Notice of Project Change
EEA# 16433

Runway 27 End Runway Safety Area Improvements Project

Boston Logan International Airport

East Boston, Massachusetts

PREPARED FOR

Massachusetts Port Authority

PREPARED BY

April 2025

PREPARED FOR

Massachusetts Port Authority

PREPARED BY

WSP USA, Inc.

Vanasse Hangen Brustlin, Inc.

Jacobs

Cover image: NearMap March 23, 2022

Massachusetts Port Authority
One Harborside Drive
East Boston, MA 02128-2909
Telephone (617) 568-5000
www.massport.com

April 30, 2025

The Honorable Rebecca Tepper, Secretary
Tori Kim, Director of MEPA Office
Executive Office of Energy and Environmental Affairs
Attn: MEPA Reviewer (EEA #16433)
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: Boston Logan International Airport
Runway 27 End Runway Safety Area Improvements Project
Notice of Project Change EEA #16433

Dear Secretary Tepper and Director Kim:

On behalf of the Massachusetts Port Authority (Massport), we are pleased to submit the Notice of Project Change (NPC) for the Boston Logan International Airport Runway 27 End Runway Safety Area Improvements Project (the Project) for public review in accordance with the Massachusetts Environmental Policy Act (MEPA) regulations. The Final Environmental Impact Report (FEIR) was issued on January 30, 2023. This NPC is being submitted due to material changes resulting in increased coastal impacts, however no additional MEPA thresholds have been crossed as a result of the Project Change.

As was outlined in the previous MEPA filings, Massport has a continuing program of enhancing airfield safety at all its airports, including enhancing the Runway Safety Area (RSA) at the Runway 27 End at Boston Logan International Airport (Logan Airport). Federal Aviation Administration (FAA) policy requires that Massport enhance the RSA, to the extent feasible, to be consistent with the current FAA airport design criteria for RSAs and to improve rescue access in the event of an emergency. **This Project would not extend the usable length of the runway nor have any effect on normal runway operations, runway capacity, or types of aircraft that use the runway.**

Because of Logan Airport's location, surrounded on three sides by Boston Harbor, any improvement to the Runway 27 End RSA would require work in the marine intertidal and subtidal areas. Massport has worked closely with FAA on the conceptual design of the proposed safety improvements to avoid and minimize impacts; however, there are no feasible alternatives that both meet FAA safety requirements and avoid marine resource impacts. Recognizing this at the outset, Massport proactively reached out to key local, state, and federal resource agencies well in advance of any regulatory filings to begin the development of mitigation strategies, while continuing to explore impact avoidance opportunities.

To minimize environmental impacts to Boston Harbor, in 2019, FAA determined the preferred option to enhance the Runway 27 End RSA is an approximately 650-foot-long by 306-foot-wide RSA on a pile-supported deck with an Engineered Materials Arresting System (EMAS) installed on the deck. Because of the unique environmental setting and the extraordinary cost of the type of structure proposed, FAA approved the narrowing of the pile-supported deck from the required 500-foot-wide deck to a 300-foot-wide deck (the actual width of the deck would be 306 feet to allow for safety rails) as past FAA projects have shown that this would provide an equivalent level of safety as a full-dimensional RSA. An EMAS is constructed of collapsible concrete blocks with predictable deceleration forces. In an emergency, if an aircraft rolls into an EMAS, the tires of the aircraft collapse the lightweight concrete, and the aircraft is slowed down in a way that minimizes damage to the aircraft. Because of the irregular shoreline in this area, it is expected that the 306-foot-wide deck would extend approximately 450 feet over Boston Harbor. The Project will not lengthen Runway 9-27 nor change how it operates – this is a safety enhancement only.

The NPC proposes design modifications to emergency ramps and associated grading related to the ramps. As part of the MEPA and NEPA process and initial permitting, Massport evaluated two emergency access/egress ramps that are intended to provide safe access for emergency response personnel in the event of a water landing. In advancing the design to support post-NEPA/MEPA permitting, the design/build engineers identified several adjustments that were needed to achieve the design requirements for the emergency ramps. Several alternatives are considered and evaluated to minimize environmental impact. As a result, there will be increases in impacts to coastal and marine resources, while no additional MEPA threshold will be exceeded.

Through the use of EMAS on the pile supported deck, the Project would minimize coastal impacts while enhancing safety for Logan Airport's air passengers. The Project, once completed, would not change how Logan Airport operates. Updated mitigation measures are provided within this NPC to avoid and minimize construction-period impacts and associated mitigation.

The 20-day public comment period would begin on May 7, 2025 coincident with the publication of the MEPA *Environmental Monitor*, and would conclude on May 27, 2025. Parties on the distribution list are being sent a link to an electronic copy of the NPC. The NPC document will also be available at several public libraries and on Massport's website (https://www.massport.com/environment/project-environmental-filings/boston-logan). Consistent with evolving MEPA guidance on outreach with EJ populations, the NPC describes outreach to date.

We look forward to your review and to close consultation with you and other reviewers in the coming weeks. Please feel free to reach me at (617) 568-3546 or by email at bwashburn@massport.com.

Sincerely,

Massachusetts Port Authority

Brad Washburn, Deputy Director
Environmental Planning and Permitting

cc: S. Dennechuk, F. Leo, C. Busch/Massport
C. Quaine, L. Lesperance/FAA
Vivian Kimbell/VHB
Marla Engel/WSP

Massachusetts Port Authority
One Harborside Drive
East Boston, MA 02128-2909
Telephone (617) 568-5000
www.massport.com

30 de abril de 2025

Rebecca Tepper, Secretaria
Tori Kim, Directora de la Oficina de la MEPA
Oficina Ejecutiva de Energía y Asuntos Ambientales
At.: Revisor de la MEPA (EEA N.º16433)
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Asunto: Aeropuerto Internacional Logan de Boston
Proyecto de mejoras en el área de seguridad del extremo de la pista 27
Aviso de cambios en el proyecto EEA N.º 16433

Estimada secretaria Tepper y directora Kim:

En nombre de la Autoridad Portuaria de Massachusetts (Massport), nos complace presentar el Aviso de cambios en el proyecto (NPC) correspondiente al Proyecto de mejoras en el área de seguridad del extremo de la pista 27 del aeropuerto internacional Logan de Boston (el Proyecto) para su revisión pública de acuerdo con las reglamentaciones de la Ley de Políticas Ambientales de Massachusetts (MEPA). El Informe final de impacto ambiental (FEIR) fue emitido el 30 de abril de 2023. El presente NPC se presenta debido a cambios sustanciales que generan un aumento de los impactos costeros; sin embargo, no se han superado otros límites establecidos por la MEPA como resultado del cambio del proyecto.

Como se indicó en presentaciones anteriores de la MEPA, Massport cuenta con un programa continuo de mejoras de seguridad de los aeródromos en todos sus aeropuertos, incluida la mejora del área de seguridad de pista (RSA) en el extremo de la pista 27 del aeropuerto internacional Logan de Boston (aeropuerto Logan). La política de la Administración Federal de Aviación (FAA) exige que Massport mejore el área de seguridad de pista, en la medida de lo posible, para cumplir con los criterios actuales de diseño de aeropuertos de la FAA para las RSA y para mejorar el acceso de servicios de rescate en caso de emergencia. **El proyecto no ampliaría la longitud utilizable de la pista ni tendría efecto alguno en las operaciones habituales de la pista, su capacidad o los tipos de aeronaves que transitan por la pista.**

Debido a la ubicación del aeropuerto Logan, rodeado en tres de sus extremos por el puerto de Boston, cualquier mejora en el área de seguridad del extremo de la pista 27 supondría trabajos en las zonas marinas intermareales y submareales. Massport ha trabajado en estrecha colaboración con la FAA en el diseño conceptual de las mejoras de seguridad previstas a fin de evitar y minimizar los impactos; sin embargo, no hay alternativas viables que cumplan con los requisitos de seguridad de la FAA y, al mismo tiempo, eviten los impactos en los recursos marinos. Sabiendo esto desde un comienzo, Massport se comunicó, de manera proactiva, con los principales organismos de recursos locales, estatales y federales mucho antes de las fechas de las presentaciones reglamentarias para comenzar a desarrollar estrategias de mitigación, al tiempo que se evaluaban opciones para evitar el impacto.

Para minimizar los impactos ambientales en el puerto de Boston, en 2019, la FAA determinó que la mejor opción para mejorar el RSA del extremo de la pista 27 es un RSA de aproximadamente 650 pies de largo por 306 pies de ancho sobre una cubierta apoyada en pilotes con un sistema de detención de materiales de ingeniería (EMAS) instalado en la cubierta. Debido a la particularidad del entorno ambiental y al costo excepcional del tipo de estructura propuesta, la FAA aprobó que la cubierta apoyada en pilotes se redujera de los 500 pies de ancho requeridos a una cubierta de 300 pies de ancho (el ancho real de la cubierta sería de 306 pies para admitir barreras de protección), ya que proyectos anteriores de FAA demostraron que esto ofrecería el mismo nivel de seguridad que un RSA con las dimensiones exigidas. El EMAS se construye con bloques de hormigón que ceden con fuerzas de

desaceleración calculadas. En caso de emergencia, cuando una aeronave avanza sobre el EMAS, el hormigón aligerado se aplasta bajo los neumáticos de la aeronave, que desacelera de modo de no sufrir mayores daños. Debido a las irregularidades de la costa en esta zona, se prevé que la cubierta de 306 pies de ancho se extienda aproximadamente 450 pies sobre el puerto de Boston. El proyecto no extenderá la pista 9-27 ni alterará su funcionamiento; se trata únicamente de una mejora de la seguridad.

El NPC propone modificaciones en el diseño de las rampas de emergencia y la nivelación del terreno asociada con las rampas. Como parte del proceso relacionado con la MEPA y la NEPA y los permisos iniciales, Massport evaluó dos rampas de acceso/salida de emergencia destinadas a proporcionar un acceso seguro al personal de emergencias en caso de amerizaje. A fin de avanzar con el diseño y facilitar la obtención de los permisos posrevisión de la NEPA/MEPA, los ingenieros de diseño/construcción identificaron varias modificaciones necesarias para cumplir con los requisitos de diseño de las rampas de emergencia. Se están estudiando y evaluando varias alternativas para minimizar el impacto ambiental. Como resultado, aumentarán los impactos en los recursos costeros y marinos, aunque no se superará ningún otro límite establecido por la MEPA.

Mediante el uso del sistema EMAS sobre una cubierta apoyada en pilotes, el proyecto lograría minimizar los impactos costeros y mejoraría la seguridad de los pasajeros en el aeropuerto Logan. El proyecto, una vez finalizado, no alteraría el funcionamiento del aeropuerto Logan. El presente NPC incluye medidas de mitigación actualizadas para evitar y minimizar los impactos del período de construcción y la mitigación asociada.

El período de comentarios públicos de 20 días comenzaría el 7 de mayo de 2025, en coincidencia con la publicación del *Monitor Ambiental* de la MEPA, y concluiría el 27 de mayo de 2025. Los integrantes de la lista de distribución recibirán un enlace para acceder a una copia electrónica del NPC. El documento del NPC también estará disponible en varias bibliotecas públicas y en el sitio web de Massport (https://www.massport.com/environment/project-environmental-filings/boston-logan). En línea con las últimas directivas de la MEPA sobre la divulgación entre las comunidades de justicia ambiental, el NPC describe la difusión realizada hasta la fecha.

Quedamos a la espera de su revisión y esperamos poder finalizar la consulta con ustedes y otros revisores en las próximas semanas. Pueden comunicarse conmigo por teléfono al (617) 568-3546 o por correo electrónico a bwashburn@massport.com.

Atentamente.

Autoridad Portuaria de Massachusetts

Brad Washburn, subdirector
Planificación Ambiental y Permisos

cc: S. Dennechuk, F. Leo, C. Busch/Massport
C. Quaine, L. Lesperance/FAA
Vivian Kimbell/VHB
Marla Engel/WSP

Table of Contents

Appendices

List of Figures

List of Tables

Acronyms

Acronym	Description
AC	Advisory Circular
AHT	Annual High Tide
AHW	Annual High Water
APE	Area of Potential Effect
BCC	Boston Conservation Commission
BUAR	Board of Underwater Archaeological Resources
CFR	Code of Federal Regulations
CGP	Construction General Permit
CMR	Code of Massachusetts Regulations
CWA	Clean Water Act
CZM	Coastal Zone Management
DEIR	Draft Environmental Impact Report
DEP	Massachusetts Department of Environmental Protection
DGA	Designated Geographic Area
DMF	Massachusetts Division of Marine Fisheries
DPH	Department of Public Health
EA	Environmental Assessment
EDR	Environmental Data Report
EEA	Executive Office of Energy and Environmental Affairs
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EJ	Environmental Justice
EMAS	Engineered Materials Arresting System
ENF	Environmental Notification Form
ESPR	Environmental Status and Planning Report
FAA	Federal Aviation Administration
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
GHG	Greenhouse Gas
HAPC	Habitat Area of Particular Concern
HI	Hazard Index
ISA	Inclined Safety Area
LCS	Land Containing Shellfish
lf	Linear Feet
LSCSF	Land Subject to Coastal Storm Flowage
LSTA	Land Subject to Tidal Action
LUO	Land Under Ocean
MCAC	Massport Community Advisory Committee

MEPA	Massachusetts Environmental Policy Act
MESA	Massachusetts Endangered Species Act
MHC	Massachusetts Historical Commission
MHW	Mean High Water
MLW	Mean Low Water
MLLW	Mean Lower Low Water
NAAQS	National Ambient Air Quality Standards
NATA	National Air Toxics Assessment
NAVD	North America Vertical Datum
NEPA	National Environmental Policy Act
NERO	Northeast Regional Office
NHESP	Massachusetts Natural Heritage and Endangered Species Program
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPC	Notice of Project change
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
OOC	Order of Conditions
OSHA	Occupational Safety and Health Administration
PM	Particulate Matter
RIM	Runway Incursion Mitigation
RMAT	Resilient Massachusetts Climate Resilience Design Standards Tool
RSA	Runway Safety Area
SAS	Special Aquatic Sites
SAV	Submerged Aquatic Vegetation
sf	Square Feet
SWPPP	Stormwater Pollution Prevention Plan
TBD	To Be Determined
TOY	Time of Year
TSS	Total Suspended Solids
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WCC	Winthrop Conservation Commission
WPA	Wetlands Protection Act

Notice of Project Change

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

EEA #**16433**			
Project Name: **Boston Logan International Airport Runway 27 End Runway Safety Area (RSA) Improvements Project**			
Street Address: **One Harborside Drive**			
Municipality: **East Boston**		Watershed: **Boston Harbor**	
Universal Transverse Mercator Coordinates: **19T, 46 91 691N, 3 36 352W**		Latitude: **42°21'37" N** Longitude: **70°59'14" W**	
Estimated commencement date: **2025**		Estimated completion date: **2026**	
Project Type: **Aviation/Safety**		Status of project design: **60** %complete	
Proponent: **Massachusetts Port Authority (Massport)**			
Street Address: **One Harborside Drive**			
Municipality: **East Boston**	State: **MA**	Zip Code: **02128**	
Name of Contact Person: **Brad Washburn**			
Firm/Agency: **Massport**	Street Address: **One Harborside Drive**		
Municipality: **East Boston**	State: **MA**	Zip Code: **02128**	
Phone: **617-568-3524**	Fax:	E-mail: **Bwashburn@massport.com**	

With this Notice of Project Change, are you requesting:

a Single EIR? (see 301 CMR 11.06(8)) ☐Yes ☒**No**
a Special Review Procedure? (see 301CMR 11.09) ☐Yes ☒**No**
a Waiver of mandatory EIR? (see 301 CMR 11.11) ☐Yes ☒**No**
a Phase I Waiver? (see 301 CMR 11.11) ☐Yes ☒**No**

Which MEPA review threshold(s) does the revised project meet or exceed (see 301 CMR 11.03)? Identify any new or modified review threshold(s) associated with the project change.

- **11.03(3)(a)5. Provided that a Chapter 91 License is required, New non-water dependent use or Expansion of an existing non-water dependent structure, provided the use or structure occupies one or more acres of waterways or tidelands; and**
- **11.03(3)(b)1.f. alteration of one half or more acres of any other wetlands.**

Which Agency Permits does the revised project require?

- **Section 401 Water Quality Certification from Massachusetts Department of Environmental Protection (MassDEP)**
- **Chapter 91 License from MassDEP**
- **Federal Consistency Determination from the Massachusetts Office of Coastal Zone Management**
- **Massachusetts Endangered Species Act Review by Massachusetts Natural Heritage**

and Endangered Species Program (NHESP)

Identify any financial assistance or land transfer from an Agency of the Commonwealth for the revised project, including the Agency name and the amount of funding or land area in acres:

This is a project funded by, and on land owned by, an agency of the Commonwealth. Additional funding will be sought from the Federal Aviation Administration (FAA).

PROJECT INFORMATION

In 25 words or less, what is the project change? The project change involves . . .

Raising certain landside portions of the Project Site and extending the two proposed emergency access/egress ramps to one foot below mean lower low water.

See full project change description beginning on page 3.

Date of publication of availability of the ENF in the Environmental Monitor: September 9, 2021

Was an EIR required?	☒ **Yes**		☐ No; if yes,
was a Draft EIR filed?	☒ **Yes**	(Date: June 30, 2022)	☐ No
was a Final EIR filed?	☒ **Yes**	(Date: December 15, 2022)	☐ No
was a Single EIR filed?	☐ Yes	(Date:)	☐ No

Have other NPCs been filed? ☐ Yes (Date(s):) ☒ **No**

If this is an NPC solely for lapse of time (see 301 CMR 11.10(2)) proceed directly to **ATTACHMENTS & SIGNATURES**.

PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER

List or describe all new or modified Agency permits, financial assistance, or land transfers not previously reviewed: **include list of Agency Actions (e.g., Agency Project, Financial Assistance, Land Transfer, List of Permits)**

The only Agency Permit required to be modified is the NHESP's Conditional No-Take Determination, issued on June 21, 2024, which was reviewed under the Massachusetts Endangered Species Act.

Are you requesting a determination that this project change is insignificant such that an EIR should not be required (***note that the Proponent may also seek an advisory ruling under 301 CMR 11.10(6)***)? A change in a Project is ordinarily insignificant if it results solely in an increase in square footage, linear footage, height, depth or other relevant measures of the physical dimensions of the Project of less than 10% over estimates previously reviewed, provided the increase does not meet or exceed any review thresholds. A change in a Project is also ordinarily insignificant if it results solely in an increase in impacts of less than 25% of the level specified in any review threshold, provided that cumulative impacts of the Project do not meet or exceed any review thresholds that

were not previously met or exceeded. (see 301 CMR 11.10(6))

☒**Yes** ☐**No; if yes, provide an explanation of this request in the Project Change Description below.**

The Project Change will not significantly increase the environmental consequences in terms of the factors listed in 301 CMR 11.10(6):

(a) Expansion of Project: The design change will focus on extending the ramps to 1 foot below mean low water and adjusting the emergency ramps profiles to meet the new elevated landside grade. Additional fill is required within the ramp footprints to extend them and adjust slideslopes. This change leads to an approximately 136,000 sf increase in the Project permanent impact footprint. The increase doesn't meet or exceed any new review thresholds.

(b) Generation of Further impacts/Summary of impacts: The Project Change will not significantly increase the environmental consequences that were evaluated and reviewed under the Previously Reviewed Project. The Project Change has resulted in the increase of marine and coastal impacts as described in Table 1-1 which provides a comparison to impacts presented within the Draft EA/Final EIR. The Project Change does not cause the Project to exceed any additional review thresholds as listed in 301 CMR 11.03. As design progresses, Massport will continue to look for opportunities to achieve additional impact reductions within these resource areas. Further assessment of these impacts is discussed in Chapter 2.

(c) Change in Schedule: None

(d) Change in Project Site: The general work area is not changed, while the Project Site or limit of work is slightly expanded due to the Project Change.

(e) Need for New/Amended Permits: No new permits, financial assistance, or land transfer is required for the Project. A NHESP Conditional No-Take Determination was received on June 21, 2024. An amendment and further consultation are required with the NHESP.

FOR PROJECTS SUBJECT TO AN EIR

If the project requires the submission of an EIR, are you requesting that a Scope in a previously issued Certificate be rescinded?
☐**Yes** ☒**No; if yes, provide an explanation of this request**_____**.**

If the project requires the submission of an EIR, are you requesting a change to a Scope in a previously issued Certificate?
☐**Yes** ☒**No; if yes, provide an explanation of this request**_____**.**

SUMMARY OF PROJECT CHANGE PARAMETERS AND IMPACTS

Summary of Project Size & Environmental Impacts	Previously reviewed	Net Change	Currently Proposed
LAND			
Total site acreage	5.9 (FEIR)	3.1	9.0
Acres of land altered	2.6 (FEIR)	3.1	5.7
Acres of impervious area	4.0 (FEIR)	3.0	7.0
Square feet of bordering vegetated wetlands alteration	0		0
Square feet of other wetland alteration	Based off FEIR:		
Land Under Ocean	108,390 sf	5,754 sf	114,144 sf
Coastal Beach	2,680 sf	12,188 sf	14,868 sf
Coastal Bank	390 lf	476 lf	866 lf
Land Containing Shellfish	67,110 sf	15,654 sf	82,764 sf
Land Subject to Tidal Action	45,620 sf	8,298 sf	53,918 sf
Land Subject to Coastal Storm Flowage	102,430 sf	136,696 sf	239,126 sf
Acres of non-water dependent use of tidelands or waterways	2.4	0.6	3.0
STRUCTURES			
Gross square footage	NA	NA	NA
Number of housing units	NA	NA	NA
Maximum height (in feet)	NA	NA	NA
TRANSPORTATION			
Vehicle trips per day	NA	NA	NA
Parking spaces	NA	NA	NA
WATER/WASTEWATER			
Gallons/day (GPD) of water use	NA	NA	NA
GPD water withdrawal	NA	NA	NA
GPD wastewater generation/ treatment	NA	NA	NA
Length of water/sewer mains (in miles)	NA	NA	NA

Does the project change involve any <u>new or modified</u>:

1. conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97? ☐**Yes** ☒**No**
2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction? ☐**Yes** ☒**No**

3. impacts on Rare Species**?** ☒**Yes** ☐**No**

4. demolition of all or part of any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?
☐**Yes** ☒**No**

5. impact upon an Area of Critical Environmental Concern? ☐**Yes** ☒**No**

If you answered 'Yes' to any of these 5 questions, explain below:

PROJECT CHANGE DESCRIPTION (attach additional pages as necessary). The project change description should include:

(a) a brief description of the project as most recently reviewed,

The purpose of the Project is to enhance safety for aircraft and their passengers in emergency situations by improving the Runway 27 End RSA. The Project would advance an overriding public interest of safety consistent with Title 49 of U.S. Code Section 47101, which states "the safe operation of the airport and airway system is the highest aviation priority."[1] The Project is a required FAA safety project that would not extend the runway or affect normal runway operations, capacity, or types of aircraft using the runway.

An RSA is a flat surface surrounding the runway that is clear of obstructions. FAA requires airports to provide RSAs at runway ends and on the sides of a runway to reduce risk of injury and damage to aircraft. Runway 9-27, at 7,001 feet long and 150 feet wide, is classified as a Runway Design Code D-V runway. FAA design standards therefore require Runway 9-27 to have an RSA measuring 1,000 feet long beyond each end of the runway and 500 feet wide.[2] The Runway 27 End (east end of Runway 9-27) is on the eastern edge of the airfield, adjacent to Boston Harbor. The Runway 27 End RSA is only 150 feet long and does not meet FAA's RSA length requirement of 1,000 feet for a full dimension RSA.

The Proposed Action would extend the length of the existing Runway 27 End RSA at Logan Airport from 150 feet to a maximum of 650 feet and would incorporate an Engineered Materials Arresting System (EMAS) on a pile-supported deck. Use of the EMAS would enhance safety while maintaining the existing operational capability of the runway and airfield and minimizing environmental impacts to Boston Harbor. The deck would be supported by 300 eighteen-inch square pre-cast concrete piles arranged in a grid pattern. In one direction of the grid, the piles would be fastened together at the top by pile-caps or bracing and the connected rows are referred to as "bents." The Project includes the realignment and straightening of the existing 20-foot-wide airport perimeter road on the north side of the Runway 27 End to enhance vehicular sight lines and situational awareness for vehicles crossing the runway end, while remaining clear of the proposed EMAS. Two 25-foot-wide emergency access/egress ramps would also be constructed on either side of the proposed RSA deck.

(b) a description of material changes to the project as previously reviewed,

1 U.S. Code, Title 49, Subtitle VII, Part B, Chapter 471, Subchapter I, Section 47101 – Policies, (a) General (1).
2 U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5300-13B, Airport Design, Table G-11, March 31, 2022.

In advancing the design to support post-NEPA/MEPA permitting, the design/build engineers identified several necessary adjustments to the emergency ramps and adjacent areas to meet the design requirements. The design changes focused on extending the emergency ramps to 1-foot below mean lower low water and adjusting the ramp profile to meet the new elevated landside grades. By raising and extending the ramp profiles, additional fill is required within the ramp footprints and to adjust sideslopes.

The Project Site increased by approximately 30 percent as a result of the Project Change. This increase was a result of an increase in elevation and extension of the emergency ramps and associated grading, and the temporary perimeter road. Additionally, the Project Site was extended to the south to contain more of the perimeter road which will be temporarily relocated during construction.

The Project Change will not significantly increase the environmental consequences that were evaluated and reviewed under the Previously Reviewed Project. The Project Change has resulted in the increase of marine and coastal impacts as described in Table 1-1 of Chapter 1, which provides a comparison to impacts presented within the Draft EA/Final EIR. The Project Change does not cause the Project to exceed any additional review thresholds as listed in 301 CMR 11.03. As design progresses, Massport look at any opportunities to achieve additional impact reductions within these resource areas.

(c) if applicable, the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and

See compliance demonstration under Project Information.

(d) measures that the project is taking to avoid Damage to the Environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any prior mitigation commitments or previously issued Section 61 Finding, include a description of any such changes and a draft of the modified Section 61 Finding (or it will be required in Supplemental EIR).

The Project will maintain the proposed mitigation measures proposed and reviewed under Draft EA/the Final EIR, including providing a 1:1 ratio of wetland replacement or restoration, therefore, the mitigation areas will be increased correspondingly due to the increased wetland impacts.

The project change description should include a comprehensive description of the proposed project change, including a description of any work or activities associated with the original project that have occurred to date. At the discretion of the MEPA Office, an alternatives analysis for the changed component(s) of the project may be required, including a summary of alternatives considered and associated environmental impacts at a level of detail commensurate with the scope and scale of the proposed change. In addition to the required attachments, the filing should include supporting technical data (e.g., a Traffic Impact and Access Study, Stormwater Report, etc.) as appropriate. It should include a full list of mitigation commitments that remain unchanged from the previously reviewed project.

ATTACHMENTS & SIGNATURES

Attachments:

1. Secretary's most recent Certificate on this project
   Refer to Appendix A.

2. Plan showing most recent previously reviewed proposed build condition
   Refer to Figure 1.3.

3. Plan showing currently proposed build condition
   Refer to Figure 1.3.

4. Original U.S.G.S. map or good quality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries
   Refer to Figure A following this NPC Form.

5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)
   Refer to Appendix C.

