COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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THE OFFICE OF APPEALS AND DISPUTE RESOLUTION

November 7, 2024

In the Matter of
City of Boston Public Works Dept.
Long Island Bridge Reconstruction
Project Locus: Quincy/Boston

OADR Docket No. 2023-054
MassDEP File #W19-5439
Chapter 91 Application

RECOMMENDED FINAL DECISION

INTRODUCTION

The City of Quincy, by and through its municipal official, Thomas P. Koch, Mayor (the "Petitioner" or "Quincy")) filed on August 30, 2023, this appeal with the Office of Appeals and Dispute Resolution ("OADR")[1] to challenge a draft waterways license issued by the Massachusetts Department of Environmental Protection Boston Office ("MassDEP" or the "Department") to the City of Boston Public Works Department (the "Applicant" or "Boston") on August 9, 2023 ("Draft License"). The Draft License was issued pursuant to G.L. Chapter 91, the Public Waterfront Act ("Chapter 91") and the Chapter 91 Regulations at 310 CMR 9.00. The Draft License approved Boston's request to construct and maintain improvements to the existing piers and replace the superstructure of a bridge located within and over flowed Commonwealth

[1] OADR is an independent, neutral, quasi-judicial office within the Massachusetts Department of Environmental Protection whose Presiding Officers (senior environmental attorneys) are responsible for advising MassDEP's Commissioner in the adjudication of appeals filed with OADR, including this appeal.

tidelands of Boston Harbor between Moon Island in the City of Quincy and Long Island in the City of Boston (the "proposed Project" or "bridge replacement Project").

After reviewing and evaluating the evidence and the arguments presented by the Parties in the pre-filed testimony and cross-examination testimony of their respective expert witnesses who testified at the evidentiary Adjudicatory Hearing ("Hearing") that I conducted in the appeal, the Parties' respective pre-hearing and post hearing briefs, and the entirety of the record in this proceeding, I recommend that the Department's Commissioner issue a Final Decision affirming the Draft License.

WITNESSES[2]

The evidence in the administrative record includes the Department's basic records and the pre-filed, sworn written testimony ("PFT") and exhibits submitted by expert witnesses on behalf of the Parties. The witnesses below were available for cross-examination at the Hearing.[3]

For Quincy:

1. David Murphy: Mr. Murphy is the Vice President of Tighe & Bond. He received a Bachelor of Science in civil engineering from Northeastern University. He is a Registered Professional Engineer in Massachusetts and has been working as a civil engineer for 38 years. He has served as the project director for numerous coastal engineering projects, including bridges and dams. Mr. Murphy is qualified as an expert witness on engineering.
2. Robert Gillan: Mr. Gillan is a Quincy Police Lieutenant and the Deputy Harbormaster for

[2] Throughout this Recommended Final Decision, the witnesses' Pre-Filed Direct Testimony is referred to as "[Witness] PFT, ¶ X" and Pre-Filed Rebuttal Testimony will be referred to as "[Witness] PFR, ¶ X." Exhibits to testimony are referred to as "[Witness] Ex. X."

[3] Throughout this Recommended Final Decision, the witnesses' cross examination testimony at the Hearing is referred to as "[Witness], page:lines."

the City of Quincy. He is a licensed U.S. Merchant Marine Captain and a retired U.S. Coast Guard Reserve Commander with 28 years of experience specializing in port safety and security planning and maritime emergency response operations. During his active Coast Guard service, he served as a Port Safety and Security Officer for the Port of Boston, which involved reviewing maritime critical infrastructure for compliance with federal requirements for safe navigation. He was also the U.S. Coast Guard Project Coordinator for the demolition of the original Long Island Bridge. Mr. Gillan is qualified as an expert witness on maritime safety.

3. Paul Costello: Mr. Costello is the Chief Engineer for the City of Quincy. He received a Bachelor of Science in civil engineering from Northeastern University. He is a licensed Professional Engineer in Massachusetts and has worked as an engineer for over 40 years. He has worked on numerous engineering projects in Massachusetts, including many which involved the use of pilings and the integrity of concrete in a coastal environment. He also oversaw the demolition of the original Long Island Bridge in 2015. Mr. Costello is qualified as an expert witness on engineering.

4. David Gress: Mr. Gress is a licensed professional engineer in New Hampshire.[4] He has a Ph.D. in civil engineering materials and was a professor of civil engineering at the University of New Hampshire for 37 years. He has been published in numerous engineering journals and worked on numerous engineering projects funded by federal agencies. He routinely acts as a consultant to engineering firms and state agencies in the area of concrete and masonry construction. Much of his work is related to alkali-silica

[4] Mr. Gress has been a registered Professional Engineer in New Hampshire for the entirety of this proceeding; however, he was registered as "retired" when he filed his PFT, meaning that he was not qualified to practice engineering at that time. At the Hearing, Mr. Gress testified that he had completed the necessary steps to change his registration status and authenticated and adopted his PFT as a registered Professional Engineer at that time. See Ruling and Order on Motion to Strike, June 20, 2024.

reaction ("ASR") and was a member of the American Association of State Highway and Transportation Officials ("AASHTO") ASR Task Group. Mr. Gress is qualified as an expert witness on engineering.

5. Duncan Mellor: Mr. Mellor is the Principal Coastal Engineer for Civilworks New England. He is a licensed professional engineer in New Hampshire and Maine and has 38 years of experience assessing waterfront structures. Prior to his current position, he was the Principal Coastal Engineer for Tighe & Bond. In that position, he performed work on behalf of the City of Quincy, including observation of the Long Island Bridge piers. Mr. Mellor is qualified as an expert witness on engineering.
6. Kevin Knutti: Mr. Knutti is an independent civil/coastal engineer. He is a licensed civil engineer in Maine with 31 years of experience working with engineering design and coastal structures and assessing water levels. He previously served in the U.S. Army as an engineer and for the U.S. Army Corps of Engineers for 30 years. He has studied sea level rise since 1992 and has worked to incorporate sea level rise into engineering projects throughout the United States and in other countries. He has lectured and taught classes as an expert on tidal datums and geodetic datums. Mr. Knutti is qualified as an expert witness on engineering.

For Boston:

1. P.J. McCann: Mr. McCann is the Deputy Commissioner for Policy and Planning of the Boston Public Health Commission ("BPHC"). He assists in establishing priorities and managing the ongoing work of the BPHC, as well as providing advice to agency leadership on matters of policy, strategy, and planning. He is the lead staffer for BPHC in the ongoing planning process regarding the reuse of the public health campus on Long Island and provides advice to agency leadership on specific legal and policy questions

presented by the reuse of the facilities.

2. Benjamin Sun: Mr. Sun is the Chief Structural Engineer for the City of Boston Public Works Department. His job responsibilities include planning for and executing the procurement of design consultants to carry out bridge designs and to provide technical guidance and consultant management for all City of Boston bridges, both in design and construction. He previously was the Manager of Structural Engineering with BSC Group, an engineering firm specializing in bridges. In that role, he oversaw the demolition of the original Long Island Bridge and the planning and engineering of the bridge replacement Project. Mr. Sun is qualified as an expert witness on engineering.
3. Mark Ennis: Mr. Ennis is Vice President, Senior Structural Engineer, and Project Manager with STV Inc. ("STV"), an engineering firm prequalified by the Massachusetts Department of Transportation for complex bridge design. He is one of the Project Managers for the proposed Project and stamped the plans for the bridge replacement Project, certifying them as structurally sound. He is a Registered Professional Engineer in six states, including Massachusetts, and has 35 years of structural engineering experience, primarily in the design and engineering of bridges. Mr. Ennis is qualified as an expert witness on engineering.
4. Gary Klein: Mr. Klein is the Executive Vice President and Senior Principal at Wiss, Janney, Elstner Associates ("WJE"), an engineering firm headquartered in Illinois. He has over 50 years of engineering experience, particularly involving deterioration, distress, and failure of structures and bridges. He is a licensed Professional Engineer in six states, including Massachusetts. Mr. Klein is qualified as an expert witness on engineering.
5. Jeffrey Brandt: Mr. Brandt is the Senior Project Manager with TRC Companies, Inc. He has over 30 years of experience in the siting and permitting of coastal infrastructure

projects, including bridges. He has managed the permitting and licensing of the proposed Project since 2018 and prepared Boston's Chapter 91 license application. Mr. Brandt is qualified as an expert witness on environmental permitting.

6. Alison Love: Ms. Love is a Registered Structural Engineer with STV. She has been a member of STV's structural department for 12 years, in which role she is responsible for design calculations, construction support, and bridge ratings. She also has extensive sailing experience in the Boston Harbor, including in the waterways around Long Island, having participated in boat races in the area every summer for the past 12 years. She was responsible for preparing the Navigation Impact Study evaluating the bridge replacement Project's potential impacts on waterborne traffic. Ms. Love is qualified as an expert witness on boat traffic in the Boston Harbor.

For the Department:

1. Kashif Rashid: Mr. Rashid is the Director of MassDEP's GIS program. He is responsible for GIS and data management support for all programs within MassDEP. He has 25 years of experience with GIS mapping and has provided GIS mapping support in over 100 countries and for the United Nations. He created a cartographic analysis of Moon Island's historic shoreline for MassDEP's review of the proposed Project. Mr. Rashid is qualified as an expert witness on GIS mapping.
2. Daniel Padien: Mr. Padien is the Program Chief for the Waterways Regulation Program at MassDEP. He has final approval authority for all licensing decisions made by the Waterways Program. He reviews applications to determine compliance with Chapter 91 and the waterways regulations and supervises staff in their review of applications. He previously worked for Vanasse Hangen Brustlin, Inc., an environmental permitting consultant firm, for 25 years, during which he participated in the permitting of over 50

projects under Chapter 91. Mr. Padien is qualified as an expert witness on Chapter 91 permitting.

3. Christine Hopps: Ms. Hopps is the Assistant Director for the Waterways Regulation Program at MassDEP. She administers and enforces the provisions of Chapter 91 and reviews applications to determine their compliance with Chapter 91 and the waterways regulations. She has reviewed approximately 400 applications for Chapter 91 licenses in her tenure with MassDEP. She is also an experienced boater, having worked for 6 years as a vessel operator for SCUBA divers. Ms. Hopps is qualified as an expert witness on Chapter 91 permitting and maritime safety.

BACKGROUND

History of the Project Site

On July 1, 1949, the Massachusetts legislature passed an act titled "An act to authorize the City of Boston to construct and maintain a viaduct over and across the passage of water known as the 'Back Way' in lower Boston harbor, between Long Island and Moon Island, and approaches thereto on both Long Island and Moon Island." The act reads: "The City of Boston is hereby authorized to construct, as a part of the facilities of its institution on Long Island, a viaduct over and across the passage of water known as the "Back Way" in the lower Boston harbor between Long Island and Moon Island, and shall construct approaches to said viaduct on each end thereof. . . . Said viaduct shall be constructed and maintained subject to the provisions of chapter ninety-one of the General Laws and of all other general laws which now are or hereafter may be in force relating to bridges over tidewater . . . ." St. 1949, ch. 480, §§ 1-2 (the "Act"). The City of Boston obtained a license under Chapter 91 to construct this bridge (the "1949 License"). Pet. MOL, Ex. B. However, the 1949 License was not recorded in the Suffolk County Registry of Deeds within one (1) year of its issuance, meaning it became void under its

own conditions. Pet. MOL, Ex. B ("This License shall be void unless the same and the accompanying plan are recorded within one year from the date hereof, in the Registry of Deeds for the District of the County of Suffolk."). Nonetheless, the bridge was constructed.

The Long Island Bridge provided vehicular access to public health facilities run by the Boston Public Health Commission (the "Health Commission") on Long Island until 2014. McCann PFT, ¶¶ 5, 8. A guardhouse and security gate was located at the western end of the bridge, in the Squantum neighborhood of Quincy. Murphy PFT, ¶ 5; Murphy, 29:22-30:6. The general public was not permitted to access the bridge. Murphy PFT, ¶ 5. In 2014, it was determined that the bridge was "critically ill" and it, along with the facilities on Long Island, were shut down. Sun PFT, ¶ 5. In 2015, MassDEP issued a license for the demolition of the bridge roadway or superstructure. Sun PFT, ¶ 12. Boston also filed an amended Environmental Notification Form ("ENF") with the Massachusetts Environmental Policy Act ("MEPA") Office of the Massachusetts Executive Office of Energy and Environmental Affairs ("EEA") for the demolition of the bridge on April 7, 2015. Brandt PFT, ¶ 24. The EEA Secretary issued a certificate on April 30, 2015, determining that the demolition of the bridge did not require the submission of an Environmental Impact Report ("EIR"). Brandt PFT, ¶ 25. The certificate also stated that the review did not include the replacement of the bridge and Boston would need to file a Notice of Project Change ("NPC") if it wished to replace the bridge in the future. Brandt PFT, ¶ 26. The bridge superstructure was demolished in 2015, leaving the substructure intact. Sun PFT, ¶ 10.[5]

[5] "Superstructure" refers to the bridge deck, roadway, and steel support structure. "Substructure" refers to the piers and abutments. Ennis PFT, ¶ 9.

The Proposed Project

The proposed bridge reconstruction Project involves the construction of a new bridge replacement on top of the existing piers and abutments, reestablishing vehicular access between Moon Island and Long Island.[6] Sun PFT, ¶ 9. The bridge replacement Project will maintain the approximate height, width, and length of the original bridge. Ennis PFT, ¶ 20. It will extend 3,225 feet and will support two 10-foot travel lanes, 2-foot shoulders, and a 6-foot sidewalk. Ennis PFT, ¶¶ 20, 22. The bridge replacement will employ a delta-frame girder design as opposed to the original Long Island Bridge's truss-structure design. Ennis PFT, ¶ 21. The proposed bridge replacement Project also involves the addition of a pier-fender system to protect the piers from vessel allisions.[7] Ennis PFT, ¶ 23. The bridge replacement Project will maintain the 150 feet of horizontal clearance from the original Long Island Bridge and will improve the vertical clearance from 51 feet to 51.75 feet.[8] Ennis PFT, ¶ 24.

The proposed Project includes repair and strengthening of the existing piers. The existing concrete pier caps will be removed, new concrete caps will be poured, and galvanized steel post-tensioning rods will be inserted into the piers. Ennis PFT, ¶ 25. The new caps will be at least 4 feet thick and will be set at an elevation 2 feet higher than the original caps. Ennis PFT, ¶¶ 25.b, 37. Additionally, damaged granite facing blocks will be replaced, deteriorated mortar joints will

[6] The bridge replacement will reuse only 13 of the 15 existing piers; the piers closest to each abutment will not be used. Ennis Ex. C, p. 3.

[7] The Office of Response and Restoration of the federal National Oceanic and Atmospheric Administration ("NOAA") which is responsible for "preparing for, evaluating, and responding to threats to coastal environments, including oil and chemical spills, releases from hazardous waste sites, and marine debris" defines a vessel allision as "a vessel strik[ing] a stationary object [] such as a bridge or dock." https://response.restoration.noaa.gov/about; https://response.restoration.noaa.gov/about/media/you-say-collision-i-say-allision-lets-sort-whole-thing-out.html.

[8] Lt. Gillan testified that he was told by Coast Guard personnel that there is a federal requirement for new bridges to have a 65-foot air draft. Gillan PFT, ¶ 12. However, he has admitted that there is no regulation or guidance document describing this requirement. Gillan, 60:11-21. Additionally, the Coast Guard's Preliminary Navigation Clearance Determination for the proposed Project stated that the bridge replacement should provide at least 51.75 feet of vertical clearance. Hopps Ex. 6.

be removed, pier stems will be power-washed to remove loose debris and grout, joints will be refilled, and the pier stem profiles will be repointed using grout intended for underwater use. Ennis PFT, ¶ 27. These repairs will be performed without the use of cofferdams and without the placement of fill or dredging. Ennis PFT, ¶¶ 29, 34. Existing rebar near the top of the pier stems will be removed and replaced with either stainless steel or epoxy coated rebar to protect it from chloride corrosion. Ennis PFT, ¶ 45. The delta frames and their structural steel components will be either metalized or galvanized to protect them from corrosion. Ennis PFT, ¶ 38.

Project Background

Boston initially contracted with engineering firm STV to evaluate the integrity of the piers and abutments and to design the bridge replacement. Sun PFT, ¶ 16. STV's investigation involved taking twenty (20) concrete core samples from the piers, including every pier within the Quincy municipal boundaries, and performing tests to evaluate their strength and ability to withstand loads and determine the presence of Alkali-Silica Reactivity ("ASR").[9] Ennis PFT, ¶ 10. Compressive strength and salt content tests were performed on every core specimen and a petrographic analysis was conducted on thirteen of the core specimens. Ennis PFT, ¶ 10. STV determined that the piers' compressive strength exceeded the design standard for the original Long Island Bridge and that ASR was minor to nonexistent. Ennis PFT, ¶¶ 11, 14. On May 14, 2018, STV published a Preliminary Structures Report concluding that the piers and abutments would be adequate to support the bridge replacement following repairs and strengthening. Ennis Ex. C, p. 20. An additional engineering firm, WJE, was retained to perform an independent

[9] ASR is a process which may occur in concrete exposed to water. It involves a reaction between alkali in the cement paste and silica in the aggregates. The reaction produces a gel that expands when it encounters moisture, causing the concrete to crack. Gress PFT, ¶¶ 28.2, 34; Ennis PFT, ¶ 10.

review of the concrete samples and petrographic analysis performed to confirm the proposed pier strengthening plan and concurred with STV's conclusions. Ennis PFT, ¶ 8; Klein PFT, ¶ 36.

