

**bxp** Boston Properties

**Pelli Clarke Pelli** Architects

**ARROWSTREET**

**OJB** THE OFFICE OF JAMES BURNETT  
LANDSCAPE ARCHITECTURE

MAGNUSSON KLEMENCIC ASSOCIATES

**WSP** | PARSONS BRINCKERHOFF

McNAMARA · SALVIA

**BRIA**

**AHA** CONSULTING ENGINEERS

**vhb**

**ARUP**

**HALEY ALDRICH**

**RWDI**  
CONSULTING ENGINEERS & SCIENTISTS

**JENSEN HUGHES**

**Nutter**

# THE BACK BAY SOUTH END GATEWAY PROJECT

BOSTON, MASSACHUSETTS

FEBRUARY 23, 2017

CAC MEETING #8





# AGENDA

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- Introductions (5 Min.)
- Review Of Article 80 Process And Project Status (5 Min.)
- Project Design & Refinements Since PNF/ENF (15 Min.)
- Public Realm Improvements (15 Min.)
- Wind And Shadow (15 Min.)
- CAC Comment (20 Min.)
- Public Comment (20 Min.)
- Next Steps (5 Min.)



# PROJECT PROCESS

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- Article 80 Review
  - PNF
  - **DPIR (Draft Project Impact Report)**
  - FPIR (Final Project Impact Report) Or Supplemental Information As Requested
- MEPA Review (Concurrent)
  - ENF
  - **DEIR (Draft Environmental Impact Report)**
  - FEIR (Final Environmental Impact Report)
- PDA #2 (Planned Development Area)
  - Existing PDA Encompasses Garage Sites + Existing Building
  - Will Be Amended To Include Station Sites + Related Elements



# PROJECT STATUS

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- Key Dates
  - PNF Filing • March 29, 2016
  - ENF Filing • April 15, 2016
  - CAC #1 • April 28, 2016
  - CAC #2 • May 12, 2016 (Site Visit)
  - CAC #3 • May 26, 2016
  - CAC #4 • June 15, 2016
  - CAC #5 • June 29, 2016
  - CAC #6 • July 13, 2016
  - CAC #7 • October 6, 2016
  - DPIR/DEIR Filing • January 31, 2017
  - **CAC #8 • February 23, 2017**



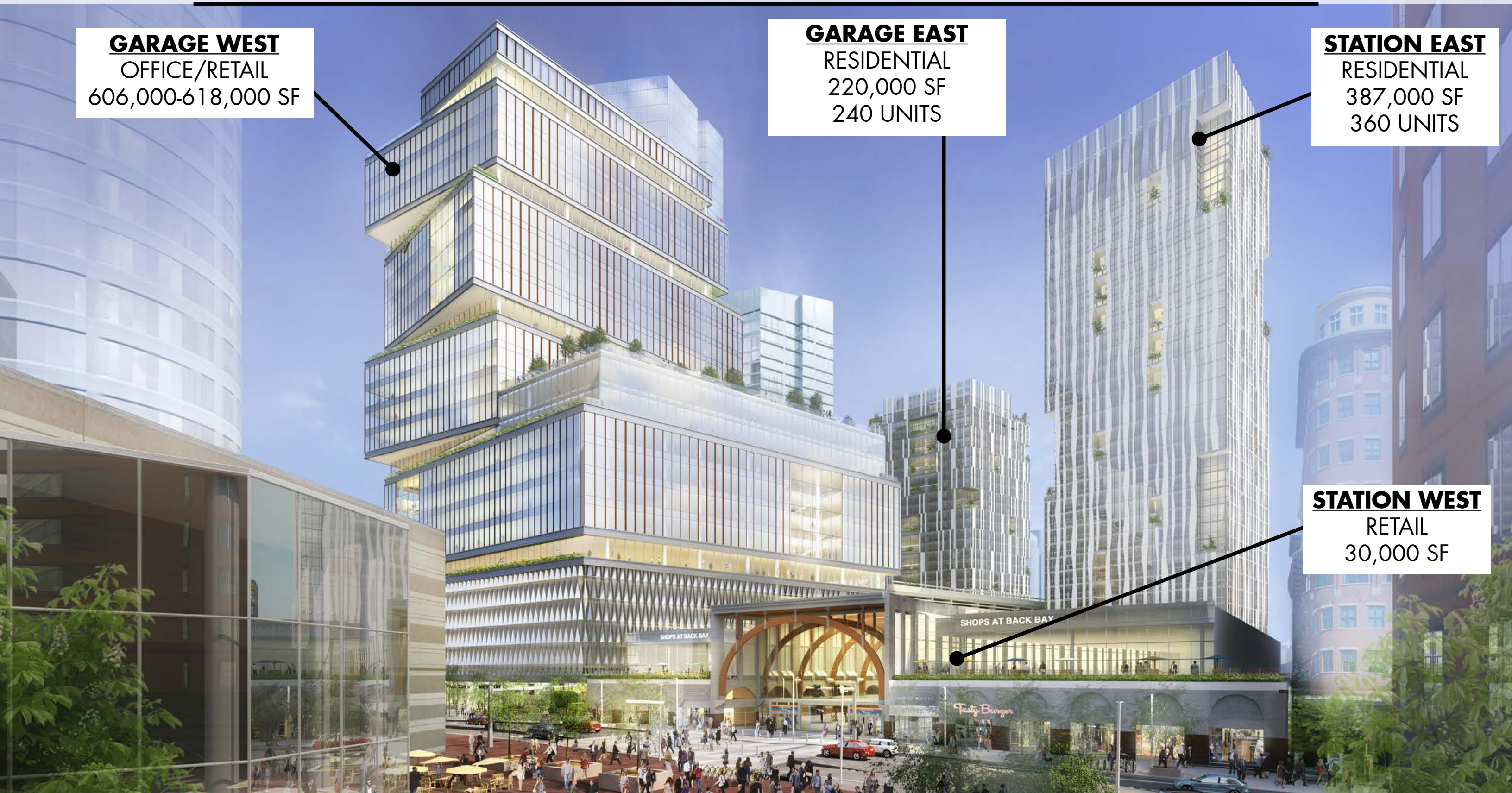
# PROJECT DESCRIPTION

**GARAGE WEST**  
OFFICE/RETAIL  
606,000-618,000 SF

**GARAGE EAST**  
RESIDENTIAL  
220,000 SF  
240 UNITS

**STATION EAST**  
RESIDENTIAL  
387,000 SF  
360 UNITS

**STATION WEST**  
RETAIL  
30,000 SF



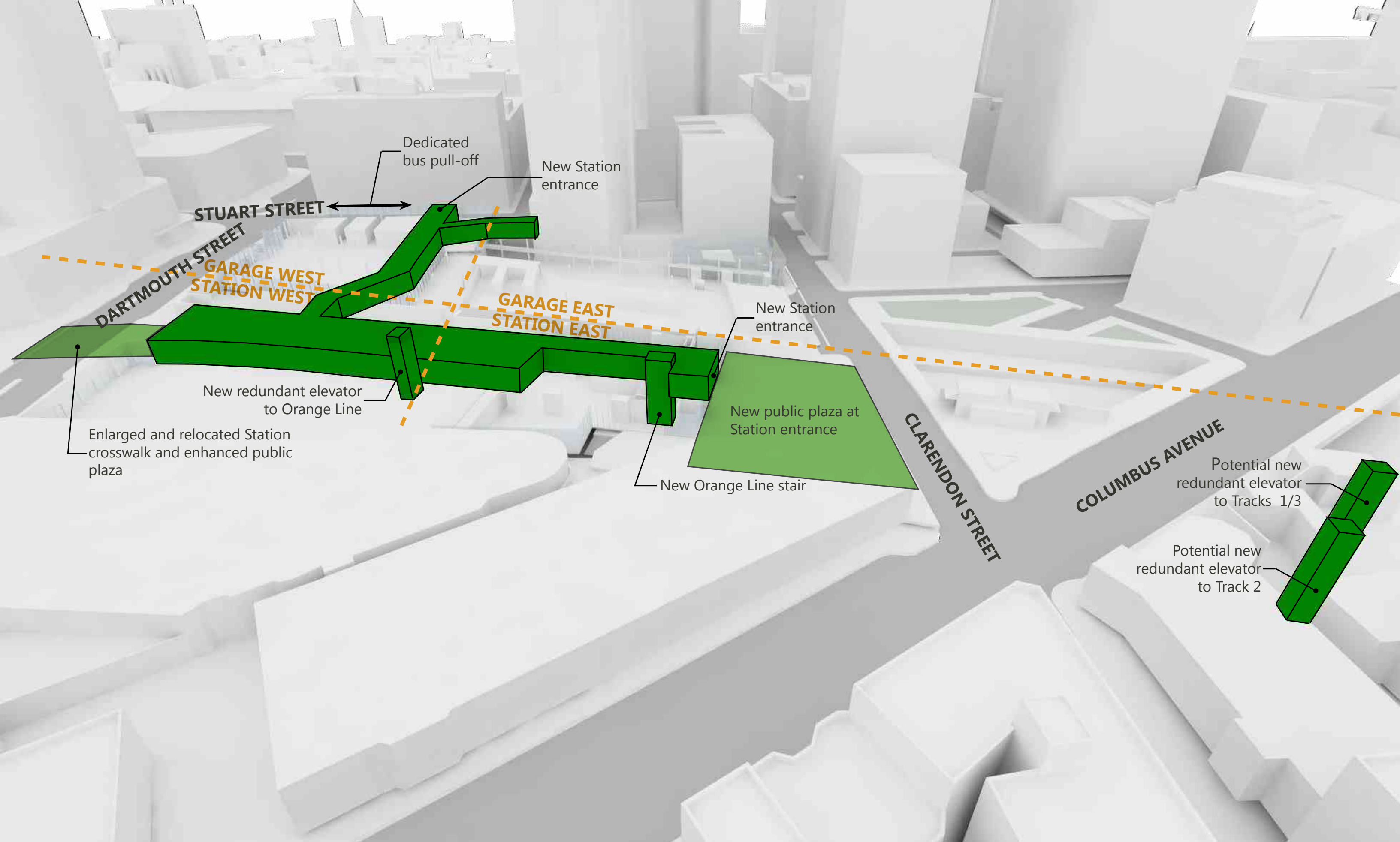


# PUBLIC BENEFITS

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- Approximately \$15.3 Million In New Annual Real Estate Tax Revenues For The City Of Boston
- Approximately \$5,500,000 In Housing Linkage And \$1,100,000 In Job Linkage Payments
- Approximately 2,500 Construction Jobs And Approximately 3,200 Permanent Jobs Across All Four Air Rights Parcel
- A Variety Of New High Quality Housing Opportunities, Including The Creation Of Affordable Housing
- New Entrances And Accessible Connections To The Station, Increasing Neighborhood Connectivity And Public Safety
- Significant Public Realm Improvements Within The Project Site Including The Creation Of An 11,000sf Public Plaza
- New And Diverse Retail Opportunities For Neighborhood Residents, Transit Customers And The Public At Large
- Innovative New Workplace Opportunities For A Variety Of Business Types





STUART STREET

DARTMOUTH STREET

GARAGE WEST STATION WEST

GARAGE EAST STATION EAST

CLARENDON STREET

COLUMBUS AVENUE

Dedicated bus pull-off

New Station entrance

New Station entrance

New redundant elevator to Orange Line

Enlarged and relocated Station crosswalk and enhanced public plaza

New public plaza at Station entrance

New Orange Line stair

Potential new redundant elevator to Tracks 1/3

Potential new redundant elevator to Track 2



# COMMUNITY/AGENCY FEEDBACK & PROJECT EVOLUTION

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- Desire For Public Open Space
  - Desire To Preserve Architectural Integrity Of Back Bay Station
  - Desire To See More Detail On Public Realm Design
- 
- Station East
    - Addition Of 11,000sf Public Plaza
  - Station West
    - Abandoned Two-Story Addition
  - Site Wide
    - Detailed Development & Phasing Of Public Realm Improvements





