



10. Project Mitigation

Massport's **Environmental Data Report (EDR)** is a unique document within the **Massachusetts Environmental Policy Act (MEPA)** process, as it provides an overview of Logan Airport operations and environmental conditions, establishing the context for project reviews and approvals through the MEPA process. Unlike other MEPA documents, the annual EDR and **Environmental Status and Planning Reports (ESPRs)** are not projects within the typical MEPA framework. The ESPRs and EDRs do not replace individual project filings subject to MEPA, nor do they serve as approval for any specific activity.

Within the traditional MEPA process, project mitigation refers to specific measures taken to avoid, minimize, and mitigate environmental impacts associated with a particular project. For Logan Airport ESPRs and EDRs, Massport reports on several types of measures aimed at reducing environmental impacts, which are grouped into the following categories:

- **Project mitigation** refers to mitigation measures as prescribed under Massachusetts General Law Chapter 30, Section 61 (**Section 61 or Section 61 Findings and Mitigation Commitments**) for projects required to prepare a state **Environmental Impact Report (EIR)**. The formal Section 61 measures discussed in this chapter are specific to individual projects and include steps taken to avoid and minimize environmental impacts through design, construction, or on-going operations.
- **Community benefits** refer to those measures Massport has agreed to take outside of the MEPA process, and these are presented in greater detail within Chapter 2, *Outreach and Environmental Justice*.
- **Other environmental measures** are programs and initiatives that Massport voluntarily implements, in addition to Section 61 project mitigation and community mitigation efforts, and these include a wide range of other environmental measures that are not project-specific but rather are aimed at addressing broader impact categories. These include noise abatement measures, ground transportation accessibility improvements, **high-occupancy vehicle (HOV)** strategies, Massport's *Roadmap to Net Zero by 2031* (Roadmap to Net Zero) initiative, and many other operational measures that increase Airport efficiency, improve the quality of services provided, and reduce community

impacts. These other environmental measures are discussed in Chapter 11, *Sustainability and Climate Resilience*, and in applicable subject matter chapters that address topics like ground access, air quality, and noise, among others.

For more on Project Mitigation, see **User's Guide, Section U10**. The status of Logan Airport projects with active Section 61 commitments is presented in this chapter. Massport continues to comply with its project mitigation commitments as outlined in the **Executive Office of Energy and Environmental Affairs (EEA)** Secretary's Certificates for these projects, which are presented in Appendix A, *MEPA Certificates and Responses to Comments*.

10.1 Projects with Section 61 Commitments

The following projects have on-going Section 61 mitigation measures, and the current mitigation implementation status for each project as of this publication is summarized in this chapter. Massport continues to track its mitigation commitments, and the forum for reporting on their status is the ESPR and EDR documents. The applicable projects are listed below in chronological order of their completion:

- **Terminal E Modernization Project, EEA #15434:** Phase I of the project was completed in November 2023, and accommodates existing and long-range forecasted passenger demand for international service. Phase I included the construction of 390,000 square feet of terminal space; renovations to the existing Terminal E structure to create a unified building; and adding four new gates. Phase II will involve construction of three additional new aircraft contact gates, roadway realignments and curb access improvements, and a direct pedestrian connection to the **Massachusetts Bay Transportation Authority (MBTA)** Airport Station Blue Line connection. Roadway realignment, ground access, and curb accessibility planning efforts began in 2024, along with preliminary design for the new Terminal E canopy. See Chapter 4, *Airport Planning*, Section 4.2, for additional information.
- **Logan Airport Parking Project, EEA #15665:** The project involves the phased addition of commercial parking at Logan Airport consistent with the amendment to the **Logan Airport Parking Freeze**. In 2018, **Massachusetts Department of Environmental Protection (MassDEP)** and the **U.S. Environmental Protection Agency (U.S.EPA)** approved an amendment to the Logan Airport Parking Freeze to add an additional 5,000 spaces at Logan Airport. Massport filed an EIR, and MEPA issued a Certificate (January 2020) approving new parking in two Airport campus locations; a new garage across from Terminal E (2,000 spaces), and additional floors within the Economy Garage (3,000 spaces). Massport prepared an **Environmental Assessment (EA)** on the project and the **Federal Aviation Administration (FAA)** issued a **Finding of No Significant Impact (FONSI)**, allowing the project to move forward.
 - Construction of the MEPA and FAA-approved **Terminal E Garage** in front of the terminal was deferred during the COVID-19 pandemic. Massport has now restarted this deferred project, and the updated program for the project calls for approximately 4,000 commercial revenue spaces,

which would be built in a new garage in front of Terminal E. Located in the central terminal area of the Airport, the new garage will also improve connectivity to the existing parking complex and on-Airport roadways. No new parking spaces are being proposed for the Economy Garage at this time.

