Chapter 1 – Summary of the Proposed Project

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1. SUMMARY OF THE PROPOSED PROJECT

1.1. Introduction

The Massachusetts Department of Transportation (MassDOT), the Massachusetts Bay Transportation Authority (MBTA), and the National Railroad Passenger Corporation (Amtrak) have for decades identified the expansion of rail capacity at Boston South Station as a crucial transportation need, one that has been articulated in multiple local, regional, state, and Northeast Corridor (NEC)-wide planning documents.[1] In cooperation with the Federal Railroad Administration (FRA), Amtrak, and the MBTA, MassDOT is now pursuing the expansion of South Station.

The purpose of the South Station Expansion (SSX) project is to expand Boston South Station terminal capacity and related layover capacity in order to meet current and future high-speed, intercity, and commuter rail service needs. The expansion of South Station would enable much-needed growth in passenger rail along the NEC and within the Commonwealth of Massachusetts. The project would also facilitate improvements in corridor and regional mobility, passenger experience and comfort, economic development, and quality of life.

The purpose of the South Station Expansion (SSX) project is to expand Boston South Station terminal capacity and related layover capacity in order to meet current and future high-speed, intercity, and commuter rail service needs.

MassDOT has prepared this Draft Environmental Impact Report (DEIR) for the SSX project in accordance with the Certificate of the Secretary of the Executive Office of Energy and Environmental Affairs (EEA) on the Environmental Notification Form (ENF) for the SSX project (EEA No. 15028), issued April 19, 2013, and the Massachusetts Environmental Policy Act (MEPA) regulations, 301 CMR 11.00 (revised, May 10, 2013). A horizon year of 2035 and an approximate opening year of 2025 are used for analysis of the project.

MassDOT has not determined the preferred alternative for all project components (see Section 1.2) in this DEIR for the SSX project. This DEIR provides an evaluation of project alternatives for several project components, including station track and interlockings, layover facilities, and future joint development. Through this evaluation, MassDOT has determined that a layover facility located west of South Station is needed and therefore has identified Beacon Park Yard as a portion of the preferred alternative. The preferred alternative for the remaining project components would be determined in the Final EIR (FEIR). Figure 1-1 and 1-2 depict the project site. Figure 1-3 through 1-6 depict massing concepts for the No Build Alternative and Joint/Private Development Alternatives. A summary of environmental impacts and mitigation for the project alternatives is included in Section 1.5.

1.2. Project Components

The SSX project consists of the 49-acre site located in and around the existing South Station Transportation Center, which consists of the South Station Rail/Transit Terminal, South Station Bus Terminal and existing USPS property and adjacent roadways. Additionally, the SSX project includes

[1] Documents citing the need for an expanded South Station include: *Critical Infrastructure Needs on the Northeast Corridor* (2013), *The Northeast Corridor Infrastructure Master Plan* (2010); *The Amtrak Vision for High-Speed Rail in the Northeast Corridor* (2010), *A Vision for the Northeast Corridor* (2012), the Massachusetts Department of Transportation *Rail Plan* (2010), the Massachusetts Department of Transportation *Freight Plan* (2010), and the two most recent long range transportation plans of the Boston Region Metropolitan Planning Organization (2007, 2011).

evaluation of three potential layover facility sites, located at Widett Circle, Beacon Park Yard, and Readville-Yard 2. Each of these sites is shown in Figure 1-1. The following sections describe the existing conditions at each of these four sites.

The SSX project consists of five primary components.

- Expanding South Station to accommodate additional platforms, tracks, a new expanded headhouse, and passenger amenities.
- Acquiring and demolishing the United States Postal Service (USPS) facility.
- Constructing rail layover facilities.
- Reopening Dorchester Avenue and extending the Harborwalk.
- Providing opportunities for future development adjacent to or above South Station.

1.2.1. Expand South Station Terminal

The SSX project would expand South Station Terminal by adding seven tracks and four new platforms for a total of 20 tracks and 11 platforms. Additionally, several existing tracks and platforms would be reconfigured. Platform lengths would be designed to meet Amtrak's and the MBTA's future berthing requirements. Tower 1 Interlocking[2] would be modified, and four of the five approach interlockings would be reconfigured to reduce conflicting movements through the terminal area and improve efficiencies. The existing South Station headhouse of 210,000 square feet (sf) would be expanded by approximately 400,000 sf to include larger passenger circulation and waiting areas, as well as amenities, such as retail and food outlets. A new headhouse and major station entrance is proposed along Dorchester Avenue.

1.2.2. Acquire and Demolish the USPS Facility

The SSX project would acquire and demolish the USPS General Mail Facility (GMF) located on Dorchester Avenue adjacent to South Station, which would provide an approximately 14-acre site on which to expand South Station. Although demolition of the USPS facility after it is vacated is part of the SSX project, the relocation of the USPS facility is not part of the SSX project. The USPS would determine the future location(s) to which its operations would be relocated, and the facility relocation would be subject to its own environmental review as required by state and federal regulations.

1.2.3. Construct Rail Layover Facilities

The SSX project would provide layover space by expanding or establishing additional facilities to meet existing and future layover facility program needs and operational requirements. The additional SSX project layover facilities would provide new layover space at some combination of the three new sites to make railroad operations at South Station more efficient and better able to accommodate future service growth.

1.2.4. Reopen Dorchester Avenue and Extend Harborwalk

Currently, the majority of Dorchester Avenue in the immediate vicinity of South Station is in private use by the USPS in support of its operations, with limited public access allowed for USPS customers and MBTA commuters. The SSX project would restore Dorchester Avenue in its entirety for public and station access. Restoration of Dorchester Avenue would reconnect the Avenue to Summer Street as a

[2] An interlocking is a segment of railroad infrastructure that consists of track, turnouts, and signals linked (interlocked) in a way that allows for train operations to succeed each other in a logical, predetermined, safe order to prevent conflicting train movements.

public way. It would include landscaping and improved pedestrian and cycling connections and facilities, including adjacent sidewalks and crosswalks. Restoration also would include construction of a long-awaited extension of the Harborwalk along the reopened Dorchester Avenue. At the South Station site, the Harborwalk is currently fragmented by the privately-used section of Dorchester Avenue fronting the USPS facility. The Harborwalk is envisioned as a 46.9-mile public walkway (with nearly 39 miles completed to date) extending along the shore of Boston Harbor. The Harborwalk extends north of the South Station site along the Federal Reserve Bank site. South of the existing USPS facility, the Fort Point Channel Harborwalk abuts and extends south of Rolling Bridge Park, crosses Fort Point Channel at Cabot Cove, and extends east from the Gillette property to Summer Street. The Harborwalk extension would include landscaping and street furniture, and would add more than one acre of open space to the area.

1.2.5. Provide for Future Development Adjacent to or Above Station

The SSX project may incorporate appropriate structural supports into the overall station and track design to provide for future private development at South Station. The project may also dedicate land along Dorchester Avenue north and south of the new headhouse entrance for future private development. The location of the station entrance, facing Fort Point Channel and potentially bounded by private development, would present an integrated approach for transit-oriented development above and around the station expansion that relates to the urban fabric of the City as well as to the waterfront. Up to two million sf of mixed-use development could provide sufficient density with a range of uses to enliven the area between Atlantic Avenue and Fort Point Channel and create a sense of place for South Station. Mixed-use development could include residential, office, hotel, and retail uses. MassDOT anticipates that revenue from the future overbuild could assist in supporting public transportation investments.

1.3. Alternatives Evaluated

This DEIR evaluates four South Station Terminal - Joint/Private Development alternatives:

- No Build Alternative.
- Alternative 1 – Transportation Improvements Only.
- Alternative 2 – Joint/Private Development Minimum Build.
- Alternative 3 – Joint/Private Development Maximum Build.