VIEW 7 - AERIAL LOOKING TO THE NORTHEAST - FUTURE EXISTING CONDITION





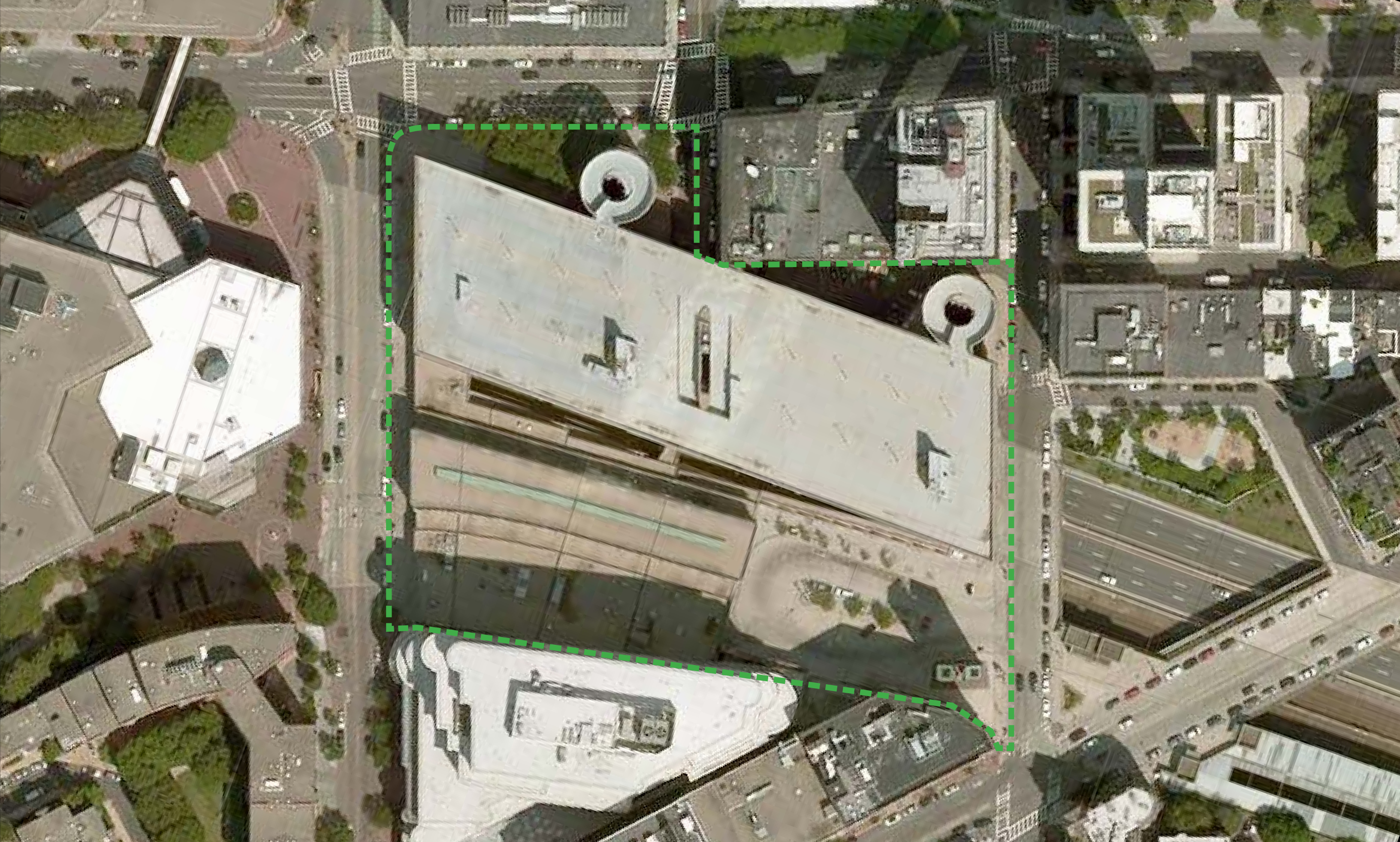
VIEW 7 - AERIAL LOOKING TO THE NORTHEAST - FUTURE PROPOSED BASE SCHEME



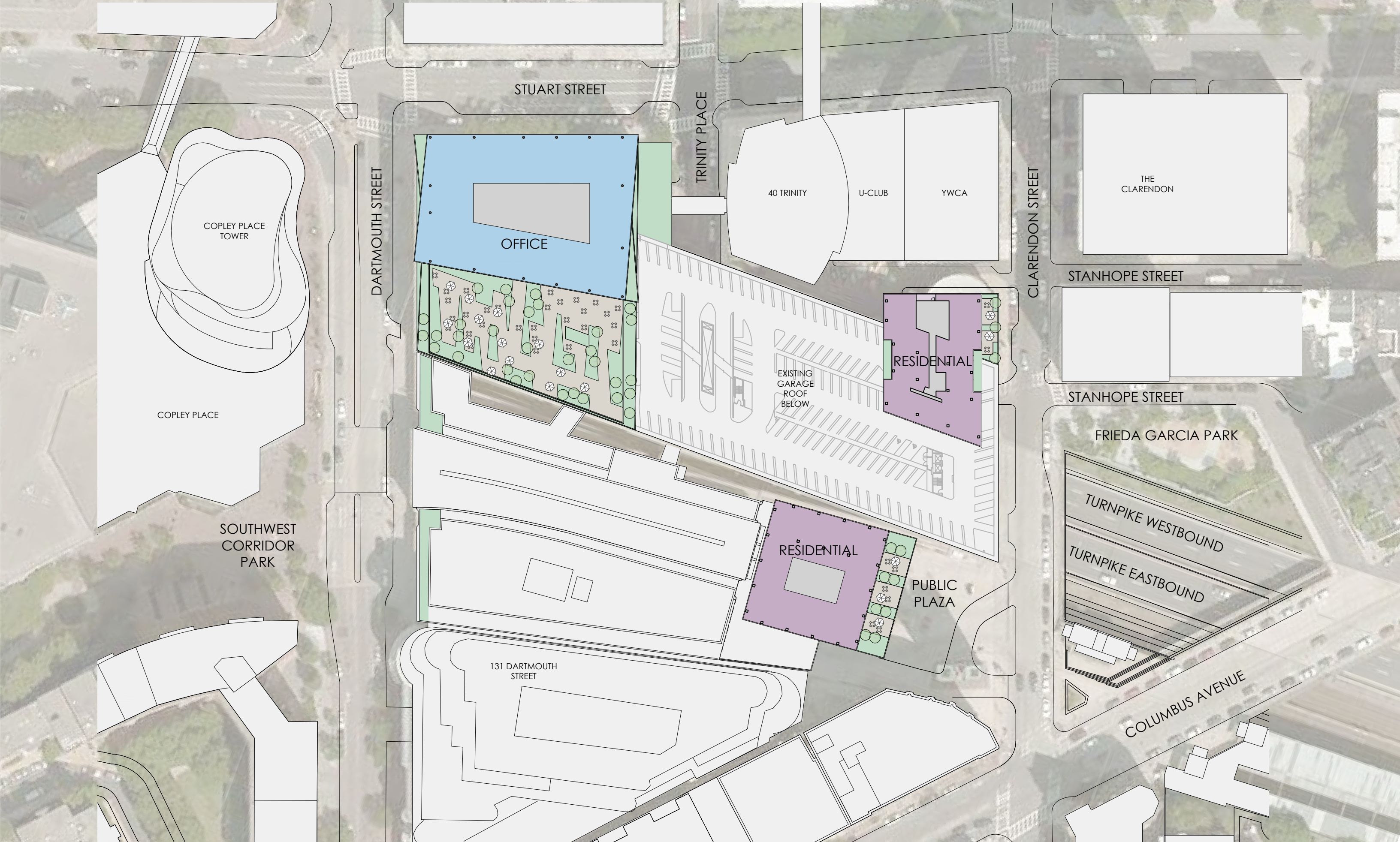


VIEW 7 - AERIAL LOOKING TO THE NORTHEAST - FUTURE PROPOSED ALTERNATE SCHEME



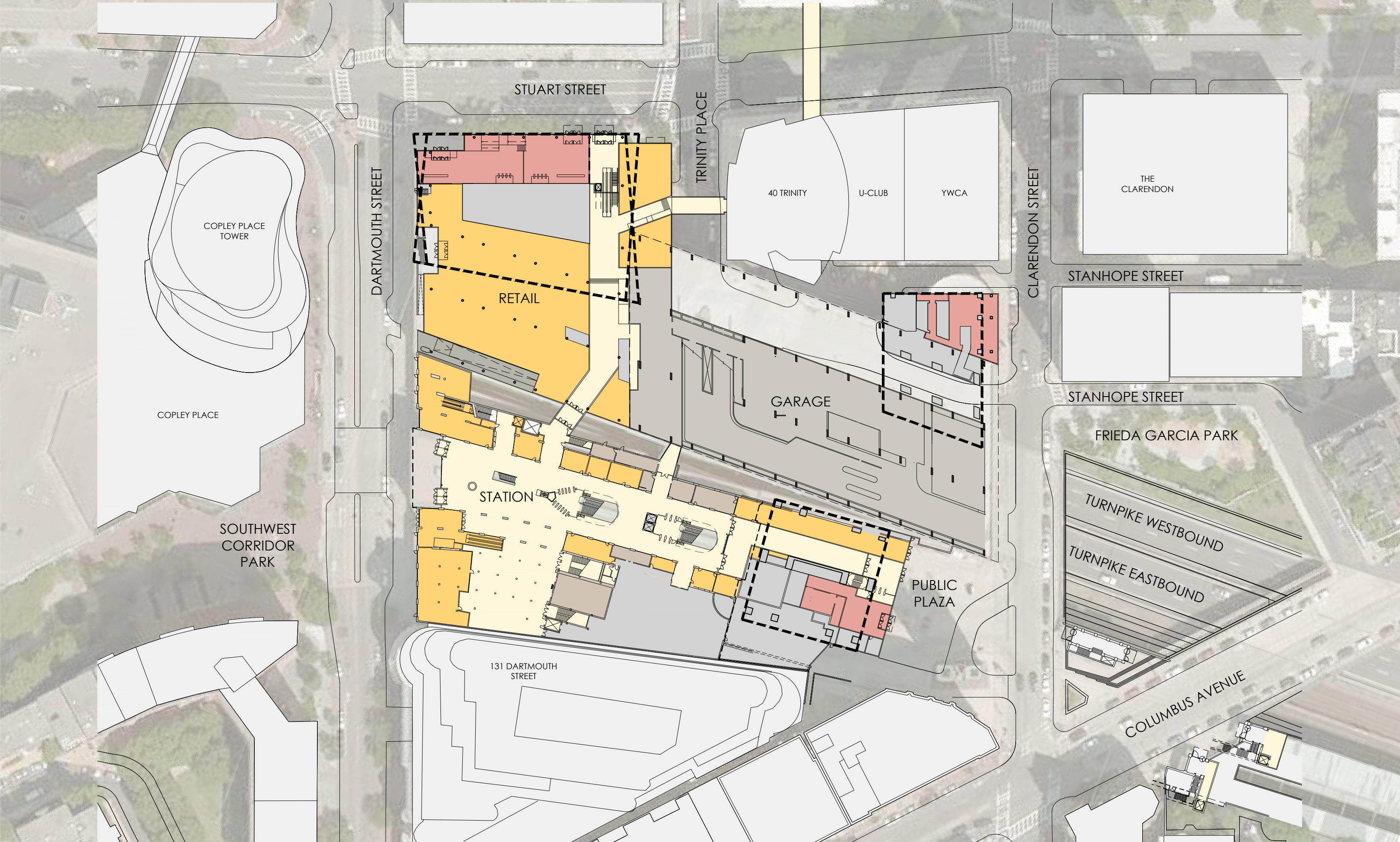






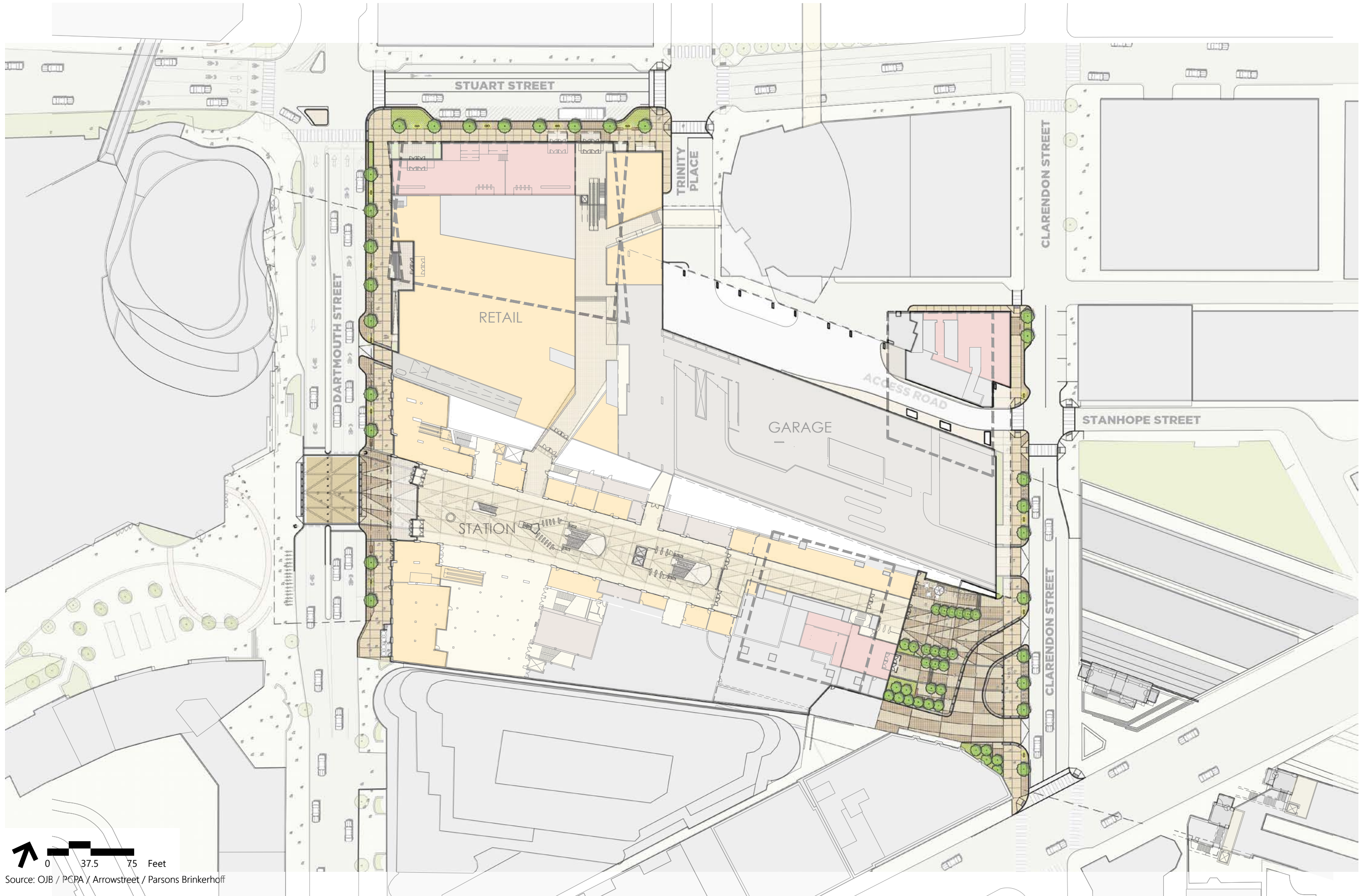
GW: TYPICAL PLAN • GE: TYPICAL PLAN • SE: TYPICAL LEVEL • SW: ROOF PLAN





GW: BASE SCHEME DECK LEVEL • GE: LEVEL 2 • SE: CONCOURSE LEVEL • SW: CONCOURSE LEVEL





0 37.5 75 Feet  
Source: OJB / PCPA / Arrowstreet / Parsons Brinkerhoff

OVERALL LANDSCAPE PLAN





VIEW FROM SOUTHWEST CORRIDOR - EXISTING CONDITIONS





**SECOND FLOOR  
EXTENSION  
ABANDONED**



SHOPS AT BACK BAY

SHOPS AT BACK BAY

BACK BAY STATION

VIEW FROM SOUTHWEST CORRIDOR - ABANDONED SCHEME





VIEW FROM SOUTHWEST CORRIDOR - BASE SCHEME





VIEW FROM SOUTHWEST CORRIDOR - ALTERNATE SCHEME





VIEW FROM DARTMOUTH STREET AND STUART STREET - EXISTING CONDITION



NEW  
STATION  
ENTRANCE



VIEW FROM STUART AND DARTMOUTH STREET - PROPOSED CONDITION





VIEW FROM STUART STREET AND TRINITY PLACE - EXISTING CONDITION





BRIDGE TO  
40 TRINITY

NEW STATION  
ENTRANCE



VIEW FROM STUART STREET AND TRINITY PLACE - PROJECT RENDERING





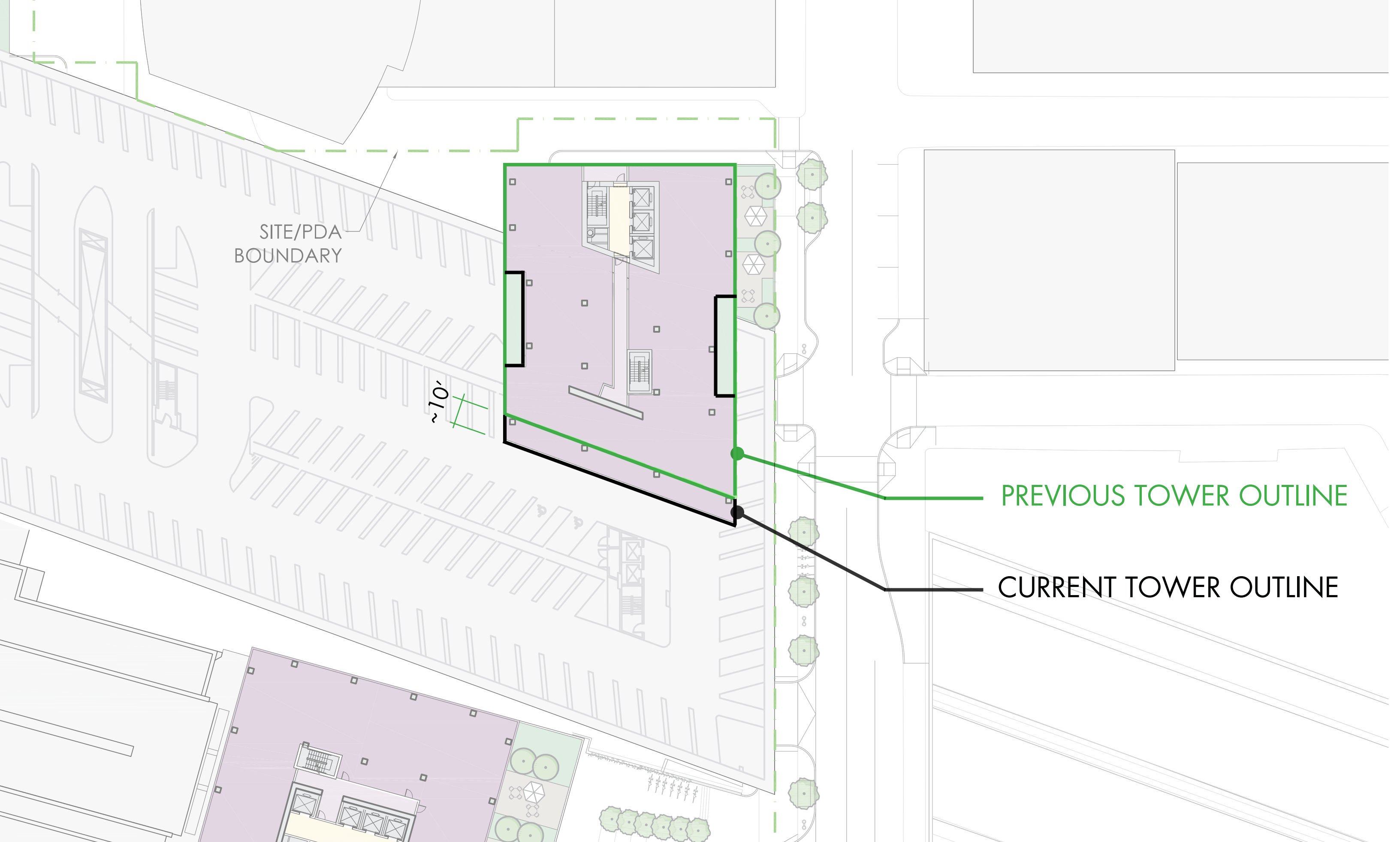
VIEW FROM COLUMBUS AVENUE - EXISTING CONDITION





VIEW FROM COLUMBUS AVENUE - PROJECT RENDERING





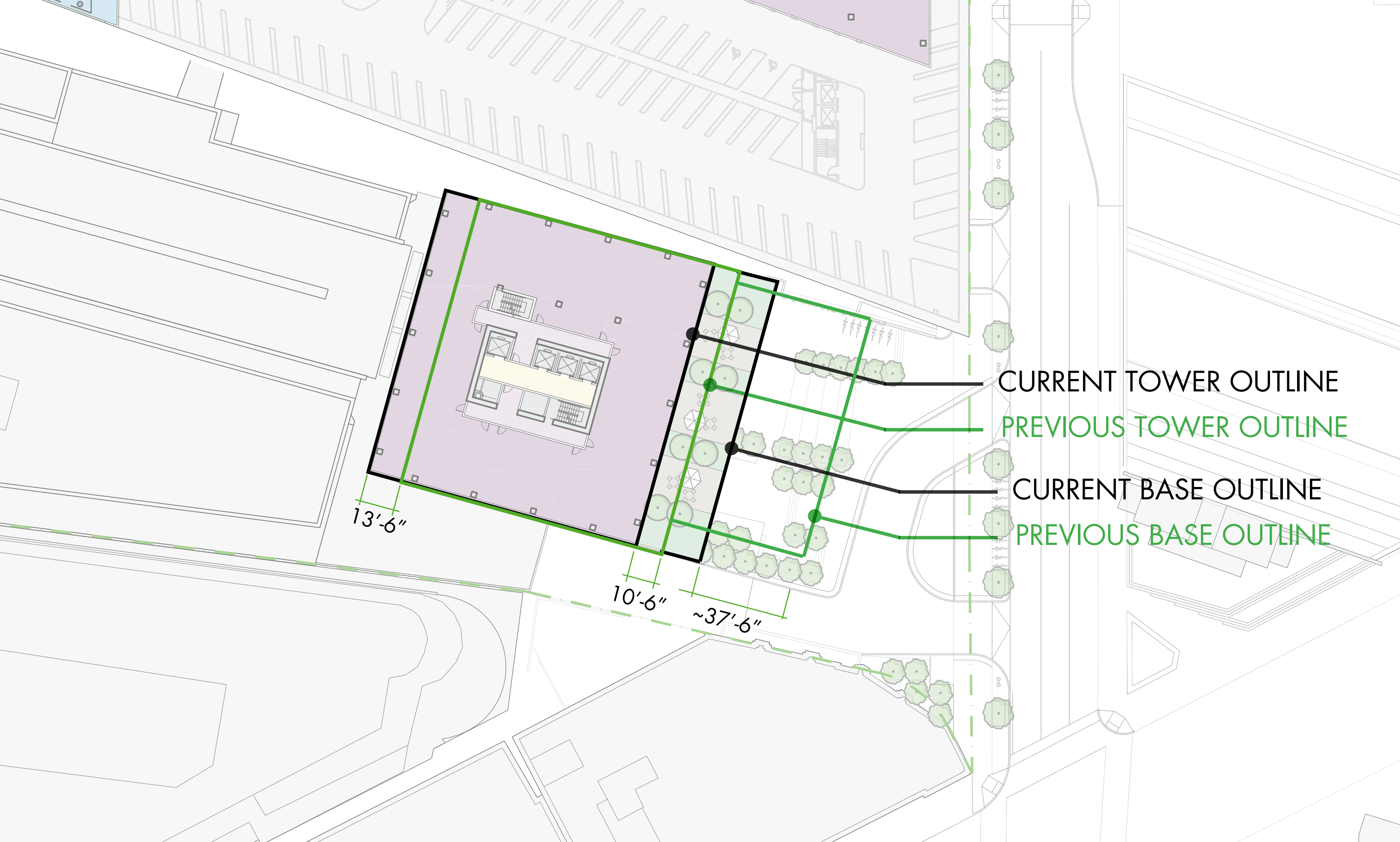
SITE/PDA  
BOUNDARY

~10'

PREVIOUS TOWER OUTLINE

CURRENT TOWER OUTLINE





CURRENT TOWER OUTLINE

PREVIOUS TOWER OUTLINE

CURRENT BASE OUTLINE

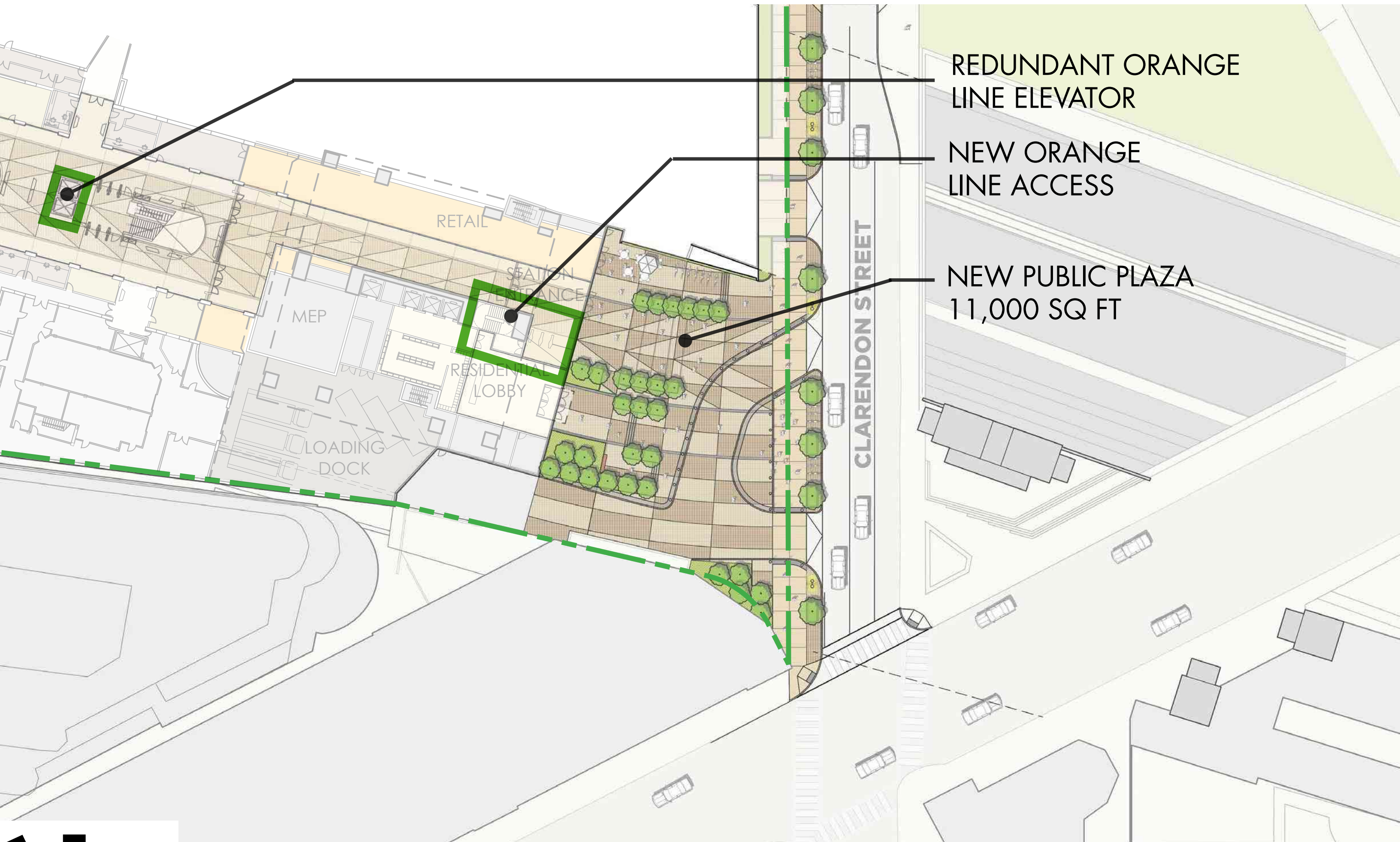
PREVIOUS BASE OUTLINE

13'-6"

10'-6"

~37'-6"





REDUNDANT ORANGE  
LINE ELEVATOR

NEW ORANGE  
LINE ACCESS

NEW PUBLIC PLAZA  
11,000 SQ FT

CLARENDON STREET

CLARENDON STREET PUBLIC PLAZA





VIEW FROM CLARENDON STREET - EXISTING CONDITION





NEW STATION  
ENTRANCE

BACK BAY SOUTH END STATION

Y. CREW

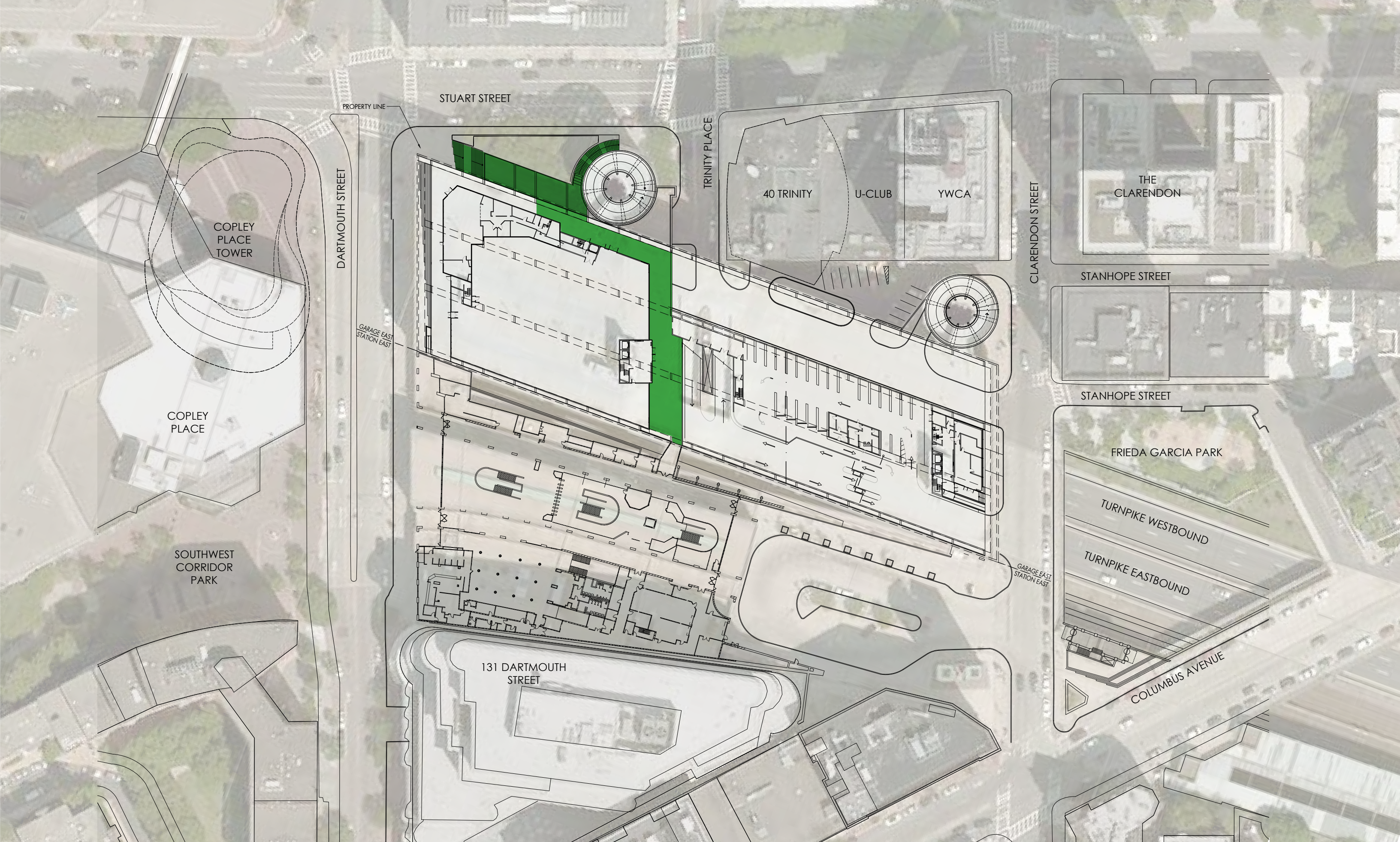
BEST SWISS  
CLUB NIZZA  
LE SPORT



BACK BAY SOUTH END STATION

NEW 11,000sf PUBLIC PLAZA





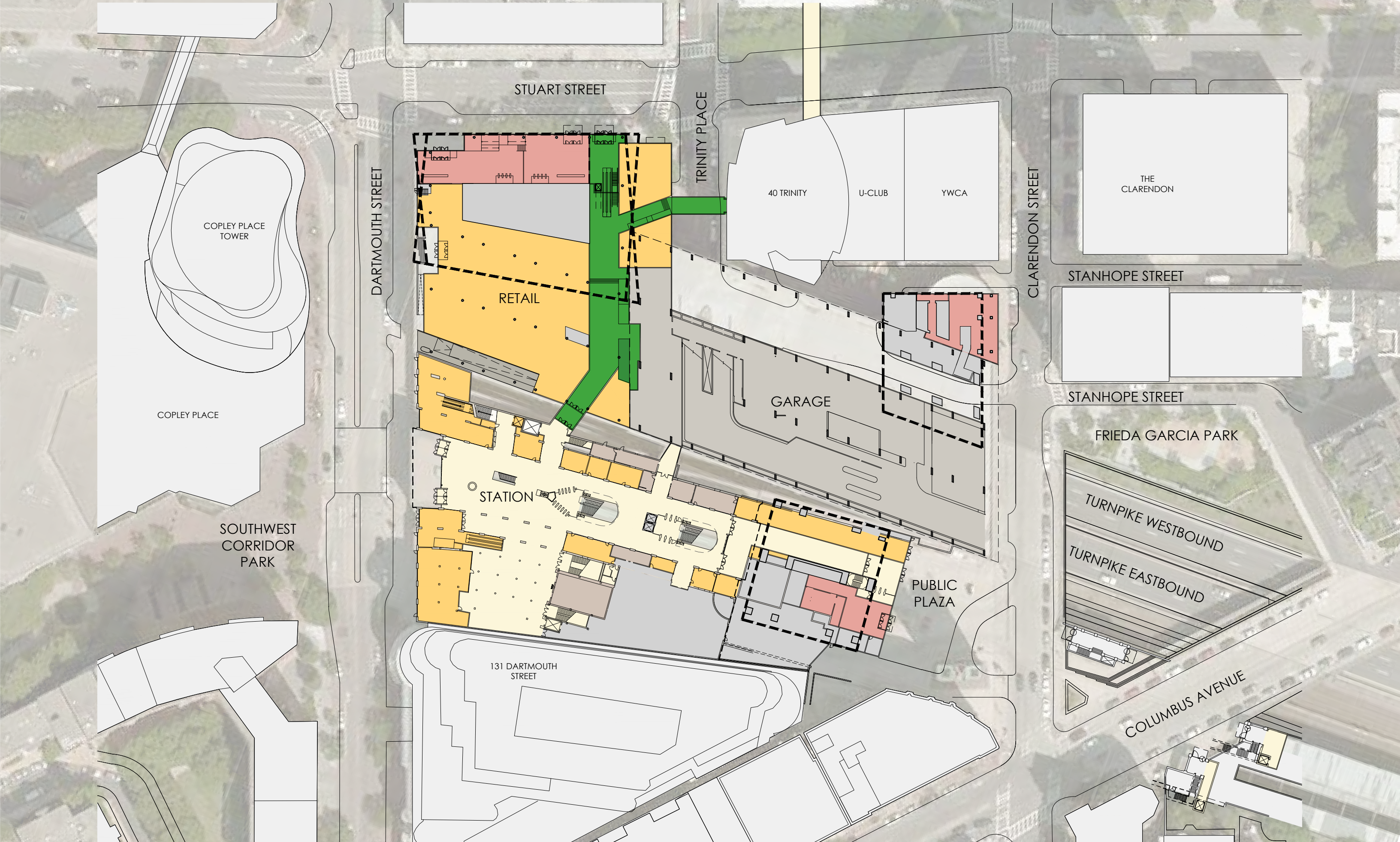
EXISTING STUART STREET CONNECTOR





EXISTING STUART STREET CONNECTOR - VIEWS





GW: BASE SCHEME DECK LEVEL • GE: LEVEL 2 • SE: CONCOURSE LEVEL • SW: CONCOURSE LEVEL





BACK BAY SOUTH END STATION



CRUMBLE

BACK BAY SOUTH  
ORANGE LINE  
COMMUTER RAIL



ORANGE LINE  
COMMUTER RAIL  
AMTRAK

GL

VIEW OF STUART STREET CONNECTOR - PROJECT RENDERING





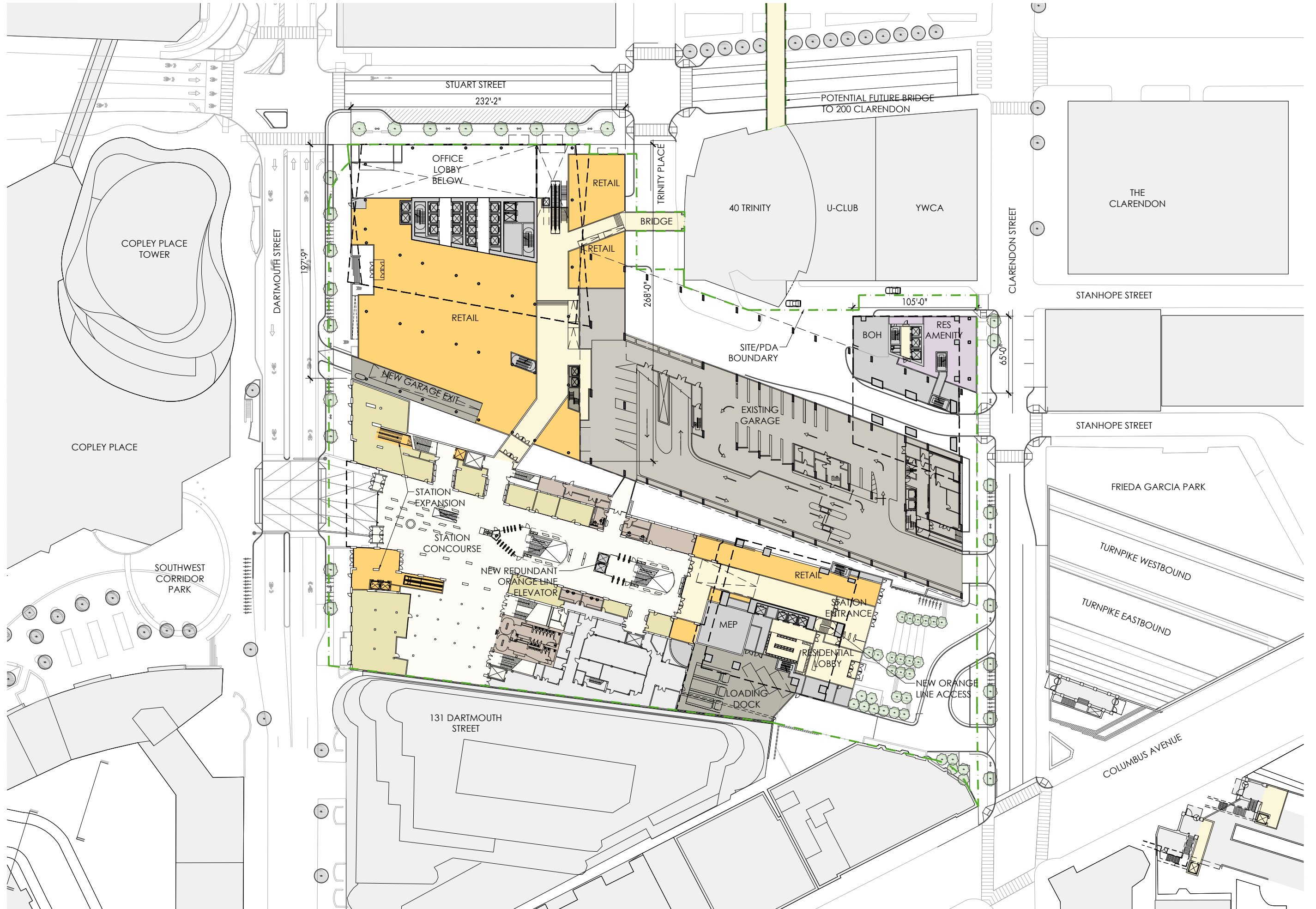
VIEW FROM DARTMOUTH STREET - EXISTING CONDITION





