Chapter 8 – Draft Section 61 Findings & Mitigation

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8. DRAFT SECTION 61 FINDINGS & MITIGATION

8.1. Introduction

These Proposed Section 61 Findings for the project have been prepared to comply with the requirements of Massachusetts General Laws, Chapter 30, Section 61, and in accordance with the Massachusetts Environmental Policy Act (MEPA) regulations at 301 CMR 11.07(6)(k), which requires state agencies and authorities to review, evaluate, and determine the impacts on the natural environment of all projects or activities requiring permits issued by the state, and to issue findings describing the environmental impacts, if any, and certifying that all feasible measures have been taken by MassDOT to avoid or minimize these impacts. As described below, MassDOT has reviewed the environmental effects of the project. Based on the review, MassDOT finds that all feasible measures have been taken first to avoid and then minimize those effects.

8.2. Proposed Section 61 Findings

8.2.1. Project Description

In cooperation with the FRA, Amtrak, and the MBTA, MassDOT is proposing expansion of Boston's South Station to support existing NEC and commuter rail services, to provide for future Amtrak and MBTA service expansions, and to address existing and future intercity and commuter rail service layover needs. The SSX project includes planning, environmental reviews, and preliminary engineering for five primary elements:

- **Expand the South Station terminal facilities** from the current 13 tracks and eight platforms to a total of 20 tracks and 11 platforms, including the construction of a new passenger concourse and other amenities.
- **Acquire and demolish the USPS General Mail Facility** located on Dorchester Avenue adjacent to South Station, to provide an approximately 14-acre site on which to expand South Station. Dorchester Avenue would be restored for public and station access, and would include landscaping and improved pedestrian and cycling connections and facilities.
- **Create an extension of the Harborwalk along reopened Dorchester Avenue,** providing landscaping and street furniture; adding more than one acre of open space to the area; and completing the current gap that exists in what would otherwise be a continuous walkway along the Boston waterfront.
- **Provide for the possibility of future joint public/private development** adjacent to and over an expanded South Station, consisting of residential, office, and retail development.
- **Provide adequate rail vehicle layover space** by expanding or constructing facilities at one or more sites in proximity to South Station to meet existing and proposed layover facility program needs and railroad operational requirements.

The approximately 49-acre South Station site includes the South Station Rail Terminal, Bus Terminal, and the USPS parcel. The three potential vehicle layover sites under consideration consist of the approximately 29.4-acre Widett Circle site, the approximately 30-acre Beacon Park Yard site, and the approximately 17.4-acre Readville – Yard 2 site**.**

In accordance with MEPA regulations, 301 CMR 11.00 (revised, May 10, 2013), and the Certificate of the Secretary on the ENF (April 19, 2013), MassDOT has prepared the SSX project Draft EIR.

8.2.2. MEPA History

MassDOT filed the ENF for the SSX project on March 15, 2013. The ENF (EEA # 15028) was noticed in the Environmental Monitor on March 20, 2013, and available for public comment through April 9, 2013. MEPA held a public scoping meeting on April 1, 2013 at South Station, presenting a project overview and soliciting public input on the project. The Secretary of EEA published the Certificate on the ENF on April 19, 2013, and determined that the project required the preparation of a mandatory DEIR. The Certificate included the scope for the DEIR.

Table 8-1 lists the history of MEPA decisions of projects on the South Station site, presented from the most recent decision to the earliest recorded decision. Per the MEPA Online Project Information System, there are no previous MEPA filings for the three layover facility sites.

Table 8-1—MEPA Decisions on the South Station Site

EEA #	Project	Action	Secretary's Determination	Date
15028	SSX project	ENF	Project required mandatory DEIR.	4/19/2013
3205/ 9131	South Station Air Rights (SSAR) project	Final EIR	FEIR complied with M.G.L. Chapter 30.	4/14/2006
10270	North/South Rail Link project	DEIR	DEIR complied with M.G.L. Chapter 30.	7/31/2003
3205	South Station project	Notice of Project Change	Approved.	12/16/2002
4327	South Station Wye Connector	ENF	Project did not require an EIR.	3/1/1992
4049	Tunnel Ventilation Program – Phase 1	ENF	Project did not require an EIR.	4/15/1981
3205	South Station project	FEIR	FEIR complied with M.G.L. Chapter 30.	3/4/1981
3173	Temporary South Station Bus Terminal	ENF	Project did not require an EIR.	9/6/1978
2868	South Station project	ENF	Project did not require an EIR.	2/2/1978
243	South Station Urban Renewal project	ENF	Project did not require an EIR.	11/15/1973

8.2.3. Required State Permits and Reviews

Table 8-2 lists State agency actions required for the SSX project, further identified by applicability to each SSX project site.