Signatures:

04/30/2025	04/30/2025
Date Signature of Responsible Officer or Proponent	Date Signature of person preparing NPC (if different from above)
Brad Washburn	Vivian Kimball
Name (print or type)	Name (print or type)
Massport	VHB
Firm/Agency	Firm/Agency
One Harborside Drive	260 Arsenal Place #2
Street	Street
E. Boston, MA 02128	Watertown
Municipality/State/Zip	Municipality/State/Zip
617-568-3524	508-513-2713
Phone	Phone

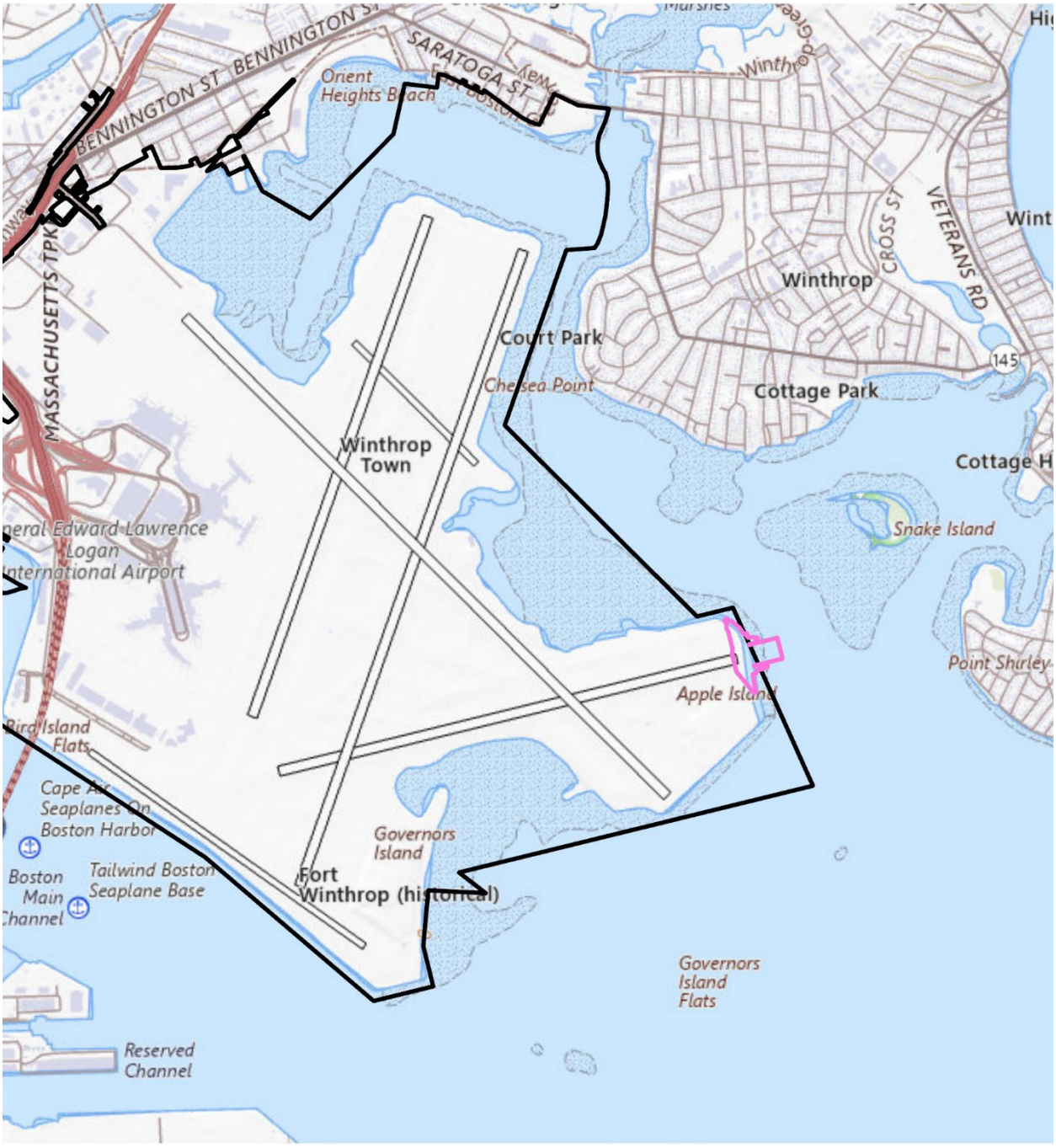


FIGURE A: Project Location

Runway 27 End RSA Improvements Project

Project Site

Airport Boundary

0 1000 2000 4000 Feet

Sources: VHB 2025, USGS ESRI National Map (2024)

1 Project Description and Permitting

1.1 Introduction

The Massachusetts Port Authority (Massport, the "Proponent") is submitting this Notice of Project Change (NPC) for the improvement of the Runway Safety Area (RSA) at the end of Runway 27 (the "Project") at Boston Logan International Airport ("Logan Airport", or the "Airport"), adjacent to Boston Harbor, in East Boston (the "Project Site", see **Figure 1-1**). The Project is required to meet the RSA design criteria in Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5300-13B, *Airport Design*,[1] and to enhance rescue access in the event of an emergency. **This Project is a required FAA safety project that would not extend the runway or have any effect on normal runway operations, runway capacity, or types of aircraft that use the runway**.

1.1.1 MEPA and NEPA Review Status

The Secretary of Energy and Environmental Affairs (EEA) issued the Final Certificate on January 30, 2023 to the Project, determining that the Final Environmental Impact Report (FEIR) adequately and properly complies with the Massachusetts Environmental Policy Act (MEPA) and its implementing regulations (the "Previously Reviewed Project"). The Previously Reviewed Project is subject to additional MEPA review as a material change (the "Project Change") resulting in this NPC. The Project Change is attributed to design modifications to emergency ramps and associated grading resulting in additional coastal and marine impacts. No additional MEPA threshold exceedances [301 Code of Massachusetts Regulations (CMR) 11.0] would occur as a result of the Project Change.

1.2 Project Background

FAA requires airports to provide a safety area surrounding each runway to reduce the risk of damage to aircraft and increase protection of passengers in the event of an unintentional "excursion" from the runway. An "excursion" from the runway can include an overrun (an arriving aircraft fails to stop before the end of the runway), an undershoot (an aircraft arriving on a runway touches down before the start of the paved runway surface), or a veer-off to one side of a runway.

1 U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5300-13B, Airport Design, March 31, 2022.

FIGURE 1-1: Site Locus **Runway 27 End RSA Improvements Project**

Proposed Project Site
Logan Airport Property Line
Political Jurisdictions

0 1000 2000 4000 Feet

Sources: VHB 2025, ESRI, Nearmap Imagery April 2025

As detailed in FAA AC 150/5300-13B, *Airport Design*, to the extent practicable, FAA requires airports that receive federal funding for airport improvement projects to provide standard dimension RSAs that are well-drained, capable of supporting maintenance and snow removal equipment, and are clear of potentially hazardous grade changes and objects. A standard dimension RSA for Runway End 27 would be 1,000-feet-long by 500-feet-wide. However, an Engineered Materials Arresting System (EMAS), which provides a level of safety equivalent to a full dimension RSA, is an acceptable alternative where it is not practicable to obtain the standard RSA dimensions due to lack of available land or, to minimize environmental impacts; both are true at the end of Runway 27. EMAS is an energy-absorbing material that crushes under the weight of an aircraft and surrounds the landing gear, stopping the aircraft. The runway's aircraft fleet mix determines the required length of the EMAS.

1.2.1 Project Description

To minimize environmental impacts to Boston Harbor while enhancing safety, Massport proposes to improve the Runway 27 End RSA by installing an EMAS on an approximately 450-foot-long by 306-foot-wide pile-supported deck. An EMAS is a safety system constructed of collapsible concrete blocks with predictable deceleration forces. When, in an emergency, an aircraft rolls into an EMAS, the tires of the aircraft collapse the lightweight concrete, and the aircraft is slowed down in a way that minimizes damage to the aircraft and its passengers. The Project would consist of the following components:

- Modify the existing Runway 27 End RSA to accommodate a steel sheet pile wall at the inshore limit of the deck to prevent settlement and erosion of the upland areas;
- Installing a transition slab spanning from the land to the pile-supported structure;
- Installing a deck structure approximately 450 feet long and 306 feet wide (an area of approximately 137,700 square feet [3.2 acres]), supported by 300 eighteen-inch square concrete piles;
- Installing an EMAS approximately 500-feet long by 170-feet wide located atop the RSA deck;
- Straightening and realigning the existing 20-foot-wide airport perimeter road to enhance vehicular sight lines and situational awareness;
- Installing two emergency access ramps to below mean lower low water (MLLW), one on each side of the proposed deck;
- Add life rings on the sides and end of the deck to enhance access in and out of the water in an emergency; and
- Upsizing an existing stormwater outfall in order to accommodate stormwater from the deck structure.

1.2.2 Project Purpose and Need

The purpose of the Project is to enhance safety for aircraft and their passengers in emergency situations by providing an RSA at the end of Runway 27 that is consistent with current FAA requirements.

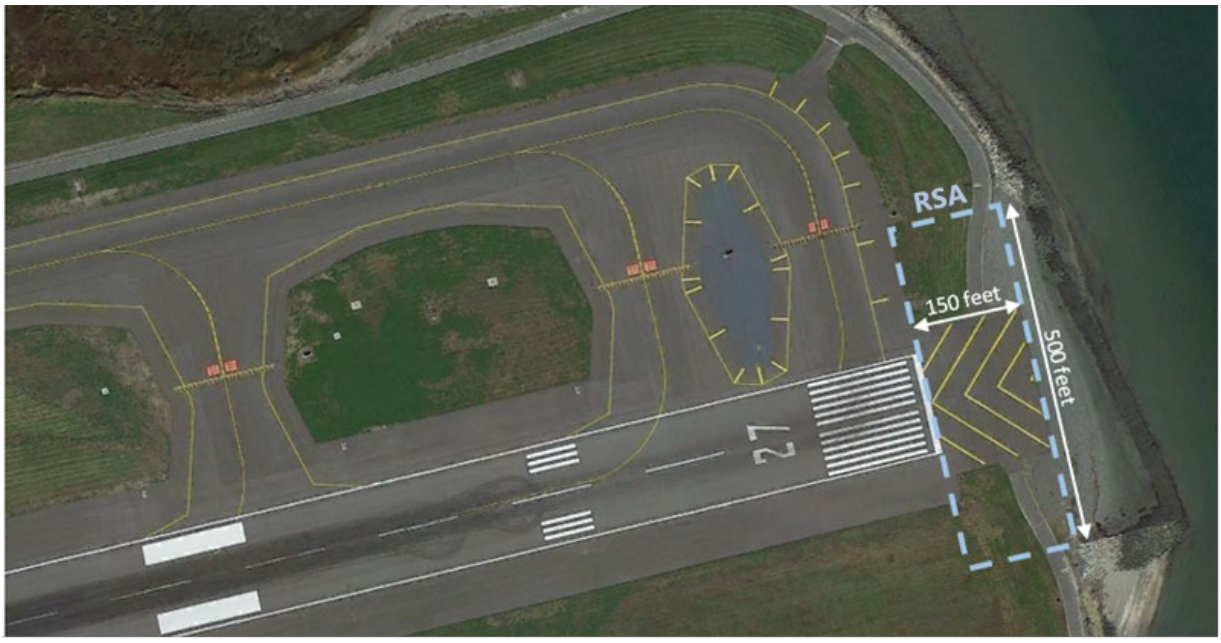
Logan Airport, certificated under 14 Code of Federal Regulations (CFR) Part 139, is a commercial service and general aviation airport that receives federal funding for airport improvement projects, and is

therefore federally obligated by FAA Order 5200.8[2] to meet the RSA design criteria contained in FAA AC 150/5300-13B, *Airport Design,* to the extent practicable.[3]

In 2017, FAA notified Massport that Runway 27 did not meet RSA standards. In response, Massport embarked on a study and in 2019, Massport published the *Boston Logan Airport Runway Incursion Mitigation Study/Runway 9-27 Runway Safety Area (RSA) Alternatives Study* (the RIM Study).[4] The RIM Study identified options for improving Runway 9-27 RSAs, specifically the Runway 27 End closest to Boston Harbor (see **Figure 1-2**). The RIM Study was attached to FAA's Determination on the acceptable improvements for the Runway 27 End RSA (both documents are included in Appendix B, *RIM Study* of the Draft EA/Final EIR).[5]

Runway 9-27 is 7,001 feet in length and 150 feet wide, with 75-foot-wide paved shoulders on each side of the runway. On the west end of the runway (the Runway 9 End), the RSA meets the full dimension RSA standards. While the Inclined Safety Area (ISA) constructed in 1992 at the Runway 27 End (east end of runway) enhanced safety, the ISA pre-dates current technologies and research conducted by FAA and the National Transportation Safety Board on runway safety improvements, the formation of FAA's Runway Safety Area Program, and the adoption by FAA of current RSA standards. With the ISA in place, the Runway 27 End meets the RSA required dimensions for width (500 feet) but does not meet the current RSA length requirements of 1,000-foot overrun or 600-foot undershoot protection required by FAA per AC 150/5300-13B (see Section 2.3 of the Draft Environmental Impact Report [DEIR]*)* for more

Figure 1-2 Runway 27 End – Existing Runway Safety Area



2 U.S. Department of Transportation, Federal Aviation Administration, Order 5200.8, Runway Safety Area Program, October 1, 1999.
3 U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5300-13B, Airport Design, March 31, 2022.
4 U.S. Department of Transportation, Federal Aviation Administration, Standard Operating Procedure 8.00, Runway Safety Area Determination, Appendix B: RSA Determination Form, "Runway 27 End RSA Improvements Project, Boston Logan International Airport," signed January 2019.
5 Massachusetts Port Authority, Draft Environmental Impact Report, EEA# 16433, Runway 27 End Runway Safety Area Improvements Project, Boston Logan International Airport, Appendix E, June 30, 2022, https://www.massport.com/media/mmfovvkx/bos-rw27-rsa-draft-eir-063022.pdf.

information)[6]. Therefore, physical improvements to the Runway 27 End RSA are needed to further enhance the safety of passengers and aircraft during takeoff and landing.

Improving the Runway 27 End RSA would fulfill the overriding public interest to optimize safety. Improvements to the RSA would enhance safety through reducing the potential for injury to passengers, aircraft crew, airport employees, and damage to the environment by reducing the risk of an aircraft entering Boston Harbor.

1.3 Summary of Project Change

As part of the MEPA and National Environmental Policy Act (NEPA) process and initial permitting, Massport evaluated two emergency access/egress ramps that are intended to provide safe access for emergency response personnel to the harbor. The ramps, one on either side of the planned RSA pile-supported deck, are also intended to help provide egress for any passengers or crew that might be in the harbor and able to get to shore. The concept initially reviewed was similar in design to the two emergency ramps that were constructed at Runway-End 33L. These ramps and associated impacts were included in the Previously Reviewed Project analysis and figures within the DEIR and Draft Environmental Assessment (EA)/Final EIR.

In advancing the design to support post-MEPA/NEPA review, the design/build engineers identified several adjustments that were needed to achieve the design requirements for the emergency ramps. Notably, it was determined that the landside connections to Logan Airport's perimeter road and grades landward of the new bulkhead needed to be raised to align with grades for the planned pile-supported deck. Secondly, the lower end of the ramps needed to be extended seaward to achieve the design criteria of being a minimum of one foot below mean lower low water. To achieve these requirements, portions of both ramps needed to be elevated and extended. **Figure 1-3** illustrates the Previously Reviewed Project conditions and presents the proposed conditions because of the Project Change. Coordination between Massport design, construction and environmental staff, Massport Fire and Rescue, and the design build team was undertaken to consider alternatives to minimize environmental impact as discussed in Section 1.3.1. As described below, these discussions led to a determination that the longer ramps described in this NPC were essential for incident response. Additionally, the perimeter road will be temporarily relocated further to the west (as shown in **Figure 1-3**) in order to avoid the construction for the emergency ramps. The perimeter road alteration necessitates landside fill which will be seeded to grass following construction which was not discussed in prior filings. In response to coordination with MassDEP, stormwater improvements have been added to the design to handle stormwater from the deck. This stormwater will be directed to a nearby outfall; that change will require additional minimal impacts to upsize the outfall appropriately. As a result of the Project Change, there are increases in impacts to coastal and marine resources which are discussed within Chapter 2 of this NPC. The Project Change does not result in a change in schedule or Project Site. No additional permits or approvals from the list presented in prior MEPA filings are required. Post MEPA/NEPA permitting has been on-going and amendments to obtained permits and filings are anticipated as discussed in Section 1.4.

6 Massachusetts Port Authority, Draft Environmental Impact Report, EEA# 16433, Runway 27 End Runway Safety Area Improvements Project, Boston Logan International Airport, Chapter 2, Project Purpose and Need, pages 2-3 to 2-6, June 30, 2022, https://www.massport.com/media/mmfovvkx/bos-rw27-rsa-draft-eir-063022.pdf.

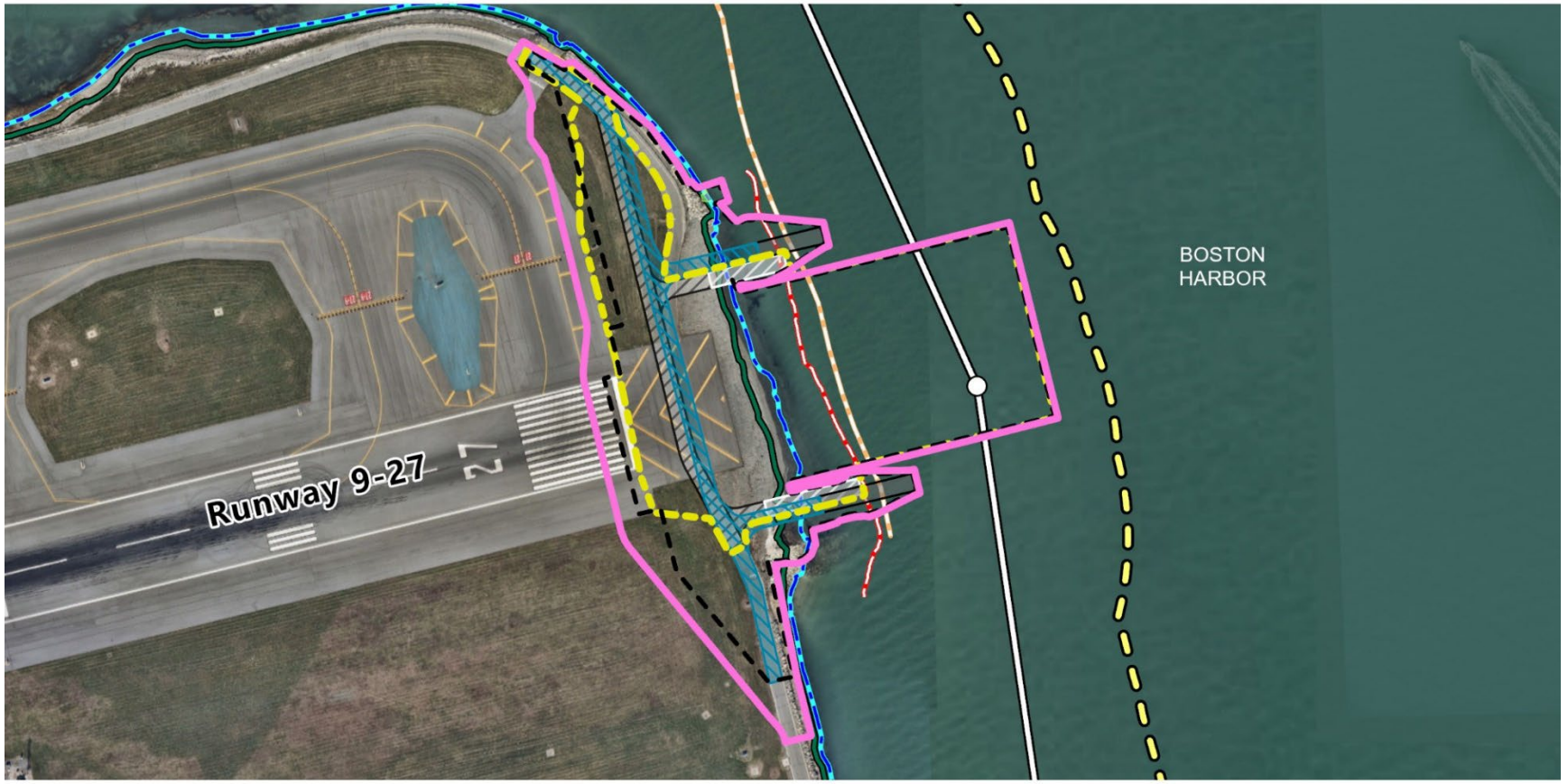


FIGURE 1-3: Previously Reviewed and Proposed Project Site

Runway 27 End RSA Improvements Project

- Proposed Project Site
- Permanent Impacts
- Project Change Egress Ramp
- Project Change Perimeter Road
- Previously Review Project
- Previously Reviewed Perimter Road
- Previously Reviewed Egress Ramp
- Mean High Water Line
- Mean Low Water Line
- Mean Lower Low Water Line
- Annual High Tide Line
- Stormwater Outfall
- Existing Airport Security Buoy (To Be Relocated)
- Logan Airport 250-Foot Inner Security Zone
- Legislated Logan Airport 500-Foot Security Zone

0 100 200 400 Feet

Sources: WSP, VHB, NOAA 2021, FIRM Panel Number 25025C0101J
Effective Date 3/16/2016, Nearmap Imagery March 202
Massachusetts Bureau of Geographic Information, MassGIS Data
Shellfish Suitability Areas, May 2011

1.3.1 Alternatives Considered

The EA/EIR and initial permitting identified a range of coastal impacts, including Land Under Ocean (LUO), Beach, Coastal Bank, Land Containing Shellfish (LCS), Land Subject to Tidal Action (LSTA) and Land Subject to Coastal Storm Flowage (LSCSF). Based on design advances, there will be increases within each of these categories (as outlined in Section 2.3), portions of which will affect previously-disturbed areas within the existing Inclined Safety Area, though some impacts are increased by the design. Massport's goal is to look for additional impact reductions as the design advances.

Upon identifying the increase in impacts, Massport immediately began to evaluate design alternatives to avoid and/or minimize the additional unavoidable adverse impacts. Two approaches were pursued: evaluate engineering solutions to minimize the impact and reevaluate the purpose and need of the emergency access/egress ramps with Massport Fire Rescue. Those evaluations are described in the following sections.

1.3.1.1 Design Considerations

The design changes focused on adjusting the ramp profile to meet the new elevated landside grade and to extend the ramp to 1-foot below mean lower low water. By raising the ramp profiles, additional fill is required within the ramp footprints and to adjust sideslopes.

1.3.1.2 Emergency Response Purpose and Need

Massport design and construction staff met with Massport Fire Rescue personnel in the field to review conditions at the existing Runway 33L emergency ramps and at the locations of the planned Runway 27 emergency ramps. Those discussions focused on the following alternatives:

1. No emergency ramps
2. A single emergency ramp
3. Narrower emergency ramps
4. Shorter emergency ramps (similar to those initially evaluated)

Massport Fire Rescue stated that the emergency ramps were essential for incident response and could not be eliminated. The ramps are needed to provide safe footing for both rescue personnel and incident victims. The stabilized ramps also facilitate the launching of small boats that could be needed to rescue individuals further from the shoreline.

The option of a single emergency ramp on one side of the pile-supported deck was discussed and also rejected since there would be no way of predicting where individuals might be stranded in the water and that the grid of pilings would provide obstacles to quick and efficient rescue operations were the incident to occur on the opposite side of the deck from a single ramp. Additionally, in an emergency situation, more access to the water is always preferred.

Like the emergency ramps at Runway-End 33L, the planned ramps will be 25-feet wide. Any dimension narrower that 25-feet would significantly constrain two-way rescue operations at either location.

In discussing the option of shortening either or both ramps, Massport Fire Rescue's primary concern was the difficulty of accessing the water during low and/or extreme low tides. In these conditions, a ramp that did not extend into the water at all tides would severely restrict the launching of a small rescue boat. Additionally, absent a stable base at the water's edge, movement by rescue personnel and/or victims would be much more difficult with only the existing marine substrate.

In summary, the options to eliminate one or both of the ramps, narrow the ramps or shorten the ramps beyond the Project Change design were rejected by Massport Fire Rescue staff.

1.3.2 Expansion of Project

As demonstrated in **Figure 1-3**, the Project Site increased by approximately 136,000 sf as result of the Project Change. This increase was a result of an increase in elevation and extension of the emergency ramps and associated grading. Additionally, the Project Site was extended to the south to contain more of the perimeter road which will be temporarily relocated during construction.

1.3.3 Summary of Impact Change

The Project Change will not significantly increase the environmental consequences that were evaluated and reviewed under the Previously Reviewed Project. The Project Change has resulted in the increase of marine and coastal impacts as described in **Table 1-1** which provides a comparison to impacts presented within the Draft EA/Final EIR. The Project Change does not cause the Project to exceed any additional review thresholds as listed in 301 CMR 11.03. As design progresses, Massport will continue to look for opportunities to achieve additional impact reductions within these resource areas. Further assessment of these impacts is discussed in Chapter 2.

Table 1-1 Runway 27 End RSA Direct Impact to Coastal Wetland Resources – Project Change

		Piles[1]		Egress Ramps and Associated Grading						Total	
	Deck Shading	NPC (number /area)	FEIR (number /area)	NPC	Difference from FEIR	Fill Landward of Bulkhead[2]	Bulkhead Rip Rap Support[2]	New Pavement[2]	Stormwater Outfall Stone Apron[2]	NPC	Difference from FEIR
Land Under the Ocean	107,700 sf	229/515 sf	246/690 sf	7,738 sf	7,738 sf	N/A	N/A	N/A	N/A	114,144 sf	5,754sf
Coastal Beach	2,170 sf	14/32 sf	6/20 sf	5,934 sf	5,444 sf	N/A	N/A	571 sf		14,868 sf	12,188 sf
Coastal Bank	310 lf	N/A	N/A	53 lf	-27 lf	274 lf	353 lf		186 sf	866 lf	476 lf
Salt Marsh	0	0	0	0	0	0	0	0	0	0	0
Land Containing Shellfish	58,130 sf	120/270 sf	124/350 sf	22,083 sf	13,453 sf	N/A	N/A	2,275 sf	180 sf	82,764 sf	15,654 sf
Land Subject to Tidal Action	35,960 sf	41/92 sf	70/200 sf	17,210 sf	7,750 sf	3,301 sf	2,212 sf	3,087 sf	180 sf	53,918 sf	8,298 sf
Land Subject to Coastal Storm Flowage	97,200 sf	270/515 sf	10/30 sf	9,335 sf	4,135 sf	113,646 sf	428 sf	27,337 sf	N/A	239,126 sf	136,696 sf
Land Below Annual High Tide	143,660 sf	270/608 sf	316/880 sf	24,948 sf	15,488 sf	3,309 sf	2,212 sf	3,087 sf	180 sf	168,071 sf	14,071 sf
Mud Flat[3] (Special Aquatic Site)	11,820 sf	30/68 sf	30/85 sf	8,249 sf	7,759 sf	N/A	N/A	571 sf	175 sf	22,072 sf	9,677 sf

All square footages are approximate values as they have been rounded to the nearest whole value.
1 The piles were reduced in overall number and size as a result of the design update. There are now a total of 300 eighteen-inch piles.
2 Landside impacts were not previously included in MEPA filings.
3 Mudflat extent from lower edge of stone shoreline to MLLW.
sf = square feet
lf = linear feet
N/A - not applicable

1.4 Regulatory Context

Consistent with subsequent filings, the Project requires permits from state and federal agencies and exceeds MEPA thresholds 301 CMR 11.03(3)(b)1.f and 301 CMR 11.03(3)(a)5, which required an Environmental Notification Form (ENF) and mandatory EIR. The Project would construct a structure within federal, state, and local jurisdictional areas. The shoreline within the Project footprint consists of LSTA and LUO and is subject to regulation pursuant to several state regulatory programs. Boston Harbor is a Navigable Water of the U.S. and placement of a structure or filling within Boston Harbor is subject to federal regulation pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. No additional MEPA threshold exceedances, permits, or approvals are anticipated as a result of the Project Change. The status of permits and approvals that are required are outlined in the sections below and summarized in **Table 1-2**.

Table 1-2 Anticipated Project Permits and Approvals

Agency/Department	Permit/Approval/Action	Status
Federal		
Federal Aviation Administration (FAA)	National Environmental Policy Act (NEPA)	Complete. Final Environmental Assessment and Finding of No Significant Impact issued on March 1, 2023. Coordination with FAA on-going.
U.S Army Corps of Engineers (USACE)	Section 10 of the Rivers and Harbors Act	In Progress
	Section 404 of the Clean Water Act	In Progress. Joint 404/401 Individual Permit application filed on September 13, 2024.
National Oceanic and Atmospheric Administration (NOAA) Fisheries Service	Section 7 Endangered Species Consultation	In Progress
U.S Coast Guard (USCG)	Navigation Coordination	In Progress
U.S. Environmental Protection Agency (USEPA)	National Pollutant Discharge Elimination System (NPDES)	NPDES Notice of Intent to be submitted to USEPA at least 14 days prior to construction.
	Construction General Permit (CGP)	NPDES Notice of Intent to be submitted to USEPA at least 14 days prior to construction.
Commonwealth of Massachusetts		
Executive Office of Energy and Environmental Affairs (EEA)	Massachusetts Environmental Policy (MEPA) Review	Final Certificate issued on January 30, 2023; NPC (this filing)
	Public Benefit Determination	Issued on February 23, 2024.
Massachusetts Office of Coastal Zone Management (CZM)	Consistency Statement with Massachusetts CZM Plan	In Progress. Filed January 24, 2025.
Massachusetts Department of Environmental Protection (MassDEP)	Individual Section 401 Water Quality Certification	In Progress. Joint 404/401 Individual Permit application filed on September 13, 2024.

