

WEYMOUTH MUNICIPAL VULNERABILITY ACTION GRANT SUMMARY REPORT

FORT POINT COASTAL INFRASTRUCTURE IMPROVEMENTS June 2019



SUBMITTED TO:

Weymouth Department of Public Works Weymouth, MA



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EXECUTIVE SUMMARY

To address natural hazard events and improve climate resiliency, Weymouth completed a Hazard Mitigation Plan in 2014. The Weymouth Local Hazard Mitigation Planning Team identified several mitigation measures that would serve to reduce the Town's vulnerability to natural hazard events. **The most important of these are physical infrastructure improvement projects including coastal structure elevations along Fort Point Road.**

Weymouth took part in the Executive Office of Energy and Environmental Affair's Municipal Vulnerability Preparedness Planning Program (MVP) in 2017, to continue exploring ways to make Weymouth more resilient to natural hazards including coastal flooding and the impacts of climate change. Coastal infrastructure (particularly seawalls), drainage and stormwater management were among the Town's top categories of concerns and challenges in the final MVP Planning Report. Reconstruction of the coastal infrastructure in the Fort Point Road area was, once again, identified as an immediate need.

In 2018, Weymouth pursued and was awarded an \$129,557 MVP Action Grant to address the physical infrastructure in the Fort Point Road area. The Town worked together with Tighe and Bond, an engineering and environmental specialist firm, to determine the best solution to address the infrastructure and climate-related concerns at the Fort Point Road area coastline.

Work completed under the grant included identification of required access agreements for construction and long-term maintenance, an existing conditions survey, geotechnical borings, and public outreach to discuss analysis of alternatives for the seawall improvements.

The MVP Action Grant final deliverable included permit level design for the preferred restoration option for the coastal improvements, including public stairway access to the water and drainage improvements. A conceptual video rendering of the seawall alternatives was developed and landscape rendering graphics prepared for the preferred alternative for public posting.

The technical partners from Massachusetts Coastal Zone Management met with the planning team on several occasions, both in person and via conference call to provide advice and improve the project deliverables.







SUMMARY OF THE PLANNING AND DESIGN PROCESS

The MVP Action grant involved the following steps in planning, studies outreach and design. Highlights of each major task are provided below:

PRIVATE PROPERTY ACCESS AND MAINTENANCE

 While the seawall is owned by the Town, there are 25 properties what will need some type of legal access for wall repairs, improvement and maintenance. Finding and recommendations to the Town were provided.

ENGINEERING STUDIES AND SURVEY

- Existing topographic survey completed.
- Coastline conditions assessment completed.
- Three 25-40-foot deep borings drilled behind the seawall on Fort Point Road (task was supplemental to MVP grant).

ALTERNATIVES ANALYSIS AND OUTREACH

• Three alternative wall designs were presented at a public meeting on March 21, 2018. A preferred alternate was selected based on feedback from the public and technical advisors.

PERMITTING LEVEL DESIGN

• Final Deliverables: Conceptual Graphic, Permit Level Design, Opinion of Probable Construction Cost and Permitting Memo



View north along Fort Point Road showing added revetment and toe repairs behind failing seawall.

FORT POINT ROAD COASTAL INFRASTRUCTURE IMPROVEN





PUBLIC OUTREACH

Public outreach was accomplished through a combination of press releases, public meetings and postings on the Towns Website. The highlights of public outreach are listed below. Public Outreach deliverables are in Appendix A.

APPENDIX A:

PUBLIC MEETINGS

- Meeting Agenda and Sign-in sheet November 29, 2018
- PowerPoint presentation
- Meeting Summary
- March 21, 2019 Public Meeting Deliverables are in Appendix C

ACCESS AND MAINTENANCE AGREEMENT MEMO

• Fort Point Seawall Repair Access Memo 1.10.19

TOWN WEBSITE POSTINGS

https://www.weymouth.ma.us/engineering/pages/fortpoint-road-seawall-project











ENGINEERING ASSESSMENT

COASTLINE CONDITIONS SURVEY

A complete coastline conditions survey was completed for the Fort Point Road area. The coastline conditions survey included apparent sediment movements, tides, currents, prevailing wave orientations, beach sediment and shellfish characterization, revetment and seawall assessment, and the drainage system within the project area. The assessments helped to form an engineering basis for concept development and outreach discussions.

