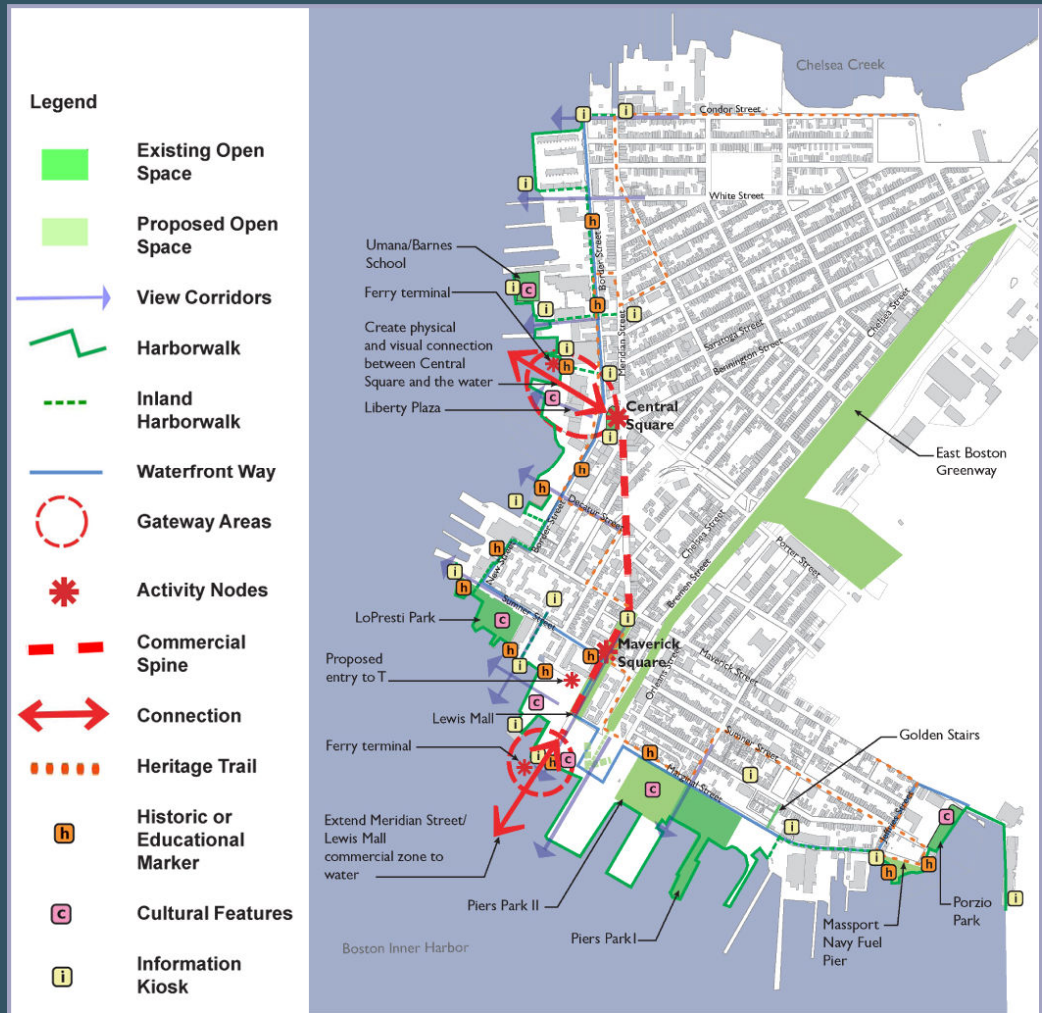
A minimum of 25% of the ground floor (excluding upper floor accessory uses) shall be devoted to civic and cultural facilities, including:

3. Teaching space.
4. Maritime history interpretive exhibit space.
5. Community meeting room and community center.

Facilities will be managed and programmed year-round.