Table 1-2 Anticipated Project Permits and Approvals

Agency/Department	Permit/Approval/Action	Status
	Chapter 91 Waterways Program License Modification	In Progress
Massachusetts Natural Heritage and Endangered Species Program (NHESP)	Massachusetts Endangered Species Act Review (MESA)	Conditional No-Take Determination received on June 21, 2024. Amendment will be requested.
City of Boston		
Boston Conservation Commission (BCC)	Massachusetts Wetlands Protection Act (WPA) Order of Conditions (OOC)	OOC (DEP#006-2004) issued on September 27, 2024. New OOC to be applied for via new Notice of Intent.

Note: This is a preliminary list of local, state, and federal permits and approvals that may be sought for the Project. This list is based on current information about the Project and is subject to change as the design of the Project evolves.

1.4.1 Federal Permits and Approvals

1.4.1.1 National Environmental Policy Act (NEPA)

The Previously Reviewed Project required the submission of an EA for NEPA. The Draft EA was combined with the FEIR pursuant to MEPA and submitted to FAA on December 15, 2022. The Final EA was submitted to FAA on March 2, 2023, and a Finding of No Significant Impact was issued on March 1, 2023. Coordination with the FAA is going to determine whether further NEPA documentation is necessitated due to the Project Change.

1.4.1.2 Section 10/Section 404

The proposed safety improvements require fill materials and/or structures to be placed below the annual high-water line, and the permanent impacts in tidal waters exceeds 1/2 acre; therefore, the Project requires an Individual Section 10/ Section 404 permit from the U.S. Army Corps of Engineers (USACE).

A joint 404/401 Individual Permit application was filed on September 13, 2024, and the application is currently under review. Massport recently provided responses to comments on January 15, 2025 and conducted a 401/404 coordination meeting with USACE and Massachusetts Department of Environmental Protection (MassDEP) on January 16, 2025. Massport will continue the regular coordination with USACE throughout the regulatory review and permitting process with supplemental information.

1.4.1.3 NOAA Fisheries Service Section 7 Consultation

The National Oceanic and Atmospheric Administration (NOAA) Fisheries Service is responsible for several protected marine species, including sea turtles, marine mammals, and some anadromous fish species.

The documentation of the Previously Reviewed Project has been provided to U.S. Fish and Wildlife Service (USFWS), USACE and other appropriate agencies. The final approval is pending issuance of the

404 Permit. Massport will continue to coordinate with the NOAA Fisheries Service through its formal Section 7 Consultation process to assess potential impacts to protected marine species.

1.4.1.4 U.S. Coast Guard Coordination

Construction activities within navigable waters that do not involve a bridge do not require a Section 9 permit from the U.S. Coast Guard, but do require coordination to ensure construction activities are conducted safely and consider navigability issues. In addition to earlier coordination, Massport briefed the U.S. Coast Guard on May 9, 2022 in advance of filing the DEIR. The documentation of the Previously Reviewed Project was provided to U.S. Coast Guard (USCG)and the USACE. Massport will continue appropriate coordination through the 404 permit/Section 10 review.

1.4.1.5 USEPA NPDES Construction General Permit

The proposed RSA improvements require completion and submittal of a Notice of Intent (NOI) to the U.S. Environmental Protection Agency (USEPA) for coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) for stormwater discharge from construction activities. As part of the NOI, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared by the contractor to document stormwater management during the construction period. The NOI submitted for the NPDES CGP will contain information about the contents and stipulations of the SWPPP.

1.4.2 State Permits and Approvals

1.4.2.1 MEPA Review

Massport submitted the ENF on August 30, 2021, and it was published on the September 9, 2021, edition of the Environmental Monitor. A Secretary's Certificate on the ENF was issued on October 8, 2021. A DEIR was submitted on June 30, 2022, and a Secretary's Certificate on the DEIR was issued on August 29, 2022. A FEIR was then submitted on December 15, 2022, and a Secretary's Certificate on the FEIR was issued on January 30, 2023, and determined that the FEIR adequately and properly complies with MEPA and its implementing regulations (see Appendix A). This NPC, presented herein, has been developed for the Project Change resulting from the design progression of the two emergency ramps and associated grading.

1.4.2.2 Public Benefit Determination

The Project Site is within tidelands subject to the provisions of An Act Relative to Licensing Requirements for Certain Tidelands (Chapter 168 of the Acts of 2007) and the Public Benefit Determination regulations (301 CMR 13.00). The Secretary of EEA issued the Public Benefit Determination on February 23, 2023, and determined that the Previously Reviewed Project will have a public benefit.

1.4.2.3 Coastal Zone Management Consistency

As discussed above, the USACE authorization requires a Office of Coastal Zone Management (CZM) Consistency Statement demonstrating the proposed RSA improvements are consistent with the approved Massachusetts Coastal Zone Management Plan. The impacts on the resource categories listed by the

CZM, as well as a consistency statement, can be found in Section 5.2 of Chapter 5 and Appendix D.1 of the DEIR. Similar to the previous RSA project at Runway 33L, Massport believes that the Runway 27 RSA improvements can be designed and constructed to be consistent with all the CZM Program Policies as set forth in 301 CMR 21.00.

A CZM Consistency Certification Request was submitted on January 24, 2025. Massport will continue to consult MassDEP, Massachusetts Division of Marine Fisheries (DMF), NOAA Fisheries, and the USCG on potential Project impacts to ensure consistency with the Coastal Zone Management Plan.

1.4.2.4 Water Quality Certification

A Water Quality Certification is required from MassDEP pursuant to Section 401 of the Clean Water Act to demonstrate that any Section 404 permit issued by the USACE would not violate state water quality standards. State water quality standards contained in 314 CMR 9.00 and 314 CMR 4.00 apply to any dredging or fill placed within Boston Harbor. This authorization will also consider the potential temporary construction-period increases in sedimentation and turbidity from in-water construction activities.

A joint 404/401 Individual Permit application was filed on September 13, 2024, and the application is currently under review. Massport will continue the regular coordination with MassDEP and USACE throughout the regulatory review and permitting process with supplemental information.

Massport recently conducted a 401/404 coordination meeting with USACE and MassDEP on January 16, 2025, and will continue the regular coordination with MassDEP and USACE throughout the regulatory review and permitting process.

1.4.2.5 Chapter 91 Waterways Program

The Project requires the submission of the Chapter 91 License application and request for Variance because a portion of the proposed work is located within the jurisdictional area and extends beyond the existing License associated with the Inclined Safety Area. An application for license and request for variance was submitted on August 20, 2024 and is currently being reviewed by the Waterways Program of MassDEP. The Project Change will require notification to MassDEP with the updated project engineering plans, applicable permits and authorizations, and supplemental information. Massport will continue regular coordination with MassDEP Waterways Program throughout the regulatory review and permitting process.

1.4.2.6 Massachusetts Natural Heritage and Endangered Species Program

Portions of landside Project elements are within a designated polygon of Priority Habitat for upland sandpiper and eastern meadowlark. Massachusetts Natural Heritage and Endangered Species Program's (NHESP) ENF comment letter, dated September 28, 2021, noted it is unclear if the Project would result in impacts to grassland habitats and if a prohibited "take" of a state-listed species would occur.

The Massachusetts Endangered Species Act (MESA) consultation and review was conducted and a Conditional No-Take Determination was received on June 21, 2024. Due to the Project Change, an amendment and further consultation are required with the NHESP. Massport's goal is for no net loss of grassland habitat.

1.4.3 Municipal Permits and Approvals

1.4.3.1 Massachusetts Wetlands Protection Act – Order of Conditions

The Project Site is located within the jurisdiction of the MA Wetlands Protection Act (WPA), as it would affect LSTA, LSCSF, Coastal Beach, LCS, LUO, and buffer zone to Coastal Bank.

An Order of Conditions (DEP # 006-2002) has been issued to the Previously Reviewed Project on September 27, 2024. A Notice of Intent will be submitted to the Boston Conservation Commission and MassDEP for the Project Change to seek a new Order Conditions. Concurrently, a Request for Certificate of Compliance will be submitted to close out the Order of Conditions issued for the Previously Reviewed Project.

1.4.4 Agency Coordination

Massport has been and will continue to conduct the community outreach to promote public involvement and coordinate with appropriate agencies, including the FAA, MEPA, USEPA, USCG, USFWS, NHESP, NOAA Fisheries Service, DMF, USACE, MassDEP, CZM, Massachusetts Historical Commission (MHC), Board of Underwater Archaeological Resources (BUAR), the Boston Conservation Commission (BCC), and Winthrop Conservation Commission (WCC) throughout the MEPA review and permitting processes.

In preparation of this NPC, MEPA indicated that the NPC should respond to any comments raised by DMF, MassDEP, and CZM regarding the emergency ramps within prior MEPA filings. MassDEP Northeast Regional Office (NERO) was the only agency to comment specifically on the emergency ramps in those filings. Comments from MassDEP NERO reference the in-lieu fee paid to USACE as being insufficient with the Massachusetts Wetlands Protection regulations for resource areas and to consider MassDMF recommendations for further agency coordination to develop a detailed mitigation plan for impacts to shellfish and mudflat habitat. A copy of their comment letter is included in Appendix B. A response to these comments is included within Section 2.3.2.5 of Chapter 2.

1.5 Public Involvement and Outreach

Agency consultation and Public Outreach have been conducted throughout the MEPA filing process and detailed in ENF, DEIR, and FEIR's Appendices. Massport's Government and Community Affairs group frequently engages in the community and through this engagement, provides updates on the status of on-going projects at Logan Airport. Since the filing of the Draft EA/Final EIR, Massport has provided verbal updates on the status of this Project. Additionally, Massport is committed to inclusion efforts and has been implementing environmental justice (EJ) outreach strategies to encourage community members to engage in the MEPA process and Project discussions and promote effective communication and the level of involvement of EJ stakeholders. Ahead of the filing of this NPC, an advanced notification was sent to the MEPA EJ reference list to CBOs within East Boston and Winthrop. After the filing of the ENF for the Proposed Project, the MEPA Office finalized the two MEPA EJ Protocols, *MEPA Public Involvement Protocol for Environmental Justice Populations* and *MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations,* which were effective as of January 1, 2022 for all new filings. Additionally, the MEPA Office amended its regulations under 301 CMR 11.00 which were promulgated on December 24, 2021. Although this NPC is not a new filing and therefore not subject to the finalized

protocols and amended regulations, Massport is voluntarily complying with these updates, and is working closely with the MEPA Office to strive for appropriate and comprehensive outreach and analysis of EJ populations in proximity to the Project. The Environmental Justice Outreach Plan was provided in Appendix E.5 of the Draft EA/Final EIR.

This Page Intentionally Left Blank.

2

Project Change Impacts Assessment

2.1 Introduction

The Project Change impact assessment of the proposed Runway 27 End Runway Safety Area (RSA) Improvements Project is documented for each applicable environmental resource category for which there has been a change in impact since the filing of the Draft Environmental Assessment (EA)/Final Environmental Impact Report (FEIR). Regulatory compliance is discussed in Chapter 1, Project Description and Permitting. An impact assessment for the following resources is discussed below:

- Coastal Resources
- Tidelands/Public Benefits and Navigation
- Threatened and Endangered Species
- Stormwater and Water Quality
- Cultural/Historic Resources
- Hazardous Materials/Materials Handling/Recycling
- Climate Change, Adaptation and Resilience, and Sustainability

2.2 Summary of Key Findings

The following sections summarize key findings with respect to the environmental impact of the Previously Reviewed Project and changes to environmental impacts due to the Project Change. Refer to **Figure 2-1** for the revised Project Site extent. The remainder of the chapter provides an impact assessment for resource areas that have additional impacts due to the Project Change. For an impact assessment for resource areas unaffected by the Project Change, refer to the Draft Environmental Impact Report (DEIR) Chapter 5, and Draft EA/Final EIR Chapter 4. Updated mitigation commitments to address increases in impacts are discussed within Chapter 4.

- Coastal Resources
  - The Previously Reviewed Project and the Project Change were designed to avoid and minimize adverse impacts to the maximum extent practicable, but unavoidable permanent impacts to

coastal wetlands remain. The proposed pile-supported deck (approximately 450-feet long by 306-feet wide) has an overall footprint of approximately 3.2 acres. The wetland area is subject to federal jurisdiction as Waters of the U.S., as well as state-regulated resource areas: Coastal Bank, Coastal Beach/Tidal Flats, Land Containing Shellfish (LCS), Land Subject to Coastal Storm Flowage (LSCSF), Land Subject to Tidal Action (LSTA), and Land Under the Ocean (LUO).

- The direct alteration of these resources would be restricted to the actual footprint of the pilings, emergency ramps, bulkhead support, new pavement, and stormwater outfall support and would approximately impact LSTA and LUO, and include Coastal Bank, Coastal Beach/Tidal Flats, LSCSF, and LCS. Most of this area has been previously altered by earlier construction of the Inclined Safety Area (ISA).
- Consistent with the DEIR and Draft EA/Final EIR, the Project Change would not cause any change in wave direction or velocity nor result in increased erosion or deposition in the marine environment. Minor scour effects in the immediate vicinity of the piles are anticipated and would not expect to be different due to the Project Change.

- Tidelands/Public Benefits and Navigation
  - Existing shoreline would be altered due to the installation of a pile-supported deck structure. Portions of that shoreline have been previously altered by the ISA. At the distance from which the shoreline is viewed by the closest residential neighborhood, the RSA would be no higher than the existing shoreline and the view would not be substantially different than the existing view.
  - As a result of the Project Change, additional impacts in flowed tideland are anticipated. However, the safety improvements would be constructed within the Logan Airport Security Zone and would be approximately 175 feet from the edge of the navigation channel at its nearest point. The proposed RSA deck would not limit vessel navigation outside the deck or between the deck and the navigation channel. Changes to the emergency ramps would not affect vessel navigation.
- Finfish Resources
  - Some fish habitats would be displaced by the pilings. However, the pilings would offer new hard substrate for encrusting marine animals and algae. Massport will adhere to the Time of Year (TOY) restriction for in-water, silt producing work extending from February 15 through June 30 for the protection of winter flounder.
  - There are no new anticipated impacts to finfish resources as a result of the Project Change.
- Rare and Endangered Species
  - An upland portion of the Project Site is within an estimated and priority habitat polygon for two grassland bird species: upland sandpiper (*Bartramia longicauda*) and Eastern meadowlark (*Sturnella magna*). These state-listed protected species are identified as endangered and species of special concern, respectively.
  - Mowed grass would be impacted by relocating the perimeter road. The Project Change will be reviewed by the Natural Heritage and Endangered Species Program (NHESP) to determine if there would be an adverse impact to these listed species. If NHESP determines the Project

Change will cause an adverse effect, appropriate mitigation measures would be developed and implemented.

- The Project Change is not likely to adversely affect any federally threatened or endangered species. The Project Change would not adversely impact federally-listed threatened or endangered species under the U.S. Fish and Wildlife Service (USFWS) jurisdiction (terrestrial species). Consultation with the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service (NOAA Fisheries) is ongoing (marine species).

- Stormwater and Water Quality
  - The Project Change would have no adverse effect on water quality. Since the filing of the Draft EA/Final EIR, design has been altered to include improvements to the existing stormwater management system at the Runway 27 End to capture and treat stormwater runoff from the deck and adjacent areas prior to discharge to Boston Harbor via an enlarged outlet pipe. The installation of a stone apron for the upgraded outfall would impact Coastal Beach/LCS (180 sf of which 175 sf is new disturbance).Coastal resource impacts anticipated due to the stone apron associated with the outfall are also covered under Section 2.3.1. Activities on RSAs do not result in a higher pollutant load than existing conditions and are not anticipated to increase total suspended solids (TSS) in the waters adjacent to the Runway 27 End.
  - During construction, turbidity may be created during installation of piles and could temporarily affect water quality in a localized area adjacent to the Project Site. A turbidity curtain would be deployed around the construction work area to contain sediment resuspended during the pile-driving activities.
- Cultural/Historical Resources
  - The Project Change would have no anticipated construction period or permanent impacts to historic resources or temporary construction impacts, as there are no identified above ground or archaeological resources in the Area of Potential Effect (APE).
  - There are no new anticipated impacts to cultural/historical resources as a result of the Project Change.
- Hazardous Materials/Materials Handling/Recycling
  - No sites within the Study Area are listed on the U.S. Environmental Protection Agency's (USEPA) National Priorities List (NPL) or in the Massachusetts Department of Environmental Protection (MassDEP) online databases. There would be no adverse impacts in the category of hazardous materials, solid waste, and pollution prevention because of the Project Change.
  - There are no new anticipated impacts to hazardous materials/materials handling/recycling as a result of the Project Change.
- Climate Change, Adaption and Resiliency, and Sustainability

- According to the Previously Reviewed Project's output report (generated using the Resilient Massachusetts Climate Resilience Design Standards Tool (RMAT), see Appendix E3 of the Draft EA/Final EIR), the Previously Reviewed Project Site would have a high initial risk to climate hazards due to its exposure to sea level rise/storm surges, extreme precipitation due to urban flooding, and extreme heat. The deck substructure would be designed to withstand anticipated coastal storms and sea level rise. The Previously Reviewed Project would not increase climate risk to other properties in the vicinity.
- The Project Change would not change Airport operations or surface transportation patterns, and therefore, would not result in a permanent change in greenhouse gas (GHG) emissions.
- There are no new anticipated impacts from climate hazards or GHG emissions as a result of the Project Change. The RMAT Tool was initially run using a project area that included the Project Change.

- Transportation

  As the Project Change does not affect airport operations, including the number of aircraft that can operate at Logan Airport, potential impacts to transportation would be limited to the construction period. Most construction materials, equipment, and personnel would be transported by marine vessel and thus would not contribute to ground transportation traffic in the vicinity of Logan Airport. Trucks carrying construction materials, equipment, and personnel would have a minimal, temporary impact on ground transportation in the vicinity of Logan Airport. Construction vehicles would be prohibited from local roads.

  - There are no new anticipated impacts to transportation as a result of the Project Change.

- Noise
  - As the Project Change does not affect airport operations, including the number of aircraft that can operate at Logan Airport, potential impacts to transportation would be limited to the construction period. Construction noise is anticipated to occur for 120 days total that would take place during two separate 60-day construction periods. While construction noise levels are not anticipated to exceed City of Boston construction noise limit criteria, Massport will consider construction measures (such as noise dampening mats employed during pile-driving activities) to further minimize noise impacts where possible.
  - There are no new anticipated impacts to noise as a result of the Project Change.
- Air Quality and GHG Emissions
  - As the Project Change does not affect airport operations, including the number of aircraft that can operate at Logan Airport, potential impacts to air quality and GHG emissions would be limited to the construction period. Emissions of air pollutants during construction would meet the de minimis standards for General Conformity with the National Ambient Air Quality Standards (NAAQS).
  - There are no new anticipated impacts to air quality and GHG emissions as a result of the Project Change.

2.3 Coastal Resources

Coastal resource areas subject to federal, state, and local jurisdiction are present within Logan Airport's boundary and within the Study Area. The regulatory requirements for work within coastal resources include the Massachusetts Wetlands Protection Act (WPA),[1] Section 10 of the Rivers and Harbor Act (Section 10),[2] and Sections 401 and 404 of the Clean Water Act (Sections 401/404),[3]

Identification of the regulated resources was based on-site inspection and resource delineation and categorized according to the definitions of the different resource areas described below. The Project Site is located within the City of Boston. Massport will, however, continue to coordinate with the Town of Winthrop, including the Winthrop Conservation Commission.

State resource areas regulated in the WPA are generally determined by the physical shoreline configuration, tidal elevation, vegetation, or floodplain elevation. State regulated resources at the Project Site include the following (refer to DEIR Section 5.2 for further definition on these resources):

- Land Under the Ocean
- Coastal Beaches
- Coastal Banks
- Salt Marsh
- Land Containing Shellfish
- Land Subject to Tidal Action
- Land Subject to Coastal Storm Flowage (100-year coastal floodplain)

The functions and values provided by the coastal resource areas present at the Airport include flood control, storm damage prevention, fish and shellfish habitat, production export, sediment/shoreline stabilization, and wildlife habitat. These coastal resources are illustrated in **Figure 2-1**.

In addition to the wetland resource areas regulated by the WPA as listed above, the state regulations include a 100-foot buffer zone landward from the upper limit of Coastal Bank, Coastal Beach, or coastal wetland.

1 Massachusetts General Law (MGL) Chapter 131 Section 40 – 310 CMR 10.00.
2 33 USC 403 – Section 10 of Rivers and Harbors Act of 1899.
3 Public Law 92-500 Sections 401 and 404.

This Page Left Intentionally Blank.

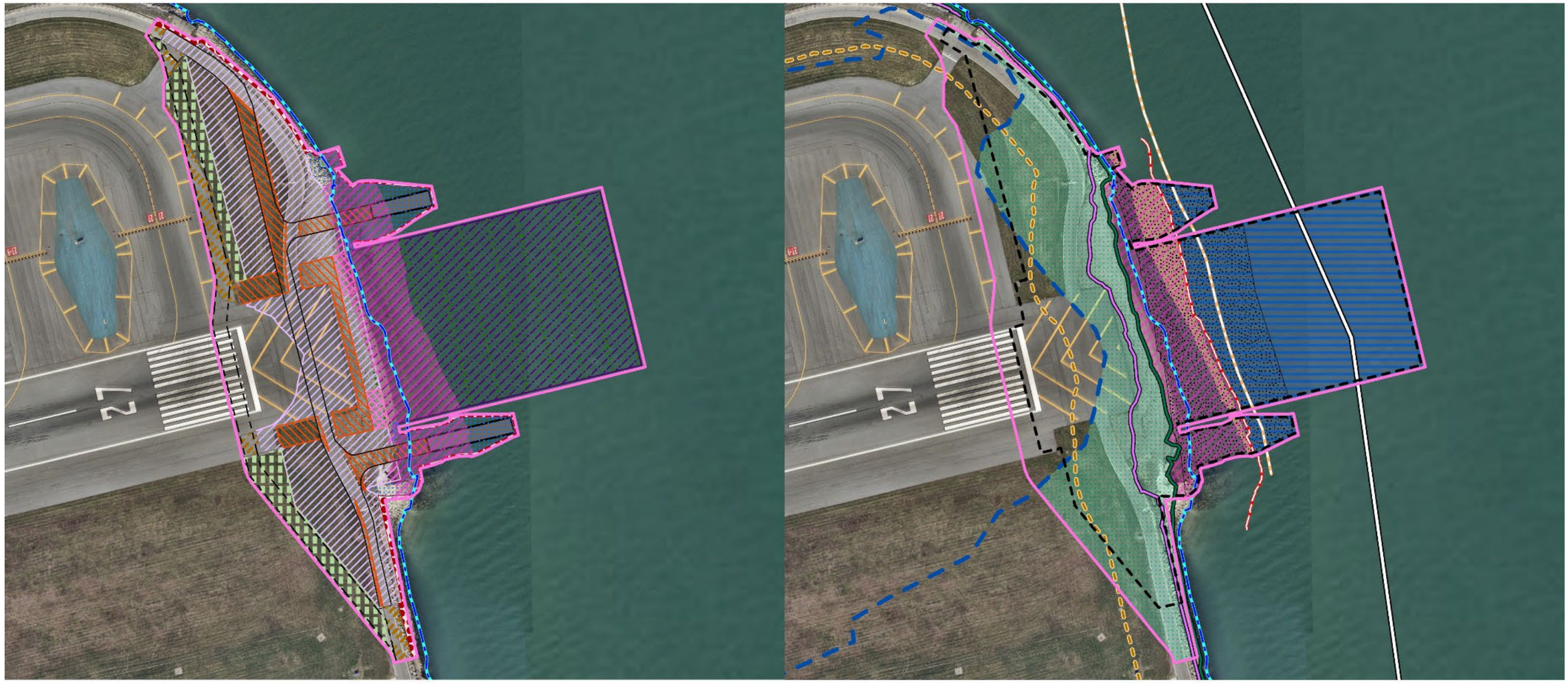


FIGURE 2-1: Proposed Design and Environmental Constraints **Runway 27 End RSA Improvements Project**

This Page Left Intentionally Blank.

Boston Harbor, a federal Navigable Water of the U.S., is regulated by the U.S. Army Corps of Engineers (USACE) under Section 10 and Section 404 and MassDEP under Section 401 for activities like the proposed RSA deck construction. Section 10 governs structures, floats, piles, dredging, and filling, whereas Sections 401 and 404 manage the discharge of dredged or fill material below the Mean High Water (MHW) line and includes Special Aquatic Sites (SAS) like salt marshes, Submerged Aquatic Vegetation (SAV) such as eelgrass beds, and Mud Flats. Jurisdiction extends to the Annual High Tide (AHT) line for Sections 401/404 and vegetated wetland limits beyond it, and to the MHW line for Section 10, based on tidal elevations of 4.33 feet (North America Vertical Datum [NAVD] 1988) and 6.5 feet (NAVD 2022). Boundaries are determined by NOAA tidal predictions, Boston Station datums, and onsite topography. Activities like excavating, dredging, backfilling, and driving piles below the MHW line fall under Section 10, including the proposed deck structure, while filling below the AHT line for ramps or structures is regulated by Sections 401/404. SASs in the area, including Vegetated Wetlands and Mud Flats, require specific environmental reviews, but no work below the MHW line is planned near salt marshes. An eelgrass survey found no SAS near the Project Site, and no Vegetated Wetlands are above the AHT line, but Mud Flats extend below the Mean Low Water (MLW) line (Elevation -5.16 feet NAVD) and become exposed during extremely low tides. See Section 5.2 of the DEIR for further definition of federally regulated resources.

2.3.1 Project Change Impact

As a result of the Project Change, there are additional impacts anticipated for federal, state and local coastal resources. **Table 2-1** presents the revised impacts to coastal wetland resources and compares the changes to findings presented in the Draft EA/Final EIR.

Table 2-1 Runway 27 End RSA Direct Impact to Coastal Wetland Resources – Project Change

		Piles[1]		Egress Ramps and Associated Grading						Total	
	Deck Shading	NPC (number /area)	FEIR (number /area)	NPC	Difference from FEIR	Fill Landward of Bulkhead[2]	Bulkhead Rip Rap Support[2]	New Pavement[2]	Stormwater Outfall Stone Apron[2]	NPC	Difference from FEIR
Land Under the Ocean	107,700 sf	229/515 sf	246/690 sf	7,738 sf	7,738 sf	N/A	N/A	N/A	N/A	114,144 sf	5,754sf
Coastal Beach	2,170 sf	14/32 sf	6/20 sf	5,934 sf	5,444 sf	N/A	N/A	571 sf		14,868 sf	12,188 sf
Coastal Bank	310 lf	N/A	N/A	53 lf	-27 lf	274 lf	353 lf		186 sf	866 lf	476 lf
Salt Marsh	0	0	0	0	0	0	0	0	0	0	0
Land Containing Shellfish	58,130 sf	120/270 sf	124/350 sf	22,083 sf	13,453 sf	N/A	N/A	2,275 sf	180 sf	82,764 sf	15,654 sf
Land Subject to Tidal Action	35,960 sf	41/92 sf	70/200 sf	17,210 sf	7,750 sf	3,301 sf	2,212 sf	3,087 sf	180 sf	53,918 sf	8,298 sf
Land Subject to Coastal Storm Flowage	97,200 sf	270/515 sf	10/30 sf	9,335 sf	4,135 sf	113,646 sf	428 sf	27,337 sf	N/A	239,126 sf	136,696 sf
Land Below Annual High Tide	143,660 sf	270/608 sf	316/880 sf	24,948 sf	15,488 sf	3,309 sf	2,212 sf	3,087 sf	180 sf	168,071 sf	14,071 sf
Mud Flat[3] (Special Aquatic Site)	11,820 sf	30/68 sf	30/85 sf	8,249 sf	7,759 sf	N/A	N/A	571 sf	175 sf	22,072 sf	9,677 sf

All square footages are approximate values as they have been rounded to the nearest whole value.
1 The piles were reduced in overall number and size as a result of the design update. There are now a total of 300 eighteen-inch piles.
2 Landside impacts were not previously included in MEPA filings
3 Mudflat extent from lower edge of stone shoreline to MLLW.
sf = square feet
lf = linear feet
N/A - not applicable

2.3.1.1 Land Under Ocean

The Project would result in the loss of approximately 114,144 sf of LUO due to the revisions to the emergency ramps. This is an increase in 5,754 sf from the Draft EA/Final EIR. The increase in impact occurred due to the need to adjust the profiles of the two emergency ramps and extend them seaward to one-foot below mean lower low water (MLLW). Despite this additional loss, the LUO will continue to mitigate storm damage and provide flood control, with the pile arrangement potentially enhancing storm protection by dispersing wave energy. No submerged aquatic vegetation or eelgrass was identified near the Site. While the RSA deck will overshadow a portion of the seabed, the benthic habitat will continue to function due to the ongoing tidal flow, with food sources for benthic invertebrates maintained. The loss of soft bottom habitat, such as that of the soft shell clam, will be addressed during project permitting in consultation with relevant authorities, including the Division of Marine Fisheries and the U.S. Army Corps of Engineers. Refer to Section 4.2 of Chapter 4 for proposed mitigation. During construction, there would be 2,038 sf temporary impacts to LUO due to the work area outside of the footprint of the deck and ramps. Prior to completion of construction, these areas would be restored to pre-construction conditions.