A professional topographic survey of the coastline and inland drainage areas was completed and an existing conditions plan prepared.

GEOTECHNICAL BORINGS

Based on the selection of the sheet pile type design for the Fort Point Seawall, additional geotechnical work is required to optimize the design for the sea wall. Three borings were installed, to a depth of 28-40 feet. The boring data was used to determine the optimal depth of the sheet pile cutoff wall, and subsurface materials which inform calculations to assure the structural integrity of the design including the existing height of the wall plus a potential future extension.

The boring logs and geotechnical summary are provided in Appendix B.

APPENDIX B:

- Boring Locations and Logs
- Field Investigations





Proposed Sheet Pile Seawall- EL 12.0 FT



Proposed Sheet Pile Seawall- EL 13.5FT



Proposed Seawall Finishes



Proposed Seawall Finishes

ALTERNATIVES ANALYSIS

Three conceptual alternatives for the Fort Point Road Seawall were examined. These alternatives included a sheet pile supported wall, an inkind replacement with a similar precast seawall block, or a concrete gravity wall. Each of the three alternatives would be designed to be a minimum elevation of 12 feet NAVD88, with an option to raise the wall an additional 1.5 feet at some time in the future.

The benefits and constraints for the three alternatives were analyzed. Feasibility, permitting issues, construction cost, public benefit, sustainability, ecological benefits, flood mitigation, complexity, maintenance and grant funding potential were all considered.

The pros and cons of the alternatives were presented at a neighborhood meeting on March 21, 2019. The presentation used a variety of media including PowerPoint graphics and video renderings. Following the meeting, landscape perspective drawings of the preferred design were posted on the Town website.

Tighe & Bond recommended the sheet pile supported wall due to the added benefit of preventng seepage through and under the seawall and the height of the wall will provide the additional freeboard necessary for sea level rise. The alternatives analysis deliverables are provided in Appendix C except for the video graphics due to size.

APPENDIX C:

- March 21, 2019 Public Meeting Agenda and Sign in
- Public Meeting Notice
- Alternatives Meeting Power Point
- Alternatives Meeting Summary

OP	TION NUMBER	PROS	CONS	APPROX COST
No	Build	 No jurisdictional impacts No cost 	 Wall blocks are deteriorating Does not provide additional freeboard for SLR 	\$
1A - -	Install concrete encased sheet pile wall Raise wall 2' to EL 12'	 Prevents seep through wall Provides additional freeboard for SLR Can be adapted for future expansion 	 High cost Must reset some revetment 	\$\$\$\$
1B - -	Install concrete encased sheet pile wall Raise to EL 13.5'	 Prevents seep through wall Wave overtopping reduced Consider raising road 	 High cost Must reset some revetment Loss of some views over the wall 	\$\$\$\$
2A - -	Replace existing wall blocks in kind Raise wall 2' to EL 12'	 Simple solution Provides additional freeboard for SLR Can be adapted for future expansion 	 Allows water through revetment Large cast-in-place leveling slab 	\$\$
2B - -	Replace existing wall blocks in kind Raise wall to EL 13.5'	 Simple solution Wave overtopping reduced Consider raising road 	 Allows water through revetment Large cast-in-place slab Loss of some views over the wall 	\$\$
3A - -	Install concrete gravity wall Raise wall 2' to EL 12'	 Provides additional freeboard for SLR Can be adapted for future expansion 	 Provides additional freeboard for SLR Can be adapted for future expansion 	\$\$\$
3B - -	Install concrete gravity wall Raise wall to EL 13.5'	Wave overtopping reducedConsider raising road	Wave overtopping reduced	\$\$\$

Matrix presenting the pros and cons of the three pond restoration options.

