

AVENUE OF THE ARTS
Design Guidelines Study

City of Boston
Martin J. Walsh, Mayor

BOSTON
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SASAKI RWDI®

October 2015

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October 2015

It is with great pleasure that the Boston Redevelopment Authority issues the Avenue of the Arts Design Guidelines Study. This document is the result of both the dedication and participation of residents, community organizations, and institutions throughout the duration of the study and also the years of hard work which led to the existing zoning entitlements that these guidelines hope to enrich.

Huntington Avenue is a unique corridor in the City of Boston and serves as a place for our residents and visitors to engage in a wide range of cultural and academic opportunities. It is also an area about to undergo tremendous change, with multiple large building projects providing the opportunity to enhance the vibrancy of the area and strengthen the identity of the district as a destination.

These Guidelines will serve to provide a range of stakeholders and interested parties with a vision for the public realm between Longwood Avenue and Massachusetts Avenue and help shape future projects when they are reviewed under Article 80B of the Boston Zoning Code.

I want to thank all those who have participated in this important effort and look forward to continuing to work with you as this vitally important part of our community evolves.

Sincerely,

Brian P. Golden

Brian Golden
Director

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ACKNOWLEDGEMENTS

The Avenue of the Arts Design Guidelines are the result of a collaborative effort with the many institutions and dedicated residents in the study area. We thank all of the participants for their generous contribution of time and insight.

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Martin J. Walsh, Mayor

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Museum of Fine Arts, Boston
New England Conservatory of Music
Wentworth Institute of Technology
Boston Symphony Orchestra
Massachusetts College of Art and Design
Northeastern University

INTRODUCTION

The portion of Huntington Avenue located between Massachusetts Avenue and Longwood Avenue, also referred to as the “Avenue of the Arts”, is home to many of Boston’s greatest institutions dedicated to fine arts, architecture, music, theater, and education. These institutions include the Boston Symphony Orchestra, Boston University’s Huntington Theater Company, New England Conservatory of Music, Northeastern University, the Wentworth Institute of Technology, Massachusetts College of Art and Design, and the Museum of Fine Arts. The Avenue of the Arts is a destination for residents and visitors alike, providing unparalleled opportunities for a wide range of cultural and educational activities. The Avenue benefits from superior transit and vehicular access, serviced by the MBTA Green Line trolley, numerous bus routes, and direct connections to both Downtown and points west via Huntington Avenue. Large volumes of pedestrians use the Avenue to access the many institutions at all times of the day.

In recent years, projects such as Building H at Northeastern University, the reopening of the Museum of Fine Arts Huntington Entrance, the new residence halls at MassArt and Wentworth, and the ongoing construction of the Design and Media center at MassArt have shown the dedication of these institutions to embrace and enhance their shared resource of the Avenue of the Arts.

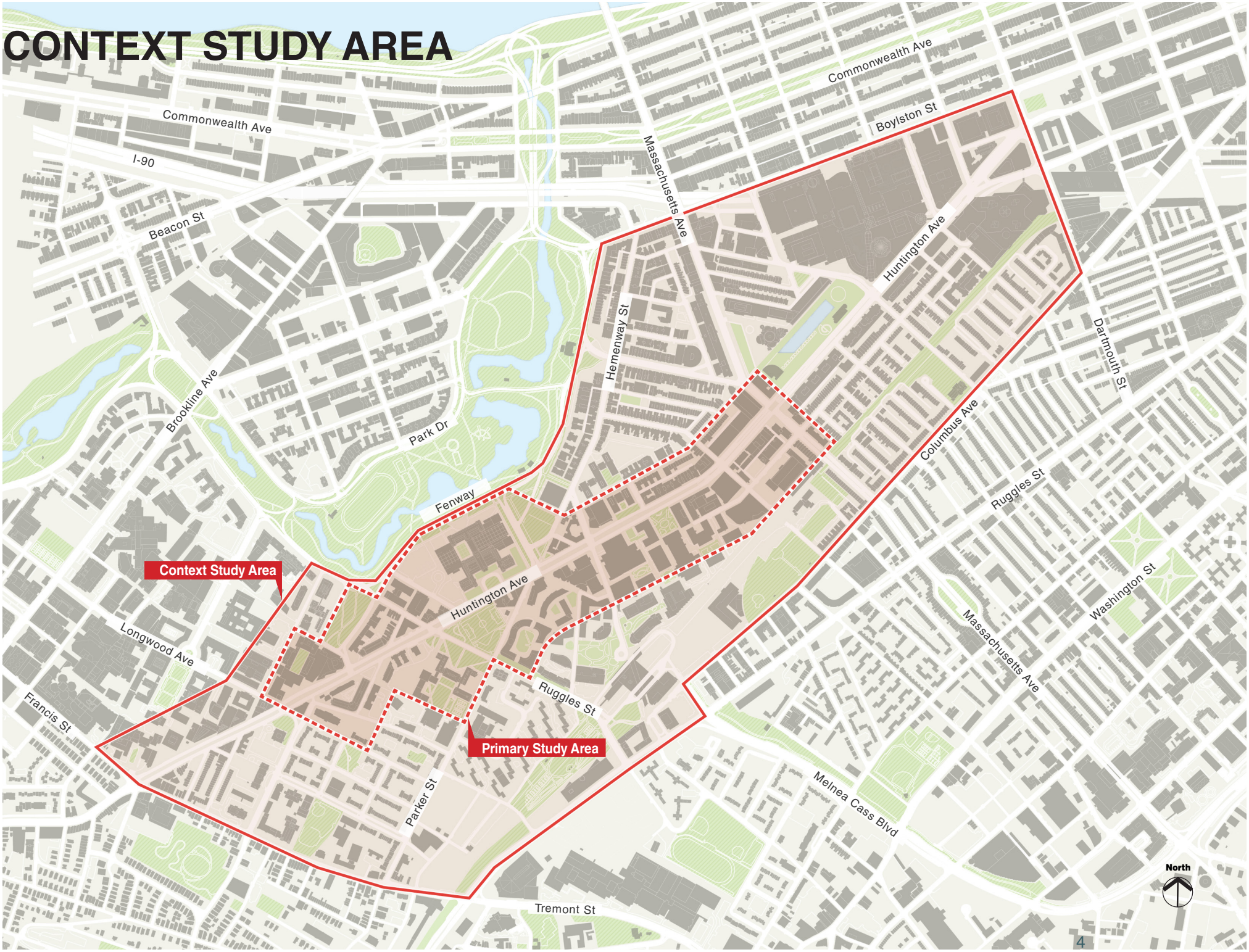
While a number of master plans have been approved through the Institutional Master Plan (IMP) approval process, as well as individual sites having gone through the Planned Development Area (PDA) approval process, there has been no overall urban design study or framework provided for the corridor as a whole. This Study attempts to do just that. The Design Guidelines Study for the Avenue of the Arts aims to provide a cohesive vision of the public realm, as defined by buildings, open spaces, and sidewalks for the Avenue between Massachusetts Avenue and Longwood Avenue. The study makes clear recommendations in each of the following categories: mobility, placemaking, programming and comfort. Through analysis of existing conditions and the proposed IMPs and PDAs, specific recommendations have been created for open space, building massing, street level activities, shadow and wind, without altering the uses or total gross square footage which zoning currently allows. The unique attributes of the Avenue have informed these guidelines. They reflect both its role as one of three major institutional corridors in the city, and the aspirations toward celebrating its many cultural institutions.

The urban design guidelines reflect input from four public meetings, held throughout the duration of the study, in which ideas were presented to the public for discussion and input. Many of the institution’s plans, already in place and in various stages of the Article 80 approvals process, were integrated as well. Ongoing work by local organizations and resident groups has been incorporated as much as possible, in recognition of the fact that the time of many dedicated stakeholders and constituents helped to shape the existing entitlements and zoning.

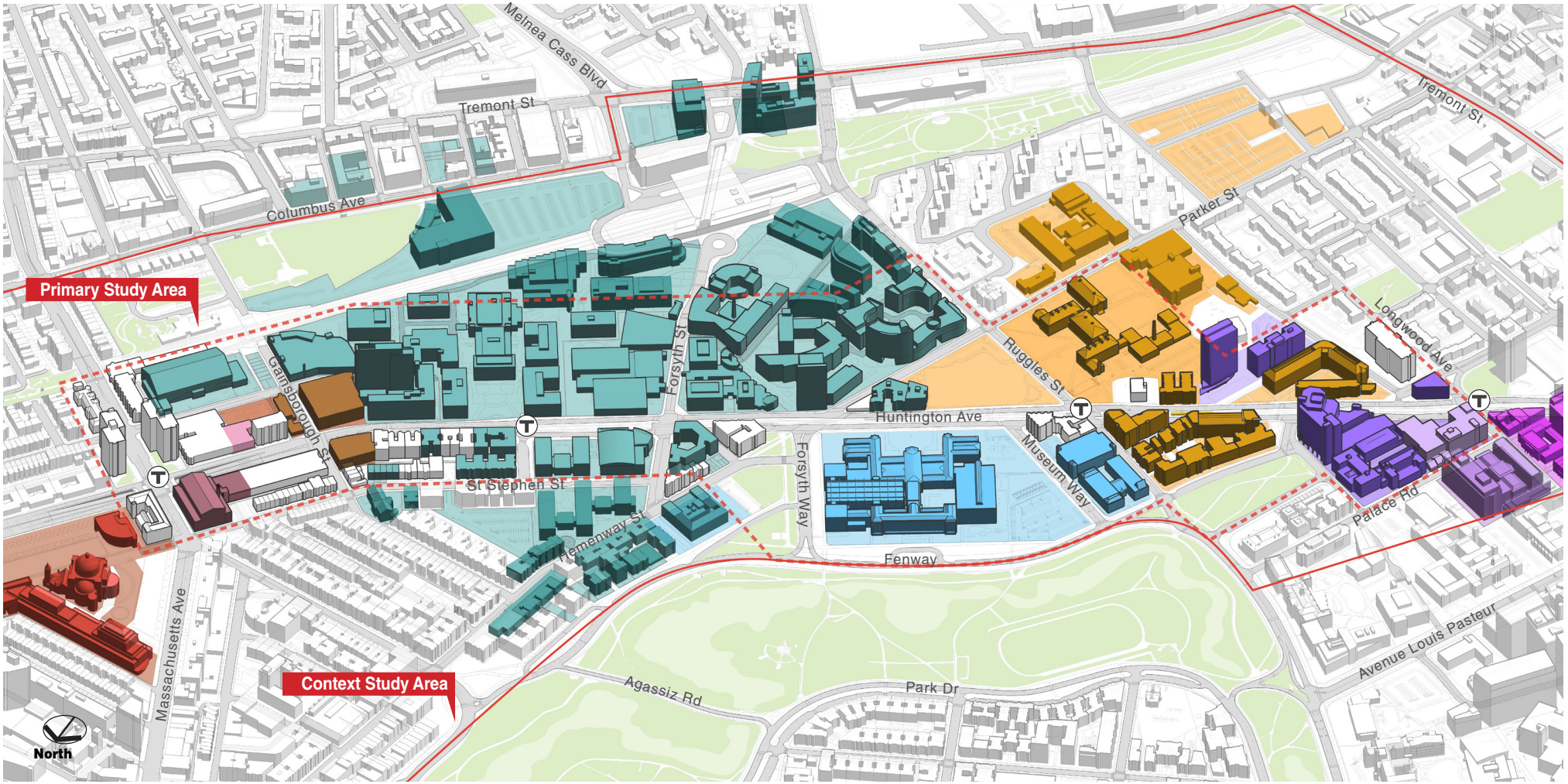
The report is divided into two sections: master plan framework recommendations for the overall study area organized by the theme, followed by specific parcel by parcel guidelines. General principles that guide the master plan framework and tactics or means of achieving the principles, proceed the framework recommendations. Through the document several ground level renderings help to illustrate a more immediate sense of place at key moments along the Avenue. The guidelines themselves are more analytic, including dimensional recommendations as well as overall massing directives.

The work of this study is intended to create both more coherence and continuity for the Avenue of the Arts while also allowing for the expression of each institution’s unique identity. It represents the first step in creating a more intentional spatial and programmatic framework for the Avenue, and provides clear guidelines which can be considered as individual projects come forward. As guidelines, they are not mandatory requirements nor are they intended to replace the elements of Article 80B of the Boston Zoning Code which regulate Large Project Review. Rather, the recommendations in the guidelines identify issues and will inform future permitting and design review of projects in the primary study area. They are intended to be flexible and accommodate a range of design solutions.

CONTEXT STUDY AREA



PRIMARY STUDY AREA: INSTITUTIONAL OWNERSHIP

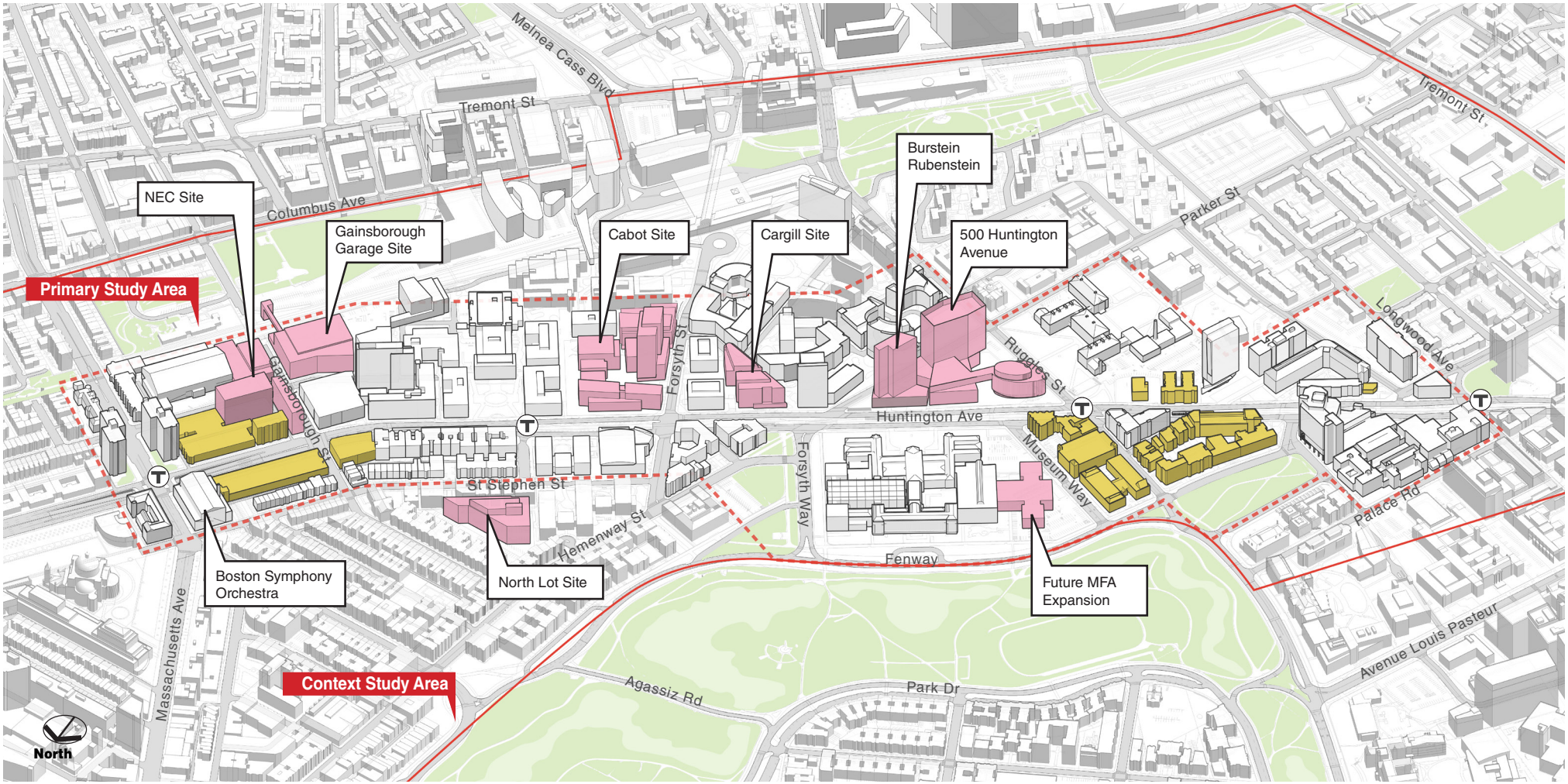


- Northeastern University
- Wentworth Institute
- Museum of Fine Arts
- FCCS Christian Science Center
- Boston Symphony Orchestra
- New England Conservatory
- Huntington Theatre Company
- MASS College of Arts & Design
- Mass College of Pharmacy
- Harvard Medical School

PERMITTED PROJECTS

Northeastern, Wentworth, and the New England Conservatory have recently undertaken planning and permitting processes, through Article 80 of the Boston Zoning Code, which will add approximately 1.7 million square feet of new space directly along the Avenue. While much of the planning recognized the importance of the Avenue and discussed the role individual projects could play in enhancing the experience of the street, no overarching principles or design guidelines informed the Avenue's look and overall feel. The zoning entitlement granted through the Article 80 process for many of these institutional projects only defined general parameters such as use, square footage, FAR, and maximum height. The final location and appearance of future buildings, open spaces, and the public realm will be subject to Article 80B Large Project Review at such time in the future that individual projects move forward.

The urban design guidelines found within this study are meant to guide future development by providing recommendations for buildings and open spaces as they go through the Article 80B review process. Proposed and permitted projects (shown as pink) are shown in the diagram on page 7. These include the Northeastern, Wentworth and New England Conservatory more recent proposals as well as the Museum of Fine Arts 2004 expansion proposal. For this study the BRA included sites that may be subject to change in the future and as such have been included in the urban design guidelines recommendations. These potential development sites are indicated in yellow.


NEC Site
Gainsborough Garage Site
Cabot Site
Cargill Site
Burstein Rubenstein
500 Huntington Avenue
Primary Study Area
Context Study Area
Boston Symphony Orchestra
North Lot Site
Future MFA Expansion
Melnea Cass Blvd
Tremont St
Columbus Ave
Parker St
Longwood Ave
Gainsborough St
Forsyth St
Ruggles St
Huntington Ave
St Stephen St
Hemenway St
Forsyth Way
Museum Way
Palace Rd
Fenway
Massachusetts Ave
Agassiz Rd
Park Dr
Avenue Louis Pasteur
North
Permitted Projects
Potential Development Sites

PRINCIPLES AND TACTICS

This study identified four general themes to help structure the overall recommendations for the urban design guidelines. The themes of mobility, placemaking, programming and comfort are each addressed in greater detail throughout this report. Here each of the themes is accompanied by an overall principle and specific tactics or means of achieving the principle. The principles were derived from the design team's analysis of the particular conditions within the study area as well as from feedback gained at the public meetings. Each principle is meant to set the broad aspirational goals within each theme for new and existing development along the Avenue. These principles are generalizable not only to the study area but could apply more broadly to entirety of Huntington Avenue within the City of Boston.

Individual tactics respond more specifically to the local conditions within the study area and offer clear directives for new development along the Avenue. The tactics provide realizable actions as well as spatial and programmatic intentions that provide the basis of the urban design guidelines in this study. The urban design guidelines toward the end of this report give form to each of the tactics as they apply to development on specific blocks throughout the study area.

MOBILITY

PRINCIPLE:

Create a clear, safe, well-connected pedestrian experience.

TACTICS:

- **Future development must provide sufficient sidewalk width for pedestrians' comfortable and safe passage**
- **Clarify the cadence of pedestrian crossings along the Avenue through massing, landscape, and sight lines**

PLACEMAKING

PRINCIPLE:

The Avenue should be a cohesive, high quality environment. Institutions should express their identity through architecture and open spaces.

TACTICS:

- "Fabric" buildings must relate in scale and material to the buildings that surround them
- "Connecting" open spaces facilitate pedestrian movement both along the Avenue and within surrounding blocks
- A continuous streetwall should highlight "signature" open spaces and "iconic" buildings
- "Iconic" buildings should express institutional identity

PROGRAMMING

PRINCIPLE:

The Avenue should be an active, inclusive urban environment.

TACTICS:

- New buildings must have active ground floors; existing buildings should add active ground floor uses where possible
- New and existing open spaces should be actively programmed throughout the year and for a wide range of audiences

COMFORT

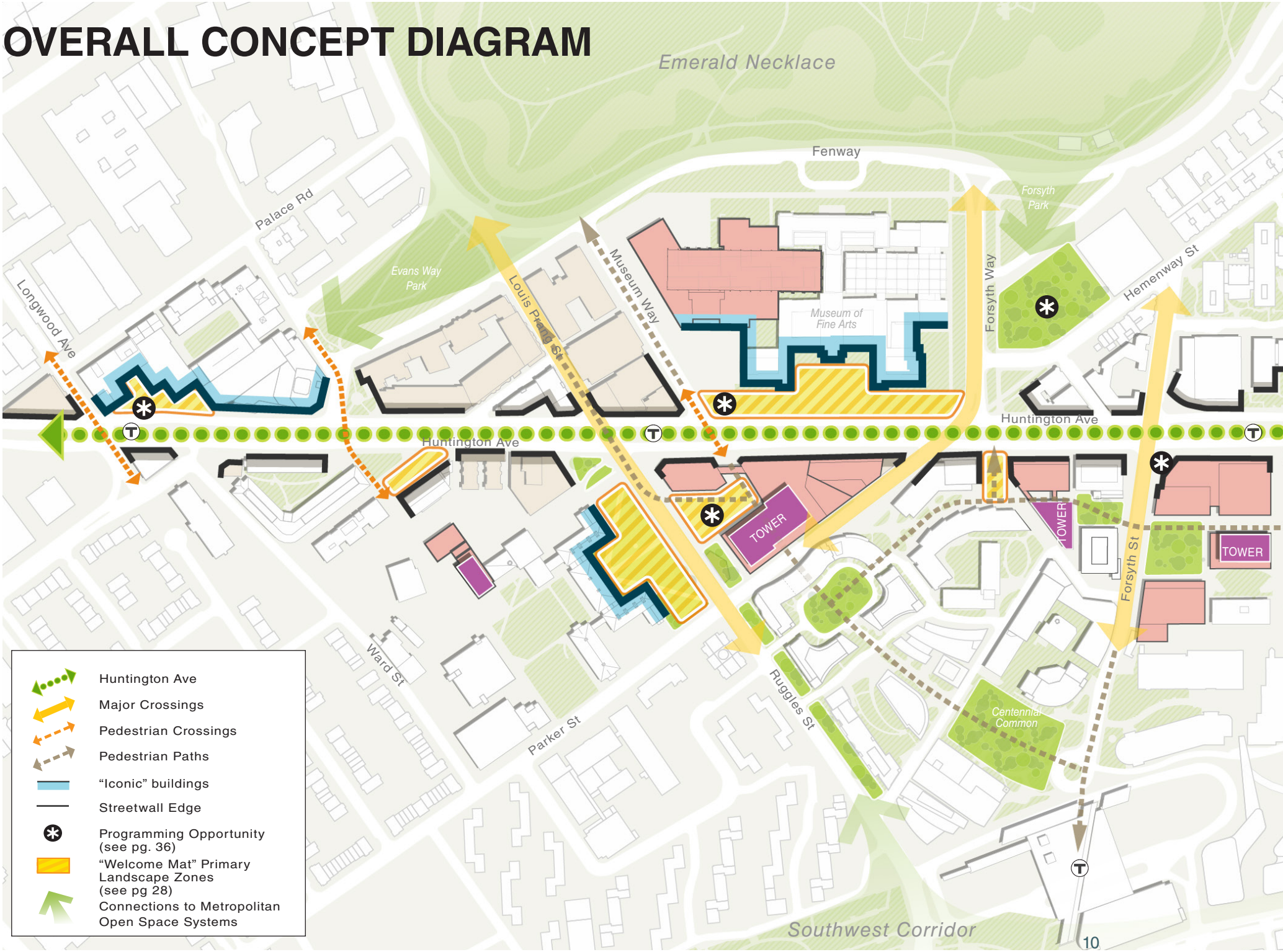
PRINCIPLE:

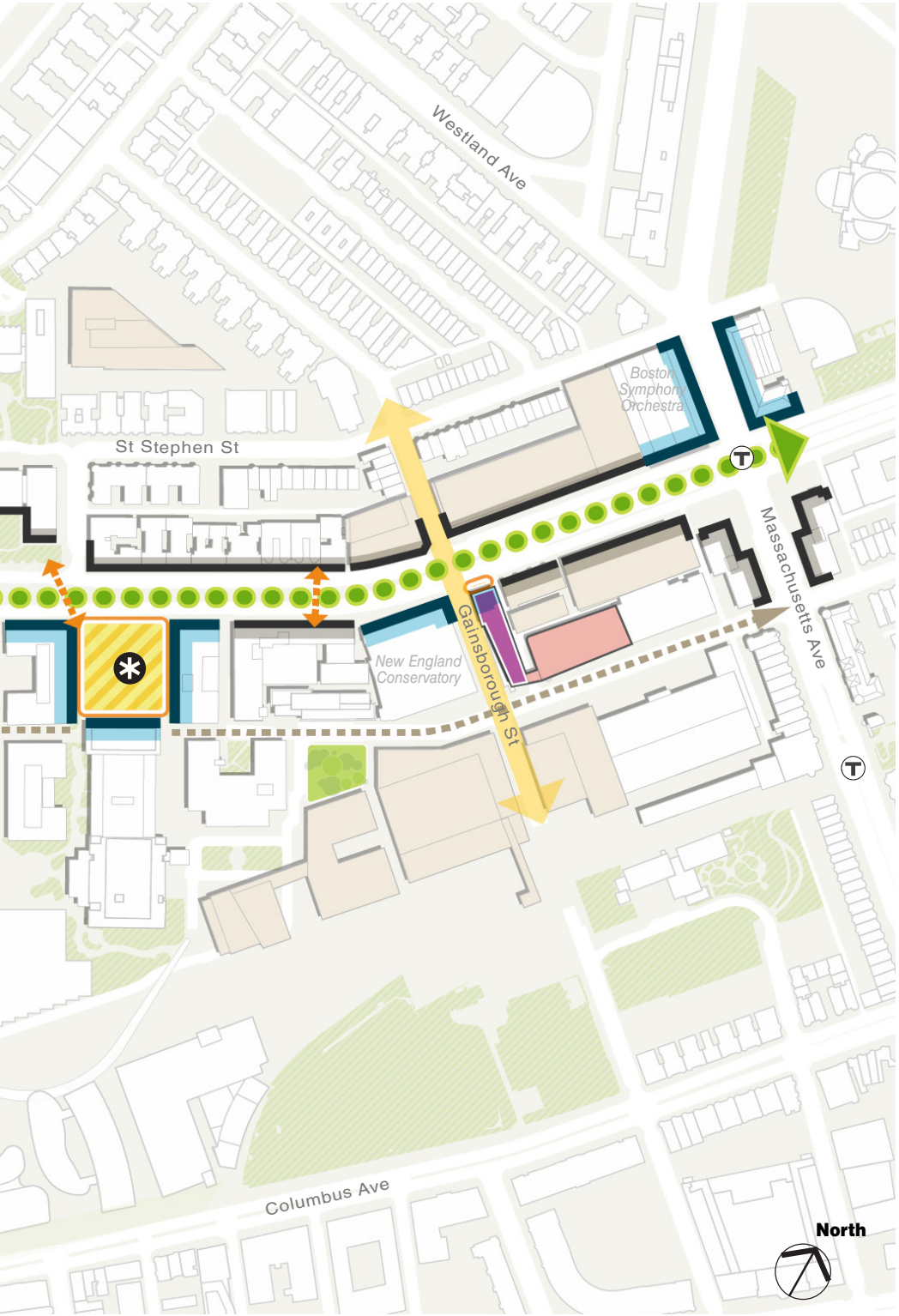
New development and initiatives should promote pedestrian comfort in the public realm.

TACTICS:

- Minimize building shadow impacts, particularly on active buildings and open spaces
- Minimize negative wind impacts on new and existing open spaces
- Employ landscape strategies that promote comfort by providing seasonal shade

OVERALL CONCEPT DIAGRAM





The overall concept diagram highlights the recommendations of the study in graphic form. It depicts a broad framework for development and the public realm along the length of Huntington Avenue from Massachusetts Avenue to Longwood Avenue. This framework provides the basis for the urban design guidelines which depict the recommended three dimensional approach for many of the development parcels in the study area. The diagram is purposefully abstracted to indicate the general strategy for Huntington Avenue and highlights these key design ideas:

- As represented by the green dotted line, Huntington Avenue should be conceived of as a continuous and coherent experience though the entire study area. Streetscape improvements - tree planting, light fixtures, wayfinding elements,and street furniture - and sidewalk widths should be as consistent as possible for the length of the Avenue so as to create a singular identity as the “Avenue of the Arts.”
- Important cross streets are noted by the pink arrows. These crossings are important for vehicles, but along with the mid-block connections (shown with small red arrows) are more important as pedestrian crossings. Referred to as “sidestreets’ elsewhere in this report, these streets provide important opportunities for streetscape improvements and - in the blocks closest to Huntington Avenue itself - provide opportunities for retail and ground level activation. Setbacks for a “cafe” or activity zone as needed should be prioritized on the side of these streets that receive the most sun.
- Pedestrian paths indicted by the grey dotted lines, help pedestrian navigation through the study area. To the greatest extent possible these paths should be reinforced and improved by new development. One such important pedestrian connection is the path extending from the Ruggles T station, along Museum Way to the Fenway.
- Light blue lines indicate the “iconic” buildings that represent many of the institutions along the Avenue. These special buildings should maintain their prominence along the Avenue so as to create hierarchy within the urban setting.
- The black lines at the edges of buildings along the Avenue and for the first block of the side streets, represent the important street wall continuity that the remainder of the buildings should provide. This creates an urban fabric or background condition against which iconic buildings should stand out.
- Special opportunities for landscape expression should occur at each of the “welcome mat” locations. Combined with active programming each of these spaces provide further expression for individual institutions and help to highlight the iconic buildings in many cases.
- Connections to both the larger open space systems, the Fenway and Southwest Corridor, are highlighted in green along with the important network of smaller scaled green spaces. Both help to provide movement through the site and access to large park systems.

MOBILITY

Huntington Avenue incorporates a wide range of mobility modes as a busy urban thoroughfare. Along side the E Branch of the Green Line located in the central median, two vehicular lanes carry traffic along the length of the Avenue. These lanes accommodate significant vehicular loads including MBTA bus routes and shared bicycle lanes. Within the study area, on street parking exists only in the block closest to Massachusetts Avenue. Pedestrian use is robust along the Avenue, owing to the large population of students from Northeastern, Wentworth Institute, Mass College of Arts and Design, Mass College of Pharmacy and the Harvard Medical School. Movement for pedestrians along Huntington Avenue is relatively safe with crossings clearly marked. Varying sidewalk widths on some of the blocks can however partially impede pedestrian flow. Crossing Huntington Avenue can be more challenging for pedestrians. Because of the volume of traffic on the street, the relatively wide right of way and the presence of the Green Line, crossing the Avenue can be difficult. Since both the Northeastern and Wentworth campuses span Huntington Avenue, students must cross several times a day.

Because the intent of this study was to produce urban design guidelines for Huntington Avenue within the study area, and not an overall transportation study, the recommendations of this report focus primarily on the public realm and pedestrian mobility. At many of the public meetings, questions arose around broader questions of mobility, which were outside the scope of this work. While traffic volumes, congestion, and safety issues are important to the overall functioning of this urban boulevard, the primary point of this study was to create urban design guidelines for proposed development parcels and general recommendations for streetscape and landscape improvements. Questions also arose during the public meetings as to the limits of the study area and the importance of considering areas of Huntington Avenue both inbound toward downtown and outbound to Jamaica Way. While the study area boundaries were set to provide guidance for the majority of the proposed development parcels underway, it was noted that the streetscape recommendations of this report could be applicable beyond the specific study area boundaries, and it is recommended that discussion with relevant city agencies begin in order to explore potential opportunities to implement these.