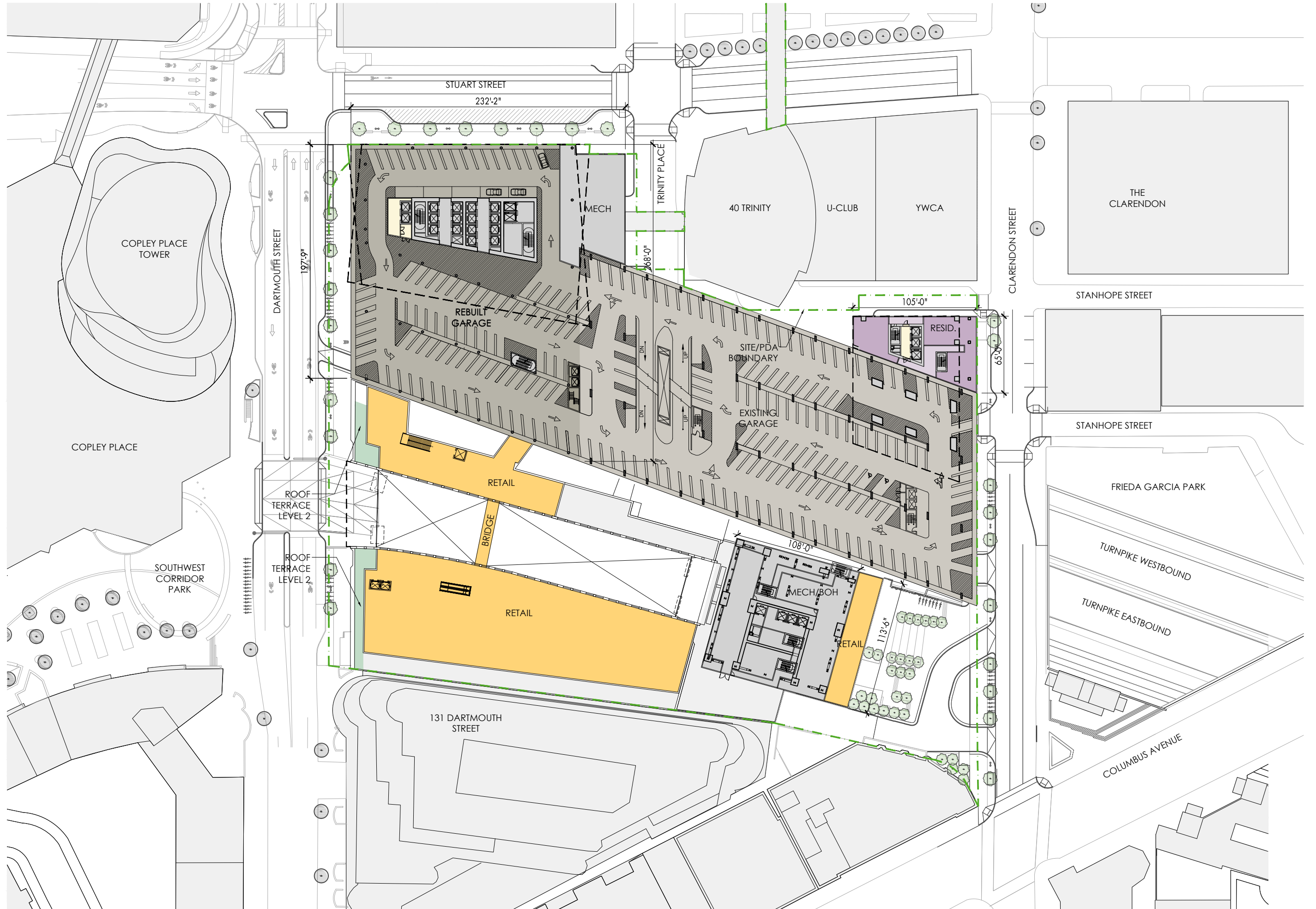
VIEW FROM DARTMOUTH STREET - PROJECT RENDERING





STATION CONCOURSE LEVEL





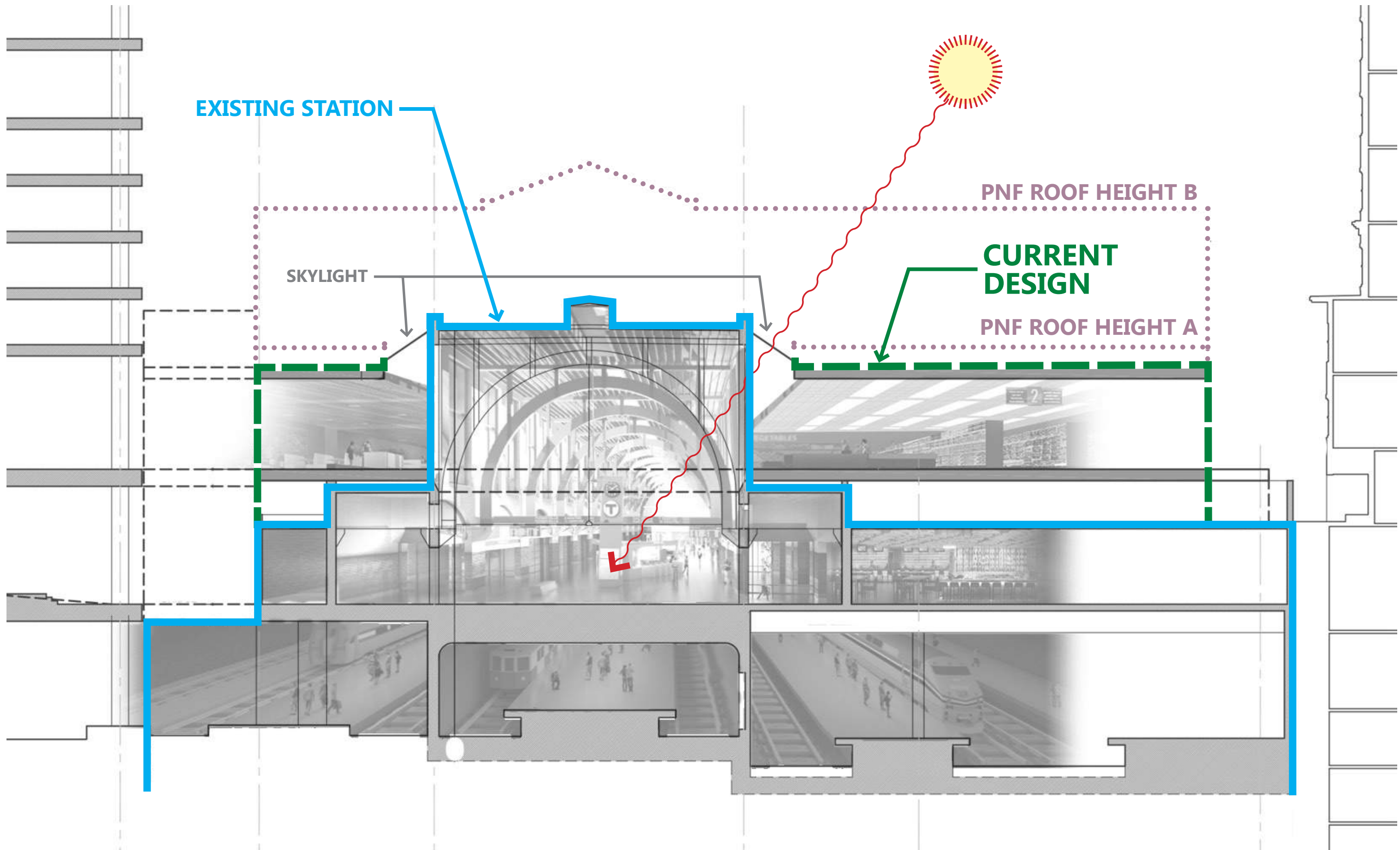
STATION SECOND LEVEL





STATION WEST - VIEW OF CENTRAL HALL FROM DARTMOUTH STREET ENTRY









STATION WEST - VIEW OF POTENTIAL PEDESTRIAN BRIDGE


















STATION WEST - VIEW OF CENTRAL HALL LOOKING TOWARD DARTMOUTH STREET

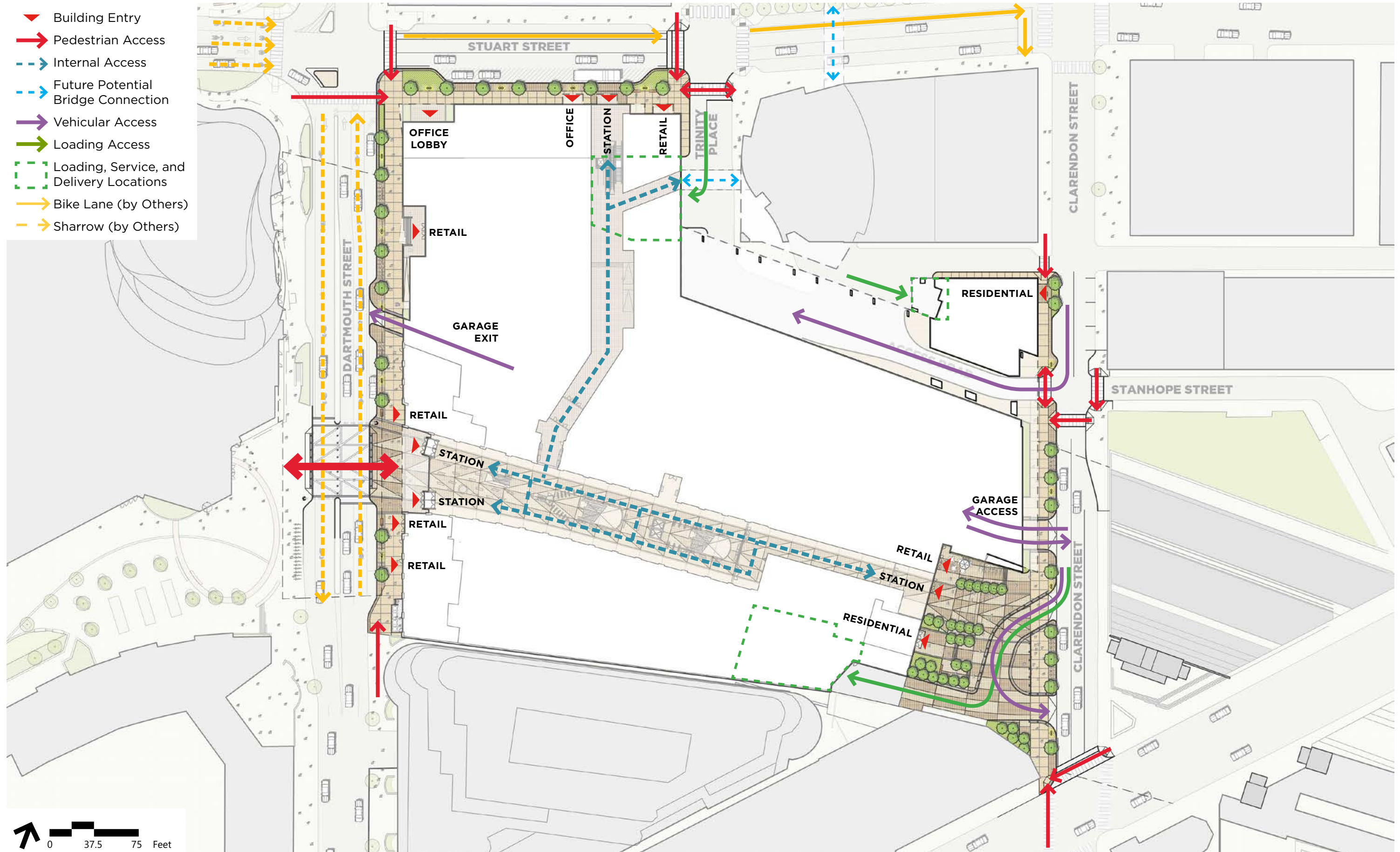


# PUBLIC REALM IMPROVEMENTS





-  Building Entry
-  Pedestrian Access
-  Internal Access
-  Future Potential Bridge Connection
-  Vehicular Access
-  Loading Access
-  Loading, Service, and Delivery Locations
-  Bike Lane (by Others)
-  Sharrow (by Others)

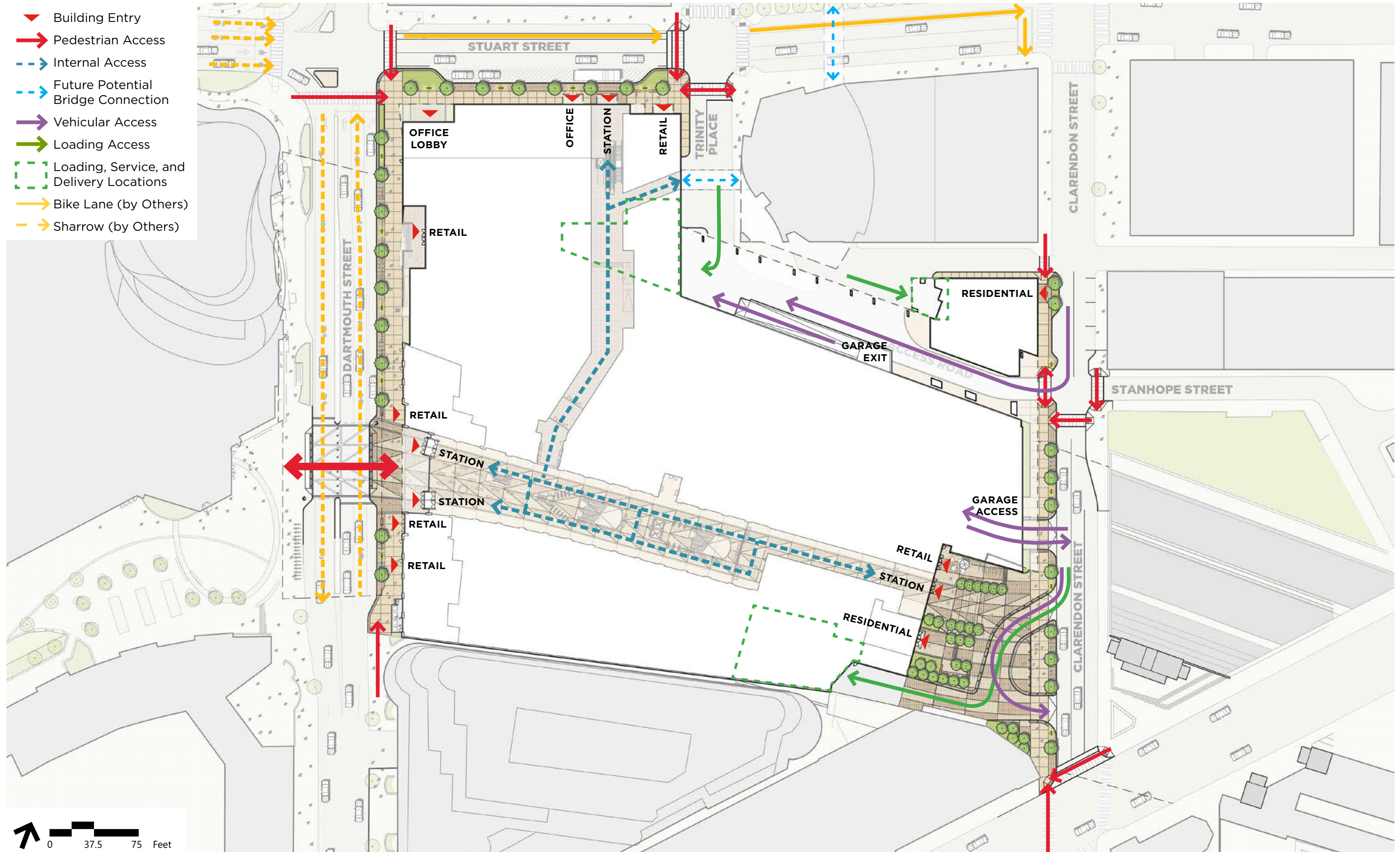


Source: OJB / PCPA / Arrowstreet / Parsons Brinkerhoff

CIRCULATION AND ACCESS PLAN - BASE SCHEME



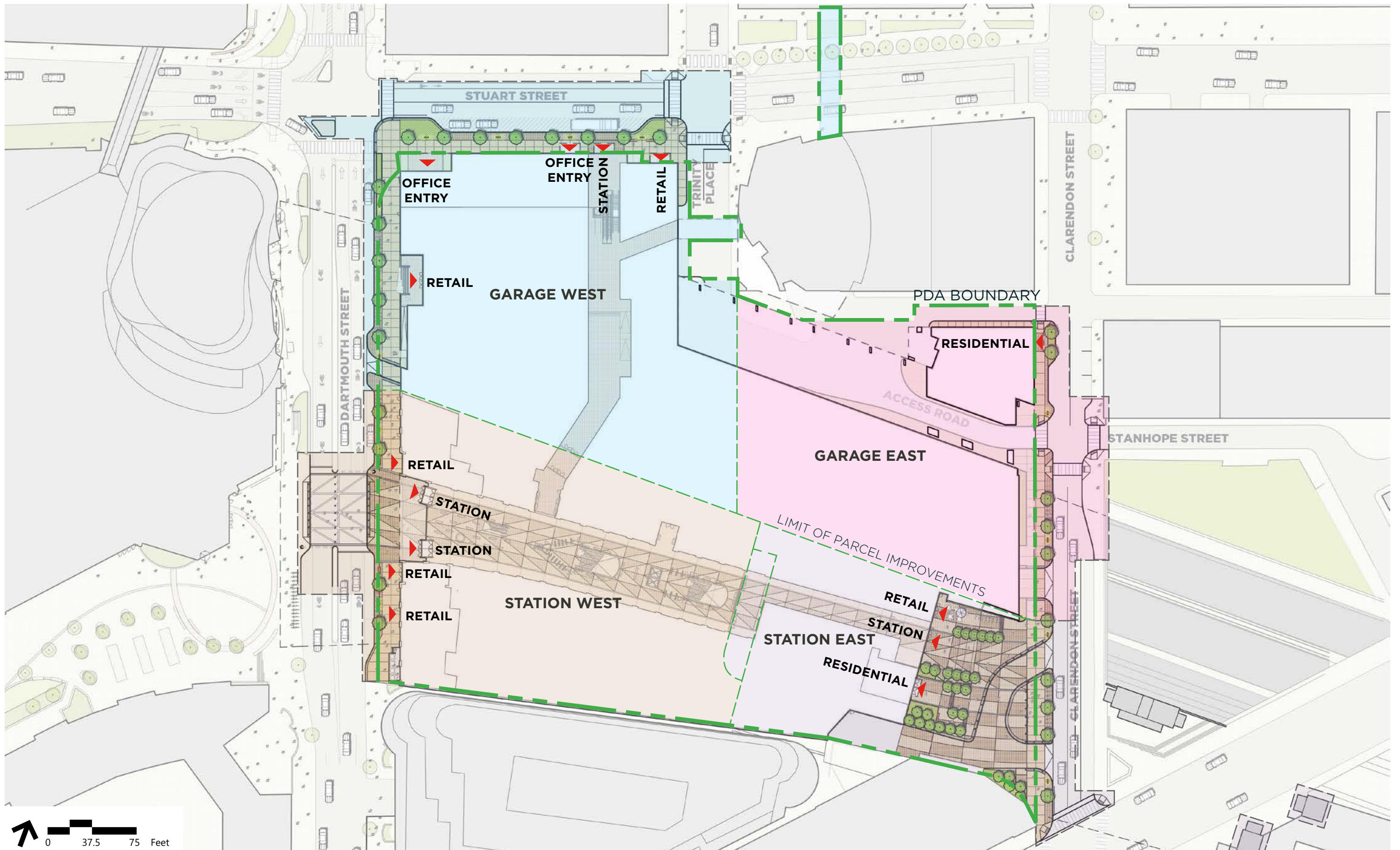
-  Building Entry
-  Pedestrian Access
-  Internal Access
-  Future Potential Bridge Connection
-  Vehicular Access
-  Loading Access
-  Loading, Service, and Delivery Locations
-  Bike Lane (by Others)
-  Sharrow (by Others)