- **Runway 27 End Runway Safety Area Improvements Project, EEA #16433:** This project will enhance safety for aircraft and passengers in emergency situations by improving the Runway 27 End **Runway Safety Area (RSA)**. The RSA improvements are a required FAA safety project. The project would not extend the runway or affect normal runway operations, capacity, or types of aircraft using the runway. An EA and **Final Environmental Impact Report (FEIR)** were completed in 2023 and a FONSI was issued by the FAA. In April 2025, Massport filed a **Notice of Project Change (NPC)** with MEPA to address design changes to the two proposed emergency access and egress ramps and MEPA issued a Certificate in June 2025.

Once projects with on-going requirements are constructed, mitigation tracking reports on the continuing requirements. Each project discussed below has completed its requisite state and federal environmental reviews and has adopted mitigation plans that have been formalized with individual Section 61 Findings.

Massport tracks both Massport and Logan Airport tenants' progress towards implementing and meeting their environmental mitigation commitments on schedule and in accordance with the requirements outlined in the Section 61 Findings for each project. As each project moves forward through its design and construction phases, its mitigation plan is implemented with on-going tracking to verify compliance. Once mitigation efforts are completed, those projects are no longer reported in EDRs and ESPRs.

The following sections describe each project's current implementation status for measures that occurred in the reporting period. Previous filings contain historical details on the implementation of mitigation measures. The **Environmental Notification Forms (ENFs)**, **Draft Environmental Impact Reports (DEIRs)**, and FEIRs issued for the projects discussed in this chapter are provided in Appendix A, which contains the Secretary's Certificates.

10.2 Terminal E Modernization – EEA #15434

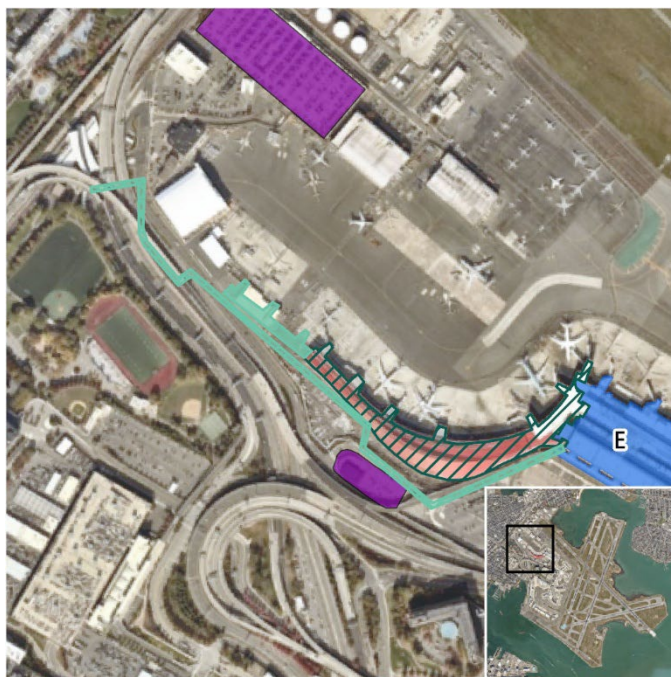


Figure 10-1 Terminal E Modernization EEA#15434



The Terminal E Modernization Project will add seven new gates to Terminal E in two phases, with four gates to be completed in Phase I and the remaining three gates to be completed in Phase 2. Of the seven gates, three were already approved under MEPA in 1996 for the International Gateway Project; however, the MEPA-approved gates for the International Gateway Project were never constructed. The existing concourse, terminal core, and terminal roadway frontages are collectively referred to as the "Project," and these areas will also be expanded. The implementation of the Project will better accommodate the current and projected demand for international travel, regardless of the Project's status.

Figure 10-1 shows the location of the Terminal E Modernization Project. **Table 10-1** lists each of the Section 61 mitigation commitments for the Terminal E Modernization Project and Massport's progress in achieving these measures. Future EDRs and ESPRs will provide updates, as available.

10.2.1 Permitting History

- Certificate on the ENF issued on December 16, 2015.
- Certificate on the Draft EIR issued on September 16, 2016.
- Certificate on the FEIR issued on November 10, 2016
- FAA FONSI and **Record of Decision (ROD)** issued on November 14, 2016.
- Section 61 Findings approved on January 19, 2017.

10.2.2 Project Status

Construction of the Terminal E Modernization Project began in 2019, accompanied by an enabling project to relocate the Logan Airport gas station to the Southwest Service Area (SWSA) at the intersection of Tomahawk Drive and Jeffries Street. This relocation cleared the area for Phase I of the Terminal E Modernization, which included the addition of four new gates and new passenger amenities within a

Modernization, which included the addition of four new gates and new passenger amenities within a building designed to serve as a noise barrier and achieve a minimum **Leadership in Energy and Environmental Design (LEED®)** Gold certification. **Sustainability** features incorporated into the project include integrated **solar photovoltaics (PV)**, daylight harvesting, a high-performance **building envelope**, recycled materials, and a solar-ready roof to support Massport's Roadmap to Net Zero.

Phase I construction was completed, and the four new gates opened in October 2023. As of December 2024, Phase II of the project remains deferred. This phase proposes three additional gates and a direct pedestrian connection to the MBTA Blue Line Airport Station. While no revised construction timeline has been released, internal enhancements within Terminal E have continued throughout 2024.