2.3.1.2 Coastal Beaches

Coastal Beaches, as defined by the WPA, consist of unconsolidated sediment subject to wave, tidal, and coastal storm action, extending from the MLW line to existing Inclined Safety Area (ISA), consisting of human-made structures. At the Project Site, the Coastal Beach is a narrow sandy strip between the MLW and the toe of the crushed rock slope protection, installed for the Runway 27 ISA. The Project Change includes the expansion of two emergency ramps and associated gradings will affect an additional 12,188 sf, totaling 14,868 sf of impact. The Project Change does not significantly affect the interests of the WPA regarding storm damage prevention, flood control, or wildlife protection, as the Coastal Beach offers minimal benefits in these areas. The support piles will help dissipate wave energy, aiding storm damage prevention, and since the Coastal Beach is frequently submerged by tides, its role as shorebird feeding habitat is limited. Ample alternative shoreline habitat exists nearby, mitigating any reduction in available feeding areas due to the Project Change. During construction, there would be 1,091 sf temporary impacts to Coastal Beach due to the work area outside of the footprint of the deck and ramps. Prior to completion of construction, these areas would be restored to pre-construction conditions.

2.3.1.3 Coastal Banks

The Project would result in the unavoidable alteration of approximately 866 linear feet (lf) of the fabricated Coastal Bank for the emergency ramps. This is an increase of 476 lf as result of the Project Change in order to accommodate the emergency ramps. The alteration would convert the existing riprap bank to a low steel sheet pile wall and concrete paver emergency access ramps. The Project Change would not affect the functions or the interests of the Coastal Bank including storm damage prevention and flood control. The new steel sheet pile wall beneath the proposed RSA deck would protect the deck abutment and would maintain the stability of the Coastal Bank beneath the deck. During construction, there would be 361 lf temporary impacts to Coastal Banks due to the work area outside of the footprint of the deck and ramps. Prior to completion of construction, these areas would be restored to pre-construction conditions.

2.3.1.4 Land Containing Shellfish

Land Containing Shellfish (LCS) encompasses LUO, tidal flats, rocky intertidal shores, and salt marshes. At the Project Site, it includes intertidal and subtidal areas supporting commercially important shellfish species like soft-shell clams, razor clams, surf clams, and blue mussels, with low quantities found partly due to shellfish disease. The Project Change involves additional alteration of this habitat due to the construction of emergency ramps affecting 22,083 sf, primarily through concrete pavers and riprap, which extends into the coastal beach's soft shell clam habitat. This a total of 82,764 sf of impacts to LCS. A scour analysis prepared during subsequent filings indicated no changes in sediment erosion or accretion patterns due to the Project, thus minimizing secondary impacts on shellfish habitats. The Project Change is not anticipated to change sediment erosion or accretion patterns. During construction, there would be 4,460 sf temporary impacts to LCS due to the work area outside of the footprint of the deck and ramps. Prior to completion of construction, these areas would be restored to pre-construction conditions. Mitigation will be coordinated with the Division of Marine Fisheries and may involve funding shellfish habitat restoration given the current low density of shellfish in the area. Refer to Section 4.2 of Chapter 4 for details on mitigation.

In their comments on the DEIR, MassDEP Northeast Regional Office (NERO) noted that 8,630 sf of LCS would be directly impacted by the installation of concrete pavers and riprap to create the emergency ramps. The new ramp design will increase that impact area to 22,083 sf. Based on the revised impact number, Massport will offer compensatory mitigation in the form of an in-lieu fee paid to the U.S. Army Corps of Engineers as well as a state shellfish habitat restoration program as guided by the Massachusetts Division of Marine Fisheries (DMF). A copy of this letter is included in Appendix B.

2.3.1.5 Land Subject to Tidal Action

Work in the LSTA at the Project Site extends from MLW at elevation -5.16 feet to the AHT at elevation 6.7 feet, encompassing a 12-foot vertical intertidal zone. The majority of the LSTA consists of an ISA stabilized with 4- to 6-inch crushed rock, with only 310 sf of coastal beach not covered. The LSTA overlaps with Coastal Beach, Coastal Bank, and LCS. The Project Change has resulted in a 8,298 sf increase in impacts to LSTA due to the extended access ramps, leading total LSTA impacts to be 53,918 sf. Additionally, this increase includes fill landward of the bulkhead and bulkhead rip rap support that was not discussed in prior filings. The LSTA primarily features crushed rock with minimal ecological value, lacking vegetation and offering limited habitat and feeding opportunities. Blue mussels currently attach to geogrid mats in the lower intertidal zone, benefiting from stability provided by the geogrid. The lower ends of the ramps will extend to the MLLW, altering a portion of hard bottom. During construction, there would be 2,708 sf temporary impacts to LSTA due to the work area outside of the footprint of the deck and ramps. Prior to completion of construction, these areas would be restored to pre-construction conditions.

2.3.1.6 Land Subject to Coastal Storm Flowage

The 100-year floodplain, identified by Federal Emergency Management Agency (FEMA) as LSCSF, encompasses areas at elevations 13 and 12 feet on the Project Site, extending into the upland portion of the existing paved RSA, perimeter roadway, and part of Taxiway D. Upland sections of the Site are characterized by paved and mowed grass areas and can experience coastal flooding due to rising waters or wave action above the base flood elevation. The extension of the emergency ramps cause an impact of

an additional 136,696 sf. Additionally this increase includes fill landward of the bulkhead and bulkhead rip rap support that was not discussed in prior filings. Impacts to LSCSF total 239,126 sf as a result of the Project Change. During construction, there would be 53,767 sf temporary impacts to LSCSF due to the work area outside of the footprint of the deck and ramps as well as grassland and existing pavement impacts in due to the realignment of the perimeter road in order to avoid the construction site. Prior to completion of construction, these areas would be restored to pre-construction conditions.

2.3.1.7 Federally Regulated Resource Areas

The total area of the Previously Reviewed Project under Federal jurisdiction is 168,071 sf, consisting primarily of the RSA deck footprint (143,660 sf), impact from piles (608 sf), and fill for ramps (24,948 sf). The area mainly comprises crushed rock shoreline, providing limited habitat value, with the RSA deck's impact over tidal waters covering approximately 143,660 sf. Below this lies a narrow sandy beach, transitioning to a mud flat exposed during low tides, classified as a Section 404 Special Aquatic Site. The Project Change would impact 9,677 sf of additional mud flat due to the extension and grading associated with the emergency ramp, leading to mud flat impacts to total 22,072 sf. During construction, there would be 4,746 sf temporary impacts to federally regulated resource areas due to the work area outside of the footprint of the deck and ramps. Prior to completion of construction, these areas would be restored to pre-construction conditions.

2.4 Tidelands/Public Benefits and Navigation

A portion of the Project Site is located within filled tidelands immediately adjacent to Boston Harbor, and another portion is located within flowed tidelands. The proposed work within flowed tidelands is subject to the licensure requirements of Massachusetts General Law, Public Waterfront Act, M.G.L. Chapter 91 ("Chapter 91") as implemented by the MassDEP through the Waterways Regulations (310 Code of Massachusetts Regulations [CMR] 9.00). However, according to 310 CMR 9.03(3), Chapter 91 does not apply to any project authorized by the Massachusetts Port Authority Enabling Act, St. 1956, c. 465, on previously filled tidelands within the geographical boundary of Logan Airport. Pursuant to M.G.L. c. 90, s. 61, the waters adjacent to Logan Airport are subject to a Security Zone extending 500 feet parallel to the shoreline, measured from the MHW, within which public uses and access are restricted. Within Boston Harbor and around the shoreline of Logan Airport are State Harbor Lines. Further information on the regulatory framework for tidelands/public benefits and navigation can be found in Section 4.5.1 of the DEIR.

The Secretary of the Executive Office of Energy and Environmental Affairs (EEA) issued the Public Benefit Determination on February 23, 2024 and determined that the Previously Reviewed Project will have a public benefit. Massport submitted a Chapter 91 application with a request for a variance on August 20, 2024, for the Previously Reviewed Project approved by the Massachusetts Environmental Policy Act (MEPA) Final Certificate (see Appendix A) and is currently being reviewed by the Waterways Program of MassDEP.

2.4.1 Project Change Impact

The Project Change would result in additional 10,564 sf of flowed tidelands impacted leading to a total impact of flowed tidelands of 164,914 sf. The extended ramps will be confined within the Logan Airport

Security Zone, therefore impact from the proposed change on navigation and public rights from the proposed change is *de minimis*.

The Project Change continues to comply with all relevant performance standards of the Waterways Regulations, including the standards to protect water-related public rights and water-dependent uses, design and construction-related standards, and the standards for nonwater-dependent infrastructure projects, and comply with the Coastal Zone Management (CZM) policy. Massport will coordinate with MassDEP and provide additional information about the Project Change.

2.5 Threatened and Endangered Species

The proposed RSA deck will extend into and over Boston Harbor. Boston Harbor is a tidal water body that supports and provides habitat for a variety of biological resources, including marine finfish and shellfish, marine mammals, marine reptiles, and seabirds. The upland airfield also provides grassland habitat for a variety of terrestrial mammals and birds. The proposed safety deck has been designed to minimize temporary and permanent impacts to these resources. Federally listed threatened and endangered species are managed under the Endangered Species Act (16 U.S.C. Section, 1531 et seq.) and are under the jurisdiction of the USFWS or NOAA Fisheries. The USFWS has determined there are no protected species of concern under their jurisdiction in the Study Area based on comments provided to Massport on April 1, 2021, during early project coordination as part of the Environmental Notification Form (ENF).[4] NOAA Fisheries has informally indicated the Previously Reviewed Project will not have an adverse impact on protected species within their jurisdiction that may occasionally occur in Boston Harbor in the vicinity of the Project Site. Massport has initiated formal Endangered Species Act Section 7 consultation with NOAA Fisheries as part of Project permitting. Massport will also continue to coordinate with NOAA Fisheries regarding potential impacts to designated Essential Fish Habitat (EFH) in the vicinity of the Project Site. The NOAA EFH Mapper database was consulted and identified 27 species within Boston Harbor that benefit from the harbor for one or more life stages (refer to Section 4.6.2 of the DEIR[5]). Boston Harbor is also designated as a Habitat Area of Particular Concern (HAPC) for Inshore (0 to 20 meters from the MLW line) juvenile Atlantic cod.

Two upland grassland State-listed bird species, the upland sandpiper (*Bartramia longicauda*) and Eastern meadowlark (*Sturnella magna*), are present on the Project Site. Massport will continue to coordinate with the NHESP. Protected grassland habitat will be altered and Massport will work with NHESP to develop suitable mitigation. It is Massport's goal to avoid impacts to an individual or habitat that would constitute a "take" that would require a Conservation and Management Permit.

The primary impact to marine biological resources consists of installing concrete piles to support the RSA deck and the shading of coastal resources from the deck. The resources that will be affected include the shoreline intertidal and subtidal areas. The intertidal shoreline from Annual High Water (AHW) to MLW at the end of Runway 27 is characterized as a crushed rock stabilized slope constructed in 1992 as an ISA. While salt marsh was identified along the shoreline to the northwest outside of the Project Site, no salt

4 Massachusetts Port Authority, Environmental Notification Form, *Runway 27 End Runway Safety Area Improvements Project*, Boston Logan International Airport, Attachment C, "Agency Coordination," August 31, 2021, https://www.massport.com/media/4xdlv5rz/9-27-enf_compiled_final_083021.pdf.

5 Massachusetts Port Authority, Draft Environmental Impact Report, EEA# 16433, *Runway 27 End Runway Safety Area Improvements Project*, Boston Logan International Airport, Chapter 4, "Existing Environment," pages 4-27 to 4-28, June 30, 2022, https://www.massport.com/media/mmfovvkx/bos-rw27-rsa-draft-eir-063022.pdf.

marsh is present within or immediately adjacent to the footprint of the Project Site and no impacts to salt marsh would be anticipated during construction or project implementation. The upper portion of the coarse rock slope does not offer much habitat and is generally unvegetated. The lower end of the slope between MHW and MLW is submerged for longer periods during the tidal cycle and provides some habitat for barnacles (*Balanus* sp.), common periwinkle snails (*Litterina littorea*), and a narrow band of blue mussels (*Mytilus edulis*) established between the rocks.

2.5.1 Project Change Impact

Associated work in the adjacent upland on the airfield will alter existing grassland habitat, including a state-listed polygon of priority habitat for two upland grassland bird species: upland sandpiper and Eastern meadowlark. Grassland habitat will be both temporarily and permanently altered by the Project Change. The Project Change would decrease the amount of grassland impacts from 22,000 sf to 15,000 sf. The existing and temporary perimeter roads would be removed and reseeded at the conclusion of construction. Additionally, the majority of fill landward of the bulkhead would be restored to grassland habitat. During construction, 29,000 sf of grassland will be temporarily altered for during in order to reroute the perimeter road around the Project Site.

2.6 Stormwater and Water Quality

Water quality and stormwater discharges at Logan Airport are regulated by the National Pollutant Discharge Elimination System (NPDES) and the Massachusetts Stormwater Policy and Standards, with a specific individual permit (NPDES Permit MA0000787) issued in August 2023. This permit covers activities at Logan Airport and addresses the nature of stormwater discharge into Boston Harbor and its tributaries, aiming to enhance environmental and public health protection. The Project Site comprises taxiways, runways, perimeter roads, and grassed infields adjacent to Boston Harbor, part of which is in the 100-year coastal floodplain according to FEMA. Stormwater is managed through sheet flow and collection in stone trenches and catch basins, discharging to the harbor through outfalls equipped with tide gates to prevent seawater infiltration. Current runoff water quality management includes pavement sweeping and the use of vegetated filter strips and crushed stone slopes for infiltrating water.

2.6.1 Project Change Impact

The Project Change involves the expansion of the two emergency ramps described in the Draft EA/Final EIR and initial permitting. The Project Change will not significantly affect the volume or water quality of stormwater runoff. In response to coordination with MassDEP, the Project Change will make improvements to the existing stormwater management system at the Runway 27 End to capture and treat stormwater runoff from the deck and adjacent areas prior to discharge to Boston Harbor via an enlarged outlet pipe. The Project Change is expected to have negligible impacts on turbidity and pollutant loading in Boston Harbor, as it will not increase pollutant sources, but rather capturing and treating runoff from the deck and surrounding areas will offer water quality improvements. The Project Change will not alter the number of aircraft or ground vehicle operations, nor will it affect pollutant discharge from atmospheric deposition.

This Page Left Intentionally Blank.

3 Environmental Justice and Outreach

3.1 Introduction

The state environmental review process requires public outreach and consideration of designated environmental justice (EJ) populations. This chapter summarizes EJ populations within 1 mile of the Project Site, potential impacts, Massport's outreach conducted to date, and the continued outreach plan. As demonstrated in this chapter, **the Project Change does not result in increases in impacts that would affect EJ populations within 1 mile of the Project Site.**

The Project would enhance safety for aircraft and their passengers in emergency situations by constructing improvements to the Runway Safety Area (RSA) at the end of Runway 27 consistent with current Federal Aviation Administration (FAA) requirements. **This Project is a required FAA safety project that would not extend the runway or have any effect on normal runway operations, runway capacity, or types of aircraft that could use the runway.** Appendix G.1 of the Draft Environmental Assessment (EA)/Final Environmental Impact Report (EIR) provides additional details of Massport's ongoing outreach plan.

3.2 Regulatory Overview

Governor Baker signed *An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy*[1] (the Climate Roadmap Act) on March 26, 2021, Session Law 2021, c. 8, ss. 57-60, which defined EJ principles and populations, and environmental benefits and burdens. The *Environmental Justice Policy of the Executive Office of Energy and Environmental Affairs*[2] (2021 EJ Policy), originally issued in 2002 and updated on June 24, 2021, incorporates the definitions from the Climate Roadmap Act and reinforces an inclusive community involvement in the environmental decision-making process.

The Massachusetts Environmental Policy Act (MEPA) Office embarked on developing protocols to implement the requirements set forth in the Climate Roadmap Act and 2021 EJ Policy. During the development of the Environmental Notification Form (ENF), the MEPA Office released the *Interim Protocol for Environmental Justice Outreach,* followed by *Transition Rules for Public Involvement Requirements*

1 Commonwealth of Massachusetts. 2021. *An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy.* https://malegislature.gov/Laws/SessionLaws/Acts/2021/Chapter8.
2 Commonwealth of Massachusetts. 2021. *Environmental Justice Policy of the Executive Office of Energy and Environmental Affairs*. https://www.mass.gov/doc/environmental-justice-policy6242021-update/download.

for Environmental Justice Populations effective June 24, 2021, and *Draft MEPA Public Involvement Protocol for Environmental Justice Populations* effective October 1, 2021. The *Transition Rules for Public Involvement Requirements for Environmental Justice Populations,* effective June 24, 2021, require all ENFs and expanded ENFs (EENFs) filed with the MEPA Office to identify the location of a project relative to EJ Populations as depicted on the *Massachusetts 2020 Environmental Justice Populations* mapping tool (EJ Maps Viewer). In advance of the *Transition Rules for Public Involvement Requirements for Environmental Justice Populations,* which were not yet in effect at the time of the ENF filing, Massport followed the Executive Office of Energy and Environmental Affairs' (EEA) *Interim Protocol for Environmental Justice Outreach* and conducted EJ outreach prior to the ENF filing.

Between the filing of the ENF and Draft Environmental Impact Report (DEIR), the MEPA Office finalized the two MEPA EJ Protocols, *MEPA Public Involvement Protocol for Environmental Justice Populations* and *MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations,* which were effective as of January 1, 2022 for all new filings. Additionally, the MEPA Office amended its regulations under 301 Code of Massachusetts Regulations (CMR) 11.00 which were promulgated on December 24, 2021. Although this Notice of Project Change (NPC) is not a new filing and therefore not subject to the finalized protocols and amended regulations, Massport is voluntarily complying with these updates, and is working closely with the MEPA Office to strive for appropriate and comprehensive outreach and analysis of EJ populations in proximity to the Project Site.

3.3 Environmental Justice Populations

The Climate Roadmap Act[3] defines EJ as "the equal protection and meaningful involvement of all people and communities" regarding environmental issues, laws, regulations, and policies, including the equitable allocation of benefits and burdens. It provides a new definition of EJ populations in Massachusetts, which is a neighborhood (defined as a census block group), that meets one of the following specific demographic characteristics:

- **Income:** The annual median household income is not more than 65 percent of the statewide annual median household income;
- **Minority:** Minorities (i.e., individuals who identify themselves as Latino/Hispanic, Black/African American, Asian, Indigenous people, and people who otherwise identify as non-white) comprise 40 percent or more of the population;
- **English Language Isolation:** 25 percent or more of households lack English language proficiency; or
- **Minority + Income:** Minorities comprise 25 percent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 percent of the statewide annual median household income.

Additionally, the Secretary can designate a geographic portion of a neighborhood as an EJ population.

3 Commonwealth of Massachusetts. 2021. *An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy.* https://malegislature.gov/Laws/SessionLaws/Acts/2021/Chapter8.

3.3.1 EJ Populations within the Study Area

For this NPC, the EJ populations were re-identified and re-evaluated within 1 mile of the Project Change Site, as shown in **Figure 3-1**, using the EEA Environmental Justice Maps Viewer (EJ Maps Viewer).[4] Based on the 2020 census data provided by the EJ Maps Viewer, **Table 3-1** summarizes the EJ demographics of the census block groups that fall partially or fully within 1 mile of the Previously Reviewed Project Site. Identified EJ populations within 1 mile of the Project Site have been updated from prior MEPA filings to reflect the November 2022 to the EJ Maps Viewer.

Table 3-1 Environmental Justice Block Groups Within the Designated Geographic Area

Block Group	Census Tract	Location	Median Household Income	Total Minority Population	Percent (%) of Households with English Isolation	Languages (at census tract level)[1]	EJ Criteria
1	9801.01	Boston	N/A	N/A	N/A	Spanish or Spanish Creole (6.4%)	N/A
3	1802	Winthrop	$52,118 (62% of state median)	21%	0%	N/A	Income
2	1804.00	Winthrop	$72,292 (86% of state median)	31%	9%	N/A	Minority
1	9813.00	Boston/Winthrop	$128,000 (149% of state median)	32%	0%	Spanish or Spanish Creole (20.2%)	Minority

Source: EJ Maps Viewer, 2025.
Notes: The data presented is directly from the classifications in the EJ Maps Viewer, which differs from MEPA's definition of EJ populations under the Climate Roadmap Act. Refer to DEIR Figure 6-1, which explains the discrepancy.
1 Data is from "Languages Spoken in Massachusetts" tab of the EJ Maps Viewer to determine languages spoken by at least 5 percent of population in the census tract who do not speak English very well. These data inform outreach and translation services.

4 These data were obtained from https://www.mass.gov/info-details/massgis-data-2020-environmental-justice-populations.

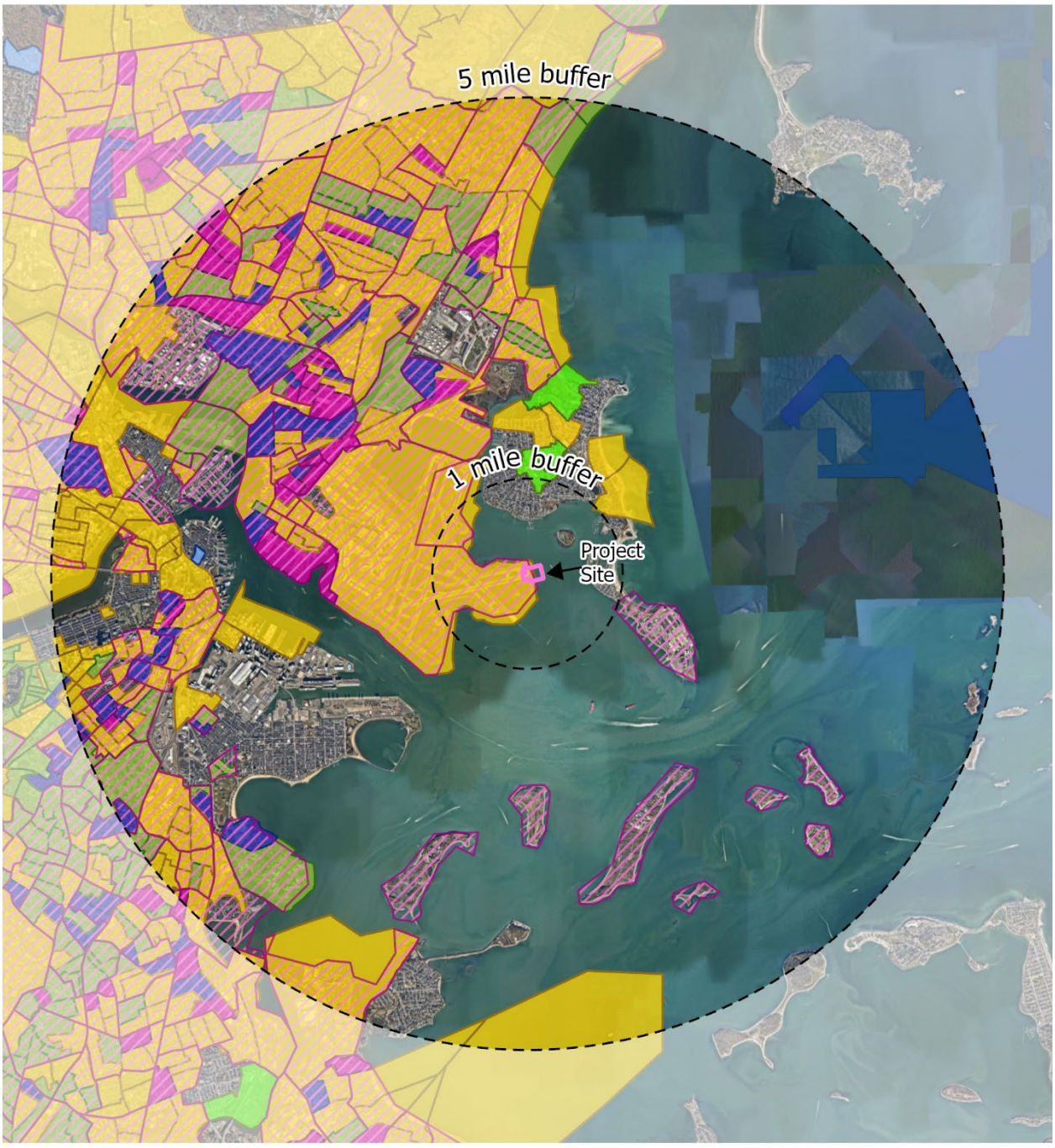


FIGURE 3-1: Environmental Justice Populations **Runway 27 End RSA Improvements Project**

Study Area
Languages spoken by at least 5% of the census tract who do not speak English Very Well
Minority
Income
English isolation
Minority and Income
Minority and English isolation
Income and English isolation
Minority, Income and English isolation

0 2500 5000 10000 Feet

Sources: VHB 2025, MassGIS, ESRI, Nearmap Imagery March 2024

3.4 Assessment of Existing Unfair or Inequitable Environmental Burden

The DEIR and Draft EA/Final EIR provided an assessment of existing unfair or inequitable environmental burden on identified EJ populations within 1 mile of the Previously Reviewed Project, characterized as the Project's Designated Geographic Area (DGA), through analysis of the Massachusetts Department of Public Health EJ Tool (DPH EJ Tool), U.S. Environmental Protection Agency's (USEPA) EJScreen, and Resilient Massachusetts Climate Resilience Design Standards Tool (RMAT) (see Appendix E of Draft EA/Final EIR). Since the development of the Draft EA/Final EIR, the characterization of EJ Block Groups within the DGA was updated to match the EJ Maps Viewer. This update did not change the findings of existing unfair or inequitable environmental burden on identified EJ populations described in prior filings.

3.4.1 Assessment of Existing Unfair or Inequitable Environmental Burden

The DEIR and Draft EA/Final EIR addressed Vulnerable Health Criteria, Potential Sources of Pollution, and Climate Change Vulnerability to help assess whether an existing unfair or inequitable environmental burden related to public health consequences has been placed upon the EJ communities, as compared to the general population, within one mile of the Project Site. This assessment was conducted consist with Section 58 of Chapter 8 of the Acts of 2021: *An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy*, and consistent with 301 CMR 11.06(7)(b) and 11.07(6)(n), each project to which the new EIR requirement applies under Part I must submit an EIR that contains "statements about the results of an assessment of any existing unfair or inequitable environmental burden and related public health consequences impacting the EJ population from any prior or current private, industrial, commercial, state, or municipal operation or project that has damaged the environment."

3.4.2 Department of Public Health Vulnerable Health Criteria

As documented in the DEIR and Draft EA/Final EIR, the DPH EJ Tool was used to assess potential health vulnerabilities within the DGA. The DPH vulnerable health EJ criteria include four environmentally related health indicators to determine populations that may have higher than average rates of environmentally related health outcomes; these are heart attack, elevated blood lead, low birth weight, and childhood asthma. The DGA includes census tracts within the municipalities of Boston and Winthrop. Two of the four vulnerable health EJ criteria are tracked at a municipality level: heart attack hospitalization and childhood asthma. Boston does meet the vulnerable health EJ criteria (defined as the community rate greater than 110% of statewide rate) for childhood asthma, but does not meet the vulnerable health EJ criteria for heart attack. Winthrop does not meet the vulnerable health EJ criteria for either heart attack of childhood asthma.