Table 8-2—Required State Agency Actions

State Agency	Action	South Station	Widett Circle	Beacon Park Yard	Readville – Yard 2
Executive Office of Energy and Environmental Affairs (EEA)	MEPA Review and Secretary's Certificate	yes	yes	yes	yes
	Amendment to the Fort Point Channel Downtown Waterfront Municipal Harbor Plan	yes[a]	no	no	no
	Public Benefit Determination	yes	yes	yes	no
Office of Coastal Zone Management (CZM)	Federal Consistency Certification	yes	yes	no	no
Department of Environmental Protection (MassDEP)	Chapter 91 Waterways License	yes	no	no	no
	Sewer Extension/Connection Compliance Certification	yes	yes	yes	yes
	Massachusetts Contingency Plan Review	yes	yes	yes	yes
	Construction/Demolition Notification	yes	yes	yes	yes
	Asbestos Notification[b]	yes	yes	no	no
MassDOT Highway Division	Vehicular Access Permit	yes	no	no	no
Department of Public Safety	Building Permit	yes	yes	yes	yes
Massachusetts Historical Commission (MHC)	State Register Review and Section 106 Review	yes	yes	yes	yes
Massachusetts Water Resources Authority (MWRA)	8(m) Permit	no	no	yes	no

a Required for Alternative 3, Joint/Private Development Maximum Build only
b Asbestos Notification to MassDEP suffices for Notification to Massachusetts Department of Labor and Workforce Development, Division of Occupational Safety (DOS)

8.2.4. A Draft Section 61 Finding

The following paragraphs provide a draft Section 61 Finding that intends to cover all potential impacts of the project. This draft Finding can be used by various state agencies with permitting responsibilities (Table 8-2).

Project Name: South Station Expansion (SSX) project
Project Location: Boston
Project Proponent: Massachusetts Department of Transportation, Office of Transportation Planning
EEA Number: 15028

Date Noticed in Monitor: [Date]

This Section 61 Finding for the South Station Expansion (SSX) project (EEA #15028) has been prepared in accordance with the provisions of M.G.L. Chapter 30, Section 61 and 301 CMR 11.07(6)(k).

The potential environmental impacts of the SSX project have been characterized and quantified in the SSX project Draft Environmental Impact Report (DEIR), which is incorporated by reference into this Section 61 Finding. To the greatest extent practicable, MassDOT has taken all feasible measures to avoid

and/or minimize adverse environmental impacts of the proposed SSX project. Where impacts are not avoidable, MassDOT has worked throughout the planning and environmental review process to develop measures to mitigate impacts of the SSX project to the extent practicable. With the implementation of the proposed mitigation, conducted in cooperation with state agencies, the [Agency Name] finds that there are no significant unmitigated impacts.

MassDOT recognizes that the identification of effective mitigation, and implementation of that mitigation throughout the life of the SSX project, is central to its responsibilities under MEPA. Accordingly, MassDOT has prepared a Table of Mitigation Commitments (Table 8-3 in the DEIR) that specifies, for each potential state permit, the mitigation that MassDOT would provide. In the Table of Mitigation Commitments, MassDOT provides clear commitments to implement the mitigation measures; estimates the costs of each proposed measure; identifies the parties responsible for implementation of measures; and provides a schedule for their implementation based upon project phasing.

The [Agency Name] has reviewed the MEPA filings for the SSX project, and finds that the environmental impacts resulting from construction of the SSX project are those impacts as described in the DEIR, which would be updated as needed in permit applications submitted for compliance with federal and state environmental laws. Pursuant to M.G.L. Chapter 30, Section 61, the [Agency] finds that with the implementation of mitigation measures as identified in the Table of Mitigation Commitments, all practicable and feasible means and measures would have been taken to avoid or minimize potential damage to the environment due to the construction and operation of the SSX project. In making this finding, the [Agency] has considered reasonably foreseeable climate change impacts and effects such as predicted sea level rise.