GREEN LINE
OUTBOUND



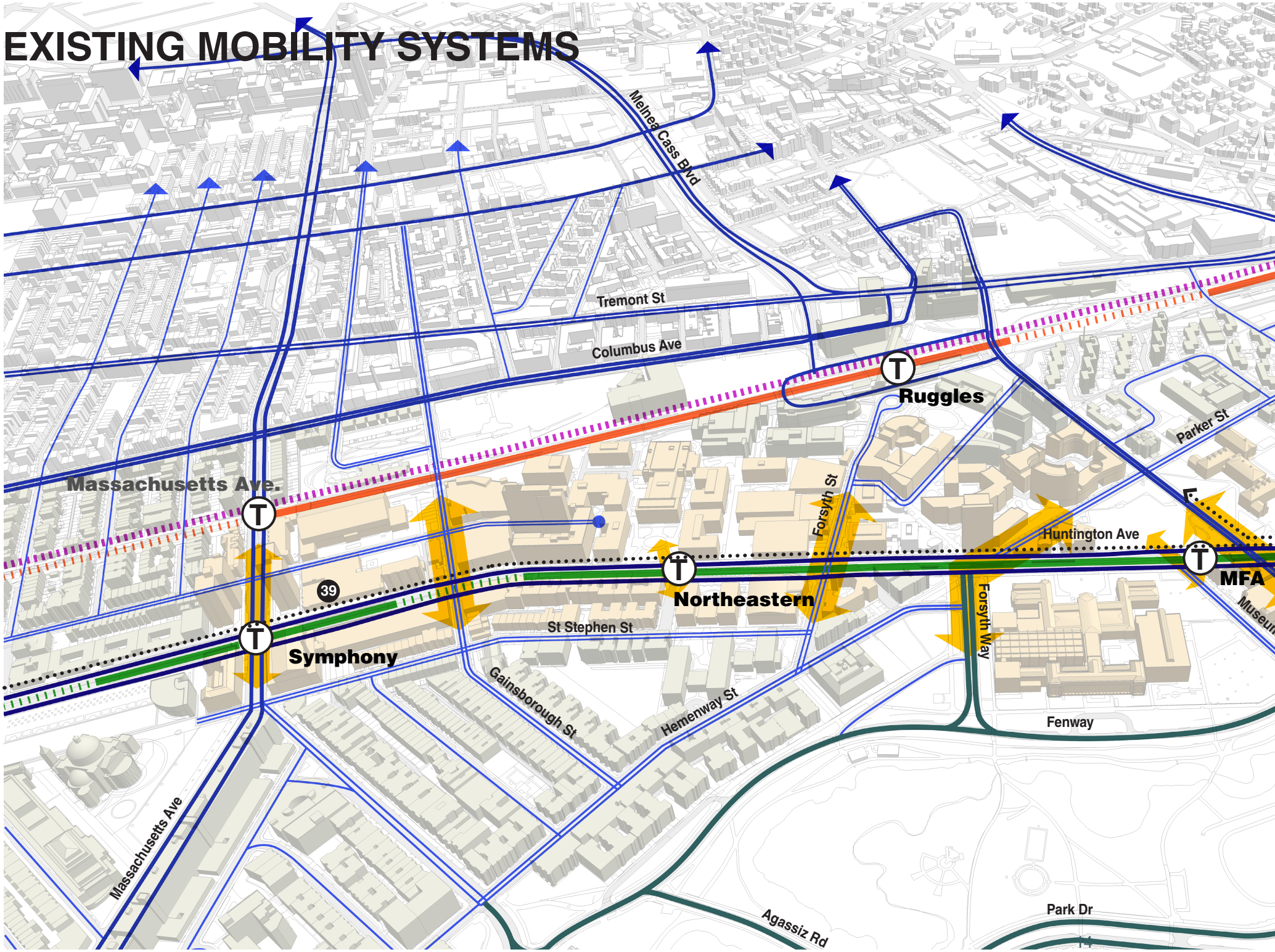

39 VIA COPLEY SQ
1208

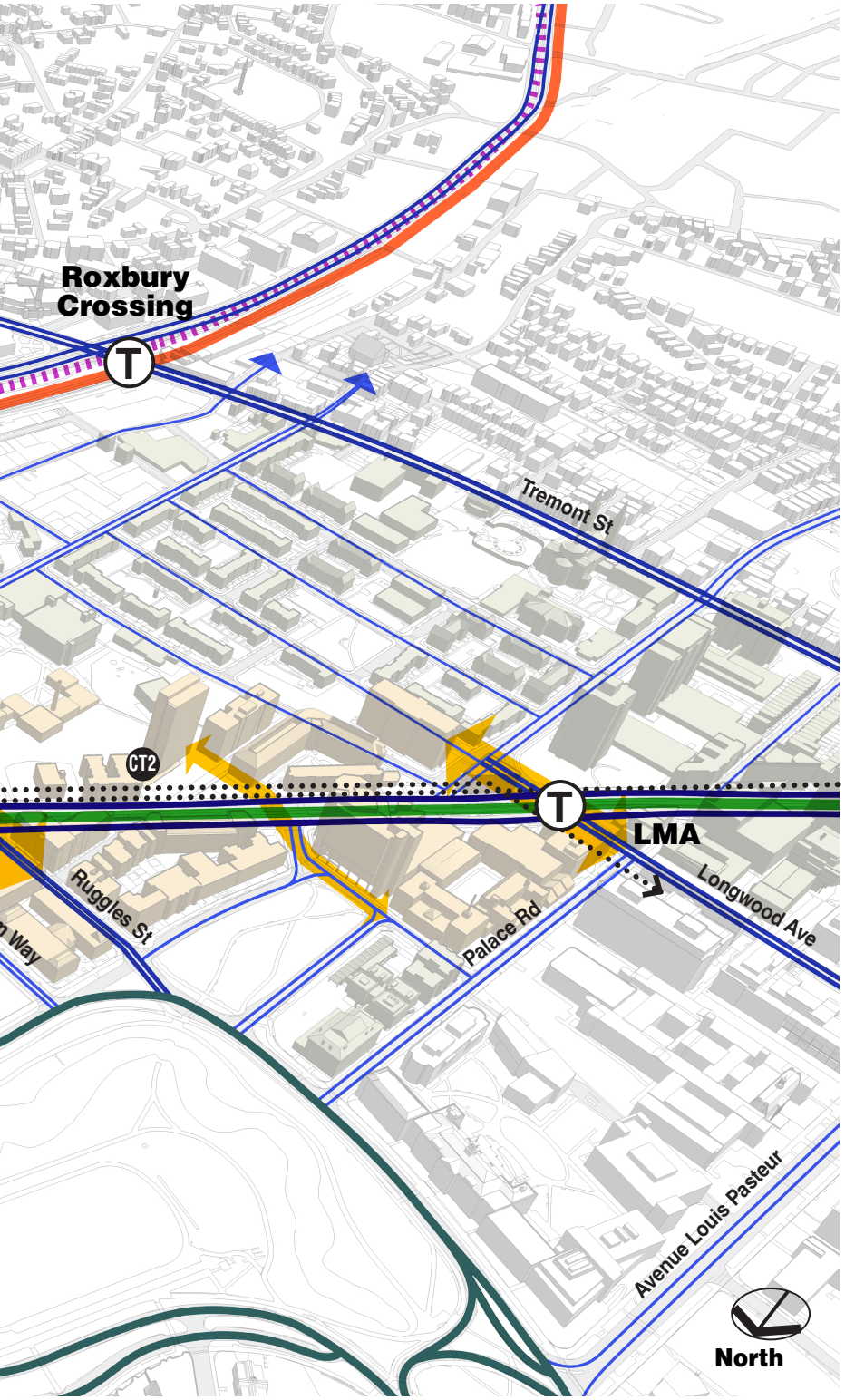



WORTHINGTON ST
Street Cleaning


39 VIA HUNTINGTON AVE

EXISTING MOBILITY SYSTEMS



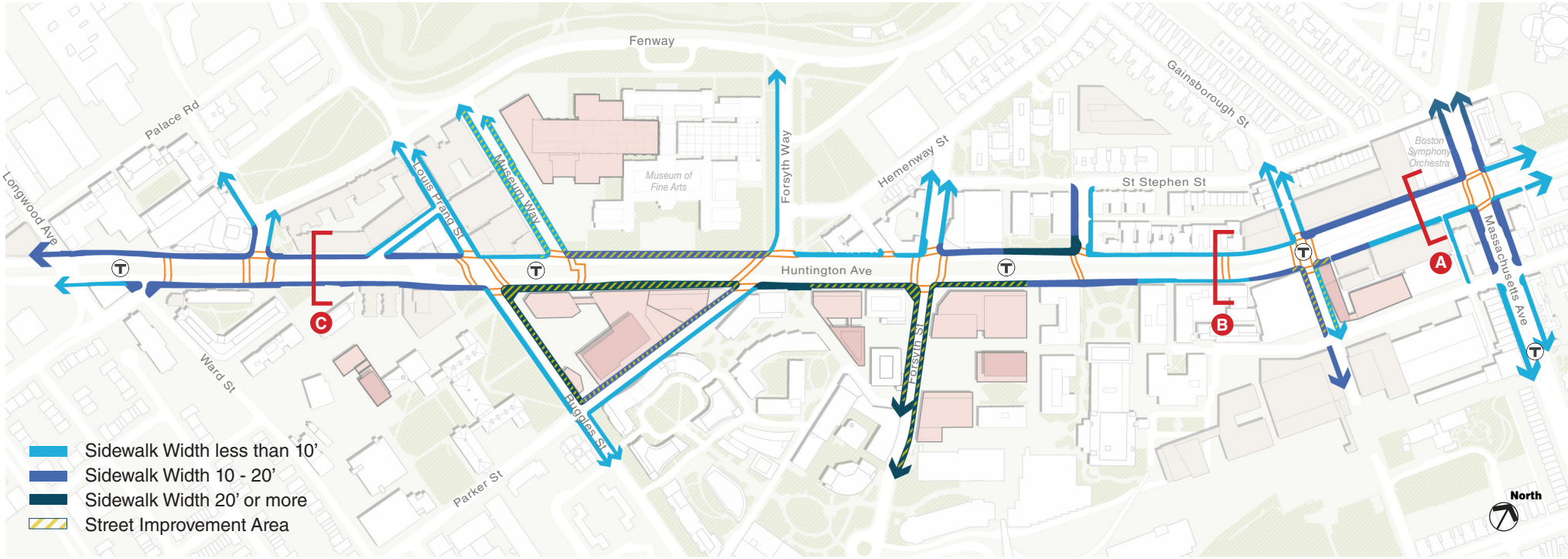


Huntington Avenue is a major multi-modal thoroughfare in the city. In addition to handling a large volume of vehicular traffic to and from downtown Boston on a daily basis, it also accommodates the E branch of the Green Line, several MBTA bus routes, a shared bicycle lane and countless pedestrians - students, residents, and visitors. The four stops on the Green Line are approximately 1/4 mile apart and serve the many institutions and venues along the Avenue. Running parallel to the Green Line, the Orange Line is approximately 1/2 mile from Huntington Avenue. Connections to Huntington Avenue from the Orange line are easily made on foot, with many commuters traveling from the Ruggles T stop along Forsyth Street or through the Centennial quad both within the Northeastern campus. These are both important connections that have informed the recommendations of this study.

As indicated in the yellow arrows, there are actually few vehicular crossings for a busy urban thoroughfare. These crossings vary from approximately 450' to over 1400' creating very long "mega-blocks." There are several mid-block pedestrian connections giving access to T stops and other routes. The relative lack of connectivity across Huntington Avenue separates the two sides - so that experientially, two realms exist. This is further exacerbated by the presence of the Green Line, its protective fencing and concrete barriers.

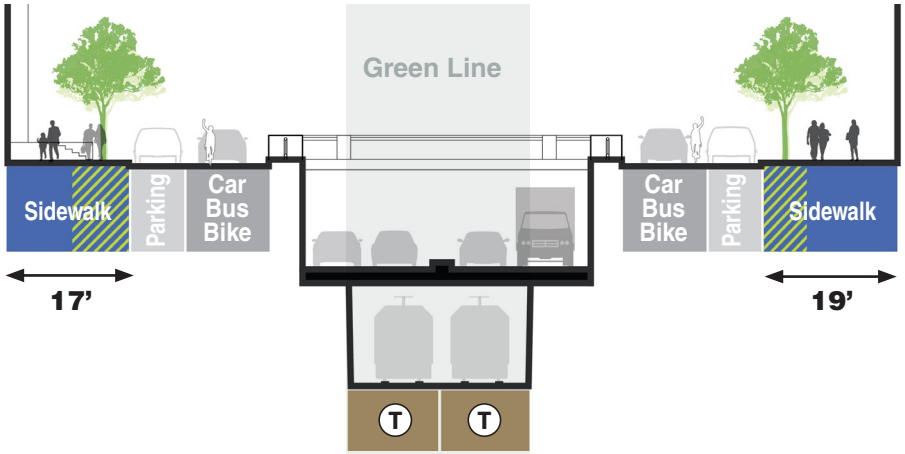
Bus routes remain active across the Avenue, but are often challenged by the limited lanes (2 in most locations) meaning that any temporarily stopped cars or trucks greatly impede traffic flow. Bicycle travel is challenging as well because of the limited space. Bicycles are forced to share lanes with cars, buses, and other vehicles.

EXISTING SIDEWALK CONDITIONS



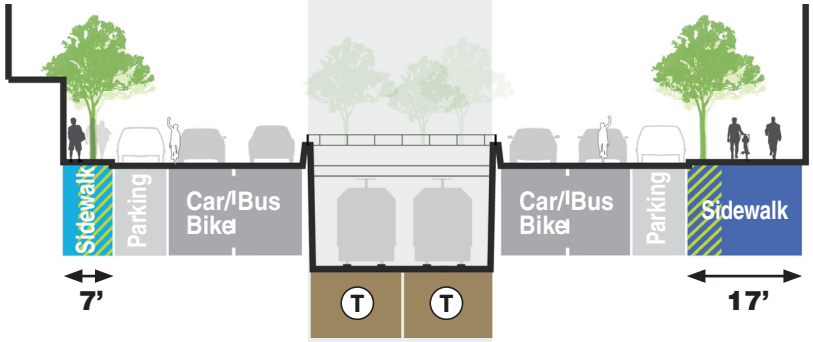
The pedestrian experience along the Avenue is varied. Sidewalk widths, sidewalk condition, materials, and the Avenue itself change from block to block. At the most extreme, the sidewalk widths can narrow to as little as 3' wide - barely passable for a stroller or wheelchair. At other places along the Avenue side walk widths are generous - up to 20' wide. Materials vary from granite pavers at the Museum of Fine Arts, to brushed concrete and brick. The size and location or tree grates also vary widely. While the majority of street trees are maple, the cadence and dimension are very different. The diagram above indicates the general widths and locations of primary sidewalks in the study area as well as those sidewalks that should be improved alongside new development. (Noted as "street improvement area")

Section A - North of Gainsborough Street



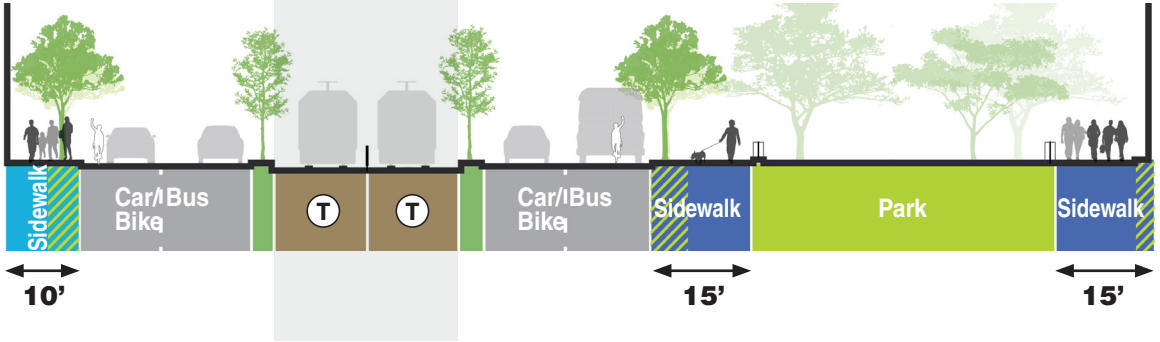


Section B - North of Forsyth Street



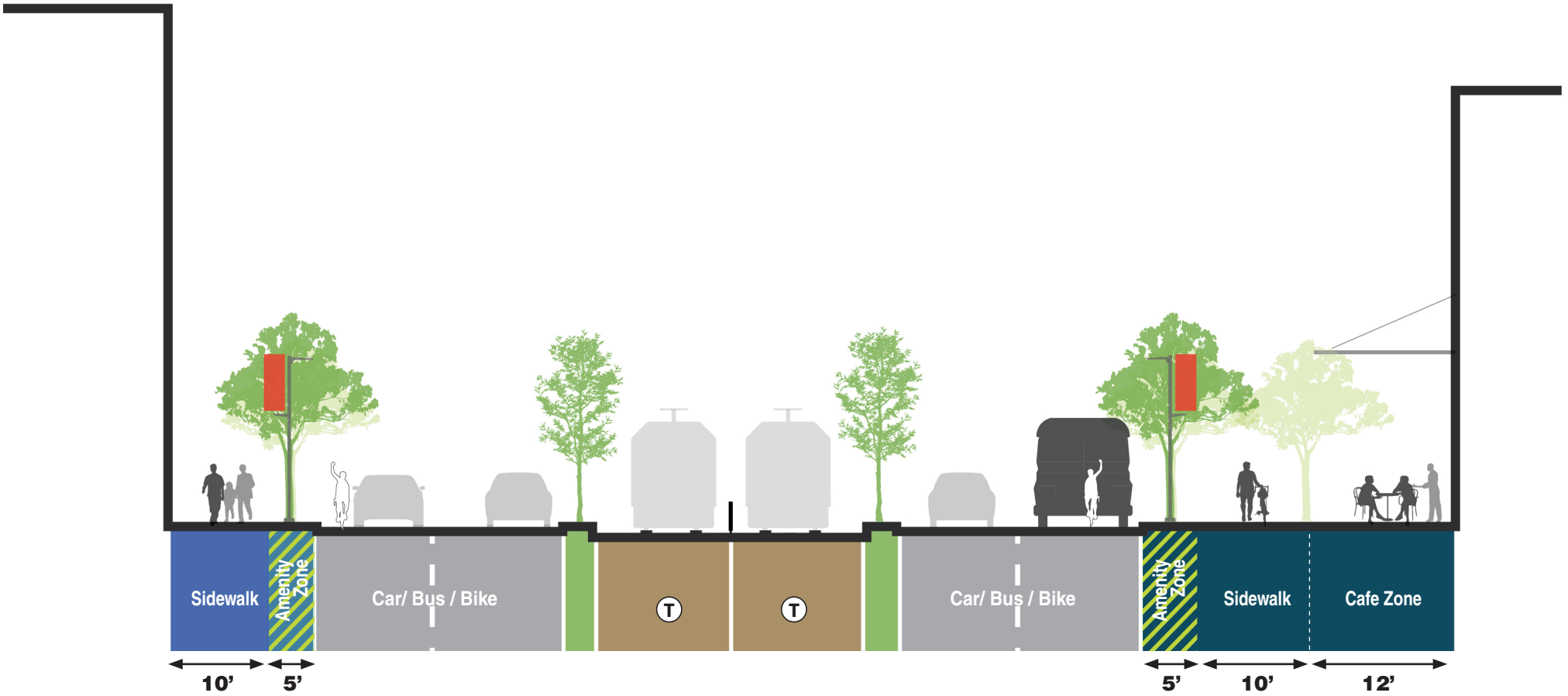


Section C - North of St. Alphonsus Street



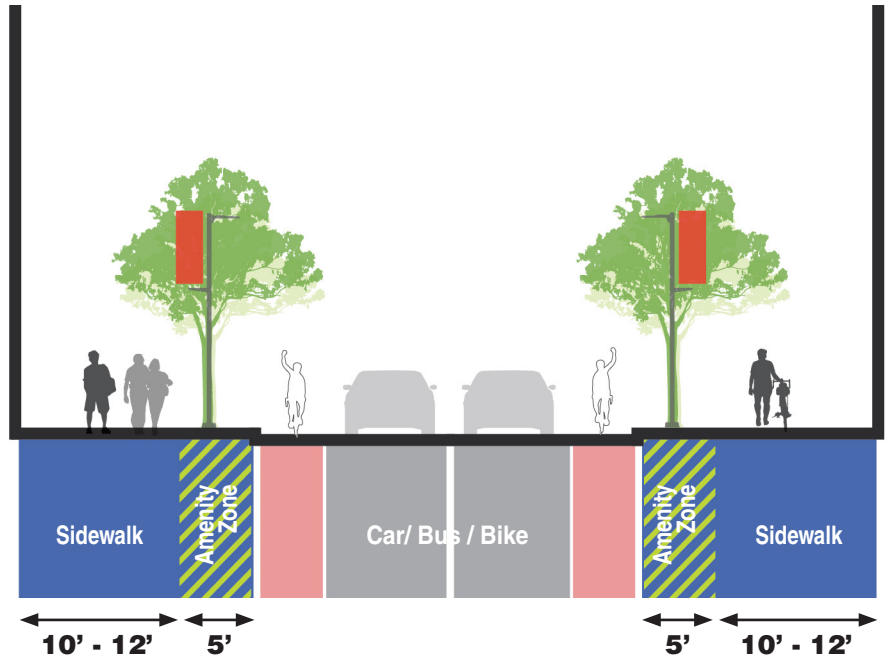


PROPOSED SIDEWALK CONDITIONS

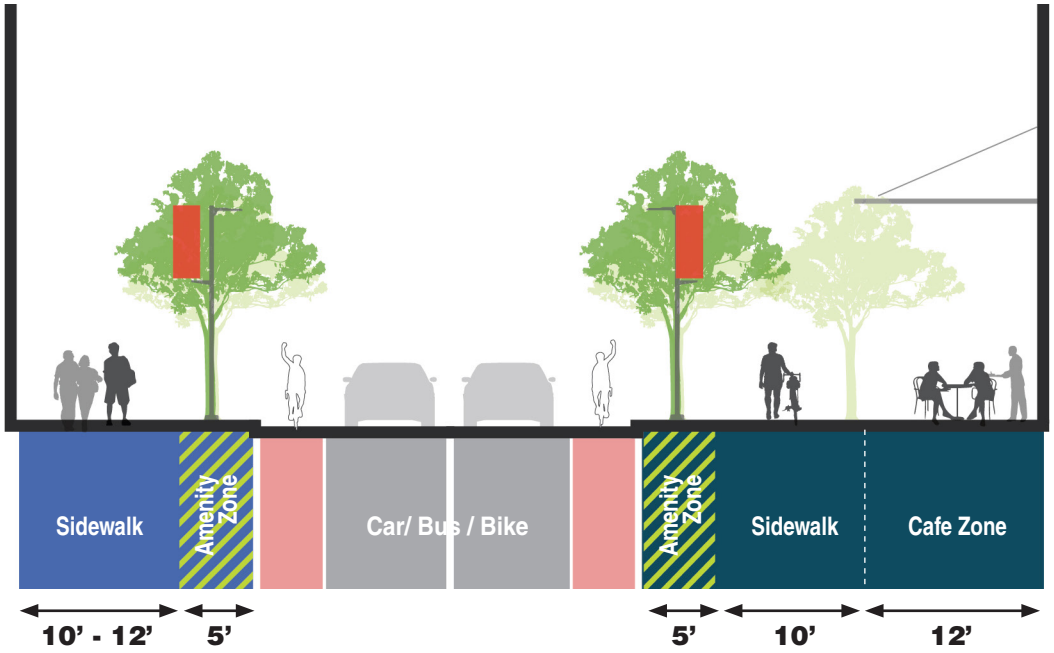


The recommended dimensions for new development along Huntington Avenue provide for continuity, pedestrian safety and potential spill out spaces for cafes and restaurants. They are also consistent with city wide standards. For the large overall Right of Way of Huntington Avenue - approximately 130’ - sidewalk widths should be no less than 10’ wide. Sidewalks should conform to accessibility standards as identified by the Boston Transportation Department and are suggested to be brushed concrete. 5’ wide porous amenity zones should be provided just inboard of the curb locations to accommodate street trees, light fixtures, benches, bike racks and other street furnishings. This zone should include pervious pavers to allow soil aeration and water infiltration for soils surrounding trees and planting areas.

Where appropriate a cafe zone of 12’ wide can accommodate outdoor dining or other spill-out uses. This is the dimension preferred by restaurateurs and cafes owners. Dividers between patrons and the sidewalk zone are often provided by the retail establishments and can include small fences, planting, or bollards. While cafe zones are a welcome amenity to Boston’s urban streets and can help to make the Avenue a destination, their location and frequency should be carefully considered and help reinforce activity nodes.



Two conditions are shown for the recommended side street sections. Here, the standard 5’ amenity zone is combined with the 10’ sidewalk zone where ground floor uses may not exist or where dimensions of the development does not allow wider setbacks.



At the southeast (or sunny) areas of the side streets and especially within the first blocks on either side of Huntington Avenue - a cafe zone should be included. This will help to support activities on the Avenue and to bring life to these side streets.

PLACEMAKING

Placemaking at Huntington Avenue refers both to the buildings, streets, and sidewalks as well as the landscape components of trees, courtyards, lawns and vegetation. There is a wide variety of building types along the Avenue. There are venerable cultural institutions such as the Boston Symphony Orchestra, Boston University's Huntington Theatre, Jordan Hall, and the Museum of Fine Arts - each expressed by the classical language of grand civic architecture - as well as modern glass towers, mid-century boxes, and the standard Boston brick mid-rise buildings. A great variety of building types have infilled the Avenue over the last twenty years. The relationship between special, iconic buildings and more background "fabric" buildings has become somewhat blurred. New towers vie for attention over the more stately architecture of the past century. This study sought to both encourage new and expressive architecture and to help clarify the relationship of "iconic" buildings to "fabric" buildings so as to provide a clear rationale for new development. The study also recommends the regularization of the street wall in order to provide a more consistent setting for iconic buildings to read against.

The landscape components of the public realm were also studied to help achieve a legible balance between special or "signature" spaces and more "connective" landscapes. The location and activation of open spaces was studied so as to enhance overall placemaking strategies and to increase the usability of these spaces. On the Avenue itself, this study recommends both more consistency in the suite of streetscape elements so as to provide continuity and coherence, as well as to provide for special moments of institutional expression. These dual goals of coherence and episodic expression for both the landscape and built form of the Avenue guided the final recommendations in the following pages.








NORTHEAST

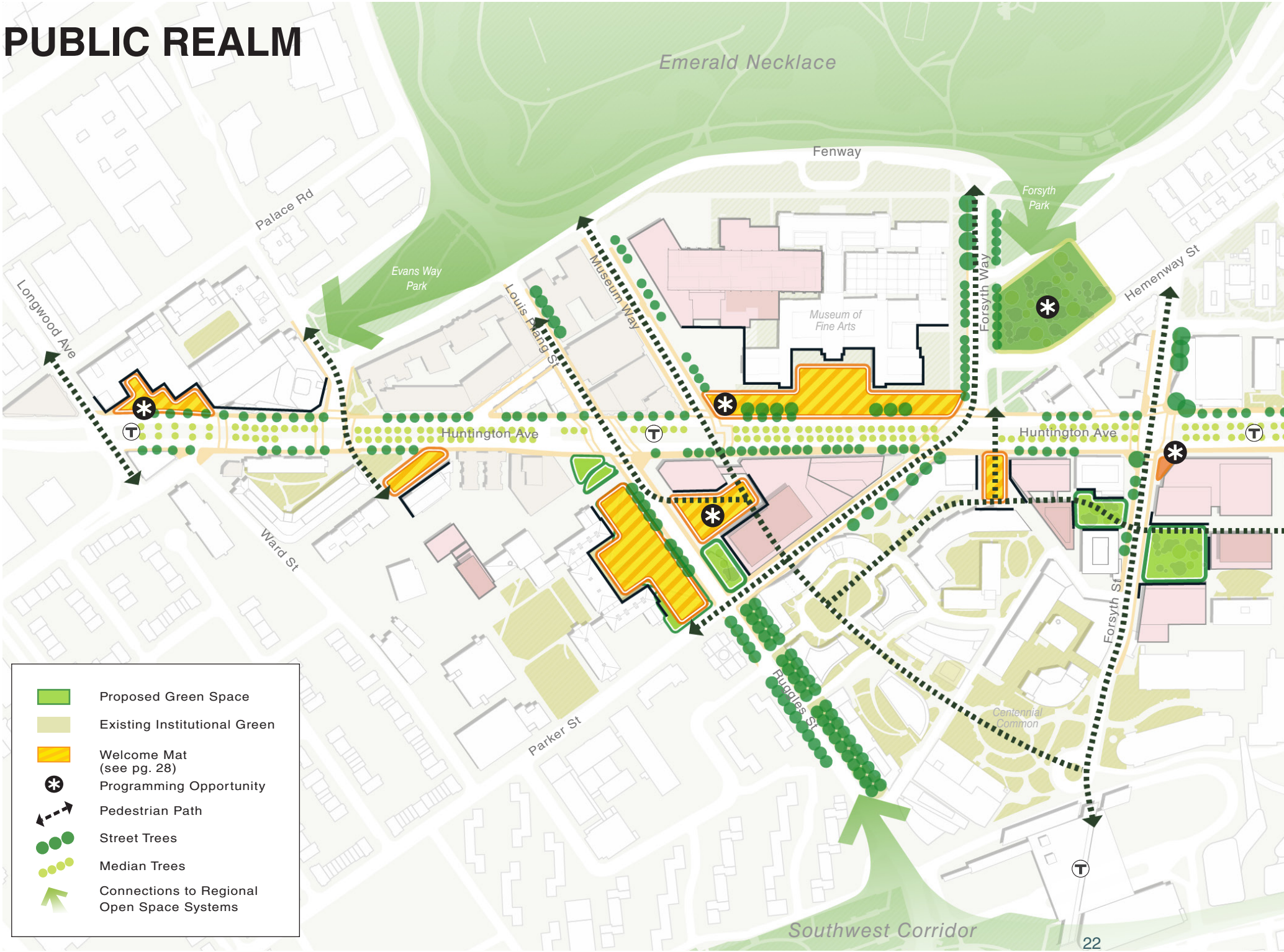

GOYA

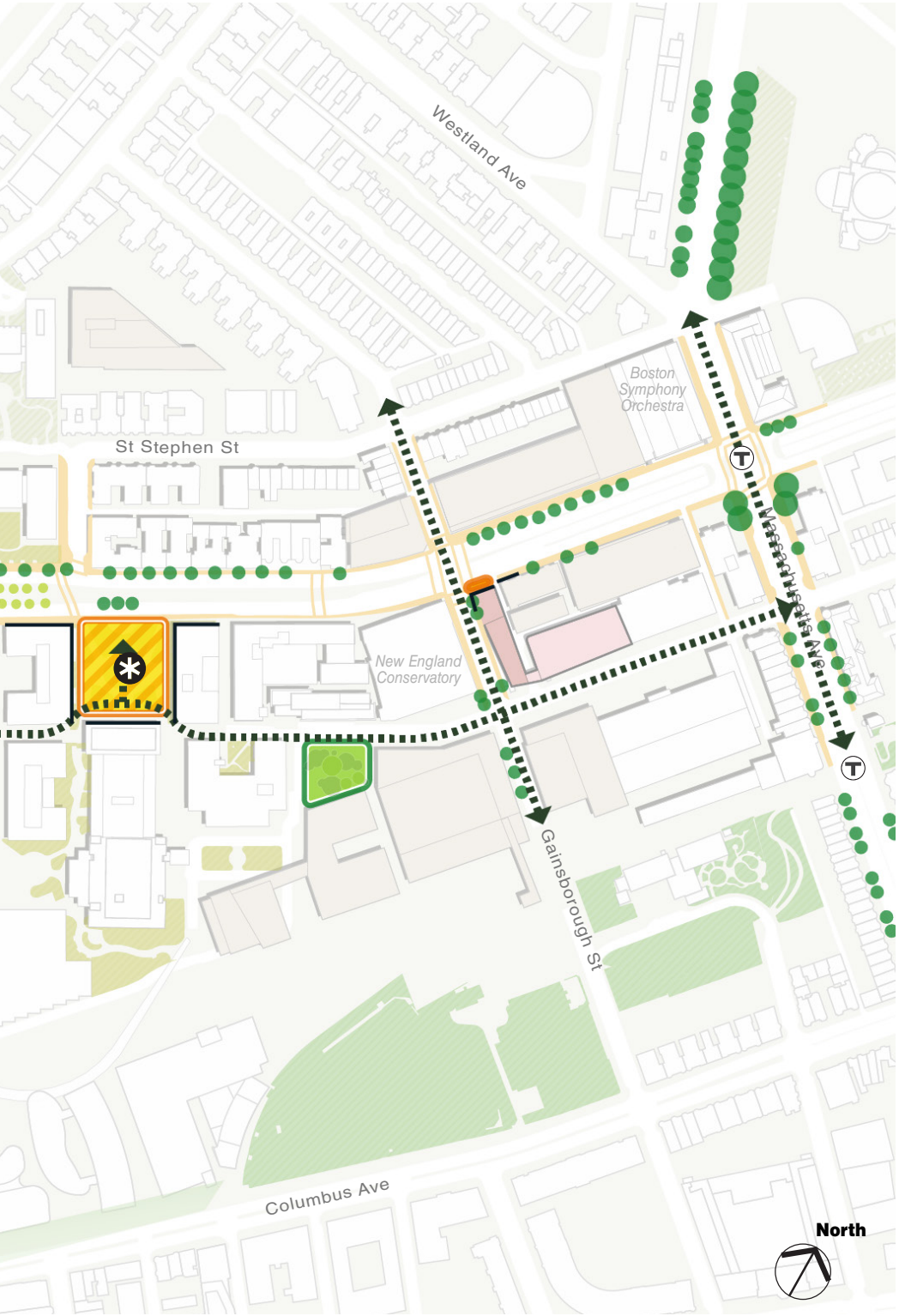






PUBLIC REALM





Huntington Avenue is one of a few true urban boulevards in the city of Boston. Along with Commonwealth Avenue, Morrissey Boulevard, and others such as Melnea Cass Boulevard, Huntington Avenue between Massachusetts and Longwood Avenue is a verdant, tree-lined street in the heart of the city. Many of the institutions along the avenue have contributed to its greening by planting trees on either side of the Green Line, supplementing and maintaining street trees, and by landscape improvements. Notable landscape features along the Avenue include the majestic front lawn and mature oaks of the Museum of Fine Arts, the Krentzman Quadrangle and Speare Hall front lawn, and the wide swath of Wentworth's lawn that stretches from Huntington to Parker Street.