Table 10-1 Terminal E Modernization Project (EEA #15434) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
Overall Project Benefits	
<i>Provide pedestrian access between Terminal E and Massachusetts Bay Transportation Authority (MBTA) Airport Blue Line-Station.</i>	On-going. The Final Environmental Impact Report (FEIR) acknowledged that a direct connection between Terminal E and the MBTA Airport Station with Blue Line service would not be included in Phase I, now complete, but would be a part of Phase II once construction of the remaining three terminal gates planned was complete. Various approaches are under consideration and will be further documented in subsequent environmental filings and EDRs or ESPRs. Currently, passengers can take a free on-Airport shuttle, from Airport Station to Terminal E, with an average wait time of three minutes.
<i>Construct roadway and curb improvements to improve vehicle flow, high-occupancy vehicle (HOV) access, and reduce air and greenhouse gas (GHG) emissions.</i>	On-going. Phase II is being advanced in accordance with the commitments outlined in the Final Environmental Assessment (EA) and FEIR for roadway and curb improvements to enhance vehicle flow and HOV access. The FEIR did not include roadway or curb improvements as part of Phase I. However, planning and design for canopy and curb access improvements began in 2024, and progress updates will be provided in future EDRs and ESPRs.
<i>Site Terminal E additions so as to buffer the adjacent neighborhoods from aircraft noise.</i>	Phase I: Implemented. Phase I met the FEIR requirement for the inside of the main concourse to be at least 45 feet high from floor to ceiling, serving as a noise buffer for East Boston Memorial Park and the surrounding neighborhoods to the southwest. Phase II will be advanced consistent with the commitments in the Final EA or Environmental Impact Report (EIR).

Table 10-1 Terminal E Modernization Project (EEA #15434) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
<i>Seek Leadership in Energy and Environmental Design (LEED®) certification at Silver level or better; meet or exceed Massachusetts (MA) LEED® Plus program goals.</i>	On-going. The project is aiming to achieve a minimum of LEED® Gold certification. and includes several sustainability initiatives, including the incorporation of recycled materials, solar photovoltaic (PV) systems, electrification stations, electrochromic and solar PV glass, super insulation, and advanced interior and exterior building systems to minimize its carbon footprint. Phase II will be advanced consistent with the commitments in the Final EA or EIR.
<i>Provide 400 Hertz (Hz) of power and pre-conditioned air at the new aircraft gates.</i>	Phase I: Implemented. 400 Hz power and pre-conditioned air have been installed at the new gates constructed under Phase I. The power and pre-conditioned air will allow for aircraft engine shutdown while at gates, reducing emissions and noise. Phase II will be advanced consistent with the commitments in the Final EA or EIR.
Site Planning and Sustainable Design / Greenhouse Gas Reduction	
<i>Incorporate sustainable design in design, construction, and operations including: Improved building envelope, Improved Air Handling Units; Efficient water loops; Reduced interior lighting power density.</i>	Phase I: Implemented. The terminal includes a well-insulated façade, advanced systems, and renewable energy systems. Phase I was designed to maximize solar gain from renewable energy systems and optimize natural light through multi-level window design, reducing interior lighting energy demands. The building utilizes improved air handling units, which reduce energy consumption by releasing conditioned air near the lower zones of passenger-occupied spaces and allowing warm, humid air to rise naturally and be exhausted. The use of PV glass on south-facing windows allows for automatic tinting, helping to keep the building cool and further reducing energy use. The building envelope and roof were designed to withstand high winds and a 500-year storm during any season, with all critical infrastructure elevated in accordance with Massport's <i>Floodproofing Design Guidelines</i> . Water conservation technology was incorporated within the design to reduce water use. Phase II will be advanced consistent with the commitments in the Final EA or EIR.