Table 3-2 lists the census tracts within the DGA and indicates whether they meet vulnerable health EJ criteria for childhood blood lead and low birth weight. For further documentation on vulnerable health EJ criteria, refer to Appendix E.4 of the Draft EA/Final EIR.

Table 3-2 DPH Vulnerable Health EJ Criteria

Census Tract	Municipality	Includes an Environmental Justice Block Group?	Meets Criteria (Greater than 110% of the Statewide Rate)?	
			Low Birth Weight	Elevated Blood Lead Prevalence
1802	Winthrop	Yes	No	Yes
1803.01	Winthrop	No	No	No
1804	Winthrop	No	No	Yes
1805	Winthrop	Yes	Yes	Yes
9801.01	Boston	No	No	No
9813	Boston	Yes	No	No
9901.01	Winthrop	No	No	No

Source: DPH EJ Tool, 2025

3.4.3 Other Potential Sources of Pollution

The DPH EJ Tool was also consulted throughout the DEIR and Draft EA/Final EIR to identify other sources of pollution that might currently pose a risk to public health within the DGA. Relevant sources of pollution that were evaluated include major air and waste facilities and hazardous material sources. There is one underground storage tank that was identified but is not within an EJ census block. Therefore, there are no major air and waste facilities within the DGA. Table E.4-5 in Appendix E.4 of the Draft EA/Final EIR summarizes these findings. There have been no changes to these findings since the filing of the Draft EA/Final EIR.

3.4.4 USEPA EJScreen

In the development of the DEIR and Draft EA/Final EIR USEPA's EJScreen tool was used to provide a percentile ranking by census block group, for 12 environmental indicators compared against statewide and national averages. The USEPA EJScreen Report included in Draft EA/Final EIR **Appendix E.4**, *EJ Supporting Documentation*, indicates the rankings of each census block group within one mile of the approximate center of the Project Site. At the time of this filing, the USEPA EJScreen tool is no longer available. MEPA has approved the use of an archived USEPA EJScreen hosted on a third party website which was consulted for the development of this Project Change. There have been no changes to findings related to USEPA EJScreen since the filing of the Draft EA/Final EIR. The findings from the USEPA EJScreen Report are summarized below. See Section 3.12 and Appendix E.4 of the Draft EA/Final EIR for further details, methodology, and definitions on these on the findings.

The City of Boston and Town of Winthrop are at or above the 80th percentile for 4 out of the 12 environmental indicators. The USEPA EJScreen Report indicates that the following were shown to be at or above the 80th percentile of the statewide average for EJ populations within the DGA (the "Project Buffer Area"):

- **National Air Toxics Assessment (NATA)**[5] **Diesel Particulate Matter (PM)** –The diesel PM concentration in the Project Buffer Area (0.463 μg/m^3) is higher than both the average concentrations in the state and in the U.S.
- **NATA Cancer Risk** –The value for this indicator in the Project Buffer Area is 34, while the average in the U.S. is 28.
- **NATA Respiratory Hazard Index (HI)** – The HI value for the Project Buffer Area is 0.55, therefore adverse noncancer effects are not likely.
- **Lead Paint** – The Lead Paint value for the Project Buffer Area is 0.84, therefore providing a higher likelihood of lead exposure from housing.

It is important to remember that the air toxics data presented in the EJScreen report provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations.

3.4.5 Climate Change Vulnerability

The RMAT Tool was run for the Draft EA/Final EIR (refer to Appendix E.3 of Draft EA/Final EIR). The RMAT Tool identified the Project Site as having a high exposure to sea level rise/storm surge, high exposure to extreme precipitation-urban flooding, and high exposure to extreme heat. As noted in *the MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations*, a high-risk rating for sea level rise/storm surge or extreme precipitation could indicate elevated climate risks for EJ populations that immediately surround the Project Site (i.e., within the Project boundaries). The Project Site boundaries are restricted to the Logan Airport campus, which, while within an EJ block group, does not contain any residential areas. Therefore, although the Project Site is susceptible to future climate conditions, elevated climate risks to EJ populations, which would create an existing unfair or inequitable environmental burden, are not anticipated. While Runway 27 would be susceptible to flooding from sea level rise, the safety improvement is necessary and has been designed to account for resiliency to the extent feasible.

Additionally, the *MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations* notes that the risk rating for extreme heat should not be used as a definitive indicator of elevated climate risks. Refer to Appendix E.3 of the Draft EA/Final EIR for a copy of the RMAT Tool Output Report.

5 The National Air Toxics Assessment (NATA) has been replaced with AirToxScreen. AirToxScreen calculates concentration and risk estimates from a single year's emissions data using meteorological data for that same year. The risk estimates assume a person breathes these emissions each year over a lifetime (or approximately 70 years). The USEPA cautions that AirToxScreen results are best applied to larger areas – counties, states and the nation. Results for smaller areas, such as a census tract, are best used to guide follow-up local studies. AirToxScreen assessments should not be used: to pinpoint specific risk values in small areas such a census tract; to characterize or compare risks at local levels (such as between neighborhoods); to characterize or compare risks between states; to examine trends from one assessment year to another; as the sole basis for risk reduction plans or regulations; to control specific sources or pollutants; or to quantify benefits of reduced air toxics emissions, https://www.epa.gov/AirToxScreen/airtoxscreen-overview.

3.5 Analysis of Project Impacts to EJ Populations

This section identifies if the Project is anticipated to cause unfair or inequitable burden to EJ populations as defined under Section 58 of the Climate Roadmap Act. It examines the nature and severity of the Project's construction impacts, how the Project impacts affect EJ populations compared to non-EJ populations, and Project benefits. **The Project Change has not resulted in a change in these findings from the Draft EA/Final EIR or DEIR.**

3.5.1 Climate Change

There would be no adverse impacts on EJ populations or disproportionate adverse impacts to EJ populations due to climate change. As discussed in Section 3.5 of Draft EA/Final EIR, there is no anticipated change in impacts from climate hazards. The Project Site is subject to sea level rise and is within a high risk coastal area. Additionally, the RMAT Tool identified that the Project Site has a high exposure to sea level rise/storm surge, extreme precipitation-urban flooding, and extreme heat. As noted in the *MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations,* a high risk rating for sea level rise/storm surge or extreme precipitation could indicate elevated climate risks for EJ populations that immediately surround the Project Site (i.e., within the Project Site boundaries).

In 2020, Massport performed a safety rehabilitation of Runway 9-27 to improve the surface of the runway. As part of that effort, and with the knowledge that some type of improvement to the Runway 27 End RSA would be upcoming, the runway threshold was raised 10 inches from its existing elevation. The 10-inch adjustment was made to account for any potential safety area construction extending out into Boston Harbor and sea level rise. The raise in elevation was made to the maximum extent practicable in relation to the remainder of the airfield. The FAA has set criteria and requirements in relation to grade change. Additionally, the deck sub-structure would be designed to withstand anticipated coastal storm events and sea level rise. The Project Change is not anticipated to increase climate risk to other properties in the vicinity.

Because the Project Site boundaries are restricted to the secured airfield and associated security zone at Logan Airport, elevated climate risks to EJ populations and non-EJ populations from this Project Change are not anticipated. Additionally, the *MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations* notes that the risk rating for extreme heat should not be used as a definitive indicator of elevated climate risks.

3.5.2 Traffic

There would be no disproportionate adverse impacts to EJ populations due to traffic. There is no anticipated change in impacts from traffic due to the Project Change. The Project would not generate any new traffic once complete. Construction would be primarily undertaken from the water, as most materials and workers would be delivered to the Runway 27 RSA construction area by barge. Short-term construction impacts are expected to be limited to on-Airport roadways (Transportation Way, Service Road, and Harborside Drive) with minimal impacts to local roadways. All trucks would access the Site by Route lA, Interstate 90, and the main Airport roadways only. Trucks would be prohibited from using local streets unless they are seeking construction-related access to or from local businesses. Based on the

maximum of 38 total daily construction truck trips and the access restrictions described above, the Project Change would have minimal impact on Airport or regional roadways.

3.5.3 Air Quality and Greenhouse Gas Emissions (GHG)

There would be no disproportionate adverse impacts to EJ populations due to air quality or greenhouse gas emissions (GHG). There is no anticipated change in impacts from air quality and GHG emissions due to the Project Change. There would be no permanent direct impacts or indirect impacts to air quality or GHG resulting from the proposed Runway 27 End RSA because the Project Change would not change the daily aircraft operations, type of aircraft, or location in which aircraft operate.

No disproportionate adverse impacts to EJ populations are anticipated as a result of potential shifting of flights during the construction period. Any shifting of flights would be utilizing existing flight paths and use of those approach and departure routes is subject to wind, weather and FAA safety requirements. Construction is expected to generate short-term construction-related air and GHG emissions, including exhaust emissions from on-road construction vehicles, off-road construction equipment and marine transport vessels; evaporative emissions from asphalt placement and curing; and fugitive dust from disturbance of unpaved areas. Estimated emissions from construction in each year that construction would occur are below applicable General Conformity *de minimis* thresholds for those pollutants for which the area is designated nonattainment or maintenance. Section 3.5.4 of Draft EA/Final EIR provides additional details on measures Massport will use to minimize GHG and other air pollutants during the construction period.

3.5.4 Noise

There would be no disproportionate adverse impacts to EJ populations due to noise. There is no anticipated change in impacts from noise due to the Project Change. There would be no permanent direct impacts or indirect impacts to noise-sensitive land uses resulting from the proposed Runway 27 RSA because the proposed Runway 27 RSA improvements would not change the daily aircraft operations, type of aircraft, or location in which aircraft operate.

The Project would generate temporary noise associated with the overall construction activities. No disproportionate adverse impacts to EJ populations are anticipated as a result or potential re-routing of flights during the construction period. Any shifting of flights would be utilizing existing flight paths and use of those approach and departure routes is subject to wind, weather and FAA safety requirements. The maximum sound levels at all receptors would be below the City of Boston's residential criterion of 86 dBA for all construction phases. The predicted maximum construction sound levels would be experienced at locations that are not within an EJ block group. These construction period sound levels are not anticipated to result in significant noise impacts at any off-airport location. Section 5.10.2 of DEIR provides additional details.

3.5.5 Natural and Water Resources

There would be no disproportionate adverse impacts to EJ populations due to unavoidable impacts to natural and water resources. As discussed in Chapter 2, there would be a change in natural and water resources as a result of the Project Change. There would be no significant impacts to the public's existing interests in these tideland areas. Due to legislated access restrictions, the only interests relevant to the

proposed RSA Project Site are shellfishing, living marine resources, and water quality. Limited shellfishing would continue as permitted under the provisions of the Airport Security Zone Statute in those areas that have historically supported that activity. The Project would be designed to protect, restore, and enhance living marine resources, as described in Chapter 4.

3.5.6 Project Benefits

The Project would enhance safety for aircraft and their passengers in emergency situations by constructing improvements to the RSA at the end of Runway 27 consistent with current FAA requirements. This Project is a required FAA safety project that would not extend the runway or have any effect on normal runway operations, runway capacity, or types of aircraft that could use the runway. The Project Change further enhances the safety components by providing greater accessibility to the area in the event of an incident. This beneficial project would serve all (EJ and non-EJ) populations that rely on Logan Airport for travel.

3.5.7 Conclusion

Project-related impacts on the public and surrounding communities are confined to the construction period, which will occur for two seasons. No disproportionate adverse impacts to EJ populations are anticipated. The Project Change has not resulted in a change in these findings. This Project would not extend the runway or have any effect on normal runway operations, runway capacity, or types of aircraft that could use the runway.

3.6 Summary of Avoidance, Minimization, and Mitigation Measures

There would be no disproportionate adverse effects or increased climate change risks to EJ populations. Therefore, no specific mitigation to EJ populations is required. Other than temporary construction phase impacts, no adverse impacts are anticipated to the surrounding community as there will be no changes to airport operations due to the presence of an RSA at the end of Runway 27. The Project is designed to protect, restore, and enhance living marine resources, as described in Chapter 4. Chapter 4 also details avoidance, minimization, and mitigation measures proposed for the Project Change.

3.7 Public Outreach

This section summarizes the outreach conducted through the MEPA process and planned outreach as the Project proceeds through design and construction. **Table 3-3** summarizes the outreach conducted to date.

Table 3-3 Summary of Public Outreach Conducted to Date

Date	Outreach Type	Outreach Method
July 30, 2019	Environmental Status and Planning Report (ESPR)	Initial Project description and status presented in 2017 ESPR.
December 31, 2020	Environmental Data Report (EDR)	Project description and status presented in 2018/2019 EDR.

Table 3-3 Summary of Public Outreach Conducted to Date

Date	Outreach Type	Outreach Method
February 23, 2021	ENF Agency Consultation Meeting	Approximately 25 agency representatives attended a project briefing and discussion led by Massport. Attendees represented the FAA, MEPA, Massachusetts Department of Environmental Protection (MassDEP), Massachusetts Natural Heritage and Endangered Species Program (NHESP), Massachusetts Division of Marine Fisheries (DMF), U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA) Fisheries Service, Massachusetts Office of Coastal Zone Management (CZM), U.S. Environmental Protection Agency (USEPA), and U.S. Army Corps of Engineers (USACE).
June 29, 2021	ENF Pre-Filing Virtual Meeting	Translated project summary on Massport website (remains available) and in meeting invite. Public notices in English and Spanish published in *East Boston Times*, *Winthrop Transcript*, and *El Mundo*. Phone calls/emails to Massport Community Advisory Committee (MCAC), elected officials, neighborhood associations, organizations. Spanish translation during meeting.
August 31, 2021	ENF Filing	Filing posted on Massport's website. Translated Project summary on Massport's website (remains available). Distribution included agencies, municipalities from the surrounding area, MCAC, and community organizations. ENF public notice translated in Spanish and published in the *Boston Herald*.
September 22, 2021	ENF Virtual Consultation Session/Public Meeting	Translated Project summary on Massport's website (remains available). Distribution included agencies, municipalities from surrounding area, MCAC, and community organizations. ENF public notice translated in Spanish and published in the Boston Herald. Spanish translation provided during the meeting.
June 6, 2022	DEIR Agency Consultation Meeting	Approximately 12 agency representatives attended a project briefing and discussion led by Massport. Attendees represented MassDEP, NHESP, DMF, NOAA Fisheries, CZM, USEPA, and Boston Conservation Commission (BCC).
June 30, 2022	DEIR Filing	Emailed to the EJ Reference List provided by MEPA. Executive summary translated in Spanish and posted on Massport's website. Posted a social media announcement notifying the public of the filing
July 20, 2022	DEIR Public Meeting	Translated project summary on Massport website (remains available) and in meeting invite. Public notices in English and Spanish published in *East Boston Times*, *Winthrop Transcript*, and *El Mundo*. Spanish translation during meeting.
December 15, 2022	Draft EA/Final EIR	Notice of Availability in English and Spanish published in *Boston Herald*, *East Boston Times*, *Winthrop Transcript*, and *El Mundo*. Circulated the Draft EA/Final EIR electronically to the EJ Reference List provided by MEPA. Translated the Notice of Availability and Executive Summary into Spanish and posted a copy on Massport's website. Posted the Draft EA/Final EIR on Massport's website at the time of the filing with MEPA, allowing for approximately an additional week of review time.

Table 3-3 Summary of Public Outreach Conducted to Date

Date	Outreach Type	Outreach Method
January 11, 2023	Consultation Meeting (Virtual) with Winthrop Conservation Commission	Briefed the Winthrop Conservation Commission on the Project, including purpose and need, public input opportunities, proposed mitigation, and Project outreach. Meeting notes are provided in Final EA Appendix C, *Agency Correspondence*.
March 15, 2023	Final EA	Circulated the Draft EA/Final EIR electronically to distribution list used for MEPA filings including the provided EJ Reference List. Translated the Executive Summary into Spanish and posted a copy on Massport's website. Posted the Draft EA/Final EIR on Massport's website at the time of the filing with MEPA, allowing for approximately an additional week of review time.
April 16, 2025	Advanced Notification	Sent an Advanced Notification to EJ reference list ahead of the NPC filing. The Advanced Notification was translated into Spanish.
April 30, 2025	Notice of Project Change	Circulated the Draft EA/Final EIR electronically to distribution list used for MEPA filings including the provided EJ Reference List. Posted the Draft EA/Final EIR on Massport's website at the time of the filing with MEPA, allowing for approximately an additional week of review time.

3.7.1 Outreach Plan

In coordination with the MEPA Office, Massport will continue to conduct outreach with local EJ communities. As has been Massport's past practice, Massport will offer translation and interpretation services in Spanish and other languages (with reasonable notice). These language services will apply to notices, documents, and community meetings that pertain to the Project. Future outreach following MEPA review includes a virtual public meeting 3 months prior to construction with Spanish translation streaming. The more detailed public outreach plan has been provided in the Appendix E.4 of the Draft EA-FEIR Massport will continue to follow the structure of this plan throughout the NPC and through Project completion.

4

Proposed Mitigation and Draft Section 61 Findings

4.1 Introduction

The Massachusetts Environmental Policy Act (MEPA) regulations, at 301 Code of Massachusetts Regulations (CMR) 11.07(j), outlines mitigation measures to be addressed in the Environmental Impact Report (EIR) process, including an "assessment of physical, biological and chemical measures and management techniques designed to limit negative environmental impacts or to cause positive environmental impacts during development and 9operation of a Project." Avoidance, minimization, and mitigation commitments for the Project were presented in Section 4.2 of the Draft Environmental Assessment (EA)/Final EIR.

This chapter provides description of Massport's proposed commitments to mitigation for the Project Change including compensatory mitigation for impacts to Land Containing Shellfish (LCS), and undisturbed Land Under the Ocean (LUO) and Coastal Beach. In addition this chapter includes updated draft Section 61 commitments to reflect the Project Change.

4.2 Project Mitigation Commitments

As described throughout this Notice of Project Change (NPC), from Project inception, the Federal Aviation Administration (FAA) and Massport have strived to meet the critical aviation safety need, to appropriately balance the direct and indirect natural resources impacts of the safety improvements, and to seek effective mitigation strategies. This iterative process will continue to identify and incorporate additional avoidance and minimization strategies through final design and construction. Impacts to natural resources are unavoidable for any of the Runway Safety Area (RSA) improvement alternatives that would meet FAA's design criteria, as demonstrated in Chapter 2 of the Draft EA/Final EIR. As discussed in Section 1.3 of Chapter 1, Massport considered Project Change alternatives that might minimize environmental impacts, however the purpose and need of the emergency ramps could not be obtained without fully incorporating the design changes presented within this NPC.

This Project is a required FAA safety project that will not extend the runway or have any effect on normal runway operations, runway capacity, or types of aircraft that could use the runway. The

impacts are due to the construction and final condition of this Project and no changes to airport operations are proposed. This section describes efforts to avoid and minimize impacts and provide compensatory mitigation for unavoidable additional impacts due to the Project Change to coastal resource areas. For avoidance, minimization, and mitigation for the Previously Reviewed Project refer to Section 4.2 of the Draft EA/Final EIR.

4.2.1 Coastal Resources

This section describes proposed avoidance, minimization, and mitigation measures for coastal wetland resource areas due to the Project Change.

4.2.1.1 Avoidance

The Project is part of a continuing safety program and is required to improve the RSA consistent with FAA's airport design standards,[1] and to enhance rescue access in the event of an emergency. The Project Change is required to meet the critical safety purpose and need for the Project.

4.2.1.2 Minimization

As described in Chapter 1, during design advancement alternatives to ramp extension were considered in order to minimize the impact on coastal resources due to the Project Change. These alternatives included eliminating one or both of the ramps, narrowing the ramps, or keeping them consistent with the Previously Reviewed Project. Given the applicable design criteria, these measures did not reduce resource impacts or are not feasible as described in Chapter 1.

4.2.1.3 Compensatory Mitigation

Direct impacts associated with the Project Change to the shoreline and seabed (below annual high water) from the emergency ramps would be approximately 168,071 square feet. The emergency ramps would generally convert previously disturbed Coastal Bank constructed as part of the existing Inclined Safety Area (ISA) to a more stabilized surface and alter Coastal Beach, Land Containing Shellfish (LCS), Land Subject to Tidal Action (LSTA), and LUO seaward of the existing ISA. The Massachusetts Wetlands Protection Act (WPA) resource area performance standards are addressed in Chapter 4 of the Draft EA/Final EIR, and demonstrate that although there will be some loss of habitat, there will not be a significant impact from the Project. These findings remained unchanged due to the Project Change. Loss of LCS due to emergency ramps will result in an approximately in a 13,453-square-foot increase in shellfish habitat impact that could reduce commercial value for badged shellfishers. While harvestable densities of soft shell clam resources in and adjacent to the proposed safety area expansion are depressed due to disease, the Massachusetts Division of Marine Fisheries (DMF) has indicated mitigation is required and likely in the form of a mitigation fee to a state shellfish habitat restoration program.

The mud flat habitat that includes the coastal beach and the lower intertidal zone is a special aquatic site and the U.S. Army Corps of Engineers (USACE) requires lost habitat be mitigated by replacement of lost area or by payment of an in-lieu fee. The in-lieu fee program charges a per square foot fee based on the

1 U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5300-13B, *Airport Design*, March 31, 2022.

impact area. The fee is based on the cost to create similar habitat from an upland site. The collected fee is provided to a state agency and must be used on ecological restoration projects.

Massport has committed to provide replacement/restoration of soft bottom intertidal and subtidal habitat to offset Project-related loss of habitat. A plan for replacement of the intertidal and subtidal area impacted by the Project Change will be included in the future permit applications. In the Draft EA/Final EIR and initial permit filings, Massport proposed a wetland mitigation goal of 1:1 restoration or replacement of approximately 1,200 square feet of filled wetland area (piles and extended emergency ramps) via construction or restoration of mud flat based on current USACE and Massachusetts Department of Environmental Protection (MassDEP) guidance. In close coordination with the resource agencies, mud flat mitigation is expected to be provided in the form of shoreline restoration within Boston Harbor.

To mitigate the impact on public interests in waterways, the Project Change will provide a restoration site in East Boston to compensate for displacement of flowed tidelands, create navigable waters that enhance recreational boating, and rehabilitate a disturbed site and create higher value coastal resources. In coordination with the USACE, Massport will provide a payment to the Massachusetts Department of Fish and Game In-Lieu Fee program, as recommended by DMF, for the impacts to shellfish resources and shellfishing. Additionally, the Project Change will conform to the Time of Year Restriction to protect spawning winter flounder, manage and treat stormwater runoff incompliance with MA Stormwater Management Standards, develop and conduct Erosion and Sedimentation Control Program, and use turbidity curtains for the in-water construction work areas.

4.2.1.4 Mitigation Costs

The cost of the mitigation will be confirmed during the permitting process with the DMF and USACE. The USACE currently uses an in-lieu fee of $17.97 per square foot which is an increase from previous filings. The impact for the Project is approximately 15,000 sf which represents the square footage of previously undisturbed LUO and Coastal Beach. For 15,000 square feet of impact, the estimated in-lieu fee would be approximately $269,550. Coordination with DMF is on-going in order to determine an appropriate mitigation fee.

4.3 Construction Period Mitigation Measures

There are no changes to construction period mitigation measures as a result of the Project Change. Construction period mitigation measures are outlined in **Table 4-1**. Refer to Section 4.3 of the Draft EA/Final EIR for further information on construction period mitigation measures.

4.4 Draft Section 61 Findings by Permit

M.G.L. Chapter 30, Section 61 authorizes state agencies with permitting responsibilities to make an official determination regarding potential impacts from a proposed project and whether impacts have been avoided, minimized, and/or mitigated for appropriately. The Law requires agencies/authorities to issue a determination that includes a finding describing the environmental impact, if any, of the project and whether all feasible measures have been taken to avoid or minimize said impact.

This section provides a brief overview of the Project, explains the history of the MEPA review process for the proposed Runway 27 End RSA Improvements Project, outlines required state and federal permits and their authorities, summarizes mitigation commitments for permanent and construction-related impacts, and provides draft Section 61 determination language for state agencies.

4.4.1 Project Description

The Project includes measures that are part of a continuing safety program and are required to improve the RSA, to the extent feasible, consistent with FAA airport design standards for RSAs,[2] and to enhance rescue access in the event of an emergency. **This Project will enhance safety but will not extend runways nor have any effect on normal runway operations, runway capacity, or types of aircraft that could use the runway**.

To minimize environmental impacts to Boston Harbor, in 2019, FAA determined that the preferred option for the Runway 27 End RSA is an approximately 650-foot-long RSA with an Engineered Material Arresting System (EMAS) installed on a pile-supported deck (approximately 450 feet long by 306 feet wide). An EMAS is constructed of collapsible concrete blocks with predictable deceleration forces. When, in an emergency, an aircraft rolls into an EMAS, the tires of the aircraft collapse the lightweight concrete, and the aircraft is slowed down in a way that minimizes damage to the aircraft. Because of the irregular shoreline at this area, it is expected that the 306-foot-wide deck would extend approximately 450 feet over Boston Harbor. Since the Project, once completed, would not change how Logan Airport operates, the Draft EA/Final EIR focused on measures to avoid and minimize construction impacts and associated mitigation. As stated above, the Project Change is not expected to significantly affect construction; overall project mitigation will be adjusted to reflect the increased marine impacts of the emergency ramps.

4.4.2 History of MEPA Review

In coordination with FAA, Massport obtained public input throughout the scoping, planning, and analysis of the Project. In accordance with the new MEPA requirements for projects within 1 mile of an environmental justice (EJ) community, Massport held a virtual pre-Environmental Notification Form (ENF) filing public meeting on June 29, 2021 after reaching out to local and state elected officials, representatives in East Boston and Winthrop, the Massport Community Advisory Committee (MCAC), and community interest groups. Notice of the meeting, along with a Project summary, was placed in English and Spanish in the *East Boston Times*, *Winthrop Transcript*, *El Mundo*, and on Massport's website. The meeting was attended by representatives from State Representative Adrian Madaro's office, the City of Boston, the Town of Winthrop, and by various community interest groups and private citizens.

In August 2021, Massport submitted an ENF to Executive Office of Energy and Environmental Affairs (EEA), per MEPA and accompanying regulations (301 CMR 11). The ENF was circulated to interested parties and a Public Notice of Environmental Review was published on September 8, 2021, in accordance with MEPA regulations 301 CMR 11.05 and 301 CMR 11.15. A public scoping meeting was held virtually on September 22, 2021, to solicit public input on development of the Draft Environmental Impact Report (DEIR) scope. The Secretary issued a Certificate on the DEIR on October 8, 2021, confirming the need to prepare an EIR.

6 U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5300-13B, *Airport Design*, March 31, 2022.

On June 30, 2022, Massport filed a DEIR for the Project with the EEA. A Public Notice of Environmental Review was published in the Environmental Monitor on July 8, 2022, and the DEIR was circulated to those who commented on the ENF and other interested parties. An additional voluntary virtual public meeting was conducted on July 20, 2022, and was attended by representatives from State Senator Ed Markey's office, the City of Boston, the Town of Winthrop, and by various community interest groups and private citizens. The public comment period on the DEIR ended on August 22, 2022. The Secretary of EEA issued a Certificate on the DEIR on August 29, 2022, confirming that the DEIR properly and adequately complied with the MEPA regulations and outlining the scope of the FEIR. The Secretary's DEIR Certificate can be found in Appendix A of the Draft EA/Final EIR.

The Secretary of EEA issued the Final Certificate on January 30, 2023, determining that the FEIR adequately and properly complies with MEPA and its implementing regulations (see Appendix A). The Project is subject to additional MEPA review through this NPC as a result of a material change (the Project Change). The Project Change is attributed to design modifications to emergency ramps and grading resulting in additional coastal and marine impacts. No additional MEPA threshold exceedances would occur as a result of the Project Change.

4.4.3 Overview of Project Impacts and Mitigation Measures

The Proposed Runway 27 End RSA Improvements Project would result in impacts to Coastal Bank, Coastal Beach, LUO, Land Subject to Coastal Storm Flowage (LSCSF), LSTA, and LCS. Massport has proposed compensation for impacts to these resources. Temporary impacts to environmental resources would also be mitigated through contractor equipment specifications, time-of-year (TOY) restrictions and silt curtains for in-water work as well as soil and erosion controls to prevent adverse water quality impacts. Some adjustment to the mitigation program is necessitated by the increased marine impacts associated with the Project Change.