Connections to the Fenway - and Boston's iconic Emerald Necklace - exist on both sides of the Museum of Fine Arts. As envisioned by Olmstead, the Forsyth Park connection and the link via Evan's Way park were meant to extend this important open space network well into the urban fabric. This study recommends enhancing these connections by expanding Forsyth Park to remove surface parking, and by improving Wentworth's "pike" crossing at Huntington Avenue. Farther away from the Avenue itself, many courtyards internal to Northeastern provide a sequence of open spaces throughout the campus. Important pedestrian connection from the Ruggles T Station give access to a wide array of students, residents, visitors and workers. These paths should be strengthened and enhanced in as many locations as possible.

South of Huntington Avenue, the Southwest corridor provides a widely used bicycle route and recreational amenity zone. Connections to and from this corridor should be enhanced and improved as well. Both pedestrian and vehicular movement along Ruggles Street should benefit from the generous setback on the east side of the street as well as the enhancement to Wentworth's front lawn. As Ruggles Street is one of the only connections that extends from the Fenway to the Southwest corridor, special attention is needed on this heavily used corridor.

The many sizes and types of open spaces throughout the study area lends character and relief to the urban setting. As much as possible these open spaces should be protected from excessive shading. These spaces greatly enhance and contribute to the overall livability of the study area, help to provide cooling in the summer months, and can contribute to area's overall visual appeal.

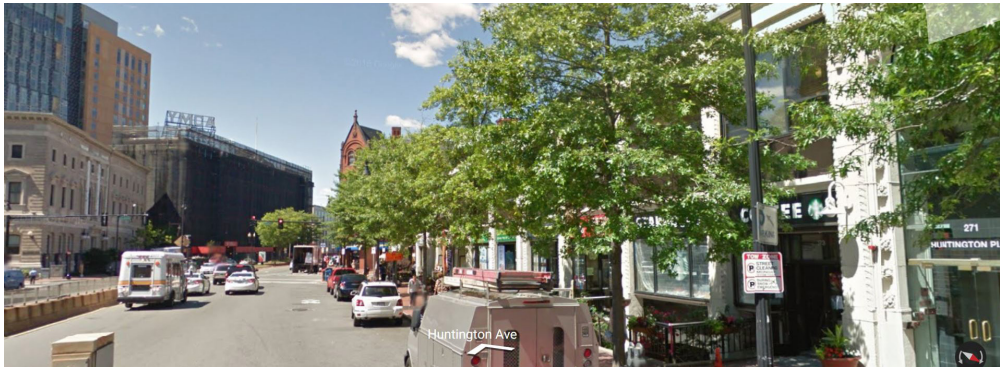
COHESIVE LANDSCAPE MATERIALS GUIDELINES

Planting Materials - Huntington Ave

Canopy trees along Huntington Ave should be a single species, large, urban-hardy and salt-tolerant. Species may be selected to build on existing successful tree plantings along the Avenue, such as London plane tree (Platanus x acerifolia) or Pin Oak (Quercus palustris). These trees should be planted at a consistent 30' O.C. spacing to establish a cohesive rhythm along the streetscape. Tree planting conditions should promote tree health and longevity; a minimum of 250 cu.ft. soil volume should be provided for each tree. When possible, trees should be planted in vegetated areas; when context requires them to planted in grates, structural soil below pavements should be provided to allow an expanded root zone. Species selection should be coordinated with the City.

Planting Materials - Cross Streets

Trees along Huntington Avenue's cross streets should be selected using the same criteria as above, with the same spacing and soil-volume guidelines. Each cross street may have a distinct tree type; urban-hardy species with a distinctive fall color, such as Honey Locust (Gleditsia triacanthos var. inermis) or Red Maple (Acer rubrum), are recommended. Species selection should be coordinated with the City.









Paving Materials

Streetscape materials should be selected to comply with Boston Complete Street guidelines. A minimum 8' scored concrete pathway should be maintained to accommodate all users. A 5' amenity zone along the curb should be paved with porous pavers, running parallel to the street, in a range of warm grays to complement that scored concrete. The BRA should work with property owners and city agencies to discover ways of maximizing the use of these materials throughout the study area and beyond.









COHESIVE LANDSCAPE MATERIALS GUIDELINES

Site Furnishings

Site furnishings should be contemporary, with clean lines, and made from high -quality materials such as wood, metal or stone. Individual expression by the various institutions along the corridor is encouraged, but should be balanced by complementing the existing and proposed light fixtures, fences, and other City standard features of the Avenue.













Seating



Bike Rack





Trash

Lighting

Street Lights should be spaced 60’ on center, alternating with canopy trees, to reinforce a consistent cadence of the streetscape. Existing Lighting fixture standards will be maintained.







Wayfinding and Signage

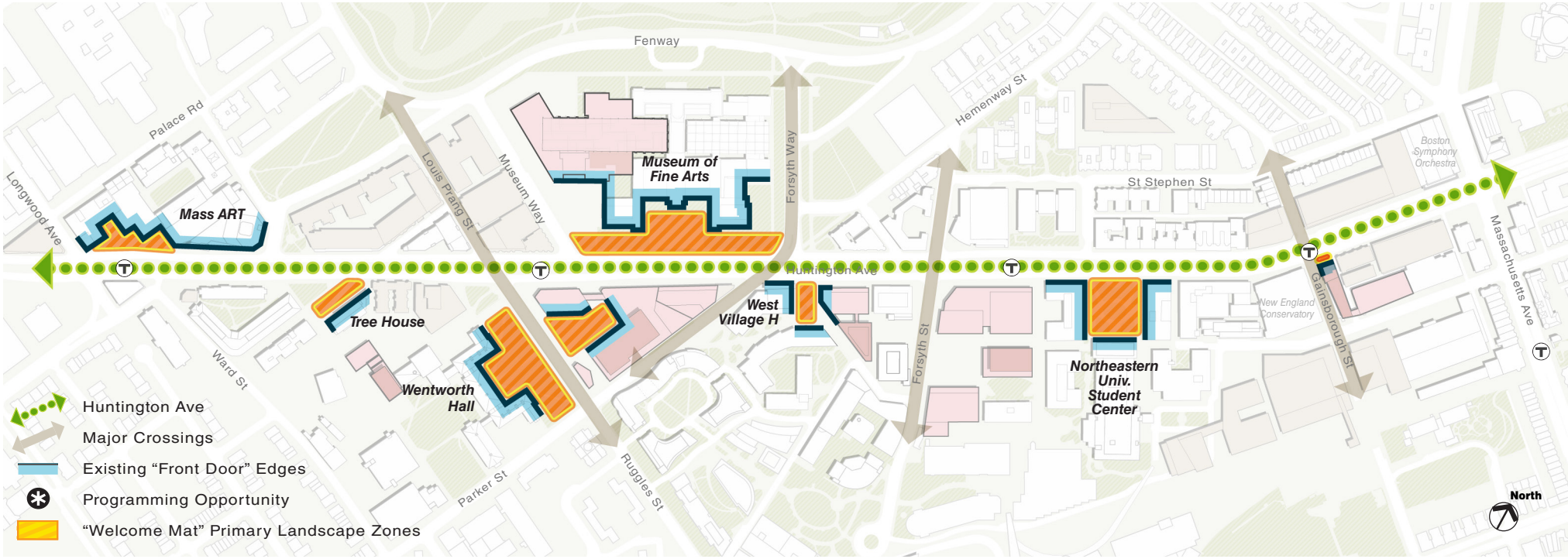
A cohesive identity may be reinforced by establishing district-wide signage standards. Wayfinding elements may include signs and banners. Consultation with MASCOs wayfinding program should occur as concepts are generated.







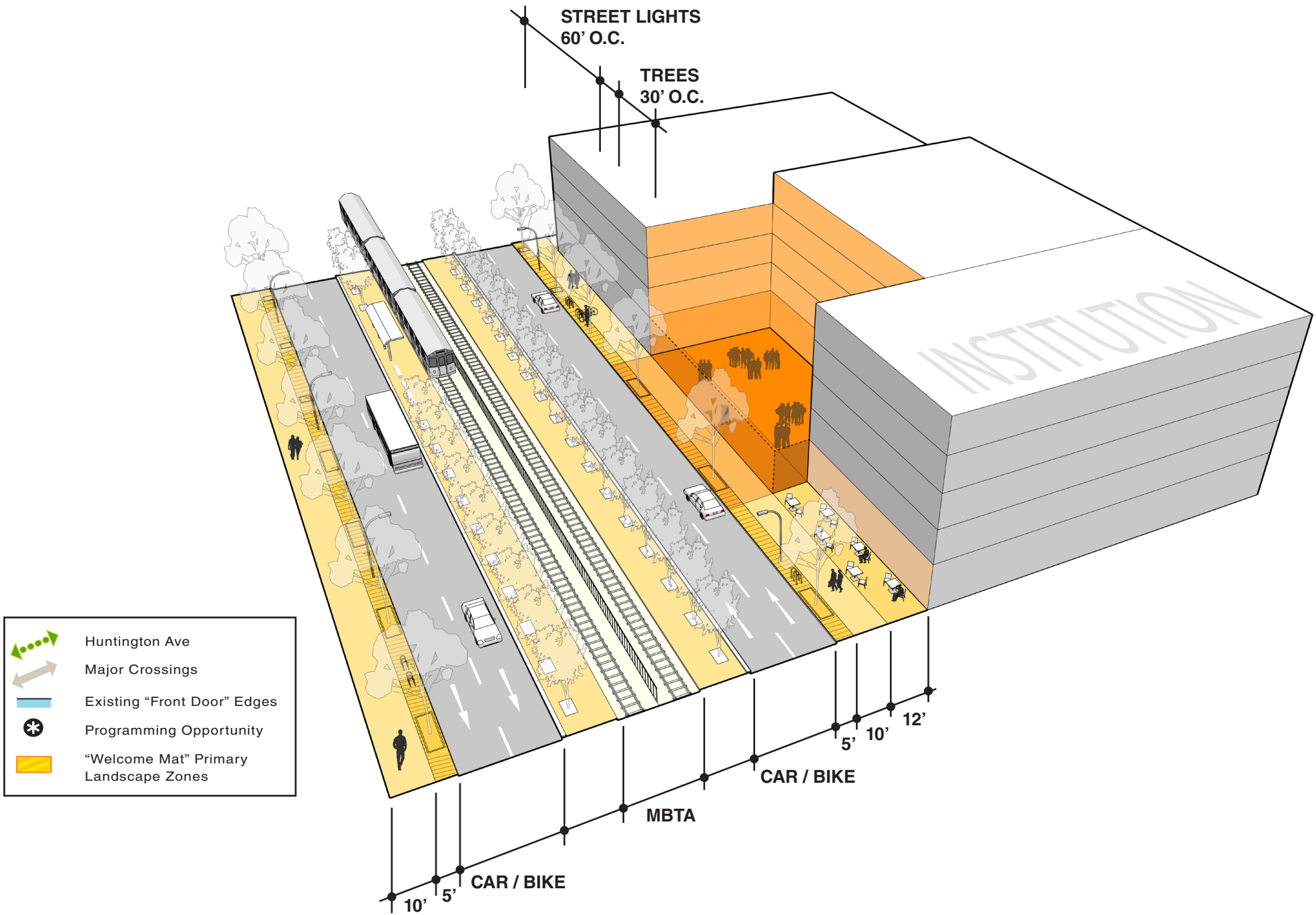
HUNTINGTON AVENUE CONCEPT - WELCOME MATS



To help celebrate the unique nature of the Avenue of the Arts, this study has identified a number of opportunities - mostly aligned with individual institutions - where truly creative and expressive treatments of the public realm can take place. Referred to as "welcome mats," these public spaces offer an opportunity for each of the institutions to create open, accessible and usable gathering areas. Meant to be articulated in a very different manner from the cohesive streetscape elements, these spaces can incorporate unique pavers, benches and seating, landscape features and even special lighting elements. Some of these special spaces already exist - such as Krentzman Quad and the plaza in front of Wentworth's Treehouse. The planned streetscape improvements that will accompany the New England Conservatory's Phase I Student Learning Center is also indicated as one of the "welcome mat" opportunities. At the Treehouse Plaza, many of the recommended treatments exist - special paving, seating, landscape elements and lighting which create a lively and welcoming space.

The study highlights a number of these unique spaces that can help to create a cadence of activity nodes down the length of the Avenue. These places each have a strong relationship to the individual institutions and are meant to give a heightened presence to each. The diagram on page 29 shows how the treatment of these special spaces should extend out to the curb edge, while also allowing the cohesive streetscape elements to continue. Both the coherence of the Avenue and individual institutional expression can be achieved. The cadence of both the street trees and lightpoles should remain unchanged at these locations.

Beyond the design characteristics of these spaces, active programming should be included as well. The Museum of Fine Arts' iconic and stately front lawn is an existing space that could be enhanced by active programming especially at the corner of Museum Way and Huntington Avenue. A simple and deferential cafe at this location could increase the "dwell time" of museum visitors as well as providing a much needed refreshment venue outside of the museum.


STREET LIGHTS
60’ O.C.
TREES
30’ O.C.
INSTITUTION
Huntington Ave
Major Crossings
Existing “Front Door” Edges
Programming Opportunity
“Welcome Mat” Primary Landscape Zones
10’
5’
CAR / BIKE
MBTA
CAR / BIKE
5’
10’
12’

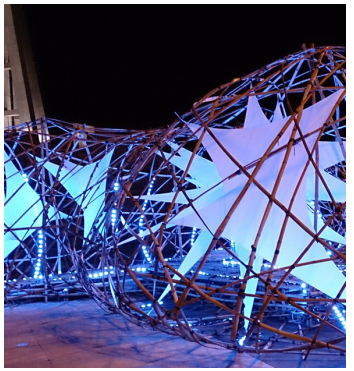
WELCOME MATS MATERIALS GUIDELINES

Integrated Lighting

Innovative and integrated lighting and illuminated art installations should be included in the design of the “Welcome Mats.” Lighting elements will extend the appeal of these urban spaces beyond daylight hours and can help to enliven the overall look and feel of the Avenue.










WELCOME MATS MATERIALS GUIDELINES

Site Furnishings

Site furnishings in the welcome mats should take on a wide variety of forms so as to give identity to these unique spaces and to express the character of the constituent institutions. Site furnishings can be playful, expressive, and engaging - they represent moments to create unique environments as a counterpoint to the cohesive streetscape elements that run the length of Huntington Avenue.











WELCOME MATS MATERIALS GUIDELINES

Planting Materials

As along Huntington Avenue, trees should be selected to be urban-hardy and salt tolerant. Planting palettes may be developed to reflect the individual character of the institutions.



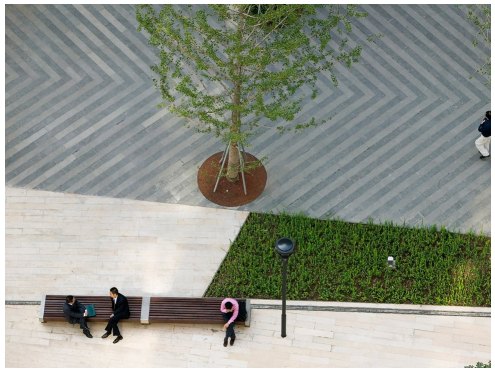




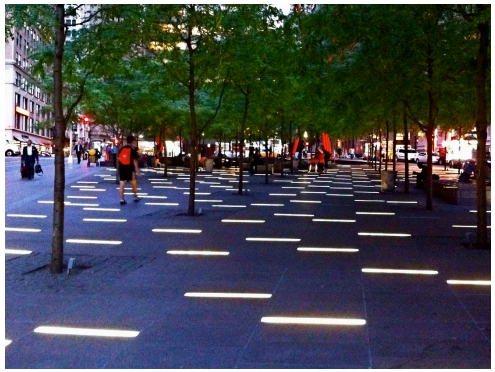
Paving Materials

Creative approaches to paving pattern and materials should be developed at the “welcome mats” to reflect the unique identity of the institution. Lighting may considered as an integral element to the paving.

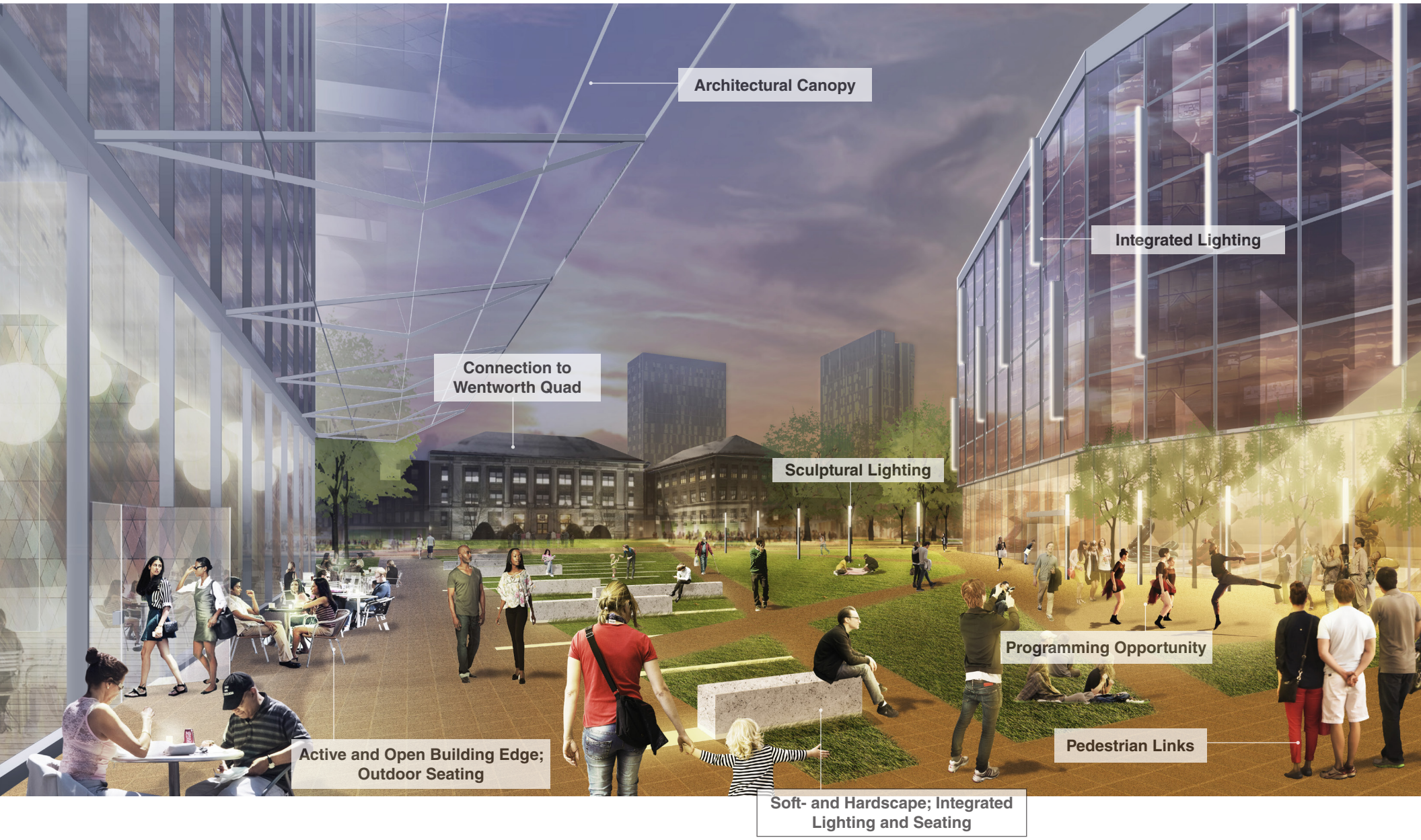




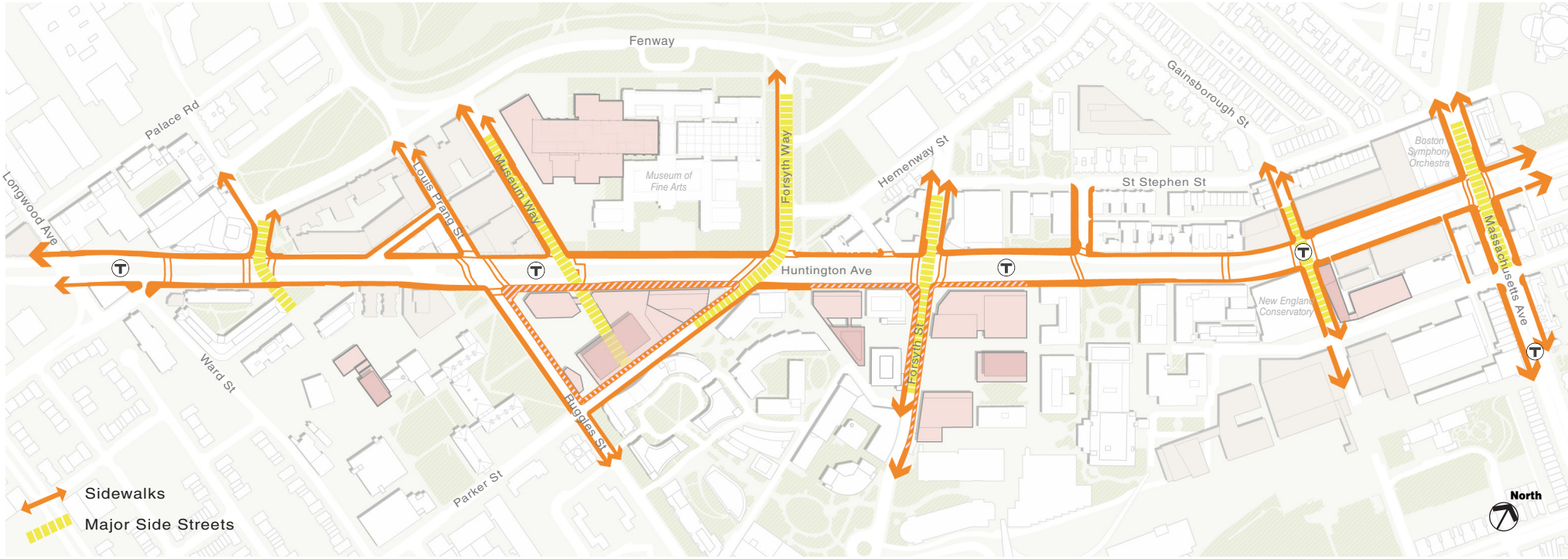




Recommended “welcome mat” articulation at the 500 Huntington Avenue courtyard.
Visual connections to Wentworth’s front lawn are enhanced through landscape, lighting and active programming.



SIDE STREET CONCEPT



In addition to recommendations for Huntington Avenue itself, the study identified the important role that cross streets have in supporting general connectivity and placemaking throughout the study area. Improvements to the cross sections of these side streets will increase pedestrian comfort and safety as well as increase the likelihood of an activated public realm. Sidewalk widths vary greatly for the side streets - sometimes narrowing to under 5'. As indicated in the sections in the mobility section of this report, a minimum setback of 15' from the curb edge is recommended for new development. On the Southeast sides of the side streets a wider setback of 27' is recommended so as to accommodate restaurant or retail spill out zones or additional planting.

As indicated in the rendering on the facing page, the recommended sidewalk widths and special corner treatment at the Forsyth Street intersection provide the opportunity for great placemaking. Landscape elements are coordinated within the pervious amenity zone outboard of the 10' clear pedestrian zone providing for safe and accessible passage. The corner building is setback at a slight angle to provide outdoor seating and a cafe spill out zone much in the spirit of the Marino Center just across Huntington Avenue. Transparency and active programming at the ground floor level create a sense of welcome and human scale. An architectural awning provides both shade and a sense of protection for patrons.

Recommended reconfiguration of Huntington Avenue and Forsyth Street. Northeastern's Cabot site to the right, Marino Center beyond.

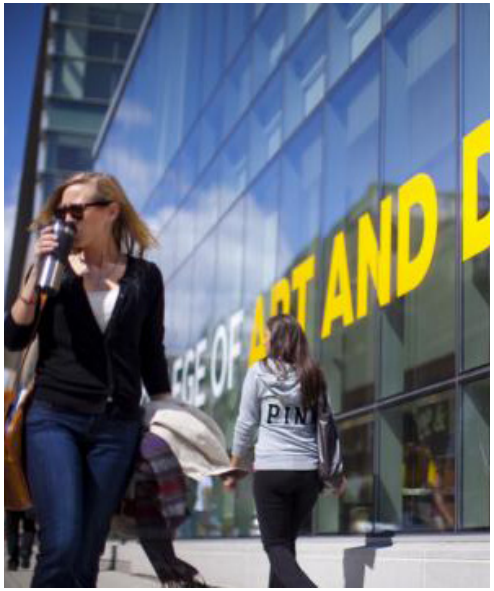


PROGRAMMING

Programming for vital urban corridors should include both ground floor activation of buildings, “the first twenty feet,” and programming at significant outdoor spaces. Active ground floor uses give a sense of vitality and life to the pedestrian experience and feel more welcome and human scaled than blank walls, garages, storage or mechanical spaces. Good urban streets contain a wide variety of active ground floor uses - combining retail, commercial, cultural and even institutional uses. Transparency is critical. Being able to look into a bustling student lounge or an art’s schools gallery go a long way to bringing the inside out and the outside in. Entries are great! The more entries that can be located on Huntington Avenue the better. An “address” on the Avenue ensures the coming and going of people throughout the day and night and gives a real sense of porosity to buildings. There are many great examples of how this can be done well; the Marino Center’s outdoor seating area and landscaped berm is active year round with a wide array of students, visitors, and local workers.

There are many opportunities along the Avenue for active outdoor programming. As identified in the overall concept diagram, some of these places already exist - such as the Krentzman Quad - that provide gathering opportunities and programmed events. There are a variety of new spaces that could benefit from such active programming as well. The concept plan identifies ample opportunities for casual gathering, cafes, seating, or performance venues along Huntington Avenue. Programming throughout the study area should build on and integrate the existing activities identified in the great work of local institutions such as the Fenway Cultural District. The exceptional collection of cultural venues along the Avenue - from the Boston Symphony Orchestra, the New England Conservatory and the Museum of Fine Arts - should be leveraged for new ideas about programming as an important first step in realizing a vibrant and active Avenue of the Arts.








ONE WAY


ART

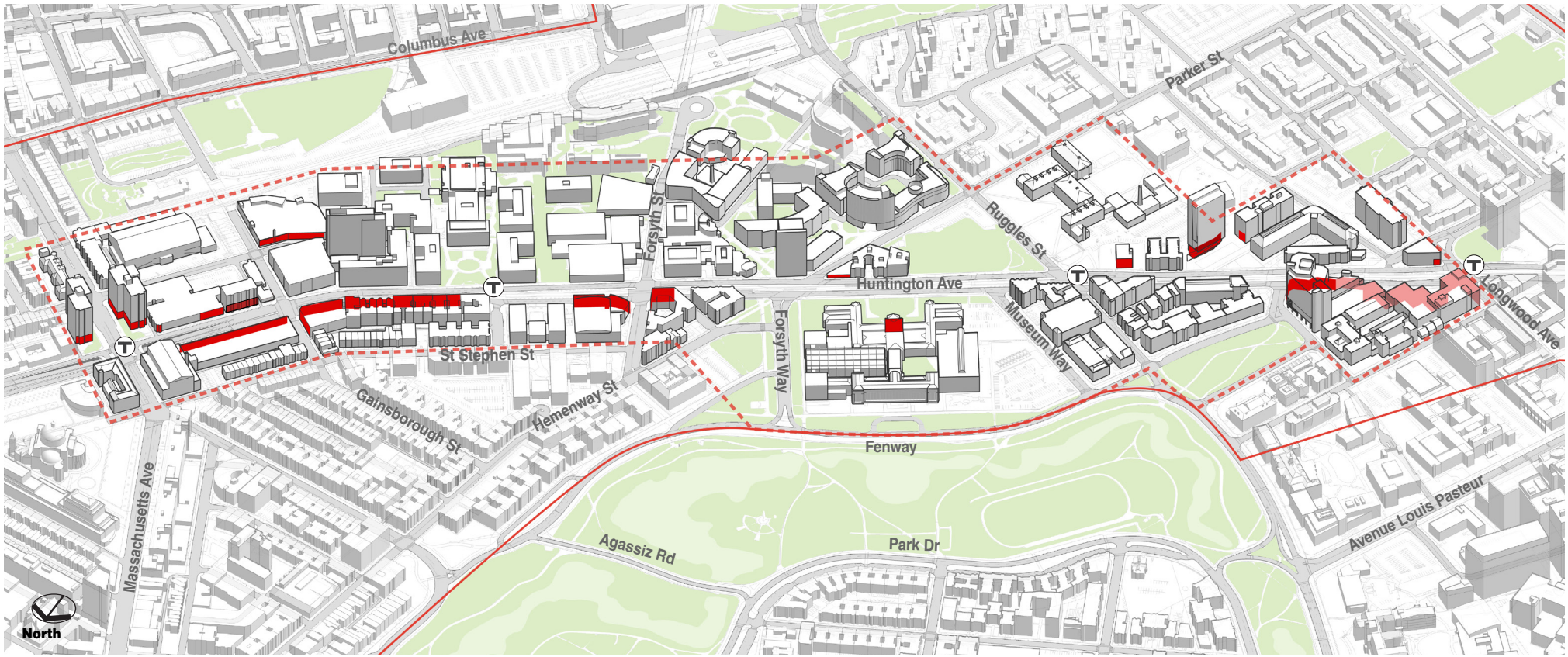



UNO



PROGRAMMING ALONG THE AVENUE

Existing ground floor programming along the Avenue - indicated in red



The above diagram indicates the current condition of ground floor programming along Huntington Avenue within the primary study area. Currently there are large stretches of the Avenue that have no ground level amenities or activities. While there is a heavy concentration of retail and restaurant activities in the blocks between Massachusetts Avenue and the Northeastern T stop, there is very little ground level programming for the remainder of the Avenue with the exception of the south side of the Forsyth Street intersection. The lack of activity and programming roughly corresponds to the predominance of institutions including Northeastern University, The Museum of Fine Arts, Wentworth Institute and the Mass College of Art and Design.

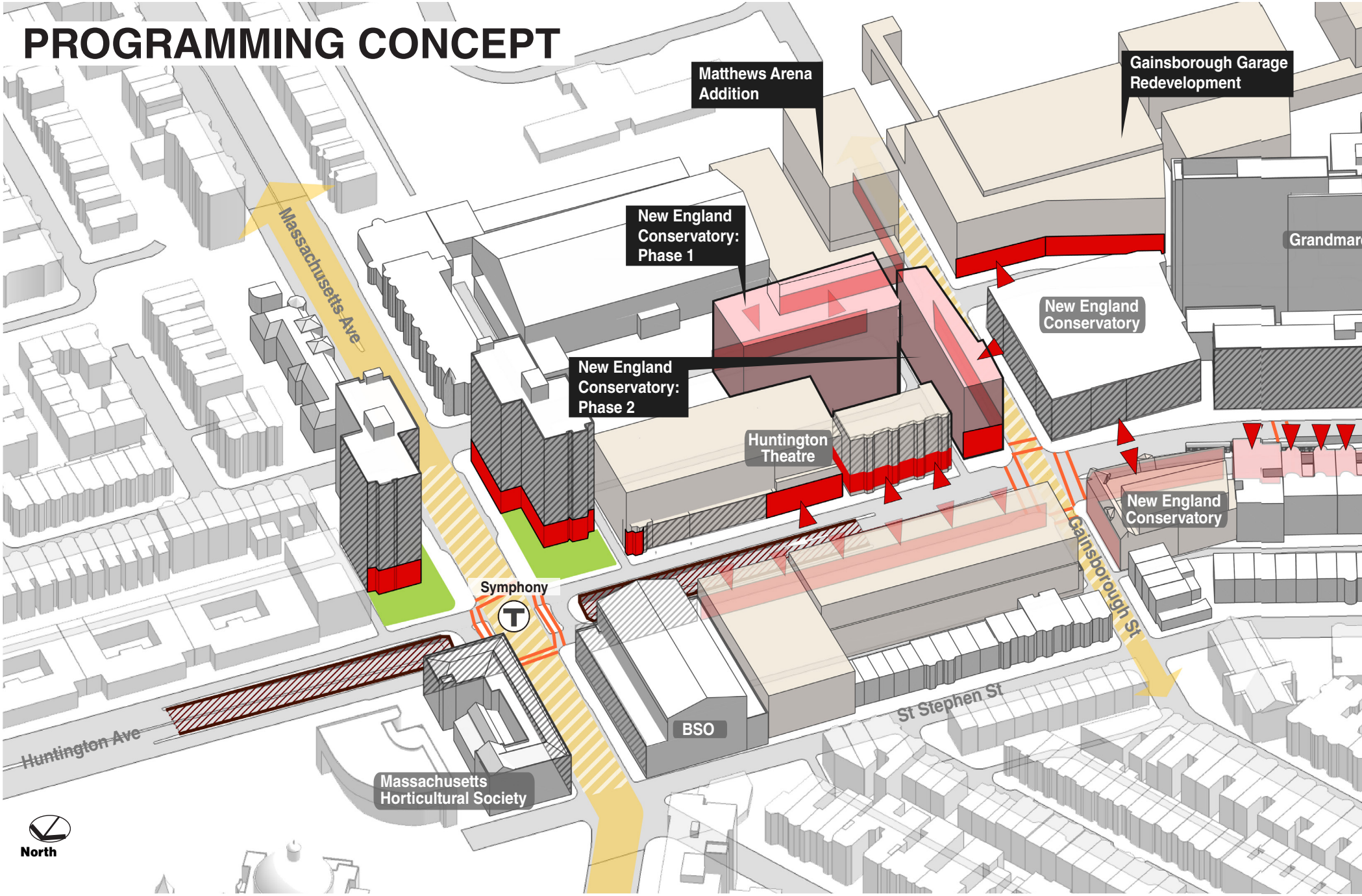
This study recommends that as much as possible all new development along the Avenue should contain active ground floor uses. The following pages indicate - in diagrammatic form - where new development (shown in pink) should include ground level programming (shown in red).