8.3. Project Mitigation

MassDOT, where practicable, would mitigate or compensate for unavoidable impacts. This section provides a summary of impacts from and mitigation required for implementation of the SSX project, which is presented more fully in Chapter 4 of the DEIR and specific Technical Reports appended to the DEIR. In Table 8-3, a summary of MassDOT's commitments is provided. As the SSX project advances into design, more site specific mitigation measures would be identified and a more defined implementation schedule would be developed.

8.3.1. Land Use

The SSX project would result in land use changes and/or property acquisitions at four South Station project sites:

- South Station. Expansion of the terminal would require the acquisition and demolition of the USPS General Mail Facility. Relocation of the USPS functions would require a separate environmental review process, to be prepared by other parties. Additionally, to reopen Dorchester Avenue as a public two-way street, a portion of the patio area at 245 Summer Street would be needed from an MBTA/Boston Redevelopment Authority (BRA) easement from 1979 that reserved this space for transportation uses.
- Widett Circle. Construction of layover facilities would require the acquisition of approximately 29.4 acres of private property; relocation of approximately 30 private businesses; and demolition of existing buildings.
- Beacon Park Yard. An agreement in principal has been reached between Harvard and MassDOT to use approximately 22 acres of Beacon Park Yard for a new commuter rail layover, maintenance facility and rail station. MassDOT intends to expand layover capacity to the west

and south of South Station to provide a more-balanced mix of layover sites. For more details see Appendix 4 – *Zoning and Land Use Technical Report.*

- Readville – Yard 2. Expansion of the 17-acre facility would increase the existing Readville Yard by approximately seven acres, of which the MBTA currently owns the majority. However, a partial taking of approximately 0.7 acres of a privately-owned property would be required to complete the expansion.
- 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.

Negotiations with the USPS are ongoing. For the construction of layover facilities, any required property acquisitions would be limited to the minimum footprints required to support each function, including access roads, stormwater management facilities, and employee parking areas where required. MassDOT's goal would be to reach agreements with existing owners for purchase of properties required for the SSX project. For the required acquisitions, MassDOT would comply with provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, 42 USC 4601. MassDOT would pay fair market value for all parcels in private ownership that would be acquired, in accordance with federal and state guidelines. For more details see Appendix 4 – *Zoning and Land Use Technical Report.*

8.3.2. Wetlands, Floodplain, and Ecology

At the South Station and Readville – Yard 2 sites, MassDOT would be required to obtain an Order of Conditions from the Boston Conservation Commission.[1] South Station site construction activities would require work within land subject to coastal storm flowage (100-year floodplain) and the buffer zone of a coastal bank (Fort Point Channel). Expansion of layover facilities at Readville – Yard 2 would impact a portion of the riverfront area and buffer zone of the Neponset River bank. In accordance with the Order, MassDOT would implement Best Management Practices (BMPs), soil erosion and sediment control plans, and other mitigation required by the Commission. Construction of layover facilities at Widett Circle and Beacon Park Yard would not impact WPA jurisdictional resources. For more details see to Appendix 5 - *Natural Resources Technical Report.*

8.3.3. Waterways, Tidelands, and Coastal Zone

Chapter 91 licensing would be required at the South Station site. The terminal expansion proposed in Alternative 1 would require a new nonwater-dependent infrastructure license, and would fully meet the regulatory requirements for nonwater-dependent infrastructure facilities. In addition to the infrastructure license, the private development proposed in Alternative 2 and Alternative 3 would require one or more nonwater-dependent use licenses, depending upon the licensing approach approved by MassDEP. Alternative 2 would meet applicable regulatory standards for open space, building height, and setback. The ground floor of the private development buildings within licensing jurisdiction would be designated as facilities of public accommodation. Alternative 3 would require certain regulatory substitutions to comply with building height and setback requirements; activities within the water-dependent use zone; and potentially open space restrictions. Alternative 3 could only be licensed under the provisions of an approved Municipal Harbor Plan.

The layover facility sites would not require Chapter 91 licensing. The Widett Circle and Beacon Park Yard layover facility sites contain filled, landlocked tidelands, which are exempt from licensing under Chapter 91. Readville – Yard 2 does not contain filled tidelands and is not subject to Chapter 91.

[1] Pending project staging, one or two Orders of Conditions from the Boston Conservation Commission could be required for the SSX project for work at these two SSX project sites.