Table 10-1 Terminal E Modernization Project (EEA #15434) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
<i>Specify roofing materials with a minimum reflectance rating of 0.70 and emittance value of at least 0.75 for a minimum of 75% of the available roof area. Install non-glare roofing materials.</i>	Phase I: Implemented. The building's roof achieved this reflectance rating as it reflects heat, mitigating the heat island effect. PV glass facing south reduces internal glare through automatically darkening to help keep the building cooler and reduce energy use. Phase II will be advanced consistent with the commitments in the Final EA or EIR.
<i>Incorporate infrastructure for collection, storage, and handling of recyclable materials.</i>	Phase I: Implemented. The building includes infrastructure for the collection, storage, and handling of recyclable materials. Waste reporting for Logan Airport is discussed in Chapter 11, Section 11.1.2.3. This includes the use of Oscar, an Artificial Intelligence (AI) sorting assistant that helps increase recycling success. Phase II will be advanced consistent with the commitments in the Final EA or EIR.
<i>Require contractor to develop a construction waste management plan that requires diversion or reduction of construction waste by at least 75%.</i>	Phase I: Implemented. 77 percent of waste was diverted from landfill, totaling 3,472 pounds. See Chapter 11, Section 11.1.2.3. Phase II will be advanced consistent with the commitments in the Final EA or EIR.
<i>Establish a project-specific goal for sourcing materials extracted, harvested, recovered, and or manufactured within New England.</i>	Phase I: Implemented. In alignment with Massport <i>Sustainability Design Guidelines</i> , the project prioritized utilizing recycled materials from local sources throughout the building to minimize GHG emissions through development. Phase II will be advanced consistent with the commitments in the Final EA or EIR.
<i>Design project to achieve energy efficiencies of a minimum of 20% below the MA Energy Code.</i>	Phase I: Implemented. Phase I achieved an energy efficiency of 25 percent, exceeding the Massachusetts Energy Code. Phase II will be advanced consistent with the commitments in the Final EA or EIR.
<i>Include water conservation devices that reduce water use by 20% below code.</i>	Phase I: Implemented. Phase I achieved a 31 percent annual reduction in water use through water conservation devices and technology. Phase II will be advanced consistent with the commitments in the Final EA or EIR.
<i>Include a minimum of 25,000 square feet of roof top solar photovoltaic system (approximately 300 kilowatt [kW]). Heat restroom hot water with solar units.</i>	On-going. The building includes 5,500 square feet of PV glass with a 20 kW capacity. The roof was designed for the potential for a future solar PV system. The addition of 25,000 square feet of solar PV is included in the scope for Phase II.

Table 10-1 Terminal E Modernization Project (EEA #15434) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
<i>Incorporate occupancy sensors in all indoor areas to reduce electrical demand.</i>	Phase I: Implemented. Occupancy sensors were incorporated throughout the building to reduce electrical demand. The multi-tier window system additionally allows for increased natural light, reducing electrical demand. Phase II will be advanced consistent with the commitments in the Final EA or EIR.
<i>Evaluate other energy efficiency/greenhouse gas reduction measures as project design progresses.</i>	Phase I: Implemented. Energy efficiency measures result in a 25 percent reduction in energy use. Throughout the design, innovative solutions were employed to enhance energy efficiency and mitigate greenhouse gas emissions. The building's strategic design, which maximizes solar benefits, has reduced electrical demand through natural light and provides for future solar PV opportunities. Advanced air handling reduces energy needs while providing a comfortable environment. From these advancements, Massport anticipates reducing annual electricity consumption by 10 percent due to efficiencies from Phase I.
Air Quality	
<i>Reduce operational-related carbon dioxide (CO₂) emissions associated with the Project by a minimum of 30% percent.</i>	On-going. Reduced operational GHG from the efficiencies within Terminal E resulted in a reduction of 1,414 metric tons of carbon dioxide equivalent (MTCO ₂ e) compared to business-as-usual conditions. Phase II will continue to advance operational GHG emissions reductions.
Stormwater Management	
<i>Replace and upgrade stormwater management.</i>	Phase I: Implemented. A new stormwater management system was installed to handle stormwater associated with Phase I. Phase II will be advanced consistent with the commitments in the Final EA or EIR.
Construction Period Impacts	
<i>In accordance with DEP's Clean Air Construction Initiative, the Authority will require that construction contractors to install emission control devices such as diesel oxidation catalyst and/or particulate filters on certain equipment types (i.e., front-end loaders, backhoes, excavators, cranes, and air compressors).</i>	Implemented.
<i>Retrofitting of certain construction equipment types with emission controls such as diesel oxidation catalyst and/or particulate filters.</i>	Implemented.

Table 10-1 Terminal E Modernization Project (EEA #15434) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
<i>Selection of high efficiency "temporary" space heating/cooling systems.</i>	Implemented.
<i>Remediate subsurface contamination, as necessary, if encountered during tank removals or other excavation activities as part of construction (in compliance with the Massachusetts Contingency Plan).</i>	Implemented.
<i>Soil treatment and reuse on site as part of a Soil Management Plan.</i>	Implemented.
<i>Voluntary compliance with the requirements of City of Boston noise ordinances, including restrictions on the types of equipment that can be used, and limitations on the hours when certain activities can take place (the City of Boston noise ordinance establishes restrictions during the construction hours between 7:00 PM and 7:00 AM).</i>	Implemented.
<i>Construction worker vehicle trip limitation, including requiring contractors to provide off-Airport parking and use of high-occupancy vehicle transportation modes for employees.</i>	Implemented.
<i>Implement Indoor Air Quality (IAQ) Management Plan during construction.</i>	Implemented.
Construction Traffic Operations	
<i>Construction-related traffic will be required to access and egress through the North Gate using only state and federal highways and the Airport roadway network. Construction- related traffic on local East Boston roadways will be prohibited.</i>	Implemented.
Construction Traffic Operations	
<i>Construction employee parking spaces will not be permitted on the construction site nor will provisions be made for them elsewhere on-Airport with the exception of a small number of spaces for supervisory personnel. The Authority will require contractors on this Project to implement construction worker vehicle trip management measures, including requiring off-Airport parking and HOV transportation modes for contractor employees.</i>	Implemented.
<i>Police details will be employed, as needed, to manage traffic and ensure public safety.</i>	Implemented.