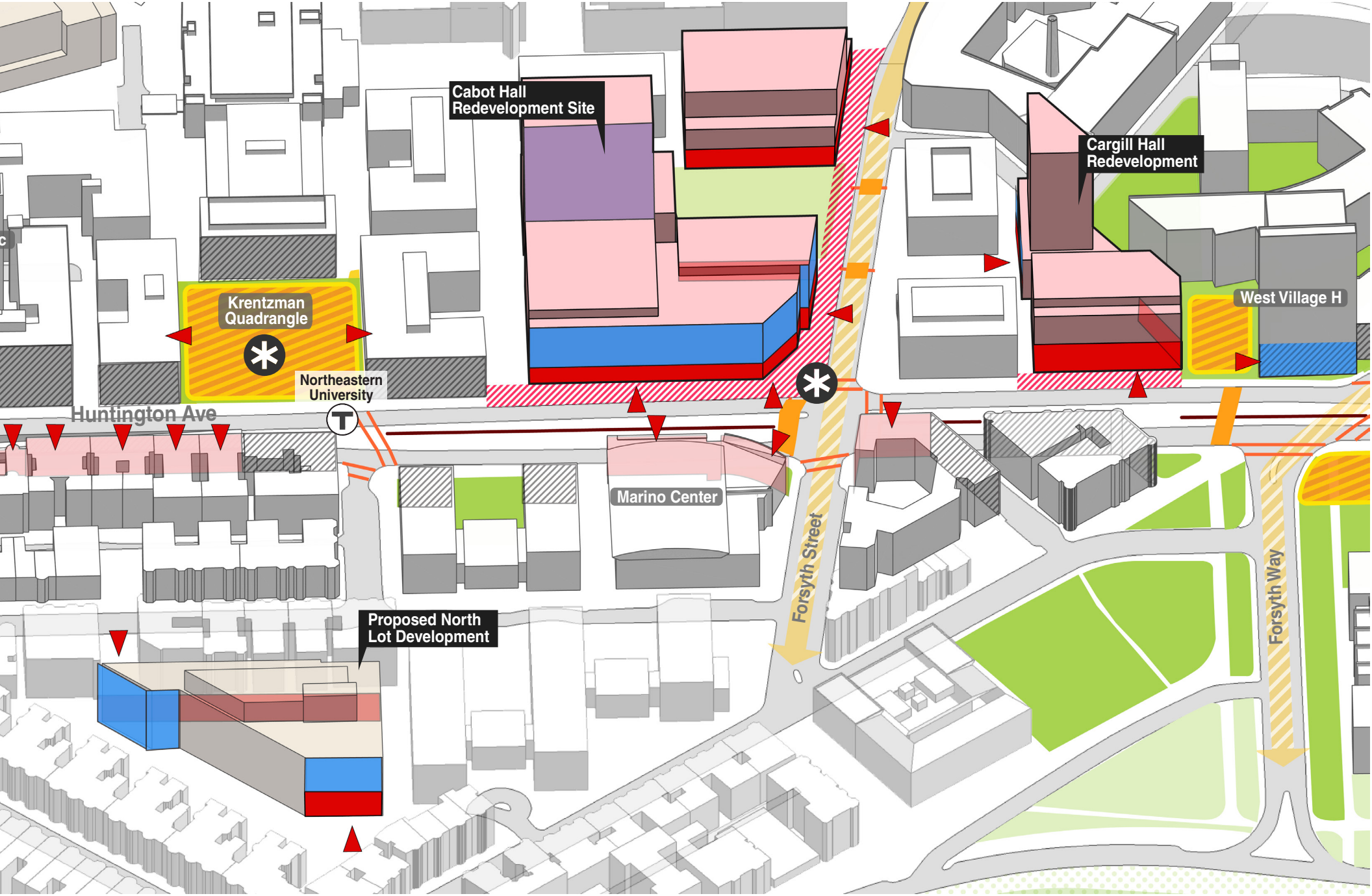
Outdoor areas should include active programming as well. As indicated on the overall concept diagram (pages10-11) by the asterisks - there are many opportunities for outdoor programming. One such opportunity is indicated in the concept rendering on the facing page. At the corner of Ruggles Street and Huntington Avenue, a cafe or other outdoor amenity could bring activity and life to this intersection. The ground levels of 500 Huntington, could also be enlivened with active uses such as restaurants with outdoor dining.

Recommended reconfiguration of Huntington Avenue and Ruggles Street intersection

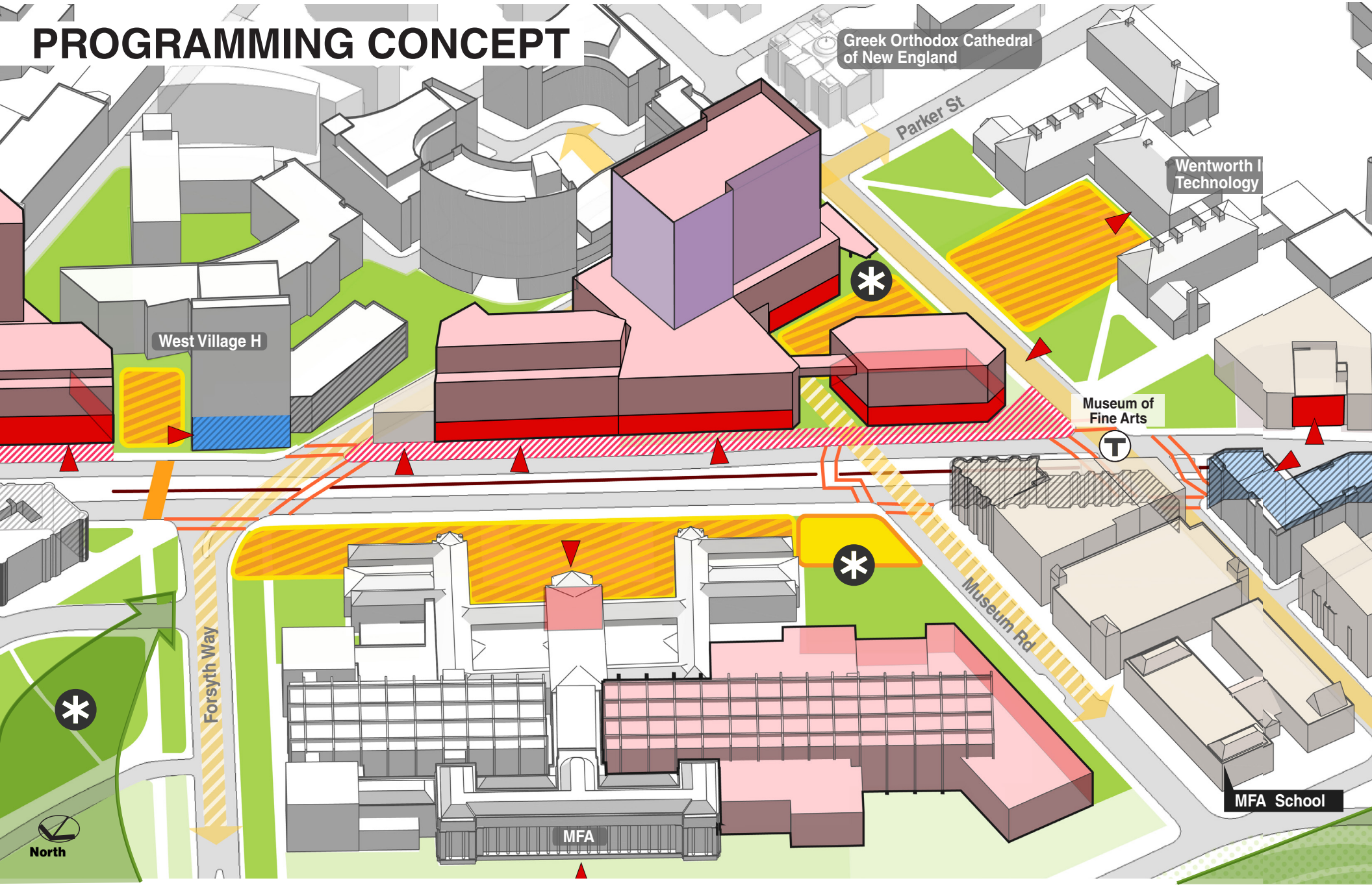


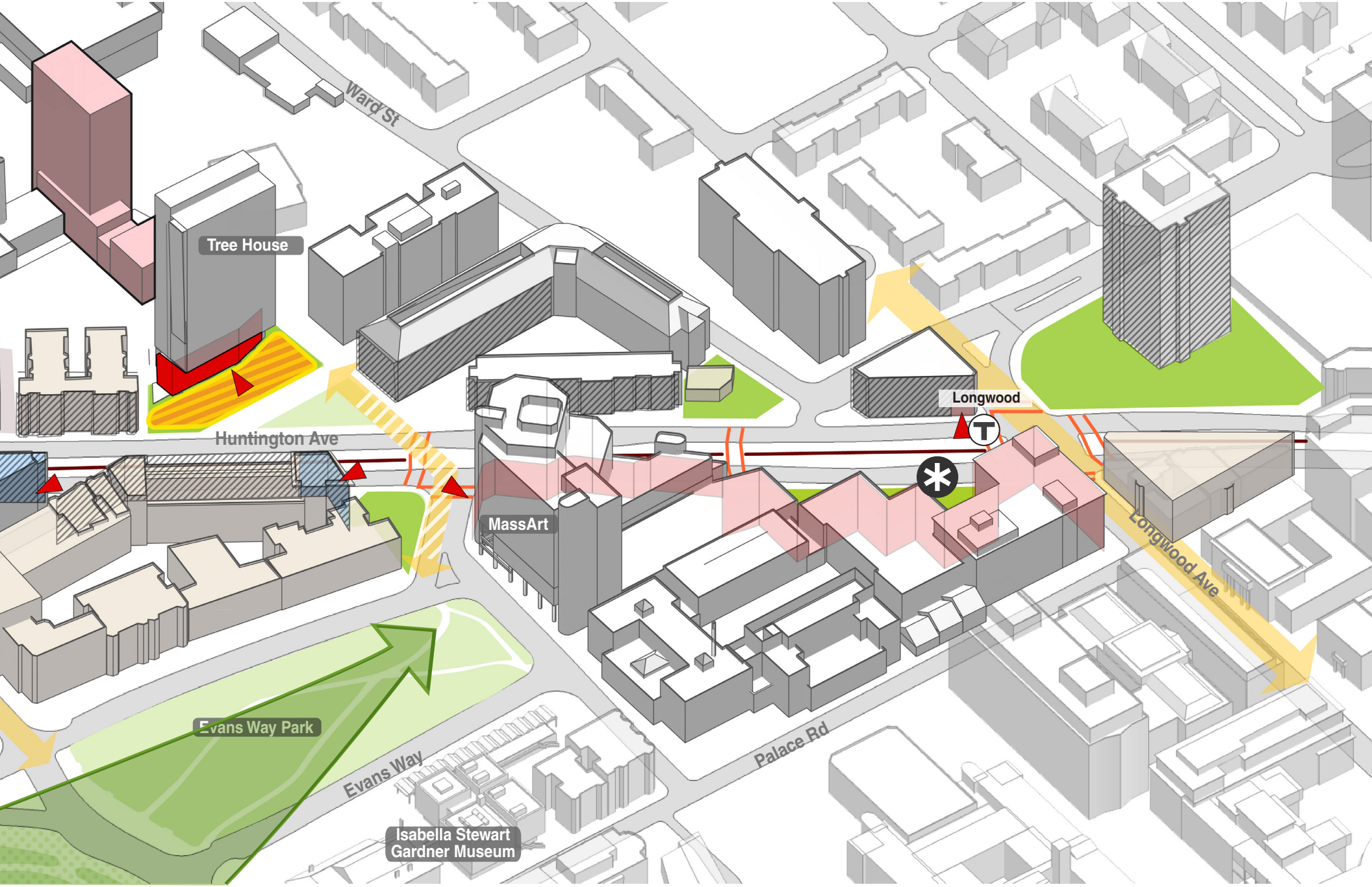
PROGRAMMING CONCEPT




Cabot Hall
Redevelopment Site
Cargill Hall
Redevelopment
West Village H
Krentzman
Quadrangle
Northeastern
University
Huntington Ave
Marino Center
Forsyth Street
Forsyth Way
Proposed North
Lot Development
Building Entry
Active Ground Floor
Inactive Ground Floor
Transparent Facade
New Tower Facade

PROGRAMMING CONCEPT




Ward St
Tree House
Huntington Ave
Longwood
MassArt
Longwood Ave
Evans Way Park
Evans Way
Palace Rd
Isabella Stewart Gardner Museum
Building Entry
Active Ground Floor
Inactive Ground Floor
Transparent Facade
New Tower Facade

COMFORT

Human comfort is an important consideration in the design of urban environments. Boston's continental climate is characterized by summers that are typically warm to hot, sometimes rainy and humid, and winters that combine cold temperatures with rain and snow. The shoulder seasons, spring and fall, are typically mild with temperature variations dependent on wind and sun. The most effective strategies for creating agreeable micro-climates in Boston include blocking winter winds and providing adequate shade in the summer months.

This study focused on the impacts of both wind and shadows for Huntington Avenue. As more projects come online for approval in the future, this study aims to set goals and provide guidance for development so as to achieve a high level of comfort for the public realm. In the analysis of shadow and wind impacts, it is important to note that priority was given to those public spaces where people potentially spend time sitting or standing. These include spaces where people could be waiting for a bus, eating at an outdoor cafe, or sitting in a courtyard. In such spaces both the impacts of wind and shadows could decrease the overall comfort or "dwell time" for people. The goal is to coordinate future development in such as way so as to maximize thermal comfort for the many visitors, residents, students and workers who inhabit the outdoor space of the Avenue on a daily basis.







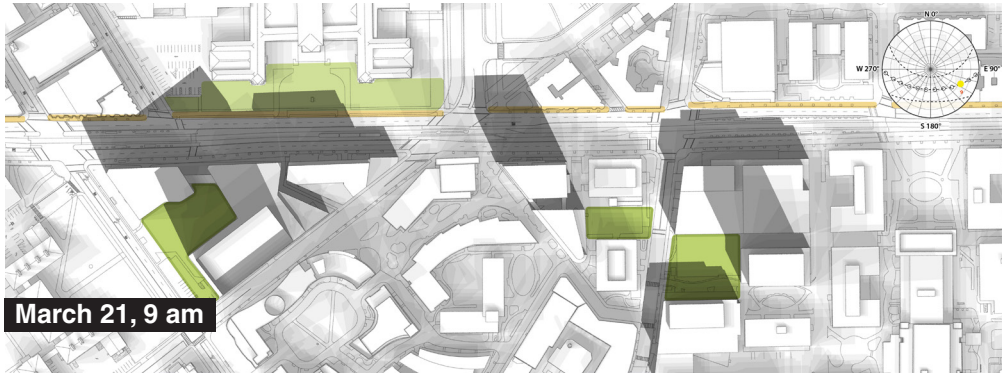


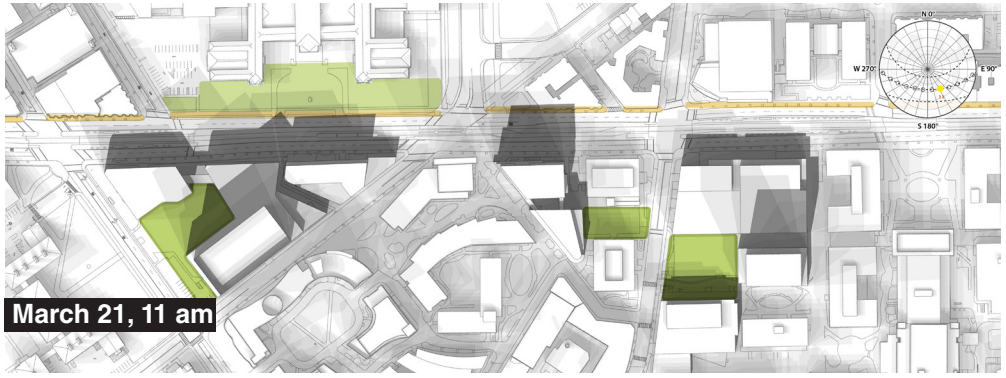


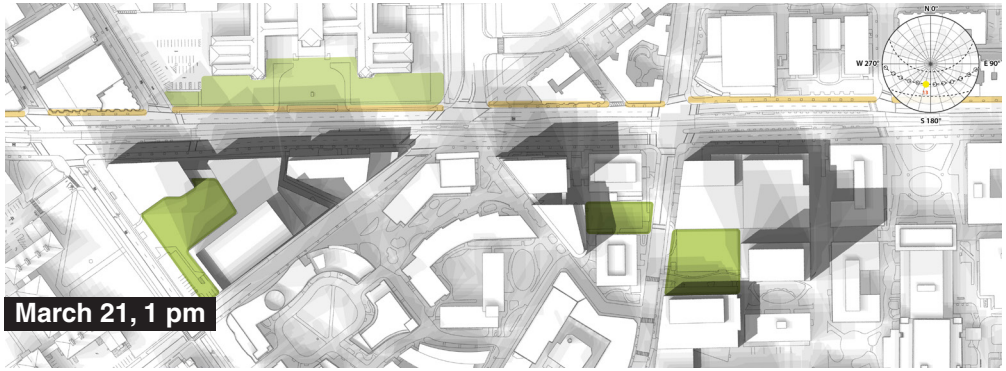


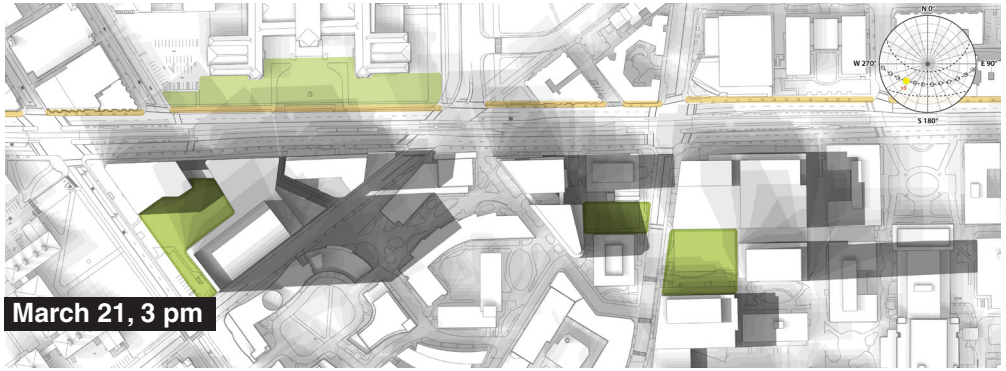


SHADOW STUDIES









Consistent with BRA methodology, shadow studies were created for the winter and summer solstices (December 21 and June 21) and the equinox (March and October 21). As indicated by the diagrams on this page, the equinox date was chosen to represent the overall sense of shadow impacts for the Avenue. The equinox represents both the average *annual* shadow impacts, but more importantly it is a good indicator of a worst case scenario as shadows are shorter in the summer months (when people are likely to linger outdoors) yet longer in the winter months (when people are less likely to linger outdoors). The times of day shown above also represent the worst case scenario, generally in the morning hours when the sun is lower in the sky. By 3pm in the afternoon (when people may be more likely to linger outdoors) shadows generally fall parallel to Huntington Avenue - with limited effect on the Avenue itself.

The green spaces in the diagram above indicate existing and proposed open spaces that are likely to be occupied by people sitting or standing, and therefore more vulnerable to lasting shadow impacts. Sidewalks are indicated in yellow to better assess the impact of shadows on the general public realm as well.

The darker gray color represents the shadows at various times for the recommended IMP and PDA massing described in more detail on page 60-72. As shown, the revised massing greatly reduces shadow impacts for the majority of the proposed open spaces and sidewalks. From 11am onwards, shadows do not adversely impact the majority of open spaces and sidewalks for this segment of Huntington Avenue.

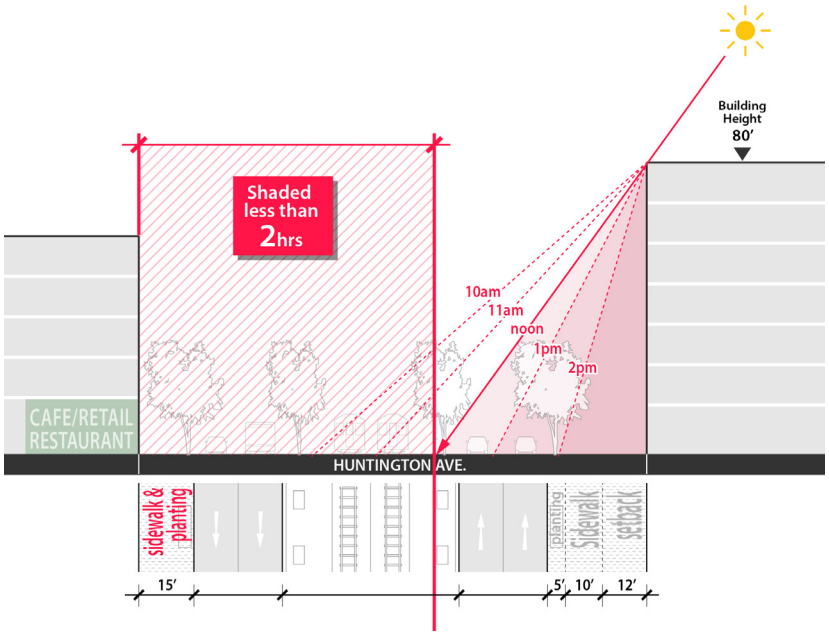


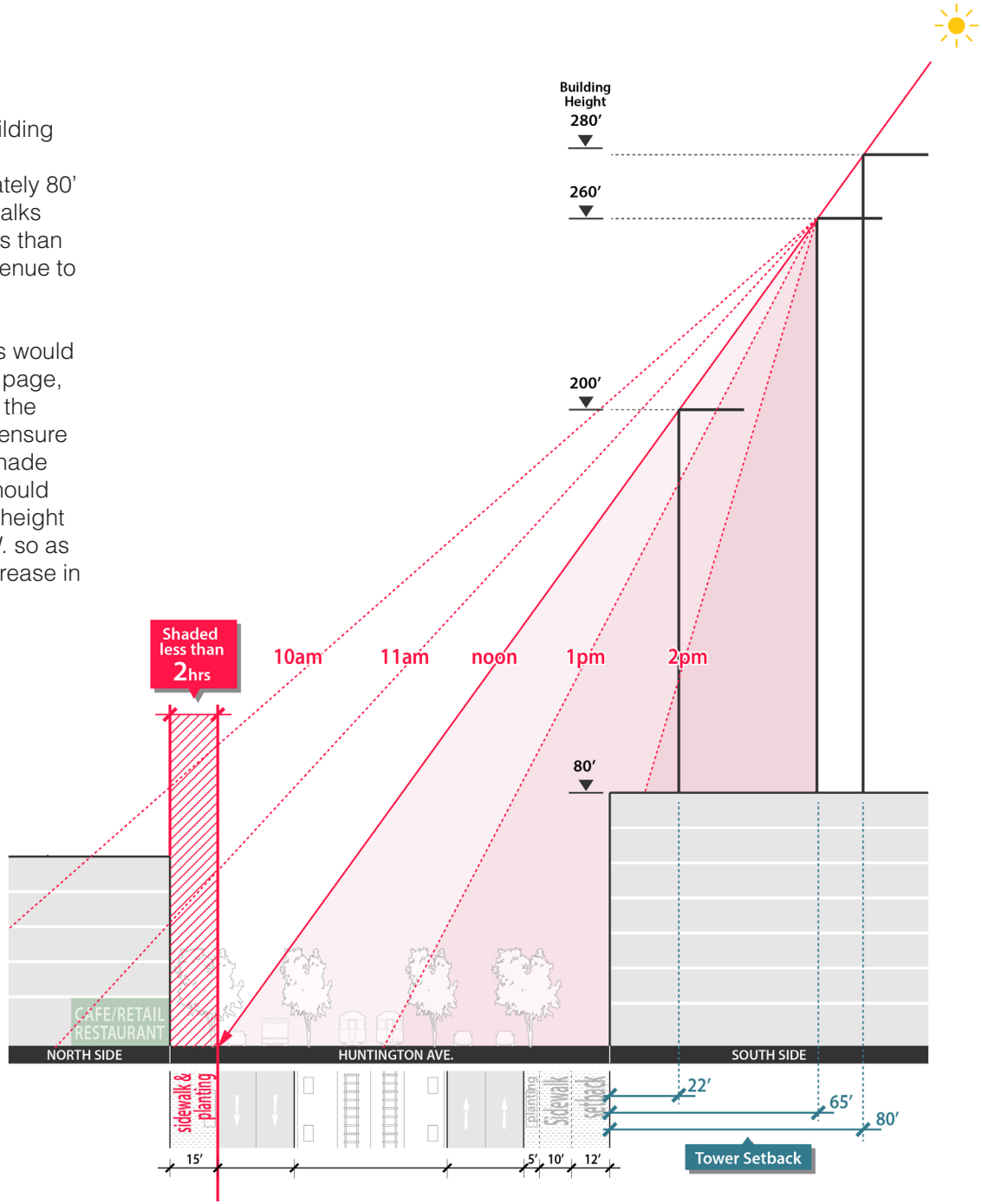
Looking at the cumulative shadow impacts for the recommended massing at 500 Huntington Avenue, the Burstein Rubenstein site, the Cargill and Cabot sites - the ***duration*** of shadows was considered to get a more qualitative assessment of their impacts. Looking to standards in place elsewhere in the city of Boston - it was determined that a reasonable threshold for negative shadow impacts would be approximately 2 hours; shadows lasting more than that on an occupiable public space should be avoided to the greatest extent possible. As indicated in the diagram above, the majority of shadows on the green and yellow spaces are in the shorter range of 1 - 2 hours; a great improvement from the massing approved in the IMP and PDA documents. Some shadow impacts are however unavoidable. Both the proposed courtyard at 500 Huntington and Northeastern's Law School quad will be shaded for 2+ hours at the equinox; somewhat more in the winter months and somewhat less in the summer months.

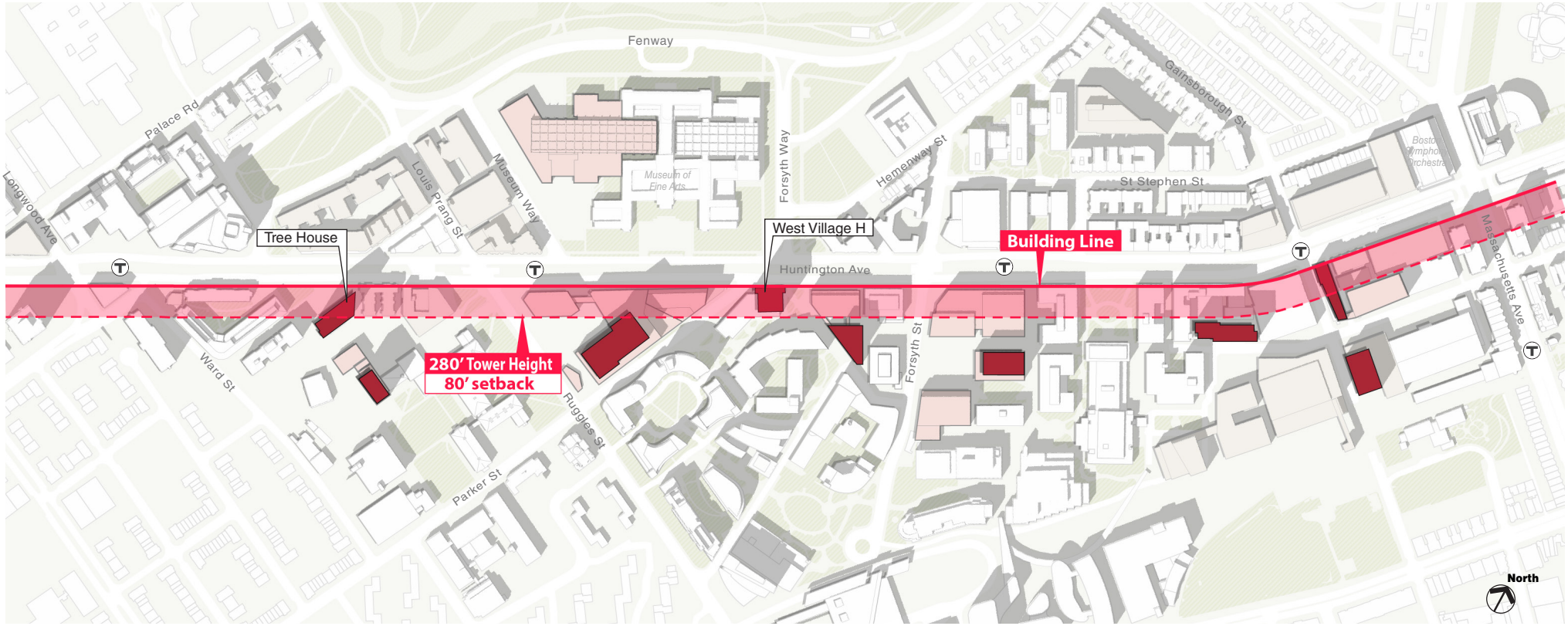
SHADOWS AND BUILDING SETBACKS

A series of shadow studies were conducted to assess the impact that building heights would have on the public spaces of Huntington Avenue. For the "average" time of year - equinox - a typical "fabric" building of approximately 80' high creates shadows that do not impact the northern roadways or sidewalks along Huntington Avenue. As indicated below the area that is shaded less than 2 hours extends from the face of the buildings on the north side of the Avenue to well over half-way through the overall right of way.

The diagram on the right indicates the shadow effects that taller buildings would create for the same time of year (equinox). As described on the previous page, a threshold of time - 2 hours - was deemed as a reasonable threshold for the amount of shading desirable for actively used public spaces. In order to ensure that the public sidewalks on the north side of Huntington Avenue are in shade for less than two hours on average throughout the year, taller buildings should set back in proportion to their height. For example, a tower that is 200' in height should be set back approximately 22' from the Huntington Avenue R.O.W. so as to not shade the north sidewalk for more than two hours. As buildings increase in height, setbacks distances should increase as well.







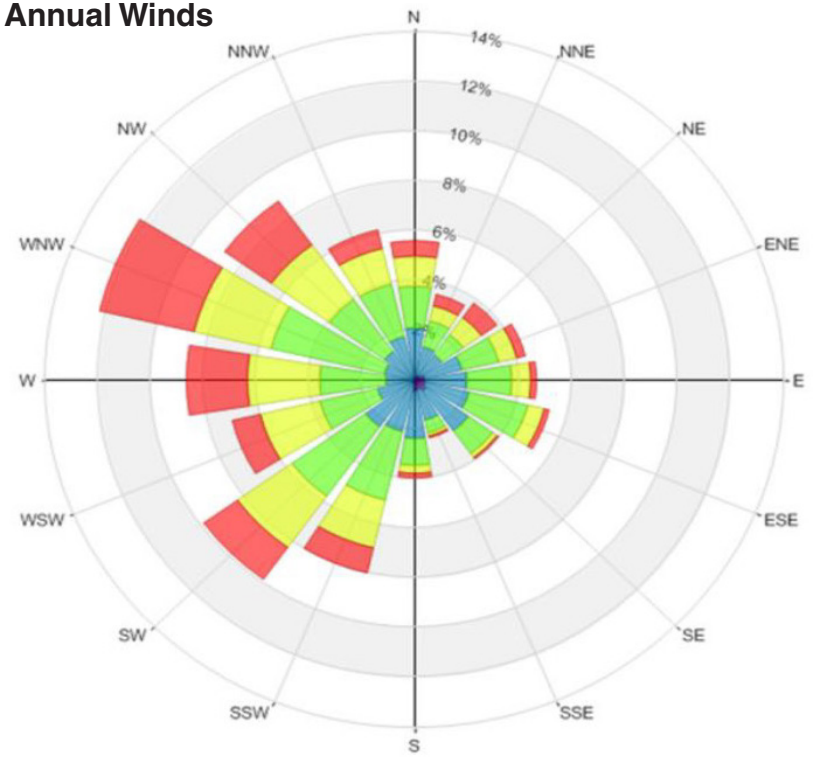
Ultimately, total building height will be dictated by the zoning for each parcel, but these diagrams are intended to illustrate the relationship between height, its location on the avenue, and its impact on shadow duration on public spaces and sidewalks.

The diagram on this page indicates that currently approved tall buildings in the study area, with the exception of Northeastern's Burstein Rubenstein site, can accommodate their permitted height without adversely impacting the sidewalk or public realm on the north site of Huntington Avenue. Towers which may be proposed in the future which are located within the shaded zone would need to be lower that 280' in order to minimize shadow impacts, while towers further than 80' from Huntington Avenue could be taller. All heights are regulated by zoning.