# MHP Open Space Concept Plan





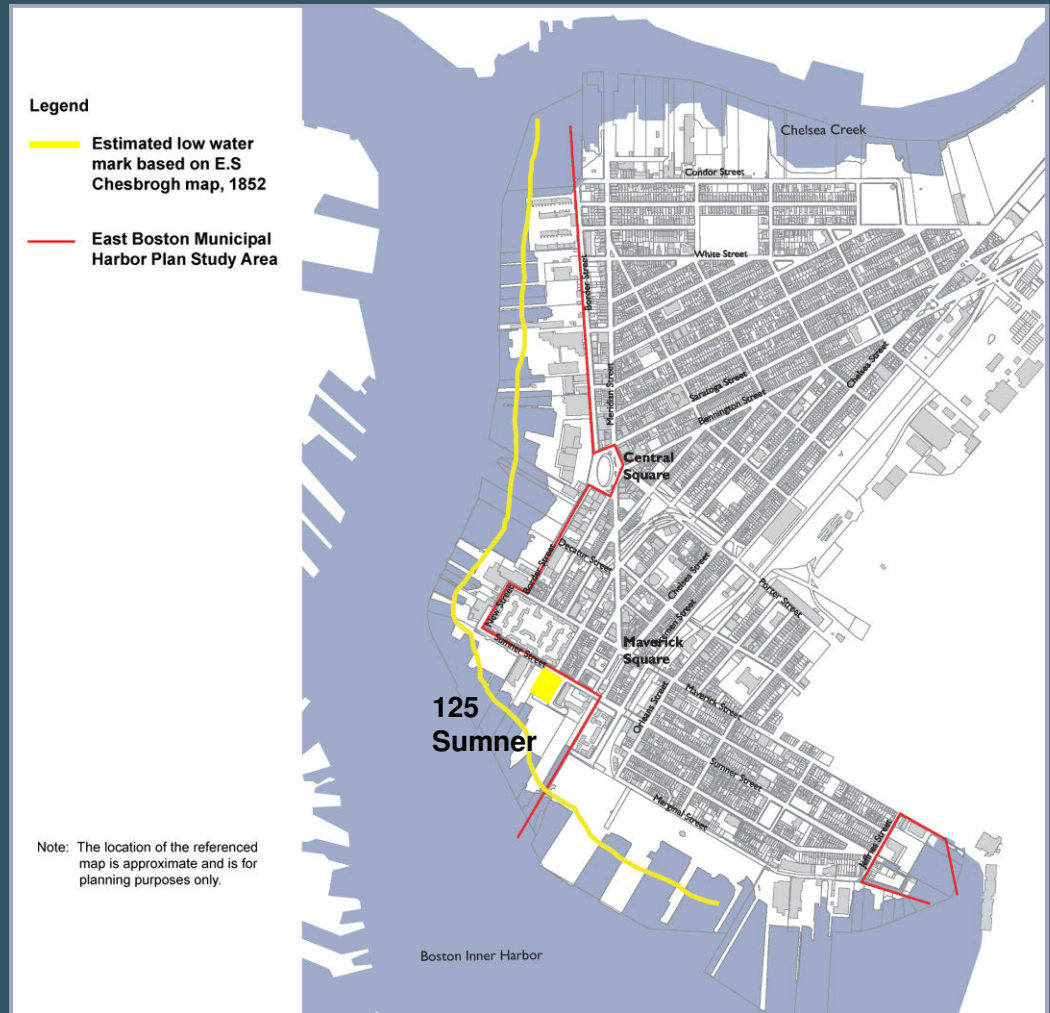
# 125 Sumner Street

- No shoreline
- Commonwealth Tidelands due to public ownership
- Owned by BHA
- Mission to provide affordable housing





# Commonwealth Tidelands



## 125 Sumner Street: Activation Substitution

- Proposed Substitution:  
Permit FPTs to occupy up to 75% of the ground floor (excluding upper floor accessory uses) in Commonwealth tidelands that are publicly owned.
- Proposed Offsetting Benefits:  
A minimum of 25% of the ground floor (excluding upper floor accessory uses) shall be devoted to civic and cultural facilities open to the public.





# East Boston Municipal Harbor Plan Update

Municipal Harbor Planning  
Committee Meeting



East Boston Waterfront District MHP Amendment