The Joint/Private Development Build Alternatives primarily are distinguished by the degree to which private development would or would not be accommodated. Alternative 1 would not provide for potential private development at South Station. Alternatives 2 and 3 represent the lower and upper bounds of potential private development at South Station. To the extent that the environmental impacts of the future private development are not addressed in the evaluation of the SSX project, additional MEPA filings may be necessary. Additionally, future private development will require filings with the City of Boston pursuant to Article 80 of the Boston Zoning Code. Each of these alternatives includes the project components defined in Section 1.2.

The SSX project also includes the evaluation of two potential layover facility sites south of South Station (Widett Circle and Readville-Yard 2) and one potential layover site west of South Station (Beacon Park Yard) to expand existing layover capacity and meet current and future South Station layover needs.

As shown in Table 1-1, the SSX project includes substantial changes in land use at the South Station site in all Build Alternatives. Each Build Alternative includes: (i) a seven acre increase in rail facilities at the ground plain; (ii) a reduction in building footprint from the demolition of the USPS facility to facilitate the planned rail improvements with an accompanying increase in public open space (plazas, sidewalks, Harborwalk and cycle track) of between 3.9 and 4.3 acres; and (iii) a six acre reduction in

roads/miscellaneous paved areas by conversion of internal roadways and service areas to public open spaces and rail improvements. Existing land use at the South Station site is shown in Figure 1-7.

Table 1-1—South Station Site / Land Use

Land Use	No Build Area (ac)	Alternative 1 Area (ac)	Alternative 2 Area (ac)	Alternative 3 Area (ac)
Rail Facilities	20.0	27.6	27.6[a]	27.6[a]
Buildings (ground plain)	14.5	6.6	8.4	8.8
Park/Sidewalks/Open Space	2.7	6.6	7.0	6.6
Roads/Misc. Paved	10.0	4.2	4.2	4.2
Undedicated	0.0	2.2[b]	0.0	0.0
Watersheet	1.8	1.8	1.8	1.8
Total	49.0	49.0	49.0	49.0

a Includes joint/private development above rail improvements.
b Presently programmed space between Dorchester Avenue sidewalk and rail improvements.

1.4. Project Benefits

In addition to the transportation benefits related to increasing rail terminal and layover facility capacity, the SSX project also provides many environmental, economic, and public benefits as outlined below:

1.4.1. Transportation

- Improved rail service
  - Support increased ridership: The project would improve the rail system's ability to absorb future demand along the MBTA's south side commuter rail lines and along the Northeast Corridor (NEC). In the 2025 opening year, the project would support the projected increase in ridership of approximately 16,000 to 17,000 additional daily combined commuter rail and Amtrak intercity rail boardings and alightings at South Station over the No Build Alternative. By 2035, these numbers would increase to approximately 20,000 to 22,000.
  - Improved performance: The project would provide the ability to meet Amtrak's and the MBTA's established performance objectives of 95% on-time performance.
  - Induced mode shift: The project may help induce mode shift by improving the access, convenience, and availability of transit as a viable alternative to people who would otherwise commute or travel to Boston by car.
  - Increased efficiency: New layover facilities would increase capacity for and efficiency of rail service.
- Improved passenger experience
  - New facilities: The project would provide new pedestrian platforms and circulation and waiting areas for passengers and other station visitors.
  - ADA upgrades: Platform upgrades would be implemented to stay current with Americans with Disabilities Act (ADA) and life safety regulations, including emergency egress considerations.
- Pedestrian improvements
  - New Harborwalk: Constructing one-half mile of Harborwalk adjacent to Fort Point Channel would close the last remaining gap in this area of Downtown Boston of a continuous waterfront walkway. In addition to a dedicated pedestrian path, seating and landscaping would also be provided.

  - Improved connections: Improving pedestrian connections around and through the South Station site to the neighboring communities of the Leather District, Chinatown, the Downtown/Financial District, and the South Boston Waterfront/Innovation District.
- Bicycle improvements
  - New cycle track: Constructing one-half mile of cycle track on Dorchester Avenue would provide new connections between Summer Street and the proposed South Bay Harbor Trail in South Boston.
  - Expanded Hubway: The project would provide an opportunity for the Hubway bike sharing system to expand its South Station hub by creating a second bicycle dock on the east side of the station to supplement the existing dock on the west side of the station.
  - Bicycle storage: The project would provide new covered, secure bicycle storage facilities in the new terminal headhouse on Dorchester Avenue.
- Improved vehicular circulation
  - Reduced congestion: Improvements to vehicular traffic flow and reduced curbside congestion on Atlantic Avenue would be accomplished by providing an alternative road to accommodate curbside activity and separating vehicular traffic from pedestrian and bicycle activity.
  - Improved operations: Mitigation to existing intersections surrounding South Station will improve overall traffic operations and efficiency for vehicles, pedestrians, and cyclists.
  - New curbside facilities: The project would provide a new area for curbside activity on Dorchester Avenue to accommodate taxicabs, drop-off, pick-up, MBTA buses, and private shuttles.
  - New service access: In Alternatives 2 and 3, additional service access could link the back of the potential joint development with the South Station Connector.
- Improved multimodal connections
  - Better bus connections: Reopening Dorchester Avenue presents an opportunity for potential bus connections to downtown Boston and the South Boston Waterfront/Innovation District.
  - Reduced parking ratios: The project adopts significantly reduced parking ratios to minimize parking and discourage driving to this major transit hub. Since the alternative concepts presented in the ENF, MassDOT further prioritized other modes of travel (transit, biking, and walking) and this resulted in a 68% reduction from the ENF.

1.4.2. Environment

- Sustainable approach: The project would incorporate sustainable design measures, including climate change adaptation strategies.
- Healthy transportation: The project promotes the healthy transportation options of walking, bicycling, and public transit.
- Reduction of CO_2 emissions: The stationary source GHG emissions at South Station will be reduced by approximately 8% for a Build condition incorporating Alternative 1, or by approximately 12% for a Build condition incorporating Alternative 3.
- Open space: The project will result in an increase in public open space of approximately 3.9 – 4.3 acres in the build alternatives considered, converting portions of the restricted Dorchester Avenue to publicly accessible sidewalks, Harborwalk and cycle track. Alternatives 2 and 3 would provide approximately 0.5 – 0.7 acres of additional open space as part of a joint/private development.

1.4.3. Economic Impacts

- New development: The project provides an opportunity for new residential, retail, and commercial uses.
- Regional spending: The permanent household population and employment gains associated with Alternatives 2 and 3 would generate an estimated $26 to $78 million in additional household spending in the Boston MPO region.

1.4.4. Public Amenities

- New public waterfront access: Public access to the waterfront would be restored through the conversion of 4.5 to five acres of filled tidelands, currently occupied by USPS, to a combination of rail transportation improvements, walkways, cycle track, and (in Alternatives 2 and 3) mixed uses.
- New mixed-use urban district: Opportunities for mixed public and private uses in a location with substantial foot traffic has the potential to make South Station a non-transportation oriented destination. In addition, in Alternatives 2 and 3, facilities of public accommodation would be provided at the ground floor of buildings for nonwater-dependent use within filled tidelands.
- Improved public realm: New and expanded urban landscape and appropriate lighting and signage would provide a safe, well-lit environment on a 24-hour basis.

1.5. Changes in the Project since the ENF

The SSX Project has been modified since the issuance of the Secretary's Certificate on the ENF (April 2013).