The South Station and Widett Circle sites are located within the Massachusetts Coastal Zone and would be assessed for consistency with Massachusetts Coastal Zone Management (CZM) policies. The three SSX project sites containing landlocked tidelands, consisting of South Station, Widett Circle, and Beacon Park Yard, would require a Public Benefit Determination under 2007 Massachusetts Acts, Chapter 186, Section 8.

Alternative 1 would not create any new shadows on exterior public spaces and, as a nonwater-dependent infrastructure project, it would not be subject to 310 CMR 9.51(2)(c). Both Alternatives 2 and 3 would create shadow impacts. No mitigation is anticipated for new shadows cast on Dorchester Avenue because all Build Alternatives would result in a substantial net benefit to public use of the waterfront. The relatively brief duration of the predicted new shadows on the South Boston Shoreline of the Fort Point Channel make these alternatives unlikely to require mitigation.

A wind analysis was completed for Alternative 3, the most impactful of the Build Alternatives, which shows that the project would have minimal impacts to the pedestrian level wind environment within the project site in comparison to the No Build Alternative. Only four locations of the 80 studied could experience uncomfortable conditions. Three of these locations are located on sidewalks adjacent to Summer Street. The fourth is located adjacent to a building corner outside of a proposed open space site. Final design of the project would include mitigation elements such as plantings which would decrease the potential negative impacts from wind. For more details see Appendix 6 - *Coastal Resources Technical Report*.

8.3.4. Water Quality and Stormwater

The impervious cover and runoff rates and volumes for all the Build Alternatives at the South Station site are anticipated to decrease compared to No Build conditions. Changes in land cover and use of the site may affect pollutant loadings from the site. Efforts would be made to minimize waste material from entering the stormwater conveyance system. Stormwater BMPs would be implemented to the extent practicable to mitigate for the potential increase in pollutants and to comply with the MassDOT and City of Boston Complete Streets guidelines and MassDEP stormwater management guidelines. No new discharges and no impacts to the surface water quality of Fort Point Channel are anticipated as a result of the project. The SSX project would not impact existing drainage infrastructure at the South Station site. It is anticipated that the existing site drainage infrastructure, including infrastructure within Dorchester Avenue, would be sufficient for the SSX project.

SSX project activities at each of the layover sites would include removing impervious cover and installing tracks and ballasts, which would reduce the peak flow rates for stormwater runoff during most storm events. Construction or expansion of layover facilities would not increase potential pollutant loading to nearby water bodies. Both structural and nonstructural stormwater BMPs would be installed, as necessary, to mitigate for the changes in stormwater runoff volume and to limit the impact from construction and operation on nearby water bodies, including maintaining the Total Maximum Daily Loads (TMDLs) of the Charles and Neponset Rivers. Disturbed areas and original ground contours would be restored after construction is complete. For more details see Appendix 7 - *Water Quality and Stormwater Technical Report*.

8.3.5. Water and Wastewater

Under Alternative 3, which is the maximum development scenario, the net total water usage at the South Station site would be 826,000 gallons per day (gpd) and the net total wastewater generation at the site would be 750,900 gpd. The estimated water usage and wastewater generation at the South Station site would be partially offset by the loss of the USPS facility. Additionally, the SSX project would

incorporate water efficiency measures, such as low flush toilets, which would minimize the use of water and wastewater generation.

Proposed improvements would include additional service connections for the new joint development, with upsized service connections to the expanded terminal concourse. Depending upon the construction staging and location of service connections within the new buildings, replacing the existing sewer main could be required in Dorchester Avenue to connect to the joint/private development. BWSC indicates that there is adequate capacity available in its water and sewer mains in the immediate vicinity of the South Station site to accommodate the SSX project Maximum Build Alternative. The design approach, as well as existing capacity, would be further evaluated as design progresses.

The estimated wastewater discharges at the South Station site would exceed MassDEP's threshold of 15,000 gallon/day, and MassDOT would be required to offset the increased flows at a 4:1 ratio, per MassDEP's Policy on Managing Infiltration and Inflow in MWRA Community Systems. As project design advances, and in consultation with MassDEP and BWSC, MassDOT would develop an infiltration and inflow (I/I) plan to mitigate for increased flows at the South Station site. BWSC indicates there likely is not adequate existing piping in the immediate vicinity of the project site to achieve the I/I requirements. Sewer systems that are hydraulically connected to the mains in the vicinity of the South Station site potentially could meet I/I requirements, however, and opportunities to implement an I/I program may exist in other areas in the City, including the North End neighborhood.

