



Boston Logan International Airport

Logan Runway 27 Runway Safety Area (RSA) Enhancements Project EEA No. 16433

PROJECT SUMMARY (July 2022)

Project Overview. The Massachusetts Port Authority (Massport) is in the concept design and environmental permitting phase for enhancement of the runway safety area (RSA) at the end of Runway 27 at Boston Logan International Airport. The proposed improvements are part of a continuing Federal Aviation Administration (FAA) safety program required to enhance the RSA, to the extent feasible, to be compliant with FAA's current airport design standards and to enhance rescue access in the event of an airfield emergency. **RSAs are safety improvements and do not extend runways or have any effect on normal runway operations, runway capacity, or types of aircraft using the runway.**

The eastern end of Runway 9/27 (Figure 1) does not meet the current FAA design standards for length as it was constructed before the current FAA design standards were in place. Runway Safety Areas are typically level areas 1,000 feet long by 500 feet wide that surround the runway. RSAs may be shorter in length if an Engineered Materials Arresting System (EMAS) is installed at the runway end to provide an equivalent level of safety. EMAS is a bed of crushable concrete blocks that, when run over, slow down and can safely stop an airplane during an emergency.

Based on the 2019 FAA determination for this runway, the preferred RSA enhancement option for preliminary design and permitting will be the construction of a 306-foot wide pile-supported deck (or pier) extending approximately 650 feet from the existing runway threshold, with an EMAS installed on the deck. Because of the irregular shoreline at this area, it is expected that the 306-foot wide deck would extend to the northeast over Boston Harbor between 450 to 500-feet. Massport previously constructed a similar RSA deck in 2011/2012 at the eastern end of Runway 15R/33L. The proposed Runway 27 RSA deck will not include a light pier as exists at the Runway-end 33L RSA deck. Although the project site is in close proximity to the Town of Winthrop, all work will be within the City of Boston.

The project is still in the early phases of concept design and environmental permitting; based on the current schedule, construction would occur in two phases during the summer/fall of 2025 and 2026. Each construction phase would last approximately 2 months.

Summary of Key Draft Environmental Impact Report (DEIR) Findings

- The pile-supported deck design and dimensions represent the smallest environmental footprint that meets the FAA's critical safety requirements
- There are permanent impacts along the shoreline and in the harbor associated with the installation of the deck support pilings (<1,000 sf); mitigation for those impacts are addressed in the DEIR and will be finalized through the local, state, and federal permitting process
- There will be no impact on the adjacent navigation channel
- There will be no impact to Snake Island in Winthrop

Anticipated Construction Impacts. As was experienced for the construction of the Runway 33L RSA deck, there will be some permanent impacts to the nearshore harbor habitat by installation of the deck support system (expected to be pilings). There will also be a range of typical temporary construction impacts including construction vehicle trips, equipment noise and emissions, etc. The safety area deck is expected to be constructed primarily from the water using barge-mounted equipment. Some phases of deck construction will require periodic runway shutdowns to safely accommodate the barge(s) and other construction equipment. Runway shutdowns often result in a temporary shifting of runway utilization subject to wind and weather patterns. Because RSA improvements are purely safety enhancements and do not impact runway operational capabilities, there will be no changes to runway utilization as the result of this project once construction is completed.

Construction Mitigation Measures. A range of environmental controls will be implemented during project construction, including:

- Construction equipment/pile driving noise reduction mitigation measures
- Time of year (TOY) limitations for in-water construction activities to protect fish habitat
- Silt curtains will be used to protect water quality
- Limited work hours – primarily daylight hours
- Construction vehicles restricted from local roads (standard practice for all projects)
- Community construction hotline will be provided

Climate Change/Resiliency. This safety project must be designed to connect with the existing airfield runway/taxiway network. The deck will be constructed with a 75-year design life and designed to withstand predicted sea level rise and more frequent and intense storm events.

Greenhouse Gas (GHG) Impacts. The completed safety project will not change how the runway or airfield operates and will not affect which aircraft can operate on the runway; therefore there will be no difference in GHG emissions with or without the project. There will be temporary increases in construction equipment emissions; those emissions have been evaluated in the DEIR that is currently in the public review phase with the Massachusetts Environmental Policy Act (MEPA) office.