Additionally, Boston contracted with Benesch, an engineering design firm prequalified by MassDOT for complex bridge design, to perform a third-party safety review of STV's proposed design. Ennis PFT, ¶ 7; Sun PFT, ¶ 17. Benesch subcontracted GEI Consultants, Inc. ("GEI"), a geotechnical engineering firm, to join the review. Ennis PFT, ¶ 7; Sun PFT, ¶ 17. The review by Benesch and GEI was designed to match the review performed by MassDOT under G.L. c. 85 ("Chapter 85").[10] Ennis PFT, ¶ 7; Sun PFT, ¶ 17. The design documents were submitted to Boston only after all comments by Benesch and GEI were resolved. Ennis PFT, ¶ 7; Sun PFT, ¶ 17. Registered Professional Engineer Mark Ennis stamped the design plans certifying them as structurally sound. Ennis PFT, ¶ 5.

Simultaneously, Boston prepared and submitted two Notices of Intent ("NOI") for the proposed Project; one on April 13, 2018, to the Boston Conservation Commission ("BCC") and one on May 17, 2018, to the Quincy Conservation Commission ("QCC"); relating to temporary impacts to protected wetland resource areas associated with construction of new bridge. Brandt PFT, ¶¶ 14-15. The BCC approved the NOI, which was appealed by Quincy to MassDEP's Wetlands Program, and the QCC denied the NOI, which was appealed by Boston to MassDEP's Wetlands Program.[11] Brandt Ex. H, p. 1. MassDEP's Wetlands Program consolidated the two appeals and, on June 6, 2019, issued a Superseding Order of Conditions approving both NOIs. Brandt PFT, ¶ 17; Brandt Ex. H, pp. 1-3. Quincy appealed the SOC to OADR,[12] and the

[10] MassDOT review under Chapter 85 is conducted for municipal bridge preservation projects of bridges with a span between 10 and 20 feet. Sun PFT, ¶ 15; Sun, 188:23-189:10.

[11] Boston also appealed the portions of the QCC's decision pertaining to Quincy bylaws to Superior Court, which held in favor of Boston and annulled the QCC's denial. City of Boston v. Quincy Conservation Commission, Massachusetts Superior Court, Docket No. 1884-CV-03440, dated December 3, 2020 (Pasquale, J.).

[12] See n.1, at p. 1 above.

Presiding Officer in the appeal issued a Recommended Final Decision, which was adopted by the Department's Commissioner as a Final Decision, dismissing the appeal with respect to the Boston NOI for lack of standing and with respect to the Quincy NOI for failure to state a claim upon which relief could be granted.[13] Quincy then appealed to Superior Court, which upheld the dismissal.[14]

On July 31, 2018, Boston submitted a Notice of Project Change ("NPC") for the proposed Project to the MEPA Office. Brandt PFT, ¶ 27. The EEA Secretary issued a certificate on September 21, 2018, determining that the bridge replacement did not require the preparation of an Environmental Impact Report ("EIR"). Brandt PFT, ¶ 28. Quincy appealed the NPC to Superior Court, which held in favor of Boston and dismissed the case.[15]

For the Chapter 91 Application, Boston prepared an alternatives analysis for the proposed Project. The analysis examined four alternatives: the no-build alternative, the ferry-access-only alternative, the standardized multi-modal bridge deck alternative, and an in-kind replacement of the original Long Island Bridge superstructure. Brandt PFT, ¶ 7. The analysis examined each alternative regarding ability to meet the project purpose and need, operational reliability, environmental impact and footprint, and resiliency to sea level rise. Brandt PFT, ¶ 7. The no-build and ferry-access-only alternatives were discarded for not providing the necessary operational reliability, as the analysis contends that ferries and helicopters cannot provide reliable 24-hour emergency services. Brandt PFT, ¶ 8; McCann PFT, ¶¶ 9-10. Additionally, U.S.

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[13] In the Matter of City of Boston Public Works Department, OADR Docket Nos. WET-2019-021 & 022, Recommended Final Decision (March 17, 2021), adopted by Final Decision (March 31, 2021).

[14] City of Quincy v. Massachusetts Department of Environmental Protection, Massachusetts Superior Court, Docket No. 2184-CV-00991, dated December 30, 2021 (Squires-Lee, J.).

[15] City of Quincy v. Beaton, Massachusetts Superior Court, Docket No. 1884-CV-03629, dated July 27, 2022 (Connolly, J.).

Coast Guard policy requires the piers to be removed if they are not reused, which the analysis states would cause substantial environmental impacts. Brandt PFT, ¶ 9; Sun PFT, ¶ 13. The standardized multi-modal bridge deck alternative was discarded for its environmental impacts, as it would require the removal of the current piers and abutments so that larger piers and abutments can be constructed. Brandt PFT, ¶ 12. Finally, the analysis discarded the in-kind replacement of the original Long Island Bridge alternative because its truss-type structure was deemed less resilient to sea level rise than the bridge replacement Project's delta-frame girder design. Brandt PFT, ¶ 13.

Thereafter, Boston submitted its Chapter 91 Application to MassDEP for the selected bridge replacement on December 21, 2018. Brandt Ex. B. Boston provided public notice of the Chapter 91 Application via The Boston Globe and The Environmental Monitor on February 6, 2019. Hopps Ex. 2, pp. 1-2. On March 6, 2019, Quincy requested a public hearing on the Chapter 91 Application. Hopps Ex. 2, p. 2. Notice of the public hearing was published in The Boston Globe and The Environmental Monitor on April 24, 2019. Hopps Ex. 2, p. 2. The public hearing was held at the Kennedy Center in Quincy on May 7, 2019, at 7:00 p.m. Hopps Ex. 2, p. 2. MassDEP received 3,470 written comments during the combined comment period. Hopps Ex. 2, p. 2. Boston submitted a response to the comments to MassDEP on April 4, 2020. Hopps Ex. 2, p. 2.

Boston also prepared a Navigation Impact Study (the "Study") at the request of the U.S. Coast Guard. Love PFT, ¶ 3.[16] The Study evaluated vessel use of the waterway, surrounding harbors and structures and alternative routes, and sea level rise projections.

[16] See Love Ex. B, "City of Boston Public Works Department Long Island Bridge over Boston Harbor Superstructure Replacement Navigation Impact Study," June 2021; and Love Ex. C, "City of Boston Public Works Department Long Island Bridge over Boston Harbor Superstructure Replacement Navigation Impact Study Supplement," revised May 2022.

MassDEP issued the Draft License to Boston on August 9, 2023. Hopps PFT, ¶ 4; Padien PFT, ¶ 9; Hopps Ex. 2, p. 3. MassDEP determined that the proposed bridge reconstruction Project was a water-dependent infrastructure crossing facility and that the landward limit of Chapter 91 jurisdiction was the present[17] mean high-water mark, as established by the National Tidal Datum Epoch ("NTDE") for the 1983-2001 tidal epoch. Hopps Ex. 2, p. 1, Knutti PFT, ¶ 11. The 1983-2001 tidal epoch was the current tidal epoch at the time the Chapter 91 Application was filed, although more recent tidal data is available. Hopps PFT, ¶ 23; Knutti PFT, ¶¶ 9-10. MassDEP also determined that the proposed Project met all the requirements and standards for licensing under the Waterways Regulations at 310 CMR 9.31 to 310 CMR 9.37. Hopps Ex. 2, pp. 2-3.

Procedural Background

Quincy appealed the Draft License to OADR on August 30, 2023, objecting to eleven (11) findings in the Draft License. On October 18, 2023, Quincy moved to compel discovery from Boston by requesting entry onto land for the purpose of taking additional core samples from the piers for further testing, and on October 31, 2023, Quincy moved to stay the proceedings in the appeal pending the U.S. Coast Guard's responding to navigation-related public comments and issuing a final bridge permit. Also on October 31, 2023, Boston argued that the case was moot due to the newly discovered existence of the 1949 License and 310 CMR 9.05(3)(a) exempting "maintenance, repair, and minor modifications . . . of fill or structures for which a grant or license is presently valid" from licensing requirements.[18] I conducted a Pre-Hearing Conference in the appeal on November 8, 2023, at which the motion to compel

[17] The regulations refer to the "present" high-water mark and the draft Chapter 91 License refers to the "contemporary" high-water mark. These terms are used interchangeably in the Parties' testimony.

[18] On September 26, 2023, MassDEP informed the Parties that a copy of the 1949 license was found in its files, and on October 19, 2023, produced it to the Parties.

discovery, the motion to stay, and the mootness argument were also discussed. Thereafter, I issued a Pre-Hearing Conference Report and Order on November 10, 2023, establishing proposed issues for adjudication in the appeal, directing additional briefing on the motion to stay and mootness issue, and denying the motion to compel discovery for being unduly burdensome to Boston. Following comments from the Parties, I issued Amended Issues for Adjudication on November 21, 2023. On December 8, 2023, I issued a Ruling and Order denying Quincy's request to stay the proceedings in the appeal because the U.S. Coast Guard cannot issue a final bridge permit until Boston receives a Chapter 91 license from MassDEP and the U.S. Coast Guard's navigation analysis differs from the navigation analysis under Chapter 91, and ruling that the 1949 License did not make the case moot because the 1949 License was void and the proposed Project is not a "maintenance and repair" project. The December 8, 2023 Ruling and Order also added an additional issue for adjudication, Issue 9, which posed the following issue: If the 1949 License is void, do the remaining concrete piers on which the proposed Project would be constructed constitute the continuation of an existing, unauthorized public service project subject to 310 CMR 9.05(3)(c); if yes, has any unauthorized structural alteration or change occurred subsequent to January 1, 1984; if yes, has the Department determined that licensing of the piers is essential to prevent significant harm to an overriding water-related public interest; and if yes, has notice and opportunity for public comment been satisfied?

On March 19, 2024, Boston filed an emergency motion to file replacement testimony, contending that one of its witnesses had retired without advance notice and would not be testifying at the Hearing. I granted that motion on March 22, 2024. In response and on same date, Quincy filed a motion for reconsideration and request for issuance of a subpoena compelling the former witness to testify at the Hearing. On March 25, 2024, Boston identified its substitute witness as Benjamin Sun ("Mr. Sun") who subsequently filed PFT and appeared at

the Hearing for cross-examination by Quincy's legal counsel. A motion hearing was held on April 5, 2024, after which Quincy withdrew its motion for reconsideration and request for subpoena on April 8, 2024.

On May 3, 2024, Boston filed a motion to strike the testimony of Quincy's witness, David Gress, arguing that he was not competent to testify to engineering matters because he was not a Registered Professional Engineer in Massachusetts and was a retired engineer in New Hampshire, and contending that his testimony regarding Issue 4 for adjudication was irrelevant because 310 CMR 9.37 requires only that a structure be certified as structurally sound by a Registered Professional Engineer.[19] I conducted a site view of the proposed Project site on May 6, 2024, which the Parties attended. On May 13, 2024, MassDEP joined Boston's motion to strike Mr. Gress's testimony, raising the additional ground that he had not been forthright by submitting PFT claiming to be a Registered Professional Engineer authorized to render expert engineering testimony in this appeal when he was retired at the time of his testimony. MassDEP also filed a motion for summary decision on Issue 4,[20] which Quincy opposed in their May 28, 2024 filing which included a cross-motion for summary decision on Issue 8.[21]

I conducted a two-day Hearing to adjudicate the appeal in MassDEP's Boston office on May 29-30, 2024, at which the motion to strike and cross-motions for summary decision were also discussed. On June 20, 2024, I issued a Ruling and Order denying the motion to strike the testimony of David Gress, ruling that G.L. c. 112, § 81R(b)[22] permits Registered Professional

[19] Issue 4 posed the following issue for adjudication: Does the proposed Project comply with the requirements of 310 CMR 9.37 concerning Engineering and Construction standards?

[20] Id.

[21] Issue 8 posed the following issue for adjudication: Does the proposed Project as conditioned comply with the basic requirements for licensing in accordance with 310 CMR 9.31(1)?

[22] G.L. c. 112, § 81R(b) provides: "Nothing in said sections shall be construed to prevent or to affect . . . a person not a resident of and having no established place of business in the commonwealth from practicing or offering to practice therein the profession of engineering or land surveying, when such practice does not exceed in the

Engineers in New Hampshire to testify to engineering matters in Massachusetts and that the act of authenticating his PFT at the Hearing after he had been reinstated as an active engineer in New Hampshire cured any issues regarding his competence and candor. I deferred ruling on the motions for summary decision.

Prior to the close of the Hearing on May 30, 2024, MassDEP made an oral motion requesting that I issue a Tentative Decision instead of a Recommended Final Decision in the appeal and then filed a written motion later that same day making the same request and detailing its reasons for the motion. The Parties submitted their post-hearing briefs on June 27, 2024. Neither Quincy nor Boston filed responses to MassDEP's motion for Tentative Decision[23] and the Chief Presiding Officer denied the motion on September 27, 2024.[24]

ISSUES FOR ADJUDICATION

1. Does the proposed Project qualify as a Water-Dependent Infrastructure Crossing Facility pursuant to 310 CMR 9.12(2)(d)?

    a. If the proposed Project is a water-dependent infrastructure crossing facility, has Quincy demonstrated that the Project as conditioned does not serve a proper public purpose and does not provide greater benefit than detriment to the rights of the public in tidelands in accordance with 310 CMR 9.31(2)(a)?

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aggregate more than thirty days in any calendar year; provided, such person is legally qualified by registration to practice the said profession in his own state or country in which the requirements and qualifications for obtaining a certificate of registration are not lower than those specified in said sections . . . ."

[23] Tentative decisions are issued in very narrow circumstances for good cause shown. When issued, Parties have seven (7) days to file objections to the Tentative Decision and supporting arguments. Issuance of a Tentative Decision does not reopen the record of the appeal. Nor does it prevent a party from seeking reconsideration of a Final Decision issued by MassDEP's Commissioner or her designee. See 310 CMR 1.01(14)(a).

[24] See Ruling and Order Denying MassDEP's Motion for Issuance of a Tentative Decision in Appeal, September 27, 2024 ("Sept. 27, 2024 Ruling"). The Chief Presiding Officer, as the head of OADR, directly supervises the work of all OADR Presiding Officers and in assigning this appeal retained jurisdiction over the review of requests to alter the ordinary course of proceedings, such as the Department's request for the issuance of a Tentative Decision. He denied MassDEP's Motion for Issuance of a Tentative Decision because, as previously noted in n.23 above, Tentative Decisions in administrative appeals before OADR are issued only in very narrow circumstances for good cause shown by the party requesting the Tentative Decision. MassDEP did not make that required demonstration. Sept. 27, 2024 Ruling, at pp. 1-7.

2. Did the Department correctly determine the limit of the Chapter 91 jurisdiction, appropriately determining and applying the High-Water Mark?

3. Does the proposed Project comply with the requirements of 310 CMR 9.35 concerning Water-Related Public Rights?

4. Does the proposed Project comply with the requirements of 310 CMR 9.37 concerning Engineering and Construction standards?

5. Does the proposed Project comply with the categorical restriction on fill and structures at 310 CMR 9.32(1)(a)(2), where the proposed Project would utilize the exiting piers?

a. If yes, would the piers be "licensed" as part of the proposed Project?

6. Did the Department correctly determine that, as related to the proposed Project, there are no unresolved compliance issues with MEPA and the Wetlands Protection Act pursuant to 310 CMR 9.33?

7. If the Department did correctly determine the limit of the Chapter 91 jurisdiction, appropriately determining and applying the High-Water Mark, did the Department err in determining that the Project is not subject to the provisions of 310 CMR 9.34 requiring compliance with applicable local zoning ordinances?

8. Does the proposed Project as conditioned comply with the basic requirements for licensing in accordance with 310 CMR 9.31(1)?

9. If the 1949 Chapter 91 License is void, do the remaining concrete piers on which the proposed Project would be constructed constitute the continuation of an existing, unauthorized public service project subject to 310 CMR 9.05(3)(c)?

a. If yes, has any unauthorized structural alteration or change occurred subsequent to January 1, 1984?

b. If yes, has the Department determined that licensing of the piers is essential to prevent significant harm to an overriding water-related public interest?

c. If yes, has notice and opportunity for public comment been satisfied?

STATUTORY & REGULATORY FRAMEWORK

Chapter 91 and its implementing regulations at 310 CMR 9.00, also known as the Waterways Regulations, "represent the modern embodiment of the public trust doctrine, and 'govern . . . water[-dependent] and nonwater-dependent development in tidelands and the public's right to use those lands.'" Navy Yard Four Associates, LLC v. Department of Environmetal Protection, 88 Mass. App. Ct. 213, 218 (2015). "As such, those parties seeking to put tidelands to either water-[dependent] or nonwater-dependent use [within the meaning of the Waterways Regulations at 310 CMR 9.12 . . . must first obtain a license [from the Department] pursuant to [Chapter 91]." Id.

Public access rights to the coastline for fishing, fowling and navigation have long been established in Massachusetts in the public trust doctrine and are implemented by MassDEP through G.L. c. 91 and the Waterways Regulations at 310 CMR 9.00.[25] Chapter 91 and the Waterways Regulations authorize the Department to grant licenses to conduct work in tidelands provided that the project satisfies certain criteria designed to protect the interests of the public in the affected tideland. See 310 CMR 9.35(1). Some unavoidable interference is inherent in certain water-dependent uses, which "may be allowed provided mitigation is provided to the greatest extent deemed reasonable by the Department, and that the overall public trust in waterways is best served." Id.

[25] For a discussion of this history, see In the Matter of Jimary Realty Trust, OADR Docket No. 2016-015, Recommended Final Decision (August 3, 2018), 2018 WL 6040709, adopted by Final Decision (August 14, 2018), 2018 WL 6040708.