The layover facility sites would require domestic sewer for the crew building and support shed proposed at each site. Only light maintenance activities are proposed at the facilities, therefore, no industrial wastewater would be generated. According to BWSC, its existing systems at the three sites have adequate capacity to handle the proposed water demand and wastewater discharge. Capacity would be further evaluated as project design advances. Due to the low amount of wastewater anticipated to be generated from the layover facility sites (below the 15,000 gpd threshold), they would be exempt from MassDEP's I/I offset requirements. For more details see Appendix 8 - *Water and Wastewater Technical Report*.

8.3.6. Transportation and Traffic

The SSX project would provide regional and local transportation and traffic benefits: enhanced transit capacity, regionally and locally to downtown Boston; more efficient train operations; integration of the South Station rail and bus terminals; new pedestrian connections and potential for enhanced water access; new bicycle accommodations; relief of curbside congestion on Atlantic Avenue; improved separation of South Station vehicle traffic and pedestrians/bicyclists; an aggressive approach to constraining parking and adopting shared parking principles for the project; and restoration of a key roadway connection, Dorchester Avenue, in the core of the city.

There would be no transportation or traffic impacts associated with construction of layover facilities.

At the South Station site, transportation impacts and associated mitigation would include:

- Roadway mitigation. To address level of service deficiencies to vehicles, pedestrians, and bicycles, mitigation would consist of several measures, including: providing dedicated curbside space for taxicabs, passenger drop-off and pick-up, and private shuttles along the reopened portion of Dorchester Avenue to address excessive curbside congestion along Atlantic Avenue; further adding curbside capacity by removing six parking meters from Atlantic Avenue; and improving bicycle accommodations on Atlantic Avenue. Additionally, intersection upgrades would be implemented to improve traffic flow; reduce queuing; and improve pedestrian and

bicycle mobility. A total of seven infrastructure upgrades are proposed in Alternative 1 – Transportation Improvements Only; Alternative 2 – Joint/Private Development Minimum Build and Alternative 3 – Joint/Private Development Maximum Build would provide an additional 10 intersection improvement upgrades (for a total of 17 upgrades) to supplement the upgrades proposed in Alternative 1.

- Traffic Demand Management (TDM) commitments. TDM commitments would vary depending upon the selected Joint/Private Development alternative for the South Station site. These commitments would help to advance MassDOT's Healthy Transportation Compact initiative and GreenDOT policies.
    - MassDOT would commit to the following TDM measures in Alternative 1:
        - Incorporate bicycle parking in the new headhouse on Dorchester Avenue.
        - Provide electronic signage displaying transit schedule information.
        - Incorporate curbside space and a shuttle stop for private shuttles along Dorchester Avenue to accommodate shuttles to/from the South Boston Waterfront/Innovation District.
        - Allow for Hubway to expand its bike share program onto the reopened Dorchester Avenue, and consider an expanded Hubway station in the roadway design phase.
        - Work with the City of Boston to improve bicycle accommodations along Atlantic Avenue from Kneeland Street to Summer Street.
        - Participate in the U.S. EPA SmartWay Transport Program to increase energy efficiency and reduce greenhouse gas emissions.
        - Prepare a Construction Mitigation Plan (CMP) for BTD to minimize disruption in the area throughout construction.
    - In addition to the TDM commitments proposed in Alternative 1, which does not propose additional parking, MassDOT would commit the following TDM measures in Alternatives 2 and 3:
        - Accommodate electric vehicle charging facilities within the structured parking.
        - Charge market rates for off-street parking spaces used by single occupant vehicle (SOV) drivers.
        - Provide car sharing parking (Zipcar or similar program) and carpool/vanpool designated parking spaces in any structured parking facilities.
        - Work with BTD to conduct a post-development traffic monitoring program, which would be conducted prior to the start of each phase of construction and repeated six months after the issuance of occupancy certificates.

For more details see Appendix 9 – *Traffic Analysis Technical Report*.

8.3.7. Air Quality

Based on the results of the emissions inventory analysis for the project area, very small increases in pollutant emissions are projected in the vicinity of the South Station and layover facility sites due to the SSX project. These would not exceed the Massachusetts or National Ambient Air Quality Standards and no adverse air quality impacts are expected to occur with any of the Build Alternatives. Based on the emissions inventory analysis, no mitigation measures would be required for any of the Build Alternatives.