Source: OJB / PCPA / Arrowstreet / Parsons Brinkerhoff

CIRCULATION AND ACCESS PLAN - ALTERNATE SCHEME



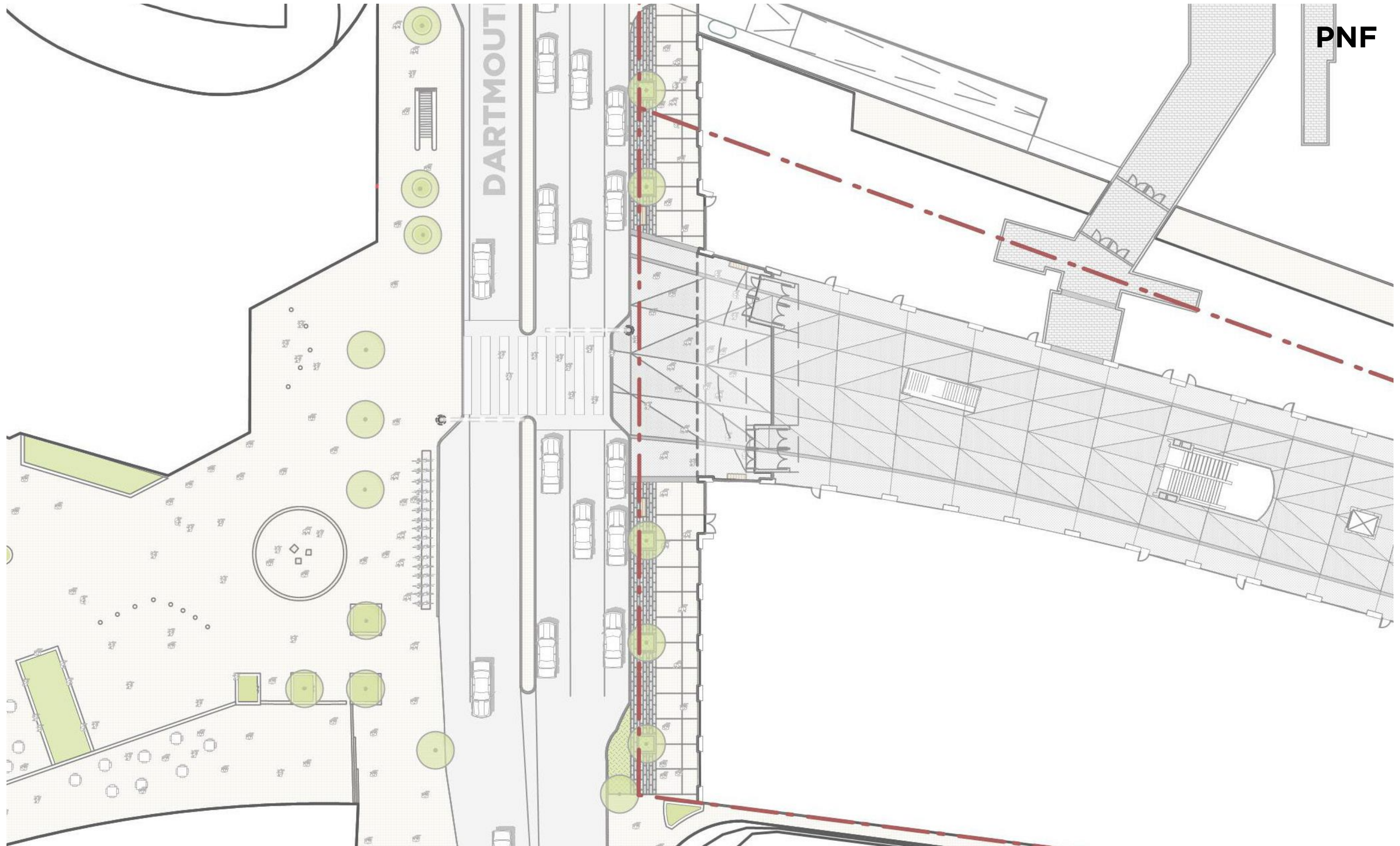


0 37.5 75 Feet

Source: OJB / PCPA / Arrowstreet / Parsons Brinkerhoff

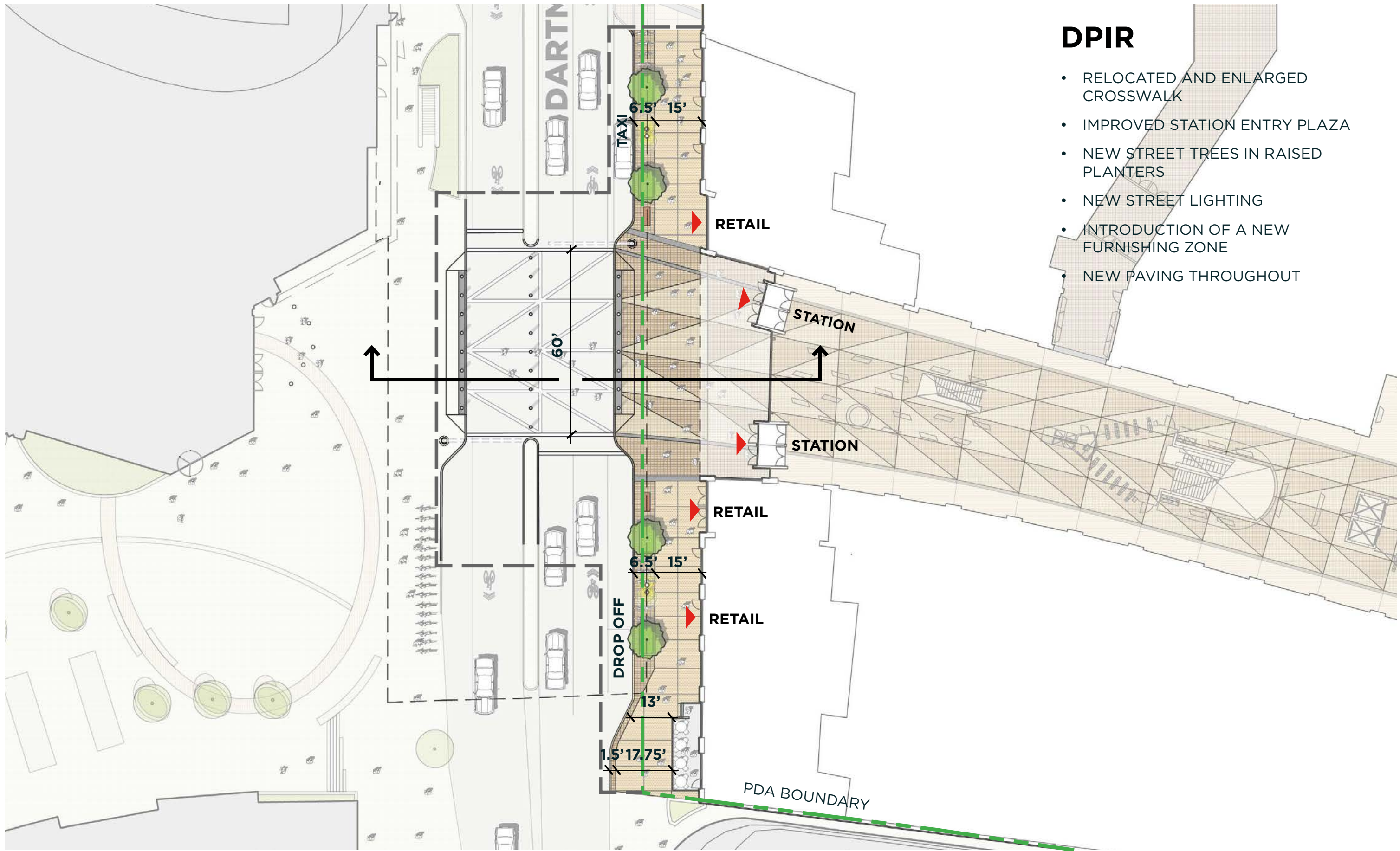
OVERALL PUBLIC REALM IMPROVEMENTS





PNF

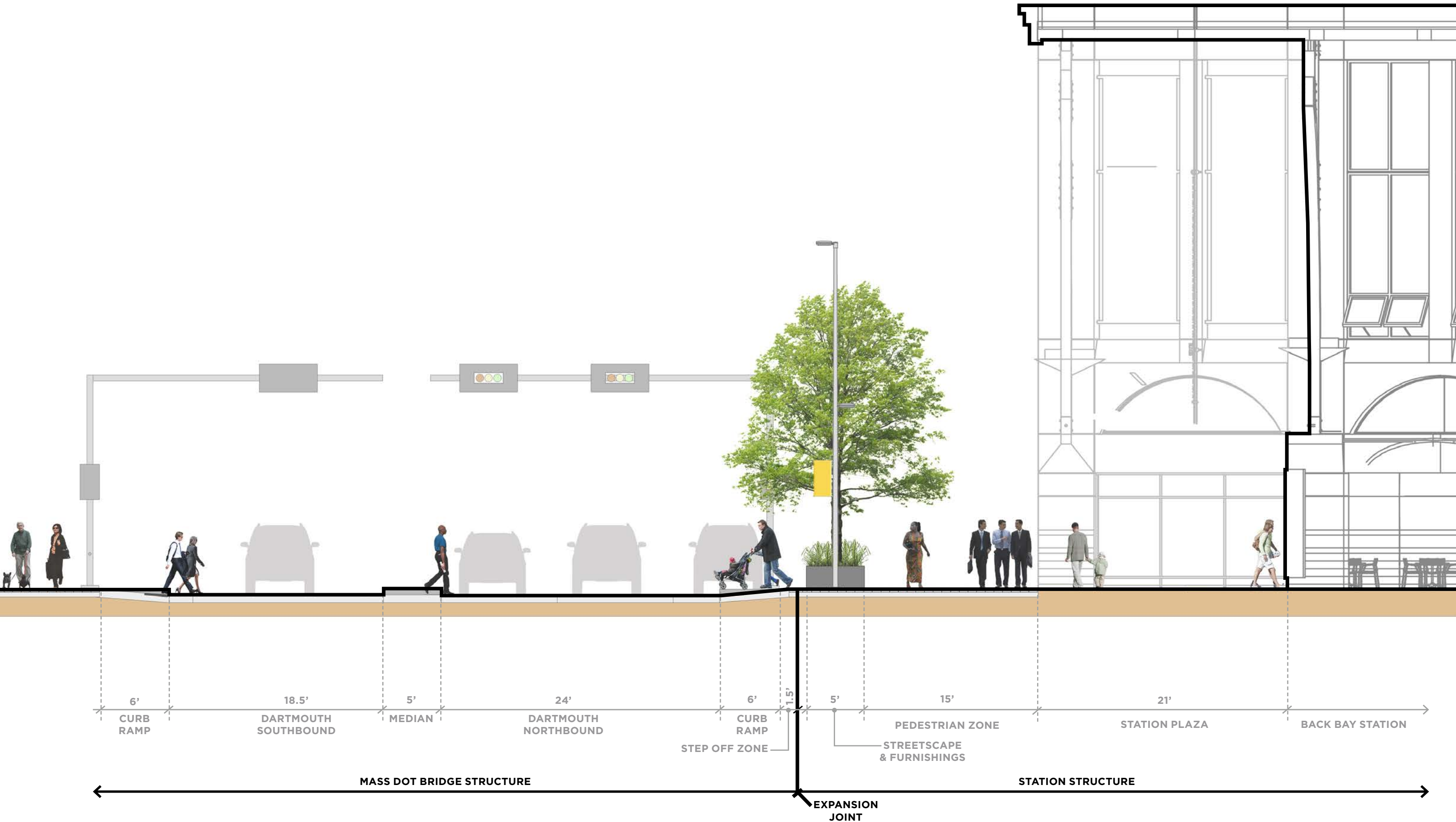




## DPIR

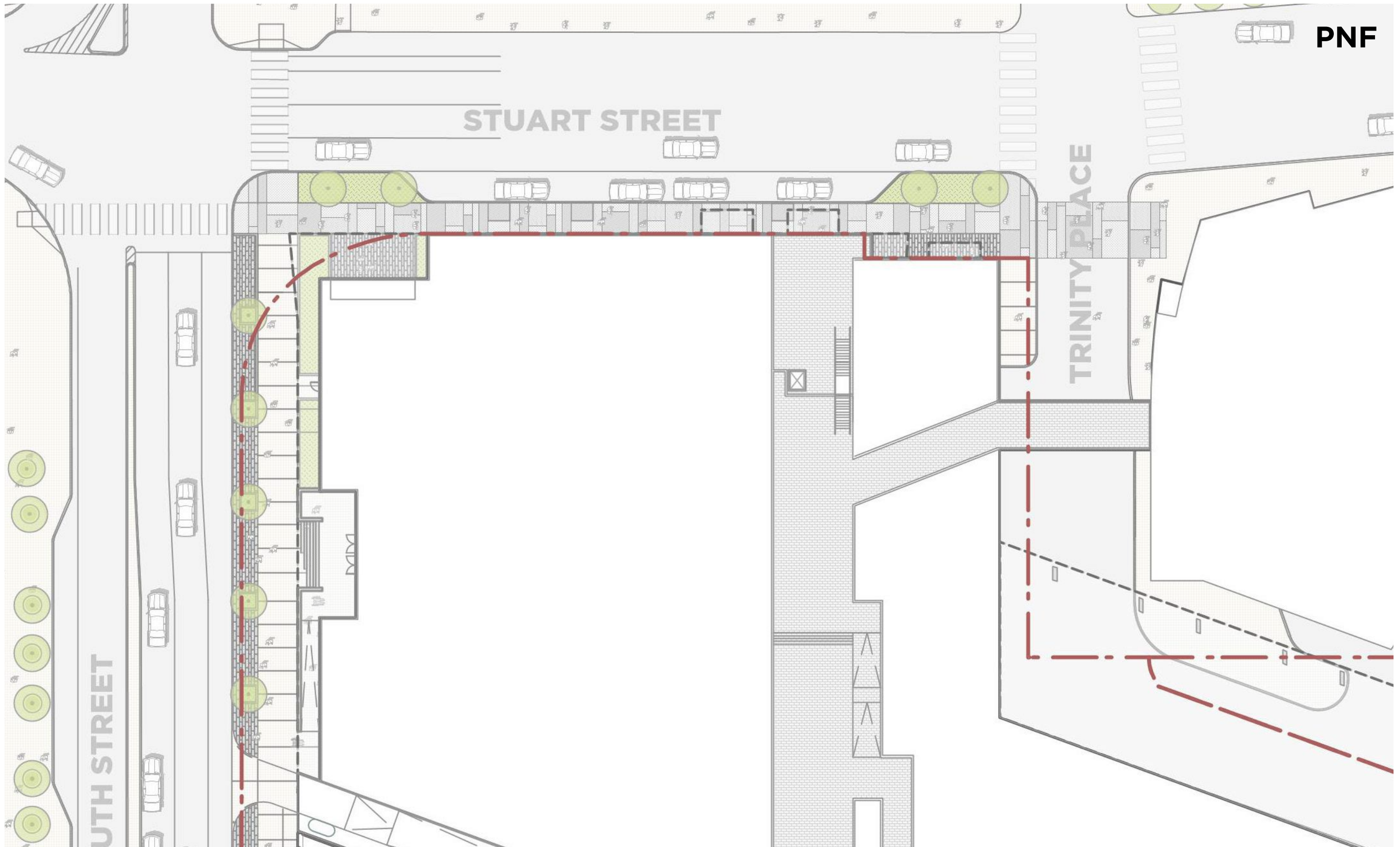
- RELOCATED AND ENLARGED CROSSWALK
- IMPROVED STATION ENTRY PLAZA
- NEW STREET TREES IN RAISED PLANTERS
- NEW STREET LIGHTING
- INTRODUCTION OF A NEW FURNISHING ZONE
- NEW PAVING THROUGHOUT





DARTMOUTH STATION PLAZA SECTION





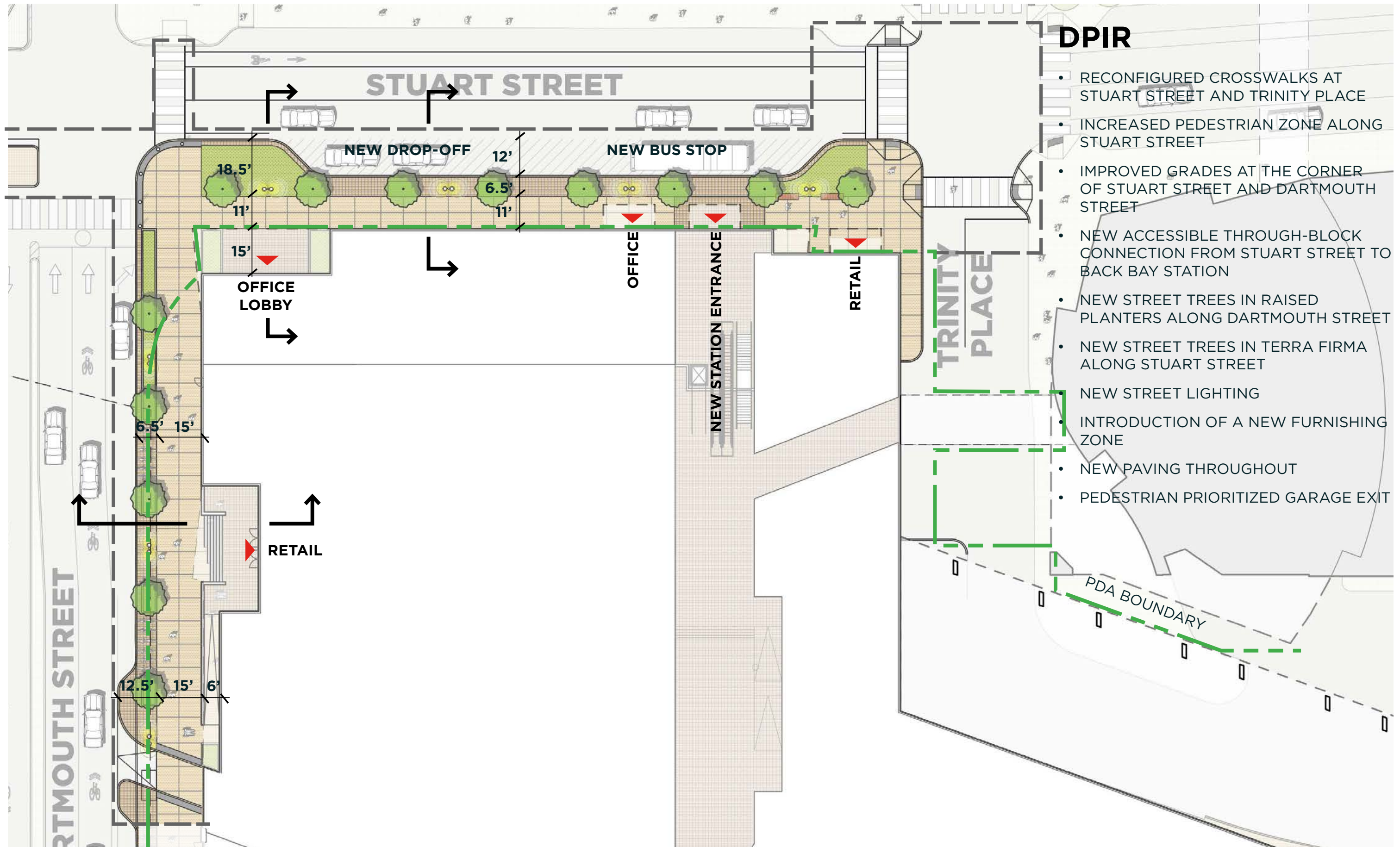
PNF

STUART STREET

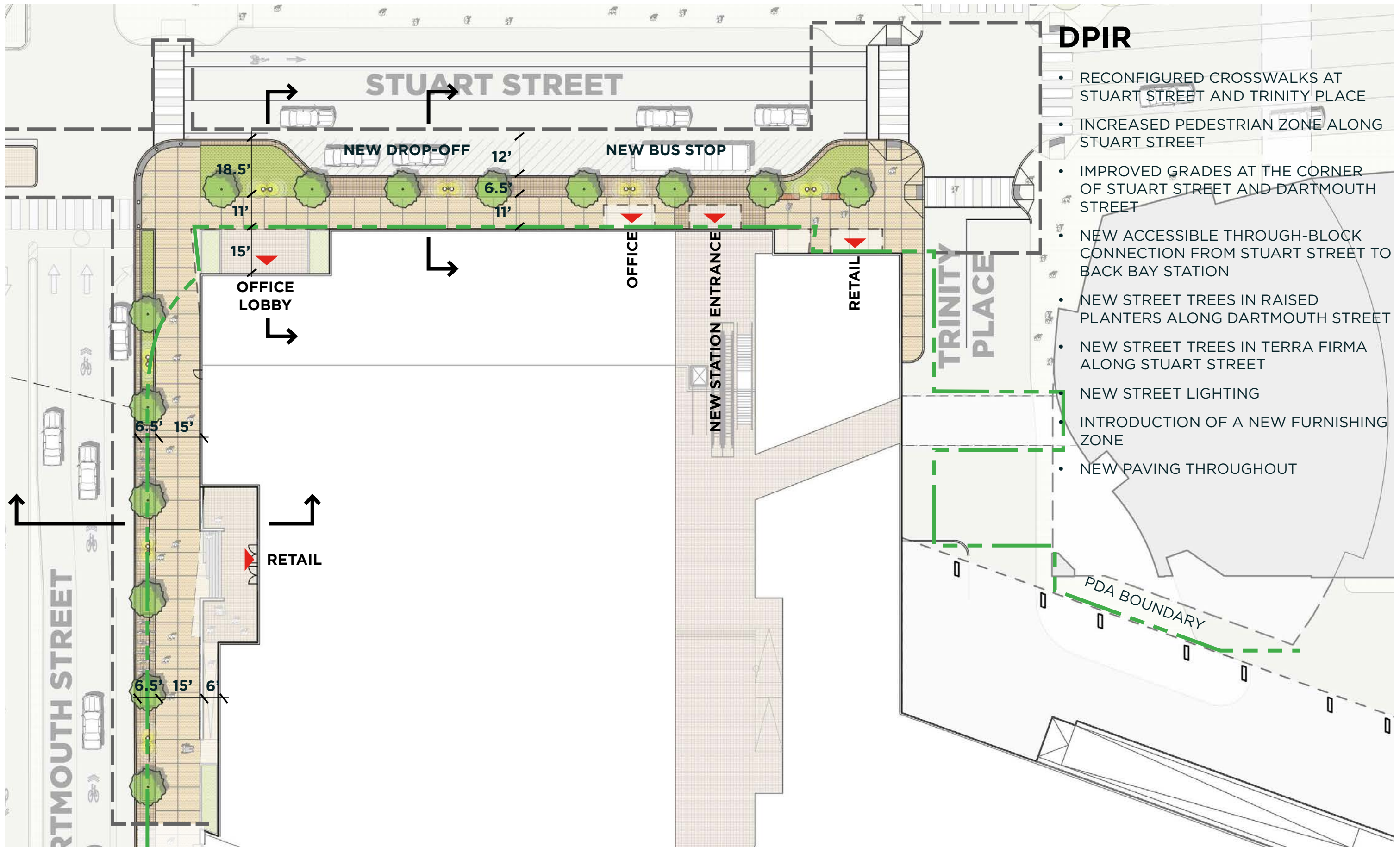
TRINITY PLACE

SOUTH STREET





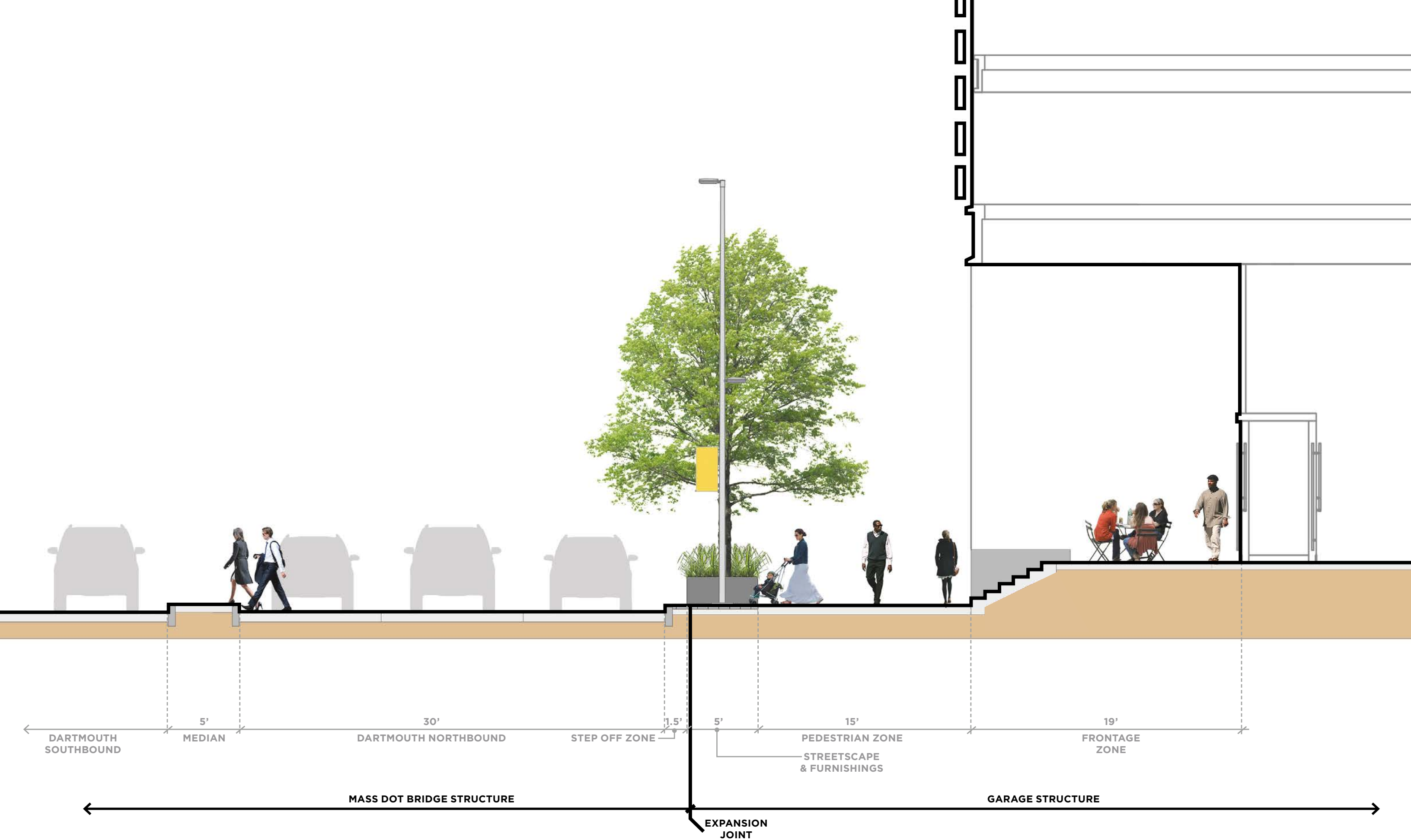




## DPIR

- RECONFIGURED CROSSWALKS AT STUART STREET AND TRINITY PLACE
- INCREASED PEDESTRIAN ZONE ALONG STUART STREET
- IMPROVED GRADES AT THE CORNER OF STUART STREET AND DARTMOUTH STREET
- NEW ACCESSIBLE THROUGH-BLOCK CONNECTION FROM STUART STREET TO BACK BAY STATION
- NEW STREET TREES IN RAISED PLANTERS ALONG DARTMOUTH STREET
- NEW STREET TREES IN TERRA FIRMA ALONG STUART STREET
- NEW STREET LIGHTING
- INTRODUCTION OF A NEW FURNISHING ZONE
- NEW PAVING THROUGHOUT





DARTMOUTH STREET RETAIL SECTION





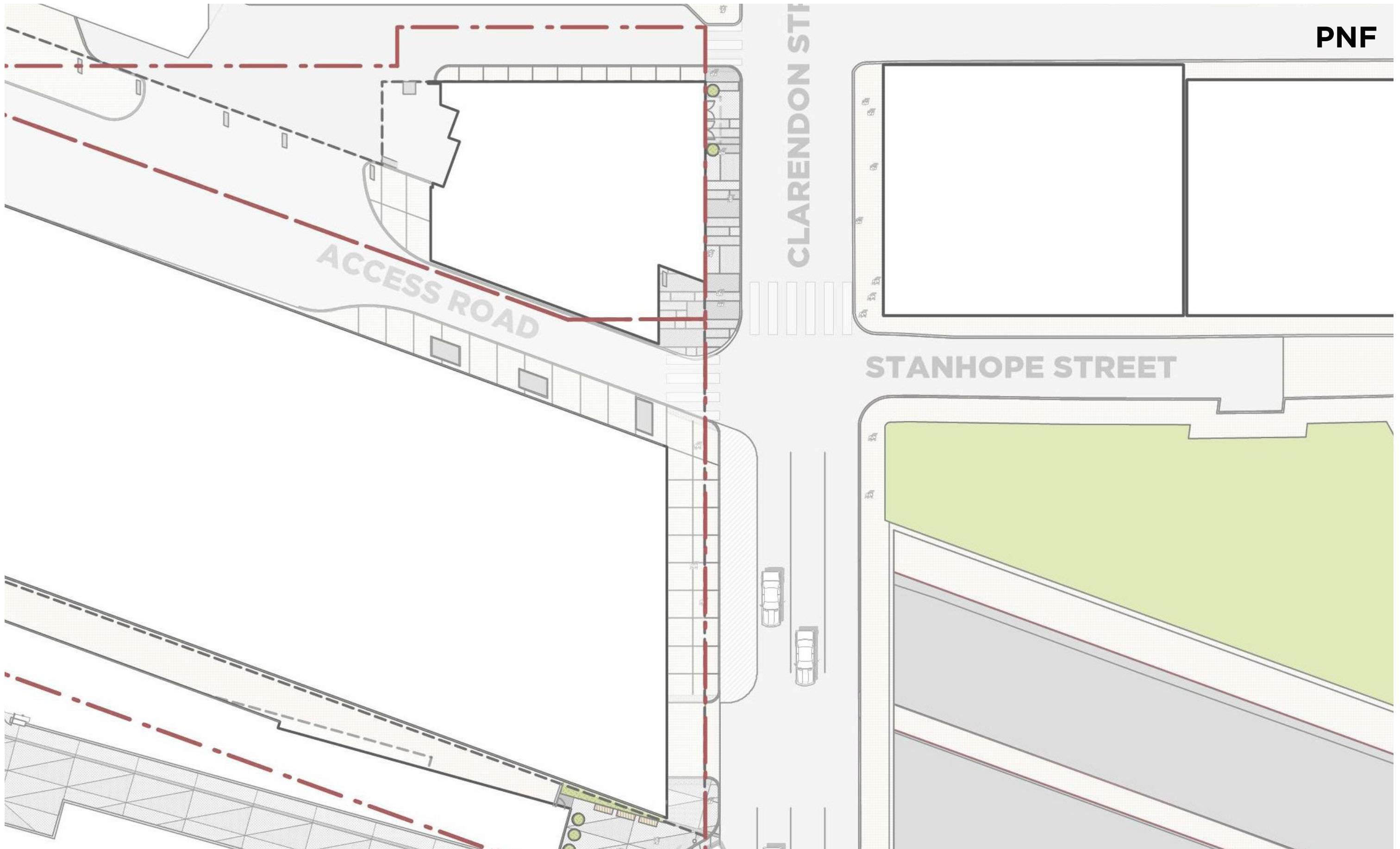
STUART STREET SECTION AT OFFICE LOBBY ENTRY