Tighe&Bond

PERMIT LEVEL DESIGN PLANS

The Town of Weymouth is proposing to redesign the seawall in the Fort Point Road area to provide a resilient, holistic system capable of properly functioning over the 50-year life of the new infrastructure. This holistic and resilient design approach considers projected climate change impacts, including sea level rise and increased frequency and severity of coastal storms.

Seawall Redesign and Reconstruction: The existing concrete wall is anticipated to be reconstructed as a concrete encased sheet pile wall and will be raised approximately one and one-half to two feet from the current elevation to an elevation of 12' NAVD88. The sheet pile will be driven to a depth of approximately 12 feet below Mean Sea Level (MSL), thereby improving sliding resistance, reducing wave wash-through, and minimizing potential for loss of backfill in the rocks that support the wall. The new height or top-of-wall elevation was established through public outreach and meetings to balance the risks for overtopping with the impacts of a higher wall on viewsheds and access to the beach. The new wall and its foundation will also be designed with appropriate load-bearing capacity to accommodate future modifications in height and size. This will allow the Town to more easily retrofit the infrastructure in future to better respond to climate change impacts.

The proposed project also includes public access stairways in three locations. The design of the concrete and timber stairways wraps around the top of the seawall and drops down over the revetment with helical anchor pilings to support the foot of the open timber stairway. The suggested locations for stairs include a stairway at the end of Sawtelle Road, Bacon Road, and the north end of Caldwell Street. The walls and the stairway have been designed to stay within the footprint of the existing infrastructure to minimize impacts on sensitive coastal resources.

Drainage Redesign and Reconstruction: Drainage in the Project Area will be redesigned and reconstructed to better respond to projected climate change impacts as a coherent, holistic system for storm and flood water management, not a patchwork of independent structures. This new system will rapidly drain flood waters post storm while also having the capacity to keep water out – i.e., to eliminate both surcharging and the infiltration of tidally-influenced ground water as it currently occurs.

The permit level stormwater design includes a water-tight, easy-to-maintain system including new generation elastomeric check valves to control backflow. All drain outfalls were designed for durability, ease of maintenance, and resistance to beach sedimentation and blockage and meet Massachusetts stormwater management standards for redevelopment projects. Existing catch basins will be evaluated and replaced with new structures where appropriate. All catch basins will also be hooded to remove gross solids or hydrocarbons from runoff prior to discharge.

As the project moves forward the Town plans to pursue additional MVP Action Grant funding to finalize design plans and obtain the necessary federal, state and local permits. The final design and permit phase will take at least one year. It is anticipated that construction on the seawall repairs and infrastructure improvements would take place no earlier than 2021.

Appendix D includes the permitting level design deliverables.

APPENDIX D:

- Permit Level Design Plans
- Permit Level Opinion of Probable Construction Costs
- Identification and Assessment of Permits Needed for the Fort Point Coastal Infrastructure Improvements

TECHNICAL SUPPORT PROVIDED BY PROJECT PARTNERS

The project team is especially grateful to the guidance provided by Rebecca Haney and Erikk Hokenson, from the Massachusetts Office of Coastal Zone Management. Rebecca and Erikk provided ongoing advice, attended the project meetings and provided critical input to improve the project deliverables.

Town staff supporting the project included leadership from Chip Fontaine, PE, Town Engineer and Jim McGrath, PLS, Assistant Town Engineer. The Weymouth project team included Harbormaster Paul Milone, Conservation Agent Mary Ellen Schloss, Emergency Management Director John Mulveyhill, and Weymouth Grants and Procurement Specialist Christine Howe. The Town team were involved in the grant every step of the way, providing support to coordinate grant administration, easement and access agreement discussions with key abutters, providing meeting logistics, public outreach and field support during survey and boring work, and reviewing and providing valuable comments on all deliverables.

As the project moves forward, the continued support of both state and local partners will be vitally important.