4.4.3.1 Permanent Impacts

Permanent impacts resulting from construction of the Project would be mitigated, as described in Section 4.2.1 and summarized in **Table 4-1**. There would be no impacts to ground transportation, air quality, socioeconomic impacts, EJ, children's health and safety risks, historic resources, Section 4(f) resources, wild and scenic rivers, farmland, natural resources, light emissions, and energy supply. Therefore, mitigation is not required for these resources.

4.4.3.2 Construction Impacts

Temporary, short-term impacts from construction activities would be mitigated to the extent practicable (see **Table 4-1**). Appropriate construction mitigation measures would be incorporated into the contract documents and specifications governing the activities of contractors and subcontractors constructing elements of the Project. No modifications to these measures would be required due to the Project Change.

All construction activities would comply with FAA Advisory Circular 150/5370-10H, *Standard Specifications for Construction of Airports*.[3] On-site resident engineers and inspectors will monitor construction activities to ensure that mitigation measures are properly implemented. These construction-

3 U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5370-10H, *Standard Specifications for Construction of Airports*, December 21, 2018.

period mitigation measures would be the responsibility of Massport. Specific mitigation measures would be developed during the final design phase of the RSA Improvements Project and would be reviewed by the appropriate regulatory agencies as part of the permit applications. Construction-period mitigation requirements would be incorporated into the final plans and specifications that would serve as the basis for the construction contract.

Table 4-1 Proposed Mitigation Measures and Commitments

Environmental Categories	Mitigation Measure or Commitment	Approximate Cost	Implementation Schedule	Responsible Party
Land Containing Shellfish	Provide mitigation fee to Massachusetts Division of Marine Fisheries (DMF) for off-site restoration.	TBD	Prior to Construction	Massport
Habitat	Replace lost upland grassland habitat.	TBD	During Construction	Contractor
	Implement winter flounder time-of-year (TOY) restriction from February 15 to June 30 for in-water construction activities.	TBD	During Construction	Contractor
Coastal Wetlands	Provide in-lieu fee (U.S. Army Corps of Engineers [USACE]) for impacts to mud flat.	$269,550	Prior to Construction	Massport
	Provide 1:1 replacement/restoration of intertidal and subtidal wetlands impacted by piles and egress ramps. Mud flat mitigation is expected to be in the form of shoreline restoration within Boston Harbor.	TBD	During Construction	Massport/ Contractor
Water Quality	Develop and implement a comprehensive Soil Erosion and Sediment Control Plan in accordance with National Pollutant Discharge Elimination System (NPDES) and Massachusetts Department of Environmental Protection (MassDEP) standards.	TBD	Prior to and During Construction	Contractor
	Apply water to dry soil to prevent fugitive dust.	TBD	During Construction	Contractor
	Stabilize any highly erosive soils with erosion control blankets or hydroseeding and other stabilization methods, as necessary.	TBD	During Construction	Contractor
	Use sediment control methods (such as compost filter tubes) to prevent silt and sediment entering the stormwater system and waterways.	TBD	During Construction	Contractor
	Maintain equipment to prevent oil and fuel leaks.	TBD	During Construction	Contractor
	Use turbidity curtains around any in-water construction activities.	TBD	During Construction	Contractor
	Install measures to manage and treat stormwater runoff in compliance with the Massachusetts Stormwater Management Standards.	TBD	During Construction	Contractor
Noise	Maintain mufflers on construction equipment in accordance with Occupational Safety and Health Administration (OSHA) standards.	TBD	During Construction	Contractor
	Minimize engine idling in accordance with Massachusetts anti-idling regulations.	TBD	During Construction	Contractor

Table 4-1 Proposed Mitigation Measures and Commitments

Environmental Categories	Mitigation Measure or Commitment	Approximate Cost	Implementation Schedule	Responsible Party
	Fit any air-powered equipment with pneumatic exhaust silencers.	TBD	During Construction	Contractor
	Minimize nighttime construction.	TBD	During Construction	Contractor
	Minimize noise during pile driving activities where possible.	TBD	During Construction	Contractor
Transportation	Implement construction worker vehicle trip management techniques	TBD	During Construction	Contractor
Air Quality and Greenhouse Gas Emissions	Keep truck idling to a minimum in accordance with Massachusetts anti-idling regulations.	TBD	During Construction	Contractor
	Retrofit appropriate diesel construction equipment with diesel oxidation catalysts and/or particulate filters.	TBD	During Construction	Contractor
	Implement construction worker vehicle trip management techniques	TBD	During Construction	Contractor
Hazardous Materials and Solid Waste	Pre-characterize any materials excavated from the Study Area and require disposal (if any) to determine course of action for removal.	TBD	During Construction	Contractor
Public Outreach/ Environmental Justice (EJ)	Commit to continuing outreach to the public, including EJ communities, throughout all future phases of project development and construction in accordance with federal and state requirements.	TBD	All future phases	Massport

TBD - To be determined

4.4.4 Draft Section 61 Findings

In addition to compliance with and MEPA, there are local, state, and federal permits needed for the Project, as listed in **Table 4-2**.

Table 4-2 Potential State Actions

Agency/Department	Permit/Approval/Action	Status/Timeframe
Commonwealth of Massachusetts		
Coastal Zone Management	Consistency Statement with Massachusetts Coastal Zone Management Plan	To be obtained prior to construction.
Massachusetts Department of Environmental Protection	Individual Water Quality Certification	To be obtained prior to construction.
	Chapter 91 Waterways Program License Modification	To be obtained prior to construction.
Massachusetts Natural Heritage and Endangered Species Program	Conservation and Management Permit (if required)	If required, prior to construction.

Note: This is a preliminary list of permits and approvals that may be sought for the Project based on current information and is subject to change as the design of the Project evolves.

4.4.4.1 Massachusetts Office of Coastal Zone Management (CZM)

Project Name: *Runway 27 End RSA Improvements Project*

Project Location: *Boston Logan International Airport (Logan Airport), East Boston, Massachusetts*

Project Proponent: *Massachusetts Port Authority (Massport)*

EEA Number: *16433*

Date Noticed in Monitor: *May 7, 2025*

Applicable State Action/Permit

- Consistency Statement with Massachusetts Coastal Zone Management Plan

This Section 61 Finding for the Runway 27 End RSA Improvements Project (EEA 16433) 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 Project are characterized and quantified in the Logan Airport Runway 27 End Runway Safety Area (RSA) Improvements Project Notice of Project Change, which is incorporated by reference into this Section 61 Finding. To the greatest extent practicable, Massport has taken all feasible measures to avoid and/or minimize adverse environmental impacts of the Project. Where impacts are not avoidable, Massport has worked throughout the planning and environmental review process to develop measures to mitigate impacts of the Project to the extent practicable. With the implementation of the proposed mitigation, and cooperation with federal and state agencies, the Massachusetts Office of Coastal Zone Management (CZM) finds that there are no significant unmitigated impacts.

*Massport recognizes that the identification of effective mitigation, and implementation of that mitigation throughout the life of the Project, is central to its responsibilities under Massachusetts Environmental Policy Act (MEPA). Accordingly, Massport has prepared a Table of Mitigation Commitments (**Table 4-3**) that specifies, for each potential state permit, the mitigation that Massport would provide. In the Table of Mitigation Commitments, Massport provides clear commitments to implement the mitigation measures; identifies the parties responsible for implementation of measures; identified estimated cost (where available) and provides a schedule for their implementation based upon Project phasing.*

CZM has reviewed the MEPA filings and finds that the environmental impacts resulting from construction of the Project are those impacts as described in the NPC, 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, CZM 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 Project. In making this finding, CZM has considered reasonably foreseeable climate change impacts and environmental justice impacts.

Coastal Zone Management

As discussed in Chapter 2, the Project Change would involve additional permanent impacts to coastal wetlands subject to federal jurisdiction as Waters of the U.S, and as well as state-regulated resource areas including Coastal Bank, Coastal Beach/Tidal Flats, Land Containing Shellfish (LCS), and Land Under the Ocean (LUO). The direct alteration of these resources by the overall RSA project would be restricted to the actual footprint of the deck pilings and emergency ramps. The pilings would alter approximately

907 square feet of Land Subject to Tidal Action (LSTA) and LUO, and includes Coastal Bank, Coastal Beach/Tidal Flats, and LCS. An additional 22,083 square feet of coastal resources would be altered by the emergency ramps and associated grading. Most of this area has been previously altered by the existing ISA. Mitigation for Project impacts would include 1:1 replacement or restoration of approximately 15,000 square feet of filled wetland area , in-lieu fee, providing funding to DMF's shellfish restoration program, and a 1:1 replacement of impacted upland grassland habitat. These impacts and associated mitigation measures are summarized in **Table 4-3**. These estimated impacts have increased due to the Project Change. Mitigation measures have been revised to reflect the changes incurred from the emergency ramps Project Change.

Table 4-3 Coastal Zone Impacts and Mitigation

Estimated Impact	Mitigation	Responsible Party/ Schedule
Permanent Impacts		
Approximately 15,000 square feet of Coastal Beach (mud flat) and Land Under the Ocean	Wetland mitigation, with a 1:1 replacement or restoration of approximately 15,000 square feet of filled wetland area (associated with piles and emergency ramps) via construction or restoration of mudflat based on U.S. Army Corps of Engineers (USACE) and Massachusetts Department of Environmental Protection (MassDEP) guidance. Mud flat mitigation is expected to be provided in the form of shoreline restoration within Boston Harbor. Provide in-lieu fee in accordance with USACE mitigation policy for impacts to federally jurisdictional resources.	Massport/ Pre-Construction and During Construction
Total impact of 82,764 square feet to Land Containing Shellfish	Contribute funding to Massachusetts Division of Marine Fisheries (DMF) shellfish restoration program.	Massport/ Pre-Construction
Construction Period Impacts		
Potential impacts to winter flounder	In-water time of year restriction for silt producing construction activities of February 15 to June 30. Turbidity curtains will be used to surround the in-water work area to contain any turbidity that may be created by the construction activities.	Massport and Contractor/ During Construction
Noise impacts from pile driving that could potentially impact biological resources	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.	Contractor/ During Construction

4.4.4.2 Massachusetts Department Environmental Protection

Project Name: *Runway 27 End RSA Improvements Project*

Project Location: *Boston Logan International Airport (Logan Airport), East Boston, Massachusetts*

Project Proponent: *Massachusetts Port Authority (Massport)*

EEA Number: *16433*

Date Noticed in Monitor: *May 7, 2025*

Applicable State Action/Permit

- Section 401 Water Quality Certificate
- Chapter 91 License

This Section 61 Finding for the Runway 27 End RSA Improvements Project (EEA 16433) 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 Project are characterized and quantified in the Logan Airport Runway 27 End Runway Safety Area (RSA) Improvements Project Notice of Project Change (NPC), which is incorporated by reference into this Section 61 Finding. To the greatest extent practicable, Massport has taken all feasible measures to avoid and/or minimize adverse environmental impacts of the Project. Where impacts are not avoidable, Massport has worked throughout the planning and environmental review process to develop measures to mitigate impacts of the Project to the extent practicable. With the implementation of the proposed mitigation, and cooperation with federal and state agencies, the Massachusetts Department of Environmental Protection (MassDEP) finds that there are no significant unmitigated impacts.

*Massport recognizes that the identification of effective mitigation, and implementation of that mitigation throughout the life of the Project, is central to its responsibilities under Massachusetts Environmental Policy Act (MEPA). Accordingly, Massport has prepared a Table of Mitigation Commitments (**Table 4-4**) that specifies, for each potential state permit, the mitigation that Massport would provide. In the Table of Mitigation Commitments, Massport provides clear commitments to implement the mitigation measures; identifies the parties responsible for implementation of measures; identified estimated cost (where available) and provides a schedule for their implementation based upon Project phasing.*

MassDEP has reviewed the MEPA filings and finds that the environmental impacts resulting from construction of the Project are those impacts as described in the NPC, 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, MassDEP 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 Project. In making this finding, MassDEP has considered reasonably foreseeable climate change impacts and environmental justice impacts.

Wetlands and Waterways

s discussed in Chapter 2, the Project Change would involve additional permanent impacts to coastal wetlands subject to federal jurisdiction as Waters of the U.S, and as well as state-regulated resource areas including Coastal Bank, Coastal Beach/Tidal Flats, Land Containing Shellfish (LCS), and Land Under the

Ocean (LUO). The direct alteration of these resources by the overall RSA project would be restricted to the actual footprint of the deck pilings and emergency ramps. The pilings would alter approximately 907 square feet of Land Subject to Tidal Action (LSTA) and LUO, and includes Coastal Bank, Coastal Beach/Tidal Flats, and LCS. An additional 22,083 square feet of coastal resources would be altered by the emergency ramps and associated grading. Most of this area has been previously altered by the existing ISA. The entire Project Site is within either filled tideland (airfield) or consists of flowed tidelands (shoreline and Boston Harbor) and is subject to Chapter 91 licensing and permitting for dredging, filling, and any structures. The issuance of a Section 401 Water Quality Certification by MassDEP would be required for the discharges of fill into Waters of the U.S. In accordance with Clean Water Act (CWA) requirements, mitigation would be provided for all proposed permanent wetland impacts. These impacts and associated mitigation measures are summarized in **Table 4-4**. These estimated impacts have increased due to the Project Change. Mitigation measures have been revised to reflect the changes incurred from the Project Change.

Mitigation for Project impacts would include 1:1 replacement or restoration of approximately 15,000 square feet of filled wetland area , in-lieu fee, providing funding to DMF's shellfish restoration program, time of year restrictions on in-water construction, turbidity curtains, vibratory pile driver, and ramp up or soft start for hammer driving. Stormwater mitigation measures for the construction-period would be detailed in the Stormwater Pollution Prevention Plan (SWPPP) to be prepared by the contractor prior to construction pursuant to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP), which would include:

- Minimization of exposed soils through sequencing work and temporary stabilization.
- Site controls and erosion and sedimentation Best Management Practices (BMPs) could include siltation barriers, temporary sediment basins and stabilized construction entrances to prevent siltation in waterways.
- Use of turbidity curtains around any active in-water construction sites.
- Regular inspection and monitoring of discharges in accordance with NPDES CGP to avoid permanent and indirect effects due to construction site runoff.

Table 4-4 State Wetland and Waterway Resources Impact and Mitigation

Estimated Impact	Mitigation	Responsible Party/ Schedule
Permanent Impacts		
Approximately 15,000 square feet of Coastal Beach (mud flat) and Land Under the Ocean	Wetland mitigation, with a 1:1 replacement of approximately 15,000 square feet of filled wetland area (piles and emergency ramps) via construction or restoration of mudflat based on current U.S. Army Corps of Engineers (USACE) and Massachusetts Department of Environmental Protection (MassDEP) guidance. Mud flat mitigation is expected to be provided in the form of shoreline restoration within Boston Harbor. Provide in-lieu fee in accordance with USACE mitigation policy for impacts to federally jurisdictional resources.	Massport and Contractor/ Pre-Construction and During Construction

Table 4-4 State Wetland and Waterway Resources Impact and Mitigation

Estimated Impact	Mitigation	Responsible Party/ Schedule
Total impact of 82,764 square feet to Land Containing Shellfish	Contribute funding to Massachusetts Division of Marine Fisheries (DMF) shellfish restoration program.	Massport/ Pre-Construction
Construction Period Impacts		
Potential impacts to winter flounder	In-water time of year restriction for silt producing construction activities of February 15 to June 30. Turbidity curtains will be used to surround the in-water work area to contain any turbidity that may be created by the construction activities.	Contractor/ During Construction
Noise impacts from pile driving that could potentially impact biological resources	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.	Contractor/During Construction

4.4.4.3 Massachusetts Natural Heritage and Endangered Species Program

Project Name: *Runway 27 End RSA Improvements Project*

Project Location: *Boston Logan International Airport (Logan Airport), East Boston, Massachusetts*

Project Proponent: *Massachusetts Port Authority (Massport)*

EEA Number: *16433*

Date Noticed in Monitor: *May 7, 2025*

Applicable State Action/Permit

- Natural Heritage and Endangered Species Program (NHESP) Conservation and Management Permit (if required)

This Section 61 Finding for the Runway 27 End RSA Improvements Project (EEA 16433) 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 Project are characterized and quantified in the Logan Airport Runway 27 End Runway Safety Area (RSA) Improvements Project Notice of Project Change (NPC), which is incorporated by reference into this Section 61 Finding. To the greatest extent practicable, Massport has taken all feasible measures to avoid and/or minimize adverse environmental impacts of the Project. Where impacts are not avoidable, Massport has worked throughout the planning and environmental review process to develop measures to mitigate impacts of the Project to the extent practicable. With the implementation of the proposed mitigation, and cooperation with federal and state agencies, NHESP finds that there are no significant unmitigated impacts.

*Massport recognizes that the identification of effective mitigation, and implementation of that mitigation throughout the life of the Project, is central to its responsibilities under Massachusetts Environmental Policy Act (MEPA). Accordingly, Massport has prepared a Table of Mitigation Commitments (**Table 4-5**) that specifies, for each potential state permit, the mitigation that Massport would provide. In the Table of Mitigation Commitments, Massport provides clear commitments to implement the mitigation measures; identifies the parties responsible for implementation of measures; identified estimated cost (where available) and provides a schedule for their implementation based upon Project phasing.*

NHESP has reviewed the MEPA filings and finds that the environmental impacts resulting from construction of the Project are those impacts as described in the NPC, 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, NHESP 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 Project. In making this finding, NHESP has considered reasonably foreseeable climate change impacts and environmental justice impacts.

Threatened and Endangered Species

As discussed in Chapter 2, the Project Change would involve permanent impacts to existing grassland habitat that is a state-listed polygon of priority habitat for upland sandpiper and Eastern meadowlark. A Conservation and Management Permit would be required if impacts constitute a take for the two upland grassland State-listed species. Mitigation for impacts would include a 1:1 replacement of impacted

upland grassland habitat. These impacts and associated mitigation measures are summarized in **Table 4-5**. Massport's goal is no net loss of upland grassland habitat.

Table 4-5 State Threatened and Endangered Species Impact and Mitigation

Estimated Impact	Mitigation	Responsible Party/ Schedule
Permanent Impacts		
Loss of upland grassland habitat (14,929 square feet)	Replace lost upland grassland habitat by removing existing pavement.	Contractor/ During Construction
Construction Period Impacts		
Alteration of upland grassland habitat (28,922 square feet)	Restore upland grassland habitat disturbed by construction.	Contractor/ During Construction

Appendix A – Secretary of the Executive Office of Energy Affairs Certificate on Final Environmental Impact Report

This Page Left Intentionally Blank.

The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Maura T. Healey
GOVERNOR

Kimberley Driscoll
LIEUTENANT GOVERNOR

Rebecca L. Tepper
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1081
http://www.mass.gov/eea

January 30, 2023

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	: Boston Logan International Airport Runway 27 End Runway Safety Area (RSA) Improvement Project
PROJECT MUNICIPALITY	: Boston
PROJECT WATERSHED	: Boston Harbor
EEA NUMBER	: 16433
PROJECT PROPONENT	: Massport
DATE NOTICED IN MONITOR	: December 16, 2022

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61-62L) and Section 11.08 of the MEPA regulations (301 CMR 11.00), I have reviewed the Final Environmental Impact Report (FEIR) and hereby determine that it **adequately and properly** complies with MEPA and its implementing regulations.

Project Description

As described in the Final Environmental Impact Report (FEIR), the Massachusetts Port Authority (Massport) is proposing improvements to the Runway Safety Area (RSA)[1] located at the end of Runway 27 at Boston Logan International Airport. The Federal Aviation Authority requires that airports receiving federal funding for airport improvement projects and commercial

[1] As described by the Federal Aviation Authority (FAA), an RSA is a defined surface surrounding the runway, typically 500-feet wide and extending 1,000-feet beyond each runway end.

service airports provide standard RSAs where possible.[2] The RSA is intended to reduce the risk of damage to aircraft and protection of passengers in the event of an unintentional excursion from the runway.[3]

The project proposes the construction of an approximately 650-foot long by 306-foot-wide RSA on a pile-supported deck with an Engineered Materials Arresting System (EMAS) bed installed on the deck. An EMAS is constructed of collapsible concrete blocks which can decelerate an aircraft in a way that minimizes damage to the aircraft and potential injuries. An EMAS is often used when a full-dimension RSA (1,000 ft long by 500 ft wide) is not possible due to lack of available land or to minimize environmental impacts; an EMAS provides an FAA-approved level of safety equivalent to an RSA built to the full-length dimensions. It is expected that the 306-foot-wide deck would extend between 450 feet over Boston Harbor. The deck will be supported by 326 20-inch square concrete piles. Two emergency access ramps are proposed on each side of the deck. The 20-foot wide perimeter access road on the north side of Runway 27 will also be straightened and realigned to enhance vehicular site lines.

As indicated in the FEIR, the proposed RSA improvement is a safety improvement and does not extend the runway or have any effect on runway operations, runway capacity, or the types of aircraft that can use the runway.

Project Site

The project is located within Logan International Airport (Logan Airport), which is owned and operated by Massport. Logan Airport is New England's primary international and domestic airport and includes approximately 2,400 acres in East Boston and Winthrop, including 700 acres in Boston Harbor. Logan Airport is one of the most land-constrained hub airports in the nation and is surrounded on three sides by Boston Harbor. The airfield has six runways (which vary in length from 2,557 feet to 10,081 feet), 15 miles of taxiways, and approximately 240 acres of concrete and asphalt apron.

The 10-acre project area is focused on the east end of Runway 9-27 which is comprised of Runway 9 on the west end and Runway 27 on the east. The project site includes the existing Runway 27 end and the armored coastal shoreline and intertidal and subtidal areas seaward of the existing runway end. Runway 9-27 is 7,001 feet long, 150 feet wide, and is constructed of asphalt pavement. The runway has 75-foot-wide paved shoulders on either side. At the approach end of Runway 9 (western end of the runway), the existing RSA meets the full dimensions set forth in the FAA design standards. The approach end of Runway 27 (eastern end of the runway) does not meet the current FAA design standards for length. This runway was constructed before the current FAA design guidelines were in place. The Runway 27 End RSA is only 150 feet long and therefore does not meet the RSA length requirement of 1,000 feet for a full dimension RSA.

[2] Because many runways were built before the 1000-foot RSA standard was adopted approximately 20 years ago, the FAA implemented the Runway Safety Area Program to make practicable improvements to existing RSAs for priority runways.

[3] An excursion from the runway can include an overrun (when an arriving aircraft fails to stop before the end of the runway), an undershoot (when an aircraft arriving on a runway touches down before the start of the paved runway surface), or an event in which an aircraft veers off to one side of a runway.

Portions of the project site include Priority Habitat as mapped by the Natural Heritage and Endangered Species Program (NHESP) *Massachusetts Natural Heritage Atlas* (15th Edition). The project is located adjacent to and within Boston Harbor and contains coastal wetland resource areas including Coastal Bank, Coastal Beach, Land Subject to Coastal Storm Flowage (LSCSF), Land Subject to Tidal Action, Land Containing Shellfish (LCS), and Land Under Ocean (LUO). The project site includes areas within mapped Federal Emergency Management Agency (FEMA) flood zone VE (an area that is subject to high velocity waters and waves and is inundated by a 100-year storm) with a base flood elevation (BFE) of elevation (el.) 13 ft NAVD88. The landward area of the project site is mapped as FEMA flood zone AE (an area inundated by a 100-year storm but not subject to high velocity waters), with BFE el. 12 ft NAVD88 according to FEMA flood insurance rate map (FIRM) number 25025C0082J effective March 16, 2016.

The project site is located within two Environmental Justice (EJ) populations characterized as Minority and is within one mile of two EJ Populations also characterized as Minority. The DEIR identified the "Designated Geographic Area" (DGA) for the project as 1 mile around EJ populations, included a review of potential impacts and benefits to the EJ populations within this DGA, and described public involvement efforts undertaken to date.

Changes Since the Filing of the DEIR

The FEIR states that the project has not changed since the DEIR filing; however, project mitigation has been updated to include replacement/restoration of intertidal and subtidal wetland resource areas impacted by piles and egress ramps and replacement of lost grassland habitat impacted by changes to the perimeter access road.

Environmental Impacts and Mitigation

Environmental impacts associated with the project include creation of 3.8 acres of new impervious surface (3.3 acres RSA deck, and 0.5 acres approach slab and perimeter road), as well as permanent alteration of 390 linear feet (lf) of Coastal Bank, 2,660 sf of Coastal Beach, 97,200 sf of LSCSF, 45,420 of Land Subject to Tidal Action, 66,760 sf Land Containing Shellfish, and107,700 sf of LUO. The project will impact 154,120 sf of flowed tidelands.

The project will minimize and mitigate environmental impacts by adhering to time-of-year (TOY) restrictions for marine fisheries and provide a mitigation fee for impacts to LCS; providing 1:1 replacement/restoration of intertidal and subtidal wetland resource areas; installing stormwater management in compliance with the Stormwater Management Standards (SMS); using turbidity curtains around in-water construction and employing erosion and sediment control and other construction best management practices to reduce noise, air and water quality impacts during the construction period.

Jurisdiction and Permitting

The project is subject to the preparation of a Mandatory EIR pursuant to 301 CMR 11.03(3)(a)(5) because it requires Agency Action and involves a new non-water dependent use or Expansion of an existing non-water dependent structure, provided the use or structure occupies one or more acres of waterways or tidelands. The project also exceeds the ENF threshold at

11.03(3)(b)(1)(f) because it will result in the alteration of one-half or more acres of any other wetland (LUO, Coastal beach, Land Containing Shellfish, LSCSF). The project requires a Chapter 91 (c. 91) License (Modification) and 401 Water Quality Certification (WQC) from MassDEP. The project will require Federal Consistency review by the Massachusetts Office of Coastal Zone Management (CZM). It may require a Conservation and Management Permit (CMP) from NHESP.

The project requires an Order of Conditions (OOC) from the Boston Conservation Commission (or in the case of an appeal, a Superseding OOC from MassDEP). The project will require a National Pollutant Discharge Elimination System (NPDES) Stormwater General Permit from the Environmental Protection Agency (EPA). The Project will also be subject to review by the FAA under the National Environmental Policy Act (NEPA).

Because Massport, an Agency within the meaning of MEPA, is the Proponent, MEPA jurisdiction is broad and extends to those aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

Review of the FEIR

The FEIR included a project description, existing and proposed conditions plans, estimates of project-related impacts including new information on greenhouse gas (GHG) emissions from construction period activities, and a summary of stormwater management measures. It contained updates on coordination with permitting agencies and the status of project permits. As requested in the Certificate on the DEIR, the FEIR included additional mitigation for project impacts including wetland and habitat replacement/restoration. The FEIR provided a response to comments on the DEIR[4] including additional review of project alternatives. The FEIR included draft Section 61 Findings and a summary of project mitigation. It also contained an updated assessment of the public health impacts of the project and information related to impacts on EJ populations consistent with 301 CMR 11.07(6)(n).

The FEIR also serves as the Draft Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) and is referred to in the filing as the Draft EA/Final EIR.

Alternatives Analysis

The FEIR contained a summary of the six alternatives identified as part of the *Boston Logan Airport Runway Incursion Mitigation Study/Runway 9-27 Runway Safety Area (RSA) Alternatives Study* (the RIM/Runway 9- 27 RSA Alternatives Study). The alternatives, as previously described in the DEIR, included:

- No Build Alternative
- Alternative 1 Declared Distances
- Alternative 2 Displaced Threshold Markings

[4] On November 15, 2022, MEPA issued a memorandum acknowledging the inadvertent omission of comment letters on the DEIR from Air Impact Relief, Inc. (Air Inc.) and the Town of Winthrop due to technical issues with the on-line public comment portal and failed mail delivery. These letters were provided to Massport and responses to these comments were included in the FEIR.