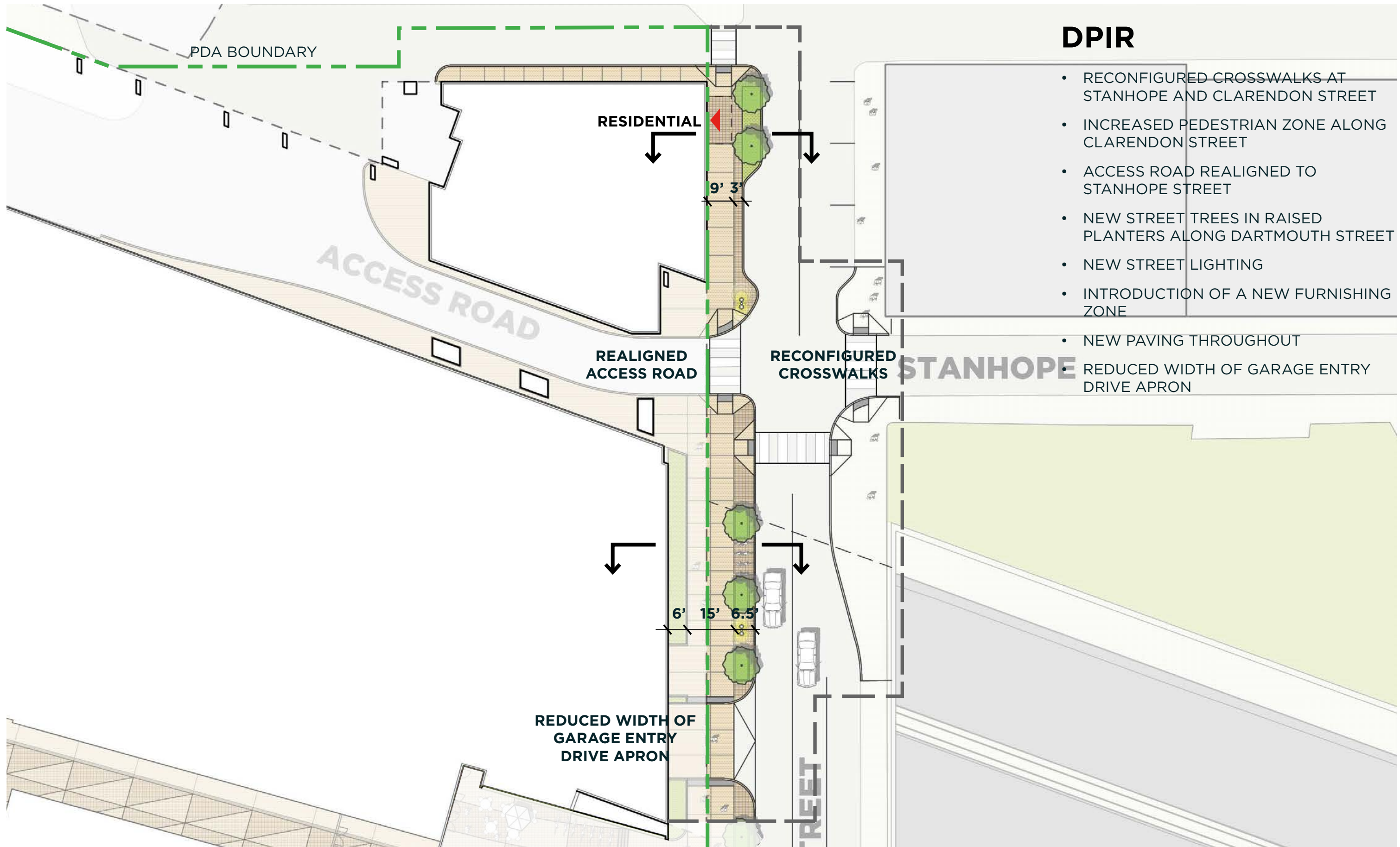


STUART STREET SECTION TYPICAL

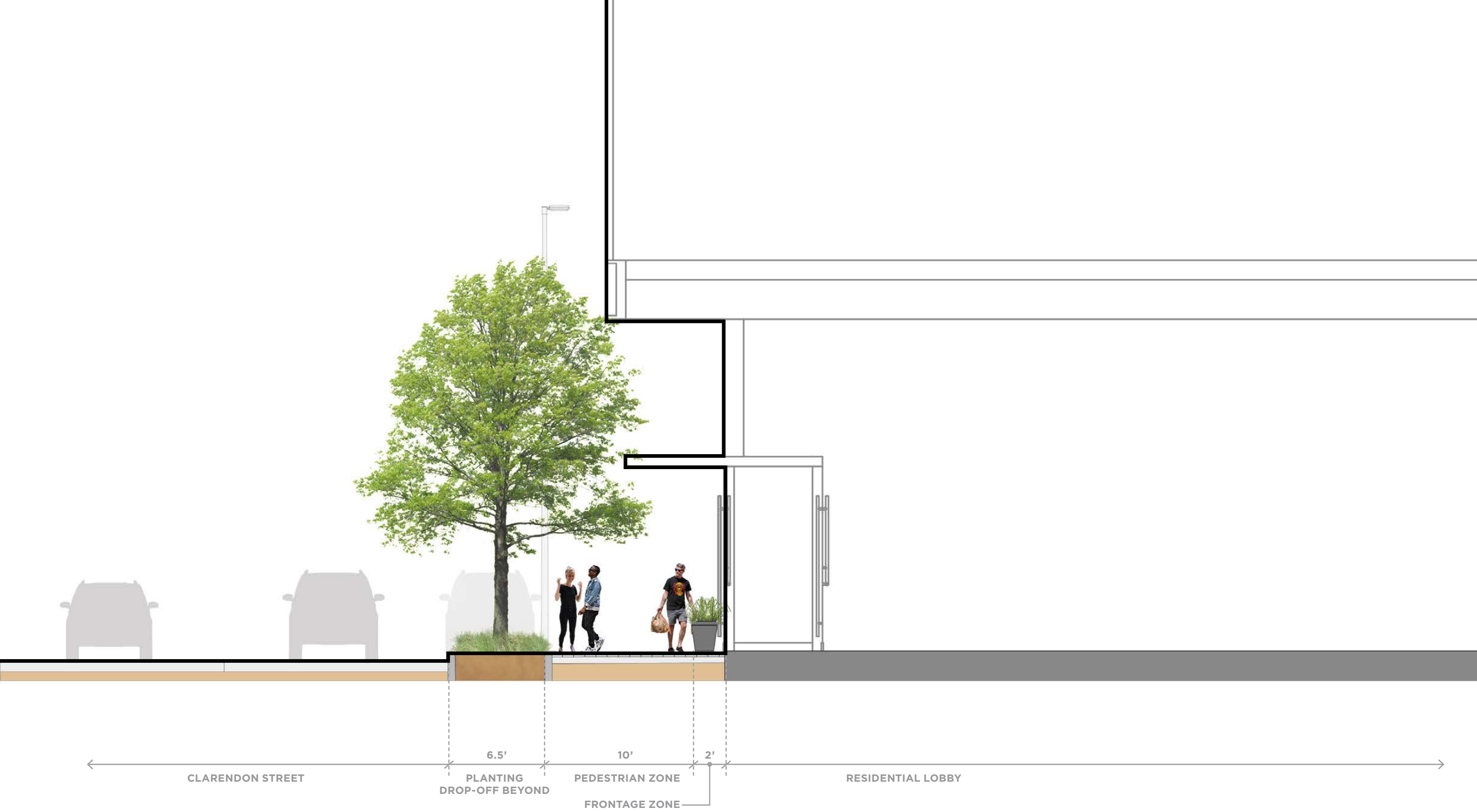






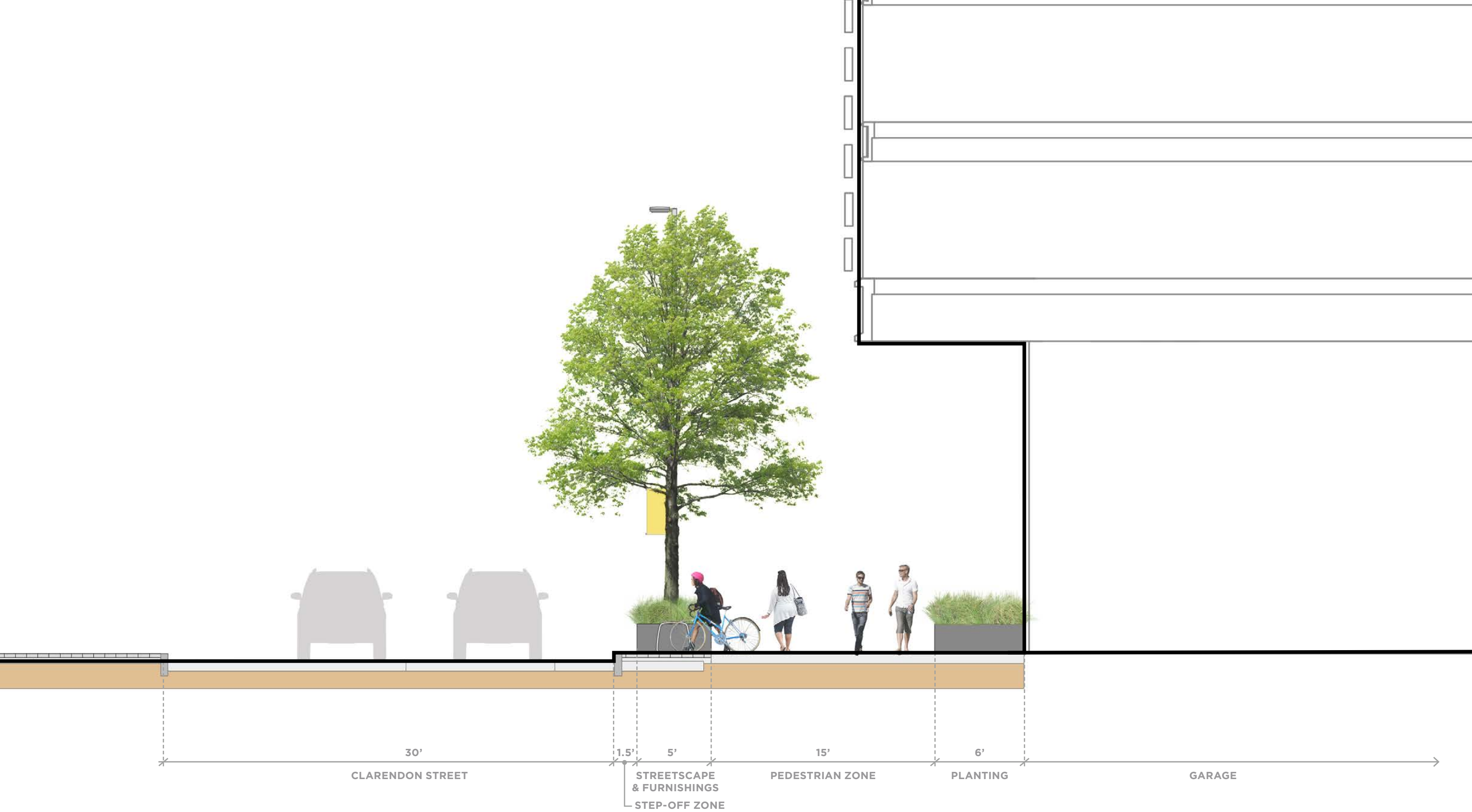






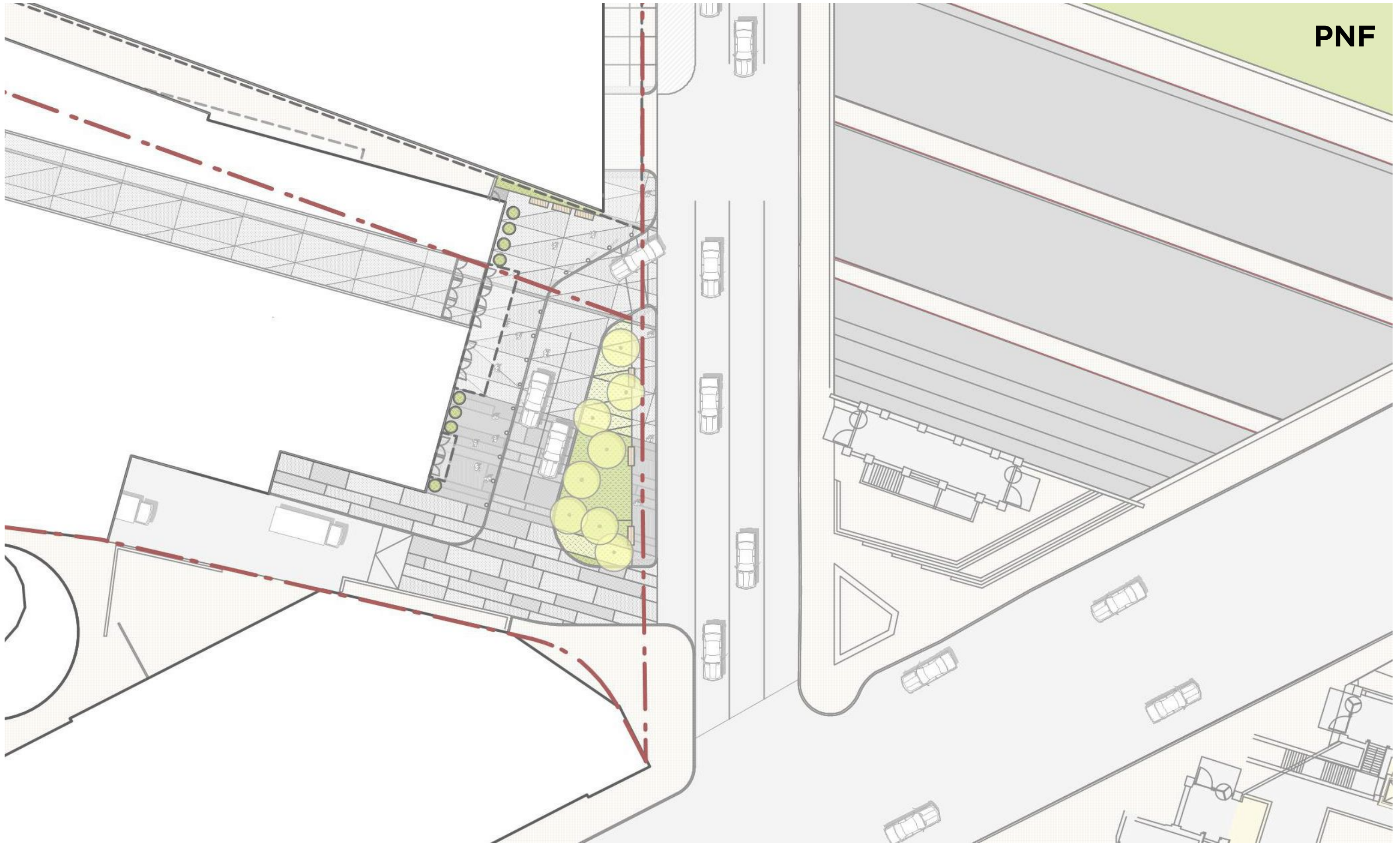
CLARENDON STREET SECTION AT RESIDENTIAL TOWER





CLARENDON STREET SECTION AT GARAGE









## DPIR

- NEW 11,000 SQUARE FOOT PEDESTRIAN FOCUSED PUBLIC PLAZA WITH TREES AND LANDSCAPE IN RAISED PLANTERS
- NEW IMPROVED ENTRY TO BACK BAY STATION ALONG CLARENDON STREET
- NEW DROP-OFF LANE
- POTENTIAL NEW REDUNDANT ELEVATORS
- NEW STREET TREES IN RAISED PLANTERS ALONG DARTMOUTH STREET
- NEW STREET LIGHTING
- INTRODUCTION OF A NEW FURNISHINGS ZONE
- NEW PAVING THROUGHOUT





NEW STATION  
ENTRANCE

BACK BAY SOUTH END STATION

Y. CREW

BEST SWISS CLUB NIZZA LE SPORT

2:45PM NEEDHAM HEIGHTS - ON TIME

BACK BAY SOUTH END STATION

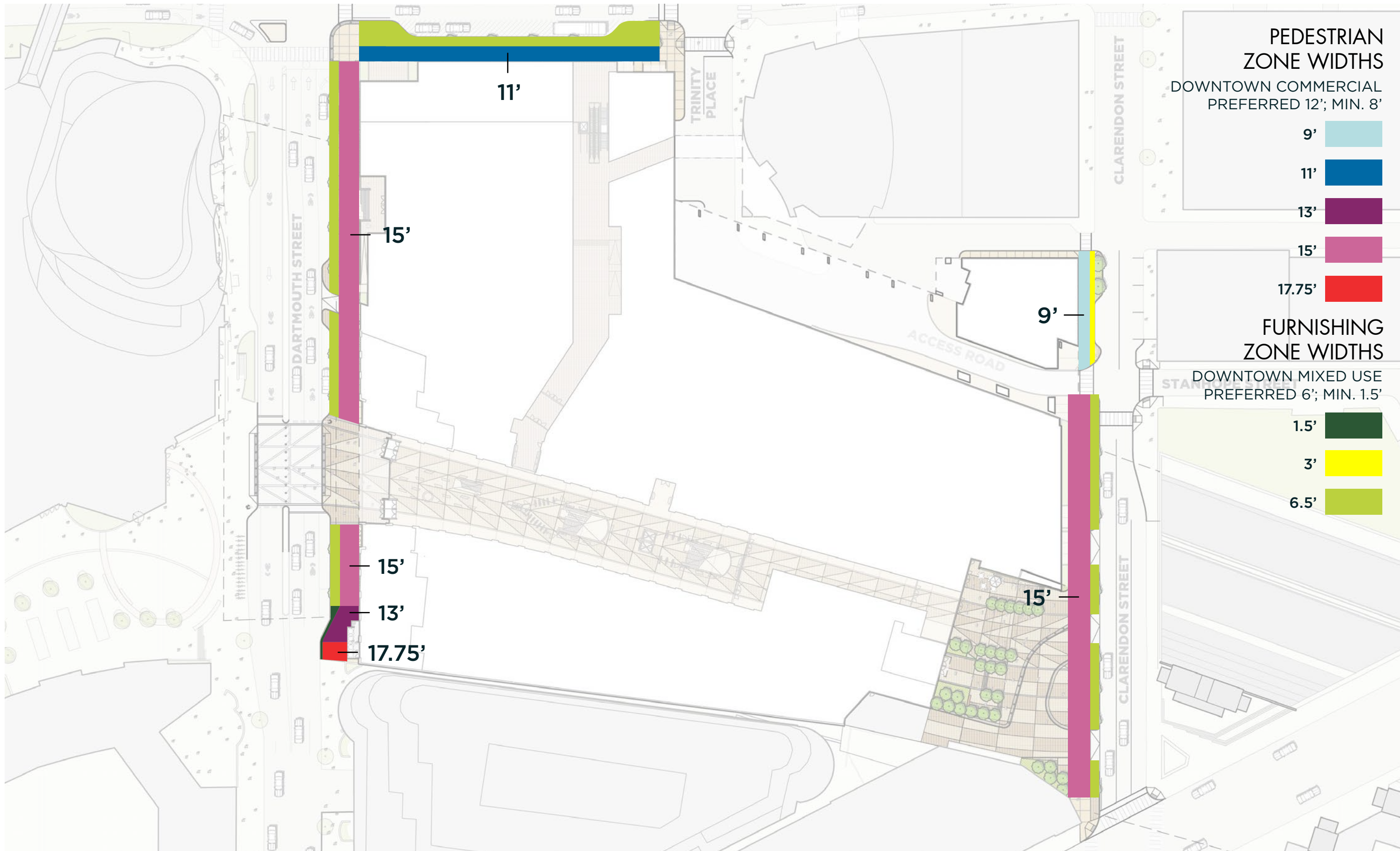
NEW 11,000sf PUBLIC PLAZA





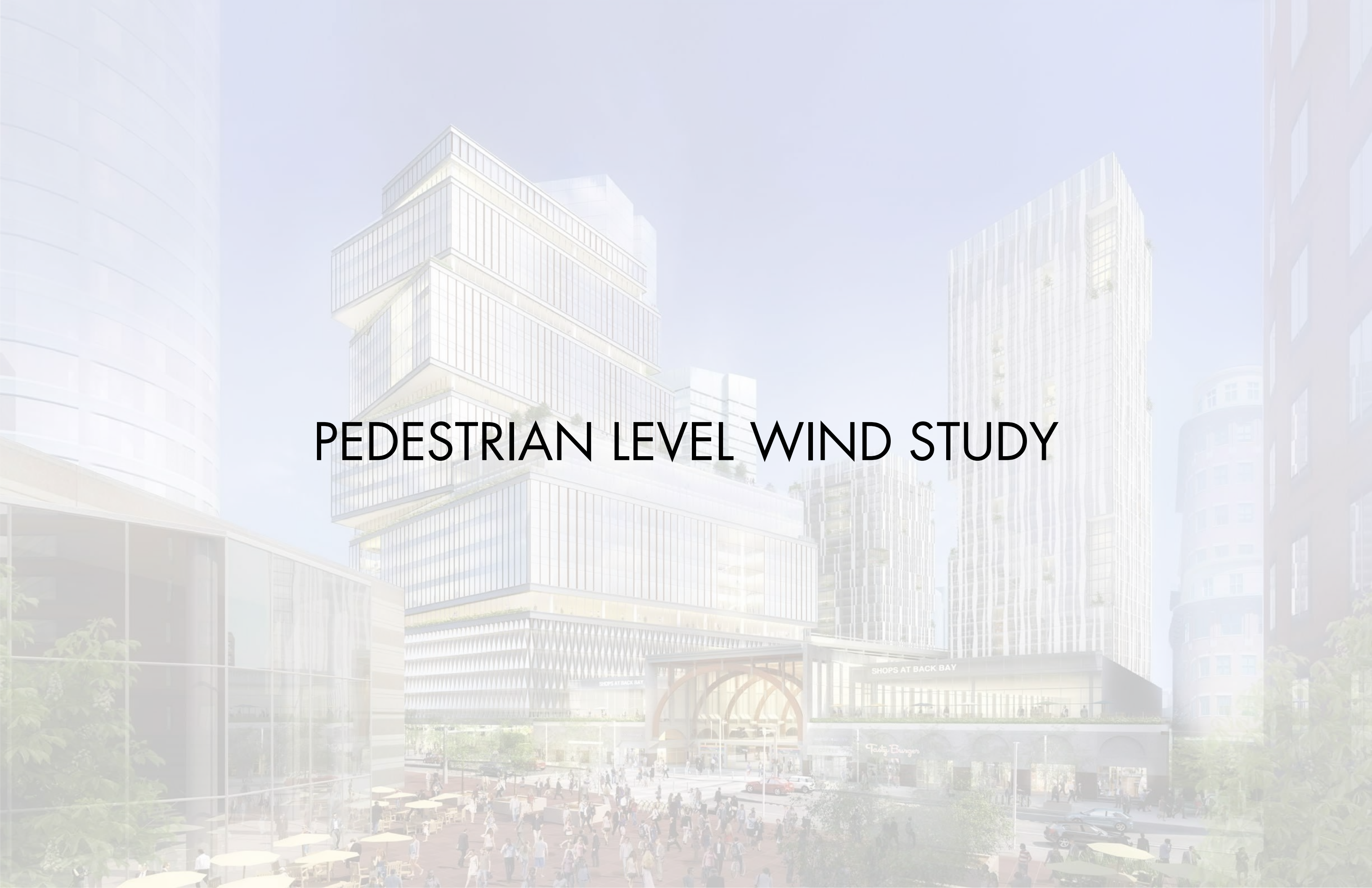
CLARENDON COURT SECTION







# PEDESTRIAN LEVEL WIND STUDY



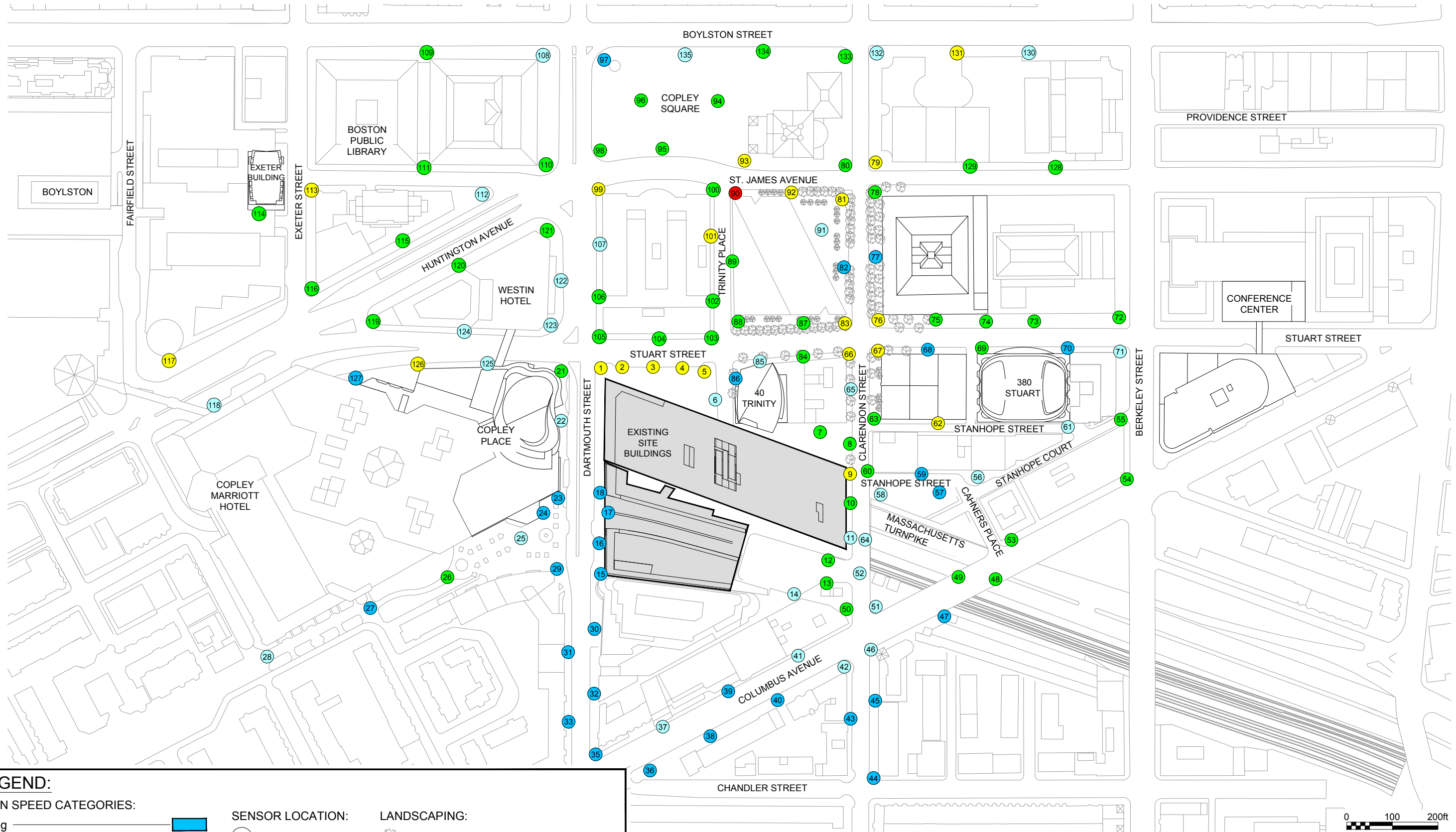


# PEDESTRIAN WIND COMFORT SUMMARY









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- Base Scheme and Alternate Scheme nearly identical results
- On-Site Wind Comfort Conditions:
  - Similar or better than No-Build conditions at most locations
  - Wind comfort conditions improve at 10 on-site locations
  - Existing uncomfortable conditions improve at 5 on-site locations
- Off-Site Wind Comfort Conditions:
  - Similar or better than No-build conditions at most locations
  - No new uncomfortable or dangerous off-site wind conditions are anticipated