Existing view north along Fort Point Road



Conceptual view north along Fort Point Road - stamped block with stain



Conceptual view north east along Fort Point Road- stamped block with stain

when when when we a

Tighe&Bond

APPENDIX A

Fort Point Coastal Infrastructure Improvements Project Kickoff - Agenda

ATTENDEES:	D. Murphy, Tighe & Bond	C. Fontaine, Weymouth Town Engineer
	D. Mellor Tighe & Bond	J. McGrath, Weymouth DPW
	G. Belfit, Tighe & Bond	M. Schloss, Weymouth Conservation Agent
	A. Houle, Tighe & Bond	P. Milone, Harbormaster
	R. Haney, Mass CZM	J. Mulveyhill, Emergency Management Director
		C. Howe, Grants and Procurement
LOCATION:	Weymouth DPW, 120 Winter	Street, Weymouth

DATE:November 29, 2018START TIME:11:00 PM-1:00 PM- Kickoff and working lunch
1:00 PM- 2:00 PM- CZM coastal concerns update

- 1. Welcome and Team Introductions (5 minutes)
- 2. Background (5 minutes)
- 3. Alternatives Considered (5 minutes)
- 4. MVP Action Grant Goals, Scope and Schedule (10 minutes)
- 5. New Design Approach- Seawall and Drainage (10 minutes)
- 6. Public Access Agreement Options (20 minutes)
- 7. Public Outreach (15 minutes)
- 8. Phasing Schedule and Grant Applications (10 minutes)
- 9. Break and Staff discussion over lunch (30 minutes)
- 10. Coastal Concerns discussion with CZM (30 minutes)

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Agenda

MVP Action Gran-Kickoff Fort Point Coastal Intrastructure NOV 39, 2018 Tighe&Bond Tighe&Bond

MEETING SIGN IN

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FORT POINT INFRASTRUCTURE IMPROVEMENTS

Town of Weymouth Staff Kickoff Meeting November 29, 2018

David Murphy, P.E. | Project Director Duncan Mellor, P.E. | Principal Coastal Engineer Gabrielle Belfit, CSM | Project Manager



FORT POINT COASTAL INFRASTRUCTURE

Project Need

- Weymouth's most vulnerable area for coastal flooding (84 homes)
- Up to a 3 mile wave fetch exposure
- Seawalls and Drainage systems inadequate to address natural hazards
- Identified as highest priority for building resiliency
 - Weymouth Hazard Mitigation Plan
 - Municipal Vulnerability Preparedness Plan
- Protect coastal resource areas including shellfish habitat

Current Conditions

- Wall (precast concrete, age: 55-87years, length: 3,100 ft)
- "Poor" conditions; Sea Level Rise about 0.6' since 1950's
- "Immediate" need of repair to address "Public Safety and Welfare"
- Drainage: old, undersized, poor condition
- Check valves malfunction, system surcharges



FORT POINT COASTAL INFRASTRUCTURE

Risk and Climate Hazard Impacts

- Major Coastal Floods:
 - Nor'easters, Sea Level Rise, Increased Precipitation
- Erosion to Coastal Landforms, damage to roads and infrastructure,
- Building and property flooding

Building Resilience

- Maintain & enhance coastal Infrastructure, revetment and seawall
- Create functional, holistic drainage system
- Elevate homes in velocity zones



FORT POINT COASTAL INFRASTRUCTURE

• Damages

- FEMA Repetitive Loss Properties (16% of study area)
- Blizzard of '78- \$150,000
- No-Name Storm "91- \$30,000
- Blizzard of '72- \$75,000
- Winter Nor'easters of 2018- prolonged flooding and wall damage

Assessments, Repairs and Improvements

Tighe&Bond

- 2008 and 2011 Bourne Consulting Seawall Assessment
- 2011 Preliminary Design for Repairs/ Replacement
- 2012 Emergency Repairs (700 feet)
- 2014 Alternative Design Options



SEAWALL ALTERNATIVES

Views & beach access issues

Tighe&Bond

FORT POINT SEAWALL ALTERNATIVES

Design Issues

- Flood elevation
- Wave action and sediment transport
- Impact on resource areas
- Public accessibility
- Visual impact

Concepts Considered

- No Build
- Cobble Beach Nourishment
- Expanded rip rap revetment
- Seawall reconstruction of varying heights and widths
 - Preferred was 2 feet increase in height and expand the rip rap- ENF was filed in 2013 and withdrawn to explore more options
 - New ENF filed in 2016(7?) wall at same location and same height with new layer of armor stones, no additional flood protection