APPEAL ADJUDICATION PROCEDURE

I. QUINCY'S BURDEN OF PROOF

As the Party challenging the Draft License authorizing the proposed Project, Quincy had the burden of proof at the Hearing, specifically to prove that MassDEP erred in issuing the Draft License based on a preponderance of the evidence presented by the Parties' respective expert witnesses and the governing legal requirements. In the Matter of Town of Hamilton, DEP Docket Nos. 2003-065 and 068, Recommended Final Decision (January 19, 2006), 2006 WL 1681035, at *8, adopted by Final Decision (March 27, 2006); In the Matter of Renata Legowski, OADR Docket No. 2011-039, Recommended Final Decision (October 25, 2012), 2012 WL 5988808, at *27, adopted by Final Decision (November 5, 2012), 2012 WL 5988807 (party challenging Chapter 91 determination has burden of proof); In the Matter of The Prysmian Group and Prysmian Cables & Systems USA, LLC, OADR Docket No. 2024-006, Recommended Final Decision (August 26, 2024), at pp. 5-6, adopted as Final Decision (September 26, 2024). Regarding its burden of proof, Quincy was required to present competent and persuasive evidence at the Hearing from an expert witness(es) with sufficient expertise to testify on the technical issues presented by their claims that MassDEP improperly issued the Draft License. Id.; In the Matter of Dan and Eva Barstow, OADR Docket No. 2019-026, Recommended Final Decision (January 22, 2020), 2020 WL 2616472, at *4, adopted by Final Decision (February 19, 2020), 2020 WL 2616471 (internal citations omitted); Prysmian, at p. 6. The question of "sufficient expertise" turns on "whether the witness has sufficient education, training, experience, and familiarity with the subject matter of the testimony." Id.

II. STANDARD OF REVIEW

The standard of review governing my adjudication of Quincy's appeal of the Draft License as the Presiding Officer in the case is as follows.

First, my review of MassDEP's determinations underlying its grounds for issuing the Draft License to Boston is *de novo*, meaning that my review is anew irrespective of what MassDEP determined previously. In the Matter of Woods Hole, Martha's Vineyard & Nantucket Steamship Authority, OADR Docket No. 2016-025, Recommended Final Decision (March 27, 2017), 2017 WL 1656437, adopted by Final Decision (April 13, 2017), 2017 WL 1656447; Prysmian, at p. 6; In the Matter of Francis P. and Debra A. Zarette Trustees of Farm View Realty Trust, OADR Docket No. WET-2016-030, Recommended Final Decision (February 20, 2018), 2018 WL 2002978, at *4, adopted as Final Decision (March 1, 2018), 2018 WL 2002977, quoting In the Matter of John Soursourian, OADR Docket No. WET-2013-028, Recommended Final Decision (June 13, 2014), 2014 WL 2996120, at *11, adopted as Final Decision (June 19, 2014), 2014 WL 2996126 ("'[t]he Presiding Officer [responsible for adjudicating the administrative appeal] is not bound by MassDEP's prior orders or statements [in the case], and instead is responsible . . . for independently adjudicating [the] appeal and [issuing a Recommended Final Decision] to MassDEP's Commissioner that is consistent with and in the best interest of the [applicable law and regulations], and MassDEP's policies and practices'").

Second, my factual determinations in adjudicating the appeal are based on a preponderance of the evidence presented at the Hearing by the Parties' respective expert witnesses with no deference to MassDEP's prior factual findings in the matter because the Adjudicatory Proceeding Rules at 310 CMR 1.01(13)(h) governing adjudication of the appeal provide that the "[t]he weight to be attached to any evidence in the record [of the appeal] will rest within the sound discretion of the Presiding Officer . . . ." In the Matter of Kane Built, Inc., OADR Docket No. 2017-037, Recommended Final Decision (December 18, 2018), 2017 WL 10924859, at *5, 2017 MA ENV LEXIS 77, at *18, adopted by Final Decision (January 17, 2019), 2019 WL 1122833, 2019 MA ENV LEXIS 8; Prysmian, at pp. 6-7.

Lastly, my legal determinations in adjudicating the appeal are based on the governing legal requirements with deference to MassDEP's reasonable interpretation of environmental statutes, regulations, and policies it is responsible for enforcing, including Chapter 91 and the Waterways Regulations. In the Matter of Pioneer Valley Energy Center, LLC, OADR Docket No. 2011-010, Recommended Final Decision (September 23, 2011), 2011 WL 6019097, at *8, 2011 MA ENV LEXIS 109, at *26, adopted by Final Decision (November 9, 2011), 2011 WL 6019096, 2011 MA ENV LEXIS 108; Prysmian, at p. 7. However, no deference is due to MassDEP's interpretation or construction of a statutory or regulatory requirement that is arbitrary, unreasonable, or inconsistent with the plain terms of the governing statutory and regulatory requirements. Arrowood Indemnity Company v. Workers' Compensation Trust Fund, 104 Mass. App. Ct. 419, 421 (2024); Prysmian, at pp. 7-8, citing, In the Matter of Brockton Power Co., LLC ("BP"), OADR Docket Nos. 2011-025 and 2011-026, Recommended Final Decision (July 29, 2016), 2016 WL 8542559, at *8-10, adopted by Interlocutory Decision [of MassDEP's Commissioner] (March 13, 2017), 2017 WL 1063662 (no deference due MassDEP's interpretation that OADR lacked jurisdiction to adjudicate federal Title VI discrimination claims in air permit appeal where MassDEP lacked a formal Title VI Grievance Policy required by Title VI Regulations of the U.S. Environmental Protection Agency ("USEPA") to review such claims).[26]

[26] In BP, MassDEP's then-Commissioner noted that "MassDEP [was] in the process of developing a formal Title VI Complaint Policy for the Department" and until such time the Policy was adopted, Title VI discrimination claims could be asserted in an administrative appeal before OADR. BP, 2017 WL 1063662, at *2 n.8, 2017 MA ENV LEXIS 21, at *5-6. Specifically, MassDEP's then-Commissioner ruled that:

> anyone aggrieved by the Department's permit decisions or enforcement orders, based on purported Title VI violations [could in the absence of a formal MassDEP Title VI Grievance Policy] assert such claims in an administrative appeal with [OADR], as Quincy [had done] in [BP and] [a]s was also done in [that] case, the claims [would be] adjudicated by an OADR Presiding Officer based on the evidentiary record in the case, who [would] forward a Recommended Final Decision to the Department's Commissioner.

Id.

III. THE MassDEP COMMISSIONER'S ROLE AS THE FINAL DECISION-MAKER IN THE APPEAL

Notwithstanding my independent/neutral role as the Presiding Officer in making factual and legal findings and recommendation to MassDEP's Commissioner on the challenged Draft License in this appeal, it is the Commissioner, as the Final Decision Maker in the appeal, who has the ultimate authority over the Permit's fate. 310 CMR 1.01(14)(b); Prysmian, at p. 8. It is a well settled principle that "[MassDEP's] commissioner determines 'every issue of fact or law necessary to the [final] decision [in an appeal,] [and] . . . may adopt, modify, or reject a [Presiding Officer's] recommended decision [in the appeal], with a statement of reasons' [based on the evidence in the record]." Ten Local Citizen Group v. New England Wind, LLC, 457 Mass. 222, 231 (2010); Prysmian, at p. 8. "[T]he commissioner's interpretation of [the governing] regulations [and statutes]," and not that of the Presiding Officer, "is conclusive at the agency level, and is the only interpretation that is entitled to deference by a reviewing court" on judicial review pursuant to G.L. c. 30A, § 14. New England Wind, 457 Mass. at 228; Prysmian, at p. 8.

DISCUSSION AND FINDINGS

Issue 1: The proposed bridge reconstruction Project is a Water-Dependent Infrastructure Crossing Facility pursuant to 310 CMR 9.12(2)(d).

Quincy contends that the bridge reconstruction Project is not a water-dependent infrastructure crossing facility while MassDEP and Boston contend that the Project is a water-dependent infrastructure crossing facility. Bridges are not presumed to be water-dependent.[27]

[27] In its closing brief, MassDEP contends that all bridges are water dependent; however, while the infrastructure crossing facility definition includes bridges, being an infrastructure crossing facility does not make a facility water-dependent. The waterways regulations list a number of uses which are always considered water-dependent, but bridges are not included in these subsections. See 310 CMR 9.12(2)(a) and (b). Rather, 310 CMR 9.12(2)(f) states that "roads, causeways, railways, and other facilities for land-based vehicular movement, other than those found to be water-dependent in accordance with 310 CMR 9.12(2)(c) or (d)" are never considered water-dependent.

The general standard for a finding of water-dependence is that "said use requires direct access to or location in tidal or inland waters, and therefore cannot be located away from said waters." 310 CMR 9.12(2). "Any other project shall be classified as a non-water dependent use project." 310 CMR 9.12(1).

The Waterways Regulations define infrastructure crossing facility at 310 CMR 9.02 to include bridges when located over water which connect existing or new infrastructure facilities located on the opposite banks of the waterway. Specifically, the waterways regulations define an infrastructure crossing facility as,

> "any infrastructure facility which is **a bridge**, tunnel, pipeline, aqueduct, conduit, cable, or wire, including associated piers, bulkheads, culverts, or other vertical support structures, **which is located over or under the water and which connects existing or new infrastructure facilities located on the opposite banks of the waterway.**" 310 CMR 9.02: Infrastructure Crossing Facility. An infrastructure facility "means a facility which produces, delivers, or otherwise provides electric, gas, water, sewage, **transportation**, or telecommunication services **to the public**." 310 CMR 9.02: Infrastructure Facility. (Emphasis supplied.)

Relative to water-dependency of an infrastructure crossing facility, where no EIR is filed, the Waterways Regulations direct MassDEP to make a finding that "such facility cannot reasonably be located or operated away from tidal or inland waters . . . based on information presented in the application and during the public comment period thereon." 310 CMR 9.12(2)(d).[28]

The Waterways Regulations generally require licensed projects to serve "a proper public purpose which provides greater benefit than detriment to the rights of the public in said lands." The Waterways Regulations further provide that the Department shall presume this requirement is met if the project is water-dependent. 310 CMR 9.31(2)(a). This presumption

[28] Because the EEA Secretary did not require an EIR for the bridge reconstruction, the Department, rather than the Secretary, made the relevant findings. See Hopps Ex. 6, p. 1, Secretary of Energy and Environmental Affairs on the Notice of Project Change, September 21, 2018, EEA #15308 (the "MEPA certificate").

may be overcome if "(a) the basic requirements specified in 310 CMR 9.31(1) have not been met; or (b) a clear showing is made by a municipal, state, regional, or federal agency that requirements beyond those contained in 310 CMR 9.00 are necessary to prevent overriding detriment to a public interest which said agency is responsible for protecting." 310 CMR 9.31(3).

1. **The Bridge is an infrastructure crossing facility which connects the existing roadway on the mainland at Moon Island to existing the roadway on Long Island.**

Quincy contends that the bridge is an accessory to the hospital, a non-water dependent use, and therefore the bridge too is non-water dependent as an accessory use to the hospital. Boston and MassDEP contend that the bridge is water-dependent because it connects two public roadways and cannot be located outside the tidelands and provide the necessary access to the island.

In support of its argument that the bridge is an accessory use to a non-water dependent use, Quincy references the zoning context, in which ancillary structures, including access roads, are considered part of and have the same use as the primary use. Tracer Lane II Realty, LLC v. Waltham, 489 Mass. 775, 779-80 (2022) (access road to solar energy facility was part of facility and subject to laws governing solar energy systems). Further, Quincy cites to the Act which authorized Boston to construct the bridge "as part of the facilities of its institution on Long Island." Pet. MOL, p. 3. Quincy also argues that in its 1949 Chapter 91 application, Boston referred to the bridge as private, to be controlled by Boston with gates at both ends. Pet. MOL, p. 4.

Boston refers to the Waterways Regulations to support its position that the proposed bridge is water-dependent because it will connect public roadways on the mainland to public roadways on an island, and therefore cannot be located away from tidal waters. The connected

transportation services would allow members of the public who wish to enter opioid and other substance use treatment programs, as well as visitors and staff, to traverse between the island and the mainland, so it qualifies as an infrastructure crossing facility. McCann PFT, ¶¶ 8-11. Therefore, Boston argues, the bridge is water-dependent.

Boston included the MEPA alternatives analysis in its Chapter 91 Application,[29] conducted in the course of the MEPA review, which studied the following alternatives: no build, ferry access only, a standard wider multi-modal bridge replacement, and an in-kind replacement of the original bridge. Brandt PFT ¶¶ 6-7; Brandt Ex. B, Chapter 91 Application. The no build and ferry access only alternatives were discarded for not meeting the operational needs or licensing requirements of the proposed opioid and substance use treatment programs. Brandt PFT, ¶ 8. There is no land owned by Boston aside from Long Island which has existing public health infrastructure that could support up to 500 beds, so not having access to Long Island is not an acceptable alternative. McCann PFT, ¶ 7. And there are no docking facilities on Long Island to accommodate vehicle-carrying ferries, and ferries do not provide reliable emergency access. McCann PFT, ¶ 8. Boston contends that it is unlikely that the program would be licensed without 24-hour unimpeded vehicular access, which ferries cannot provide. McCann PFT, ¶ 9.

Boston further contends that the proposed bridge reconstruction minimizes impacts to the environment by reusing and strengthening existing piers and will avoid the placement of fill or dredging, limiting in-water work. Brandt PFT, ¶¶ 5(b)-(c); Ennis PFT, ¶ 34.[30] Pursuant to the

[29] MassDEP contends that an alternatives analysis is not required for its determination. Hopps PFT, ¶ 13. While accurate, the applicable regulations require MassDEP to review the contents of the application, which included the alternatives analysis provided to MEPA. 310 CMR 9.12(2)(d).

[30] Wetlands impacts identified in the alternatives analysis were addressed in the Superseding Order of Conditions. See In the Matter of City of Boston Public Works Department, OADR Docket Nos. WET-2019-021 & 022, Recommended Final Decision (March 17, 2021), 2021 WL 1931601, adopted by Final Decision (March 31, 2021), 2021 WL 1931600.

U.S. Coast Guard's policy, Boston will need to remove the piers if the bridge is not reconstructed, which would have much more significant environmental impacts than constructing it. Sun PFT, ¶ 13; Sun Ex. B; Brandt PFT, ¶ 10. The ferry access alternative would also require the construction of new docking facilities, which would have further environmental impacts. Brandt PFT, ¶ 11.

The Department contends that it made the determination of water-dependency based on the proposed plans and the location of the bridge in tidal waters. Hopps PFT, ¶¶ 6-7, 10. Boston applied for a waterways license to reconstruct the proposed bridge to provide transportation services to the public. Hopps PFT, ¶ 12. The proposed bridge is an infrastructure crossing facility because it requires direct access to tidal waters to connect the existing transportation infrastructure on the mainland to the existing transportation infrastructure on Long Island. Hopps PFT, ¶ 12. The Draft License includes a condition that limits its use to transmission of transportation and utilities. Hopps PFT, ¶ 12; Hopps Ex. 2, Draft License, Use Statement and Special Condition 1.[31] The Draft License does not include any review of hypothetical alternative uses of the reconstructed bridge. Hopps PFT, ¶ 12. As a result, MassDEP contends that the proposed bridge is not an accessory or ancillary structure to the public health campus for purposes of the Chapter 91 review. Hopps PFT, ¶ 12.

I agree with Boston and the Department that the proposed bridge is water-dependent because it requires direct access to tidal waters in order to connect the existing transportation infrastructure on the mainland to the existing transportation infrastructure on Long Island. That

[31] The Draft License use statement provides, "The structures and fill authorized hereby shall be limited to the following uses: Infrastructure Crossing Facility for transmission of transportation and utilities." Hopps Ex. 2, p. 7.

The Draft License includes the following Special Condition: Any structural alteration, change in use, or any other modification to that explicitly authorized herein and contained on the License Plans shall require the prior review of the Department to determine whether additional licensing is required pursuant to M.G.L. c. 91 and the Waterways Regulations at 310 CMR 9.00. Hopps Ex. 2, p. 7.

the bridge would support the public service provided by the Boston Health Commission is consistent with the Act, but does not supplant the analysis applicable to the waterways that are the subject of Chapter 91 jurisdiction. The Act authorized construction of the bridge to provide transportation to the hospital, subject to the provisions of Chapter 91. Chapter 91 jurisdiction does not reach above the high-water line but evaluates the impacts of the legislatively authorized Project on the public trust rights protected by Chapter 91. Quincy's argument that the bridge is ancillary to the hospital is unavailing given these facts.

2. <u>The bridge replacement Project would provide transportation services to the public consistent with the definition of Infrastructure Crossing Facility as defined in 310 CMR 9.02.</u>

Quincy next contends that the bridge is not an infrastructure crossing facility because it would provide services to only a subset of the public. Quincy asserts that the regulations use of the phrase "to the public" means "to the general public." Boston and the Department contend that the phrase includes providing services to members of the public, not the general public. Boston and the Department contend that the service of connecting public roadways on the mainland to public roadways on Long Island sufficiently provides transportation services to members of the public, including those using the hospital and the other facilities on the island. I agree with Boston and the Department that services provided "to the public" in this context is not the "general public."

Quincy contends that to be an infrastructure crossing facility, like the Sagamore Bridge in Bourne, the replacement bridge must have "unfettered public highway access to and from opposite banks of their respective waterway" in order to satisfy the requirement of providing services "to the public." Pet. MOL, p. 2. To support its argument that the public means the general public, Quincy compares this requirement to the use of tax money, wherein the Supreme Judicial Court defined an expenditure for a "public purpose" as one that "confers a direct public

benefit of a reasonably general character, that is to say, to a significant part of the public." In re Opinion of the Justices, 337 Mass. 777, 781 (1958).

Additionally, on behalf of Quincy, Mr. Murphy contended in his testimony at the Hearing that the general public has previously not been allowed to access the bridge due to the security gate at the end of the Moon Island Causeway in the Squantum neighborhood of Quincy. Murphy PFT, ¶¶ 5, 15. As a consequence, the "general public" cannot access the bridge which provides services only to those "users of the public health campus" operated by a sister agency of Boston. Pet. MOL, p. 3.[32] In further support of its argument, Quincy also refers to Boston's 1949 Chapter 91 application, which referred to the bridge as private, to be controlled by Boston with gates at both ends. Pet. MOL, p. 4.