It should be noted that on the sectional diagrams (facing page) the tower outlines are indicated as rectangular volumes for the sake of clarity. There are many architectural solution for the shaping of towers - slanted facades and roofs, ziggurat stepped massing - that would achieve the same effect as the indicated setback distance. So long as the desired effect of minimizing shadows on the north sidewalks is maintained - any and all massing options should be allowed.

WIND DATA

Annual Winds



Wind statistics at Boston-Logan International Airport between 1981 and 2014 were analyzed for the spring (March to May), summer (June to August), fall (September to November) and winter (December to February) seasons. These wind roses graphically depict the distributions of wind frequency and directionality for the four seasons and for the annual period. When all winds are considered, winds from the **northwest and southwest** quadrants are predominant. The northeasterly winds are also frequent and strong, especially in the spring.

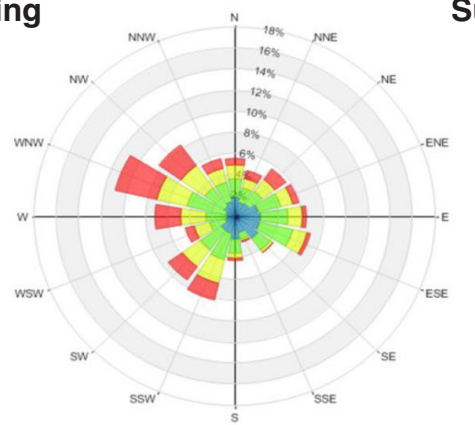
Strong winds with mean speeds greater than 20 mph (red bands) measured at the airport are prevalently from the northwesterly and southwesterly directions throughout the year, while the northeasterly winds are more seasonal (i.e., spring and fall).

Given the location of the study area and its surroundings, **winds from the northwest are considered to be the most important throughout the year**, plus seasonal winds from southwest and northeast directions.

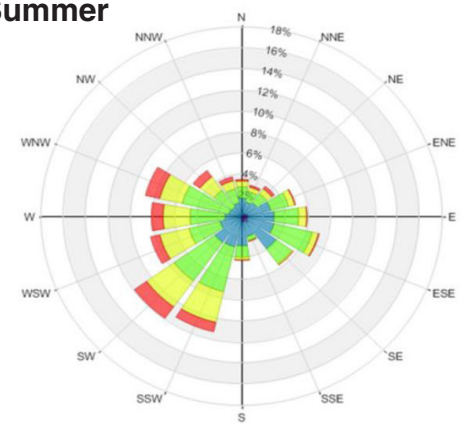
Wind Speeds (mph)



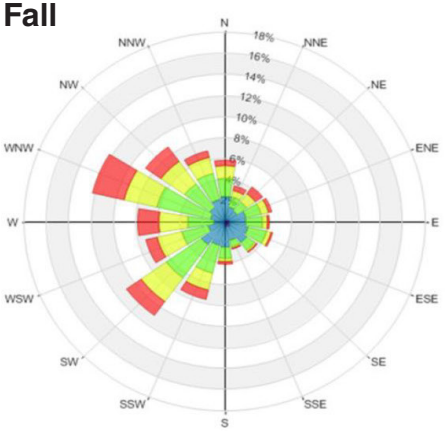
Spring



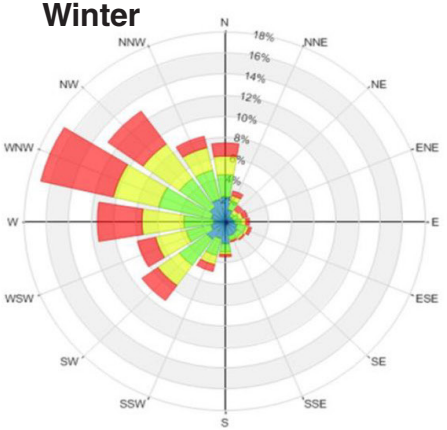
Summer



Fall



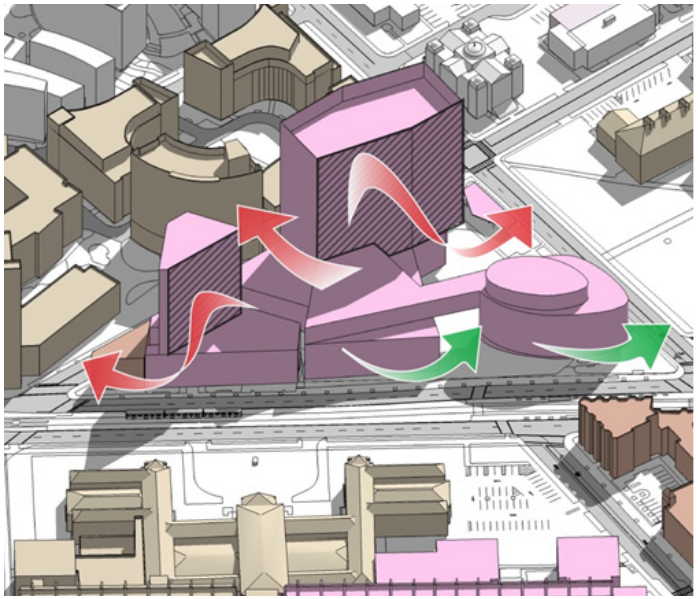
Winter



Directional Distribution (%) of Winds (Blowing From) - Boston Logan International Airport (1981 to 2014)

WIND CRITERIA AND GENERAL MITIGATION STRATEGIES





Positive Wind Effect

Negative Wind Effect

The BRA has adopted two standards for assessing the relative wind comfort of pedestrians. First, the BRA wind design guidance criterion states that an effective gust velocity of 31 mph should not be exceeded more than one percent of the time. The second set of criteria used by the BRA to determine the acceptability of specific locations is based on the work of Melbourne. This set of criteria is used to determine the relative level of pedestrian wind comfort for activities such as sitting, standing, or walking. The criteria are expressed in terms of benchmarks for the 1-hour mean wind speed exceeded 1% of the time. They are as follows:

BRA Mean Wind Criteria *

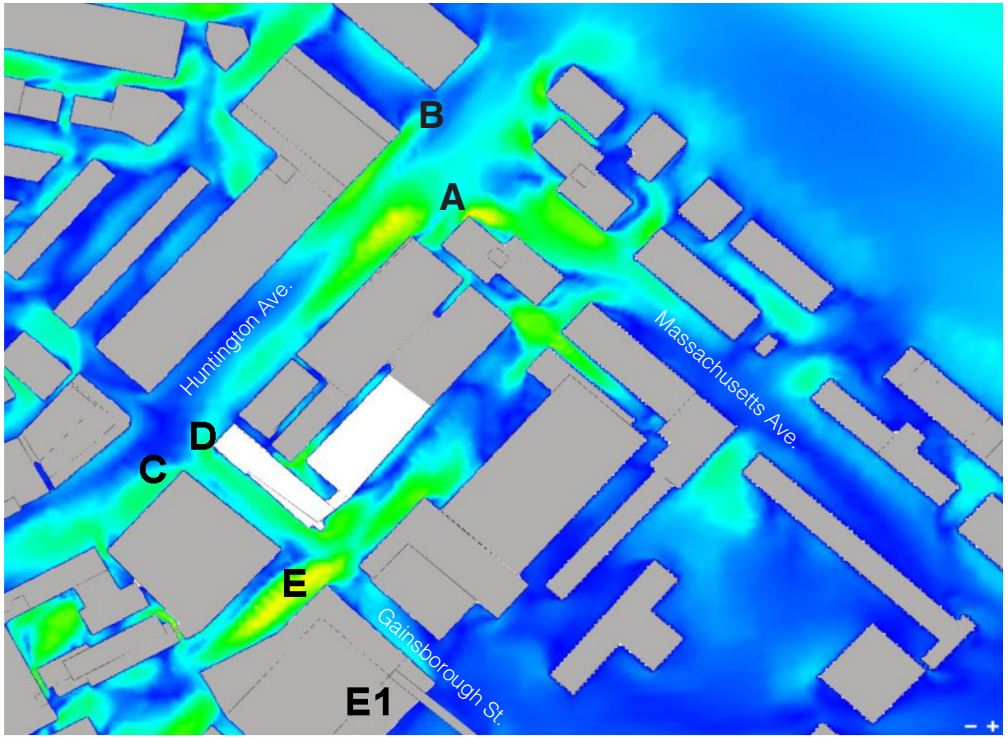
Dangerous	> 27 mph
Uncomfortable for Walking	> 19 and ≤ 27 mph
Comfortable for Walking	> 15 and ≤ 19 mph
Comfortable for Standing	> 12 and ≤ 15 mph
Comfortable for Sitting	< 12 mph

* Applicable to the hourly mean wind speed exceeded one percent of the time.

Suggestions to Mitigate Wind Impacts:

- **Orient towers such that their long sides are parallel to prevailing winds (west-northwesterly)**
- **Avoid siting two towers close together; this can create a vortex effect**
- **Step back tower facades above a deeper base to provide a "shelf" that will offset downdraft effects**
- **Incorporate trees and canopies**

WIND SIMULATION AND WIND MITIGATION STRATEGIES



A
Existing Condition. West-Northwesterly wind accelerates around building corner. This effect is likely mitigated by existing trees.

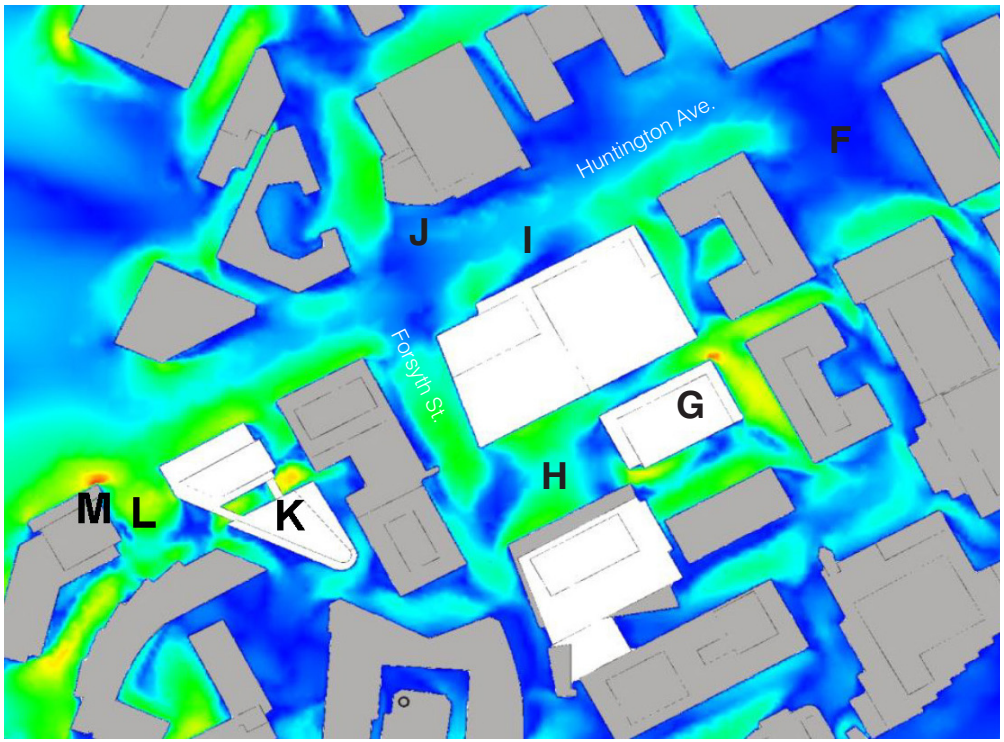
B
Existing Condition. Comfortable condition for walking and standing.

C - D
Proposed Condition. Likely comfortable for walking and standing.

E
Proposed Condition. This location will likely be uncomfortably windy for passive pedestrian activities. These activities would be more comfortable at E1.



Sitting Standing Walking Uncomfortable Dangerous



F
Existing Condition. Krentzman Quadrangle is a highly comfortable location for sitting, standing, and walking.

G
Proposed Condition. This building will be subjected to downwashing of winds off the broad facade of the tower. This effect can be mitigated by:

- Creating a tower setback / podium
- Reshaping the tower to make it more aerodynamic
- Incorporating a canopy feature to keep winds above pedestrian level
- Ensuring adequate trees in the area

H
Proposed Condition. This location will be well sheltered from prevailing winds.

I - J
These locations are and will be comfortable for walking, and potentially for sitting and standing.

K
Proposed Condition. This small plaza will be minimally subject to downwashing. This effect can be mitigated by same measures identified at location G.

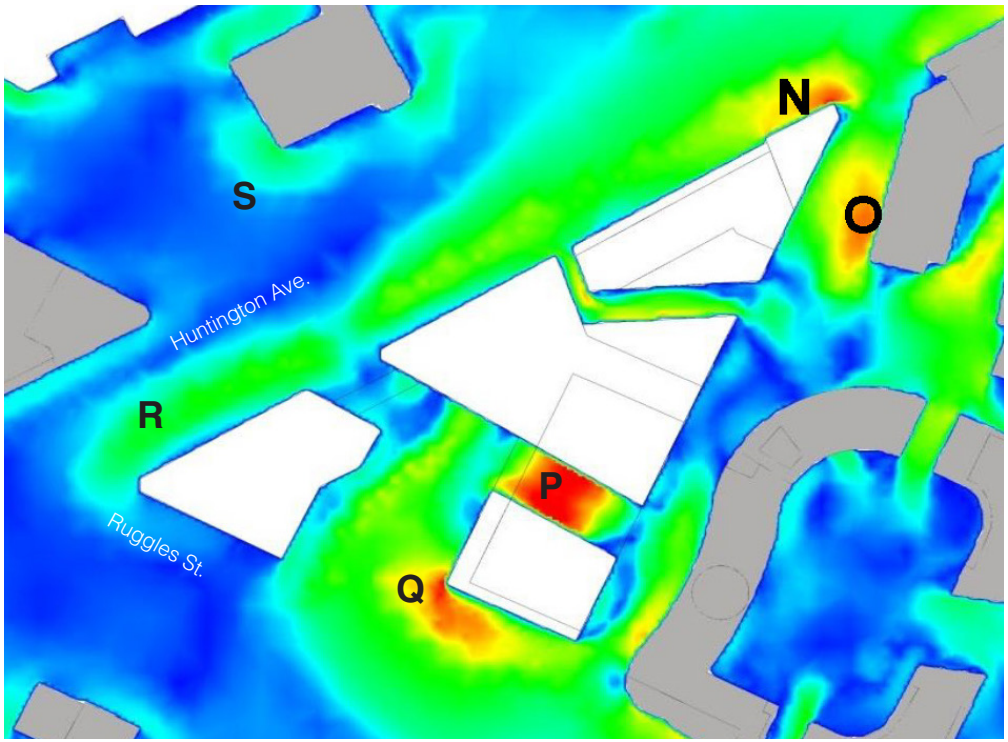
L
Existing Condition. Due to its proximity to the tower of West Village H, this location is subject to substantial downwashing.

M
Existing Condition. This location is deemed dangerous due to downwashing of winds from the tower at West Village H.



Sitting Standing Walking Uncomfortable Dangerous

WIND SIMULATION AND WIND MITIGATION STRATEGIES





N - O
Proposed Condition. This will likely be a windy location with prevailing west-northwesterly winds. These conditions can be mitigated by:

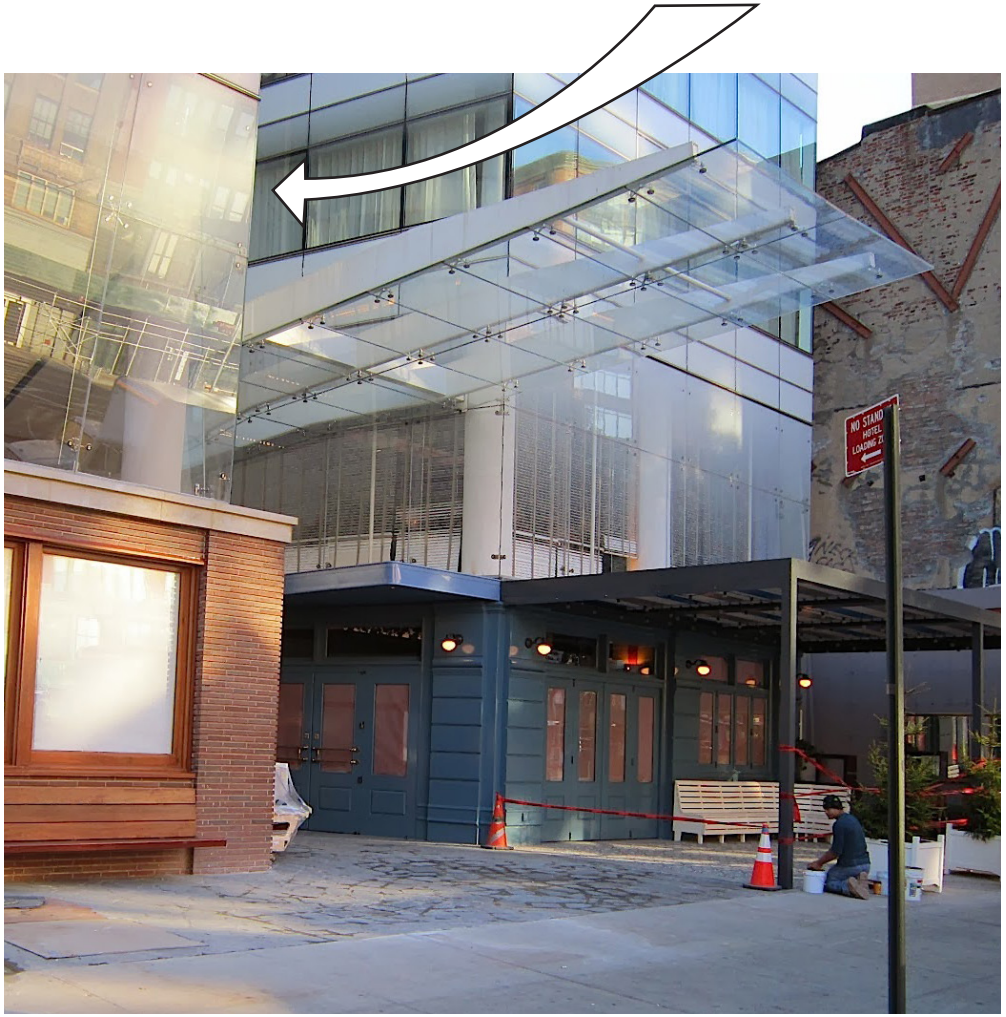
- Incorporating a tower setback in the Burstein Rubenstein facade along Huntington Avenue to create a podium level above the sidewalk
- Consider a large canopy feature along the Huntington Avenue facade to keep winds above the pedestrian level
- Consider significant canopy trees along this sidewalk to afford some protection from winds.

P
Proposed Condition. This location has the potential to be dangerously windy. This condition can be mitigated by:

- Modifying the tower floor plan to be more curvilinear and aerodynamic
- Creating a closed atrium rather than an open passageway and incorporate operable doors that do not allow doors to be open on both sides simultaneously
- Consider a large canopy feature extending above the pedestrian level but below the soffit of the opening through the tower. This canopy must cantilever out well beyond the tower facade above to intercept and redirect strong winds through the opening and keep them above pedestrians.

R
Proposed Condition. To improve conditions at this location, incorporate canopy trees.

Q
Proposed Condition. To increase comfort in this area, ensure a tower setback or incorporate significant canopy trees.

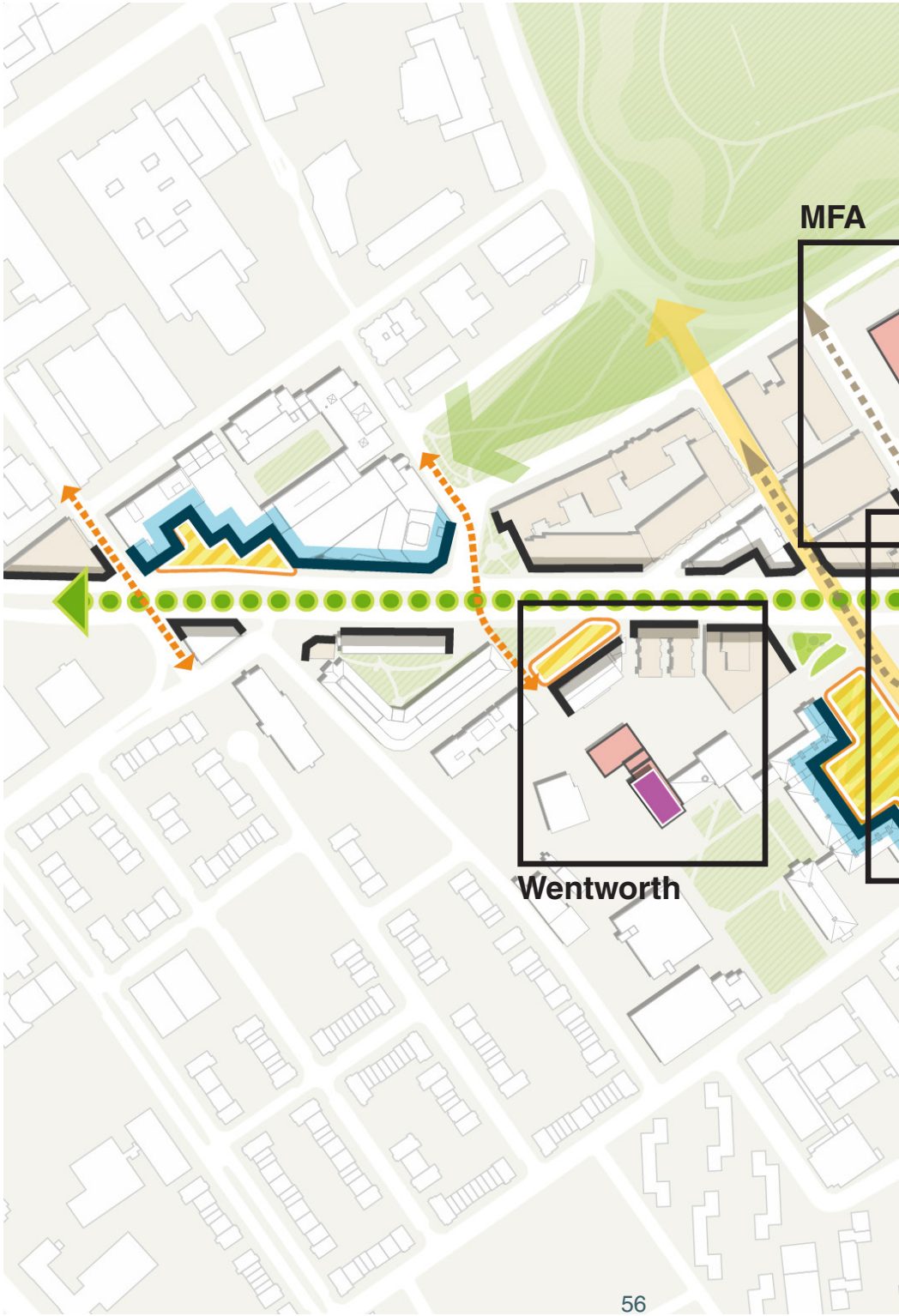


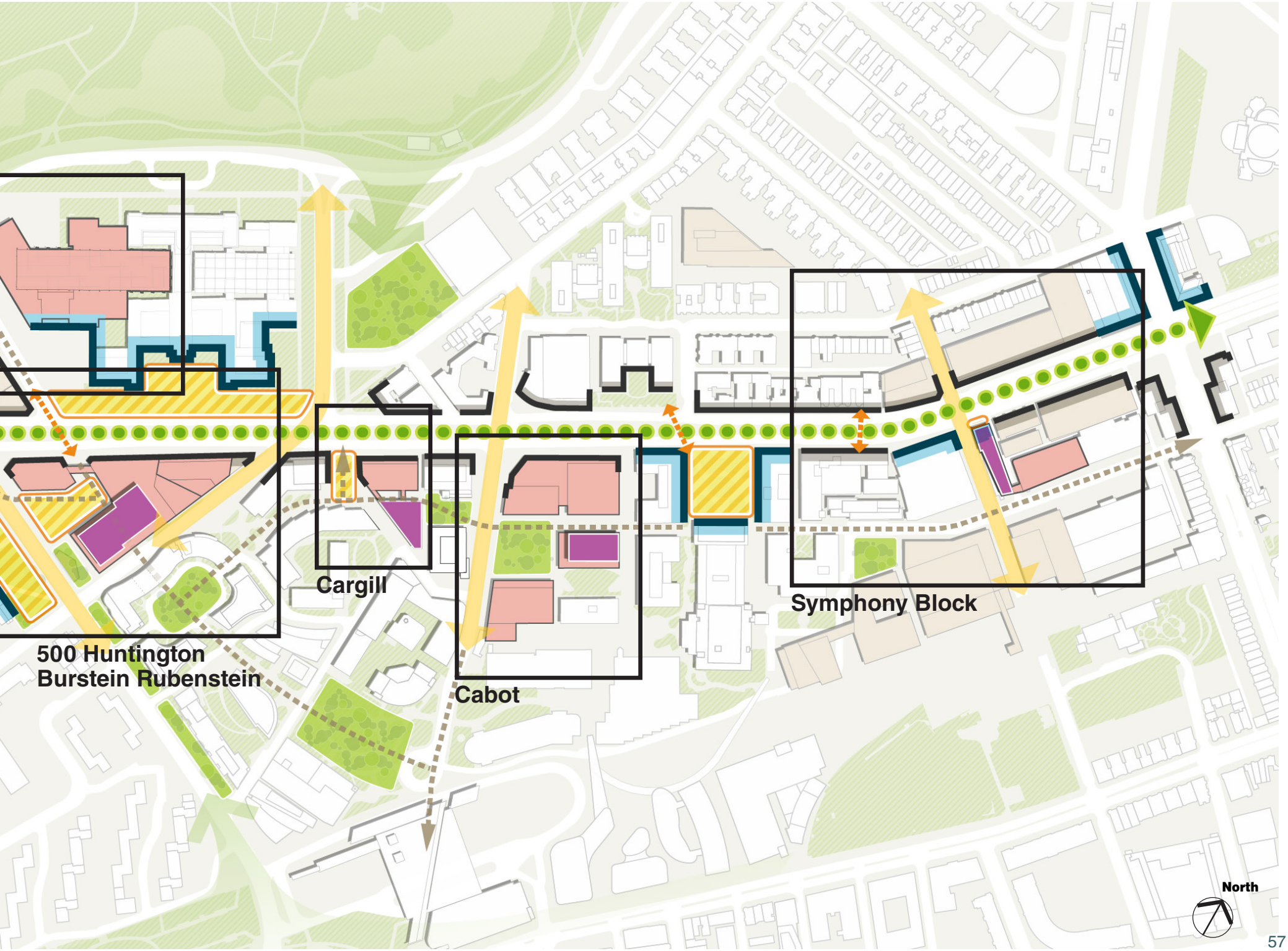


Examples of canopy features set midway into a building gap or passage, well-above pedestrian height. Such canopies can help to mitigate adverse wind effects.

PARCEL BY PARCEL DESIGN GUIDELINES

Parcel by Parcel design guidelines represent the specific recommendations for the six study area sites along as indicated on the concept diagram. Each site is described in plan to show critical relationships of major open space location, sidewalk widths, entries, and ground floor activation. Major pedestrian routes are indicated to help better integrate overall connectivity and walkability through the entire study area as well. 3d massing diagrams indicate important spatial relationships of buildings to streets, context buildings, and major landscape features. Important height and setback dimensions are included in the design guidelines to provide the overall directives for building massing on each of the sites. Each recommendation - as indicated in the diagrams - is derived from the overall concept diagram and the specific criteria as outlined in each of the four thematics sections of the study: mobility, placemaking, programming, and comfort. The guidelines represent recommendations for each of the parcel sites to ensure greater ease of pedestrian mobility and comfort, better legibility for buildings and spaces, and a more robust activation of the public realm.




500 Huntington
Burstein Rubenstein
Cargill
Cabot
Symphony Block
North

500 HUNTINGTON AVENUE BLOCK

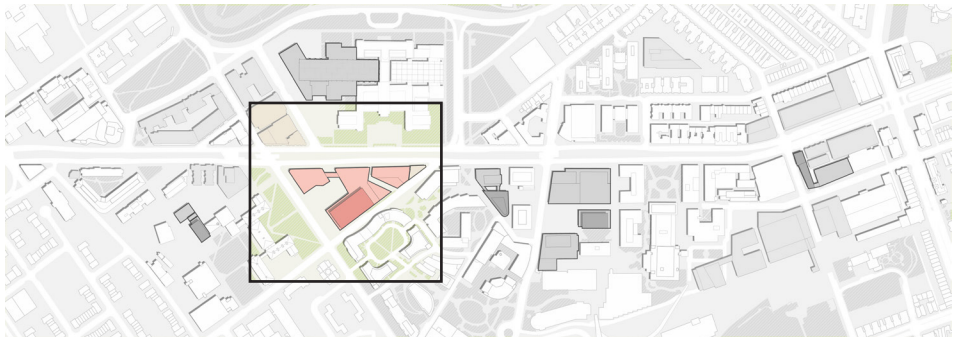
The 500 Huntington Avenue block combines development sites for both Wentworth Institute and Northeastern University. This large urban block will most likely see the most change as both IMP and PDAs indicate substantial new development here. In place of the existing recreational field and two 5-6 story residential buildings, approximately 900,000 gsf have been approved for this block alone.

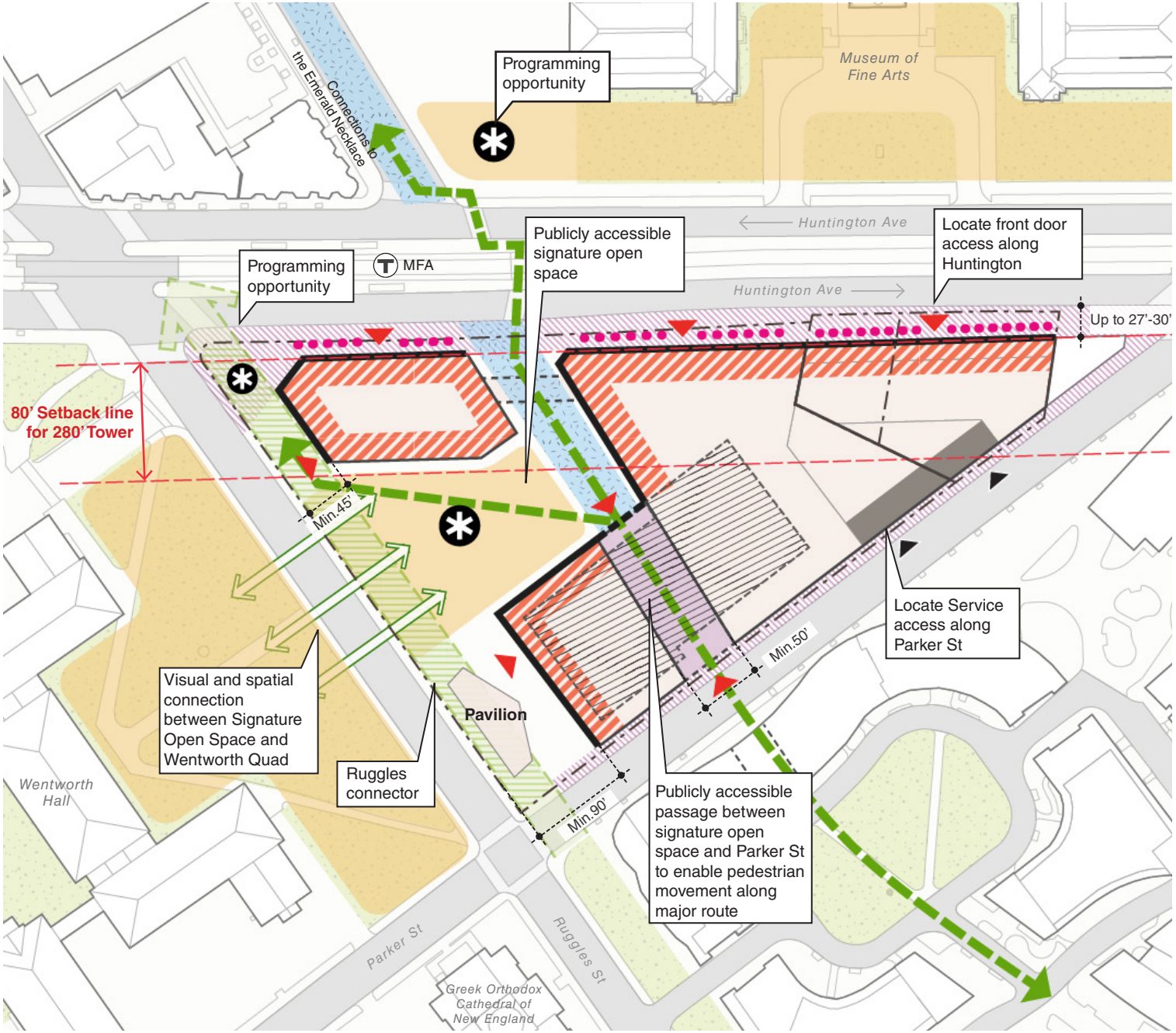
The conceptual massing in the 500 Huntington Avenue PDA and in Northeastern's IMP described a very inconsistent street wall height between Parker Street and Ruggles Street. So as to provide a coherent and consistent "fabric" to help frame the "iconic" setting of the Museum of Fine Arts and its connection to the Fenway, the massing for this block along Huntington Avenue is indicated at a consistent height of 90' with setbacks shown for additional floors. Adjustments were made to Northeastern's proposed residence hall to align with this concept, as well as to decrease the shadow impacts on the north sidewalk and portions of the MFA. While quite different in massing, the recommendation for the Northeastern site maintains the same gross square footage and is a viable shape to accommodate student housing. Adjustments were also made to the PDA site by increasing the streetwall height of the podium. In order to maintain the gross square footage allowed by zoning, some square footage was removed from the tower, reducing its visual presence along the corridor.