The ENF identified a number of alternatives for evaluation. Since the ENF, the project has further evaluated concepts related to the following areas: station, rail, layover, and joint development. For each of these project elements, an alternatives analysis was conducted and is described in more detail in Chapter 3. The alternatives analysis process further refined the concepts for each of the alternatives. Changes to the alternatives since the ENF include:

- **Alternative 1 - Transportation Improvements Only.** The ENF indicated that South Station would expand by approximately 215,000 sf. As a preliminary programming value, the DEIR indicates that South Station would expand by approximately 400,000 sf. This increase in size of the South Station expansion is attributed to advanced design, as the emergency egress, station ventilation, and back of house (MBTA/Amtrak spaces, service, and storage areas) requirements have been refined since the publication of the ENF.
- **Alternative 2 - Joint/Private Development - Minimum Build.** The ENF indicated that Alternative 2 could include approximately 850,000 sf of private development with approximately 470 parking spaces. The DEIR indicates that Alternative 2 could provide approximately 660,000 sf of private development with approximately 234 parking spaces. The revised DEIR Minimum Build program represents a decrease in building size and associated parking. The decreased potential for private development reflects advanced design associated with infrastructure (rail and overbuild foundation requirements) and Chapter 91 regulation stipulations, including setback and height requirements. The decrease in parking spaces reflects the Secretary's request to reduce parking to the maximum extent practicable, and is consistent with parking ratios confirmed by the Boston Transportation Department (BTD) and the Boston Redevelopment Authority (BRA).

- **Alternative 3 - Joint/Private Development – Maximum Build.** The ENF indicated that Alternative 3 could include up to 2.5 million sf of private development with approximately 1,370 parking spaces. The DEIR indicates that Alternative 3 could include up to approximately 2 million sf of private development with approximately 506 parking spaces. Similar to Alternative 2, the revised DEIR Maximum Build program represents a decrease in building size and parking, associated with conceptual design and the request for reduced parking.
- **Beacon Park Layover Site.** MassDOT intends to utilize Beacon Park Yard as a preferred location to the west, to provide a more-balanced mix of layover sites west and south of South Station. MassDOT is continuing to evaluate the Widett and Readville alternative sites to provide a layover facility south of South Station. MassDOT is simultaneously performing environmental review of the I-90 Allston Interchange project, which is located in an area that includes the Beacon Park Yard rail site and I-90 (the Massachusetts Turnpike). The Interchange project is examining how to best realign the transportation assets in this area while also addressing significant structural needs; highway operational changes (the introduction of All-Electronic Tolling); the construction of a commuter rail station; and the introduction of significant off-road multimodal connections throughout the area. MassDOT has determined that it is appropriate to consider these potential transportation changes under a single environmental review process. Therefore, MassDOT plans to continue environmental review of the Beacon Park Yard site as a layover facility and future commuter rail station as part of the I-90 Allston Interchange project's environmental review.

The South Station Expansion DEIR and associated technical reports analyze initial concepts for layover at Beacon Park Yard. The No Build condition assumes no change at Beacon Park Yard for the purposes of comparison between the Build and No Build conditions. However, any environmental impacts resulting from future changes in the use of Beacon Park Yard layover would be analyzed in the I-90 Allston Interchange project's environmental review.

MassDOT also conducted detailed alternatives analyses for four of the SSX project components:

- Terminal track configurations.
- Station design concepts.
- Layover facility site alternatives.
- Joint/private development alternatives.

Chapter 3 describes the alternatives analyses and concept design process that was conducted for the SSX project. Based on these analyses, several SSX project alternatives were dismissed from further consideration following the publication of the ENF and further analysis, as summarized in Table 1-2 and discussed in Chapter 3. This section also provides information on the alternatives that were dismissed subsequent to the ENF.

Table 1-2—SSX Project Alternatives Dismissed from Further Consideration

Component	Alternative	Reason for Dismissal
Terminal Track Configurations	Unconstrained Rail Alternatives Constrained Rail Alternatives 1 and 4	• Land Acquisition. • Difficult construction phasing. • Disjointed passenger rail services. • High capital and maintenance costs. • Would not meet requirements for platform lengths.
Layover Facility Sites	BTD Tow Lot	• Considerable impacts to City operations due to site closure. • No suitable alternative location for City operations.

1.6. Summary of Potential Environmental Impacts

This section presents a summary of the potential impacts of the project alternatives (see Chapter 4) at the South Station site and the layover sites along with mitigation measures that would be employed, as appropriate and necessary. Impacts associated with station design concepts are included in the assessment of the joint/private development alternatives.

1.6.1. South Station Site

Table 1-3 summarizes the environmental impacts for the three Joint/Private Development Alternatives. Chapter 4 provides detailed environmental analysis as well as mitigation measures for environmental impacts. Chapter 8 also provides a summary of mitigation measures. MassDOT's analysis through the DEIR demonstrated that with respect to environmental considerations, impacts associated with the two track configuration alternatives generally would be the same. Track Configuration Alternatives 2 and 3 would have similar amounts of impervious areas and similar storm drainage systems. No variation is anticipated with respect to air quality, noise and vibration, site contamination, or floodplain impacts. Environmental impacts associated with reconfiguration of the approach interlockings would not vary between Track Configuration Alternatives 2 and 3.

Table 1-3—Environmental Impacts, Joint/Private Development Alternatives

Environmental Impacts	Alternative 1 Transportation Improvements Only	Alternative 2 Joint/Private Development Minimum Build	Alternative 3 Joint/Private Development Maximum Build
Land Use	• Adds other (non-rail) transportation uses. • An existing MBTA/BRA easement (presently utilized as a patio for 245 Summer Street) would be required in order to reopen Dorchester Avenue as a public two-way street.	• Same as Alt. 1 and adds residential, commercial, and parking uses. • An existing MBTA/BRA easement (presently utilized as a patio for 245 Summer Street) would be required in order to reopen Dorchester Avenue as a public two-way street.	• Same as Alt. 1 and adds residential, commercial, and parking uses. • An existing MBTA/BRA easement (presently utilized as a patio for 245 Summer Street) would be required in order to reopen Dorchester Avenue as a public two-way street.
Wetlands	• No adverse impacts to wetland resources.	• same	• same
Chapter 91 Waterways and Tidelands	• Unrestricted public use of Dorchester Avenue. • Opens five acres of filled tidelands within Dorchester Avenue to public access. • Provides approximately 6.6 acres of open space.	• Adds approximately 78,400 sf of Facilities of Public Accommodation at the ground level. • Minor shadow impacts. • Provides approximately seven acres of open space.	• Adds approximately 87,120 sf of Facilities of Public Accommodation at the ground level. • Exceeds Chapter 91 building height and setback requirements. • New shadows for a substantial portion of the day. • Small changes in pedestrian level wind conditions. • Provides approximately 6.6 acres of open space.
Water Quality and Stormwater	• Reduces impervious cover and runoff. • Adds new stormwater BMPs.	• same	• same

Environmental Impacts	Alternative 1 Transportation Improvements Only	Alternative 2 Joint/Private Development Minimum Build	Alternative 3 Joint/Private Development Maximum Build
Water Supply and Wastewater	• Analysis conducted only for the most impactful maximum development scenario.	• Analysis conducted only for the most impactful maximum development scenario.	• Generates 750,900 total (411,950 additional) gallons per day of wastewater. • Uses 826,000 (453,150 additional) gallons per day of water per day. • May require new sewer main in Dorchester Avenue.
Traffic	• Overall operations for South Station study area intersections remain the same or slightly improved in the morning and evening peak periods.	• Overall operations for South Station study area intersections remain the same or slightly improved in the morning peak period and remain the same or slightly reduced in the evening peak period.	• Overall operations for South Station study area intersections remain the same or slightly improved in the morning peak period and remain the same or slightly reduced in the evening peak period.
Air Quality	• Will not exceed air quality standards. • Project-related pollutant emissions increase by less than 2%. • SO_2 emissions decrease by 2%. • CO concentrations decrease due to the decrease in motor vehicle CO emission rates.	• Condition was not analyzed per meeting with MEPA. Most impactful development scenario was analyzed.	• Will not exceed air quality standards. • Project-related pollutant emissions increase by 3%. • SO_2 emissions increase by 3%. • CO concentrations decrease due to the decrease in motor vehicle CO emission rates.
Greenhouse Gas Emissions	• Stationary source CO_2 emissions reduced 8%. • Mobile source CO_2 emissions decrease by 1.9% (2025) and 1.6% (2035).	• Condition was not analyzed per meeting with MEPA. Most impactful development scenario was analyzed.	• Stationary source CO_2 emissions reduced 12%. • Mobile source CO_2 emissions increase by 1.1% (2025) and 0.9% (2035).