- Alternative 3A Full RSA in Boston Harbor, Fill Option
- Alternative 3B Full RSA in Boston Harbor, Deck Option
- Alternative 4A EMAS on 500-Foot-Wide Deck
- Alternative 4B EMAS on 306-Foot-Wide Deck (Preferred Alternative)

In response to comments, the FEIR provided additional detail to substantiate the dismissal of Alternatives 1 and 2. As stated in the FEIR, Alternative 1, Declared Distances was dismissed not only because it would reduce the ability of Runway 9-27 in accommodating approximately 75% of aircraft using that runway, but would also result in those aircraft having to take weight penalties (reduce their takeoff weight). The FEIR also describes the southwest corner of the airfield, where pavement markings would be adjusted, as a Massport and FAA-identified "hot spot" where measures have already been implemented to reduce the possibility of pilot confusion including runway status lights, enhanced markings, and signage. The FEIR states that any shifting or relocating of runways in this area will complicate a complex area even further. Alternative 2, Displaced Thresholds would restripe a segment of Taxiway M pavement immediately west of the existing Runway 9 End. This alternative would decrease the existing RSA length deficiency from 850 feet to 655 feet, increasing the RSA length only marginally but not resulting in the Runway 27 End meeting FAA's design requirements. The FEIR also responds to comments requesting consideration of alternatives not previously proposed including the possibility of reconfiguring or shifting Taxiway E to or making other airfield alterations to facilitate capacity needs with a shortened runway. The FEIR provides a discussion of why these alternatives are not feasible including issues of safety and taxiway congestion.

As stated in the FEIR, Massport, in consultation with FAA, previously selected RSA Alternative 4B (EMAS on 306-foot-wide deck) as the Preferred Alternative. This alternative was selected because it would provide full FAA-required overrun and undershoot protection, while maintaining the airfield utility and efficiency. It would do so with reduced impacts to environmental resources in Boston Harbor and the navigation channel, compared to the other alternatives that would achieve the project goals. Comments on the DEIR questioned the FAA's role in selecting the Preferred Alternative. The FEIR notes that based on the findings of the RIM study, the existing runway cannot be improved to enhance safety. In addition, the FAA will need to approve the final runway design and construction, since a portion of the project will be funded by the FAA.

Environmental Justice

As noted above, the project site is located within two EJ populations characterized as Minority (Census Block Groups 9901.01[5] and 9813 Block Group 2) and is within one mile of two additional EJ populations also characterized as Minority (Census Block Groups 1804 Block Group 2 and 9801.01 Block Group 1). Within the Census Tracts containing the above four EJ populations within one mile of the project site, the following languages are identified as those spoken by 5% of more of residents who also identify as not speaking English very well: Spanish and Spanish Creole.

The FEIR provided a summary of ongoing public outreach which included the following when the FEIR was filed:

[5] Census Tract 9901.01 is not associated with any data as it is located with Boston Harbor.

- Posted a social media announcement notifying the public of the filing.
- Notice of Availability in English and Spanish published in *Boston Herald, East Boston Times, Winthrop Transcript,* and *El Mundo*.
- Circulated the FEIR electronically to the EJ Reference List provided by MEPA.
- Translated the Notice of Availability and Executive Summary into Spanish and posted a copy on Massport's website.
- Posted the FEIR on Massport's website at the time of the filing, allowing for approximately an additional week of review time.

The FEIR provided additional detail on how flights redirected during the Runway 27 closure might impact EJ populations as flights will temporarily shift to other runways. The FEIR notes that the approach and departure routes depend on FAA air traffic control safety determinations including wind and weather. While the airport is surrounded by communities containing both EJ and non-EJ populations, it is not expected that any one population will be disproportionately affected. The FEIR provides the following summary of potential flight paths:

Northeast flow FAA traffic pattern: Aircraft that depart from Runway 9 would primarily shift to Runway 4R departures. Aircraft departing Runway 4R fly a route that generally travels northeast of the airport over communities of Boston, Winthrop, and Revere at varying altitudes. Communities located northeast of the airport, below the Runway 4R departure routes, include a mix of both non-EJ and EJ populations.

Southwest flow FAA traffic pattern: Aircraft that would have landed on Runway 27 are expected to primarily shift to Runway 22L arrivals. On descent, aircraft would fly over the same communities listed for the Northeast flow. If shifted to the northeast flow, aircraft would primarily shift to Runways 4R and 4L arrivals which generally overfly southwest of the airport over communities of Boston, Milton, and others.

Northwest flow FAA traffic pattern: Aircraft that would have landed or departed on Runway 27 are expected to shift primarily to Runway 33L. Runway 33L departures generally travel northwest of the airport over the communities of Boston, Chelsea, and Everett (both EJ and non-EJ communities). Runway 33L arrivals generally come from the southeast over Boston Harbor (away from close-in residential land uses) but also overfly at higher altitudes South Shore communities including Hull, Weymouth, and Cohasset

The FEIR also notes that during a similar closure of Runway 9-27 in the summer of 2020, Runway 9 departures shifted to Runway 4R and a small portion to Runway 15R. The Runway 27 departures shifted primarily to Runway 22R. However, as stated above, the choice of runways to be used by FAA will be based on wind, weather, and safety requirements and cannot be predicted in advance. A review of the EJ map provided in the FEIR shows the airport is within and surrounded by EJ communities. As noted above, only arrivals from the southeast, over Boston harbor, are away from residential areas and EJ populations.

Temporary construction impacts associated with the project are expected to include marine vessel trips which will generate additional GHG emissions. The FEIR describes the anticipated routes of these marine vessels, indicating that the contractor's offsite yard will likely be in Quincy, East Boston, or Charlestown. As discussed further below, the FEIR provides the number and types of vessels to be used and quantifies the expected emissions. It is anticipated that barges and other vessels supporting construction would operate in an area up to 220 feet on

either side of the footprint of the RSA deck during the two 60-day runway closure periods. The DEIR previously indicated that the nearest residences are 2,400 feet from the project. The FEIR also notes the location of other sensitive receptors including schools, daycare centers, children's health clinics, or any other concentrated populations of children, indicating that the closest facility is a daycare in Winthrop, approximately 5,000 feet north of the project site.

The FEIR assesses potential impacts to water quality and indicates that the project will comply with the MassDEP Stormwater Management Standards (SMS). As discussed further below, although the project proposes an increase in impervious area, stormwater discharges will be to a tidal area and will not affect floodplain levels. The FEIR included summaries of interagency meetings with the Division of Marine Fisheries and the U.S. Coast Guard which documented that access to shellfish beds will continue for badged shellfishers upon completion of construction, and that the project would not preclude use of the navigational channel by the public during construction.

Impervious Area and Stormwater

The project will increase impervious area by 3.3 acres of RSA deck over open water and by 0.5 acres of perimeter road pavement and approach slab some of which is in currently grassed uplands. Comments on the DEIR from MassDEP indicated that treatment of the runoff from the deck would be required to provide water quality treatment and reduce the velocity of the runoff. The FEIR responds that the Notice of Intent application will describe the stormwater management measures and address each of the ten SMS with supporting calculations. The preliminary stormwater design includes scuppers to collect runoff on the RSA deck connected to a trunk line to carry the runoff to the outer end of the deck to be released into deep water. Correspondence from Massport[6] states that runoff from the RSA will be clean unimpacted water that does not require treatment prior to discharge. This conflicts with prior MassDEP comments indicating that water quality treatment would be required and should be addressed during permitting. The FEIR describes stormwater treatment for the new pavement associated with the relocated perimeter road stating that the runoff would be allowed to sheet flow onto adjacent grassed or crushed stone surfaces for infiltration. The proposed stormwater management will be subject to review and approval by the Boston Conservation Commission under a Notice of Intent filing (or in the case of an appeal, a Superseding Order of Conditions from MassDEP).

Wetlands and Fisheries

As noted above, the following wetland resource areas will be impacted by the deck: 45,420sf of Land Subject to Tidal Action, 2,660 square feet of Coastal Beach, 97,200sf of LSCSF (100-year Floodplain), 107,700 sf of LUO, and 66,760sf of LCS. The impacts are summarized in the table below:

[6] Email from Stewart Dalzell, Massport, to Jennifer Hughes, MEPA Analyst, dated January 20, 2023.

Table 5-1 Runway 27 End RSA Direct Impacts to Coastal Wetland Resources - Proposed Project

Wetland Resource Area	Jurisdiction	Impacts			
		RSA Deck (shading)	Piles (Number/Area[1])	Emergency Access Ramps	Total[2]
Land Under the Ocean	Local and State	107,700 sf	246 / 690 sf	0	107,700 sf
Coastal Beach	Local and State	2,170 sf	6 / 20 sf	490 sf	2,660 sf
Coastal Banks	Local and State	310 lf	N/A	80 lf	390 lf
Salt Marsh	Local and State	0	0	0	0
Land Containing Shellfish	Local and State	58,130 sf	124 / 350 sf	8,630 sf	66,760 sf
Land Subject to Tidal Action	Local and State	35,960 sf	70 / 200 sf	9,460 sf	45,420[3]
Land Subject to Coastal Storm Flowage	Local and State	92,000 sf	10 / 30 sf	5,200 sf	97,200 sf
Land Below Annual High Tide	Federal	143,660 sf	316 / 880 sf	9,460 sf	153,120 sf
Mud Flat (Special Aquatic Site)	Federal	37,210 sf	100 / 280 sf	490 sf	37,700 sf

All square footages are approximate values as they have been rounded to the nearest value of ten (most values were rounded up).
1 Each 20-inch square pile is 2.78 square feet (sf). Direct impact of all 326 piles is 906 square feet.
2 Area of impact under the RSA Deck or area of upland. Area of piles or approach slab not included, since included in the overall deck area.
3 Includes 1,230 square feet for RSA Deck approach slab.
lf = linear feet
sf = square feet
N/A = Not Applicable

In the FEIR, Massport indicates that it will provide mitigation for permanent impacts to LUO and Coastal Beach (mudflat) associated with the placement of 252 piles and the installation of safety/egress ramps. This mitigation will be detailed as part of the Notice of Intent filing but is expected to include some form of shoreline restoration in Boston Harbor or Chelsea Creek or could involve mudflat creation similar to work conducted to offset impacts associated with the 33L RSA project. The FEIR also addressed the overshadow of approximately 2.7 acres of LUO and Coastal Beach by the RSA deck and states that the shaded area will continue to be influenced by the tides which will supply phyto- and zooplankton for filter feeding species and organic detritus for scavengers/detritivores. The FEIR also notes that there are no vascular plants, saltmarsh, or aquatic bed species present within the deck area that would be impacted by the lack of sunlight. As noted above, restoration/replacement will be provided as mitigation for the 700 sf of coastal wetland resource area altered by the deck piles.

As requested by the Division of Marine Fisheries (DMF), the FEIR contained a record of project coordination between DMF and other resource agencies (NOAA, USEPA, CZM, Boston Conservation Commission) regarding the development of a detailed mitigation plan for permanent impacts to shellfish and mud flat habitat. The record of the meetings indicates that mitigation for impacts to LCS will be in the form of a contribution to the shellfish restoration program. The FEIR states that badged shellfishers will be temporarily restricted from the mudflats in the work area during construction but upon completion, the shellfishers would have access to areas previously open for harvest which includes areas under the deck; however, boat access under the deck would be restricted. The FEIR indicates that project mitigation will include the DMF recommended TOY restriction for in-water, silt-producing work from February 15 to June 30 to minimize impact to winter flounder. In addition, the project will use turbidity curtains to contain turbidity associated with in-water silt-producing work occurring outside of the recommend TOY to minimize impacts to spawning and early life history stages of shellfish species in the vicinity of the project.

Chapter 91 and Tidelands

The FEIR includes additional information regarding the location of the State Harbor Lines relative to the project site and indicates that the proposed RSA deck will extend up to 460 feet seaward of the line established by Chapter 733 of the Acts of 1966. The FEIR asserts that the Massport Enabling Act[7] contains broad authorization for Massport to utilize adjacent underwater areas for airport purposes should the need arise in the future, including seaward of the State Harbor Line. Comments from the MassDEP Waterways Regulation Program (MassDEP Waterways) state that MassDEP does not agree with this assertion but indicate that the matter can be worked out during licensing. MassDEP Waterways recommends that Massport request a prefiling consultation to clarify this point. To the extent such consultation results in the need to make design changes to meet c. 91 requirements, Massport should consult with the MEPA Office about whether further review may be needed in the form of a Notice of Project Change (NPC) filing.

Public Benefit Determination (PBD)

The project site is comprised of tidelands subject to the provisions of *An Act Relative to Licensing Requirements for Certain Tidelands* (2007 Mass. Acts ch. 168) and the Public Benefit Determination (PBD) regulations (301 CMR 13.00). I must issue a PBD for any project in tidelands required to under an EIR review process. The FEIR included more detailed information describing the nature of tidelands affected by the non-water dependent project and documented compliance with the requirements for public benefits. The FEIR indicates that the project will protect Boston Harbor in the event of an overrun or undershoot event, by preventing aircraft from entering the harbor. The FEIR notes that, under the Massachusetts Port Authority Enabling Act, preservation of public safety and security at Logan Airport has been legislatively determined to be an appropriate use of the affected tidelands. Other potential public interests in tidelands that might be affected by the proposed safety project are limited due to existing Airport security restrictions. As noted above, shellfish harvesting by licensed clammers is allowed within the Security Zone with prior notice from DMF. The FEIR also indicates that boats operating in the outer 250-foot security zone will need to divert around the footprint of the RSA deck. However, boats are not currently permitted to anchor within the existing Logan Airport 500-foot security zone and the proposed RSA deck would not change the existing restriction on boating activities.

I will issue a PBD within 30 days of the issuance of the FEIR Certificate.

Rare Species

As noted above, the proposed project site is mapped as *Priority Habitat* for a state-listed species: Upland Sandpiper (*Bartramia longicauda*), Endangered and Eastern Meadowlark (*Sternella magna*), Special Concern as indicated in the *Massachusetts Natural Heritage Atlas* (15th Edition). The FEIR details the impacts to Priority Habitat, including 17,400 sf of impacts from relocating the vehicle perimeter road to a safer, more perpendicular crossing of the Runway 27 End. The FEIR further states that in the new position, the grass area between the existing

[7] Massachusetts Port Authority Enabling Act, Chapter 465 of the Acts of 1956, Section 4, Paragraph 6.

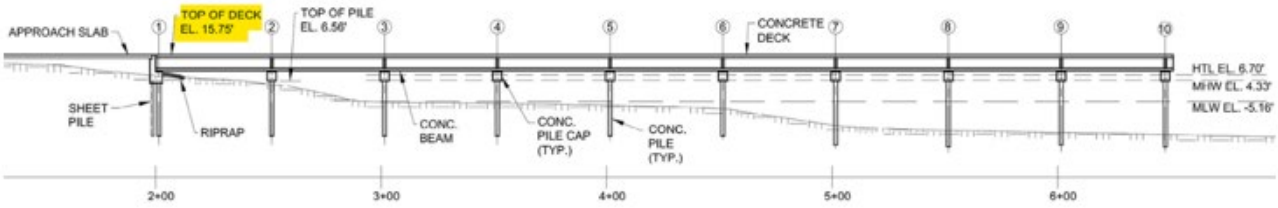
roadway and the new road will be replaced with crushed stone to eliminate the need for mowing. An additional area of approximately 3,000 sf of grassland will be impacted by paving an area on the south side of the runway end to provide a continuous 300-foot wide paved area for the runway and shoulders as required by FAA. In total, the FEIR reports that 20,300 sf of grassland habitat would be permanently altered. To mitigate these impacts, Massport will work with the FAA, NHESP and airport operations to identify an area on the airfield where an equal amount of pavement could be removed to avoid a Take and the need for a CMP.

The FEIR identifies temporary impacts associated with construction staging and equipment operations that will impact an additional 22,000 sf of grassland habitat. The temporary impacts will be for two 60-day construction periods between July and October. Once construction is completed, the disturbed area will be restored and reseeded with a seed mix approved by NHESP to establish the grassland habitat. In an email dated January 24, 2023, NHESP indicates that comments prepared in response the DEIR remain largely applicable to the FEIR submission and further indicates that provided permanent impacts to grassland habitats are replaced and temporary grassland impacts repaired, then NHESP would anticipate the project may be conditioned to avoid a prohibited Take of state-listed species.

Climate Change

Adaptation and Resiliency

The Certificate on the DEIR required that Massport discuss whether the elevation of the runway safety area is consistent with recommendations from the MA Resilience Design Tool for the 2050 and 2070 planning horizon. The FEIR contained the figure below illustrating that the top of the deck would have an elevation of approximately 15.75 feet NAVD88.



The final EIR also provided the table below, showing the current and projected elevations for the mean low water line, mean high water line, water surface elevation, and wave action elevation based on the MA Resilience Design Tool Report included in the FEIR, which recommended that the RSA deck be designed to be resilient to the 100-year storm event in 2070. Based on the elevations below, the top of the deck would be above the projected water surface elevation for the 100-year storm in 2070, but slightly under the projected “wave action” water elevation which takes into account the effect of wave action on the site.

Table 3-6 RMAT Sea Level Rise Projections for 2050 and 2070 Planning Horizons (feet, NAVD 1988)

Measure	Current	2050	2070
Mean Low Water	-5.16	-2.3	-0.7
Mean High Water	4.3	7.3	9.2
Water Surface Elevation	5.51	12.5	14.3
Wave Action Elevation	9.49	13.6	15.9

Current values from NOAA, *Tide Predictions; Datum for 8443970, Boston, MA*, https://tidesandcurrents.noaa.gov/datums.html?id=8443970.
Projected values from the RMAT Output Report, see Appendix E.3 for further methodology.

The Certificate on the DEIR indicated that that the recommendation provided by the MA Resilience Design Tool appears to be correlated to a "Medium" criticality assessment of project assets, which is understated given the critical function of Logan Airport as a key transportation hub for the Northeast region. For "High" critical assets, the MA Resilience Design Tool guidance recommends planning for the 200-year storm (as of 2070 and interim planning horizon of 2050) for most buildings/facilities for the sea level rise/storm surge parameter, and up to the 500-year storm for transportation assets. The FEIR states that the project design will not be able to meet these design recommendations since it will not be possible to raise the entire airfield and runway system. According to the FEIR, Massport recognizes that some assets may be inundated by flooding or excessive precipitation and has worked to flood-proof light vaults and other features, and to identify operational changes to runways and taxiways to accommodate drying out before being returned to service. In addition, in 2020 Massport elevated the runway 27 threshold by 10 inches and improved the drainage system.

The FEIR notes that the elevation of the Runway 9-27 deck will be higher than those constructed at the Runway 4R End light pier and the Runway 33L RSA deck in 2017 and 2014, respectively. The Certificate on the DEIR required that Massport discuss adaptive management strategies to improve resiliency to project assets if the project design does not meet the recommended Tool recommendations. The FEIR references the Massport *Floodproofing Design Guide* introduced in 2014 which was created with the intent of protecting airport assets from climate change related impacts. The FEIR notes that the Massachusetts Coastal Flood Risk Model (MC-FRM) is also used to assess potential flooding vulnerabilities for Massport projects. The FEIR also references several ongoing programs to improve resiliency at the airport as well as lessen the airport's overall impact to climate change including an evolving sustainability policy, development of a Climate Action Plan, and a net zero GHG emissions roadmap titled *Roadmap to Net Zero by 2031*.

Greenhouse Gas (GHG) Emissions

The FEIR included an air quality analysis that identifies the project-related construction emissions, including marine vessel emissions, and indicates that they are below the *de minimis* standards for General Conformity with the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. To estimate exhaust emissions from on-road vehicles and construction equipment, emissions factors were developed using the USEPA's Motor Vehicle Emissions Simulator model (MOVES3) (on road and nonroad modules). The methodology associated with the analysis is further detailed in an appendix to the FEIR. The construction period emissions inventory is shown in the table below.

Table 3-3 Construction Period Emission Inventory by Source (Tons/Year)

Category	2025					
Source	**CO**	**NO_x**	**VOC**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**
On Road	0.004	0.101	0.079	0.002	0.002	0.0002
Off Road Equipment (Land + Marine)	0.49	5.19	7.96	0.29	0.28	0.01
Marine Vessels	1.46	8.60	0.23	0.18	0.17	0.01
Fugitive Dust	-	-	-	0.91	0.13	-
Total (2025)	1.95	13.89	8.27	1.38	0.58	0.01
Category	**2026**					
Source	**CO**	**NO_x**	**VOC**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**
On Road	0.003	0.076	0.062	0.001	0.001	0.0001
Off Road Equipment (Land + Marine)	0.17	1.65	2.65	0.10	0.10	0.00
Marine Vessels	1.32	7.77	0.21	0.16	0.15	0.01
Fugitive Dust	-	-	-	0.87	0.12	-
Total (2026)	1.49	9.50	2.93	1.13	0.37	0.01

The FEIR further reports on short-term increases in GHG emissions due to construction activities. Based on a preliminary estimate of construction equipment and vehicles that are anticipated during the two 60-day construction periods, a maximum of 45 trucks and automobiles and a maximum of 15 marine vessels could be deployed daily. As requested in the Certificate on the DEIR, a GHG emission inventory by source was conducted and is summarized in the table below.

Table 3-5 Construction-Period GHG Emissions Inventory by Source (Tons CO_2/Year)

Source/Year	2025	2026
On Road	48	37
Off Road Equipment (Land and Marine)	2,845	1,125
Marine Vessels	649	586
Total	3,542	1,748

Source: WSP, May 2022.

Construction-period air quality mitigation measures detailed in the FEIR include:

- Dust suppression techniques will be implemented to control fugitive dust emission sources and are anticipated to reduce PM10 and PM2.5 emissions by 75 percent.
- Construction equipment will be maintained according to manufacturers' specifications and operated using USEPA-compliant fuels to minimize emissions.

- Contractors will be required to use Tier III or Tier IV equipment where feasible, limit idling, and implement construction worker vehicle trip management techniques.
- Contractors will be required to use Ultra Low Sulfur Diesel fuel and/or operate vehicles using alternative fuels, where feasible.
- Contractors will be required to use after-engine emissions controls, such as oxidation catalysts or diesel particulate filters, where feasible.

Mitigation and Draft Section 61 Findings

The FEIR provides final mitigation commitments and draft Section 61 Findings for use by Participating Agencies, which are summarized below. The Section 61 Findings should be provided to Participating Agencies to assist in the permitting process and issuance of final Section 61 Findings. As an Agency undertaking the project, Massport should also issue Section 61 Findings including all mitigation commitments for the project.

Environmental Justice/Public Health

- Continue public outreach as outlined in the *Updated EJ Outreach Plan*.
- Provide erosion and sedimentation control during construction and stormwater management in accordance with the MassDEP Stormwater Standards to protect water quality.
- Minimize engine idling in accordance with Massachusetts anti-idling regulations.
- Retrofit appropriate diesel construction equipment with diesel oxidation catalysts and/or particulate filters to minimize emissions.

Wetlands and Fisheries

- Provide 1:1 replacement/restoration of intertidal and subtidal wetlands impacted by piles and egress ramps.
- Provide stormwater management system to control and treat stormwater runoff in compliance with the Massachusetts Stormwater Management Standards
- Implement winter flounder time-of-year (TOY) restriction from February 15 to June 30 for in-water construction activities
- Provide mitigation fee to DMF) for off-site restoration.
- Use turbidity curtains for in-water construction.

Chapter 91 and Tidelands

- Continue to allow shellfish harvesting by licensed clammers within the Security Zone with prior notice from DMF.

Rare Species

- Provide 1:1 replacement of lost upland grassland habitat

Climate Change

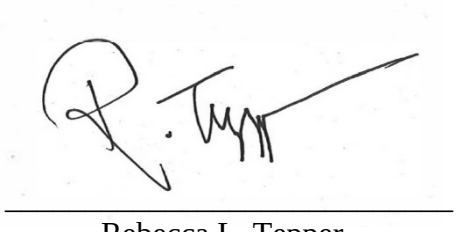
- Elevate the RSA deck above the projected water surface elevation for the 100-year storm in 2070.

Construction Period

- Develop and implement a comprehensive Soil Erosion and Sediment Control Plan in accordance with NPDES and MassDEP standards.
- Apply water to dry soil to prevent fugitive dust.
- Maintain mufflers on construction equipment.
- Minimize engine idling in accordance with Massachusetts anti-idling regulations.
- Retrofit appropriate diesel construction equipment with diesel oxidation catalysts and/or particulate filters.
- Fit any air-powered equipment with pneumatic exhaust silencers.
- Implement construction worker vehicle trip management techniques.

Conclusion

Based on review of the FEIR, comment letters, and consultation with reviewing Agencies, I find that the FEIR adequately and properly complies with MEPA and its implementing regulations. No further MEPA review is required, and the project may proceed to permitting. Participating Agencies and Massport should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12.



January 30, 2023
Date

Rebecca L. Tepper

Comments received:

01/05/2023 John Vitagliano
01/12/2023 B. Cooney
01/18/2023 Division of Marine Fisheries (DMF)
01/20/2023 D. Hickey
01/23/2023 K. Dimes
01/23/2023 Air Inc.
01/23/2023 MassDEP Waterways Regulation Program (WRP)
01/24/2023 Natural Heritage and Endangered Species Program (NHESP)

RLT/JAH/jah

Appendix B – Massachusetts Department of Environmental Protection Northeast Regional Office Comment Letter on Draft Environmental Impact Report

This Page Left Intentionally Blank.

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Bethany A. Card
Secretary

Martin Suuberg
Commissioner

August 22, 2022

Bethany A. Card, Secretary
Executive Office of
Energy & Environmental Affairs
100 Cambridge Street
Boston MA, 02114

Attn: MEPA Unit

RE: Boston
Boston Logan International Runway 27 End
Runway safety Area (RSA) Improvements
Project
EEA # 16433

Dear Secretary Card:

The Massachusetts Department of Environmental Protection Northeast Regional Office (MassDEP-NERO) has reviewed the Draft Environmental Impact Report (DEIR) for the proposed Boston Logan International Runway 27 End Runway safety Area (RSA) Improvements Project in Boston. MassDEP provides the following comments.

Wetlands

The project requires a mandatory EIR because it requires a State Agency Action and involves a new non-water dependent use or expansion of an existing non-water dependent structure provided the use or structure occupies one or more acres of waterways or tidelands (301 CMR 11.03(3)(a)5.). The selected alternative proposes construction of a Runway Safety Area (RSA) deck at the end of Runway 27 The RSA deck will be 306 feet wide and would be supported by pilings and/or caissons starting on land for approximately 150 feet, then extending 450 feet into the harbor. The EMAS dimensions will determine the final dimensions of the RSA deck. This will result in a surface area of approximately 137,000 square feet of decking (approximately 3.2 acres) over the harbor supported by 326 square twenty-inch concrete piles.

The following Resource Areas will be impacted by the deck: 45,420 sf of Land Subject to Tidal Action, 2660 square feet of Coastal Beach, 97,200 sf of Land Subject to Coastal Storm Flowage (100-year Floodplain), 107,700 sf of Land Under the Ocean, and 66,760 sf of Land Containing Shellfish.

The DEIR states that permanent impacts to resource areas consist only of impacts from the 326 pilings, or 910 square feet. It further details that only 246 of the 326 pilings would be installed in wetlands resource area making the impact area 690 square feet. The DEIR asserts that this "represents a loss of less than one percent of the 107,700 square feet of natural substrate under the deck." The DEIR states that the deck would overshadow 2.47 acres of the seabed but does not address the shading impacts from the deck or its effect on shellfish The performance standard for Land Containing Shellfish is no adverse effect on productivity caused by several factors including alterations in water circulation, alterations in the distribution of sediment grain size, and changes in water quality.

The DEIR includes a detailed analysis of the preferred pier support structure, including the number and types of pilings, caissons, and an assessment of potential effects on scour and accretion of the harbor bottom and adjacent shoreline. The study in the DEIR concludes that the chosen alternative, called Deck Support Alternative 2, "would result in the lowest volume of seabed scour" and that "even with the artificially increased approach velocities…and the resultant scour effects, under the slow rates of erosion illustrated by this analysis, the scour volumes for all of the alternatives would be modest at the proposed deck site and would need to undergo very long-term spring tides to achieve their maximum predicted scour volumes." The scour analysis also indicates that no changes to sediment grain size or distribution would be anticipated in the vicinity of the proposed RSA deck.