Boston responds that the bridge replacement would provide transportation services to the public to access the public services provided by the Boston Health Commission renovation and reopening of the existing public health campus on Long Island. At the Hearing, the Boston Health Commission's Deputy Commissioner for Policy and Planning, Mr. McCann, testified that "thousands of regional residents who receive services [on Long Island] will access the facility, and [the Health Commission] also hope[s] that the facility is one where the individuals receiving care there can reintegrate with their families, with the employment system, with the hous[ing] system, so we envision both frequent travel from the campus to the mainland for those services and travel to the campus by service providers and family members and other individuals." McCann, 181:13-182:6. Other services are supported on Long Island, including Camp Harborview, which hosts 800 Boston-area students every day during the summer to "experience life outside of the city and recreational and educational opportunities on the island." McCann,

[32] Mr. Murphy acknowledged on cross-examination that the proposed project that would be authorized by the Draft License does not include any guardhouse. Murphy, 30:13-24

185:4-10. The Camp Harborview experience also includes a sailing program operated by Piers Park. McCann, 185:11-16. The educational and recreational opportunities offered by Camp Harborview would also be accessible by the public using the Long Island Bridge. McCann, 185:14-16.

Further, Mr. McCann testified that the Boston Health Commission's staff maintains the gatehouse on Moon Island with signage allowing authorized personnel to enter. Since 2014, the credential check at the gatehouse has been limited to the use of the public safety personnel accessing the fire training facility and the police firing range. McCann, 183:15-184:4.

On behalf of MassDEP, Ms. Hopps testified that the proposed bridge will provide transportation services "to the public" even though it is only to a subset of the public, similar to other services that infrastructure facilities provide such as electric, gas, water, sewage or telecommunications. "For example, a sewage pipeline provides services 'to the public' even though it only provides those services to a subset of the public." Hopps PFT, ¶ 15. Further, MassDEP distinguishes any limitations on access to the bridge due to the gatehouse located on the Moon Island Causeway as being related to access to the bridge; but not as a change to the transportation service the bridge provides to the public. Hopps PFT, ¶ 6. In authorizing an infrastructure crossing facility to provide the public service of transportation, MassDEP contends that it is not required that the public at large must be allowed access to the structure. Hopps PFT, ¶ 17.[33]

I agree with MassDEP and Boston that the use of the bridge that would be authorized by the Draft License is transportation service "to the public" even where, as here, the public that

[33] The test for water-dependency of an infrastructure crossing facility, where no EIR is filed, requires MassDEP to make a finding that "such facility cannot reasonably be located or operated away from tidal or inland waters . . . based on information presented in the application and during the public comment period thereon." 310 CMR 9.12(2)(d).

may access to the transportation service may be a subset of the general public. The Waterways Regulations do not use the phrase "general public" that Quincy reads into the language. Quincy's reference to "public purpose" in the context of taxes looks for direct benefit to a significant part of the public, of a reasonably general character. In re Opinion of the Justices, 337 Mass. at 781. The Supreme Judicial Court also ruled, in the context of eminent domain and tax money, that "public use" means "the enjoyment and advantage of which are open to the public on equal terms. The circumstances may be such that only a relatively small portion of the inhabitants may participate in the benefits, but the use or service must be of such nature that in essence it affects them as a community and not merely as individuals." In re Opinion of the Justices, 297 Mass. 567, (1937). These cases support an argument that transportation to the island – which supports public services – are for the public, even if not every member of the public may use the transportation service. It is not a "private" roadway or bridge; but it is a public roadway or bridge connection to public lands which include public service uses. These services benefit the community even if only a subset of the public utilizes the services.[34]

Issue 1(a): The proposed bridge reconstruction Project is a water-dependent infrastructure crossing facility and Quincy has not demonstrated that the Project as conditioned fails to serve a proper public purpose and fails to provide greater benefit than detriment to the rights of the public in tidelands in accordance with 310 CMR 9.31(2)(a).

The Waterways Regulations provide that,

> "No license or permit shall be issued by the Department for any project on tidelands or Great Ponds, except for water-dependent use projects located entirely on private tidelands, **unless said project serves a proper public purpose which provides greater benefit than detriment to the rights of the public** in said lands. . . . (a) The Department shall presume 310 CMR 9.31(2) is met if the project is a water-dependent use project." 310 CMR 9.31(2). "The presumptions of 310 CMR 9.31(2) may be overcome only if: (a) the basic requirements specified in 310 CMR 9.31(1) have not been met; or (b) a clear showing is made

[34] Quincy's contention that the 1949 Chapter 91 application refers to the bridge as "private" appears to reflect its managed use for hospital access and does not change the fact that the bridge will be publicly owned and maintained by Boston. Sun PFT, ¶ 14; See also Act, §§ 4-5 ("Said viaduct and approaches shall be maintained by said city through its institutions department . . . . Said viaduct and its approaches shall be deemed to be held by said city in its governmental capacity . . . .").

> by a municipal, state, regional, or federal agency that requirements beyond those contained in 310 CMR 9.00 are necessary to prevent overriding detriment to a public interest which said agency is responsible for protecting . . . ." 310 CMR 9.31(3). (Emphasis supplied.)
>
> The Waterways Regulations further provide that,
>
> "Notwithstanding the provisions of 310 CMR 9.31(1) through (3), the Department shall issue a license or permit where the project comprises fill or structures that **have been specifically authorized in a grant or other enactment of the legislature**, provided that the Department may prescribe such alterations and conditions as it deems necessary to ensure the project conforms with: (a) any requirements contained in the legislative authorization; and (b) the standards of 310 CMR 9.31 through 9.60, to the extent consistent with the legislative authorization." 310 CMR 9.31(4). (Emphasis supplied.)

Quincy has not overcome the presumption that the replacement bridge serves a proper public purpose which provides greater benefit than detriment to the rights of the public. MassDEP contends that public rights to fishing, fowling and navigation are not impacted by any limitation of access to use of the bridge, as the jurisdictional area that the structure is constructed over will remain available for the public. Hopps PFT, ¶ 17. Testifying on behalf of Quincy, Mr. Murphy acknowledged on cross examination that he had reviewed the Draft License and that it includes conditions that prevent Boston from restricting the public's right to use and to pass freely for all lawful purposes upon the lands lying seaward of the low water mark. Murphy, 31:9-33:4; see Hopps Ex. 2, Draft License, Conditions 9 and 10.[35] Further, MassDEP contends that because the Massachusetts legislature authorized the project, Quincy cannot overcome the

[35] Draft License, Condition 9: This license authorized structures and a fill on Commonwealth tidelands -- the licensee shall not restrict the public's right to use and to pass freely for any lawful purpose upon lands lying seaward of the low water mark.

Draft License, Condition 10: Unless otherwise expressly provided by this license, the licensee shall not limit the hours of availability of any areas of the subject property designated for public passage nor place any gates, fences or other structures on such areas in a manner that would impede or discourage the free flow of pedestrian movement thereon.

presumption of proper public purpose. See Act, § 1.[36] As a result, the public rights to fishing, fowling and navigation are protected.

The legislature authorized construction of the bridge for the public purpose of providing access to the health services located on Long Island. The Draft License at issue here prescribes conditions and requirements consistent with the authorizing language in 310 CMR 9.31. A preponderance of the evidence supports a conclusion that the bridge reconstruction Project serves a proper public purpose which provides greater benefit than detriment, consistent with the legislative authorization to construct the bridge.

Issue 2: The Department correctly determined the limit of the Chapter 91 jurisdiction, and appropriately applied the High-Water Mark.

Tidelands are "present and former submerged lands and tidal flats lying between the present or historic high-water mark, whichever is farther landward, and the seaward limit of state jurisdiction." 310 CMR 9.02: Tidelands.

The Waterways Regulations define the high-water mark for tidelands to be,

> "the present mean high tide line, as established by the present arithmetic mean of the water heights observed at high tide over a specific 19-year Metonic Cycle (the National Tidal Datum Epoch), and shall be determined using hydrographic survey data of the National Ocean Survey of the U.S. Department of Commerce . . . ." 310 CMR 9.02: High Water Mark(a).

The historic high-water mark is,

> "the high water mark which existed prior to human alteration of the shoreline by filling, dredging, excavating, impounding, or other means. In areas where there is evidence of such alteration by fill, the Department shall presume the historic high water mark is the farthest landward former shoreline which can be ascertained with reference to topographic or hydrographic surveys, previous license plans, and other historic maps or charts, which may be supplemented as appropriate by soil logs, photographs, and other documents, written records, or information

[36] "The City of Boston is hereby authorized to construct, as part of the facilities of its institution on Long Island, a viaduct over and across the passage of water . . . between Long Island and Moon Island." Act, § 1.

> sources of the type on which reasonable persons are accustomed to rely in the conduct of serious business affairs." 310 CMR 9.02: Historic High Water Mark.[37]

The Department determined that the present high-water mark is the landward limit of Chapter 91 jurisdiction within the footprint of the Project site. Draft License, Finding #3. Quincy raises several issues with this Finding and contends that the Department should have applied the historic high-water mark which Quincy contends is not the same as the present high-water mark.

First, Quincy contends that the historic high-water mark should have been based on an 1897 plan for a seawall on Moon Island that shows filled tidelands in the vicinity of the eastern portion of the abutments for the bridge. Murphy PFT, ¶ 24; Murphy Ex. 5, ("1897 Plan"). Mr. Murphy testified on behalf of Quincy that his Exhibit 6 is a representation that spatially geo-referenced the 1897 Plan with the current aerial photogrammetry and the Chapter 91 Application plans and created a figure showing the difference in the high-water lines. Murphy PFT, ¶ 24, Murphy Ex. 6, overlay-plan.[38]

Second, Quincy contends that some temporary fill placed during the 1950 bridge construction, likely remains. Knutti PFT, ¶¶ 7, 12; Knutti Ex. 7, 1950 plan from MassDEP 1949 license files. As a result, Quincy contends that the Department should have presumed the high-water mark is the farthest landward former shoreline shown on the 1897 Plan.

Third, Quincy argues that the Department incorrectly determined the present high-water mark because Boston used the mean high-water mark for the tidal epoch from 1983-2001 rather

[37] See also Moot v. Department of Environmental Protection, 448 Mass. 340, 342 (2007); Arno v. Commonwealth, 457 Mass. 434, 437 (2010) ("because actual high and low water marks can change over time . . . the starting point for determining the public's rights in tidelands (filled or unfilled) must be the historic, or 'primitive,' high and low water marks").

[38] Murphy Ex. 6 shows a red line labeled "High-Water Line from Seawall and Reservoir Extension Plan Dated 12/8/1897" and a purple line labeled "MHW/Limit of Work from Chapter 91 Plans Dated 7/7/2023" and shows "Point B" at the area where the proposed bridge reconstruction would land at Moon Island.

than the more recent tidal epoch from 2002-2020, which would give a value 0.3 feet higher. Knutti PFT, ¶ 11. On behalf of Quincy, Mr. Knutti testified that even using the tidal epoch ending in 2017, the latest data available when Boston submitted the Chapter 91 Application, the mean high-water mark would be 0.23 feet above the number Boston used. Knutti PFT, ¶ 11. Finally, Quincy contends that for the present high-water mark, Boston should have calculated their own tidal datums for a specific 19-year tidal epoch suited to the project purpose. Knutti PFT, ¶ 13.

Boston contends that Quincy has not met its burden of proof to show that the historic high-water mark is different from the present high-water mark.[39] Boston's position is that the present high-water mark is the accurate limit of Chapter 91 jurisdiction because it is the same as the historic high-water mark in the area where work is proposed. Brandt PFT, ¶ 22. The location where the bridge will land on Moon Island, the nub that juts out toward Long Island, has no separate historic high-water line in the Department's GIS data. Brandt PFT, ¶ 20, Figure 1-1; Brandt PFT, ¶¶ 22-23. Boston contends that no work will take place in the area designated as proposed fill on the 1897 Plan. Brandt PFT, ¶ 22.

On behalf of Boston, Mr. Brandt testified that the GIS data provided by the Department and used by Boston to delineate the applicable high-water mark in the Chapter 91 Application shows only a present high-water mark in the area of proposed work because there is no historic high-water mark in that location. Brandt PFT, ¶ 20. Mr. Brandt testified that MassDEP's guidance to him was that the overlap of the present high-water mark with the historic shoreline indicates that there is no historic high-water mark within the project footprint.[40]

[39] In its Application, Boston concluded that the historic shorelines on both sides of the bridge are largely the same as they are today, evidencing no filling of tidelands. See Chapter 91 Application, 1-3.

[40] Mr. Brandt testified that he received this guidance from Ms. Hopps in a June 16, 2023 email. Brandt PFT, ¶ 21; Brandt, 285:3-9.

In his review of Murphy Ex. 6, Mr. Brandt testified that the red line on Murphy Ex. 6 generally conforms with an 1894 nautical chart showing Moon Island (Brandt Ex. J). He testified that the red line represents the historic high-water mark and shows that there is only a nominal difference in the overlap of the present high-water line with Moon Island's historic shoreline at the location where the work is proposed. Specifically, he testified that the area Mr. Murphy identified on the 1897 Plan, where temporary filling was proposed to be placed, is not the location where work is proposed. Brandt PFT, ¶ 22.[41] Mr. Brandt testified that the nominal difference in the lines at the location on the nub, where work is proposed, is due to the historic mapping and methodology used to prepare Murphy Ex. 6 which does not compare GIS mapping layers.[42]

The Department also contends that the high-water mark is correctly determined. Hopps PFT ¶¶ 20-21; Padien PFT, ¶ 9. Like Boston, MassDEP contends that Quincy's reliance on the overlay of "current aerial photogrammetry" and the 1897 Plan does not provide an adequate degree of accuracy to be reliable. Hopps PFT, ¶ 28. The Department contends that there is no evidence of fill within tidelands and therefore the present high-water mark is the limit of Chapter 91 jurisdiction. Hopps PFT, ¶ 27; Padien PFT, ¶ 9; See also Padien Ex. 3, Historic Shoreline Analysis.[43]

The Department's position is supported by the Historic Shoreline Analysis conducted in

[41] Mr. Padien testified that the seawall present at the site is the same seawall constructed following the approval of the license in 1898. Padien PFT, ¶ 14.b.

[42] Mr. Brandt testified that "Exhibit 6 prepared by Murphy does not compare GIS data layers of a historic high-water line and a contemporary high water line because there is no data for a historic high-water line. Murphy, instead, is using the 1897 proposed filling plan, and not an as-built drawing, as a stand-in for a nonexistent historic high-water line." Brandt PFT, ¶ 22.

[43] Boston and MassDEP also contend that the contemporary high-water mark is identical to the high-water mark shown in historic sources predating 1897, meaning that either the 1897 Plan is inaccurate or the seawall was not constructed in accordance with the 1897 Plan. Brandt PFT, ¶ 22; Hopps PFT, ¶ 28; Padien PFT, ¶ 14.d.

the course of its review of Boston's Chapter 91 Application for the proposed Project. The Department's analysis included review of multiple documents dating from an 1857 Nautical Chart to present day maps, aerial photography, and on-site visual observations. Padien PFT, ¶ 10.[44] Mr. Padien concluded that the 1897 Plan identified a proposed seawall connecting to the rock outcrop or ledge at Point B on the 1897 Plan. Padien PFT, ¶ 11.b. Mr. Padien concluded that the rock outcrop or ledge at Point B is within the footprint of the proposed replacement bridge. Padien PFT, ¶ 11c; Padien Fig. 1 and Fig. 2.[45] Mr. Padien testified that his evaluation of the high-water mark included GIS-based mapping that was used to prepare an overlay of the relevant documents.[46] Padien PFT, ¶¶ 12-13; Padien Ex. 3.

On behalf of the Department, Mr. Rashid testified that he assisted in the preparation of the preparation of the historic shoreline analysis documented in Padien Ex. 3. Mr. Rashid testified regarding his verification of the georeferences relied on to prepare Padien Ex. 3 on which Mr. Padien relied to identify the high-water mark. Rashid PFT, ¶¶ 3-6. Quincy did not challenge the preparation of this analysis. Based on his review of these sources, Mr. Padien

[44] These items included: 1857 Nautical Chart US Coast and Geodetic Survey; the historic high water line published by the Massachusetts Office of Coastal Zone Management; 1860 U.S. Coast Survey Registration 832; License Plan 2099 dated December 8, 1897; 2004 BSC Existing Conditions Survey; U.S. National Geodetic Survey benchmark MY0001; a drawing file titled "24034 MHW and Spot Grades.dwg"; online aerial photography obtained from Google Earth and Bing Maps; and Mr. Padien's personal visual observations. Padien PFT, ¶ 10. While one of the several documents included in Mr. Padien's review, Ms. Hopps testified that the 1897 Seawall Plan is not sufficiently accurate to be reliable. Hopps PFT, ¶ 28.

[45] Padien Fig. 1, Moon Island aerial photograph annotated to indicate approximate limit of visible ledge (Source Google Earth, Imagery Date 6/30/2022); and Padien Fig. 2, Moon Island aerial photograph annotated to indicate the approximate limit of visible ledge (Source Bing Aerials).