Environmental Impacts	Alternative 1 Transportation Improvements Only	Alternative 2 Joint/Private Development Minimum Build	Alternative 3 Joint/Private Development Maximum Build
Noise and Vibration	• 24-hour noise levels at 245 Summer Street and across Fort Point Channel at Necco Street would exceed FTA moderate impact criteria due to removal of noise buffering USPS facility. (Noise walls will be provided to mitigate impacts). • Vibration levels from trains not expected to exceed FTA criterion for human annoyance due to slow train speeds.	• Noise impact eliminated at 245 Summer Street and across Fort Point Channel due to enclosure of Joint/Private Development alternatives. • Vibration levels from trains not expected to exceed FTA criterion for human annoyance due to slow train speeds.	• Noise impact eliminated at 245 Summer Street and across Fort Point Channel due to enclosure of station area by Joint/Private Development alternatives. • Vibration levels from trains not expected to exceed FTA criterion for human annoyance due to slow train speeds.
Historic Resources	• No archaeological sensitivity. • No adverse impacts on historic properties included in the Area of Potential Effects.	• same	• same
Site Contamination/ Hazardous Materials	• Construction may encounter contaminate soils or debris associated with the property's historical railroad use or fill utilized for 19th century land-making activities • Prior to demolition of USPS facility, sampling and analysis would be conducted to identify and quantify asbestos-containing and hazardous materials.	• same	• same

Environmental Impacts	Alternative 1 Transportation Improvements Only	Alternative 2 Joint/Private Development Minimum Build	Alternative 3 Joint/Private Development Maximum Build
Environmental Justice (EJ)	• Would not disproportionately and adversely affect EJ populations. • Would improve accessibility to public transportation and open space.	• same	• same

1.6.2. Layover Facility Sites

Table 1-4 summarizes the environmental impacts for the three layover facility sites. Chapter 4 provides detailed environmental analysis as well as mitigation measures for environmental impacts. Chapter 8 also provides a summary of mitigation measures. The environmental effects of a layover facility at the Beacon Park Yard will be further evaluated in the environmental documents prepared for the separate I-90 Allston Interchange Project.

Table 1-4—Environmental Impacts, Layover Facility Site Alternatives

Environmental Impact Factor	Widett Circle	Beacon Park Yard	Readville-Yard 2
Land Use	• Continue industrial and rail operations/support facilities use zoned commercial and exempt/institutional.	• Continue railroad use zoned industrial.	• Continue railroad use zoned exempt/institutional • Acquire 0.7 acre parcel zoned industrial.
Wetlands and Ecology	• No impact. Nearby resources not affected.	• No impact. Nearby resources not affected.	• Requires construction in Riverfront Area (2,100 sf).
Chapter 91 Waterways and Tidelands	• Not subject to Chapter 91.	• Not subject to Chapter 91.	• Not subject to Chapter 91.
Coastal Zone	• Consistent with CZM policies.	• Not in the Coastal Zone.	• Not in the Coastal Zone.
Open Space, Parks, Recreation Areas, and Community Facilities	• No impacts. No resources nearby.	• No impacts. No resources nearby.	• No impacts. No resources nearby.
Water Quality and Stormwater	• Reduces impervious cover, peak flow rate and runoff volume.	• No changes to peak flow rate, runoff volume. • Adds new stormwater BMPs to protect surface water quality of the Charles River.	• Increase in impervious cover, peak flow rate and runoff volume. • Adds new stormwater BMPs to protect surface water quality of the Neponset River.

Environmental Impact Factor	Widett Circle	Beacon Park Yard	Readville-Yard 2
Water Supply and Wastewater	• Wastewater generation and water usage decrease.	• Water usage and wastewater generation increase by 4,290 gallons of water per day.	• Water usage and wastewater generation increase by 1,720 gallons of water per day.
Transportation and Traffic	• No impacts. Trip generation at layover site is minimal.	• No impacts. Trip generation at layover site is minimal.	• No impacts. Trip generation at layover site is minimal.
Air Quality	• Will not exceed air quality standards.	• Will not exceed air quality standards.	• Will not exceed air quality standards.
Greenhouse Gas Emissions	• Stationary source modeling not completed. Facility to comply with Stretch Code. • Mobile source CO_2 emissions (locomotives) = 4,913 tons per year.	• Stationary source modeling not completed. Facility to comply with Stretch Code. • Mobile source CO_2 emissions (locomotives) = 3,319 tons per year.	• Stationary source modeling not completed. Facility to comply with Stretch Code. • Mobile source CO_2 emissions (locomotives) = 3,081 tons per year.
Noise and Vibration	• No noise or vibration impacts.	• Unmitigated noise level would exceed FTA severe impact criterion at the midday peak activity hour along Wadsworth and Pratt Streets. (Noise walls will be provided to mitigate impacts) • No vibration impacts.	• Unmitigated noise level would exceed FTA moderate impact criterion at the midday peak activity hour along Wolcott Street and Riley Road. (Noise walls will be provided to mitigate impacts) • No vibration impacts.
Historic Resources	• No archaeological sensitivity. • No historic resources affected.	• No archaeological sensitivity. • No historic resources affected.	• No archaeological sensitivity. • Historic resources within APE recommended not National Register eligible.
Hazardous Materials/Site Contamination	• Investigation would be required prior to demolition to identify ACM and potential hazardous materials.	• Investigation would be required prior to demolition to identify ACM and potential hazardous materials.	• Some contamination may be encountered during construction.

Environmental Impact Factor	Widett Circle	Beacon Park Yard	Readville-Yard 2
Environmental Justice (EJ)	• Would not disproportionately and adversely affect EJ populations.	• Would not disproportionately and adversely affect EJ populations.	• Would not disproportionately and adversely affect EJ populations.

1.7. Summary of Public Involvement and Agency Coordination

MassDOT implemented a robust public involvement and agency coordination process to meet the following goals:

- Provide an interactive, collaborative, and credible public process that welcomes the communities of interest and provides a variety of ways for the public to be involved in, contribute to, and review draft project ideas and plans.
- Solicit ideas and recommendations from the public that would result in a project that is achievable; reflects public aspirations; and enhances multimodal transportation for the city, region, and NEC.
- Provide methods to keep neighbors, residents, business owners, City, state and regional officials, and users of South Station involved and updated regularly on development of project plans.

MassDOT has and would continue to use a variety of techniques to keep the public engaged and involved during the SSX planning and development process, including:

Project Mailing List: The database for the project includes 2,276 individuals and organizations (1,257 active email contacts). MassDOT sends regular email updates, including when significant documents are uploaded to the project website and public meetings are being held.

Social Media: MassDOT provides regular updates on the project through the MassDOT Blog, Twitter, and Facebook pages. This approach reaches individuals who are interested in transportation issues but may not already subscribe to the SSX project mailing list.[3] Since the project's inception, there have been 25 blog posts on the project picked up by the Facebook and Twitter feeds as well. Two of the most recent posts had 667 and 510 page views within one month of being posted, respectively.

Meetings and Events: MassDOT has hosted a number of public informational meetings to share milestone information and collect public comments and suggestions. As of August 2014, MassDOT has met with community, civic, business, and citizen groups affected by the project.

- Public Informational Meetings/Open Houses (two in November 2012)
- MEPA ENF Scoping Session (April 1, 2013)
- Information Sessions at South Station: two in August 2013 and two in September 2013
- Information Sessions in Dewey Square Farmer's Market: one in November 2013; to be resumed in the fall of 2014
- Institution and Business Briefings: 35
- Neighborhood and Advocacy Group Briefings: 11
- Agency and Elected Official Briefings: 23
- Interagency Meetings (including other MassDOT Divisions): 152

[3] Currently, the MassDOT Twitter feed has 42,123 followers.