The DEIR also acknowledges that there could also be a potential change in productivity of Land Containing Shellfish beneath the deck due to a potential change in the distribution of sediment. The DEIR indicates that "Massport has initiated discussion with DMF and badged shellfishers regarding impacts to softshell clam and associated habitat. Mitigation for the lost shellfish habitat will be developed in consultation with the DMF and other applicable agencies." Massport acknowledges that the new hard surface offered by the pilings would shellfish habitat for species such as blue mussel but not clams and that there could be a resultant loss in commercial value for clams. 8,630 square feet of Land Containing Shellfish would be directly impacted by the installation of concrete pavers and riprap to create the emergency egress ramps. Massport plans to offer compensatory mitigation in the form of an in-lieu fee paid to the U.S. Army Corps of Engineers as well as a state shellfish habitat restoration program as guided by the DMF. Payment of an in-lieu fee does not meet the performance standards contained in the Massachusetts Wetlands Protection regulations for any Resource Area. The DEIR acknowledges that phytoplankton and algae will be negatively impacted by shadow form the proposed deck. MassDMF has recommended that the proponent continue to coordinate with DMF and other resource agencies to develop a detailed mitigation plan for permanent impacts to shellfish and mud flat habitat. Mudflats are classified as Coastal Beaches (310 CMR 10.27(1)). MassDMF recommends a time of year (TOY) restriction for pile installation from February 15 to June 30 to minimize impact to winter flounder and the use of turbidity curtains to contain turbidity associated with in-water silt-producing work occurring outside of the recommend TOY. While MassDEP concurs that a TOY will mitigate for

some construction related impact, a demonstration is still needed that performance standards will be met for each Resource Area and appropriate mitigation provided to address permanent impacts. Relocating shellfish should be addressed as an alternative (310 CMR 10.34(6)).

The DEIR asserts that the project will not require a variance and that the deck construction over the affected Resource Areas will meet the Performance standards for work in those Resource Areas. MassDEP does not concur based on the information provided in the Draft EIR. For example, no demonstration has been made that the Project as proposed will comply with Stormwater Management requirements specified at 310 CMR 10.05(6)(k)1, 2, and 3. The DEIR proposes no new stormwater management structures for a deck adding more than 3.5 acres of impervious area to the airport. The proposed deck creates new impervious surfaces, so at a minimum, treatment of the runoff from the deck is needed. Previously, the Runway 33L and 22R RSA work was found to increase the proposed velocity of the runoff to the point that it would erode the substrate in the underlying a resource areas. The increase to turbidity to resource areas from uncontrolled release of stormwater generated by the proposed RSA does not appear to have been addressed in the Draft EIR. Stormwater control measures need to be proposed to provide water quality treatment and reduce the velocity of the runoff to demonstrate compliance with 310 CMR 10.05(6)(k)1-10.
The section on Federally Regulated Resource Areas indicates that 10,340 square feet of fill will be placed below the annual high tide line, 880 square feet of from the 316 piles and 9460 square feet for the emergency egress ramps. This activity will therefore also trigger a 401 Water Quality Certification application. The direct impacts to mudflat consist of 280 square feet for pilings and 490 square feet of fill for the emergency egress ramps. 485 square feet of Coastal Beach would be altered and converted to hard bottom by the emergency egress ramps. No mitigation is offered even for the so-called direct impacts.

Will a pier be required by FAA to house a lighting structure at Runway End 27 RSA, similar to Runway End 33L? If so, an evaluation of resource impacts, alternatives, and potential mitigation measures to offset impacts should be conducted in the Final EIR."

The MassDEP appreciates the opportunity to comment on this proposed project. Please contact Rachel.Freed@mass.gov at (978) 694-3258 for further information on wetlands issues. If you have any general questions regarding these comments, please contact me at John.D.Viola@mass.gov or at (978) 694-3304.

Sincerely,

John D. Viola
Deputy Regional Director

cc: Brona Simon, Massachusetts Historical Commission
Eric Worrall, Rachel Freed, Phil DiPietro, MassDEP-NERO

This Page Left Intentionally Blank.

Appendix C- Distribution List

This Page Intentionally Left Blank

Distribution List

The NPC includes the lists of federal, state, and municipal agencies from whom the Proponent will seek permits or approvals and other parties as specified in 301 CMR 11.16. These are the parties to whom the NPC is required to be circulated.

MEPA requested that the NPC (or a summary) be distributed to all Community Based Organizations (CBOs) and tribes included in the Environmental Justice Community Based Organizations ("EJ CBOs") list that was used to provide notice of the FEIR (unless someone requested to be excluded or the MEPA Office and EEA EJ Director have provided an alternative list).

The NPC also includes the lists of federal agencies, state representatives, and other interested parties who commented on the FEIR. This NPC is available on Massport's website (https://www.massport.com/logan-airport/about-logan/environmental-reports/).

The 'N' indicates Massport mailed or emailed a notice of availability including an electronic link to the NPC. The 'P' indicates Massport mailed a printed copy of the NPC.

Libraries			
P Boston Public Library Main Branch 700 Boylston Street Boston, MA 02116	P Chelsea Public Library 569 Broadway Chelsea, MA 02150	P Boston Public Library East Boston Branch 365 S. Bremen Street East Boston, MA 02128	P Boston Public Library Charlestown Branch 179 Main Street Charlestown, MA 02129
P Revere Public Library 179 Beach Street Revere, MA 02151	P Winthrop Public Library 2 Metcalf Square Winthrop, MA 02151		
Federal Government			
U.S. Senators and Representatives			
N The Honorable Ed Markey JFK Federal Building, Suite 975 15 New Sudbury Street Boston, MA 02203	N The Honorable Katherine Clark Attn: Kelsey Perkins U.S. House of Representatives 157 Pleasant Street, Suite 4 Malden, MA 02148	N The Honorable Stephen F. Lynch Attn: Nicholas Zaferakis U.S. House of Representatives One Harbor Street, Suite 101 Boston, MA 02210	N The Honorable Elizabeth Warren Attn: Olivia Paulo 2400 JFK Federal Building 15 New Sudbury Street Boston, MA 02203
N The Honorable Ayanna Pressley Attn: Eric White U.S. House of Representatives 50 Redfield Street, Suite 302 Boston, MA 02122			

U.S. Environmental Protection Agency

N Mark Sanborn, Regional Administrator U.S. Environmental Protection Agency, New England Region 5 Post Office Square – Suite 100 Mail Code ORA 17-1 Boston, MA 02109-3912	N Timothy Timmermann, Director National Environmental Policy Act Office EPA New England (Region 1) 5 Post Office Square – Suite 100 Boston, MA 02109-3912 timmermann.timothy@epa.gov	N EPA New England (Region 1) Attn: NPDES Permit Division 5 Post Office Square – Suite 100 Boston, MA 02109-3912	N Philip Colarusso EPA New England (Region 1) 5 Post Office Square – Suite 100 Boston, MA 02109-3912

Federal Aviation Administration

P Luke Garrison, Director Federal Aviation Administration New England Region 1200 District Avenue Burlington, MA 01803	P Cheryl Quaine, Environmental Protection Specialist Federal Aviation Administration, New England Region Airports Division 1200 District Avenue Burlington, MA 01803	P Lisa Lesperance Lead Community Planner Federal Aviation Administration, New England Region Airports Division 1200 District Avenue Burlington, MA 01803	N Chris Quigley, Tower Manager Department of Transportation Federal Aviation Administration Logan International Airport 600 Control Tower, 19th Floor East Boston, MA 02128

National Oceanic and Atmospheric Administration

N Chris Boelke Chief, New England Branch Greater Atlantic Regional Fisheries Office 55 Great Republic Drive NOAA Fisheries Service Gloucester, MA 01930 christopher.boelke@noaa.gov	N Kaitlyn Shaw Greater Atlantic Regional Fisheries Office 55 Great Republic Drive NOAA Fisheries Service Gloucester, MA 01930 kaitlyn.shaw@noaa.gov	

U.S. Army Corps of Engineers

N Paul Sneeringer Project Manager US Army Corps of Engineers New England District 696 Virginia Road Concord, MA 01742-2751 paul.j.sneeringer@usace.army.mil

U.S. Fish and Wildlife Service

N Wendi Weber Regional Director Northeast Region 300 Westgate Center Drive Hadley, MA 01035	N David Simmons Northeast Region 300 Westgate Center Drive Hadley, MA 01035

U.S. Coast Guard

N Timothy Chase Network Engineer 427 Commercial Street Boston, MA 02109

State Government

Massachusetts Department of Environmental Protection

N MEPA Coordinator Northeast Regional Office Department of Environmental Protection 150 Presidential Way Woburn, MA 01801 john.d.viola@mass.gov	N Commissioner's Office Department of Environmental Protection One Winter Street Boston, MA 02108 helena.boccadoro@mass.gov	N Glenn Keith, Director Air and Climate Division Department of Environmental Protection 100 Cambridge Street, 9th Floor Boston, MA 02114	N Sharon Weber, Deputy Director Air and Climate Division Department of Environmental Protection 100 Cambridge Street, 9th Floor Boston, MA 02114
N Daniel Padien, Director Boston Waterways Regulation Program Department of Environmental Protection 100 Cambridge Street, 9th Floor Boston, MA 02114 DEP.Waterways@mass.gov	N Bureau of Waste Site Cleanup Section Chief Permits/Risk Reduction - NERO Department of Environmental Protection 150 Presidential Way Woburn, MA 01801	N Lisa Rhodes, Director Wetlands Program Division Department of Environmental Protection 100 Cambridge Street, 9th Floor Boston, MA 02114	N Kristin Divris Deputy Regional Director Bureau of Water Resources Northeast Regional Office Department of Environmental Protection 150 Presidential Way Woburn, MA 01801
N David Hilgeman Senior Environmental Engineer Department of Environmental Protection David.Hilgeman@mass.gov	N Philip DiPietro Environmental Engineer Department of Environmental Protection philip.dipietro@mass.gov	N Thomas Maguire Department of Environmental Protection thomas.maguire@mass.gov	N

Senate/House of Representatives

N Senate President Karen Spilka Massachusetts State House 24 Beacon Street, Room 332 Boston, MA 02133	N Senator Lydia Edwards Massachusetts State House 24 Beacon Street, Room 413-C Boston, MA 02133	N Representative Edward R. Philips Vice Chair, Joint Committee on Transportation Massachusetts State House 24 Beacon Street, Room 134 Boston, MA 02133	N Speaker of the House Ronald Mariano Massachusetts State House 24 Beacon Street, Room 356 Boston, MA 02133

Senate/House of Representatives (Continued)

N Representative James Arciero
Chair, Joint Committee on Transportation
Massachusetts State House
24 Beacon Street, Room 134
Boston, MA 02133

N Representative Adrian Madaro
Massachusetts State House
24 Beacon Street, Room 33
Boston, MA 02133

N Senator Brendan P. Crighton
Chair, Joint Committee on Transportation
Massachusetts State House
24 Beacon Street, Room 109-C
Boston, MA 02133

Massachusetts Executive Office of Energy and Environmental Affairs (EEA)

N Rebecca Tepper, Secretary
Executive Office of EEA
100 Cambridge Street, Ste 900
Boston, MA 02114
env.internet@mass.gov

N Tori Kim, Assistant Secretary and MEPA Director
Executive Office of EEA,
MEPA Office
100 Cambridge St, Ste 900
Boston, MA 02114
tori.kim@mass.gov

P MEPA Office
N Executive Office of EEA
MEPA Office
100 Cambridge St, Suite 900
Boston, MA 02114
MEPA@mass.gov

N MEPA Office
Director of Environmental Justice
100 Cambridge Street, Suite 900
Boston, MA 02144
MEPA-EJ@mass.gov

Metropolitan Area Planning Council (MAPC)

N 60 Temple Place
Boston, MA 02111
mpillsbury@mapc.org
afelix@mapc.org

N Marc Draisen
MAPC Executive Director
60 Temple Place
Boston, MA 02111

N Eric Bourassa
MAPC Transportation Director
60 Temple Place, 6th Floor
Boston, MA 02111

N Martin Pillsbury
MAPC Director
Environmental Planning
60 Temple Place, 6th Floor
Boston, MA 02111

Central Transportation Planning Staff (CTPS)

N Tegin Teich
Executive Director
CTPS
10 Park Plaza, Room 2150
Boston, MA 02116

N Gina Perille
Deputy Executive Director
CTPS
10 Park Plaza, Room 2150
Boston, MA 02116

Massachusetts Division of Fisheries and Wildlife

N Jesse Leddick
Assistant Director
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

Coastal Zone Management

N Alison Brizius, Director
Office of Coastal Zone Management
100 Cambridge Street,
Suite 900
Boston, MA 02114
alison.brizius@mass.gov

N Coastal Zone Management
Attn: Sean Duffey,
Project Review and Dredging Coordinator
100 Cambridge Street, Suite 900
Boston, MA 02114
sean.duffy@mass.gov

N Coastal Zone Management
Attn: Patrice Bordonaro,
Project Review
100 Cambridge Street, Suite 900
Boston, MA 02114
patricia.bowie@mass.gov

N Joanna Yelen
Boston Harbor Coordinator
100 Cambridge Street, Suite 900
Boston, MA 02114
joanna.m.yelen@mass.gov

N Coastal Zone Management
Project Review Coordinator
100 Cambridge Street,
Suite 900
Boston, MA 02144
sean.duffy@mass.gov
patrice.bordonaro@mass.gov

N DMF – North Shore
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
DMF.EnvReview-North@mass.gov

Massachusetts Division of Marine Fisheries

N Daniel J. McKiernan, Director
Division of Marine Fisheries
251 Causeway Street,
Suite 400
Boston, MA 02114
dan.mckiernan@mass.gov

N Kate Frew
Environmental Review
Division of Marine Fisheries
251 Causeway Street, Suite 400
Boston, MA 02114
kate.frew@mass.gov

N Forest Schenck
Division of Marine Fisheries
Annisquam River Marine Fisheries Field Station
30 Emerson Ave.
Gloucester, MA 01930
Forest.Schenck@mass.gov

N Chrissy Petitpas
Program Manager
Shellfish Program
Division of Marine Fisheries
christian.petitpas@mass.gov

N Wayne Castonguay
Regional Shellfish Supervisor
Shellfish Program
Division of Marine Fisheries
Wayne.castonguay@mass.gov

Massachusetts Department of Transportation

N Monica Tibbits-Nutt
Secretary of Transportation
MassDOT
10 Park Plaza, Suite 4160
Boston, MA 02116

N Jonathan L. Gulliver
Administrator
MassDOT Highway
10 Park Plaza, Suite 7410
Boston, MA 02116

N MassDOT District 6
Attn: MEPA Coordinator
185 Kneeland Street
Boston, MA 02111
michael.garrity@dot.state.ma.us

N MassDOT Public/Private
Development Unit
10 Park Plaza, Suite #4150
Boston, MA 02116
MassDOTPPDU@dot.state.ma.us

N Denise Garcia, Acting
Aeronautics Administrator
MassDOT Aeronautics
Logan Office Center
One Harborside Drive, Ste 205N
East Boston, MA 02128-2909

Massachusetts Secretary of the Commonwealth

N William Francis Galvin
Secretary of the Commonwealth
220 Morrissey Boulevard
Boston, Massachusetts 02125

Office of the Attorney General

N Meghan Davoren
Environmental Protection Div.
Office of the Attorney General
One Ashburton Place, 18th Floor
Boston, MA 02108

Massachusetts Department of Energy Resources

N Paul F. Ormond
P.E., Efficiency Division
Dept of Energy Resources
100 Cambridge Street,
Suite 1020
Boston, MA 02114
paul.ormond@mass.gov

Massachusetts Water Resources Authority

N Massachusetts Water
Resources Authority
Attn: MEPA Coordinator
33 Tafts Avenue
Deer Island
Boston, MA 02128
Hillary.Monahan@mwra.com

Massachusetts Historical Commission

P Massachusetts Historical
Commission
The MA Archives Building
220 Morrissey Boulevard
Boston, MA 02125

Natural Heritage and Endangered Species Program (NHESP)

N Amy Hoenig
NHESP
Division of Fisheries & Wildlife
1 Rabbit Hill Road
Westborough, MA 01581
amy.hoenig@mass.gov

N NHESP
Division of Fisheries & Wildlife
1 Rabbit Hill Road
Westborough, MA 01581
melany.cheeseman@mass.gov
emily.holt@mass.gov

Massachusetts Board of Underwater Archaeological Resources

N David S. Robinson, Director
Board of Underwater
Archaeological Resources
251 Causeway Street, Suite 800
Boston, MA 02114-2136
david.robinson@mass.gov

Federally Recognized Tribes in Massachusetts

N Bettina Washington, Tribal
Historic Preservation Officer
Wampanoag Tribe of Gay Head (Aquinnah)
20 Black Brook Road
Aquinnah, MA 02535
thpo@wampanoagtribe-nsn.gov

N Brian Weeden, Chair
Mashpee Wampanoag Tribe
483 Great Neck Road S
Mashpee, MA 02649
Brian.Weeden@mwtribe-nsn.gov

N David Weeden, THPO/Director
Mashpee Wampanoag Tribe
483 Great Neck Road S
Mashpee, MA 02649
David.Weeden@mwtribe-nsn.gov

N Nakia Hendricks Jr.
Mashpee Wampanoag Tribe
483 Great Neck Road S
Mashpee, MA 02649
106Review@mwtribe-nsn.gov

Municipalities

City of Boston

Office of the Mayor

N Michelle Wu, Mayor
City of Boston
One City Hall Square, Suite 500
Boston, MA 02201
311@boston.gov

Boston Transportation Department

N Nick Gove
Commissioner, Boston
Transportation Department
One City Hall Square, Room 721
Boston, MA 02201

Boston Planning Department

N Kairos Shen
Chief of Planning, Boston
Planning Department
One City Hall Square, 9th Flr
Boston, MA 02201

City Clerk's Office

N Alex Geourntas
Boston City Clerk
One City Hall Square, Room 601
Boston, MA 02201
cityclerk@boston.gov

City of Boston (continued)

Boston Environment Department	***Office of Climate Resilience***	***Boston Water and Sewer Commission***	***Boston City Council***
N City of Boston Environment Department One City Hall Square, Rm 709 Boston, MA 02201 environment@boston.gov	N Brian Swett Chief Climate Office and Open Space One City Hall Square, Room 709 Boston, MA 02201	N John Sullivan, Chief Engineer Boston Water and Sewer Commission 980 Harrison Avenue Boston, MA 02119	N 1 City Hall Square Suite 550 Boston, MA 02201-2043 city.council@boston.gov
Neighborhood Services	***Neighborhood Services***	***Boston Public Health Commission***	***Boston Conservation Commission***
N Corner Newman Deputy Director of Neighborhood Services 1 City Hall Square, Room 805 Boston, MA 02201 conor.newman@boston.gov	N City of Boston 1 City Hall Square, Room 805 Boston, MA 02201 contactons@boston.gov	N Boston Public Health Commission 1010 Massachusetts Ave, 2nd Floor Boston, MA 02118 info@bphc.org	N Boston Conservation Commission One City Hall Square, Room 709 Boston, MA 02201 CC@boston.gov

Town of Winthrop

N Tony Marino Town Manager Winthrop Town Hall One Metcalf Square Winthrop, MA 02152 amarino@winthropma.gov	N Jerome Falbor, Vice Chair Winthrop Air Pollution, Noise, and Airport Hazards Committee One Metcalf Square Winthrop, MA 02152 airporthazardscommittee@town.winthrop.ma.us	N Meredith Hurley Winthrop Board of Health One Metcalf Square Winthrop, MA 02152 BoardofHealth@town.winthrop.ma.us	P Kim Dimes, Chair Winthrop Conservation Commission One Metcalf Square Winthrop, MA 02152 conservation@town.winthrop.ma.us
N James Letterie Council President Winthrop Town Hall One Metcalf Square Winthrop, MA 02152 jletterie@winthropma.gov	N Town Council 1 Metcalf Square Winthrop, MA 02152 towncouncil@town.winthrop.ma.us	N Planning Board 1 Metcalf Square Town Hall Winthrop, MA 02152	

City of Chelsea	**City of Revere**
N Fidel Maltez City Manager Chelsea City Hall 500 Broadway Chelsea, MA 02150	N Patrick M. Keefe Jr., Mayor City Hall 281 Broadway Revere, MA 02151

Community Groups and Interested Parties

MEPA Environmental Justice Reference List

Community-based organizations and tribal organizations are receiving project notifications in accordance with the MEPA Public Involvement Protocol for Environmental Justice Populations, which took effect on January 1, 2022. More information is available on the MEPA website.

N Heather Miller Charles River Watershed Association Boston, MA hmiller@cwra.org	N Joy Gary, Executive Director Boston Farms Community Land Trust Boston, MA joy@bostonfarms.org	N Kelly Sherman Manager of Waterfront Design Boston Harbor Now Boston, MA KSherman@BostonHarborNow.Org	N Karen Chen Executive Director Chinese Progressive Assoc. Boston, MA karen@cpaboston.org
N Noemi Mimi Ramos Executive Director New England United for Justice Boston, MA mimi.neunited4justice@gmail.com	N Lee Matsueda Executive Director Mass Community Labor United Boston, MA lee@massclu.org	N Bruce Berman Save the Harbor/Save the Bay Boston, MA Bruce@bostonharbor.com	N Lydia Lowe, Executive Director Chinatown Community Land Trust Boston, MA lydia@chinatownclt.org
N Deb Fastino, Executive Director Coalition for Social Justice Boston, MA dfastino@aol.com	N Laura Jasinski Executive Director Charles River Conservancy Boston, MA ljasinski@thecharles.org	N Roseann Bongiovanni Executive Director GreenRoots, Inc. East Boston, MA RoseannB@greenrootsej.org	N Patrick Herron Executive Director Mystic River Watershed Association Winthrop, MA Patrick.Herron@mysticriver.org
N Karl Alexander Greenways Program Manager Mystic River Watershed Association East Boston, MA karl.alexander@mysticriver.org	N Marissa Zampino Community Organizer Mystic River Watershed Association East Boston, MA marissa.zampino@mysticriver.org	N Chris Marchi Vice President Air, Inc. East Boston, MA cbmarchi@gmail.com	N Eugene Benson, Former City Planning & Urban Affairs Professor GreenRoots, Inc. East Boston, MA eugene.benson@gmail.com

MEPA Environmental Justice Reference List (continued)

N Claire B.W. Muller Movement Building Director Unitarian Universalist Mass Action Network claire@uumassaction.org	N Julia Blatt Executive Director Mass Rivers Alliance juliablatt@massriversalliance.org	N Dálida Rocha Associate Director Neighbor to Neighbor Andrea@n2nma.org	N Ben Hellerstein MA State Director Environment Massachusetts ben@environmentmassachusetts.org
N Heidi Ricci, Director of Policy Mass Audubon hricci@massaudubon.org	N Cindy Luppi New England Director Clean Water Action cluppi@cleanwater.org	N Vickash Mohanka Director, MA Chapter Sierra Club MA vick.mohanka@sierraclub.org	N Robb Johnson Executive Director Mass Land Trust Coalition robb@massland.org
N Amy Boyd Rabin Vice President for Policy Environmental League of MA aboydrabin@environmentalleague.org	N Jodi Valenta MA State Director The Trust for Public Land Jodi.Valenta@tpl.org	N Kerry Bowie, Board President Browning the GreenSpace kerry@msaadapartners.com	N Rob Moir, Executive Director Ocean River Institute rob@oceanriver.org
N Elizabeth Soloman Massachusetts Tribe at Ponkapoag Solomon.Elizabeth@gmail.com	N Britteny Jenkins Vice President Conservation Law Foundation Bjenkins@clf.org	N Sylvia Broude Executive Director Community Action Works sylvia@communityactionworks.org	N Cora Pierce Pocassett Wampanoag Tribe Coradot@yahoo.com Breanne Frank
N Melissa Ferretti Chair Herring Pond Wampanoag Tribe melissa@herringpondtribe.org	N Cheryll Toney Holley Chair Nipmuc Nation crwritings@aol.com	N John Peters, Jr. Executive Director Massachusetts Commission on Indian Affairs (MCIA) john.peters@mass.gov	N Associate Attorney Conservation Law Foundation bfrank@clf.org
N Alma Gordon, President Chappaquiddick Tribe of the Wampanoag Nation tribalcouncil@chappaquiddick-wampanoag.org	N Patricia D. Rocker, Council Chair Chappaquiddick Tribe of the Wampanoag Nation, Whale Clan rockerpatriciad@verizon.net	N Raquel Halsey Executive Director North American Indian Center of Boston rhalsey@naicob.org	N Paulina Muratore Director of Transportation Justice and Infrastructure Conservation Law Foundation pmuratore@clf.org
N Zahra Saifee Policy & Advocacy Coordinator Environmental League of MA zsaifee@environmentalleague.org	N Alex St. Pierre Director of Communities & Toxics Conservation Law Foundation aestpierre@clf.org	N Miles Gresham Campaign Director Neighbor to Neighbor Mass. Miles@N2NMa.org	N Aliya Zwyer Public Policy Coordinator Save the Harbor/Save the Bay zwyer@savetheharbor.org
N Chris Mancini Executive Director Save the Harbor/Save the Bay Mancini@SaveTheHarbor.org Logan Badged Shellfishers	N Lena Entin Director of Individual Giving Neighbor to Neighbor Mass. Lena@N2NMa.org	N Jason Rundle Policy Coordinator Save the Harbor/Save the Bay Rundle@SaveTheHarbor.org	

Massport Community Advisory Committee (MCAC)

N Alan Wright, Chair Massport Community Advisory Committee 300 Washington Street Brookline, MA 02445	N Aaron Toffler Massport Community Advisory Committee 300 Washington Street Brookline, MA 02445 atoffler@massportcac.org	

Logan Badged Shellfishers

N Bob Stanley Master Digger Stanley Seafood 833 N Shore Road Revere, MA 02151		

East Boston Community

N Susan Huang, Co-Chair Jeffries Point Neighborhood Association 184 Webster Street East Boston, MA 02128	N Debra Cave, President Eagle Hill Civic Association 106 White Street East Boston, MA 02128	N Mary Berninger 156 Saint Andrew Road East Boston, MA 02128	N Karen Maddalena Friends of the Mary Ellen Welch Greenway 4 Lamson Street East Boston, MA 02128
N Matthew Barison Harborview Community Association East Boston, MA 02128	N Gove Street Neighborhood Association 36 Frankfort Street East Boston, MA 02128	N Noah Lewkowitz Orient Heights Neighborhood Association 54 Ashley Street East Boston, MA 02128	N Patricia D'Amore 95 Webster Street East Boston, MA 02128
N Matthew Small 156 Porter Street Condo Association 156 Porter Street East Boston, MA 02128	N Shirley Fabbo, President East Boston Chamber of Commerce 464 Bremen Street, Suite 2 East Boston, MA 02128	N Lorene Schettino East Boston Foundation 245 Sumner Street, Suite 110 East Boston, MA 02128	N Ethan Vogt Executive Director East Boston Main Streets 154 Maverick Street, Suite 210 East Boston, MA 02128

East Boston Community (continued)

N Greg Wilmot, President and CEO NeighborHealth 10 Gove Street East Boston, MA 02128	N Gail Miller, President Airport Impact Relief, Inc. 232 Orient Avenue East Boston, MA 02128	N Michelle Moon East Boston Greenway 215 Summer Street Somerville, MA 02143	N Gloribell Mota, Lead Organizer Neighbors United for a Better East Boston 19 Meridian Street, Suite 3 East Boston, MA 02128
N Margaret Farmer, Co-Chair Jeffries Point Neighborhood Association 241 Webster Street East Boston, MA 02128	N Dr. Julio Mazul Interim Chief Medical Officer NeighborHealth Health Center 10 Gove Street East Boston, MA 02128	N Veronica Robles Chair East Boston Chamber of Commerce 464 Bremen Street, Suite 2 East Boston, MA 02128	N AIR, Inc. 395 Maverick Street East Boston, MA 02128

Winthrop Community

N Winthrop Chamber of Commerce 207 Hagman Road Winthrop, MA 02152	N Cottage Park Yacht Club 76 Orlando Ave Winthrop, MA 02152	N John Vitagliano 19 Seymour Street Winthrop, MA 02152	N Winthrop Yacht Club 649 Shirley Street Winthrop, MA 02152
N Margaret Roberts 10 Billows Street Winthrop, MA 02152 rmargaret120@outlook.com	N Miriam Regan-Fiore 15 Frances Street Winthrop, MA 02152	N Jerry E. Falbo 1 Seal Harbor Road, Unit 505 Winthrop, MA 02152	N Robert Pulsifer 30 Sagamore Avenue Winthrop, MA 02152
N Brendan Cooney 35 Pico Ave Winthrop, MA 02152 cooney.brendan00@gmail.com	N Dave Hickey 33 Edgehill Road Winthrop, MA 02152	N Kimberly Dimes 116 Brookfield Road Winthrop, MA 02152 kimdimes@aol.com	

Other DEIR and ENF Commenters

N Kathy Abbott Boston Harbor Now 15 State St #1100 Boston, MA 02109	N Frank Kerr Hull Neighbors for Quiet Skies 33 Holbrook Avenue Hull, MA 02045	N Dawn Quirk 78 Morgan Street New Bedford, MA 02740

This Page Intentionally Left Blank