[46] These items included: 1860 U.S. Coast Survey Registration 832; License Plan 2099 dated December 8, 1897; 2004 BSC Existing Conditions Survey; U.S. National Geodetic Survey benchmark MY0001; and a drawing file titled "24034 MHW and Spot Grades.dwg." Padien PFT, ¶ 12. The review also included the following controls: in using the 1860 U.S. Coast Survey, Mr. Padien directed Mr. Rashid to rely on the results of the 2002-2006 Chapter 91 Historic Mapping Project performed by the BSC Group and the NAD83 georeferenced ".tif" file prepared by that team; in using the License Plan 2099, Mr. Padien directed Mr. Rashid to review the plan using only a "scale and rotate" best fit; in using the 2014 BSC Existing Conditions Survey, Mr. Padien directed Mr. Rashid to use the shape files provided to Christine Hopps by H. Jeffrey Brandt via email on February 14, 2024; and in using the drawing file, Mr. Padien directed Mr. Rashid to add spot grade elevations for the surveyed points provided identified as "LEDGE" or located along the existing seawall. Padien PFT, ¶ 12.

determined that the resulting historic shoreline analysis as shown on Padien Ex. 3 accurately represents the high-water mark.[47] Mr. Padien testified that he reviewed the historic high-water mark and determined that the proposed replacement bridge would be located in flowed tidelands of Boston Harbor between the high-water mark on Moon Island and the high-water mark on Long Island. Padien PFT, ¶ 9; Padien, 334:3-19, 355:20-356:14.

Finally, MassDEP contends that regulations defining high-water mark require the use of hydrographic survey data of the National Ocean Survey of the U.S. Department of Commerce to determine the high-water mark.[48] The 1983-2001 tidal epoch was the current one at the time the Chapter 91 Application was submitted, and as a result is the only data that the Department could appropriately use to determine the contemporary high-water mark.[49] MassDEP contends that by establishing this standard, the regulations ensure consistent methodology for review and analysis. Hopps PFT, ¶¶ 21-24. As such, Quincy's contention that Boston should have used a different tidal datum or developed its own datum is not supported by the regulatory requirements.

In sum, I have reviewed the Parties' arguments and analysis and find by a preponderance of the evidence that the Department's determination of the high-water mark is reliable. I agree with Boston and MassDEP that the 1897 Plan is not sufficiently accurate to be reliable, and that Quincy's assumption that temporary fill from the 1950 bridge construction remains in place is merely speculation as Quincy did not support with evidence its contention

[47] Mr. Padien noted the slight discrepancy between the line depicted on License Plan 2099 and the mean high-water line on the BSC survey as minor deviations that do not support a conclusion that this section of the shoreline was altered by the placement of fill. Padien PFT, ¶ 14(d).

[48] "High Water Mark means . . . for tidelands, the present mean high tide line, as established by the present arithmetic mean of the water heights observed at high tide over a specific 19-year Metonic Cycle (the National Tidal Datum Epoch), and shall be determined using hydrographic survey data of the National Ocean Survey of the U.S. Department of Commerce . . . ." 310 CMR 9.02: High Water Mark(a).

[49] While NOAA had updated the tidal datums for some stations for periods more recent than 1983-2001, it had not done so for Boston. Hopps PFT, ¶ 22.

that some fill was left behind. I find that a preponderance of the evidence supports MassDEP's finding that the present or contemporary high-water mark indicated on Padien Ex. 3 is appropriately relied upon.

Issue 3: The proposed Project complies with the requirements of 310 CMR 9.35 concerning Water-Related Public Rights.

The Waterways Regulations provide that "the Department shall take into account that the provision of public benefits by certain water-dependent uses may give rise to some unavoidable interference" and such interference "may be allowed provided that mitigation is provided to the greatest extent deemed reasonable by the Department." 310 CMR 9.35(1).

310 CMR 9.35(2)(a) is entitled "Navigation" and provides that a "[proposed c. 91] project shall not significantly interfere[50] with public rights of navigation which exist in all waterways," and that "[s]uch rights include the right to conduct any activity which entails the movement of a boat, vessel, float, or other watercraft; the right to conduct any activity involving the transport or the loading/unloading of persons or objects to or from any such watercraft; and the natural derivatives thereof." (Emphasis supplied.) The Regulation provides that the Department "shall find that the standard is not met" in certain specific circumstances. These provisions require the Department to find that a proposed project will significantly interfere with public rights of navigation if the project will:

> 1.a. extend seaward of any state harbor line unless said project is specifically authorized by law . . .
>
> 1.b. extend into or over any existing channel such as to impede free passage;
>
> 1.c. impair any line of sight required for navigation;

[50] 310 CMR 9.35(2)(a) uses the terms "significantly interfere" and "substantially interfere." The remainder of the regulations generally utilize the term "significant" when considering interference. There is no material difference between "significant" and "substantial" in this context. In the Matter of Webster Ventures, LLC, OADR Docket No. 2015-014, Recommended Final Decision (June 3, 2016), 2016 WL 3632236, at *21 n.15, adopted by Final Decision (June 15, 2016), 2016 WL 3632244.

1.d. require the alteration of an established course of vessels;

1.e. interfere with access to adjoining areas by extending substantially beyond the projection of existing structures adjacent to the site;

1.f. extend beyond the length required to achieve a safe berthing, where there are no adjacent structures;

1.g. generate water-borne traffic that would substantially interfere with other water-borne traffic in the area at present, or in the future as may be evidenced by documented projections;

1.h. alter, due to the building of a solid fill structure, tidal action or other currents so as to interfere with the ability to handle vessels;

1.i. adversely affect the depth or width of an existing channel; or

1.j. impair in any other substantial manner the ability of the public to pass freely upon the waterways and to engage in transport or loading/unloading activities.

See 310 CMR 9.35(2)(a)1.

By its terms, 310 CMR 9.35(2)(a) imposes "an explicit regulatory obligation [upon the Department] to [only authorize] . . . those structures such that the legal and reasonably foreseeable waterborne traffic associated with them does not significantly interfere with the public trust rights." In the Matter of Onset Bay II Corporation, OADR Docket No. 2012-034, Recommended Final Decision (August 28, 2020), 2020 WL 6115205, at *36, adopted by Final Decision (September 23, 2020), 2020 WL 6115206, citing In the Matter of David Fuhrmann, OADR Docket No. 2013-037, Recommended Final Decision (February 19, 2015), 2015 WL 9999156, adopted by Final Decision (April 8, 2015), 2015 WL 2381865 (Chapter 91 License required modification to include conditions avoiding proposed structure's significant interference with public rights of navigation); In the Matter of Webster Ventures, LLC, OADR Docket No. 2015-014, Recommended Final Decision (June 3, 2016), 2016 WL 3632236, adopted by Final Decision (June 15, 2016), 2016 WL 3632244 (proposed structures authorized by Chapter 91 License would not significantly interfere with public rights of navigation); In the Matter of

Jimary Realty Trust, OADR Docket No. 2016-015, Recommended Final Decision (August 3, 2018), 2018 WL 6040709, adopted by Final Decision (August 14, 2018), 2018 WL 6040708 (proposed structure authorized by Chapter 91 License would significantly interfere with public rights of navigation). This "legal and reasonably foreseeable waterborne traffic" standard is a rational, objective standard based on Chapter 91 regulatory requirements and is consistent with prior Final Decisions in administrative appeals involving challenges to Chapter 91 Licenses issued by the Department. Onset Bay II, at *46.

However, "in assessing the significance of any interference with public rights [of navigation] pursuant to 310 CMR 9.35(2)[(a)][,] . . . the Department [is required by 310 CMR 9.35(1) to] take into account that the provision of public benefits by certain water-dependent uses may give rise to some unavoidable interference with certain water-related public rights [and that] [s]uch interference may be allowed provided that mitigation is provided to the greatest extent deemed reasonable by the Department, and that the overall public trust in waterways is best served." 310 CMR 9.35(1); Onset Bay II, at *83. Within this framework, the right to navigate is construed liberally but is not unlimited. In the Matter of Keith & Valerie Stamp, OADR Docket No. 2015-024, Recommended Final Decision (August 4, 2016), adopted by Final Decision (August 8, 2016), 2016 WL 4361502. Mere inconvenience, anecdotal or conclusory statements of alleged navigation interference is not enough. Id. See also In the Matter of Sari Lipkin, Docket No. 92-043, Final Decision (December 22, 1995), 1995 WL 805814 (summary decision granted when petitioners failed to provide evidence that a pier proposed 162 feet from their sailboat mooring would significantly interfere with navigation).

Factors in determining whether interference is significant may include the difficulty of adjustments by existing users, whether alternatives are available, and whether the interference would be experienced by the public or a single abutter. In the Matter of Stanley A. Sylvia,

Docket No. 95-110, Final Decision (February 4, 1997) (more difficult launching for one family is not significant interference); In the Matter of Lawrence & Charlotte Oliviera, Docket No. 2010-017, Recommended Final Decision (January 7, 2011), adopted by Final Decision (January 7, 2011), 2011 WL 573403 (project for one user would result in significant interference with "established course of navigation" used by many to reach a specific cove). Relevant considerations include who is experiencing the interference, the anticipated frequency of it, and the extent or type of interference. Legowski, at *7. "For example, merely having to navigate around a dock is not significant interference, particularly when the dock is an impediment to just one abutting property, and such property owner has an alternative navigation route." Id.

Quincy contends that the reconstructed bridge would significantly interfere with public rights of navigation while Boston and MassDEP contend that it will not significantly interfere with such rights. I evaluated each regulatory requirement as follows:

1. **The bridge replacement does not extend seaward of any state harbor line, 10 CMR 9.35(2)(a)1.a.**

There is no evidence in the record that the bridge replacement Project would extend seaward of any known state harbor line established by the legislature pursuant to G.L. c. 91, § 34. Therefore, the record supports a finding that the proposed Project does not extend seaward of any state harbor line.

2. **The bridge replacement does not extend over any existing channel such as to impede free passage, 310 CMR 9.35(2)(a)1.b.**

The Waterways Regulations prohibit a project from extending "into or over any existing channel such as to impede free passage." 310 CMR 9.35(2)(a)1.b. "Channel" is defined to mean "a navigable route for the passage of vessels, established by customary use or under the authority of federal, state, or municipal law." See 310 CMR 9.02. There are no designated federal, state, or local designated channels that traverse the bridge replacement Project. Love PFT, ¶ 21;

Hopps PFT, ¶ 33. Nor is future dredging expected in this waterway because there are no federal navigation projects of channel designations in this waterway. Love PFT, ¶ 21. The record supports a finding that the proposed Project does not extend over an existing designated channel.

3. The bridge replacement does not impair any line of sight required for navigation, 310 CMR 9.35(2)(a)1.c.

Quincy offered no testimony asserting that the bridge replacement will impair any line of sight for navigation. The bridge would be constructed on existing piers, which have been present in the waterway since approximately 1951. The proposed replacement bridge would have a clearance of 51.75 feet above mean high water at the main navigation span and it is not expected to impair any line of sight required for navigation. Love PFT, ¶ 6. Therefore, the record supports a finding that the proposed Project does not impair any line of sight required for navigation.

4. The bridge replacement does not require the alteration of an established course of vessels, 310 CMR 9.35(2)(a)1.d.

While not defined, the term 'established course of vessels' is not synonymous with 'habitual use' by vessels in a particular area and is not a guarantee that mariners that will not have to alter their preferred course of navigation in that area as the result of a Chapter 91 licensed project. The phrase 'established course of vessels' means that a particular course must have been established by mariners, and must be continued, for a compelling and legitimate navigational reason, and not just because a number of boaters are in the habit of navigating in the area where a project is proposed. Onset Bay II, at *39. The term as used in 310 CMR 9.35(2)(a)1.d means more than a particular boater's favored route. See Stamp, citing In the Matter of Douglas Abdelnour and Bonnie Abdelnour, Docket Nos. 88-138, 88-358, 88-359, 88-360, 88-361, 90-270, Final Decision (November 22, 1994), 1994 WL 762587 (established course of vessels not found where shell fishermen, boaters and windsurfers regularly used the area in

question and area was considered an "informal navigational channel"); In the Matter of Wynn MA, LLC, OADR Docket No. 2016-004, Recommended Final Decision (July 15, 2016), adopted by Final Decision (July 22, 2016), 2016 WL 4083864.

Further, there must be a significant impact from having to navigate around a new structure. "[I]mplicit in this regulatory concept is the inability, without significant adverse consequences, to change course in order to pass around a new, [c. 91] licensed structure." Onset Bay II, at *39, citing Webster Ventures, at *26 (a particular course must have been established by mariners for a compelling and legitimate navigational reason and must be continued for a compelling and legitimate navigational reason, not just because boaters habit of navigating there). In contrast, see Oliviera (proposed project used by one would require alteration of "established course of vessels" in violation of regulations, where that course was used by many to access one particular cove).

Here, the use of the waterway is more of a habitual route than an "established course of vessels" that cannot be altered without significant adverse impacts. Even if the waterway were an "established course of vessels," the testimony demonstrates that impacts will not be significant and that there are other reasonable unobstructed alternative routes available that were used prior to the 2015 bridge demolition. MassDEP testified that even assuming an increase in vessel size over time as a function of increased sea level, having multiple parties acknowledge minor interference does not rise to a level of significant interference. Hopps PFT, ¶ 32; Hopps, 391:9-400:12. The Draft License specifies that the bridge reconstruction will have a vertical clearance of 51.75 feet at mean high water. Hopps PFT, ¶ 32; Draft License, Plan, Sheet 7 of 17. The Draft License also authorizes a minimum of 150 feet width of navigable horizontal clearance at the center of the bridge, and the actual width between the fender systems will be 228 feet. Hopps PFT, ¶ 37; Draft License, Plan, Sheet 7 of 17; Sheet 15 of 17.

Boston's Study provides a significant amount of information documenting vessel use of the waterway and available alternative routes. Boston's Study included surveys of and phone calls to vessel users and video recordings of transits through the waterway to determine any impact to vessels from the bridge reconstruction. Love PFT, ¶¶ 9, 15.[51]

These results indicate that all recreational vessels that could traverse the original bridge, which existed between 1951 and 2015, will be able to traverse the waterway after bridge reconstruction. Love PFT, ¶ 12. Public transportation vessels that traverse the waterway, which include MBTA operated ferries, will not be affected by the proposed horizontal and vertical clearances. Love PFT, ¶ 13.[52] Quincy contends that Boston's Study failed to consider future plans to expand the ferry system in the area. Gillan PFT, ¶ 11. However, there is nothing in the record to support a conclusion that any such future vessels, if unable to traverse the bridge replacement, would not be able to utilize the alternative routes.[53]

Inquiries regarding commercial vessels using the waterway included cruise boats and sailing cruises, university and private commuting vessels. Love PFT, ¶¶ 14-20.[54] The survey identified four (4) vessels that will be unable to travel beneath the replacement bridge,[55] and

[51] See also Love Ex. B, Navigation Impact Study, June 201; Love Ex. C, May 2022 Navigation Supplement, together "Boston's Study."

[52] The MBTA operates two catamarans in this waterway with a 28.7-foot beam and a 35-foot air draft. Love PFT, ¶ 13.

[53] Lt. Gillan speculated that sea level rise or high tides could cause vessels to collide with the fenders. Gillan PFT, ¶ 9. However, this concern is related to vessel operation.

[54] Boston Harbor Cruises, City Experiences by Hornblower, Classic Harbor Line, Boston Harbor Sailing Cruises, Bay State Cruise Company, Boatonian, Massachusetts Bay Lies, Come Sail Away Now, UMass Boston M/V Columbia Point. Love PFT, ¶¶ 19-20.

[55] Two harbor cruise vessels with air drafts of 67 feet (Odyssey) and 78 feet (Spirit of Boston); Love PFT, ¶ 16; a sightseeing vessel (Adirondack III) with a 70-foot air draft; Love PFT, ¶ 17; and a Provincetown cruise vessel (Provincetown II). Love PFT, ¶ 18.

would not have been able to before the 2015 bridge demolition. Love PFT, ¶ 16.[56] One operator indicated that they would return to the alternative routes used before 2015 and that the reconstruction would not have an impact on their operation. Love PFT, ¶ 16. A third commercial vessel, a sightseeing vessel with a 70-foot air draft, would not be able to traverse the waterway, nor could it before 2015 and would need to travel the alternative routes. Love PFT, ¶ 17.[57] The fourth commercial vessel, also a sightseeing vessel, is a motor vessel that will be able to traverse the waterway except for two (2) hours during high tide. Love PFT, ¶ 18.[58] The operator reported use of the waterway when the liquid natural gas tankers are occupying the main channel during sightseeing tours, approximately six (6) times a year. This situation is the same as when the original bridge was in place. Love PFT, ¶ 18.

Regarding public safety vessels, with the exception of two U.S. Coast Guard vessels, all known emergency and maintenance vessels will be able to traverse the bridge replacement without the need to rely on existing available alternative routes. Love PFT, ¶¶ 22-24.[59] Notwithstanding the impact on these two U.S. Coast Guard vessels, the U.S. Coast Guard's Preliminary Determination[60] indicates that the vertical clearance and horizontal clearance of the bridge replacement will not unreasonably obstruct free navigation of the waterway.[61] Prior to

[56] Testimony indicates that each vessel reported 10-14 annual transits through the waterway. Love PFT, ¶ 16; Love, 321:11-15.

[57] Classic Harbor Line's sightseeing vessel, Adirondack III. Love PFT, ¶ 17.

[58] Bay State Cruise Company, Provincetown II, one of 10 vessels impacted by the bridge replacement. Love PFT, ¶ 18.

[59] Information Boston obtained from the U.S. Coast Guard included law enforcement, fire and rescue vessels in the vicinity operated by the Massachusetts State Police Marine Services, Poston Police Department Harbor Unit, Quincy Police Marine Unit, Hingham Polic Harbormaster, the Coast Guard, Boston Fire Department, Massachusetts Environmental Police, Sea Tow, and TowBoatUS Boston. Love PFT, ¶ 22.

[60] USCG Preliminary Determinations are unlikely to change absent significant new information or changes to the waterway. See 12/8/23 Ruling and Order on (1) Petitioner's Request for a Stay of Proceedings in the Appeal; and (2) the 1949 Chapter 91 License, p. 3.