Online Survey: In the fall of 2013, MassDOT opened an online survey, available in English, Spanish, and Chinese, to gather feedback on current and future amenities at South Station. The survey was promoted at information sessions at South Station; on screens at South Station; through printed bookmarks that were distributed at the information desk; through other organizations' mailing lists; through the project email list; and through the project website and MassDOT blog. When the survey was closed, there were over 700 respondents. The results were analyzed and MassDOT will be considering the findings as the project design progresses.

Other Project Materials: Other project materials include a project website, updated regularly with project documents; project fact sheets; project snapshots for a non-technical audience; and a project brochure available in English, Spanish, and Chinese.

MassDOT conducted other outreach in accordance with Environmental Justice and Title VI objectives, as described in Chapter 4. For more details on public outreach activities, see Appendix 1 - *Public Involvement and Agency Coordination Technical Report*.

1.8. Permits and Approvals

Federal, state, and local agency permits and approvals are required for the SSX project. Table 1-5 identifies state agency permits and approvals. Table 1-6 identifies federal agency permits and approvals. Table 1-7 identifies local agency permits and approvals.

Table 1-5—Required State Agency Permits

State Permit/Approval/Notification	South Station	Layover
MA Executive Office of Energy and Environmental Affairs (EEA) Massachusetts Environmental Policy Act (MEPA) Review	yes	yes
EEA - Amendment to the Fort Point Channel Downtown Waterfront Municipal Harbor Plan	yes	no
EEA - Public Benefit Determination	yes	yes
Massachusetts Department of Environmental Protection (MassDEP) Chapter 91 Waterways License	yes	no
MassDEP Stormwater Management Standards Compliance Review	yes	yes
MassDEP Sewer Extension/Connection Compliance Certification	yes	yes
MassDEP Massachusetts Contingency Plan Review/Preliminary Determination	yes	yes
MassDEP Notification Prior to Construction or Demolition	yes	yes
MassDEP Asbestos Notification/Mass Department of Labor and Workforce Development, Division of Occupational Safety (DOS)	yes	yes
Massachusetts Historical Commission (MHC) State Register Review	yes	yes
Massachusetts Office of Coastal Zone Management (CZM) CZM Federal Consistency Certification	yes	yes
MassDOT Highway Division State Highway Access Permit	yes	yes
MBTA Air-Rights Easements/Approvals	yes	no

Table 1-6—Required Federal Agency Permits

Federal Permit/Approval/Notification	South Station	Layover
FRA - National Environmental Policy Act Review	yes	yes
Federal Aviation Administration (FAA) Notice of Proposed Construction or Alteration	yes	no
Massachusetts Historical Commission Section 106 Review	yes	yes
Federal Highway Administration (FHWA) Review, Modification of High Occupancy Vehicle (HOV) designation	yes	no
U.S. Environmental Protection Agency (U.S. EPA) - National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Sites	yes	yes
U.S. EPA Notification of Building Demolition	yes	yes
U.S. Department of Transportation Section 4(f) Review	yes	yes

Table 1-7—Required Local Permits and Approvals

Local Permit/Approval/Notification	South Station	Layover
Boston Conservation Commission Order of Conditions (Massachusetts Wetlands Protection Act)	yes	yes
Boston Public Improvement Commission (PIC) Approvals	yes	yes
Boston Water and Sewer Commission (BWSC) Drainage Discharge Permit	yes	yes
BWSC Building Site Plan Review and Approval, for construction of a new or reactivated service connection to the water, sewer or drainage system	yes	yes
BWSC Demolition Termination Verification Approval, for removal or cutting and capping all water, sewer and fire pipes	yes	yes
Boston Redevelopment Authority (BRA) Large Project/Planned Development Area Review, Article 80, Boston Zoning Code	yes/Alts. 2 and 3	no