Table 10-1 Terminal E Modernization Project (EEA #15434) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
Construction Air Quality	
<i>Construction emissions will be reduced and controlled by mandatory contractor implementation of the following best practices:</i>	Implemented.
<i>Encouragement for construction-worker site access/egress using dedicated buses and vans;</i>	Implemented.
<i>Reduction of exposed erodible surface areas to the extent feasible;</i>	Implemented.
<i>Covering of exposed surface areas with pavement or vegetation in an expeditious manner and periodic watering;</i>	Implemented.
<i>Minimizing equipment idling times;</i>	Implemented.
<i>Reduction of on-site vehicle speeds;</i>	Implemented.
<i>Ensuring contractor implementation of appropriate fugitive dust and equipment exhaust controls;</i>	Implemented.
<i>Use of low- or zero-emissions equipment to the maximum extent feasible; and</i>	Implemented.
<i>Use of covered haul trucks during materials transportation.</i>	Implemented.
Construction Noise	
<i>Require construction equipment to deploy noise-reduction measures, such as the use of proper mufflers, measures to limit noise from truck traffic. Primarily operate only during daylight hours (7:00 AM to 7:00 PM).</i>	Implemented.

Source: Massport, 2025.

10.3 Logan Airport Parking Project – EEA #15665

The Logan Airport Parking Project includes the construction of new commercial parking spaces in front of Terminal E, which is currently used for surface parking. The updated Logan Airport Parking Project will add approximately 4,000 commercial revenue spaces within a new garage in front of Terminal E. Located in the central terminal area of the Airport, the Terminal E Garage will also improve connectivity to the existing parking complex and Airport roadways. No parking spaces are being proposed for the Economy Garage at this time.

The approximately 4,000 spaces will be accommodated in a nine-story facility, with commercial parking beginning on the second floor. The facility will be served by **electric vehicle (EV)** charging facilities to support Massport's Roadmap to Net Zero.

The new Garage will be connected to existing facilities:

- New pedestrian bridges will connect from the garage to northwestern Terminal C and from the garage to the west side of Terminal E;
- The existing pedestrian bridge between the West Garage and Terminal E will be dismantled for the portion within the footprint of the new garage, and the walkway will be integrated into the Garage floor plan to allow for better vehicular and pedestrian circulation; and
- A vehicular bridge will connect the fourth level of the West Garage to the new garage.

In addition, the Project will also include roadway enhancements and curb reconfiguration to improve vehicle access, particularly for HOV, and minimize idling time at curbs. Future EDRs and ESPRs will provide updates on the project, as available. **Figure 10-2** shows the location of the Logan Airport Parking Project. **Table 10-2** lists each of the Section 61 mitigation commitments for the Logan Airport Parking Project and Massport's progress in completing these measures.



Figure 10-2 Logan Airport Parking Project
EEA#15665



10.3.1 Permitting History

- Certificate on the ENF issued on May 5, 2017.
- Certificate on the Draft EIR issued on August 2, 2019.
- Certificate on the FEIR issued on January 30, 2020.

10.3.2 Project Status

In 2018, MassDEP and the U.S.EPA approved an amendment to the Logan Airport Parking Freeze to add 5,000 additional spaces at Logan Airport. Massport filed an EIR and MEPA issued a Certificate in January 2020, approving new parking in two Airport campus locations:

- 2,000 spaces in a new Garage across from Terminal E; and
- 3,000 spaces on additional floors at Economy Garage.

Construction of the MEPA- and FAA-approved Garage in front of Terminal E was put on pause during the pandemic. By late 2023, Massport had resumed progress on the project and initiated preliminary design efforts that considered current conditions and future demand projections.

As of December 2024, the preliminary design of the Terminal E Garage was on-going in preparation for construction, which is anticipated to begin in 2025. The updated garage design includes improved pedestrian and vehicular circulation features, including:

- New pedestrian bridges connecting the garage to Terminal C, Pier A, and the west side of Terminal E;
- A new vehicular bridge linking the West Garage to the Terminal E Garage;
- Dismantling of the existing pedestrian bridge between the West Garage and Terminal E, with new connections integrated into the garage floor plan; and
- Campus-wide roadway and curbside reconfigurations to improve HOV access, minimize idling, and reduce emissions.

The Terminal E Garage continues to comply with the Logan Airport Parking Freeze and will allow Massport to recover approximately 2,000 commercial parking spaces displaced from the Central and Terminal B Garages due to HOV and **Ride App** initiatives. Even with the addition of the new garage, Logan Airport will remain approximately 3,000 commercial spaces below the Parking Freeze limit. Further details on this project are included in Chapter 4, Section 4.1.