Based on the results of the carbon monoxide (CO) modeling analysis at the selected traffic intersections in the project area, anticipated increases in project-related motor vehicle traffic volumes would not exceed the Massachusetts or National Ambient Air Quality Standards (NAAQS) for CO and no adverse air quality impacts are expected to occur with any of the Build Alternatives. Based on the CO hot spot

analysis, which analyzed the air quality impacts of project-related motor vehicles on four worst-case intersections, no mitigation measures would be required for any of those intersections related to Build Alternatives.

There would be only a very slight increase in Mobile Source Air Toxics (MSAT) emissions due to the SSX project Build Alternatives compared to MSAT emissions from the No Build Alternative. These very small increases would be unlikely to result in adverse health effects.

Temporary air quality impacts could result from construction activities associated with the SSX project, including fugitive dust emissions; direct emissions from construction equipment; and increased emissions from motor vehicles on local streets due to traffic disruption. Due to the close proximity of construction activities to nearby businesses and other areas where the general public has reasonable access, appropriate mitigation measures would be implemented during construction. An emissions control plan would be developed to address these types of impacts, such as fugitive dust, construction equipment and vehicle exhaust, and potential traffic disruption and congestion. For more details see Appendix 10 – *Air Quality Technical Report*.

8.3.8. Noise and Vibration

In Alternative 1, noise levels at several receptors are expected to exceed the FTA moderate impact criteria, including 245 Summer Street and the area across Fort Point Channel. A noise barrier installed between the most easterly track in the station and Dorchester Avenue would reduce the 24-hour day-night noise levels across Fort Point Channel from idling locomotives. The height of the noise barrier would extend approximately three feet above the height of the locomotive to reduce noise levels from idling locomotives. A noise barrier installed between 245 Summer Street and the train station would reduce the peak-hour noise levels. In Alternatives 2 and 3, however, the station area would be enclosed, and the noise barrier would no longer be necessary.

At the Beacon Park Yard site, a noise barrier installed along the MBTA's Framingham/Worcester Line, extending the length of Wadsworth Street and Pratt Street between the two industrial buildings at either end of this area would reduce noise levels adjacent to the residential receptors. To reduce the vibration impacts from the track switches and crossovers at the Beacon Park Yard, the switches should not be located within 130 feet of any residential receptor. If it is not possible to relocate the switches, then ballast mats could be installed under the switches. At the Readville - Yard 2 site, the existing noise barrier between the layover facility and the residences located along Wolcott Street would be extended to include the layover facility expansion area. Extension of the noise barrier to the apartment buildings along Riley Road would provide additional mitigation.

Demolition and construction activity could impact 245 Summer Street and the South Station headhouse. The construction contractor would provide noise monitoring during construction to determine compliance with FTA and the City of Boston construction noise limits. If the construction noise levels are predicted to exceed these noise limits, then appropriate noise mitigation measures such as noise barriers would be evaluated to determine the appropriate location, height, and length of the noise barrier to provide effective mitigation. Because of the vibration-sensitive equipment located in the basement of the building at 245 Summer Street, vibration measurements would be obtained inside the building to ensure that levels do not exceed equipment specifications. For more details see Appendix 11 – *Noise and Vibration Technical Report*.

8.3.9. Greenhouse Gas Emissions

GHG reductions would be a direct benefit of the primary project goal, which is to improve public transportation capacity and performance. This GHG Emissions analysis quantifies the potential annual GHG emissions from the project, and documents MassDOT's plans to minimize GHG emissions to the maximum extent feasible, consistent with the MEPA Greenhouse Gas Emissions Policy and Protocol (GHG Policy).

Specifically, the GHG Emissions analysis finds:

- The stationary source GHG emissions at South Station will be reduced by approximately 8% for a Build condition incorporating Alternative 1 - Transportation Improvements Only, or by approximately 12% for a Build condition incorporating Alternative 3 – Joint/Private Development Maximum Build;
- Layover facilities will meet Building and Stretch Code requirements through prescriptive energy efficiency measures;
- The technical and economic feasibility of solar (photovoltaic and hot water) installations, and of connection to the nearby Veolia district steam system, will be evaluated as design progresses;
- Traffic and transit directly associated with the Project will include mitigation that will reduce GHG emissions; and
- The South Station transportation improvements have a regional GHG benefit. For more information see Appendix 12 – *Greenhouse Gas Emissions Technical Report*.