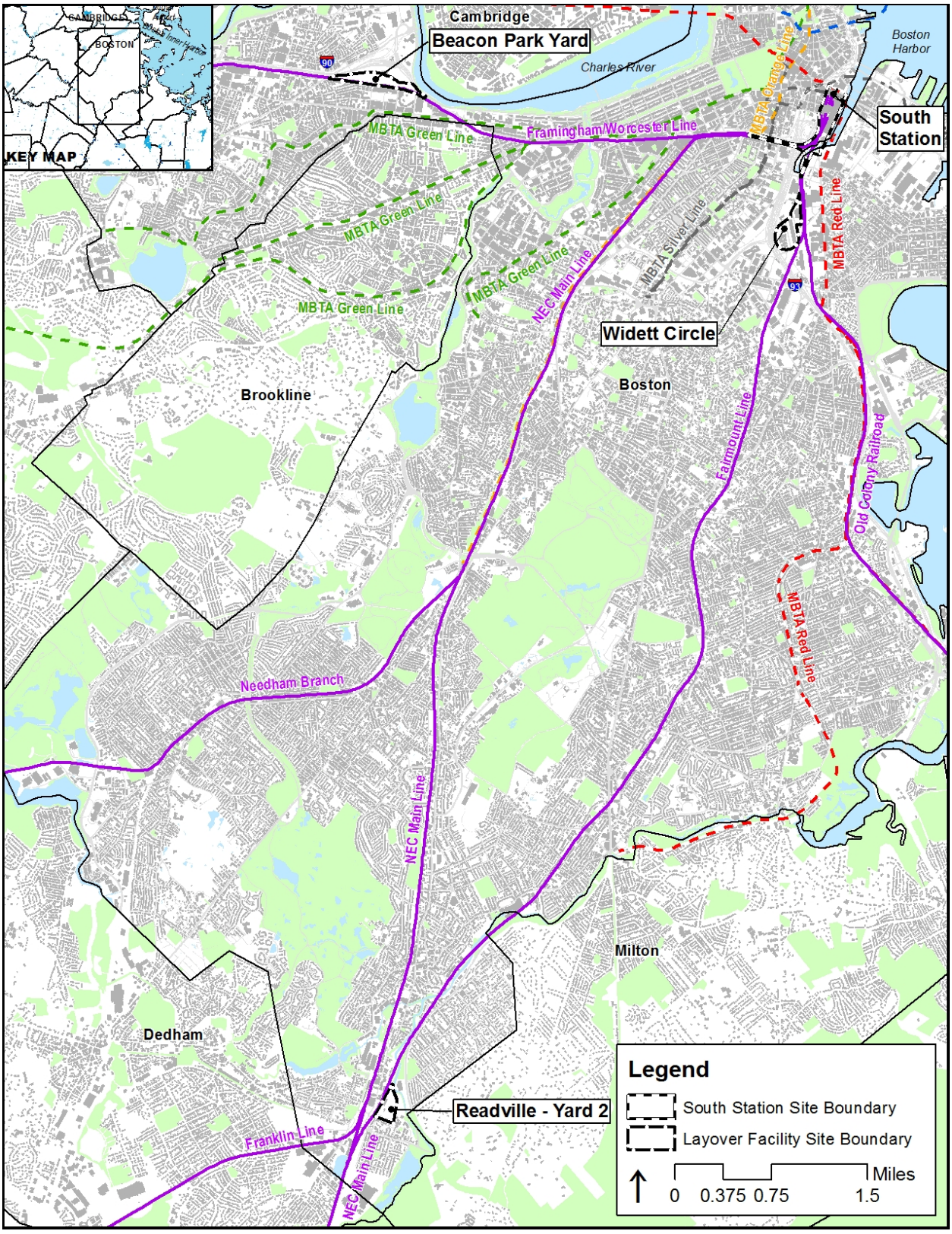

Figure 1-1—SSX Project Sites

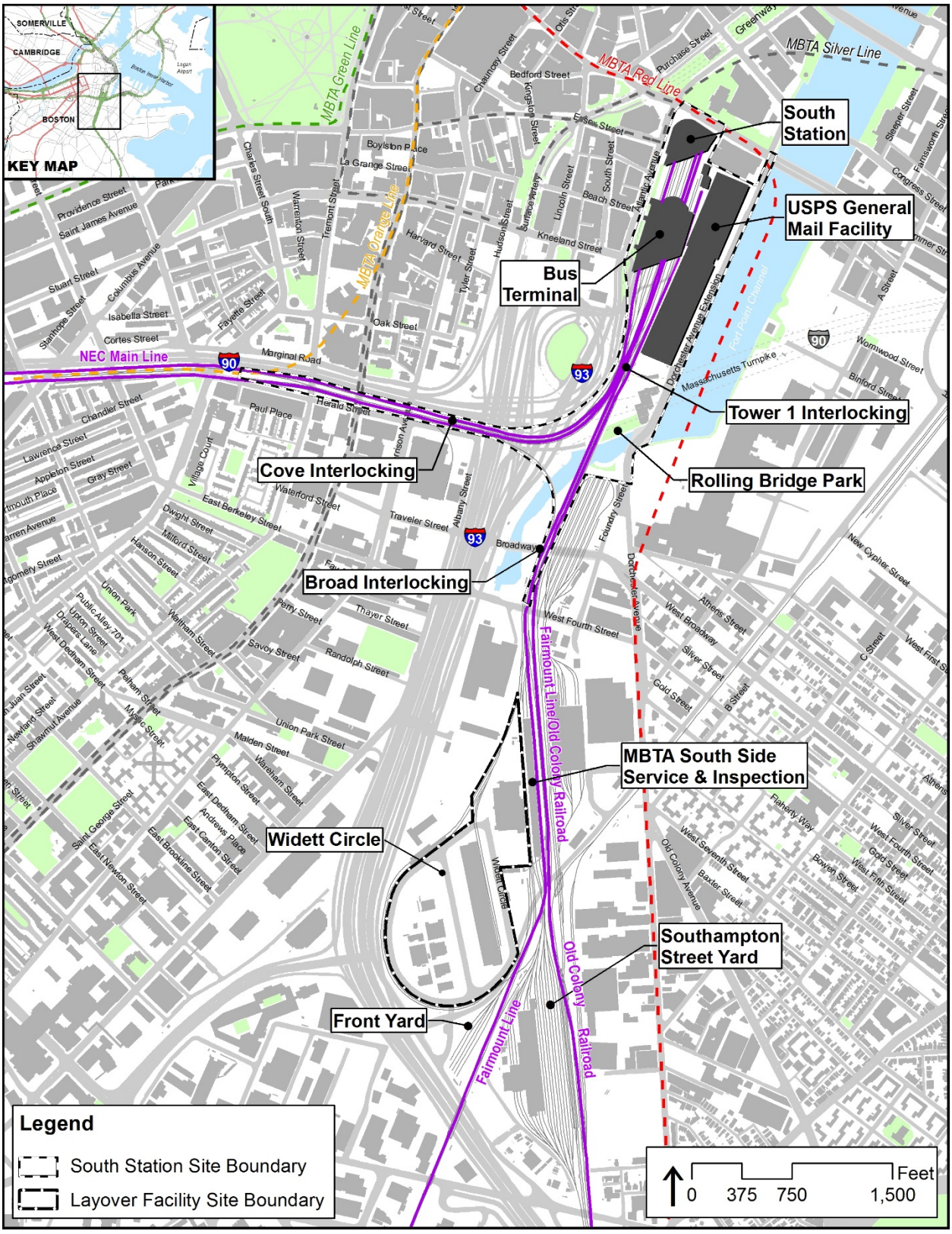

Figure 1-2—South Station Project Site: Terminal, Approach Interlockings, and Key Facilities