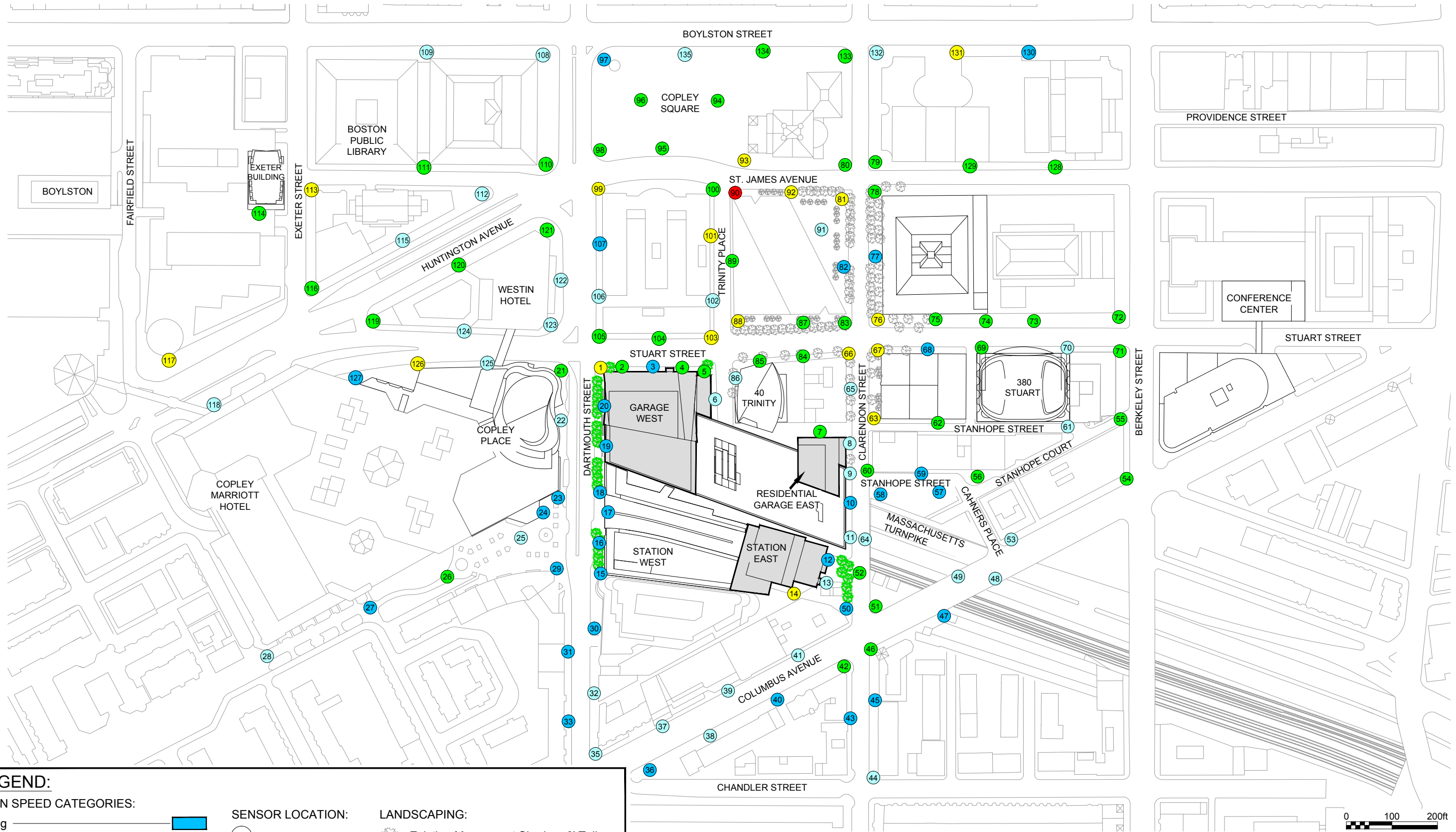


**LEGEND:**

<b>MEAN SPEED CATEGORIES:</b>		<b>SENSOR LOCATION:</b>	<b>LANDSCAPING:</b>		
Sitting				 Grade Level	 Existing Marcescent Shrubs - 8' Tall
Standing					 Existing Marcescent Trees - 20' Tall
Walking					
Uncomfortable					
Dangerous					

**PEDESTRIAN WIND CONDITIONS - MEAN SPEED - NO BUILD**



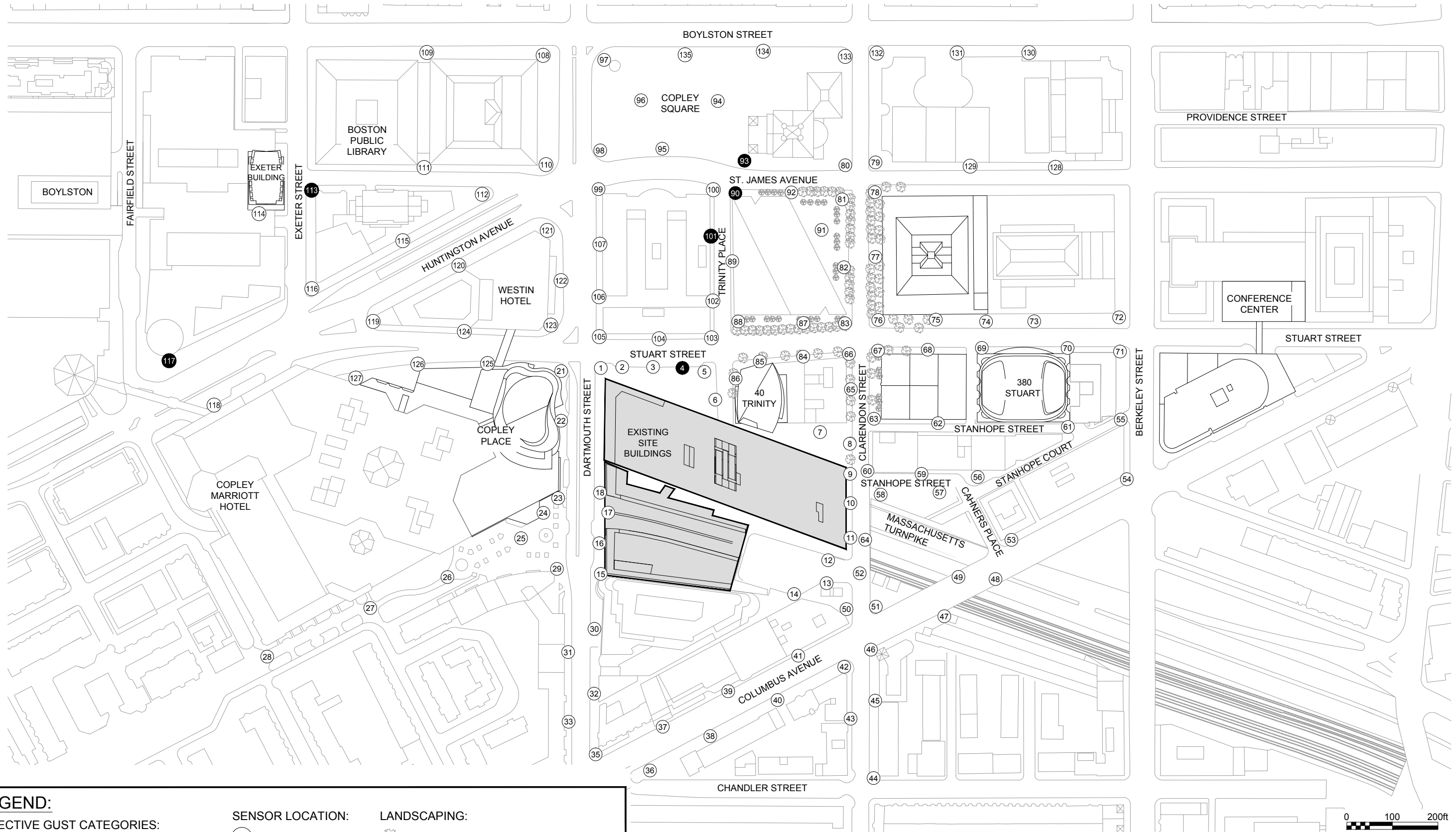


**LEGEND:**






<b>MEAN SPEED CATEGORIES:</b>		<b>SENSOR LOCATION:</b>	<b>LANDSCAPING:</b>	
Sitting				Grade Level
Standing				Existing Marcescent Shrubs - 8' Tall
Walking				Existing Marcescent Trees - 20' Tall
Uncomfortable				Proposed Marcescent Trees - 20' Tall
Dangerous				

PEDESTRIAN WIND CONDITIONS - MEAN SPEED - BASE SCHEME



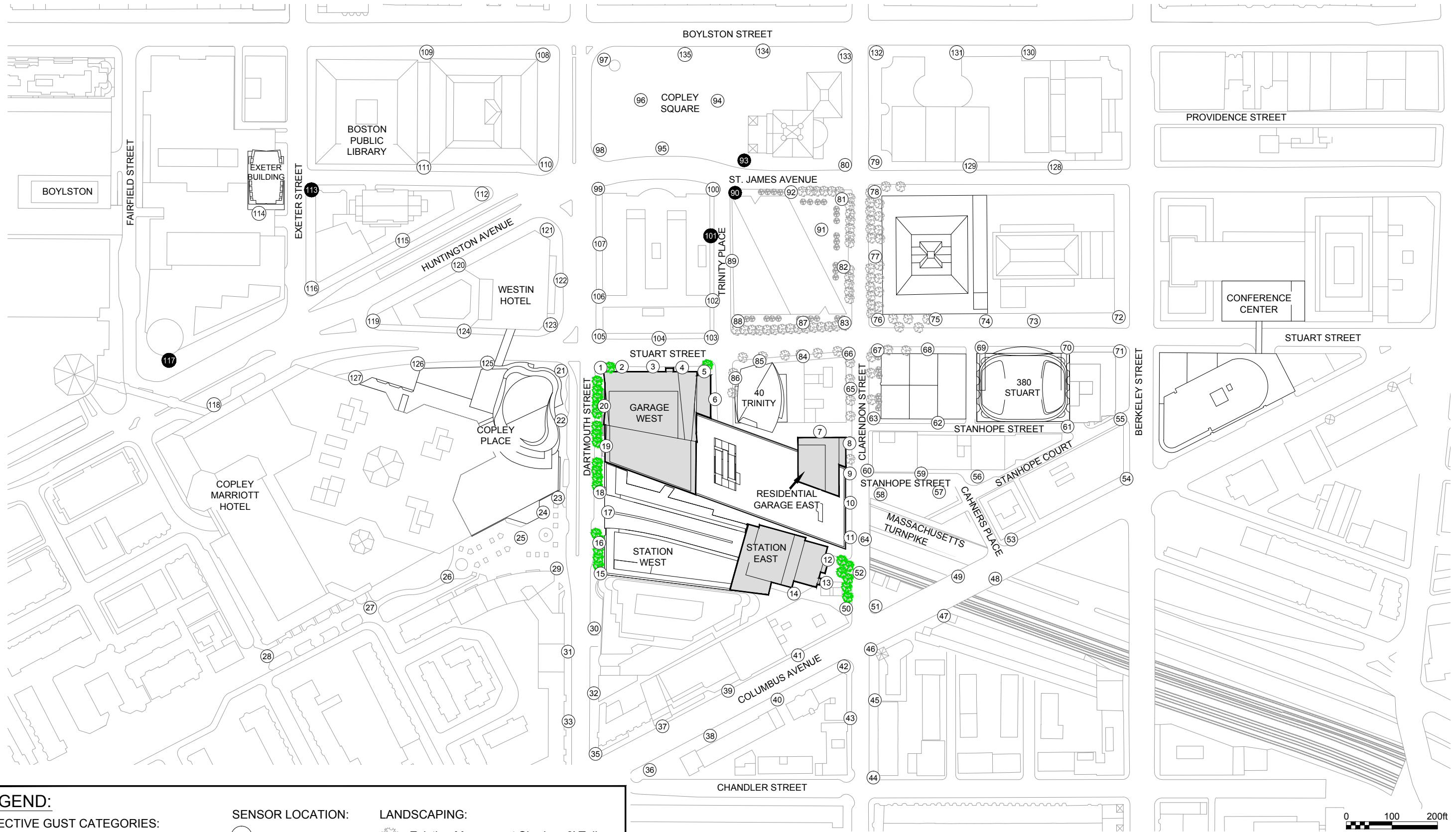


**LEGEND:**

<b>EFFECTIVE GUST CATEGORIES:</b>	<b>SENSOR LOCATION:</b>	<b>LANDSCAPING:</b>
Acceptable 	 Grade Level	 Existing Marcescent Shrubs - 8' Tall
Unacceptable 		 Existing Marcescent Trees - 20' Tall

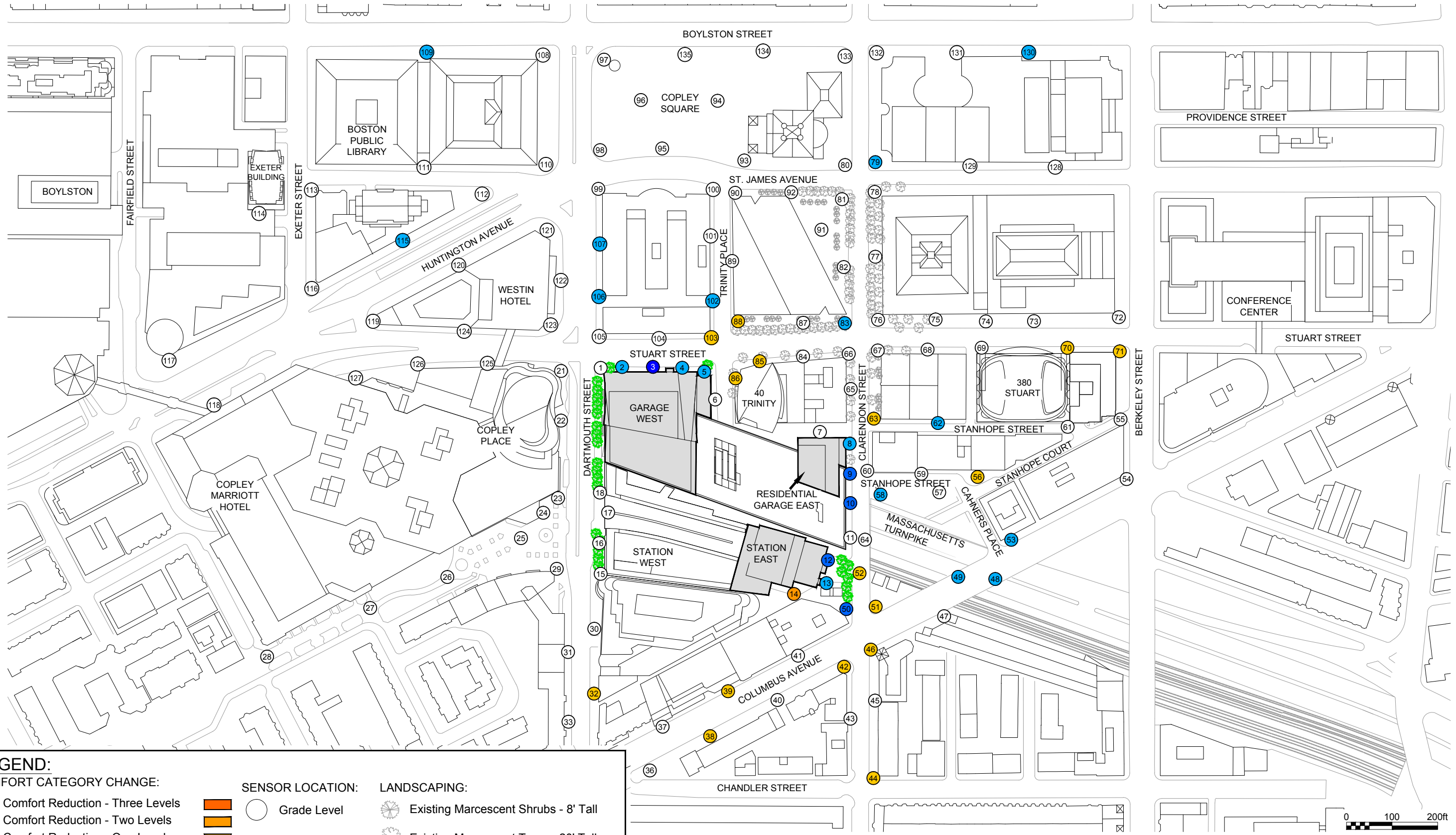
PEDESTRIAN WIND CONDITIONS - EFFECTIVE GUST - NO-BUILD





PEDESTRIAN WIND CONDITIONS - EFFECTIVE GUST - BASE SCHEME





**LEGEND:**

<b>COMFORT CATEGORY CHANGE:</b>		<b>SENSOR LOCATION:</b>		<b>LANDSCAPING:</b>	
Wind Comfort Reduction - Three Levels			Grade Level		Existing Marcescent Shrubs - 8' Tall
Wind Comfort Reduction - Two Levels					Existing Marcescent Trees - 20' Tall
Wind Comfort Reduction - One Level					Proposed Marcescent Trees - 20' Tall
No Comfort Category Change					
Wind Comfort Improvement - One Level					
Wind Comfort Improvement - Two Levels					
Wind Comfort Improvement - Three Levels					