8.3.10. Historic Resources

MassDOT's analyses of visual, noise and vibration, shadow, and wind impacts related to each alternative were considered for impacts to historic resources in the Area of Potential Effects (APE), including the South Station Headhouse, Fort Point Channel Historic District, Leather District, Federal Reserve building, Commercial Palace Historic District, Kneeland Street Steam Heating Plant, Chinatown, and 245 Summer Street. There are no historic properties identified at the layover facilities. Alternative 1 would have no adverse impacts on historic properties included in the APE. Alternative 2 and Alternative 3 would have shadow impacts within the APE. The new construction proposed under Alternatives 1, 2, and 3 would be implemented to be consistent with the planning and design principles developed for the project, which are intended to guide the preservation and protect the historic integrity of the existing South Station Headhouse. For more information see Appendix 13 – *Historic Resources Technical Report*.

8.3.11. Site Contamination and Hazardous Materials

Based on the types of oil and hazardous material (OHM) releases that have been documented on the USPS parcel, significant issues associated with these specific releases would not be anticipated during the demolition of the facility and the proposed terminal expansion. Based on the historical presence of railroad tracks in this area prior to the construction of the General Mail Facility in 1932, however, contamination associated with this previous use could be encountered during construction. Prior to demolition of the USPS facility, further investigation would be required to identify the presence, location, and quantity of suspect asbestos-containing materials (ACM) and potential hazardous materials, including sampling and analysis of materials. Response actions would be required, including development of a site-specific health and safety plan.

Based on the compliance status of historic releases at the Widett Circle site, no likely residual contamination exists and significant issues associated with the historic releases would not be anticipated during layover facility construction. Based on the recent and historic use of Beacon Park Yard, it is

likely that some contamination would be encountered during layover facility construction. Based on the historic and current use of Readville-Yard 2, it is likely that contamination would be encountered during layover facility expansion. Construction activities at Readville - Yard 2 also could include measures to address a previous OHM release in the vicinity of the proposed expansion.

The SSX project would require demolition of multiple existing facilities at Widett Circle and one facility at Beacon Park Yard. Prior to demolition activities, further investigation would be required to identify potential OHM and ACM. For more information see Appendix 14 – *Site Contamination and Hazardous Materials Technical Report*.

8.3.12. Environmental Justice

The South Station improvements would benefit all populations, including Environmental Justice (EJ) populations that use the station by providing improved transportation facilities and additional areas of open space, including the new Harborwalk on Dorchester Avenue. The improvements would not directly displace any EJ populations. The acquisition of the USPS facility would result in the displacement of all employees, including EJ employees who may work at the USPS. It is anticipated that the acquisition and relocation of the USPS facility would not result in a permanent loss of USPS jobs; this facility would be relocated to another site in Boston, and it would be accessible via public transportation. Regarding the loss of the post office facility as a community service, there are two other USPS post offices within close proximity to South Station.

No disproportionately high and adverse human health and environmental effects, including air quality, visual, social and economic effects, are anticipated to occur to EJ populations due to the SSX project. Increases in rail operations and associated increases in noise could adversely impact EJ communities in proximity to the Beacon Park Yard and Readville – Yard 2 sites. To mitigate impacts, noise barriers are proposed at both locations between layover areas and residential communities. Project-related property displacements would occur at Widett Circle, with the displacement of 30 private businesses, which could affect minority or low-income workers.

Minimal or no change would occur among the alternatives across the communities of concern for accessibility to needed services (hospitals and colleges) and jobs (basic, retail, and services), mobility and congestion, or environmental impacts. The SSX project would result in minimal changes regarding accessibility and mobility of minority, low-income, linguistically isolated, and disabled populations and non-disadvantaged populations. For more information see Appendix 3 - *Environmental Justice and Title VI Technical Report*.

8.3.13. Summary of Mitigation Commitments

The SSX project would result in impacts to social and natural resources, including land use, Wetland Protection Act jurisdictional resources, protected open space, and noise. It would have beneficial effects on transportation that would improve mobility and access for users.

Table 8-3 presents a table of SSX project mitigation commitments for implementation of mitigation measures to address both permanent and construction-related, temporary impacts. The conceptual measures identified in Table 8-3 serve as a framework for SSX project mitigation. More specific, detailed mitigation measures would be developed as the SSX project design advances, and would be reviewed by the appropriate regulatory agencies as part of project permit applications. Temporary, short-term impacts from construction activities would be mitigated to the extent practicable. Construction-period mitigation requirements would be incorporated into the final design plans and specifications that would serve as the basis for construction contract documents and specifications.