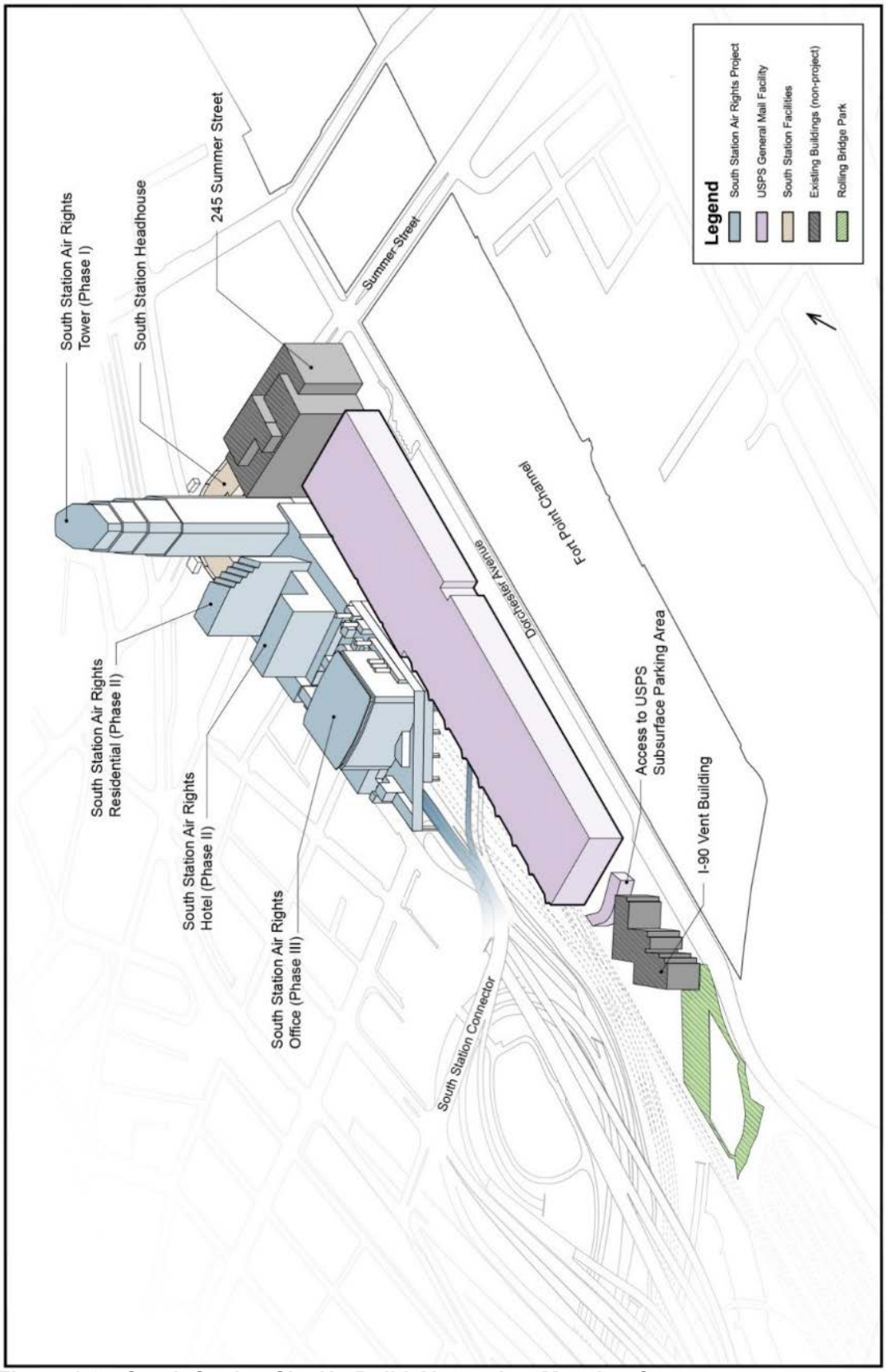

Figure 1-3—South Station Site No Build Alternative, Massing Concept

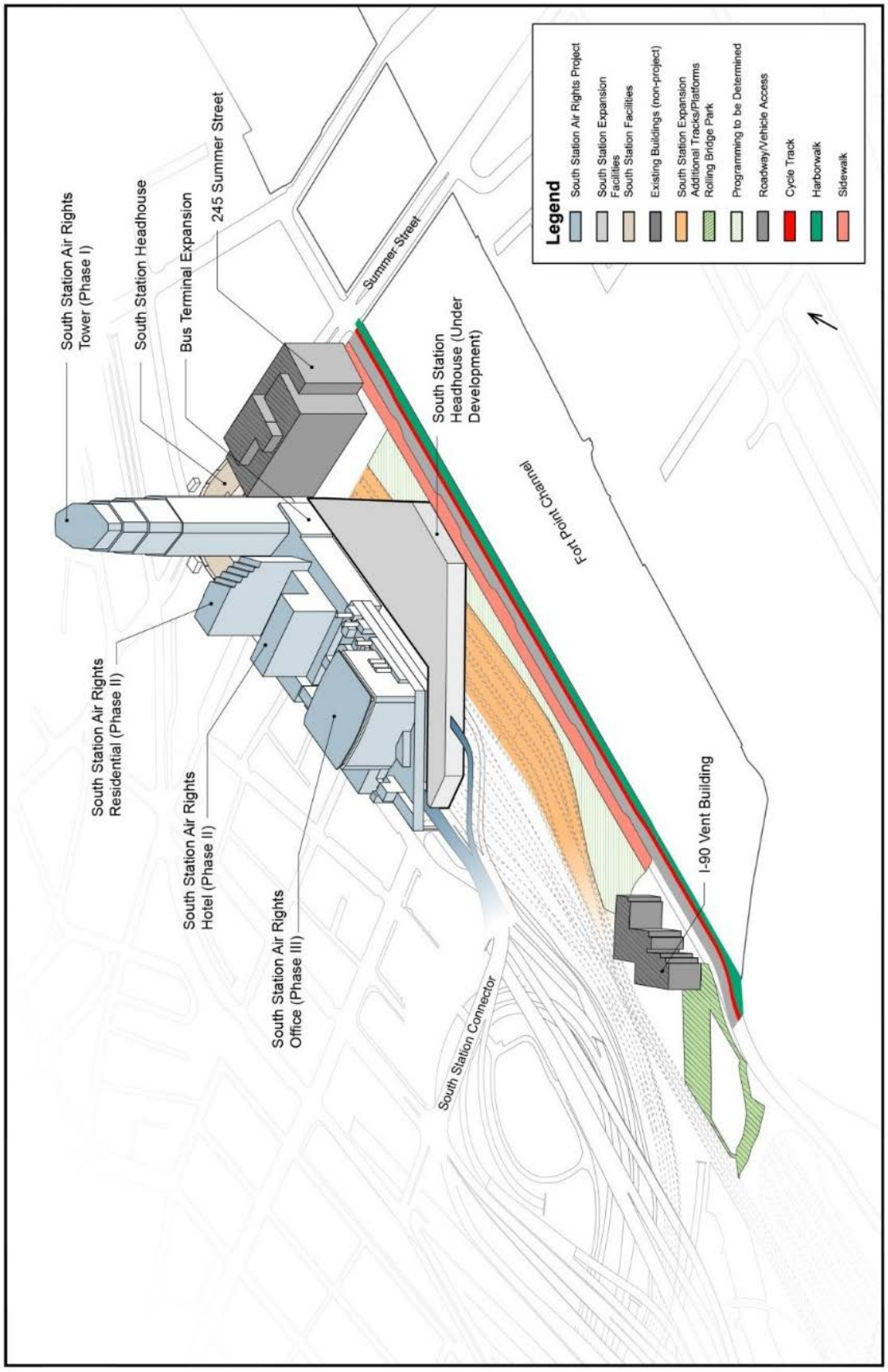

Figure 1-4—South Station Site Joint/Private Development Alternative 1, Massing Concept

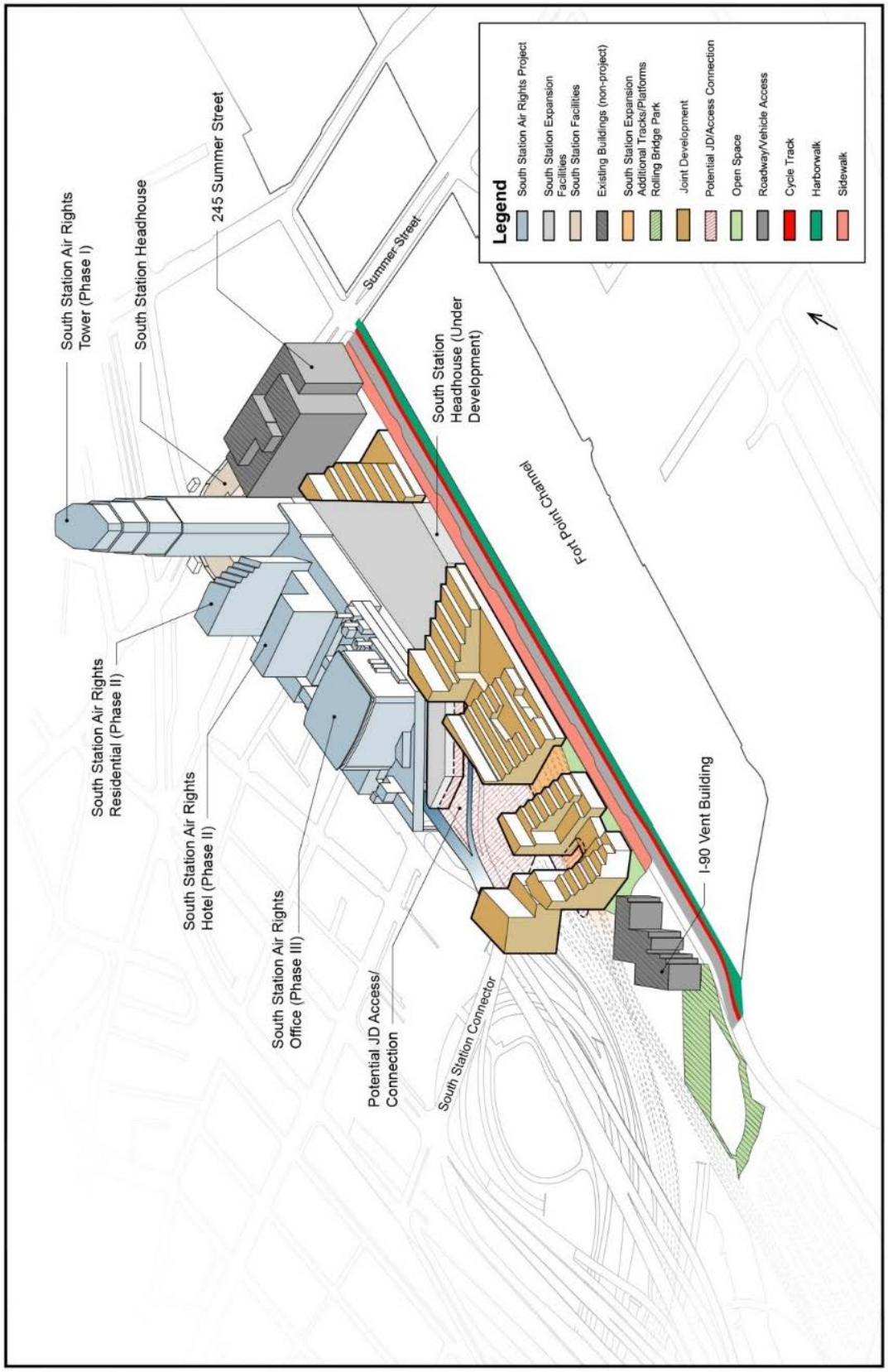

Figure 1-5—South Station Site Joint/Private Development Alternative 2, Massing Concept