The proposed tower at 500 Huntington Avenue, in accordance with the PDA, is set back from Huntington Avenue proportionate to its height - as recommended in the shadow analysis section of this report as well. The overall orientation of the tower - aligned parallel to Parker Street - is maintained as well to diminish the appearance of bulk from Ruggles Street. The massing diagram for the tower indicates steps in the longer facades to help alleviate the overall mass of the tower. Setbacks are indicated in the diagrams on all sides of the tower to disrupt and lessen these downdrafts from summer and winter winds. Several additional features will also help to reduce negative wind impacts at the ground level. These include a pavilion like structure and landscaping at the corner of Parker and Ruggles Streets, the recommendation of an architectural canopy along the southern building facade within the courtyard facing Wentworth, and the inclusion of an enclosed arcade linking this open space to the Museum Way pedestrian path.

At the ground level, a significant courtyard space visually connects to the Wentworth "front yard" axially across Ruggles Street. This courtyard space and the Wentworth yard should be treated as a special "welcome mat." Along Ruggles Street, a minimum setback of 45' is maintained for the development at the corner of Huntington Avenue to accommodate a future transit corridor (cycle track or other mode). This setback is increased to 90' for the base of the tower mass - again to lessen its impact on the Ruggles and Parker Street intersection. Active ground floor uses are recommended along Huntington Avenue and on the interior perimeter of the courtyard spaces. Porous building edges are indicated for the ground floor of all buildings along Huntington Avenue - as this is an ideal site for cafes and restaurants that could benefit local residents, museum visitors, students and professional office workers. The corner building at Huntington and Ruggles - could house special function spaces for Wentworth at the ground floor as a way of signaling this important intersection.

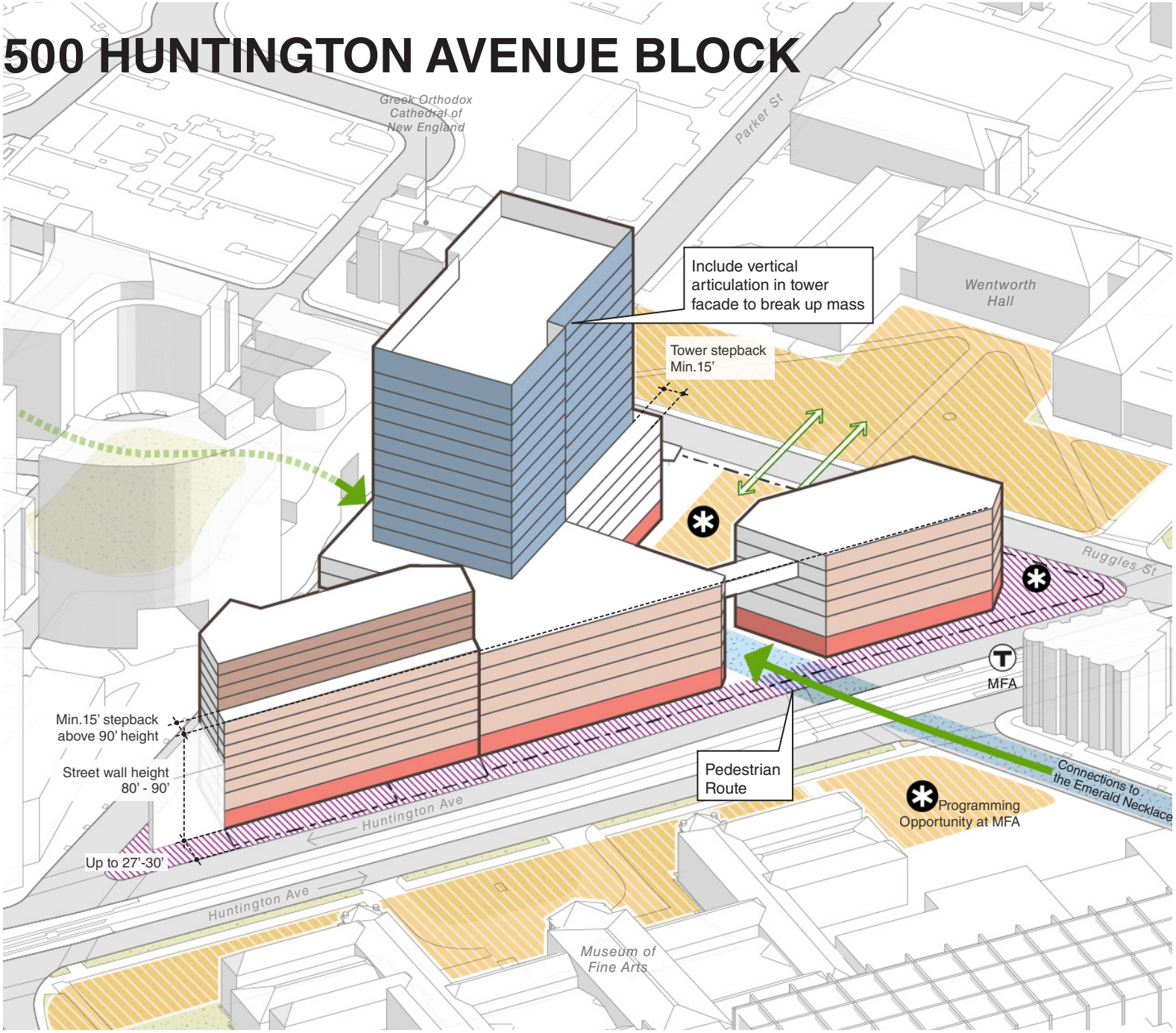
Museum Way is extended through the site to provide continuous pedestrian access from the Fenway to the Ruggles T Station. This route aligns with the interior pedestrian route established by Northeastern University and connects to the Centennial Quad. This route will provide a pleasant spatial sequence along roads, through courtyards and across arcades. It will help to provide a comfortable and safe route for pedestrians - removed from the busy traffic of Ruggles Street.





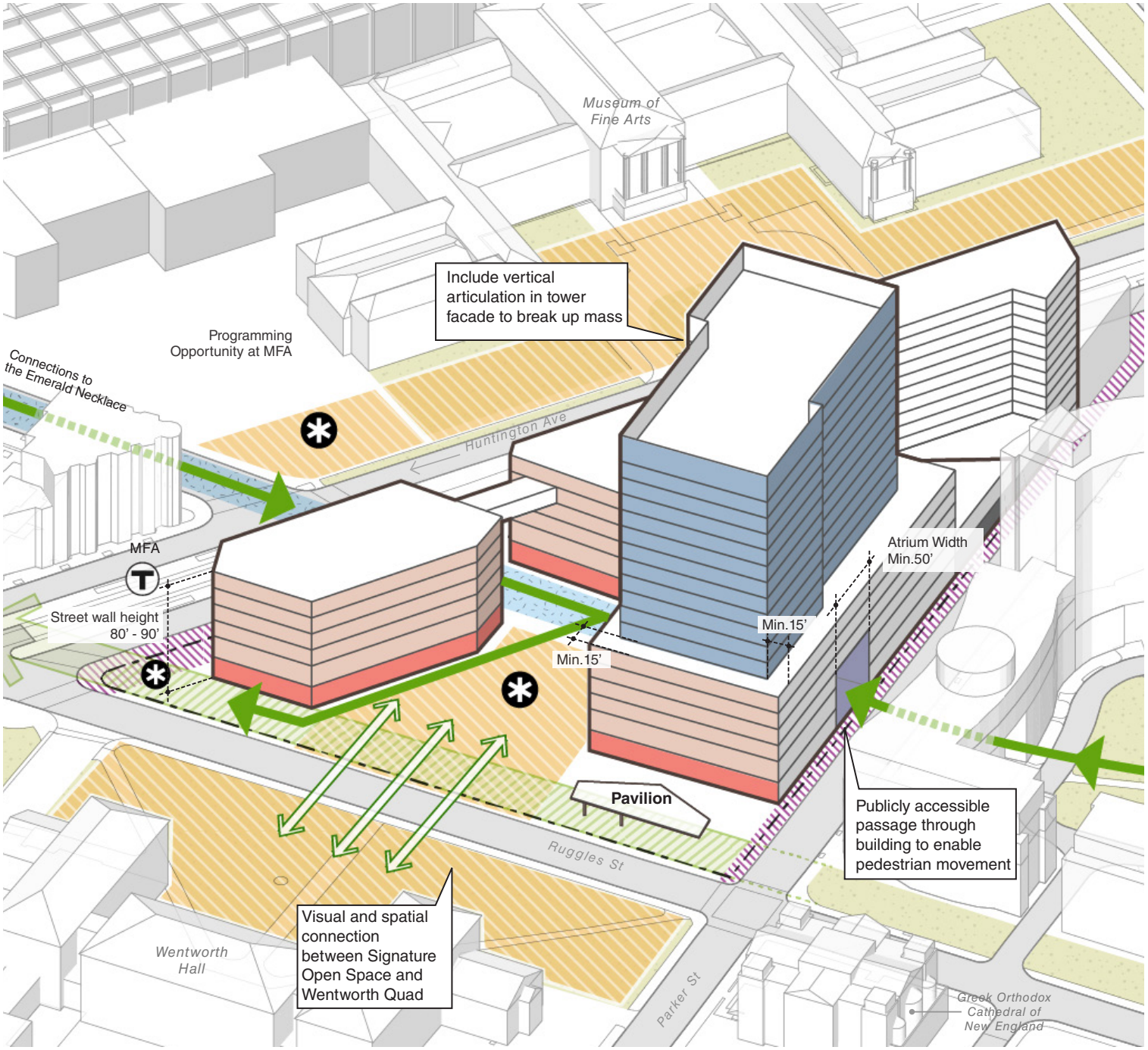
Ground Floor Plan

500 HUNTINGTON AVENUE BLOCK



- Streetwall Facade and Massing
- Active Ground Floor
- Setback Mass
- Tower Facade
- Landscape Area
- Sidewalk Improvement Area
- Welcome Mat
- Special Paving Treatment
- Atrium
- Service Access / Entry

Northeast View



- Streetwall Facade and Massing
- Active Ground Floor
- Setback Mass
- Tower Facade
- Landscape Area
- Sidewalk Improvement Area
- Welcome Mat
- Special Paving Treatment
- Atrium
- Service Access / Entry

Southwest View

CABOT SITE

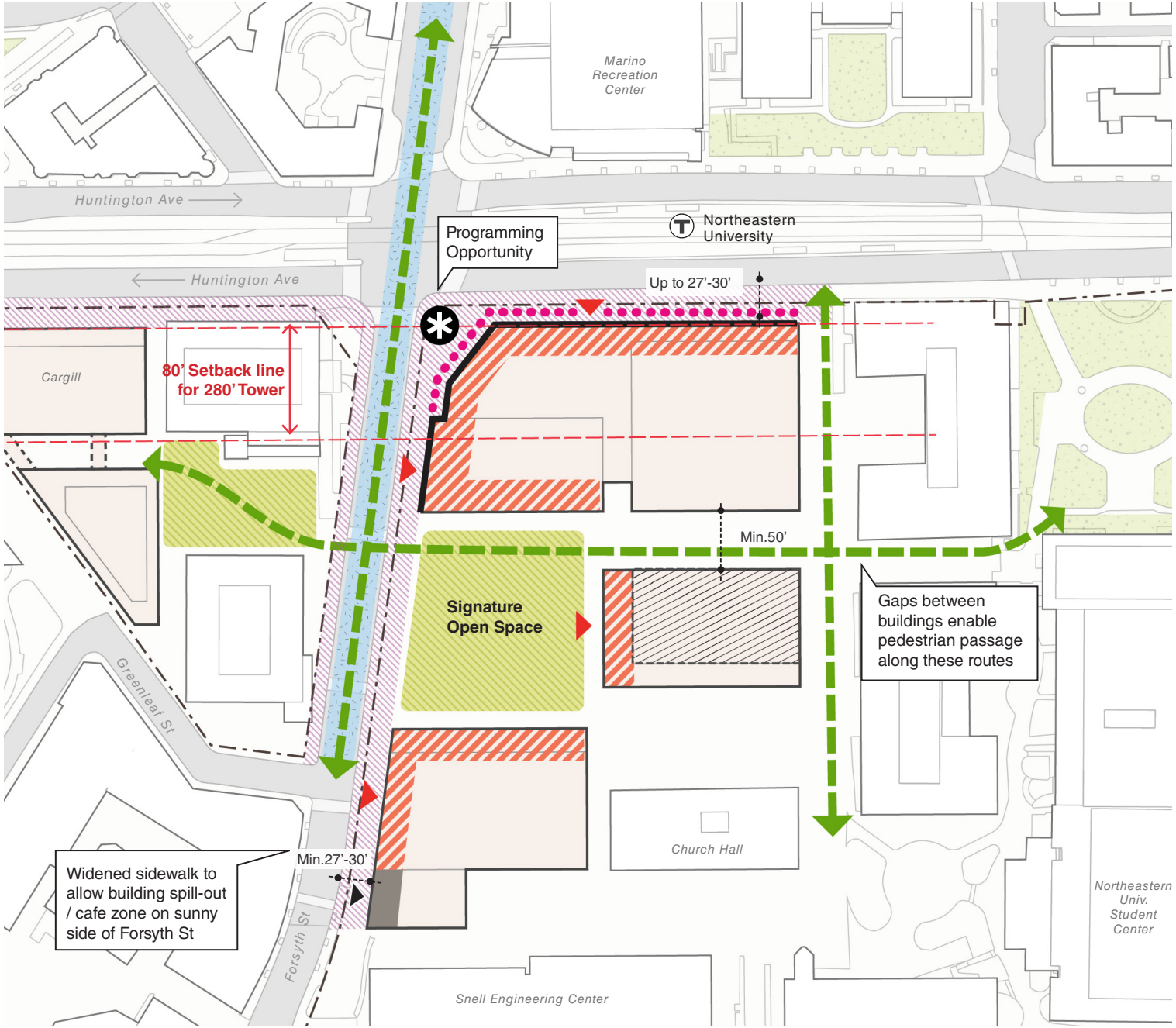
The Cabot site is significant for Northeastern's future development as it replaces the "Cabot cage," a large recreational facility that has been in use by the University for more than half a century. The existing double height building currently presents a blank wall to Huntington Avenue for its entire length, and is largely inwardly focused. Redevelopment here is a great opportunity both for Huntington Ave as well as Forsyth Street.

The recommended development plan restructures the site as a series of three buildings set around a western facing open space. The tallest of the three developments is located to the east of the open space and is set back from Huntington Avenue so as not to cause negative shadow impact on the Avenue and, more importantly, the newly created open space along Forsyth Street. The tower component of the development is recommended to be set back from its base to lessen the downdraft effect of winter winds and to provide a visual transition from the base to the upper areas. Along Huntington Avenue, the development continues the recommended streetwall height of 90' with setbacks for any taller elements. Due to its deep setback from Huntington Avenue, additional height for the tower could be accomodated without creating negative shadow impacts on the sidewalks. This would require an ammendment to the IMP. Sidewalk setbacks are recommended to be up to 27'-30' on both Huntington and Forsyth as both locations would be suitable for cafe spill out zones (and to allow for the south facing widened side street). Ground floor activation is recommended along these streets as well as within the courtyard perimeter.

As this is a unique crossing condition and actively used by pedestrians, special consideration has been given to the southeast corner space of this intersection. Here, across Huntington from the popular outdoor seating space of the Marina Center, a corner setback is recommended so as to provide the opportunity for programming as indicated in the rendering on page 35; this could be outdoor seating for a cafe or restaurant. Porous building edges are indicated for the Huntington Avenue frontage to ensure street level activation.

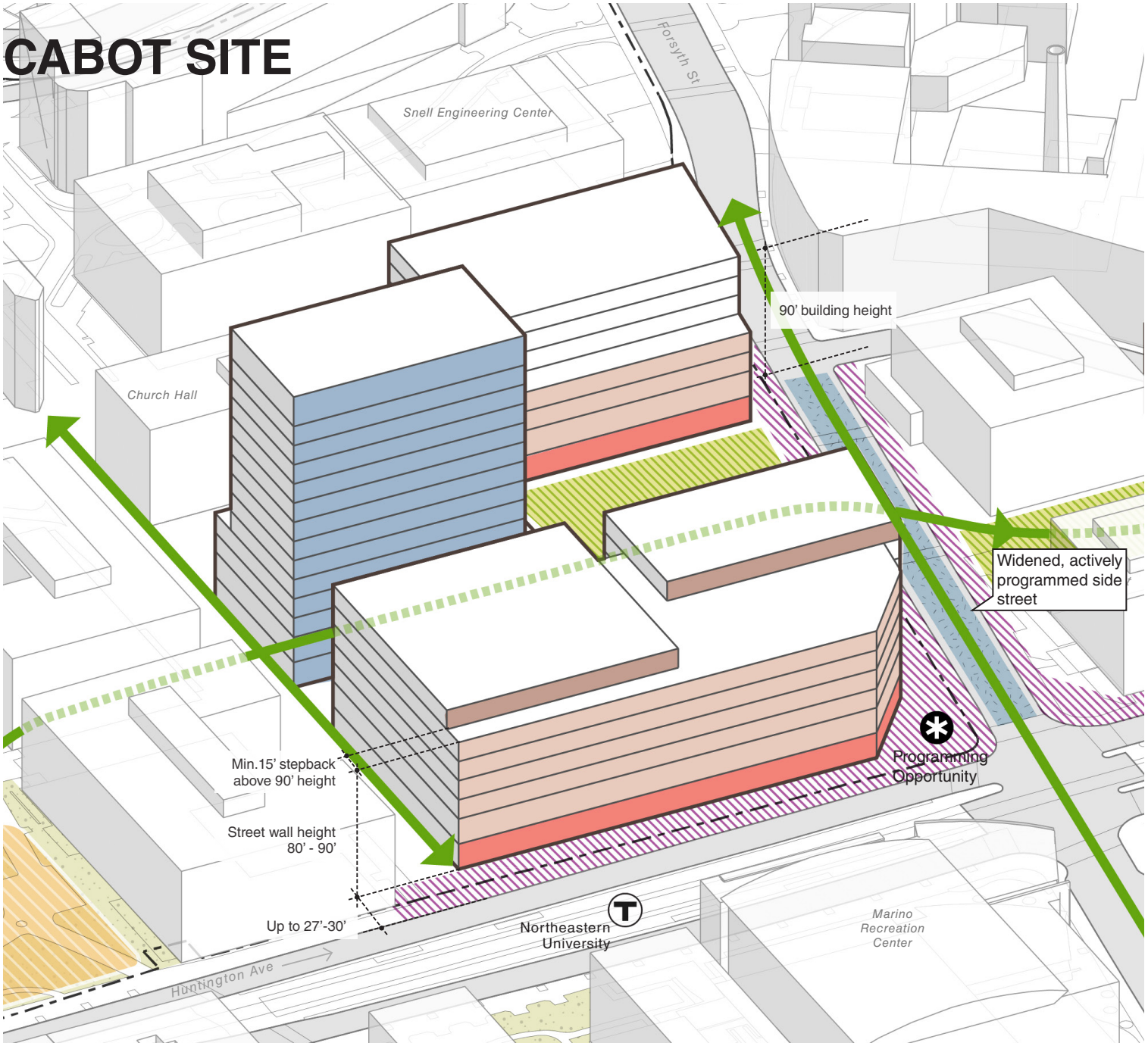
Movement for pedestrians is accommodated along the St. Botolph pedestrian way, along Forsyth Street and immediately west of the Cabot site within the campus. Gaps for such paths is recommended to be at least 50' between buildings.





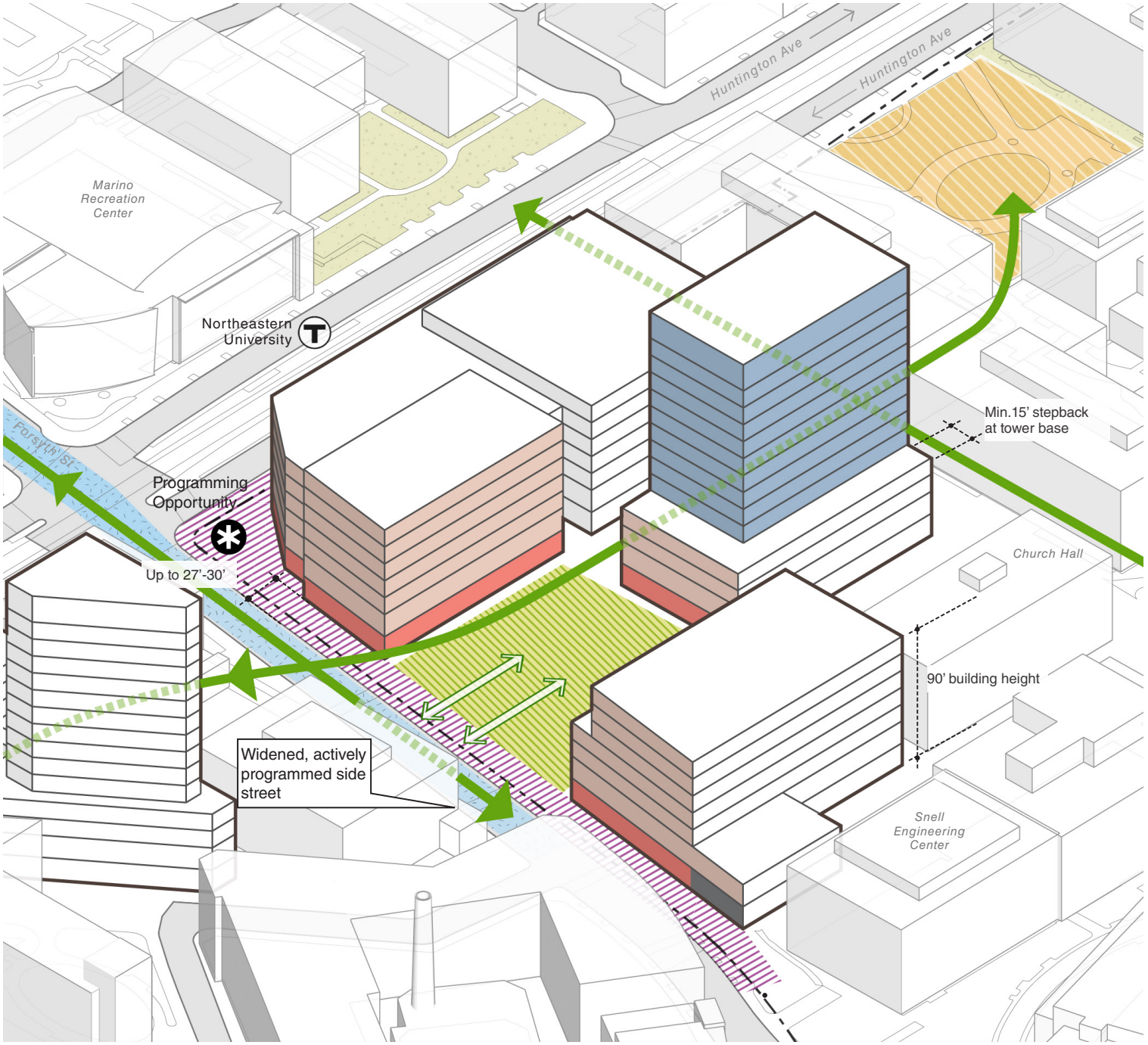
Ground Floor Plan

CABOT SITE



- Streetwall Facade and Massing
- Active Ground Floor
- Setback Mass
- Tower Facade
- Landscape Area
- Sidewalk Improvement Area
- Welcome Mat
- Special Paving Treatment
- Atrium
- Service Access / Entry

Northeast View



Streetwall Facade and Massing
Active Ground Floor
Setback Mass
Tower Facade
Landscape Area
Sidewalk Improvement Area
Welcome Mat
Special Paving Treatment
Atrium
Service Access / Entry

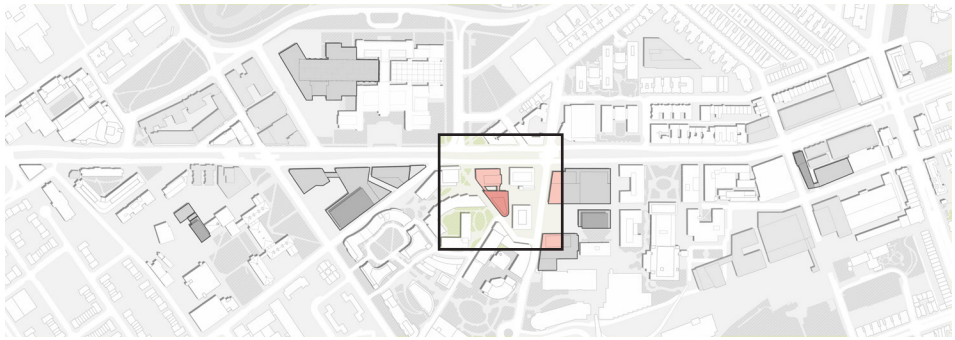
Southwest View

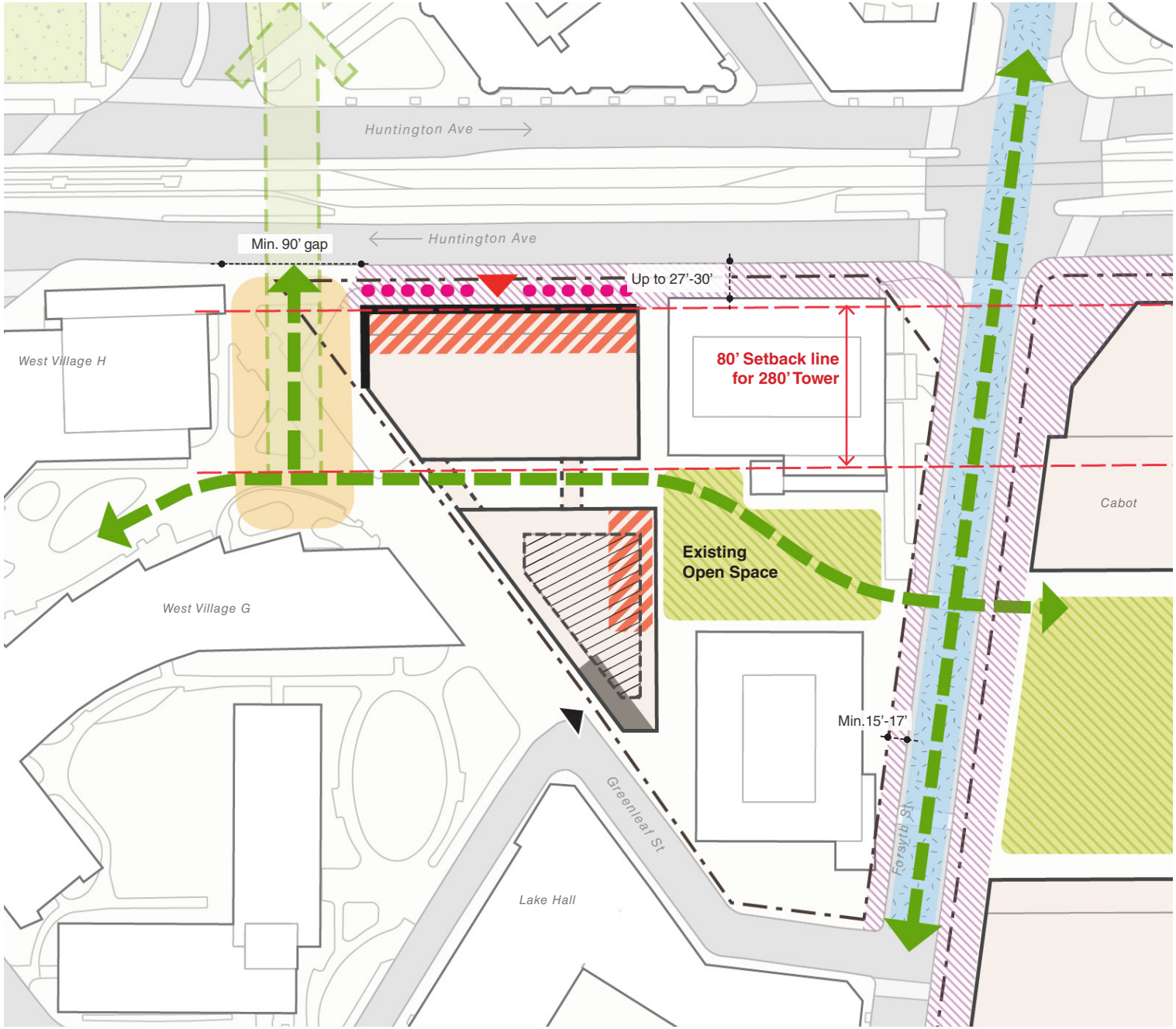
CARGILL SITE

Located at the intersection of Forsyth Street and Huntington Avenue, the Cargill site is an important infill site for Northeastern University. To the east, new development provides the opportunity to create a entry gateway into the campus from Huntington Avenue as an extension of the Fenway. To the west, the side abuts Northeastern's existing Law School quadrangle. The St. Botolph pedestrian path crosses the Cargill site from east to west, parallel to Huntington Avenue.

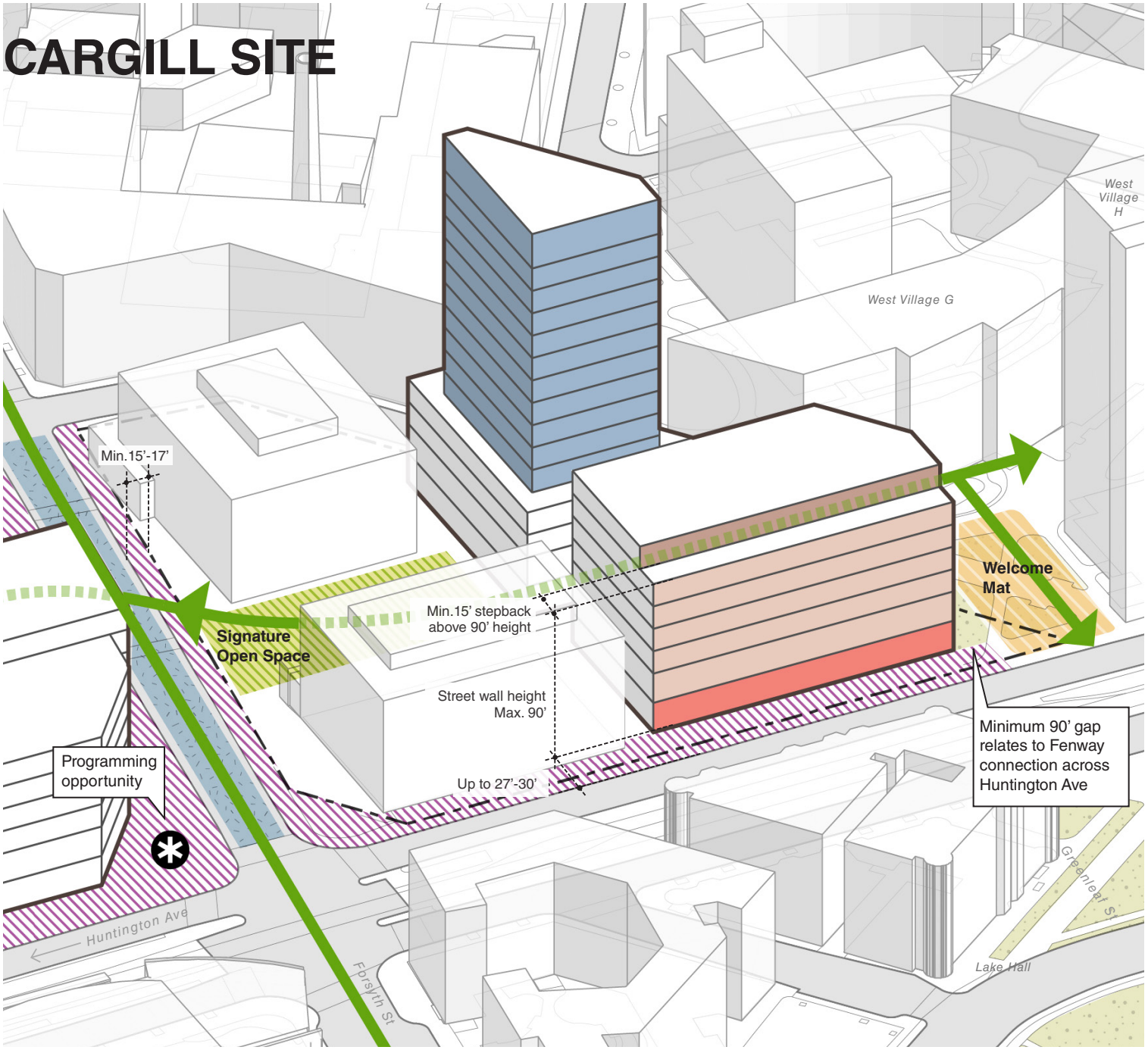
Recommendations for this site apply to both the building massing and the articulation of the open spaces. As noted in the overall concept diagram and shadow study sections of this report, taller buildings should set back from Huntington Avenue in proportion to their height, and they should be located so as not to shadow significant existing or proposed open spaces. At the Cargill site a tower of approximately 210' is indicated in at the southern area of the site - in accordance with massing alternatives indicated in Northeastern's IMP. Setbacks for the tower are recommended on all sides so as to prevent downdrafts from wind, and to create the appearance of lower massing profiles at the buildings' edges.