[61] Specifically, the Preliminary Determination included a finding that "a replacement superstructure should provide

issuing its Preliminary Determination ("Preliminary Determination" or "PNCD"), the U.S. Coast Guard reviewed Boston's Study.[62] The two largest known emergency vessels in the area are fire boats that belong to the Boston Fire Department Marine Division and Massport Fire, both of which are reported to have sufficient clearance to traverse the bridge replacement. Love PFT, ¶ 24.[63] While Quincy contends that the Study is unreliable and based on faulty assumptions, it provides no alternative factual basis for its assertion. Gillan PFT, ¶¶ 13-15.[64]

Further, no vessels will be permanently blocked from accessing some navigable portion of the Boston Harbor on either side of the proposed bridge replacement. Boston's Study charted multiple alternate routes between destinations on each side of the bridge replacement Project and even the longest alternative added only 30 minutes of travel time for a vessel traveling at six knots. Love PFT, ¶¶ 25-31; Love Table 10: Common Routes Through Long Island Bridge and Alternate Routes. Lt. Gillan testified that redirecting vessels to these alternative routes would serve to reduce the safe passage of vessels competing to use the Boston Main Ship Channel and that some ferries have grounded in two of these routes, although the routes where groundings occurred are not identified. Gillan PFT, ¶ 15. Beyond Lt. Gillan's anecdotal statement, Quincy did not include in its testimony any evidence documenting that any of the alternative routes contain navigational obstacles that would preclude their inclusion in the analysis of alternative routes. In the absence of evidence of navigational obstacles, Lt. Gillan's testimony relates to

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at least 51.75' of vertical clearance (MHW) and 150' of horizontal clearance in order to not unreasonably obstruct the free navigation of the waters over which the bridge is constructed." Love PFT, ¶ 23; Love Ex. F, Preliminary Determination, p. 1. See also Hopps PFT, ¶ 41.

[62] See Love Ex. F, p. 1.

[63] Boston Fire Department's largest vessel, the John S. Damrell, has a 22-foot beam and a 25-foot air draft. Massport Fire's fireboat, American United, has a 22-foot beam and a 41-foot air draft. Love PFT, ¶ 24.

[64] While Lt. Gillan initially testified that the Study stated it could not be considered accurate for planning purposes; Gillan PFT, ¶ 14; he clarified at the Hearing that the Study did not say that and it was merely his opinion that the Study was inaccurate. Gillan, 65:17-21.

safe vessel practices while MassDEP's Chapter 91 review is related to the bridge reconstruction and presumes proper and appropriate use of the waterway by mariners. See In the Matter of Pontoosuc Lake Properties, LLC,[65] OADR Docket No. 2021-019, Recommended Final Decision (July 24, 2023), 2023 WL 10950112, at *14, adopted by Final Decision (October 27, 2023), 2023 WL 10950111, citing Fuhrmann, at *9 ("Pontoosuc Lake").

Regarding the vertical clearance, Mr. Knutti contends that the Project does not adequately account for sea level rise. Knutti PFT, ¶¶ 20-25. However, even if sea level will rise is higher than Boston estimates in the Study,[66] that does not prove there will be a significant interference with navigation. Mr. Knutti provides no evidence of even an estimate of how many vessels would potentially be unable to traverse beneath the bridge if sea level rise is higher than Boston's estimate. Moreover, even if sea level rise would cause a large number of vessels to be unable to traverse beneath the bridge, Boston has established that there are multiple alternate routes that are convenient and add little extra travel time.

Additionally, Quincy contends that the proposed fender system would reduce the channel width by 10 feet, reducing the navigable waterway area compared to the original bridge. Gillan PFT, ¶ 8; Mellor PFT, ¶ 6. This testimony is effectively refuted, however, by MassDEP. Ms. Hopps testified that the Draft License authorizes a minimum width of 150 feet of navigable horizontal channel clearance at the center of the bridge. Hopps PFT, ¶ 37. Ms. Hopps further testified that the actual width between the fender systems will be 228 feet and by way of

[65] Pontoosuc Lake was appealed to the Berkshire County Superior Court. That appeal was dismissed and the Commissioner's Final Decision is binding. See Wells v. Department of Environmental Protection, Massachusetts Superior Court, Docket No. 2376-CV-00201.

[66] Mr. Knutti testified that Boston's reliance on the 2016 Climate Ready Boston Plan for sea level rise estimates was unusual or misunderstood and suggests that the Study should have used other estimates, but acknowledges that there is no one right or wrong way to assess the effects of potential future sea level rise on infrastructure. Knutti PFT, ¶¶ 21-23.

describing the adequacy of these widths explained that the MBTA's vessels have a 40-foot beam (width). Hopps PFT, ¶ 37.

In acknowledging that the current horizontal waterway is marked as 228.75 feet, Lt. Gillan testified that vessels use the full span, making the 150-foot horizontal width of the channel insufficient. Gillan PFR, ¶ 5. Relative to the horizontal distance, Lt. Gillian further opined that two ferries would not be able to pass at the same time within the 150 horizonal clearance resulting is safety concerns. Gillan PFR, ¶ 6. Again, this concern relates to safe vessel practices while MassDEP's Chapter 91 review is related to the bridge reconstruction and presumes proper and appropriate use of the waterway by mariners. See Pontoosuc Lake, at *14.

In sum, Quincy has not put forward any specific evidence that the bridge replacement will have significant impacts by pushing mariners towards navigation hazards, will affect or interfere with commercial fishing activities, or otherwise cause any mariner or marine facility significant economic loss. Nor will vessels be permanently blocked from accessing some other navigable portions of the Boston Harbor on either side of the replacement bridge or surrounding destinations. Love PFT, ¶ 26.[67] Boston's Study identified multiple alternate routes for use by vessels on one side of the bridge replacement that desire to access a location in the Boston Harbor on the other side of the bridge. Love PFT, ¶¶ 25-31. The longest alternate route, from Dorchester Bay to Quincy Bay, added only thirty minutes to the travel time for a vessel traveling at six knots.[68] Accordingly, the bridge replacement Project will not have a significant impact on

[67] Six popular destinations and access points to destinations in and around Boston Harbor were identified and alternative routes between these destinations for any vessels unable to traverse the replacement bridge were evaluated. These destinations included the entrance to the inner Boston Harbor; Dorchester Bay in the channel used to access Marina Bay and Savin Hill Yacht Club; Quincy Bay in the mooring field used by Squantum Yacht Club and Wollaston Yacht Club; Higham Bay near the entrances to Weymouth Fore River and Weymouth back River; Hingham Bay near Weir River; Hingham Harbor; Hingham Yacht Club; and the entrance to the Hull Bay where Nantasket Beach Saltwater Club and Hull Yacht Club have docks and mooring fields. Love PFT, ¶ 27; Study, p. 28, Chart 5.

[68] Alternative routes ranged from less than 2 minutes to 30 minutes. See Love PFT, ¶ 28, Table 10: Common Routes Through Long Island Bridge and Alternate Routes.

an established course of vessels; all vessels that could traverse the original Long Island Bridge will be able to traverse the bridge replacement.

5. <u>The bridge replacement does not interfere with access to adjoining areas, 310 CMR 9.25(2)(a)1.e.</u>

There are no identified designated areas within Boston Harbor that are considered harbors of refuge. Love PFT, ¶ 36. However, a local harbor of refuge is a naturally or artificially protected water area that provides a place of relative safety or refuge for vessels traveling along the coast or operating in the region. Love PFT, ¶ 35. The islands in Boston Harbor may serve as vessel refuge in inclement weather. Love PFT, ¶ 36. These islands are located on either side of the bridge replacement, which does not limit any vessel from reaching a harbor of refuge. Love PFT, ¶¶ 34-37.[69] Therefore, the record supports a finding that the proposed Project does not interfere with access to adjoining areas.

6. <u>The bridge replacement does not extend beyond the length required to achieve safe berthing, 310 CMR 9.25(2)(a)1.f.</u>

There is no testimony in the record asserting that there are adjacent structures. Nor is there any testimony in the record asserting that the bridge replacement would extend beyond the length required to achieve a safe berthing to adjacent structures. Therefore, the record supports a finding that the bridge replacement Project is not subject to this subpart.

7. <u>The bridge replacement does not generate water-borne traffic that would substantially interfere with other water-borne traffic, 310 CMR 9.25(2)(a)1.g.</u>

The bridge replacement Project will connect public roadways for transportation purposes. It will not generate water-borne traffic, and, therefore, the Waterways Regulation at 310 CMR

[69] Quincy did not provide any testimony rebutting Ms. Love's conclusions.

9.25(2)(a)1.g does not apply. Nor will it substantially interfere with other water-borne traffic as discussed above.

8. <u>The bridge replacement does not alter, due to the building of solid fill structure, tidal action or other currents so as to interfere with the ability to handle vessels, 310 CMR 9.25(2)(a)1.h.</u>

Quincy offered no testimony supporting its claim that the bridge replacement Project includes the building of a solid fill structure. Moreover, the Draft License does not authorize any building of a solid fill structure. Therefore, the record supports a finding that the bridge replacement Project does not alter, due to the building of solid fill structure, tidal action or other currents so as to interfere with the ability to handle vessels.

9. <u>The bridge replacement does not adversely affect the depth or width of an existing channel, 310 CMR 9.25(2)(a)1.i.</u>

For the sake of discussion, to the extent the navigable way under the proposed main navigation span constitutes an "existing channel," neither the depth nor the width of the "existing channel" will be affected by the bridge replacement project.[70] Also, the Project does not involve the placement of fill or dredging, so there is no impact to the depth of the "existing channel." The bridge replacement will maintain the prior and existing horizontal navigable clearance of 150 feet and the actual width between the fenders of 228 feet. Love PFT, ¶ 6; Hopps PFT, ¶ 37.

10. <u>The bridge replacement does not impair in any other substantial manner the ability of the public to pass freely upon the waterways to engage in transport or loading/unloading activities, 310 CMR 9.35(2)(a)1.j.</u>

MassDEP contends that the project will not impair in any other substantial manner the ability of the public to pass freely upon the water way and to engage in transport, loading or unloading activities. Hopps PFT, ¶38. MassDEP admits that there is a subset of vessels that will

[70] <u>See</u> discussion above regarding 310 CMR 9.35(2)(a)1.b.

be required to utilize an alternative route during certain tides or at all times, but contends that the multiple alternative routes available ensure that public transport will not be substantially impaired. Hopps PFT, ¶ 38. Further, MassDEP contends that the availability for the public to fish, fowl and navigate in tidelands is not impacted by any limitation of access to use of the bridge, as the jurisdictional area that the structure is constructed over will remain available for the public, protecting the traditional Chapter 91 uses. Hopps PFT, ¶ 43. The jurisdictional area of water sheet between the high-water mark at Moon Island and the high-water mark at Long Island, under the bridge, will provide adequate clearance for continued use. Hopps PFT, ¶ 42. Quincy's witness, Mr. Murphy, acknowledged on cross-examination that he had reviewed the Draft License and that it includes conditions that prevent Boston from restricting the public's right to use and to pass freely for all lawful purpose upon the lands lying seaward of the low-water mark. Murphy, 31:9-32:21; Draft License, Conditions 9 and 10.[71] See also 310 CMR 9.35(2)(b) and 310 CMR 9.35(3).

Issue 4: The proposed Project complies with the Engineering and Construction standards requirements of 310 CMR 9.37.

310 CMR 9.37(1) provides that:

> All fill and structures shall be designed and constructed in a manner that: (a) is structurally sound, as certified by a Registered Professional Engineer; (b) complies with applicable state requirements for construction in flood plains, in accordance with the State Building Code, 780 CMR and as hereafter may be amended, and will not pose an unreasonable threat to navigation, public health or safety, or adjacent buildings or structures, if damaged or destroyed in a storm; and (c) does not unreasonably restrict the ability to dredge any channels. (Emphasis supplied.)

[71] Draft License, Condition 9: This license authorized structures and a fill on Commonwealth tidelands -- the licensee shall not restrict the public's right to use and to pass freely for any lawful purpose upon lands lying seaward of the low water mark.

Draft License, Condition 10: Unless otherwise expressly provided by this license, the licensee shall not limit the hours of availability of any areas of the subject property designated for public passage nor place any gates, fences or other structures on such areas in a manner that would impede or discourage the free flow of pedestrian movement thereon.

Much of the Parties' arguments with respect to Issue 4 pertain to the question of whether the proposed Project is structurally sound. However, before addressing that question, the threshold question of what exactly 310 CMR 9.37(1) requires must be answered. 310 CMR 9.37(1)(a) requires that fill and structures be "structurally sound, as certified by a Registered Professional Engineer." (Emphasis supplied.) It is undisputed that the proposed Project was certified as structurally sound by a Registered Professional Engineer, Mark Ennis. Thus, the question is whether Mr. Ennis's certification satisfies the requirements of 310 CMR 9.37(1)(a), or whether Quincy may prove a violation of the Regulation by showing that the proposed Project is, in fact, not structurally sound.

MassDEP and Quincy filed cross-motions for summary decision on this issue. MassDEP argues that the text of the regulation is plain: 310 CMR 9.37(1)(a) requires only that a project be certified as structurally sound by a Registered Professional Engineer, and that evidence relating to the proposed Project's structural integrity is irrelevant. Boston makes the same argument in its memoranda of law. App. MOL, p. 20. Quincy argues that the certification requirement is distinct from the structural integrity requirement, such that the Regulation requires both to be satisfied.

This issue was addressed in In the Matter of Entergy Nuclear Operations, Inc. and Entergy Nuclear Generation Co., OADR Docket No. 2015-009, Recommended Final Decision (February 5, 2016), 2016 WL 921973, at *32, adopted by Final Decision (February 25, 2016), 2016 WL 903463 ("Entergy"). In Entergy, the Chief Presiding Officer determined that a Petitioner may "present a Professional Engineer experienced in Chapter 91 Licensing matters as an expert witness to refute [a] certification [under 310 CMR 9.37]." In acknowledging the Department's reliance on the Registered Professional Engineer's certification, Entergy established a high bar to overcome the presumption that comes with such certification: a

Petitioner would need to present strong evidence from a "Massachusetts Professional Engineer" who is "experienced in Chapter 91 Licensing matters" to overcome it. Entergy, at *32.[72]

The plain language of the regulation supports the conclusion that a structure be must certified as structurally sound by a Registered Professional Engineer and does not require the Department to conduct a separate inquiry into structural integrity, in the first instance or absent a showing that rebuts the presumption.[73] Other regulatory provisions under which MassDEP does perform such reviews do not contain the language "as certified by a Registered Professional Engineer." Quincy specifically points to the location of the historic high-water mark (310 CMR 9.02) and the interference with navigation (310 CMR 9.35(2)(a)) as aspects of project review on which MassDEP performs its own analysis. However, neither of those regulatory provisions contain any language similar to "as certified by a Registered Professional Engineer."[74]

The presence of that language in 310 CMR 9.37 when it is absent from other Waterways Regulations indicates an intent for MassDEP to rely on the certification of a Registered

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[72] The nature of presumptions in the context of evidentiary proof has been explained as follows:

> A presumption imposes on the party against whom it is directed the burden of production to rebut or meet that presumption . . . . If that party fails to come forward with evidence to rebut or meet that presumption, the fact is to be taken by the fact finder as established. If the party comes forward with evidence to rebut or meet the presumption, the presumption shall have no further force or effect . . . .

Massachusetts Guide to Evidence (2021 Edition), Article III, Section 301(d), at pp. 31-34.

[73] Regulatory terms are interpreted according to their plain, usual and ordinary meaning and absent a clear intent to the contrary, language should not be implied if not present. In the Matter of Geomatrix Systems, LLC, OADR Docket No. 2018-029, Recommended Final Decision (January 10, 2020), 2020 WL 2616479, *10, adopted by Final Decision (February 7, 2020), 2020 WL 2616478 (plain meaning should be afforded to regulatory terms). "However, courts will not hesitate to overrule agency interpretations when those interpretations are arbitrary, unreasonable, or inconsistent with the plain terms of the regulation itself." Id., citing Beverly Port Marina, Inc. v. Commissioner of Department of Environmental Protection, 84 Mass App. Ct. 612, 620 (2013). If regulatory language is not clear it is necessary to consider the 'the cause of its enactment, the mischief or imperfection to be remedied and the main object to be accomplished, to the end that the purpose of its framers may be effectuated.'" Id., citing DiFiore v. American Airlines, Inc., 454 Mass 486, 490 (2009).

[74] In citing to Entergy, Quincy contends that it that it would be an abdication of MassDEP's duty to not perform its own technical review of a project's structural integrity; that it is illogical to not require MassDEP to perform a technical review of structural integrity when it does perform such reviews on other aspects of projects; and that failing to conduct a technical review of structural integrity would render the public comment process meaningless.

Professional Engineer rather than to perform its own structural integrity analysis. Such intent is logical, as engineering is a subject which requires special expertise and licensing to the point that only individuals who have met stringent statutory requirements are permitted to practice it.[75] The rule making process for regulations is elaborate and detailed and designed to ensure that the regulations are in accord with the public interest and will. See In the Matter of Geomatrix Systems, LLC, OADR Docket No. 2018-029, Recommended Final Decision (January 10, 2020), 2020 WL 2616479, *11, adopted by Final Decision (February 7, 2020), 2020 WL 2616478. This regulatory provision is consistent with that premise; public safety is served where the structural integrity of a bridge is determined by a Registered Professional Engineer, rather than by a MassDEP employee who is not a Registered Professional Engineer.

It is reasonable to conclude that the Waterways Regulations intend for MassDEP to rely on the expertise of Registered Professional Engineers in the first instance. As MassDEP stated in its Closing Brief, "the act of a Registered Professional Engineer approving plans by way of his or her stamp carries with it that person's (or organization's) reputation, experience, education, and expertise. Misuse of an engineering stamp may subject a licensed engineer in Massachusetts to discipline, including license revocation." MassDEP Motion for Summary Decision, p. 4 n.2. It is not in the public interest for the Waterways Regulations to require MassDEP to second-guess the expertise of a Registered Professional Engineer.