Permit Requirements. Based on the current concept design, RSA construction may require the following environmental reviews and permits:

Federal

- National Environmental Policy Act (NEPA): *Environmental Assessment (FAA)*
- US Army Corps of Engineers: *Section 10/404 permit*

State

- MEPA Review: Environmental Notification Form (ENF), Draft and Final Environmental Impact Report (EIR)
- Massachusetts Department of Environmental Protection:
 - MA Wetlands Protection Act
 - Chapter 91 License amendment
 - 401 Water Quality Certification
- MA Office of Coastal Zone Management: Federal Consistency Statement

Local

- Boston Conservation Commission: *MA Wetlands Protection Act*

Anticipated Environmental Review and Construction Schedule

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| • MEPA ENF filing | August 2021 |
| • Draft EA/EIR | June 2022 |
| • Final EIR/NEPA | Fall 2022 |
| • MEPA/NEPA decisions issued | Early 2023 |
| • File permit applications | 2022-2023 |
| • All permits/approvals issued | 2023 |
| • Final Design | 2023 – 2024 |
| • Construction | 2025 – 2026 |

Outreach and Communications

In preparation for this meeting, Massport has reached out to local and state elected officials, representatives in East Boston and Winthrop, Massport Community Advisory Committee, and a range of area community groups surrounding the project site. Notice of the meeting has been placed in the East Boston Times, Winthrop Transcript, El Mundo, and on Massport's website at <http://www.massport.com/logan-airport/about-logan/environmental-reports/>. This voluntary meeting is being conducted in acknowledgement of the project's proximity to nearby residential areas in Winthrop and East Boston and environmental justice communities surrounding Logan Airport.

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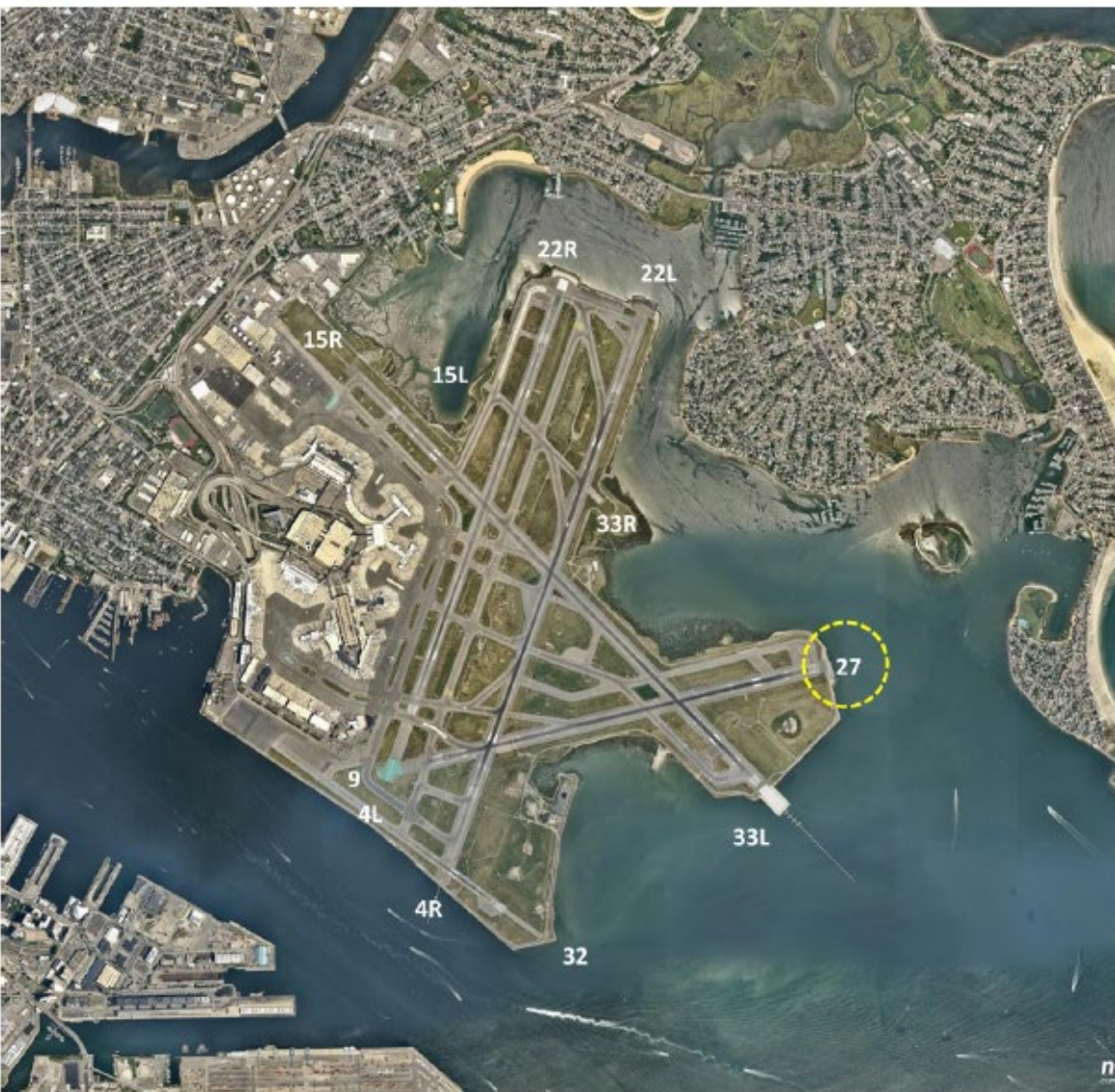


Figure 1 – Runway 27 Runway Safety Area Project Location