The massing of the development is separated into two volumes so as to maintain an east west passage through the site as a continuation of the St. Botolph pedestrain link, and as indicated in Northeastern's IMP. The lower development, located along Huntington Avenue, maintains the desired streetwall condition with setbacks recommended only above a 90' height. Ground floor activation is recommended along Huntington as are entries and a generally porous street-facing edge. Sidewalk widths along Huntington Avenue and the side streets should conform to dimensional recommendations described in the mobility section of this report. A gap of 90' is recommended at the Forsyth Street "gateway" location west of the Cargill site to reinforce visual connections to the Fenway from within the campus.

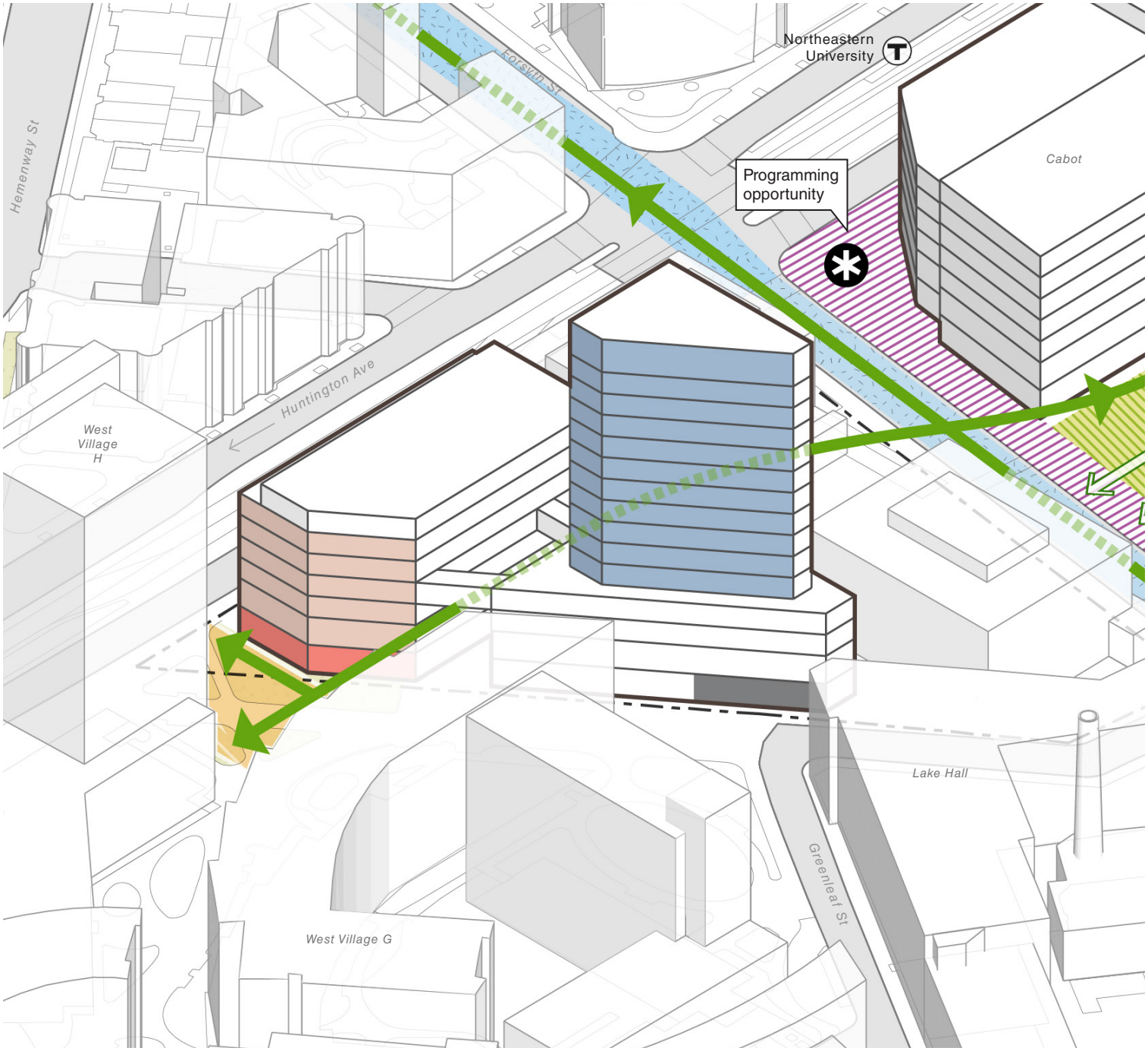




Ground Floor Plan



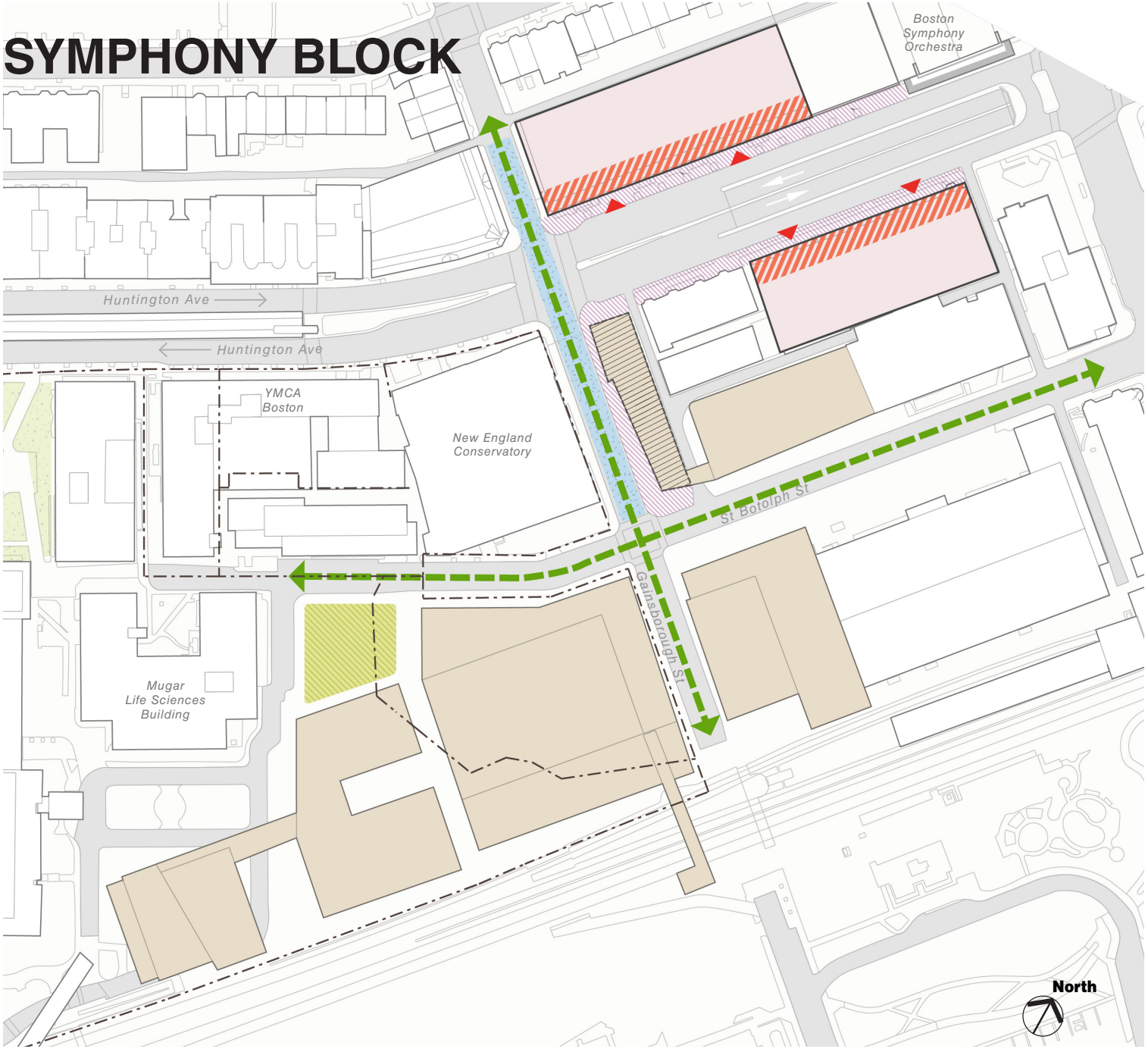
Northeast View



- Streetwall Facade and Massing
- Active Ground Floor
- Setback Mass
- Tower Facade
- Landscape Area
- Sidewalk Improvement Area
- Landscape Programming Opportunity
- Special Paving Treatment
- Service Access / Entry

Southwest View

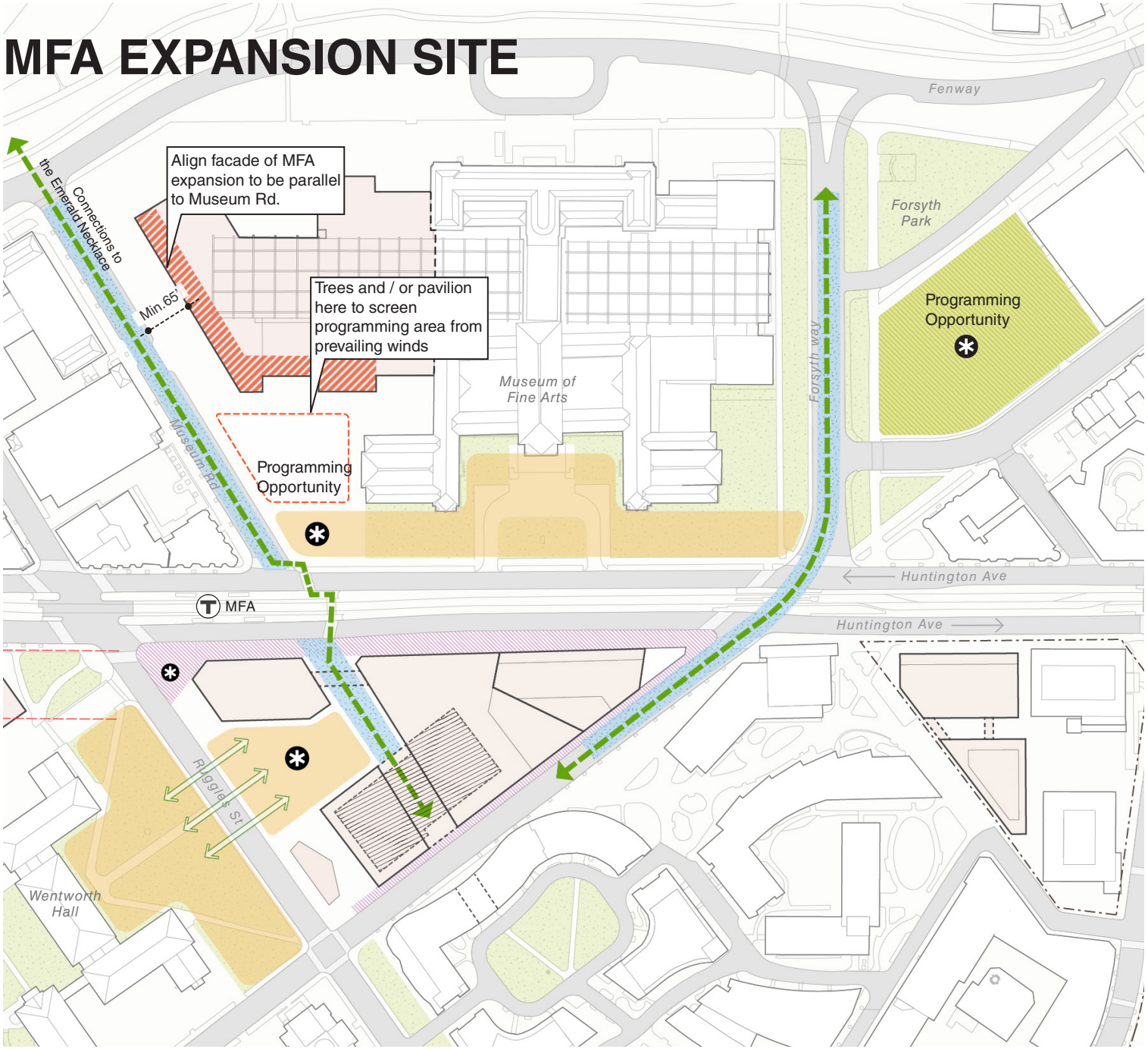
SYMPHONY BLOCK



- Active Ground Floor
- Landscape Area
- Sidewalk Improvement Area
- Special Paving Treatment
- Pedestrian Connectivity
- Main Access / Entry
- Permitted Projects

Retail uses abound along Huntington Avenue between Massachusetts Avenue and Gainsborough Street. It is one of the most lively and active areas of Huntington Avenue within the study area. Given the low height of the existing buildings - between 2 and 3 stories - this area may be subject to redevelopment in the near future. The guidelines recommend active ground floor uses for these parcels - with a preference for ground floor convenience retail or restaurants to maintain the existing character. On the north side or Huntington Avenue, a maximum of 90' feet is recommended (existing zoning allows for 90'). So as to maintain the street wall at the height of the Boston Symphony Orchestra's facade columns the massing should stepback at approximately 60'. On the south side of Huntington Avenue a massing height of 90' feet is also recommended - so that future development here maintains the streetwall "fabric." The New England Conservatory tower at the intersection of Gainsborough and Huntington and Jordan Hall, should both read as the "iconic" buildings in this location.

MFA EXPANSION SITE

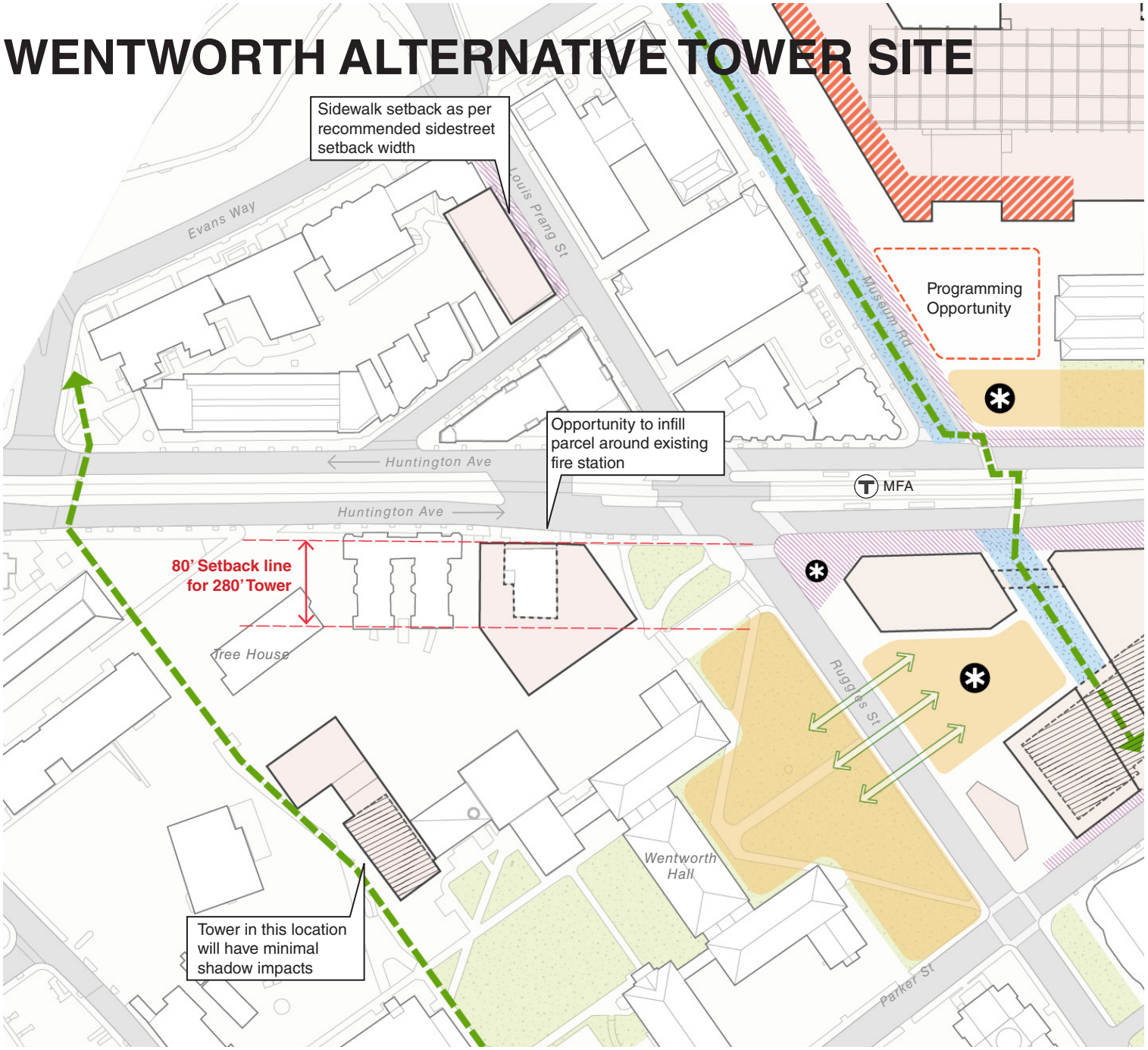


- Active Ground Floor
- Landscape Area
- Sidewalk Improvement Area
- Special Paving Treatment
- Landscape Programming Opportunity
- Pedestrian Connectivity

The future expansion of the Museum of Fine Arts should create a streetwall parallel with Museum Road with a generous setback of approximately 65'. This development should have ground floor activation along Museum Road and as much as possible on the south facade facing Huntington Avenue. As noted in the overall concept diagram, the corner of Huntington Avenue and Museum road is an ideal location for a programming opportunity. A small cafe or refreshment pavilion could provide seasonal activity and help to enliven the great front lawn of the Museum. Trees or other landscape treatment closer to the Museum itself should protect patrons from northwesterly winter winds and provide shade in the warmer months.

The surface parking lot west of the Forsyth Institute building is an ideal spot for programming as well. Outdoor activities could include concerts and performances in a potential new open space here. Proximity to the Fenway should encourage programming in coordination with the larger Fenway Cultural District's existing efforts.

WENTWORTH ALTERNATIVE TOWER SITE



- Active Ground Floor
- Landscape Area
- Sidewalk Improvement Area
- Special Paving Treatment
- Landscape Programming Opportunity
- Pedestrian Connectivity

For building locations on the Wentworth Campus and across Huntington Avenue, an infill strategy that helps to maintain streetwall continuity, contextual heights, and tower placements that minimize shadow impacts are recommended. The Wentworth "Pike" (a student path crossing Hunting Avenue close to the Evans way intersection) should be reinforced by new developments. Active ground floor uses are recommended along the Pike as well as along Huntington Avenue.

Along Louis Prang Street, new development should follow recommended setbacks for side street sidewalk widths and should not exceed heights as required by existing zoning.

North

BUILDING MATERIAL GUIDELINES

Active Ground Floors

Ground floors of new buildings, particularly those along Huntington Avenue and local side streets, should be transparent, have operable doors to allow easy access and robust ground floor activity, and be constructed from high quality, contemporary materials with careful design. Glass should be truly transparent, not tinted or obscured, and provide views to active interiors. The finished floor elevation of ground floors should align with the sidewalk level. Sunken first floors or mezzanine levels should be avoided.

Cafe Zone

Where cafes and other building amenities spill onto the sidewalk, they should use high-quality materials (such as wood, metal, stone or fabric), incorporate planted elements where possible, and adhere to clean and contemporary design. Inexpensive, flimsy, and low quality furniture, barriers, and awnings should be avoided.













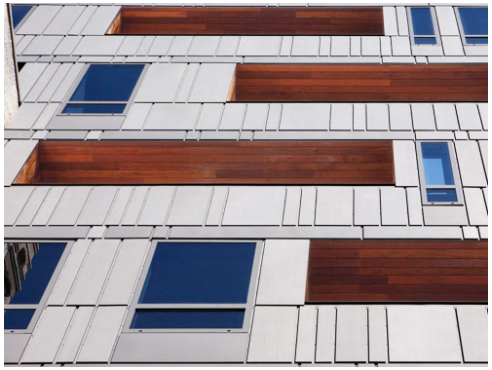


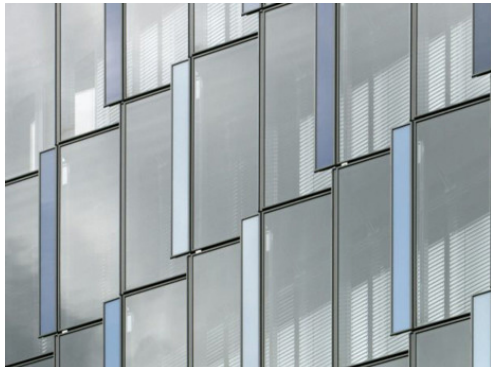
Streetwall Facade

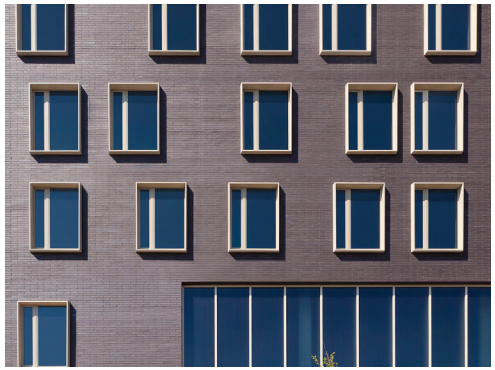
“Background Buildings” - those that form the continuous streetwall along Huntington Avenue - should be constructed of brick, masonry, stone, metal panel, terracotta panels, artful applications of precast concrete, or other high quality building materials. Window openings may be punched rather than integrated, lending the streetwall facade a “solid with voids” character.
Large horizontal stretches of facade should be broken up with vertical articulation.

Towers

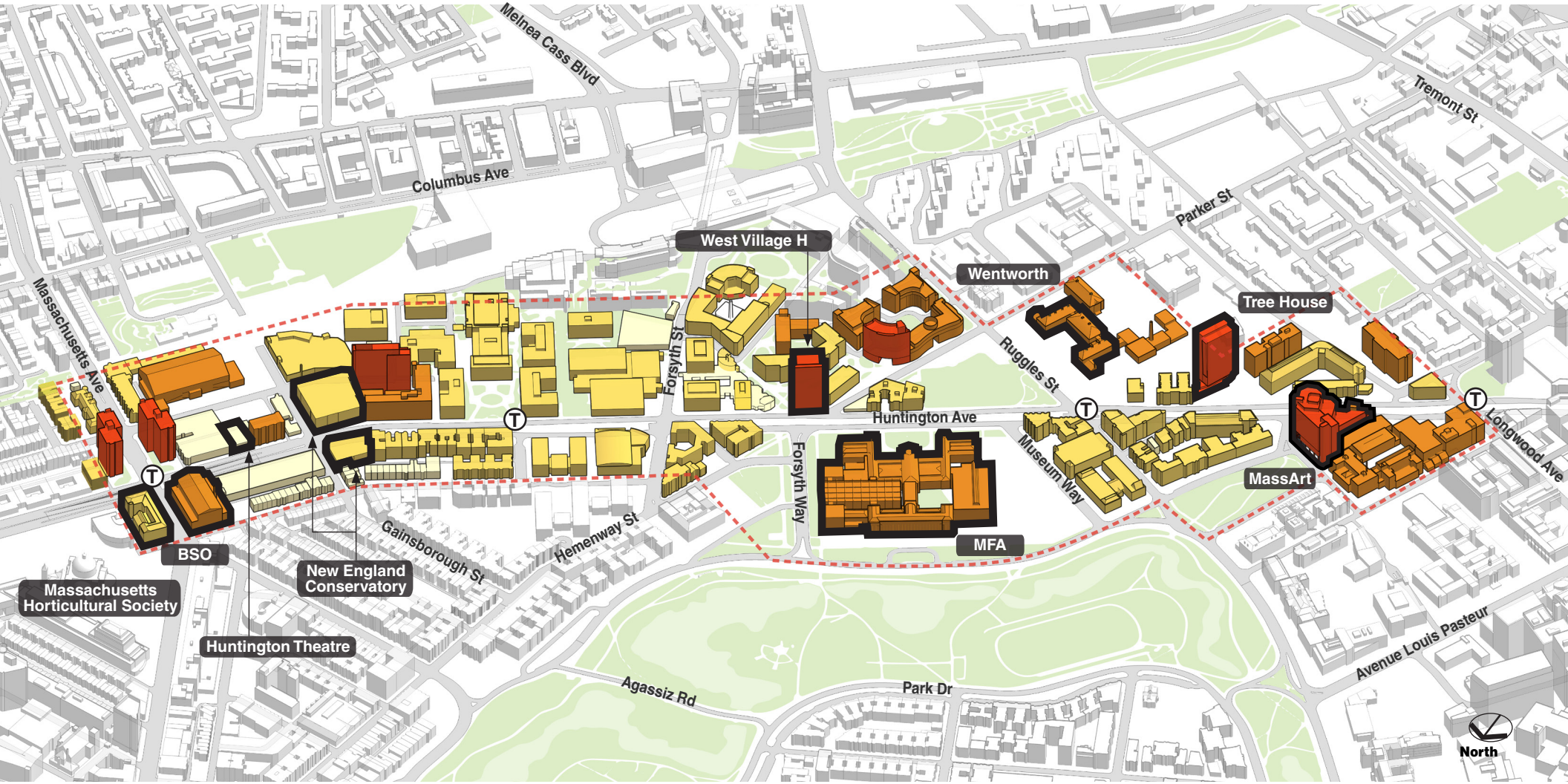
Towers within the Study Area should be composed largely of glass with colorful, artful, innovative accents.



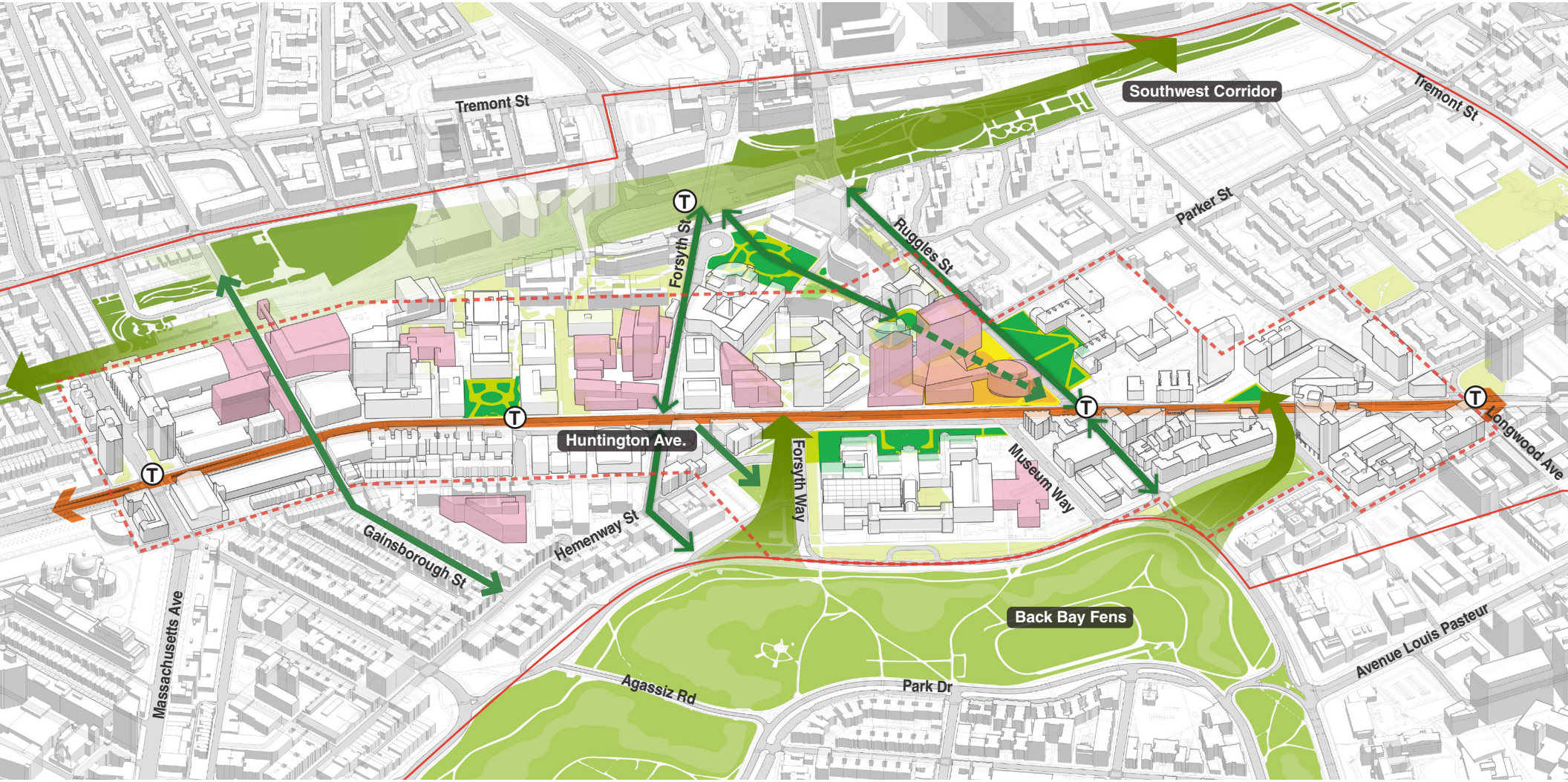



APPENDIX A: BUILDING HEIGHT



Existing Conditions

APPENDIX B: SIGNATURE AND CONNECTING LANDSCAPES

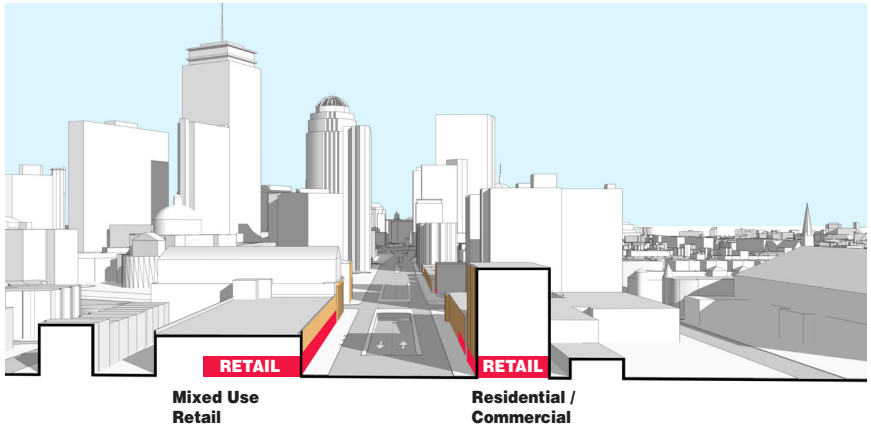


Open Space Typologies

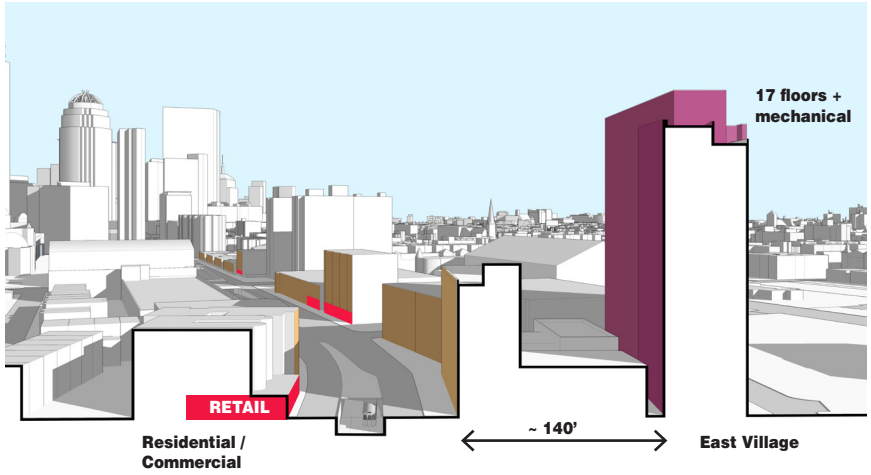
- Back Bay Fens
- Southwest Corridor
- Institutional Open Spaces