PEDESTRIAN WIND CONDITIONS - CATEGORY CHANGE - NO-BUILD TO BASE SCHEME



# SEASONAL SHADOW STUDIES







9:00AM EDT



12:00PM EDT

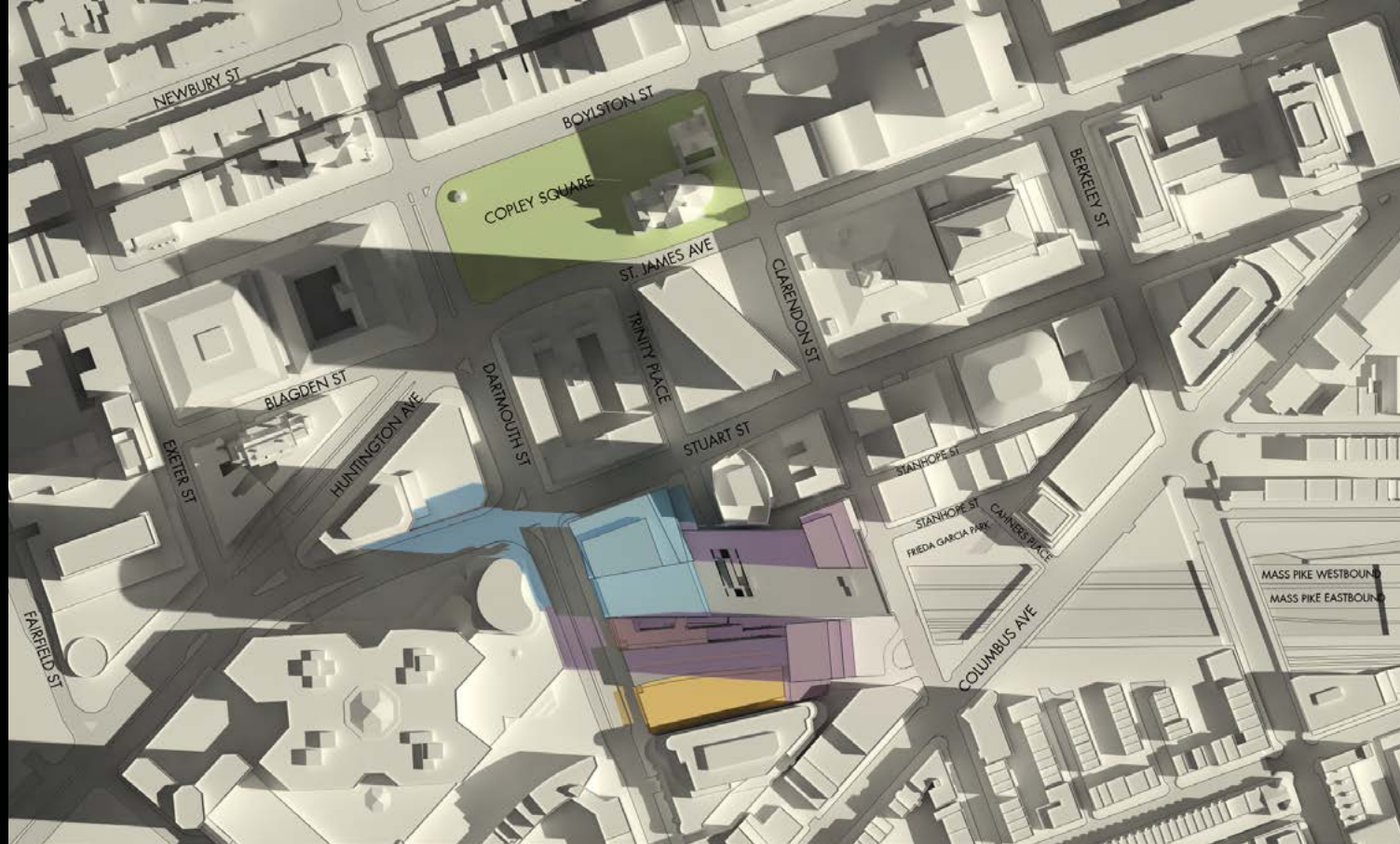


3:00PM EDT

**LEGEND**

- Commercial
- Residential
- Retail





9:00AM EDT



12:00PM EDT



3:00PM EDT



6:00PM EDT





9:00AM EST



12:00PM EST



3:00PM EST



# SHADOW LIMIT ON COPLEY SQUARE







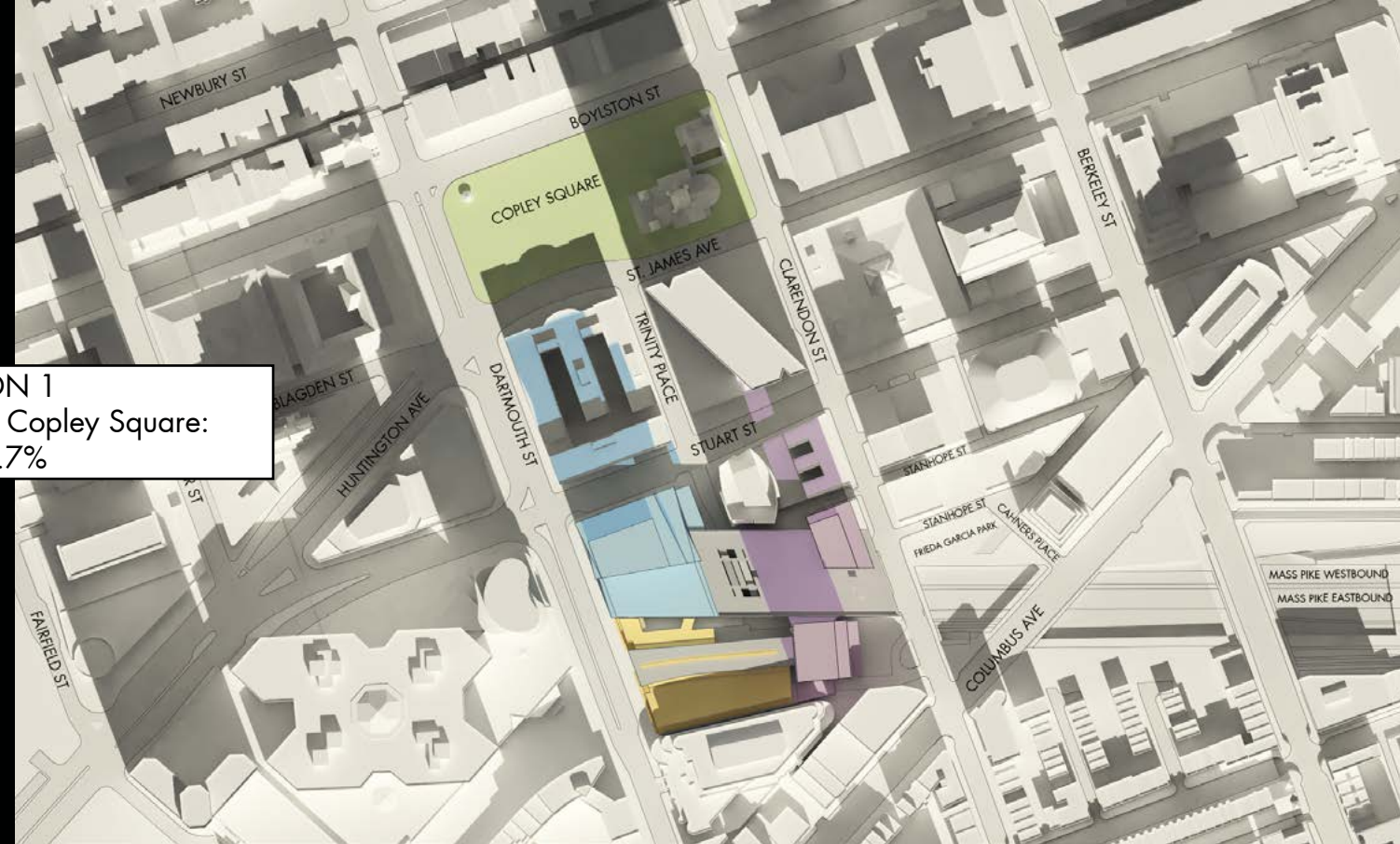
9:00am





DURATION 1  
Average Shading on Copley Square:  
0% to 2.7%

10:09AM EDT



11:19AM EDT



DURATION 2  
Average Shading On Copley Square:  
0% to 0.45%

11:53AM EDT



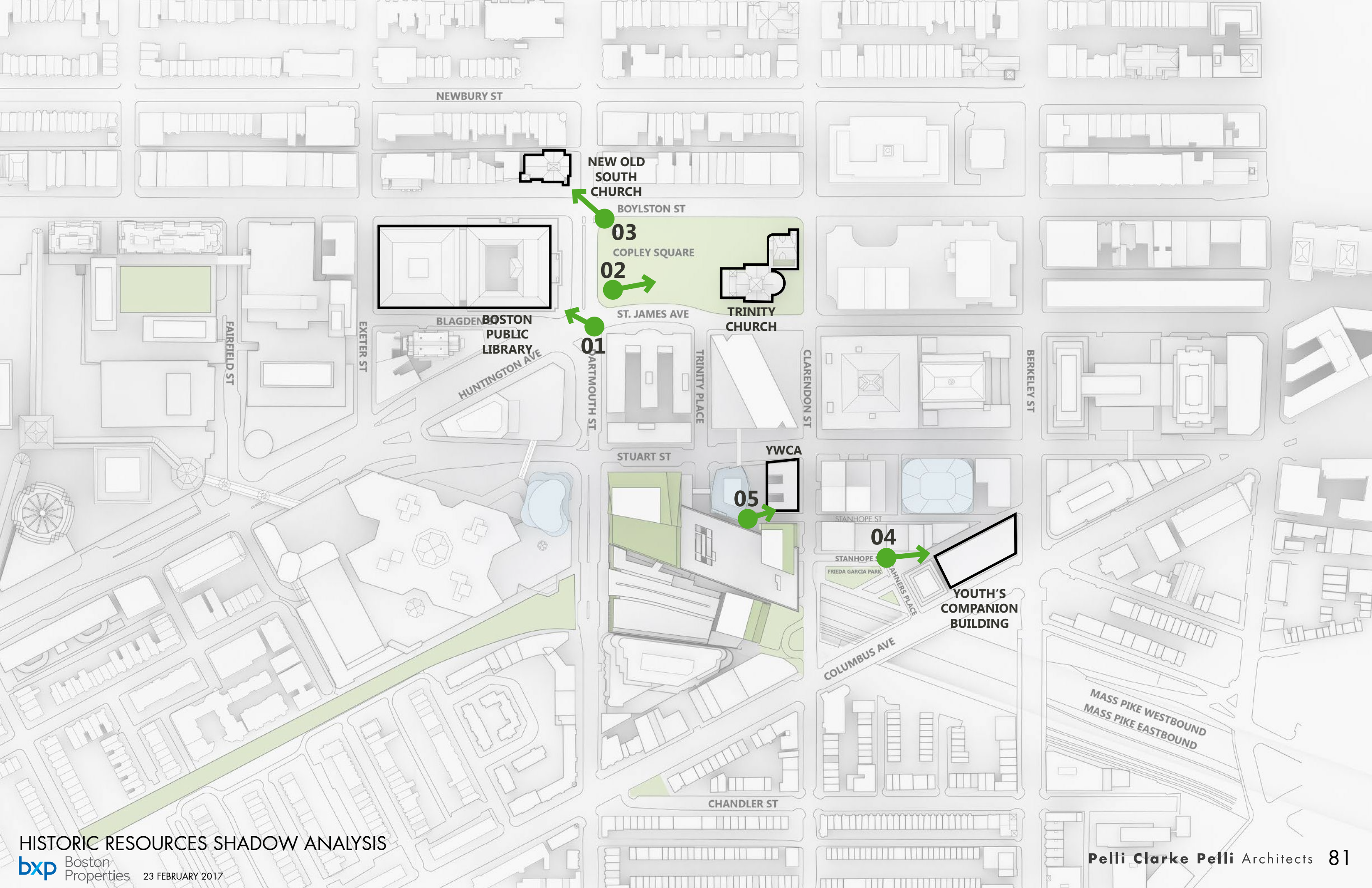
12:37PM EDT



# HISTORIC RESOURCE SHADOW ANALYSIS







NEWBURY ST

NEW OLD SOUTH CHURCH

BOYLSTON ST

03

COPLEY SQUARE

02

TRINITY CHURCH

ST. JAMES AVE

BLAGDEN BOSTON PUBLIC LIBRARY

01

HUNTINGTON AVE

STUART ST

YWCA

05

04

YOUTH'S COMPANION BUILDING

STANHOPE ST

STANHOPE ST

FRIEDA GARCIA PARK

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

STANHOPE ST

FAIRFIELD ST

EXETER ST

ARTMOUTH ST

TRINITY PLACE

CLARENDON ST

BERKELEY ST

CHANDLER ST

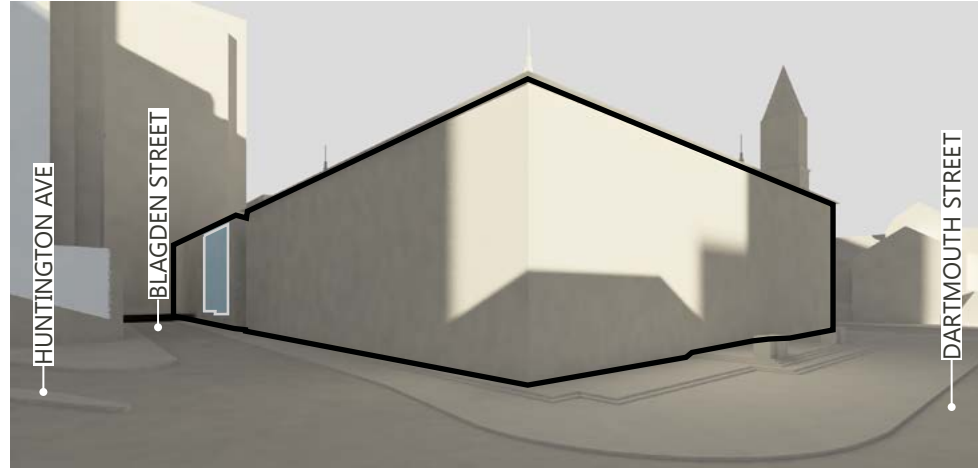
MASS PIKE WESTBOUND  
MASS PIKE EASTBOUND



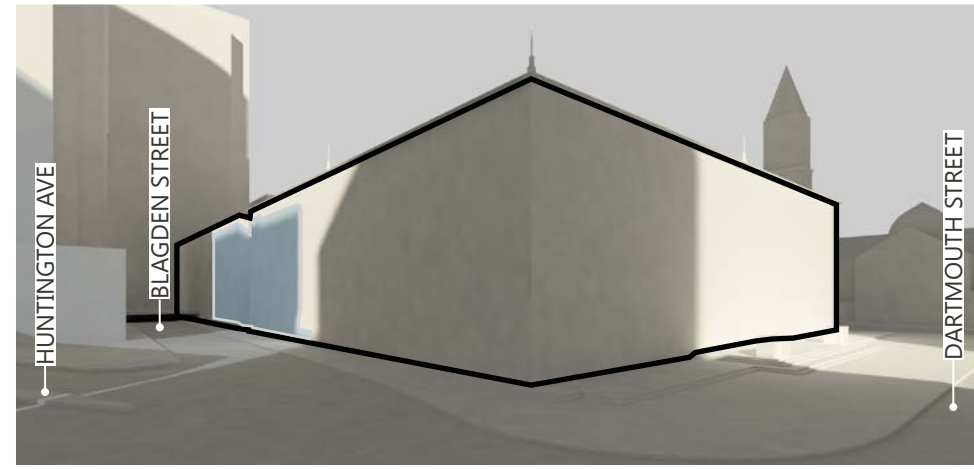
# 01 - BOSTON PUBLIC LIBRARY

## MARCH 21 AND SEPTEMBER 21 (Equinox)

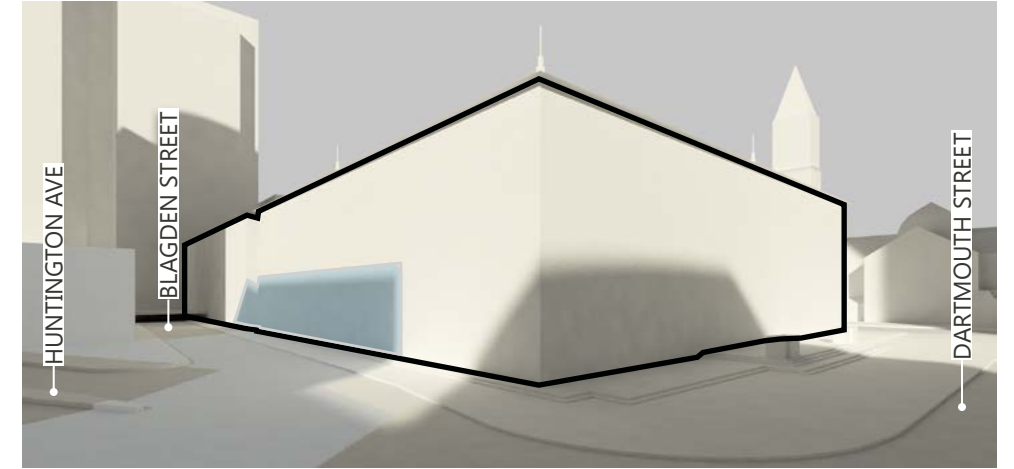
Garage West casts a small amount of net new shadow on portions of the Secondary Facade of the Boston Public Library in the morning from **8:05am to 9:32am for a total of 87 Minutes.**



8:20am EDT



8:51am EDT



9:17am EDT

## JUNE 21 (Solstice)

No net new shadow impact.



9:00am EDT



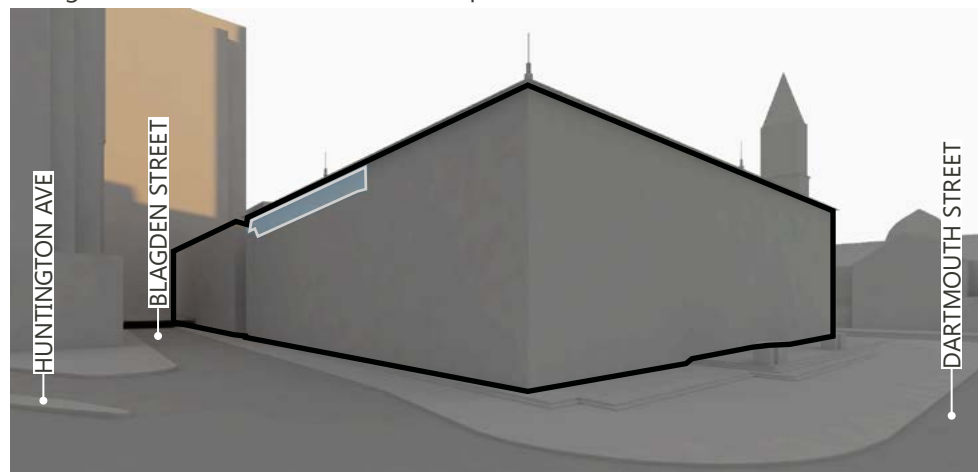
12:00pm EDT



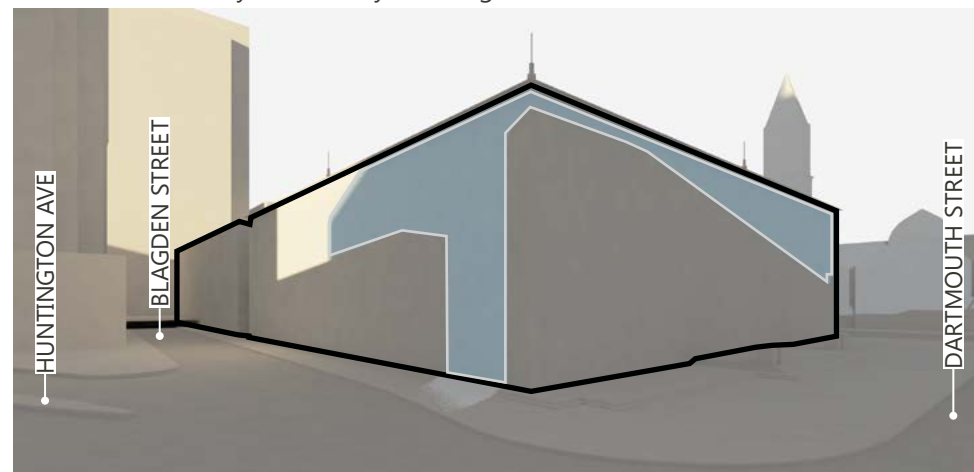
3:00pm EDT

## DECEMBER 21 (Solstice)

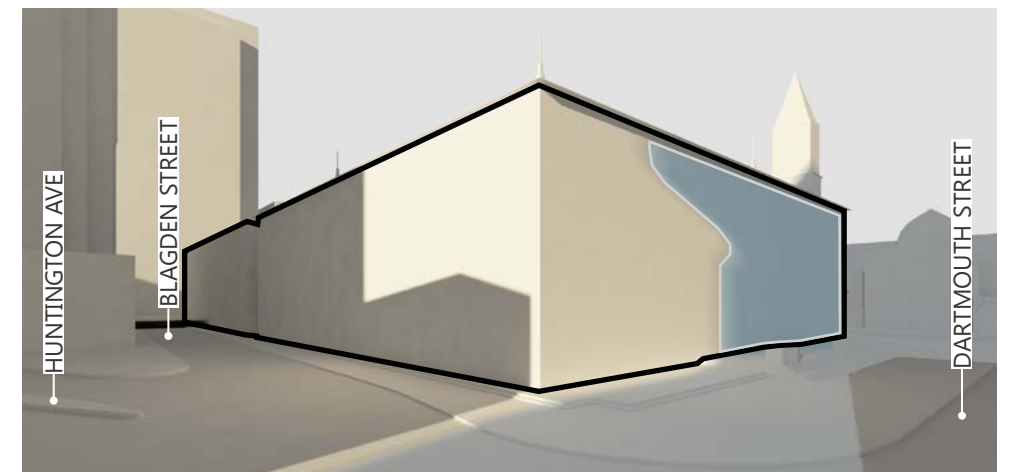
Garage West casts net new shadow on portions of the South and East Facades of the Boston Public Library in the early morning from **7:30am to 9:30am for a total of 120 Minutes.**



7:45am EST



8:30am EST



9:15am EST

Legend    Area Of Existing Shadow    Area Of Net New Shadow From Proposed Office Building    Area Of Net New Shadow From Proposed Residential Buildings



## 02 - TRINITY CHURCH

### MARCH 21 AND SEPTEMBER 21 (Equinox)

No Net New Shadow Impact.



No Net New Shadow Impact

9:00am EDT



No Net New Shadow Impact

12:00pm EDT



No Net New Shadow Impact

3:00pm EDT

### JUNE 21 (Solstice)

No Net New Shadow Impact.



No Net New Shadow Impact

9:00am EDT



No Net New Shadow Impact

12:00pm EDT



No Net New Shadow Impact

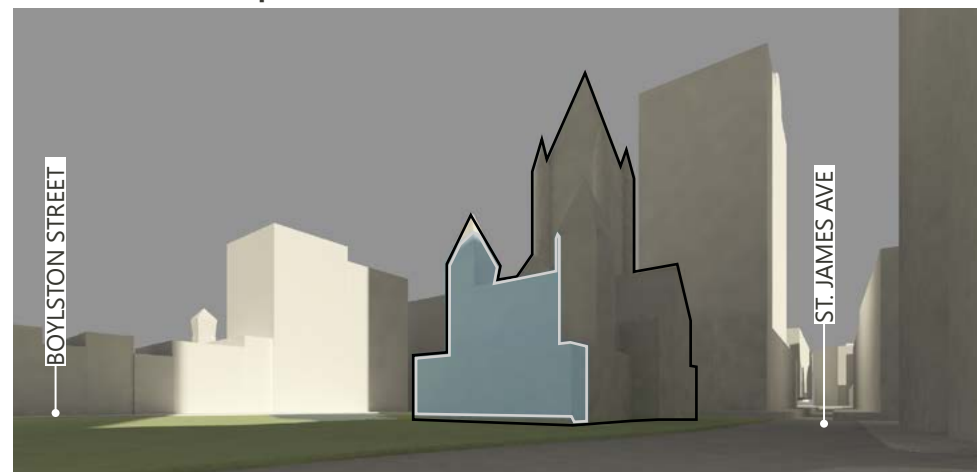
3:00pm EDT

### DECEMBER 21 (Solstice)

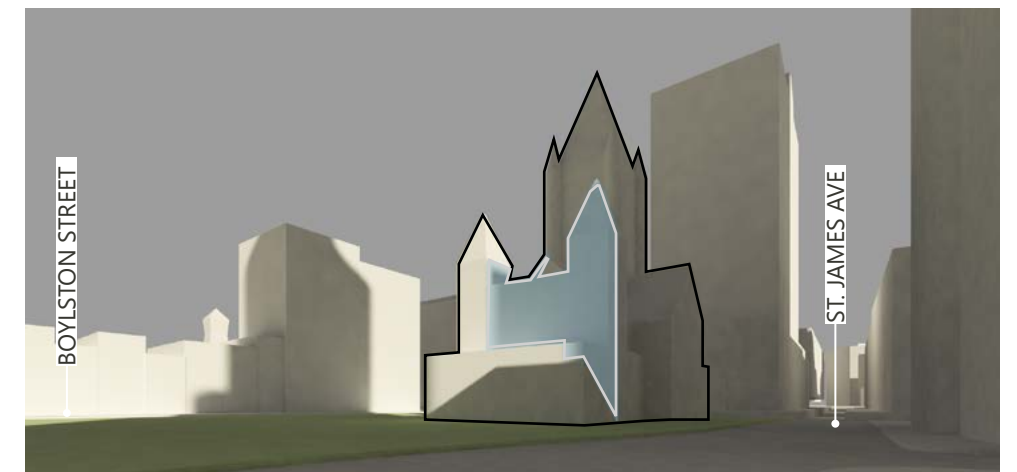
Garage West casts net new shadow on portions of the West Facade of Trinity Church from **11:15am to 12:45pm for a total of 90 Minutes.**



11:30am EST



12:00pm EST



12:30am EST

Legend Area Of Existing Shadow Area Of Net New Shadow From Proposed Office Building Area Of Net New Shadow From Proposed Residential Buildings



**MARCH 21 AND SEPTEMBER 21 (Equinox)**

No net new shadow impact



No Net New Shadow Impact

9:00am EDT



No Net New Shadow Impact

12:00pm EDT



No Net New Shadow Impact

3:00pm EDT

**JUNE 21 (Solstice)**

No net new shadow impact.



No Net New Shadow Impact

9:00am EDT



No Net New Shadow Impact

12:00pm EDT

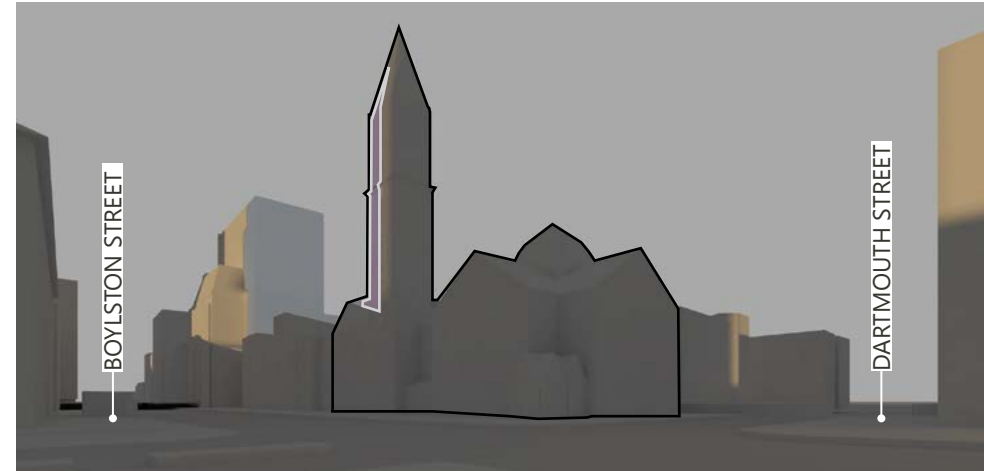


No Net New Shadow Impact

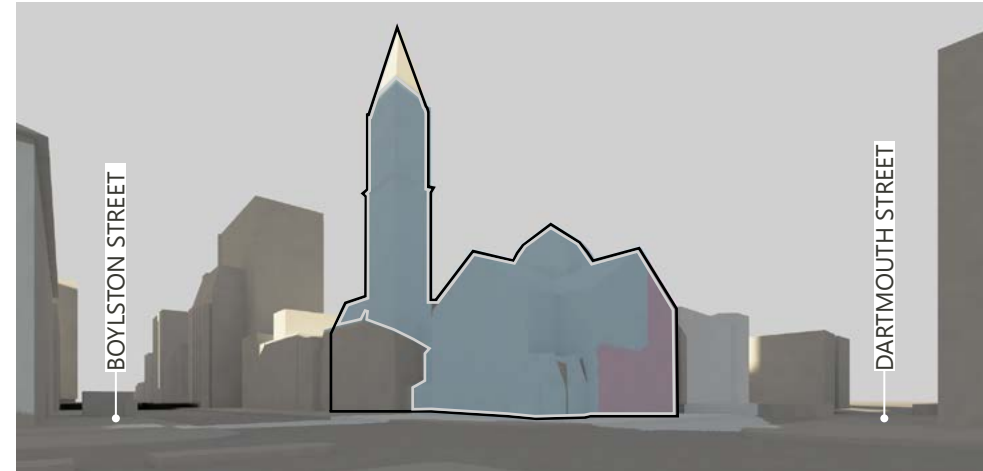
3:00pm EDT

**DECEMBER 21 (Solstice)**

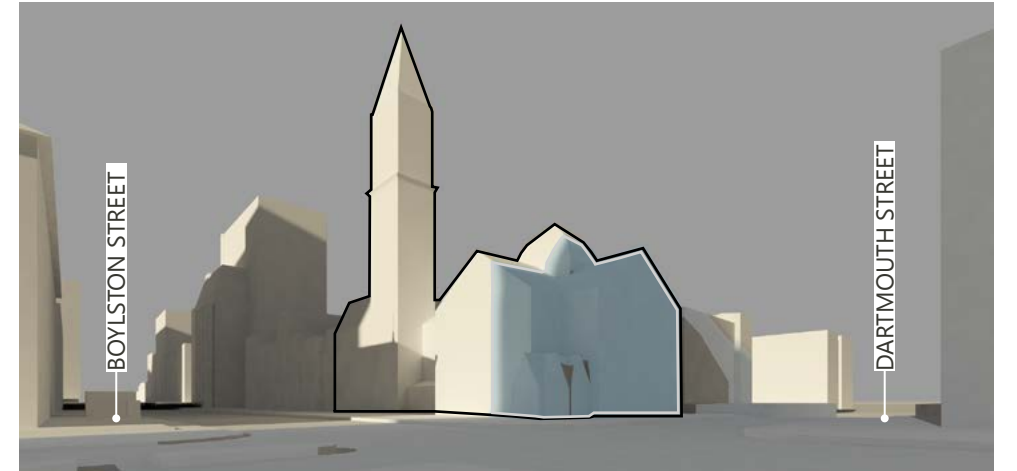
Garage West and Station East cast net new shadow on portions of the South and East Facades of the New Old South Church in the early morning from **7:45am to 9:55am for a total of 130 Minutes.**