Table 8-3—Table of SSX Project Mitigation Commitments

Category	Mitigation Measure	Schedule
Land Use/ Property Acquisition	Comply with the federal acquisition and, where appropriate, relocation requirements for property at Widett Circle and Readville – Yard 2, pursuant to the Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs (Uniform Act; 49 CFR Part 24), and the state relocation requirements, pursuant to M.G.L. Chapter 79A (760 CMR 27.00).	During final design and prior to construction start
Wetlands	Prepare soil erosion and sediment control plans for construction activity proximate to wetland resources.	During design and construction
Waterways, Tidelands, Coastal Zone	Provide approximately one-half or one acre of additional open space (depending on the Alternative) and up to 18,120 sf of facilities of public accommodation (in addition to the proposed headhouse), pending selection of joint/private development alternative. Provide plantings to mitigate wind impacts.	Construction completion
Water Quality/ Stormwater	Prepare site-specific Stormwater Pollution Prevention Plans (SWPPPs).	During final design and prior to construction start
	Prepare Spill Prevention, Control and Countermeasures (SPCC) Plan for each layover facility site.	Prior to start of operations
	Develop detailed Operation and Maintenance (O&M) Plan for each site.	Final design
	Construct catch basins with sumps and hoods, oil drip pans and oil/water separators at the four SSX project sites.	Prior to start of operations
	Investigate applicability of additional structural stormwater BMPs at the SSX project sites as needed.	Final design
Water/ Wastewater Generation	Develop an I/I plan to mitigate for increased flows at the South Station site, including evaluating sewer systems that are hydraulically connected to the mains in the vicinity of the South Station site to potentially meet I/I requirements.	Following construction
Transportation /Traffic	Provide dedicated curbside space for taxicabs, passenger drop-off and pick-up, and private shuttles along reopened Dorchester Avenue.	Construction completion
	Eliminate six parking meters along Atlantic Avenue at Kneeland Street and reprogram the curb to accommodate drop-off or taxicabs.	Prior to construction start
	Improve bicycle connectivity into Dewey Square by striping a bicycle lane along Atlantic Avenue connecting to the existing bicycle lane approaching Summer Street and the South Station Hubway station.	Prior to construction start
	Provide roadway and signal modifications at seven specific intersections for the terminal expansion (Alternative 1).	Construction completion
	Provide roadway and signal modifications at 17 specific intersections for the terminal expansion and joint/private development (Alternatives 2 and 3).	Construction completion
	Implement Traffic Demand Management (TDM) commitments, consisting of six measures in Alternative 1 and five additional measures in Alternatives 2 and 3.	Construction completion
Air Quality	Implement an emissions control plan to address areas of fugitive dust, construction equipment and vehicle exhaust, and potential traffic disruption and congestion.	During construction

Table 8-3 (continued)

Category	Mitigation Measure	Schedule
Noise/ Vibration	Implement a Construction Noise Control Plan to monitor noise impacts for potential mitigation measures.	During construction
	Install noise barrier at South Station site extending along the length of Track 20 and approximately three feet above locomotive height. (Alternative 1 only)	Construction completion
	Install noise barrier between 245 Summer Street and South Station. (Alternative 1 only)	Construction completion
	Install noise barrier at Beacon Park Yard along length of Wadsworth Street and section of Pratt Street.	Construction completion
	Extend existing noise barrier at Readville – Yard 2 to include layover facility expansion area and apartment buildings along Riley Road.	Construction completion
Greenhouse Gas Emissions	Implement stationary source mitigation measures for HVAC, lighting, building envelope, and water conservation measures. Provide transportation enhancements to mitigate mobile source impacts.	During construction
Historic Resources	Design new buildings to be consistent with the planning and design principles that guide the preservation and protect the historic integrity of the site.	Final Design
Site Contamination /Hazardous Materials	Implement special management procedures for any hazardous or contaminated wastes generated during construction, including special handling, dust control, and management and disposal of contaminated soil.	Prior to demolition/ during construction
	Perform sub-surface investigations for any planned excavation to test for possible contamination.	Pre-demolition
	Prepare site-specific Health and Safety Plans.	Pre-demolition
	Conduct inspections to identify hazardous materials such as asbestos and lead-based paint.	Pre-demolition

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