Table 10-2 Logan Airport Parking Project (EEA #15665) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
Overall Project Benefits	
<i>Accommodate existing and anticipated air passenger demand for parking to reduce drop-off/pick-up mode share and associated vehicle miles travelled (VMT) and on-Airport and off-Airport air emissions.</i>	The new parking spaces will be constructed to reduce drop-off and pick-up mode share and associated VMT, and on-Airport and off-Airport air emissions.
<i>Reuse existing developed areas (i.e., the Project sites avoid undeveloped, greenfield lands).</i>	The surface parking lot in front of Terminal E is fully developed and currently in use for parking.
<i>Selecting project sites with community input that are in areas already used for parking, are on existing bus/shuttle routes, and are separated from nearby residential communities.</i>	The surface parking lot in front of Terminal E was selected as the project site with community input. It is on existing bus or shuttle routes and is separated from nearby residential communities.
<i>Providing added noise barrier benefits in conjunction with the Terminal E Modernization Project, through the expansion of the existing Economy Garage.</i>	The project no longer includes building atop the Economy Garage and is located in the center of the Airport, away from the community.
<i>Providing dynamic signage / messaging, parking reservation system, and parking guidance via electronic space occupancy detection to reduce on-Airport circulation as well as associated VMT and air emissions.</i>	Final design will include these measures to reduce on-Airport circulation as well as associated VMT and air emissions.
Sustainability and Resiliency	
<i>Incorporating measures from the United States Green Building Council (U.S.GBC) ParkSmart® rating system into the project's technology, structural design, and operation.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Reducing lighting power densities from a base of 0.19 watts per square foot to a maximum of 0.05 watts per square foot.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Installing occupancy sensors and photocells on all applicable interior and exterior lighting.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Installing programmable thermostats where applicable (i.e., mechanical / electrical rooms).</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Designing the parking decks to be open air, negating the need for ventilation system.</i>	All new parking spaces will be open-air.
<i>Performing building commissioning in accordance with American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Guideline 0-2005 and ASHRAE Guideline 1.1-2007.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Incorporating a solar photovoltaic (PV) system at the new garage in front of Terminal E capable of offsetting 50 percent of the facility's total energy consumption.</i>	Mitigation measures will be implemented when design and construction proceed.

Table 10-2 Logan Airport Parking Project (EEA #15665) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
<i>Relocating the existing solar PV system at the new garage in front of Terminal E capable of offsetting 50 percent of the facility's total energy consumption, including all lighting and power required for its electric vehicle (EV) charging stations.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Reserving parking spaces for alternative fuel vehicles (e.g., EVs) amounting to at least 1 percent of total spaces and assigning preferred parking spaces for other low-emitting and fuel-efficient vehicles amounting to at least another 1 percent of total spaces.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Installing 11 EV charging stations (22 ports) in the new garage in front of Terminal E.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Designing and building the proposed garages to accommodate expanded EV charging infrastructures to accommodate 150 percent of demand.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Integrating vertical landscaping into the façade of the new garage in front of Terminal E.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Adhering to durable design principles and a preventative maintenance plan to extend facility lifespan and avoid greenhouse gas emissions caused by future large-scale construction and renovation activities.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Installing and applying only no- or low-volatile organic compound (VOC) coatings, paints, and sealants.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Installing halon-free fire suppression systems in each garage.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Complying with Massport's Floodproofing Design Guide and elevating critical equipment and systems above the designated design flood elevations.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Implementing an active recycling program to reduce the amount of waste sent to regional landfills/incinerators and to reduce greenhouse gas emissions associated with material disposal.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Displaying educational materials to convey the facilities' environmentally sustainable design and operations.</i>	Mitigation measures will be implemented when design and construction proceed.
Construction Period Mitigation	
<i>Providing on-Airport storage areas for construction materials.</i>	Mitigation measures will be implemented when design and construction proceed.

Table 10-2 Logan Airport Parking Project (EEA #15665) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
<i>Coordinating the arrival of large construction equipment among various on-Airport projects and limiting their arrival or removal during peak travel hours (both Airport and commuter peaks).</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Developing specific truck routing and/or staging plans for implementation by the various contractors.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Requiring construction managers to prepare:</i> • <i>Draft Soil Management Plan;</i> • <i>Draft Stormwater Pollution Prevention Plan;</i> • <i>Draft Management Plan for Dewatering, if needed;</i> • <i>Draft Health and Safety Plan.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Employing a Construction Waste Management Plan that requires at least 85 percent of materials to be recycled or reused.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Controlling rodents through routine inspection, monitoring, and treatment.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Prioritizing the use of construction equipment and materials that are repurposed, reused, or recycled (or contain recycled content), where feasible.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Prioritizing construction equipment and materials that are sourced regionally (i.e., within 300 miles of the Project sites) to reduce greenhouse gas emissions associated with their transport.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Using regional (i.e., within 75 miles) labor to the greatest extent practicable.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Encouraging construction companies to provide off-Airport parking for their employees and to provide shuttle services from these locations (shuttles are required to use the Coughlin Bypass road to access the Airport).</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Requiring all construction vehicle / equipment to follow anti-idling procedures and all construction managers to provide associated training.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Requiring the use of low- or zero-emissions equipment, where practicable.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Requiring the retrofitting of appropriate diesel construction equipment with diesel oxidation catalyst and/or particulate filters.</i>	Mitigation measures will be implemented when design and construction proceed.