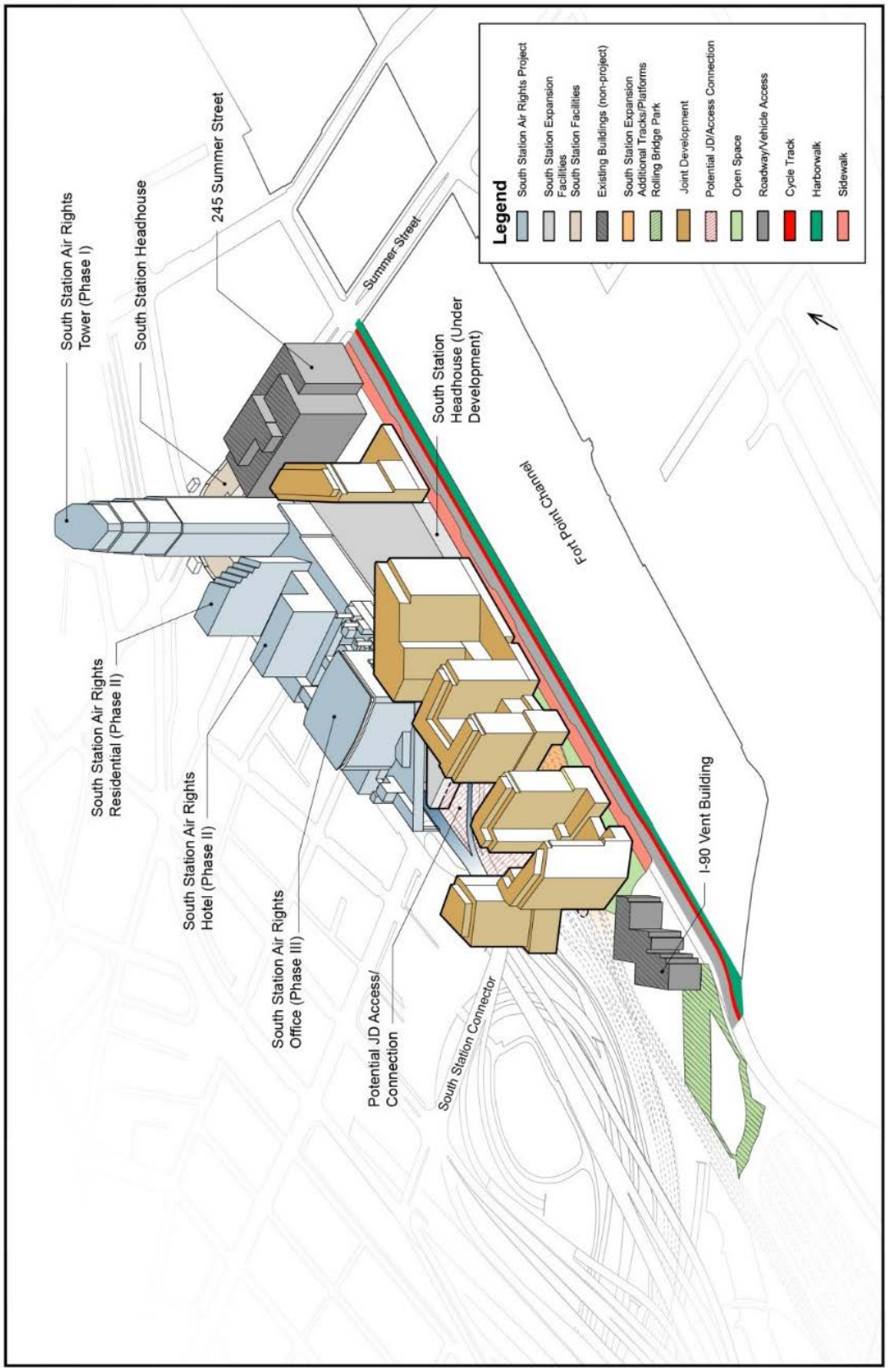

Figure 1-6—South Station Site Joint/Private Development Alternative 3, Massing Concept

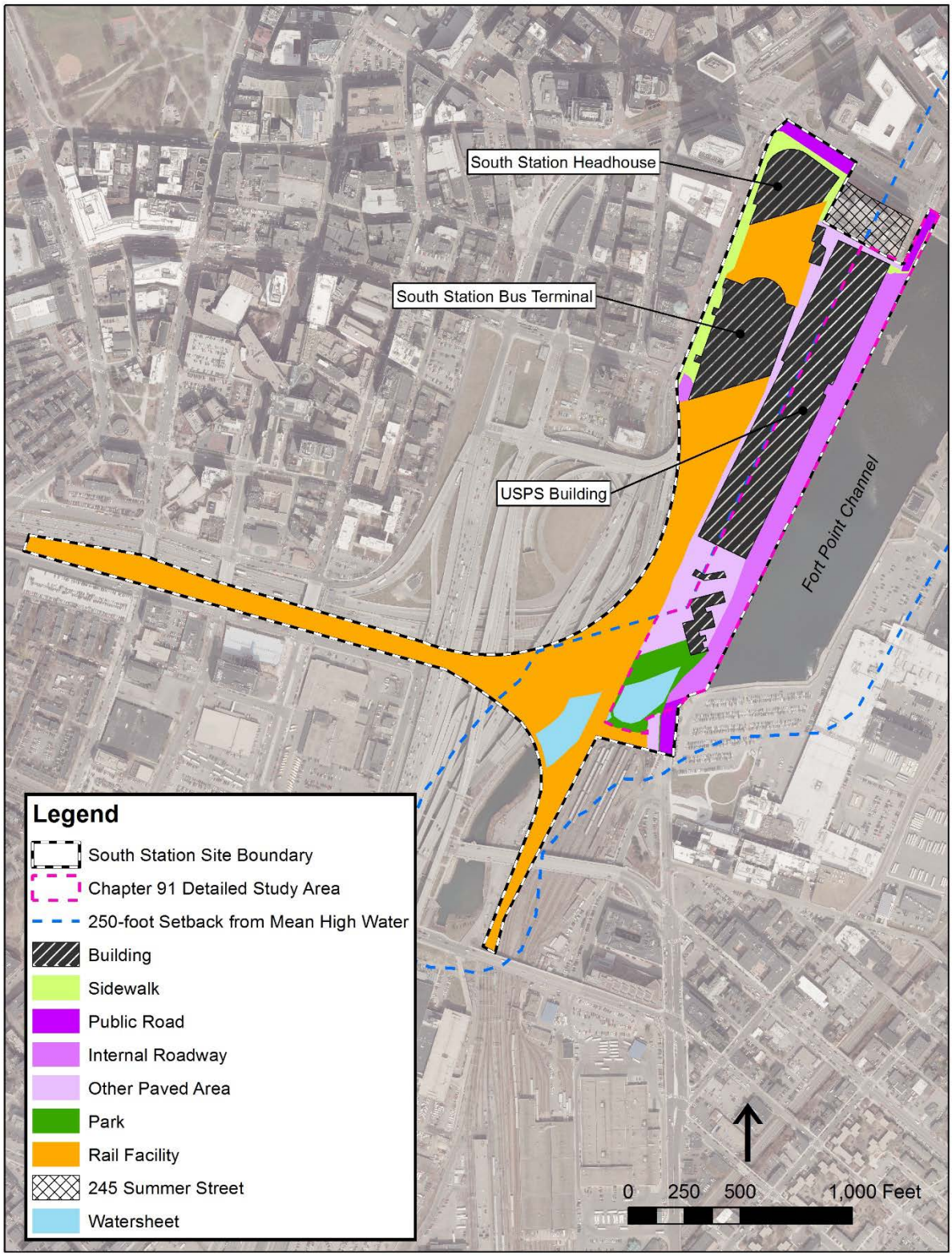

Figure 1-7— Existing Land Use

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