APPENDIX C: SETBACKS AND BUILDING HEIGHT

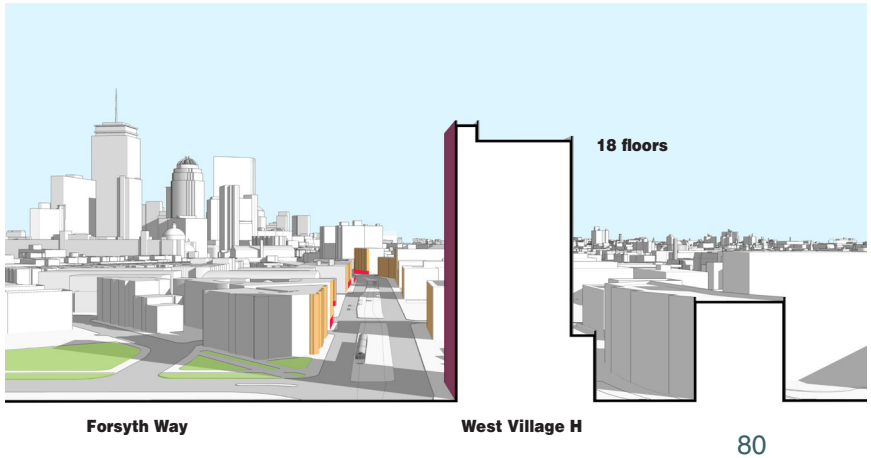
Symphony Retail Block



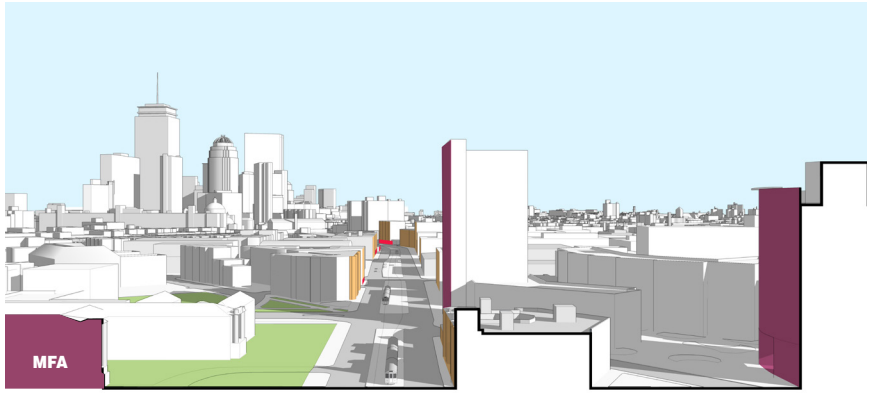
At YMCA / East Village



At Northeastern University / West Village H

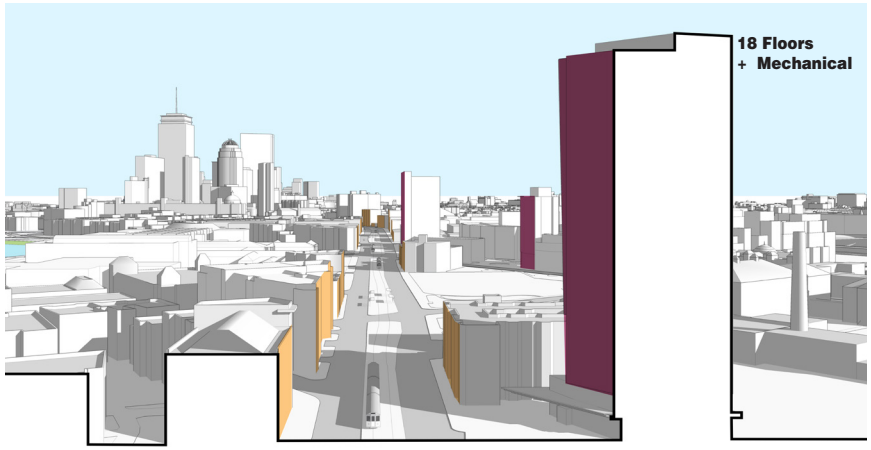


At the Museum of Fine Arts



MFA Front Lawn

At MassArt's "Treehouse"



555 Huntington Avenue

Treehouse

At MassArt and Wentworth

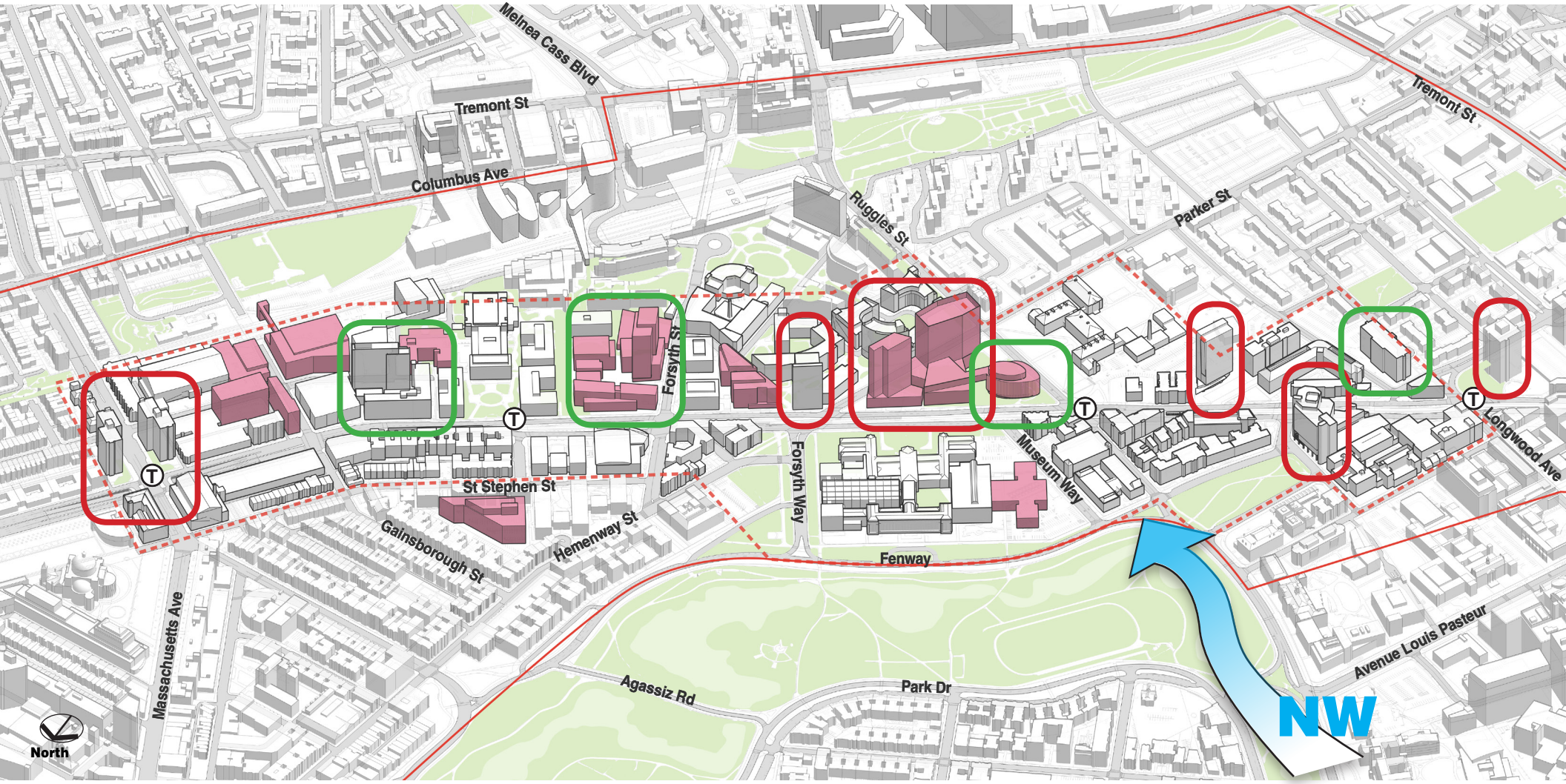


MassArt Tower

Baker Hall

610 Huntington Avenue

APPENDIX D: WIND ANALYSIS



Increased wind activity is often induced by:

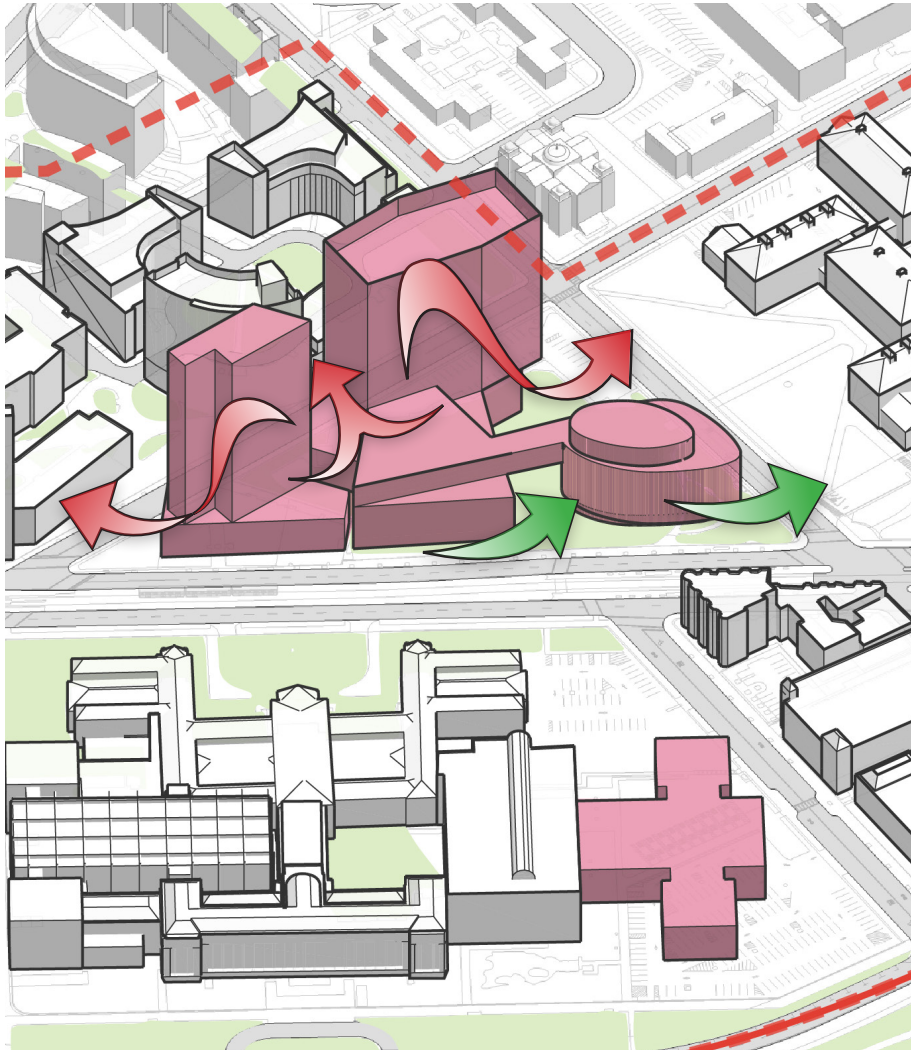
- exposed slab buildings or point towers without a podium or setback
- two adjacent buildings with their gap aligned to the pre-vailing winds

Future tall buildings should be designed with a:

- narrower façade exposed to the northwesterly winds
- large podium or setback and/or setback from main pedestrian areas

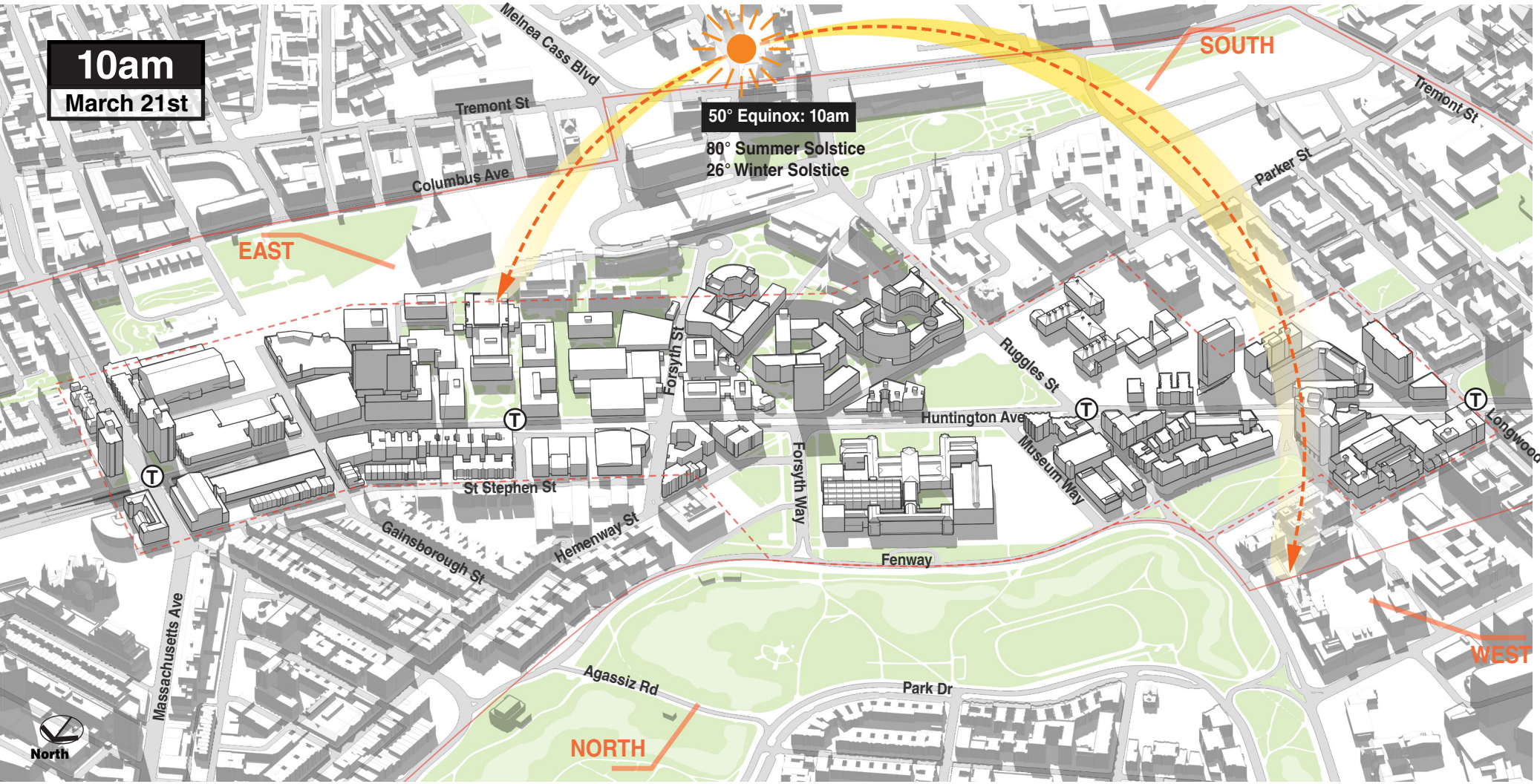


- A narrower façade exposed to the prevailing northwest winds
- A low podium structure around the tower
- A partially enclosed courtyard, but the area close to the tower could be too windy for a courtyard

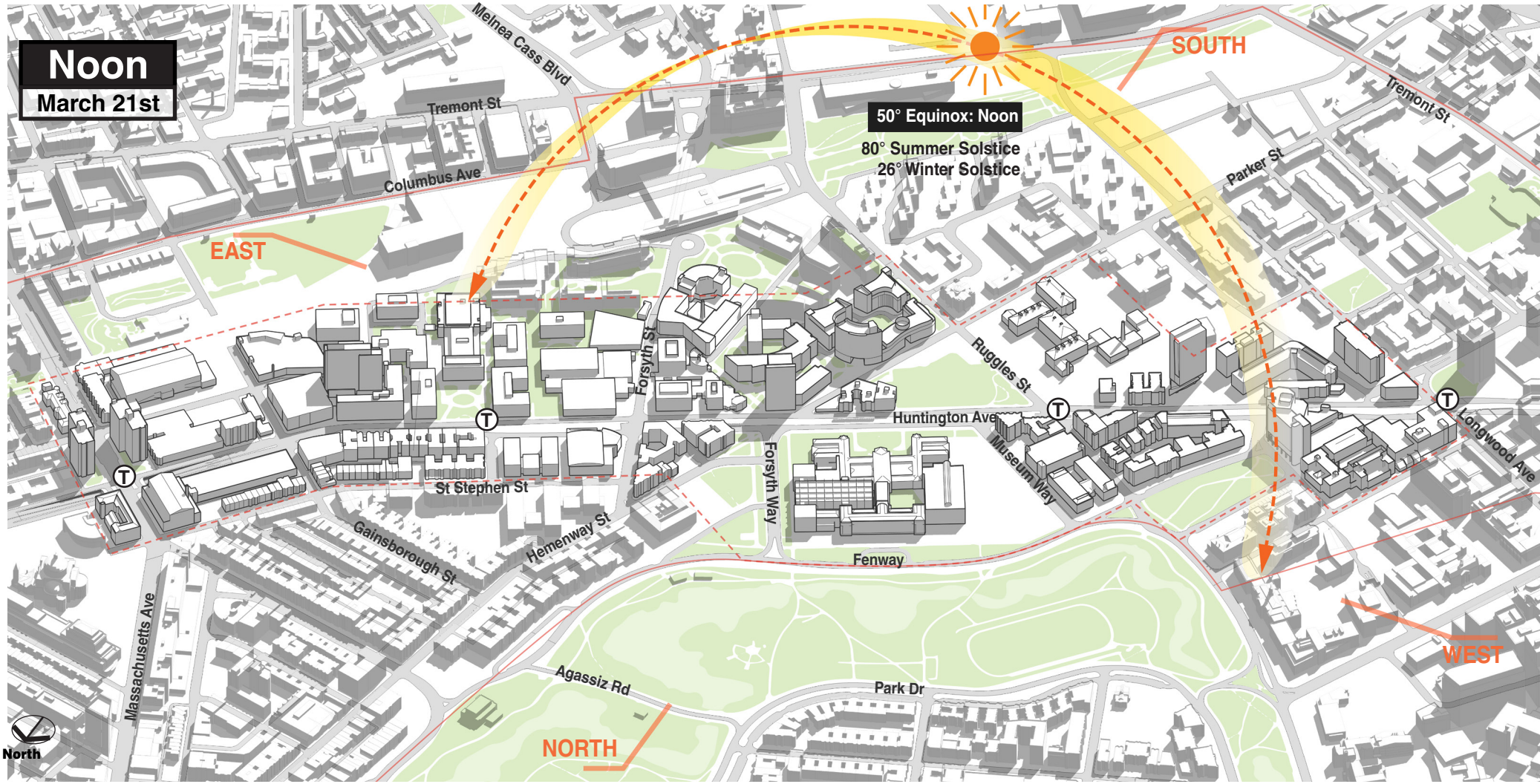


- Limited wind impact on Ave, Arts and Ruggles due to lower heights and setbacks
- Larger façade perpendicular to the prevailing winds
- Flow downwashing and accelerations around tower corners
- Channeling flow between the towers

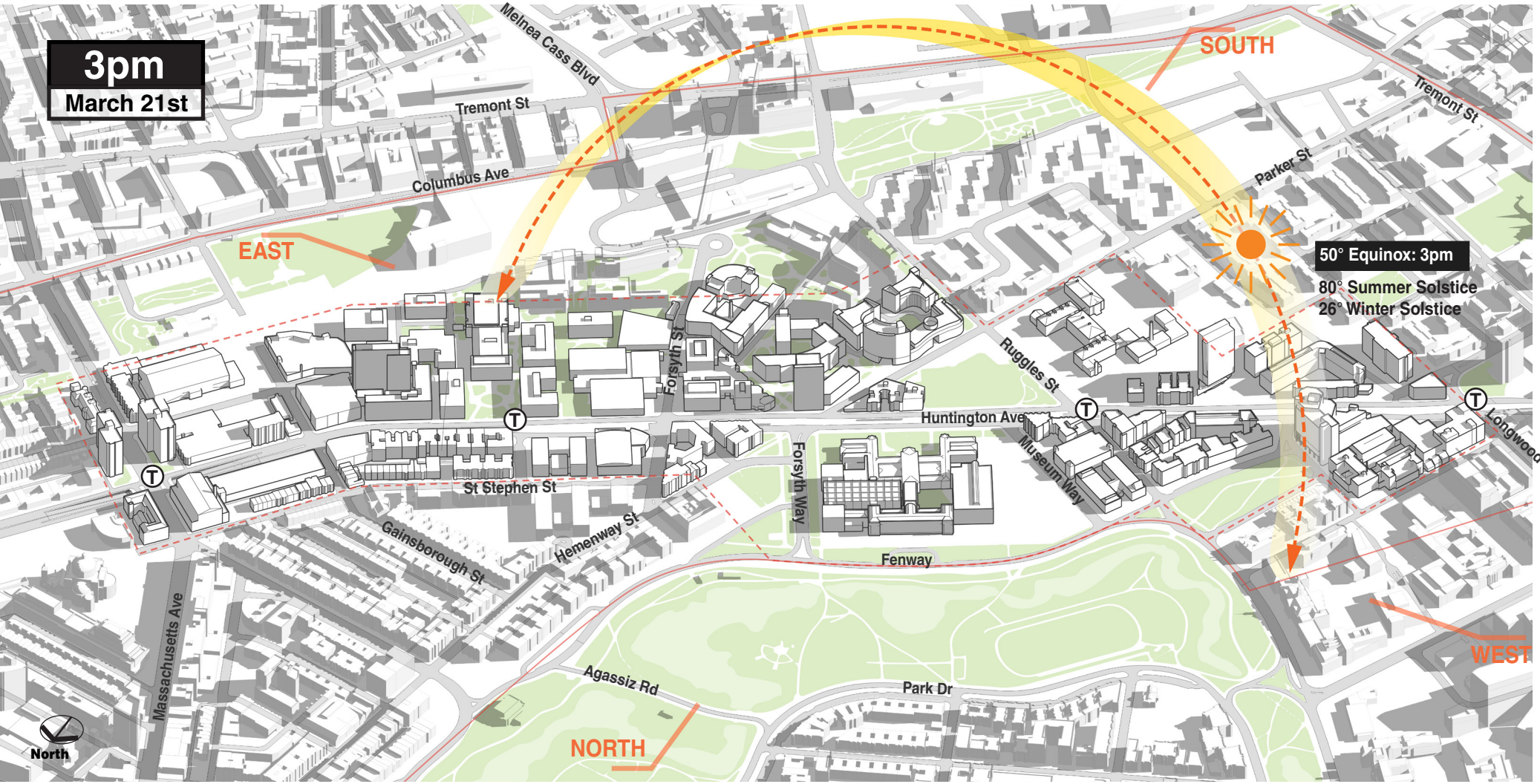
APPENDIX E: SHADOW STUDIES



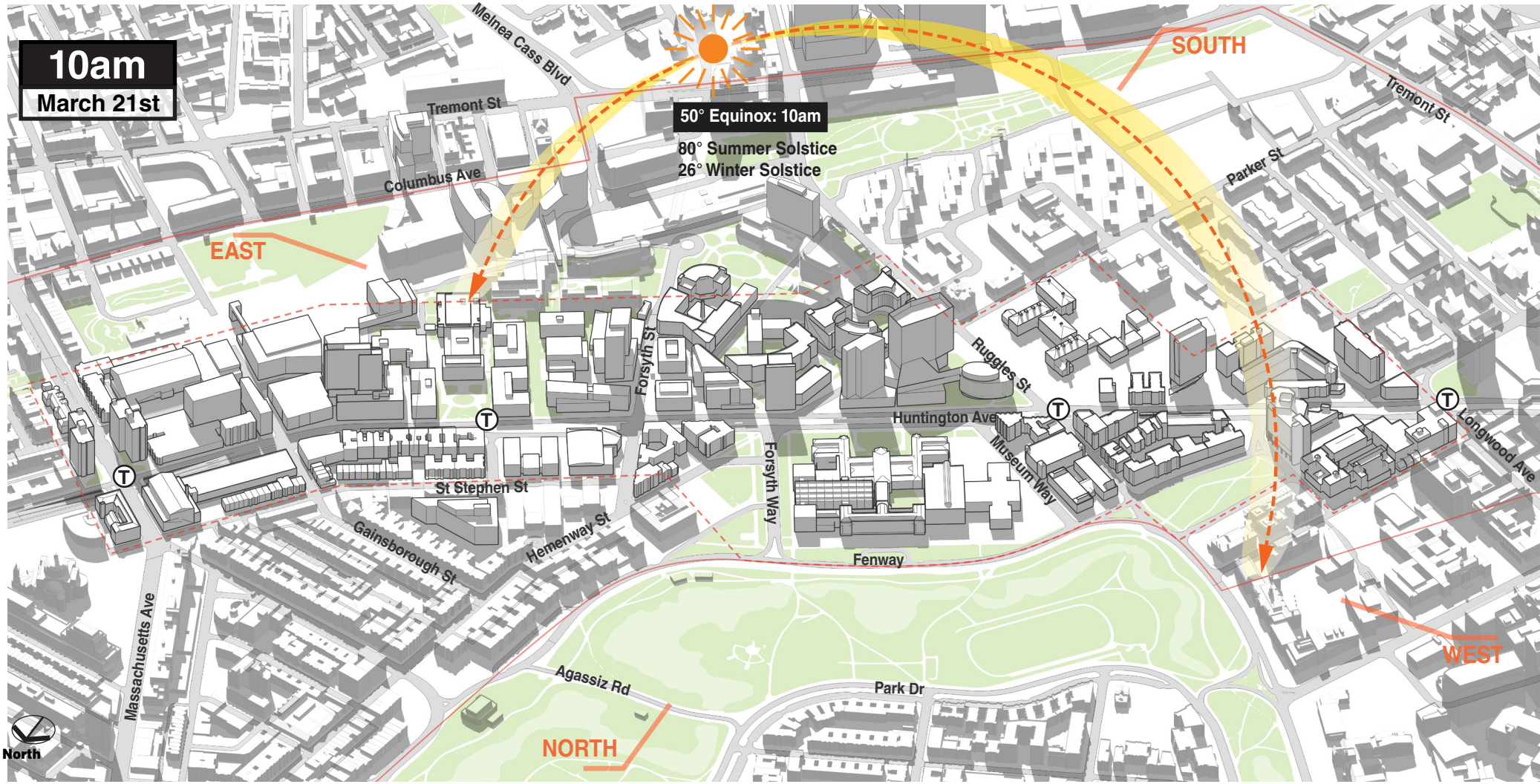
Existing condition
Avenue wide shadow study - March 21 10am



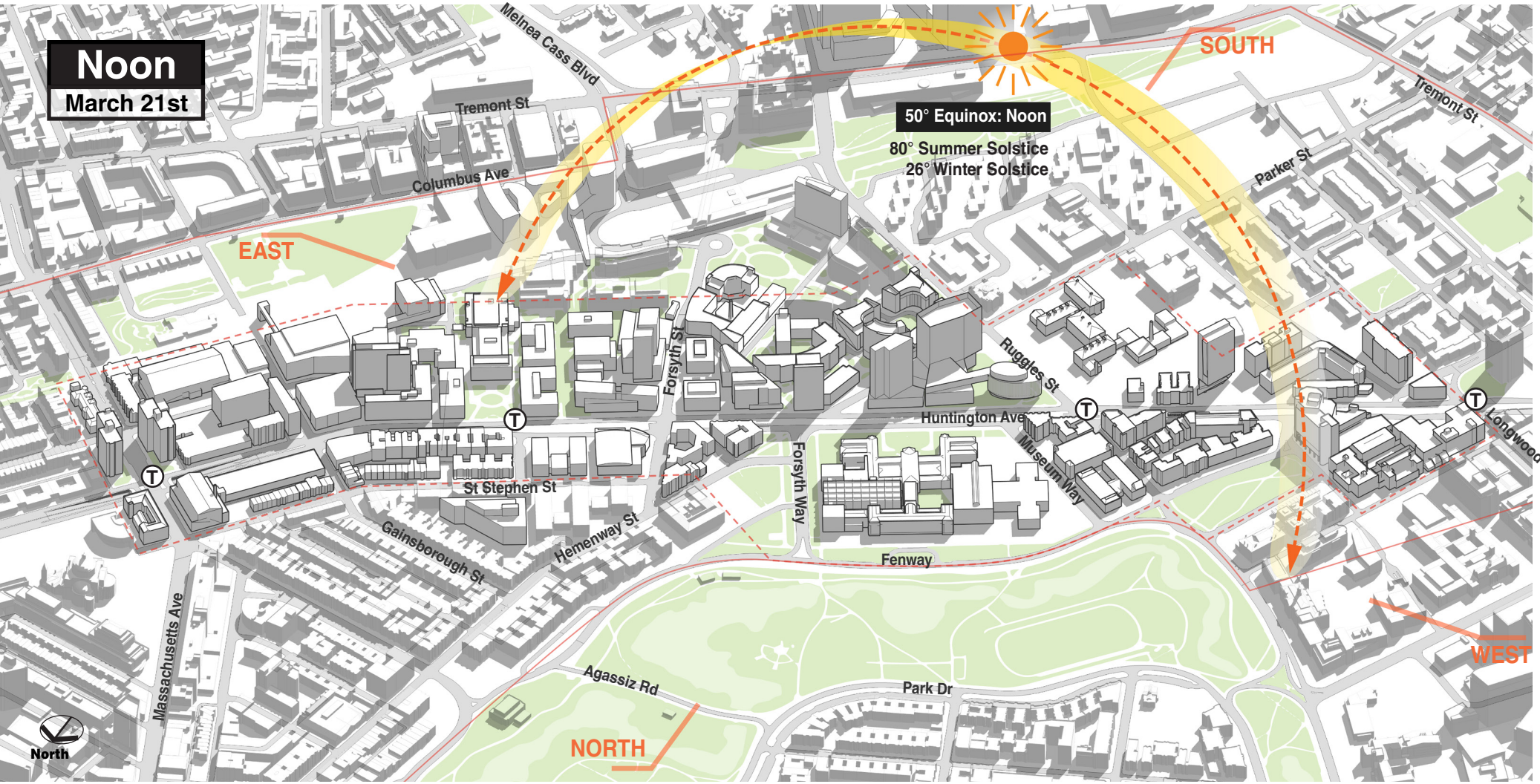
Existing condition
Avenue wide shadow study - March 21 noon



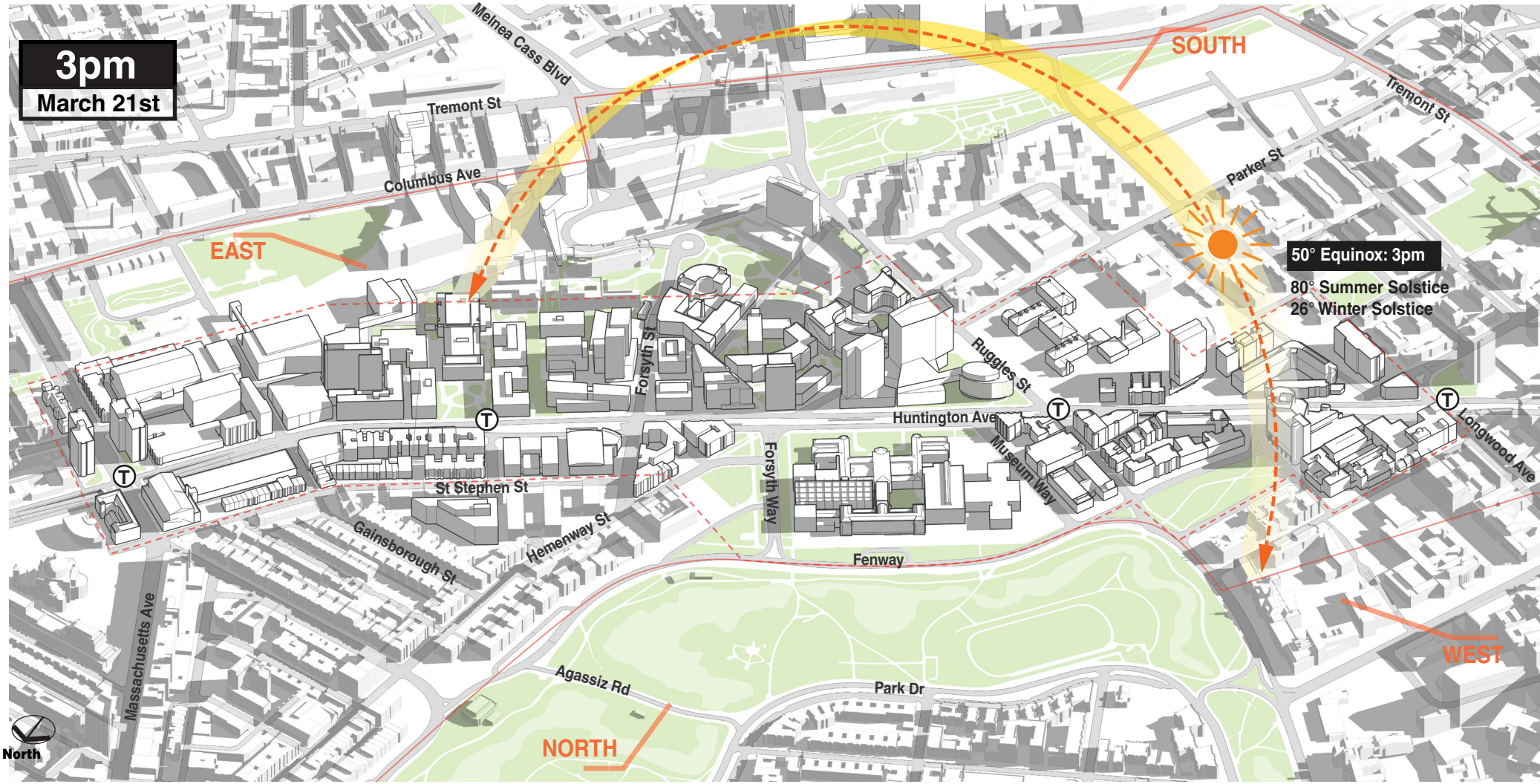
Existing condition
Avenue wide shadow study - March 21 noon



Approved redevelopment
Avenue wide shadow study - March 21 10am



Approved redevelopment
Avenue wide shadow study - March 21 noon



Approved redevelopment
Avenue wide shadow study - March 21 3pm