Table 10-2 Logan Airport Parking Project (EEA #15665) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
<i>Requiring contractors to use Ultra Low Sulfur Diesel Fuel (ULSD).</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Maintaining low on-site vehicle speeds.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Deploying air quality and fugitive dust management best practices, such as reducing exposed erodible surface areas through appropriate materials and equipment staging, covering exposed surface areas with pavement or vegetation in an expeditious manner, and stabilizing soil with cover or periodic watering.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Using and maintaining construction equipment appropriately to avoid unnecessary noise and applying noise-reduction measures to reduce noise from pile driving by at least 5 A-weighted decibels (dBA) below their unmitigated levels 1.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Requiring trucks to access the Project sites by Route 1A, Interstate 90, Coughlin Bypass Road, and the main Airport roadway only or other routes in compliance with transportation safety requirements.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Prohibiting trucks from using local streets.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Specifying truck routes in contractors' construction specifications.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Using concrete production and batching plants with access via Route 1A or Interstate 90.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Encouraging construction workers to use MBTA transit services, Logan Express, the water shuttle, and other high-occupancy modes of travel.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Putting into place an Erosion and Sedimentation Control Program, in compliance with the Stormwater Pollution Prevention Plan, to protect water quality and to minimize construction phase impacts to Boston Harbor.</i>	Mitigation measures will be implemented when design and construction proceed.
<i>Deploying spill prevention measures and sedimentation controls throughout the construction phases to prevent pollution from construction equipment and erosion.</i>	Mitigation measures will be implemented when design and construction proceed.

Table 10-2 Logan Airport Parking Project (EEA #15665) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
<i>Using the following erosion and sedimentation controls throughout the construction phases:</i> <i>Perimeter barriers such as straw wattles or compost-filled "silt sock" barriers will be placed around upland work areas to trap sediment transported by runoff before it reaches the drainage system or leaves the construction site;</i> <i>Existing catch basins within the work sites will be protected with barriers (where appropriate) or silt sacks;</i> <i>Open soil surfaces will be stabilized within 14 days after grading or construction activities have temporarily or permanently ceased.</i>	Mitigation measures will be implemented when design and construction proceed.
Ground Access Improvement, Trip Reduction, and Emissions Reduction	
<i>Implement the following ground access improvement, trip reduction, and emission reduction initiatives:</i> <i>Advance the electrification of ground service equipment, pursuant to which all ground service equipment will be replaced no later than the end of 2027 (as available);</i> <i>Expand Logan Express capacity by 10 percent;</i> <i>Increase the percentage of zero emission taxi, livery, and Ride App vehicles (i.e., those associated with companies such as Uber and Lyft) by providing: high-speed electric vehicle charging stations at all taxi, livery, and Ride App pools; and taxi and Ride App queue priority to electric vehicles (subject to negotiation with companies).</i>	Mitigation measures will be implemented when design and construction proceed.

Source: Massport, 2025.

10.4 Runway 27 End Runway Safety Area (RSA) Improvements Project – EEA #16433

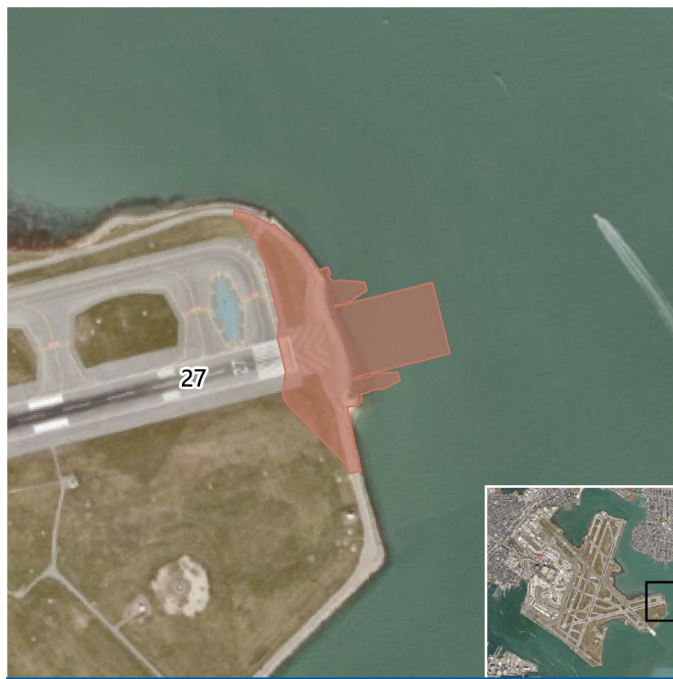
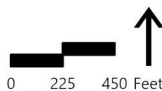


Figure 10-3 Runway 27 End Runway Safety Area EEA#16433

 Runway 27 End RSA

Notes: Status as of 12/2024
Source: Nearmap (October 2024)



The purpose of the project is to enhance safety for aircraft and their passengers in emergencies by improving the Runway 27 End RSA. The project advances an overriding public interest of safety; “the safe operation of the Airport and airway system is the highest aviation priority.”¹ The project is a required FAA safety project that does not extend the runway or affect normal runway operations, capacity, or types of aircraft using the runway. The project’s location is illustrated in **Figure 10-3**.