8:00am EST



8:50am EST



9:40am EST

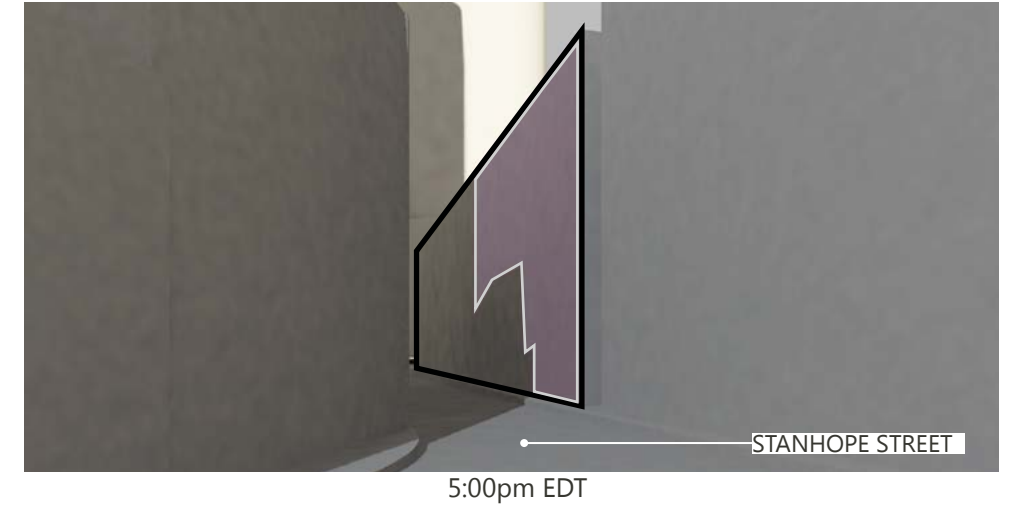
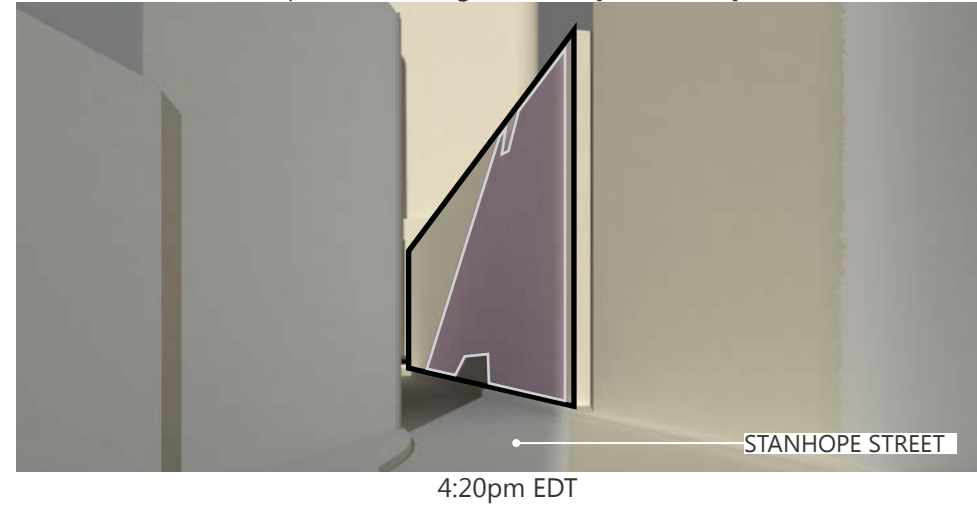
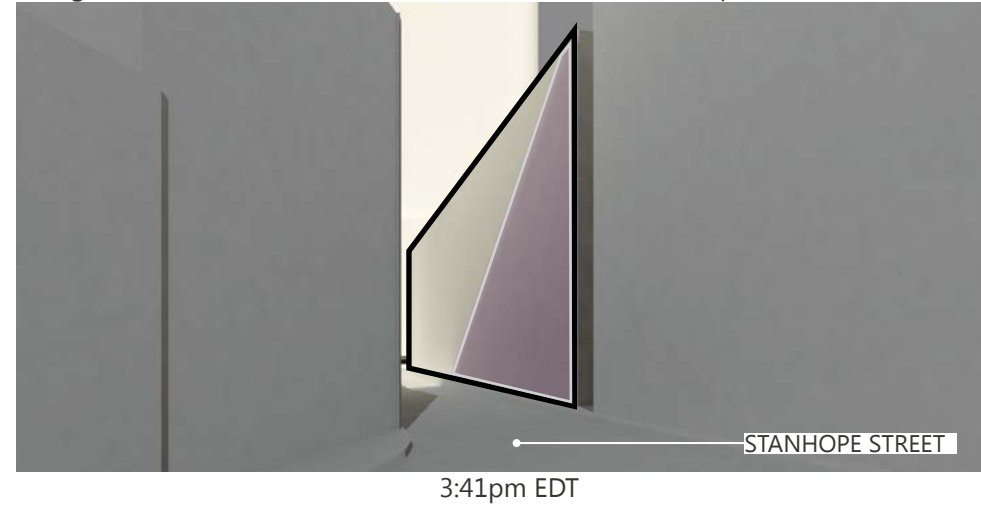
Legend Area Of Existing Shadow Area Of Net New Shadow From Proposed Office Building Area Of Net New Shadow From Proposed Residential Buildings



## 04 - YOUTH'S COMPANION BUILDING (SECONDARY FACADE)

### MARCH 21 AND SEPTEMBER 21 (Equinox)

Garage East and Station East cast some net new shadow on portions of the Rear Elevation of the Youth's Companion Building from 3:26pm to 5:15pm for a total of 109 Minutes.



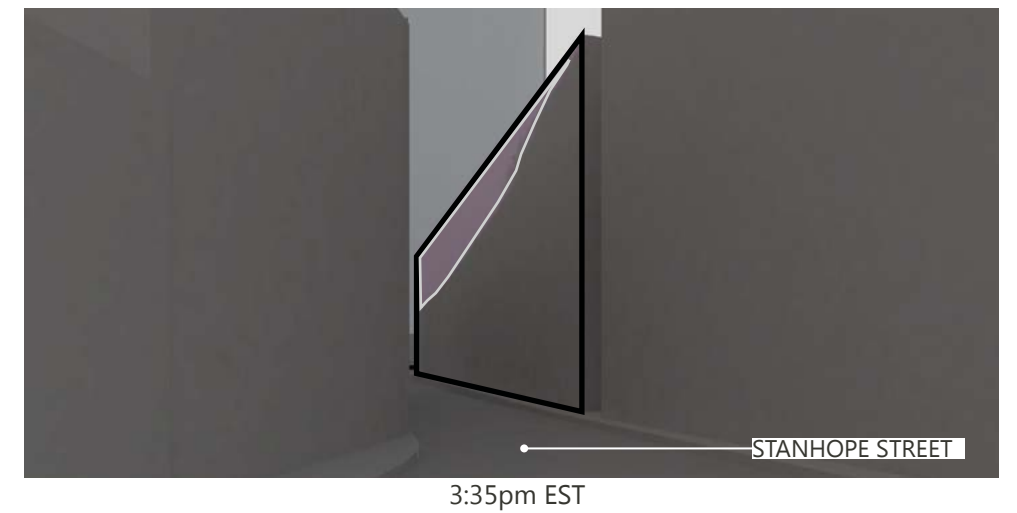
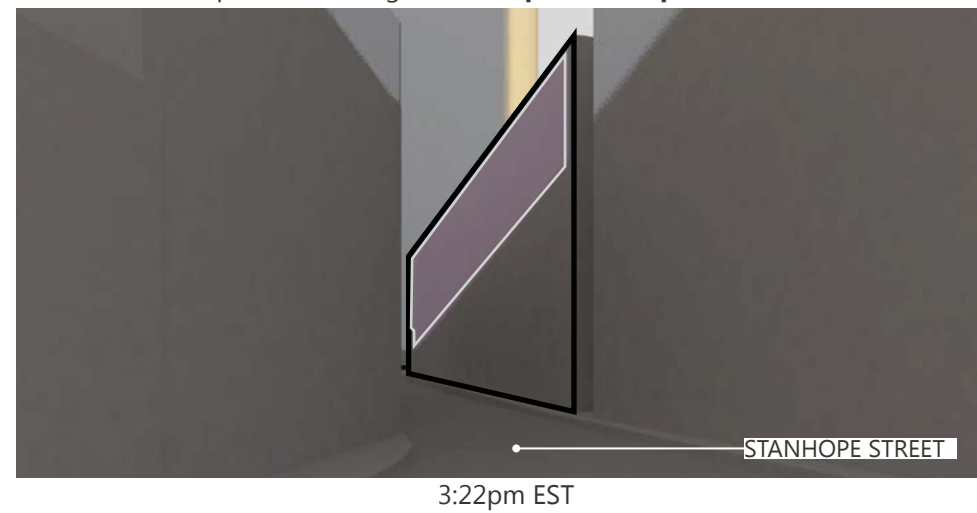
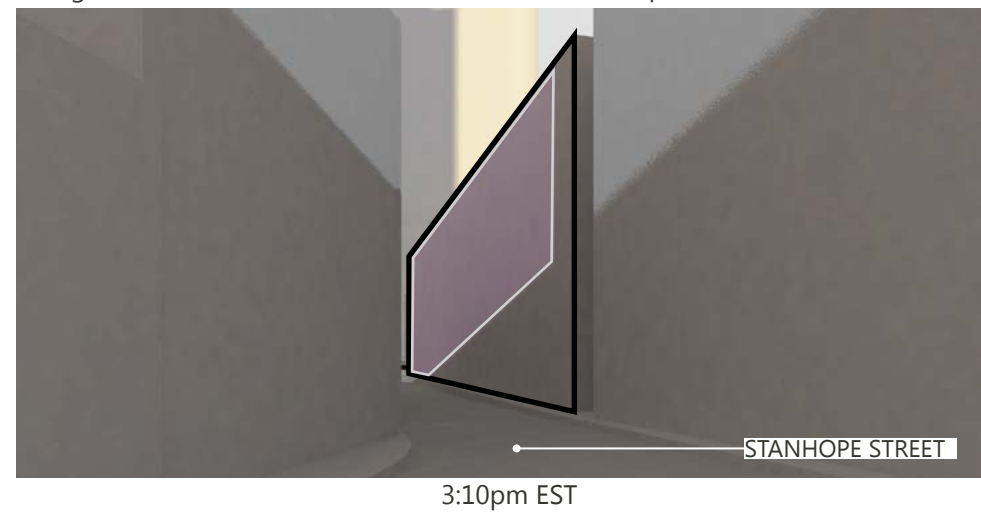
### JUNE 21 (Solstice)

No net new shadow impact.



### DECEMBER 21 (Solstice)

Garage East and Station East cast net new shadow on portions of the Rear Elevation of the Youth's Companion Building from 3:00pm to 3:45pm for a total of 45 Minutes.



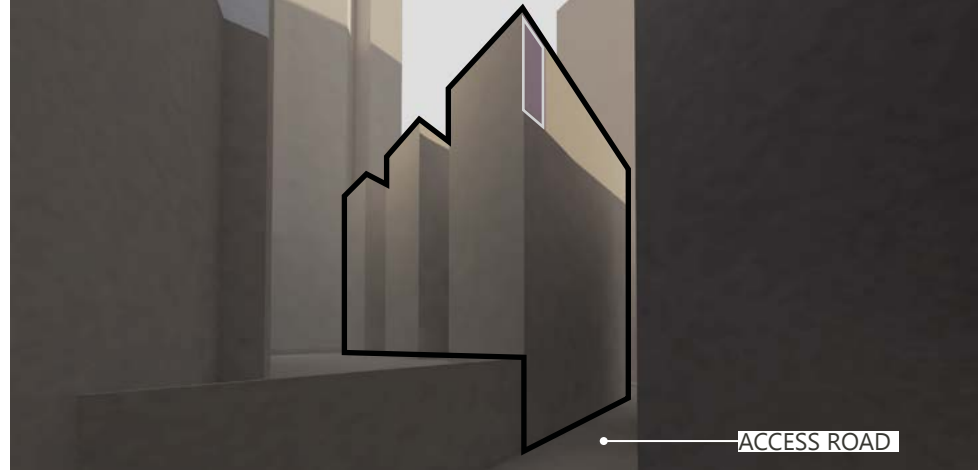
Legend   Area Of Existing Shadow   Area Of Net New Shadow From Proposed Office Building   Area Of Net New Shadow From Proposed Residential Buildings



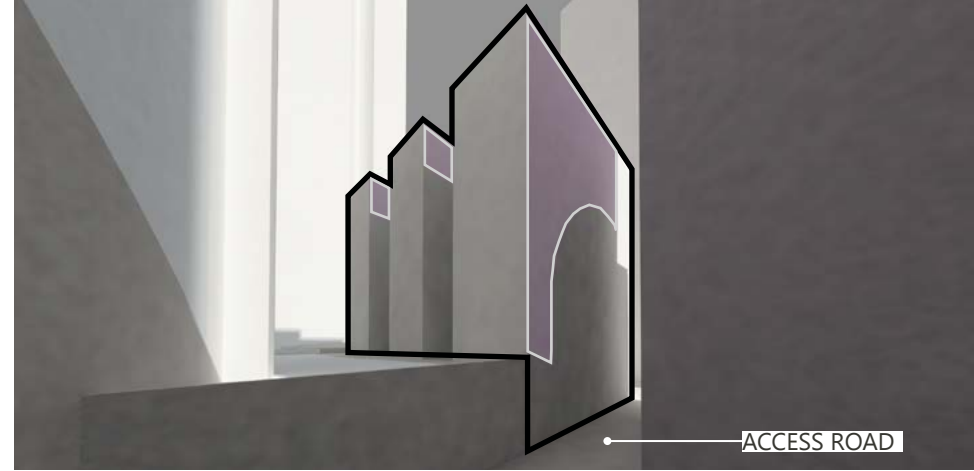
## 05 - YWCA

### MARCH 21 AND SEPTEMBER 21 (Equinox)

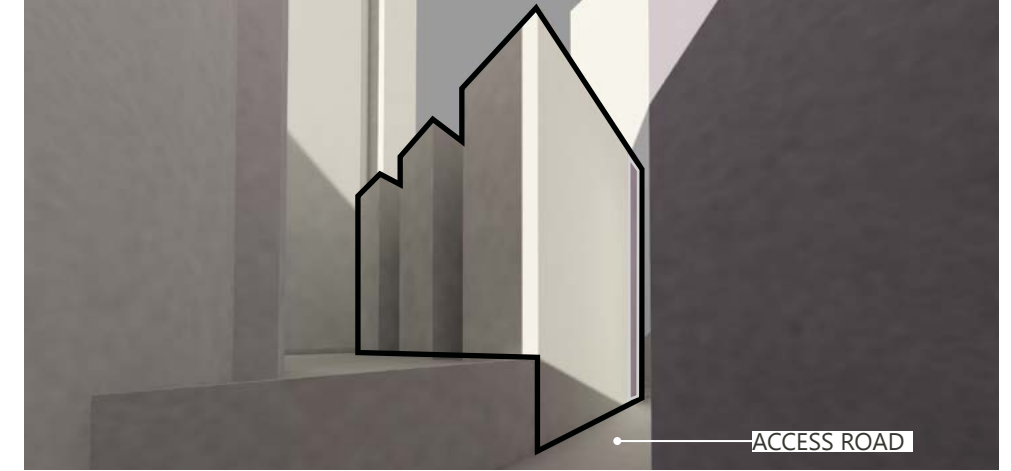
Garage East casts net new shadow on portions of the Secondary Elevation of the YWCA Building from **7:10am to 3:41pm for a total of 7 Hours and 31 Minutes.**



7:25am EDT



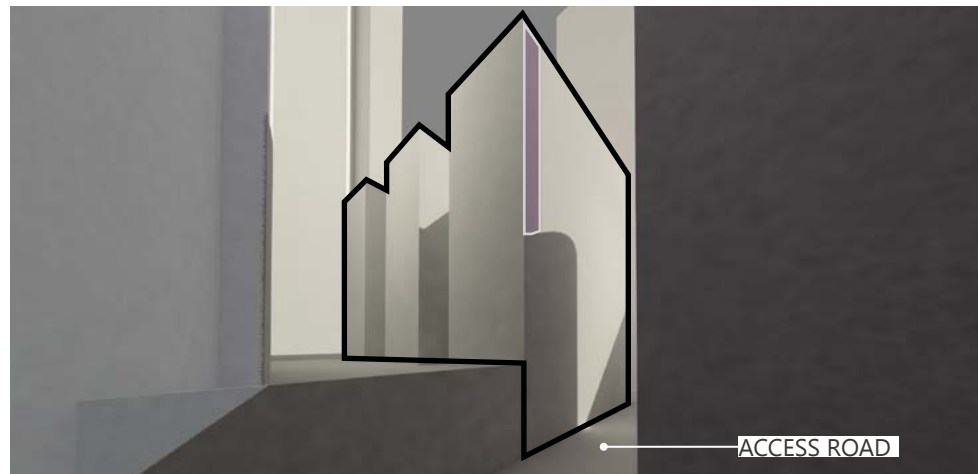
11:25am EDT



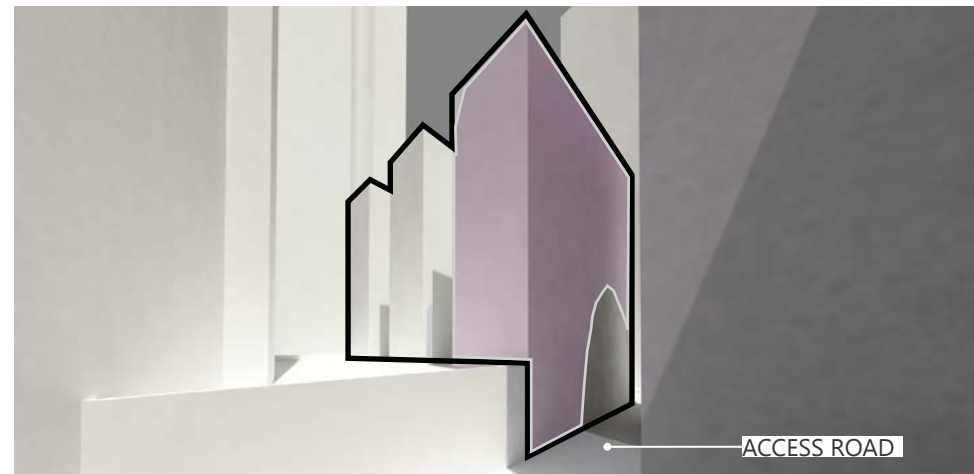
3:26pm EDT

### JUNE 21 (Solstice)

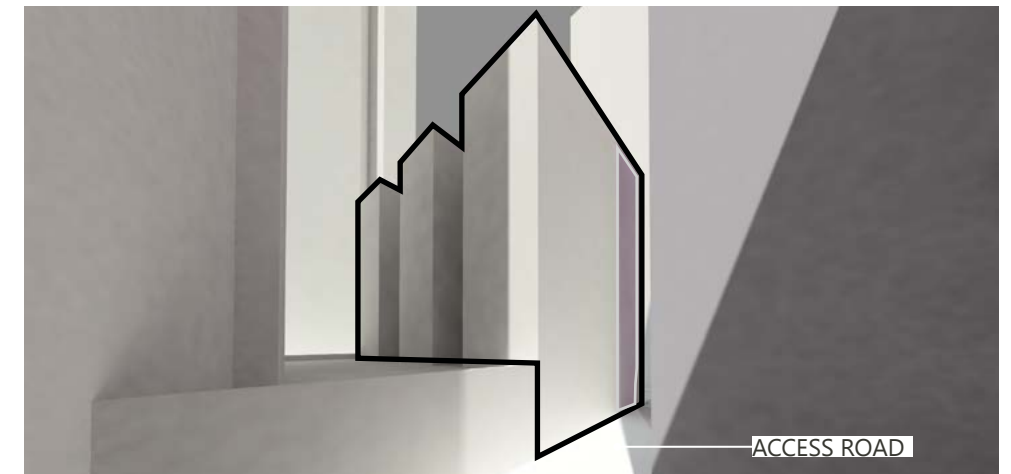
Garage East casts net new shadow on portions of the Secondary Elevations of the YWCA Building from **8:50am to 2:20pm for a total of 5 Hours and 30 Minutes.**



9:05am EDT



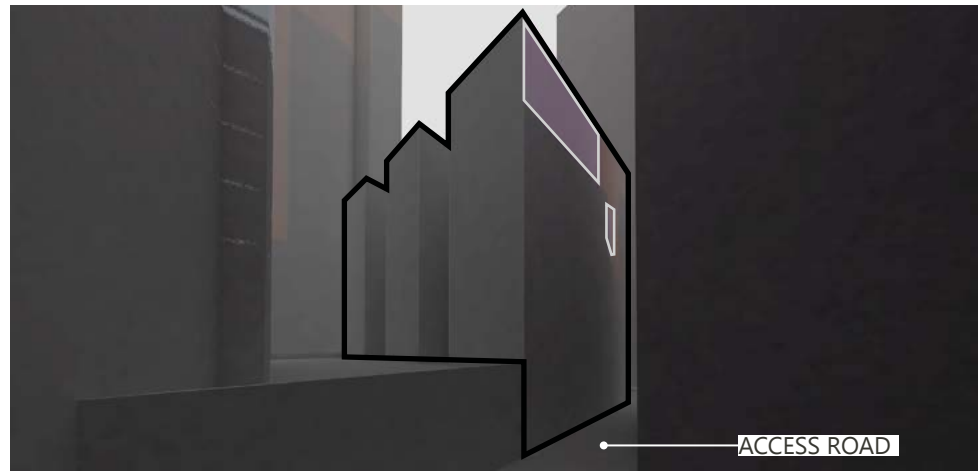
12:35pm EDT



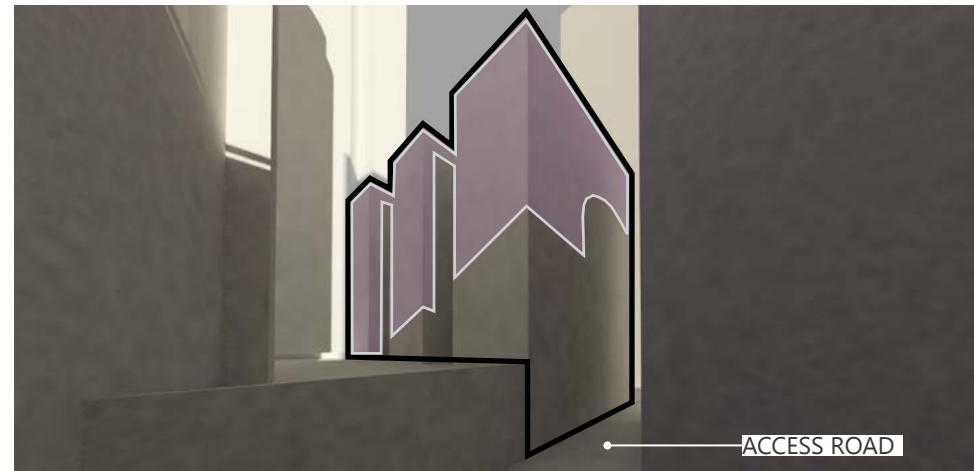
2:05pm EDT

### DECEMBER 21 (Solstice)

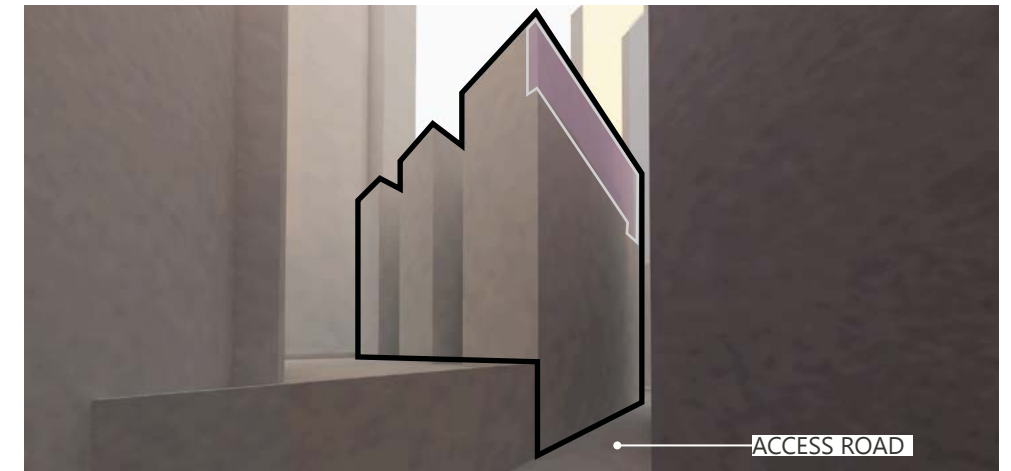
Garage East casts net new shadow on portions of the Secondary Elevations of the YWCA Building from **Sunrise (7:11am) to 3:50pm for a total of 8 Hours and 39 Minutes.**



7:26am EST



11:30am EST



3:35pm EST

Legend Area Of Existing Shadow Area Of Net New Shadow From Proposed Office Building Area Of Net New Shadow From Proposed Residential Buildings



# NEXT STEPS + CONTACT INFORMATION

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- Public Meeting #1:  
March 1, 2017 6:00PM - 8:00PM  
Boston Common Hotel & Conference Center, 40 Trinity Place
- MEPA DEIR Comment Period Closes • March 10, 2017
- BPDA DPIR Comment Period Closes • April 16, 2017
- Future CAC Meeting Topics:
  - Traffic and Parking
  - Sustainability
  - Additional Topics TBD

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Q&A



An architectural rendering of a modern city street scene. The central focus is a multi-story glass skyscraper with a stepped, tiered top. To its right is another tall, slender glass building. In the foreground, a pedestrian plaza is filled with people, some sitting at outdoor cafe tables under umbrellas. A building with arched windows and a sign that reads "SHOPS AT BACK BAY" is visible. The sky is a clear, light blue. The overall atmosphere is bright and urban.

THANK YOU!