Nonetheless, Entergy establishes that, consistent with the public comment process, it is reasonable that public comments could challenge a certification by a Registered Professional Engineer. Thus, while the Waterways Regulations clearly authorize MassDEP to presume structural soundness as certified by a Registered Professional Engineer, a petitioner in an appeal

[75] See G.L. c. 112, § 81J (requiring four to twenty years of engineering experience, depending on the level and length of engineering education, plus completion of a written or oral examination to be registered as a professional engineer).

may rebut that presumption.[76] As noted above, Entergy set a high bar to overcome this presumption: a Petitioner would need to present strong evidence from "Massachusetts Professional Engineers" who are "experienced in Chapter 91 Licensing matters" to overcome it. Entergy, at *32.

Given the high bar to overcome the presumption of structural soundness certified by a Registered Professional Engineer, I accord little weight to the Hearing testimony of those witnesses who are not Registered Professional Engineers in Massachusetts with experience in Chapter 91 Licensing matters. For these reasons, Quincy has two witnesses, Mr. Murphy and Mr. Costello, both Registered Professional Engineers in Massachusetts whose testimony I must consider and accord it the weight that it is due.[77]

Mr. Murphy provided limited testimony regarding the structural integrity of the proposed Project; his testimony on Issue 4 is limited to criticism of the use of limpet dams over standard cofferdams in the construction of the bridge and urging MassDEP to perform its own analysis of the appropriate methods to be used for any repairs below the mudline. Murphy PFT, ¶¶ 25-26.[78] Boston's witness, Mr. Ennis, addressed this testimony in his rebuttal testimony stating that no

[76] See n.72, at p. 59 above.

[77] Mr. Murphy and Mr. Costello are both Registered Professional Engineers in Massachusetts and have significant experience with the Chapter 91 regulations. See Murphy Ex. 1; Costello PFT, ¶¶ 2-7. Quincy has three other engineering experts: Mr. Knutti, Mr. Mellor, and Mr. Gress. Mr. Knutti is not licensed to practice engineering in Massachusetts and appears to have very little experience working with the Chapter 91 regulations. Mr. Mellor and Mr. Gress do have experience working with the Chapter 91 regulations; see Mellor Ex. 1; Mellor, 120:10-14, Gress Ex. 1; however, neither is a Registered Professional Engineer in Massachusetts, and the Entergy test requires both elements.

[78] Mr. Murphy testified that MassDEP state should independently verify that the bridge has undergone a thorough Chapter 85 MassDOT review and that they should document an appropriate review of the issue of repairs below the mudline with the proposed Limpet Technology. Murphy PFT, ¶ 26. He further testified that MassDEP should not determine that the bridge meets 310 CMR 9.37 until MassDOT has reviewed and signed off on the bridge design. Murphy PFT, ¶ 27. At the hearing, Mr. Sun testified that even though the applicable statute says MassDOT review is required if a bridge has a span longer than 10 feet, MassDOT has interpreted the statute as excluding non-BRI and non-NBI bridges. Sun, 195:4-198:23.

repairs below the mudline are proposed "because the comprehensive, petrographic, and chloride testing performed on the existing piers, coupled with the 2018 underwater survey of the existing piers, led STV to believe that no work is required below the mudline." Ennis PFR, ¶ 61. Mr. Murphy did not otherwise testify that the structural integrity of the proposed Project may be compromised.

I also find Mr. Costello's testimony unpersuasive. His testimony largely argued that there is a need for more testing of the remaining piles on which the original bridge stood and that the testing done by Boston falls short of the demonstration necessary to show structural soundness under 310 CMR 9.37(1)(a). Costello PFT, ¶ 26.[79] However, his testimony is vague and includes little regarding the testing he deems missing. What he does offer was effectively refuted by Mr. Ennis who testified that the testing Mr. Costello requests has either already been performed or is unnecessary.[80]

For example, Mr. Costello argued that the structural integrity of the timber piles, specifically of the tensile capability at the interface between the concrete pier and the timber piles, had not been adequately assessed. Mr. Costello testified that the structural integrity of the piers should be subject to a "specific investigation," that the piers below the mudline have not been assessed and that the timber piles should be assessed for bacterial degradation. Costello PFT, ¶¶ 23-24, 30; Costello PFR, ¶ 2.

[79] Earlier in these proceedings, I denied Quincy's Motion to Compel additional coring testing on the piers which its witness at the Conference, Dr. Gress, who at the time was identified by his PhD and not as Registered Professional Engineer, agreed would damage the piers to some extent. I concluded that the testing conducted by Boston appeared to be extensive and had been provided to Quincy for its review. Pre-Hearing Conference Report and Order, November 10, 2023.

[80] In rebuttal to Mr. Ennis's testimony that Mr. Costello cited no "document, code or other authority that requires the testing he suggests," Mr. Costello referenced AASHTO (8th Edition) and Section V (Underwater Bridge Repair, Rehabilitation and Countermeasures Manual). Ennis PFT, ¶ 59; Costello PFR, ¶ 9. However, he did not include in his rebuttal the referenced documents or cite to the provision within them that he relied on to support his opinion.

Regarding the timber piles, Mr. Ennis testified that it is unclear what Mr. Costello's concerns are, but that the situation he presents is rare because if tensile capacity of a pile is lost, the forces are redistributed to other piles. Ennis PFT, ¶ 57. Mr. Ennis also testified that STV's assumptions were reviewed and confirmed by GEI prior to finalization of the design. Ennis PFT, ¶ 57. Regarding Mr. Costello's contention that the bridge should comply with the Massachusetts State Building Code, Mr. Ennis testified that the building code does not apply to bridge designs. Ennis PFT, ¶ 58. Instead, bridge designs are governed by the AASHTO Bridge Design Specifications with which the bridge replacement plan complies. Ennis PFT, ¶ 58.

Like Mr. Murphy, Mr. Costello also testified that testing should have occurred below the mudline. Costello PFT, ¶ 26. In addition to his rebuttal of Mr. Murphy's testimony on this point, Mr. Ennis testified in rebuttal that testing below the mudline was unnecessary because concrete below the mudline would be in better condition than the concrete in the intertidal zone that was tested. Ennis PFT, ¶ 59; Klein PFT, ¶¶ 29-30.

Mr. Costello also contended in his testimony that further testing for the presence of alkali-silica reaction ("ASR") is needed. Costello PFT, ¶ 27.[81] In response, Mr. Ennis testified that a core sample was taken of almost every pier and showed that ASR was "minor, very minor, or . . . nonexistent," and "ha[d] not contributed to structural degradation of the concrete." Ennis PFT, ¶ 14. Mr. Ennis further testified that with the limited presence of ASR, there were no observations of the pier masonry to suggest that expansion within the piers has occurred to displace the granite masonry facing. Ennis PFT, ¶ 17.[82] Mr. Ennis acknowledged that discovery

[81] The structural investigation included comprehensive strength tests, salt content tests, petrographic analysis to evaluate the substructure for strength and ability to withstand seismic and other loads and to determine the presence and extent of ASR. Ennis PFT, ¶ 10; Ennis, 204:16-24.

[82] While not a Massachusetts Registered Professional Engineer with Chapter 91 experience, Mr. Gress's rebuttal on behalf of Quincy appears to agree with Mr. Ennis's conclusion that the minor ASR present within the piers has not resulted in observations that suggest expansion within the piers. Gress PFR, ¶ 26.

of ASR in existing older structures is commonplace and testified that to address durability given the testing results, strengthening and repair of the piers is part of the design. Ennis PFT, ¶ 16. On behalf of Boston, Mr. Klein also testified that ASR remains relatively minor. Klein PFT, ¶ 37. He testified that it is unlikely that the rate of deterioration will increase; rather he opined that the rate or progression of ASR will decrease or stop entirely over the next 75 years. Klein PFT, ¶ 37. Mr. Costello did not provide any testimony rebutting this testimony.[83]

Nor did Mr. Costello explain why the testing that has already been performed is inadequate besides opining that the testing is "limited" and stating that "further investigation of the hidden and unhidden components is needed." Costello PFT, ¶ 27. I find this testimony vague and insufficient to establish that the testing failed to demonstrate that the design is structurally sound. It consists of speculation and conjecture and therefore is insufficient to meet Quincy's burden. See In the Matter of Algonquin Gas Transmission, LLC, OADR Docket No. 2017-011, 2017-012, Recommended Final Decision, (October 16, 2019), 2019 WL 5693697, at *12, adopted by Final Decision (October 24, 2019), 2019 WL 5693696.

Finally, Mr. Costello does not address why the pier strengthening and repair process would not solve alleged issues relating to the piers' structural integrity. Mr. Ennis testified that the structural integrity of the proposed Project has been examined by four engineering firms: STV prepared the foundation design; GEI performed a comprehensive review of that design; Benesch performed a third-party comprehensive safety review of the proposed design; and engineering firm WJE reviewed the structural investigation and pier design by STV and

[83] Dr. Gress testified that his review included review of the strengthening and repair plan in concluding that the ASR will have a negative effect on the life of the structure. Gress PFT, ¶ 22; Gress PFR, ¶ 25. However, as discussed previously, his testimony is not given substantial weight in this context. Further, Mr. Klein effectively refuted Dr. Gress's testimony identifying incorrect statements regarding final design (Gress PFT, ¶ 49; Klein PFT, ¶ 27); several speculative arguments by Dr. Gress regarding tremie concrete and proposed post-tensioning (Gress PFT, ¶¶ 54-55, 58-61; Klein PFT, ¶¶ 30-32); and inaccurate references by Dr. Gress to MassDOT bridge manual requirements (Gress PFT, ¶ 53; Klein PFT, ¶ 29).

confirmed that the proposed pier strengthening and repair plans addressed existing conditions. Ennis PFT, ¶¶ 6-8; Klein PFT, ¶¶ 24, 37. Mr. Costello did not provide convincing reasoning for why his opinion should be given more weight than the opinions of four engineering firms to which Mr. Ennis and Mr. Klein testify.

Other than asserting that it was limited, Mr. Costello did not provide any rebuttal testimony challenging the pier testing that was conducted or specifically identifying the tests he would conduct. Mr. Ennis testified that pier testing included extracting twenty (20) concrete core specimens and included all piers within the Quincy municipal boundary.[84] Comprehensive salt content tests were conducted on all concrete core specimens and a petrographic analysis was conducted on thirteen (13) of the concrete core specimens. Ennis PFT, ¶ 10. Comprehensive strength testing was conducted to measure the load-bearing capacity of concrete structures as well as their ability to resist cracking and other types of damage. Ennis PFT, ¶ 11. Testing included petrographic analyses of the concrete core specimens performed by independent materials testing facility accredited by the American Association of State Highway and Transportation Officials ("AASHTO").[85]

Additionally, Mr. Ennis testified that the design specifications take into account sea level rise resiliency. Ennis PFT, ¶¶ 36-41.[86] Regarding sea level rise resiliency considerations, Mr.

[84] STV utilized industry standards in conducting these tests according to American Society for Testing and Materials ("ASTM") standard C42, "Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete." Ennis PFT, ¶ 10.

[85] This analysis was performed by American Engineering Testing, Inc. ("AET"), in accordance with ASTM Standard C856, "Standard Practice for Petrographic Examination of Hardened Concrete," and ASTM Standard C457, "Standard Test Method for Microscopical Degermation of Parameters of the Air-Void System in Hardened Concrete." Ennis PFT, ¶¶ 12-13.

[86] Neither Mr. Murphy nor Mr. Costello rebuts Mr. Ennis testimony on these issues. Mr. Mellor briefly does but cites to 310 CMR 9.37(2)(b)(2), which applies to new buildings for nonwater-dependent uses intended for human occupancy, to support his contention that Boston has not formally assessed sea level rise effects on the project or designed the project to accommodate sea level change effects. Mellor PFT, ¶ 26; Mellor, 121:5-126:8. Even if Mr. Mellor were qualified to testify on this issue, I do not find Mr. Mellor's testimony persuasive.

Ennis testified that the design maximizes resilience to projected sea level rise. Ennis PFT, ¶ 36. These components include the new concrete pier caps that will be set an elevation of 13.5,9.2' feet above mean high water to improve resiliency. Ennis PFT, ¶ 37.[87] Design details and material coating systems were based on the exposure to salt spray, wave exposure and potential submergence during record storms. Ennis PFT, ¶ 38. Mr. Ennis testified that there is no risk of projected sea level rise to the roadway on the bridge itself, which will have surface elevations ranging anywhere between 49.50 feet to 60.32 feet at the main navigation span over mean high water. Ennis PFT, ¶ 40.[88] The delta-frame girder design was chosen over the truss-type structure of the original Long Island Bridge in order to both minimize steel exposure to the saltwater environment and provide a higher superstructure under-clearance for all of the bridge spans.

In sum, Quincy has not met its burden of proving that the certification by the Registered Professional Engineer on behalf of Boston is unreliable, or that the proposed Project is not structurally sound. I conclude that a preponderance of the evidence supports a ruling that the proposed Project complies with the standards set forth in 310 CMR 9.37.

Issue 5: The proposed bridge reconstruction Project complies with the categorical restriction on fill and structures at 310 CMR 9.32(1)(a)(2), where the proposed Project would utilize the exiting piers.

The Waterways Regulation concerning Categorical Restrictions on Fill and Structures provides that:

> (1) The Department has determined that in certain situations fill or structures categorically do not meet the statutory tests for approval under M.G.L. c. 91 or are otherwise not in keeping with the purposes of 310 CMR 9.00. Accordingly, a project shall be eligible for a license only if it is restricted to fill or structures which accommodate the uses specified below, within the geographic areas specified in 310 CMR 9.32(1)(a) through (e).

[87] The original pier caps were set at an elevation of 11.5 feet, 7.2 feet above mean high water. Ennis PFT, ¶ 37.

[88] The only rebuttal from Petitioner on this testimony was from Mr. Mellor, who contends that the predicted life of the proposed steel galvanizing is 40 years, not 75 years, and provided a link for Zinc Coating Life Predictor. However, the link was not available, and his testimony could not be confirmed. Mellor PFR, ¶ 8.

(a) Tidelands (Outside of ACECs and DPAs).
1. fill or structures for any use on previously filled tidelands;
2. fill or **structures for water-dependent use located below the high-water mark**, provided that, in the case of proposed fill, reasonable measures are taken to minimize the amount of fill, including substitution of pile-supported or floating structures and relocation of the use to a position above the high-water mark . . . . (Emphasis supplied.)

310 CMR 9.32(1)(a)1-2. As discussed above, the replacement bridge is a water-dependent use. Quincy contends that regardless of whether it is water-dependent, none of the categorical restrictions contemplate the re-use of unauthorized fill or structures. Quincy contends first that the piers are unauthorized structures because Boston never recorded the 1949 License, making it null and void. See Tilton v. City of Haverhill, 311 Mass. 572, 579 (1942) (holding that a license which is not recorded within one year as required by St. 1872, ch. 236, § 4[89] is "void in the strict sense"); 12/8/23 Ruling and Order on (1) Petitioner's Request for a Stay of Proceedings in the Appeal; and (2) the 1949 Chapter 91 License, p. 6 (ruling that the 1949 License is void due to failure to record within one year). Next, Quincy contends that Boston never applied for amnesty for the unauthorized bridge or piers and therefore that there is no record of MassDEP determining that piers should remain. As a result, Quincy contends the piers should have been removed because MassDEP never made a determination to license them since the status of the 1949 license was unknown to the Department until these proceedings.

Neither Boston nor MassDEP address Quincy's contention that the categorical restriction on fill and structures bars the bridge reconstruction project because the 1949 License was not recorded. Boston contends simply that the project is water-dependent and that, because there is no fill proposed, the categorical restriction is satisfied. MassDEP agrees with Boston and notes

[89] St. 1872, ch. 236, § 4 has been codified at G.L. c. 91, § 18. The current version of G.L. c. 91, § 18 requires a license to be recorded within sixty days, but in 1949, the requirement was to record within one year.

also that the Project will be constructed below the high-water mark, and the existing piers are all located in flowed Commonwealth tidelands.

As discussed above, the project is water-dependent and there is no fill proposed or authorized. That the structures were not licensed in 1949 is not determinative; as discussed below at Issue 9, the current Chapter 91 Application intended to license the piers, and the Department considered the piers in issuing the Draft License and therefore did make a determination that the piers are included in the Draft License. It is well within the jurisdiction of this de novo proceeding to determine that the piers are to be licensed. Therefore, Quincy's objection to past irregularities relative to the 1949 License does not prevent a determination that the piers are structures that can be licensed. It is reasonable for the Department to conclude that the piers meet the statutory tests for approval under Chapter 91 and the regulations. Further, the Project is eligible for a license under 310 CMR 9.32 because it is a water-dependent use located below the high-water mark that does not propose fill.

Issue 5(a): The piers are "licensed" as part of the proposed Project.

The Parties agree that the Draft License would apply to the piers.[90] Quincy concedes that if the replacement bridge is eligible for a Chapter 91 license, despite utilizing the existing piers which it contends are unauthorized, the license would apply to all parts of the bridge that the Department determines are covered by the license.[91] Boston and the Department contend that Boston's Chapter 91 Application intended to license the piers.[92] They further contend that the

[90] See Pet. MOL, p. 27; App. MOL, pp. 22-24; MassDEP MOL, p. 21.

[91] See Pet. MOL, p. 27.

[92] Examples from the Chapter 91 Application include: "a new Chapter 91 Waterways License is required to construct the bridge superstructure replacement on the existing piers. The new work includes strengthening the existing bridge piers and installing the new bridge superstructure"; Chapter 91 Application, p. 1-3; Brandt PFT, ¶ 5.a;

"[t]he bridge design utilizes the existing substructures so only very limited in-water work is required"; Chapter 91 Application, p. 2-1; Brandt PFT, ¶ 5.b;

Draft License references the piers as the "substructure" and would authorize Boston to make "repairs and improvements to the 13 piers within Chapter 91 jurisdiction consisting of partial demolition, installation of reinforced concrete pier caps, [and] repointing of the granite piers" and to "install[] . . . fender systems on Piers 9 and 10." Draft License, p. 1; Ennis PFT, ¶ 9; Hopps PFT, ¶ 47. In sum, a preponderance of the evidence shows that the existing piers would be licensed as part of the proposed bridge replacement project.