An RSA is a flat surface surrounding the runway that is clear of obstructions. The FAA requires Airports to provide RSAs at runway ends and on the sides of a runway to reduce the risk of injury and damage to aircraft in the event of an emergency.

Runway 9-27 is 7,001 feet long and 150 feet wide. It is classified as a Runway Design Code D-V runway. The FAA design standards for a D-V runway require an RSA measuring

1,000 feet long beyond each end of the runway and a width of 500 feet. The Runway 27 End is located on the east end of the runway, and the eastern edge of the airfield, adjacent to Boston Harbor. The Runway 27 End RSA is only 150 feet long and does not meet the FAA’s RSA length requirement of 1,000 feet for a full dimension RSA. The location of the Project is illustrated in **Figure 10-3**. The FAA determined the preferred option to enhance the Runway 27 End RSA is an approximately 650-foot-long by 300-foot-wide RSA on pile pile-supported deck with an **Engineered Material Arresting System (EMAS)** installed on the deck.

1 49 U.S.C. § 47101

10.4.1 Permitting History

- Certificate on the ENF issued on October 8, 2021.
- Certificate on the Draft EIR issued on August 29, 2022.
- Certificate on the FEIR issued on January 30, 2023.
- FAA FONSI issued on March 1, 2023.
- Certificate on NPC issued on June 30, 2025.

10.4.2 Project Status

The Runway 27 RSA Improvements Project proposes construction of a pile-supported deck over Boston Harbor at the approach end of Runway 27. The project includes an EMAS to meet FAA safety standards. While this alternative avoids major operational or upland impacts, it results in unavoidable impacts to coastal resources. A comprehensive mitigation program for the nearby areas of Boston Harbor is being developed to address these effects. Construction is anticipated to begin in 2025, with completion expected in 2027.

Environmental review advanced in 2023. A joint Draft EA and FEIR was filed with the FAA and MEPA in late 2022, followed by MEPA’s issuance of a Certificate on the FEIR in January 2023, directing the project to proceed with permitting. A final EA was submitted to the FAA, and a FONSI was issued in March 2023.

As of December 2024, the project continued to advance through federal, state, and local permitting. In April 2025, Massport filed an NPC with MEPA to address design updates related to two emergency access and egress ramps. These ramps were extended to reach one foot below Mean Lower Low Water, as required by Massport Fire Rescue to ensure effective emergency response under all tidal conditions. These design changes expanded the project’s limit of work and resulted in additional coastal resource impacts. MEPA issued a Certificate on the NPC, acknowledging the design modifications and directing continued coordination with permitting agencies.

Table 10-3 Runway 27 End Runway Safety Area Improvements Project (EEA #16433) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
Land Containing Shellfish	
<i>Contribute funding to Massachusetts Department of Marine Fisheries (DMF) shellfish restoration program.</i>	Mitigation measures will be implemented as construction proceeds.
Coastal Wetlands	
<i>Provide in-lieu fee (U.S. Army Corps of Engineers [U.S.ACE]) for impacts to mud flat.</i>	Implemented. An in-lieu fee payment for permanent mud flat impacts was made in 2025 as part of the revised permitting approach outlined in the 2025 Notice of Project Change (NPC).

Table 10-3 Runway 27 End Runway Safety Area Improvements Project (EEA #16433) Details of On-going Section 61 Mitigation Measures (as of December 31, 2024)

Mitigation Measure	Status
<i>Potential wetland mitigation (associated with piles and emergency egress ramps) based on U.S.ACE and Massachusetts Department of Environmental Protection (MassDEP) guidance.</i>	Mitigation measures will be implemented as construction proceeds.
<i>Potential mud flat mitigation in the form of shoreline restoration.</i>	Mitigation measures will be implemented as construction proceeds.
State Threatened and Endangered Species	
<i>Replace lost upland grassland habitat by removing existing pavement.</i>	Mitigation measures will be implemented as construction proceeds.
Construction Period Mitigation	
<i>In-water time of year restriction for silt producing construction activities of February 15 to June 30.</i>	Mitigation measures will be implemented as construction proceeds.
<i>Turbidity curtains will be used to surround the in-water work area to contain any turbidity that may be created by the construction activities.</i>	Mitigation measures will be implemented as construction proceeds.
<i>A vibratory pile driver will be used as much as possible, and a ramp up or soft start for hammer driving with padding on top of the pile will lessen noise impacts.</i>	Mitigation measures will be implemented as construction proceeds.
<i>Restore upland grassland habitat disturbed by construction.</i>	Mitigation measures will be implemented as construction proceeds.

Source: Massport, 2025.