Issue 6: The Department correctly determined that, as related to the proposed Project, there are no unresolved compliance issues with MEPA and the Massachusetts Wetlands Protection Act pursuant to 310 CMR 9.33.

The Waterways Regulations provide that "[a]ll projects must comply with applicable environmental regulatory programs of the Commonwealth, including but not limited to: (a) Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 61 through 62H and 301 CMR 11.00: MEPA Regulations. (b) [the Massachusetts] Wetlands Protection Act ["MWPA"], M.G.L. c. 131, § 40, and 310 CMR 10.00: Wetlands Protection." 310 CMR 9.33(1). The Waterways Regulations further provide that, "[w]here a state or regional agency has authority to issue regulatory approval, issuance of such approval shall be conclusive as to compliance with the regulatory program in question." 310 CMR 9.33(2). Relevant to the MWPA, "if the Department has issued a final order of conditions the project shall be presumed to comply with the statute and the final order shall be deemed to be incorporated in the terms of the license or permit, with no additional wetland conditions imposed." 310 CMR 9.33(3).

"[t]he proposed superstructure allows for the reuse of the existing substructures, which reduces construction cost and eliminates the need for construction of new abutments and associated wetlands/seafloor impacts"; Chapter 91 Application, p. 3-5; Brandt PFT, ¶ 5.c;

"[o]nce in operation, the bridge with the new superstructure will not change navigation as the proposed superstructure replacement uses the existing piers and will be close to the same height as the former bridge at the navigation opening and much higher at the approach spans." Chapter 91 Application, p. 7-3; Brandt PFT, ¶ 5.d-e; Chapter 91 Plans showing the existing piers, Chapter 91 Plans, Sheets 10 through 15; Brandt Ex. C, Chapter 91 Plans.

Quincy contends that there are compliance issues with MEPA and the MWPA. Relevant to MEPA, Quincy contends that Boston's recently filed Notice of Intent pursuant to the MWPA to repair the Moon Island seawall is an improper segmentation of the collective environmental impact of the project. Murphy PFT, ¶ 28. Boston and MassDEP contend that the repair of the Mood Island seawall is unrelated to the proposed bridge reconstruction Project and would not be reviewed in this proceeding. Hopps PFT, ¶ 51. As to MEPA review of the bridge reconstruction project, Boston and the Department contend that the EEA Secretary issued a Certificate determining that the proposed Project did not require the filing of an EIR, thereby concluding its MEPA review. Quincy challenged the MEPA Certificate in Superior Court and judgment was entered upholding the Certificate, which Quincy did not appeal further.[93]

Regarding the MWPA, Quincy contends that Boston's Chapter 91 Application included a different design and a different construction phase work plan than those submitted to the Quincy Conservation Commission. Quincy contends therefore that the Department should not rely on the findings in the Superseding Order of Conditions ("SOC") that MassDEP issued approving the proposed bridge reconstruction Project pursuant to the MWPA where there have been material changes to the project design and plan. Murphy PFT, ¶ 29. On behalf of Quincy, Mr. Murphy also testified that there was a lack of detailed information about the structural integrity of the existing piers proposed to be reused and the related quantification of impacts to wetland resource areas. Murphy PFT, ¶ 31. As a result, Mr. Murphy contended in his testimony that it is impossible to assess the environmental risks and the anticipated and potential impacts of the project. Murphy PFT, ¶ 33.

[93] See Hopps Ex. 7, MEPA Certificate, September 21, 2018; City of Quincy v. Beaton, Massachusetts Superior Court, Docket No. 1884-CV-03629, dated July 27, 2022 (Connolly, J.).

Boston and the Department responded contending that the SOC issued by the Department was previously challenged by Quincy and resolved in the Department's favor.[94] The issues Mr. Murphy raises relative to MWPA compliance should been raised in the context of Quincy's challenge to the SOC, and whether Quincy made them at that time or not, they cannot be reargued here.[95]

The MEPA Certificate and the SOC are final determinations that Quincy appealed and were resolved in the relevant forums. While Quincy also raises the likelihood that the piers will need to be replaced, that argument is speculative. The Department evaluated compliance with MEPA and the MWPA based on the bridge reconstruction Project as proposed, which does not include the complete replacement of the piers. In sum, I find that a preponderance of the evidence demonstrates that the MEPA Certificate and the SOC are conclusive evidence of Boston's compliance with MEPA and the MWPA.

Issue 7: The Department correctly determined the limit of the Chapter 91 jurisdiction, appropriately determining and applying the High-Water Mark, and did not err in determining that the bridge reconstruction Project is not subject to the provisions of 310 CMR 9.34 and therefore does not require compliance with applicable local zoning ordinances.

The Waterways Regulations at 310 CMR 9.34 apply to projects located on private tidelands or filled Commonwealth tidelands. Specifically, 310 CMR 9.34 provides that:

> "Any project located on private tidelands or filled Commonwealth tidelands must be determined to comply with applicable zoning ordinances and by-laws of the municipality(ies) in which such tidelands are located." 310 CMR 9.34(1). (Emphasis supplied.)

[94] In the Matter of City of Boston Public Works Department, OADR Docket Nos. WET-2019-021 & 022, Recommended Final Decision (March 17, 2021), adopted by Final Decision (March 31, 2021); City of Quincy v. Massachusetts Department of Environmental Protection, Massachusetts Superior Court, Docket No. 2184-CV-00991, dated December 30, 2021 (Squires-Lee, J.).

[95] While the plans submitted to the Quincy Conservation Commission were changed, the plans considered in the SOC are the same plans included in the Chapter 91 Application; it was appropriate for the Department to rely on the findings of the SOC.

The regulations define private tidelands to mean,

> "tidelands held by a private person subject to an easement of the public for the purposes of navigation and free fishing and fowling and of passing freely over and through the water. In accordance with the Colonial Ordinances of 1641-47, the Department shall presume that tidelands are private tidelands if they lie landward of the historic low water mark or of a line running 100 rods (1650 feet) seaward of the historic high water mark, whichever is farther landward; such presumption may be overcome upon a showing that such tidelands, including but not limited to those in certain portions of the Town of Provincetown, are not held by a private person or upon a final judicial decree that such tidelands are not subject to said easement of the public." 310 CMR 9.02: Private Tidelands.

The Waterways Regulations define filled tidelands to mean:

> "former submerged lands and tidal flats which are no longer subject to tidal action due to the presence of fill." 310 CMR 9.02: Filled Tidelands.

While flowed tidelands are defined to mean tidelands that are:

> "present submerged lands and tidal flats which are subject to tidal action." 310 CMR 9.02: Flowed Tidelands.

Quincy contends that the plan accompanying the Draft Chapter 91 License depicts a concrete support pier and temporary piles located in private tidelands landward of the historic low-water mark. Quincy contends, therefore, that the bridge replacement is subject to municipal zoning.

Boston and the Department contend that the Department correctly determined that the bridge replacement is located in and over flowed tidelands, not filled tidelands because the Department correctly determined that the present high-water mark was the limit of Chapter 91 jurisdiction. Hopps PFT, ¶¶ 19-21, 27; Padien PFT, ¶ 9; Padien Ex. 3. As a consequence, they contend that the bridge replacement Project is not subject to local zoning ordinances because the bridge replacement Project is not located on private tidelands or filled Commonwealth tidelands but will be located on flowed Commonwealth tidelands. As discussed above, I have determined

that the present high-water mark has been correctly determined.[96] As shown on the Draft License plan and confirmed on Padien Ex. 3, the bridge reconstruction Project is located on and over flowed, not filled, Commonwealth tidelands and as a result is not subject to municipal zoning pursuant to 301 CMR 9.34(1).

Issue 8: The proposed bridge reconstruction Project as conditioned complies with the basic requirements for licensing in accordance with 310 CMR 9.31(1).

The Waterways Regulations provide that, "[n]o license or permit shall be issued by the Department for any project subject to 310 CMR 9.03 through 9.05 and 9.09, unless said project [complies with subsections (a) through (i)]." 310 CMR 9.31(1).

Quincy contends in its Motion for Summary Decision that the Draft License fails to comply with 310 CMR 9.31(1)(f), which states that "[n]o license or permit shall be issued by the Department for any project subject to 310 CMR 9.03 through 9.05 and 9.09, unless said project . . . complies with applicable standards governing engineering and construction of structures, according to the provisions of 310 CMR 9.37." (Emphasis supplied.) Quincy points out that the Draft License states that "[t]he Department determines that the project shall comply with all applicable provisions of 310 CMR 9.37." (Emphasis supplied.) Quincy contends therefore that the use of the future tense, "shall comply," fails to satisfy the regulation's present tense requirement that a project "complies." This distinction is one without a difference. It is reasonable to conclude that MassDEP used the future tense "shall comply" in the Draft Waterways License because the bridge reconstruction Project is proposed and has not yet been constructed. It is reasonable for MassDEP to state that it is authorizing a proposed, unconstructed bridge that will be structurally sound. Quincy's interpretation of 310 CMR 9.31(1)(f) would make approval of any project impossible and render the entire Chapter 91

[96] See Issue 2, above.

regulatory scheme meaningless. As MassDEP contends, "the language at issue, pertaining to the project's compliance with the standards at 310 CMR 9.37, is the standard forward-looking language pertaining to that regulation in all draft Chapter 91 licenses." MassDEP Opposition to Petitioner's Motion for Summary Decision, June 7, 2024. In sum, I find that Quincy has failed to support its contention that the Draft License fails to comply with 310 CMR 9.31.

Issue 9: If the 1949 Chapter 91 License is void, do the remaining concrete piers on which the proposed Project would be constructed constitute the continuation of an existing, unauthorized public service project subject to 310 CMR 9.05(3)(c)?

a. If yes, has any unauthorized structural alteration or change occurred subsequent to January 1, 1984?

b. If yes, has the Department determined that licensing of the piers is essential to prevent significant harm to an overriding water-related public interest?

c. If yes, has notice and opportunity for public comment been satisfied?

Issue 9 was added as an issue for adjudication after the Department provided Quincy and Boston with a copy of the 1949 License which authorized Boston's construction of a bridge between Moon Island in Quincy and Long Island in Boston. This License provided that, "[it] shall be void unless the same and the accompanying plan are recorded within one year from the date hereof, the Registry of Deeds for the District of the County of Suffolk." See 1949 License, p. 3.[97] Thereafter, no Party represented that a record search at the Suffolk County Registry of Deeds was completed since the 1949 License was provided to the Parties on October 19, 2023, or that a search, which is a routine process, cannot be completed. There remains no evidence in the

[97] The Act authorized Boston to build the bridge subject to the requirements of Chapter 91, which required that the license be recorded within one year from the date of issuance or be void. Act, § 2; G.L. c. 91, § 18 (1949). See Petitioner's Position Statement on 1949 Chapter 91 Issues, Ex. 3. Interpreting this language, the Supreme Judicial Court held that the statute "must be strictly construed in favor of the public against the licensee," and so a license that was not recorded within one year "became void in the strict sense." Tilton, 311 Mass. at 579.

record that the 1949 License was recorded. As such, my December 19, 2024 Ruling that the license is void stands.[98]

I previously rejected Boston's argument that the Project was a maintenance and repair project pursuant to 310 CMR 9.22, agreeing with Quincy that the regulations at 310 CMR 9.22 contemplate minor activities undertaken in support of the original licensed structure or use and that the reconstruction contemplated here is beyond the scope of maintenance and repair. I did allow Boston the opportunity to make this argument again by producing evidence that the 1949 License was duly recorded and that therefore the 1949 License is in effect; however, as noted above, proof of recordation is not in the record and Boston did not address this issue through the sworn pre-filed testimony of its witnesses or its legal memorandum.

I also previously ruled that whether the Department has authority to require a new license even if the 1949 License is in effect is moot based on the lack of evidence that said license was duly recorded. See Ruling and Order, December 19, 2023. These conclusions left unresolved the status of the existing concrete piers on which Boston proposes to build the new bridge, which was, accordingly, added to the list of issues for resolution at the Hearing.

Quincy contends that 310 CMR 9.05(3)(c) applies because the piers are unauthorized and therefore must satisfy these requirements. The Waterways Regulations at 310 CMR 9.05(3)(c) provide that no license is required for continuation of an existing unauthorized public service project provided that no unauthorized structural alteration or change in use has occurred subsequent to January 1, 1984, unless after notice and opportunity for comment, the Department determines that licensing is essential to prevent significant harm to an overriding water-related public interest. Boston and MassDEP contend that these provisions do not apply because the

[98] Ruling and Order, December 19, 2023.

Project was authorized by the Legislature and will be relicensed by the Draft License.[99]

As discussed above, the proposed bridge reconstruction Project is a water-dependent infrastructure crossing facility which serves the public purpose of providing transportation services.[100] While the 1949 License was not recorded, and therefore void by its terms, nothing in the record before me indicates that the Legislature repealed its authorization to build the bridge.

The Act authorized construction of the bridge for the public purpose of providing transportation to serve the health facility on Long Island. The Act directed that a Chapter 91 license be obtained for the construction of the bridge. Chapter 91 did, and still does, require that licenses be recorded within a statutorily mandated time period or become void.[101] Where a license is not recorded within that time period, as is the case here, it is void. As a result, the bridge was, and its remaining piers are, unlicensed. However, there is nothing in the Act which supports an argument that failure to record a Chapter 91 license will result in repeal of special legislative authorization to construct the bridge. Nor did Quincy provide any testimony or documentation that would indicate that the Legislature repealed the authorization contained in the Act. A logical reading of the Act and Chapter 91 together supports the conclusion that because the 1949 License became void due to Boston's failure to record it, it is incumbent upon Boston to obtain a Chapter 91 license in order satisfy the authorizing Act.

In 2018, Boston filed its Chapter 91 Application to reconstruct the bridge. The bridge reconstruction Project proposes to utilize the existing authorized, but unlicensed, piers. In

[99] The existing piers are included in the proposed bridge reconstruction Project, as detailed in the Chapter 91 Application and as included in the Draft License. In issuing the Draft License, the Department did not consider the piers to be subject to 310 CMR 9.05(3)(c). Hopps PFT, ¶ 38.

[100] See Issue 1, above.

[101] In 1949, G.L. c. 91, § 18 required licenses to be recorded within one year. St. 1872, ch. 236, § 4. In 1983, the statute was amended to require licenses to be recorded within sixty days. St. 1983, ch. 589, § 26.

obtaining a Chapter 91 license, Boston would satisfy the Act's requirement for constructing the bridge as authorized, in accordance with Chapter 91.

The Parties acknowledge being unaware of the 1949 License, recorded or not, and proceeded for several years with the licensing of the bridge reconstruction Project. Before that, despite the failure to record the 1949 License, the original bridge was constructed and remained in place for approximately 65 years. Nothing in the record suggests that any Party objected to the failure to record the 1949 License during that time.[102] While the 1949 License was void, the record indicates that no involved party was aware of that fact or deemed the lack of a recorded license noteworthy until the 1949 License was produced, five years into the Chapter 91 licensing process. In sum, the bridge reconstruction Project remains authorized by the Legislature and therefore is not subject to 310 CMR 9.05(3)(c).

CONCLUSION

Quincy has failed to demonstrate by a preponderance of the evidence and the governing legal requirements that the Draft License issued by the Department for the construction of proposed bridge replacement Project was issued in violation of Chapter 91 and the authorizing regulations. In sum, (1) the proposed bridge reconstruction Project is an Infrastructure Crossing Facility that serves a proper public purpose and provides greater benefits than detriment to the rights of the public in tidelands and qualifies as water-dependent because it requires direct access to tidal waters in order to connect the existing transportation on the mainland to the existing transportation infrastructure on Long Island; (2) the Department correctly determined the limit of the Chapter 91 jurisdiction and appropriately applied the high-water mark concluding that the

[102] For comparison, zoning law in Massachusetts provides a 10-year statute of limitations for challenging a nonconforming structure. See G.L. c. 40A, § 7. Here, the original bridge stood for 65 years without complaint that the license was not recorded.

Project will be located on flowed tidelands of Boston Harbor and local zoning requirements do not apply; (3) the Project does not create unlicensable navigation hazards because the majority of vessel traffic using the waterway will still be able to use it and multiple alternative routes are available; (4) the Project satisfies the engineering and construction standards; (5) the categorical restriction on fill and structures does not apply; (6) the Department correctly determined that there are no unresolved compliance issues with MEPA and the Wetlands Protection Act; (7) the Project is not located on private tidelands or filled commonwealth tidelands and therefore is not required to comply with local zoning ordinances or bylaws; (8) the Project as conditioned complies with the basic requirements for licensing; and (9) that the 1949 License is void does not affect the legislative authorization to build the bridge, subject to obtaining a Chapter 91 license. In conclusion I recommend that the Department's Commissioner issue a Final Decision affirming the Draft License, as conditioned.

Date: November 7, 2024

Margaret R. Stolfa
Presiding Officer

NOTICE - RECOMMENDED FINAL DECISION

This decision is a Recommended Final Decision of the Presiding Officer. It has been transmitted to the Commissioner for her Final Decision in this matter. This decision is therefore not a Final Decision subject to reconsideration under 310 CMR 1.01(14)(d), and may not be appealed to Superior Court pursuant to M.G.L. c. 30A. The Commissioner's Final Decision is subject to rights of reconsideration and court appeal and will contain a notice to that effect.

Because this matter has now been transmitted to the Commissioner, no party shall file a motion to renew or reargue this Recommended Final Decision or any part of it, and no party shall communicate with the Commissioner's office regarding this decision unless the Commissioner, in her sole discretion, directs otherwise.

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