FORT POINT INFRASCTURCTURE IMPROVEMENTS

MVP GOALS

- Enhance flood protection for homes and public infrastructure
- Improve structural integrity to withstand major storm events with minimal damage
- Improve stormwater quality to benefit shellfish
- Reduce coastal flooding by designing to meet climate change projections, reducing risk to life and property





FORT POINT INFRASTRUCTURE IMPROVEMENTS

MVP SCOPE

- Seawall Redesign
 - Consider past alternatives
 - Consider public input
- Drainage Improvements
 - Holistic system, with rapid drainage and water tight design to prevent surcharge
 - Pretreatment will remove TSS
- Climate change drivers
 - Sea Level Rise
 - Storm Surge
 - Increased Precipitation





MVP PROJECT SCHEDULE

Task	Party	Duration	Start	Finish
Task 1: Kickoff Meeting, Access and Maintenance Agreements	Town; Tighe & Bond	3 months	November	January
Task 2: Seawall Revetment and Drainage Engineering Assessment	Tighe & Bond	3 months	December	February
Task 3: Alternatives Analysis, Public Meeting and Permit Level Design	Town; Tighe & Bond	5 Months	January	Мау
Task 4: Reporting	Tighe & Bond	Monthly and Final	November	June





PUBLIC ACCESS FOR REPAIRS



PUBLIC ACCESS AND PROJECT SITE OWNERSHIP

Temporary Options for Access

- **Right of Entry Agreement**
 - Limited to one property
 - Terminates when activity completed

Long Term Options for Ownership

- Land Taking
 - Fair compensation must be provided
- Permanent Easement
 - Owner grants defined rights to another party for use of portion of land
 - May be created based on prior use
- License Agreement
 - More limited than permanent easement







PUBLIC OUTREACH



PUBLIC OUTREACH APPROACH

Town Actions

- Press Release issued in June 2018
- Town to meet with "Working Group" in December to discuss easement language

Public Meetings

- Alternatives Discussion
- Visualization Tools
- Discuss Access Options
- Maintenance Agreements

Tools for Public Outreach

- Website
- Survey







2-YEAR PROJECT PHASING



PHASING THE INFRASTRUCTURE IMPROVEMENTS

- Preliminary Design-FY19
- Permitting- FY20
 - Conservation Commission
 - CZM
 - ACOE
 - MassDEP Waterways Chapter 91
- Final Design- FY20
 - Construction Drawings
 - Specifications
- Construction Services-FY21
 - Bidding
 - Construction Observation





GRANTS FOR INFRASTRUCTURE IMPROVEMENTS

- Permitting and Final Design- FY20
 - MVP Action Grant
 - CZM Coastal Resiliency

Construction FY-21

- Dam and Seawall Repair
 Program
- FEMA HMGP





Fort Point Coastal Infrastructure Improvements Project Kickoff – Meeting Summary

LOCATION:	Weymouth DPW, 120 Winter Street, Weymouth		
DATE:	November 29, 2018		
Тіме:	11:00 PM-1:00 PM- Kickoff – T&B and Town Staff		
	1:00 PM- 2:00 PM- CZM coastal concerns update		
ATTENDEES:	See sign in sheet		

A welcome to the meeting was provided by Chip Fontaine. Town staff (Town) and the Tighe & Bond MVP project team (T&B) introduced themselves and identified their roles in the project. The format for the project kickoff was discussed. Part 1 was intended to be a facilitated discussion of the project history, new design approach, wall ownership, public outreach approach, and the approach for fully funding the construction. T&B wanted to hear from the Town with respect to past experience and continued concerns. Part 2 of the meeting was to allow CZM staff to share permitting and public access concerns with the Town and T&B.

The agenda, sign-in sheet, and Powerpoint slides presented are attached to this meeting summary.

Duncan Mellor (T&B) discussed the current conditions of the wall, drainage issues, and how climate change will impact the design. John Mulveyhill and others shared local history of inundation and evacuation of the Fort Point area. All agreed that the March 2018 storm events rivaled the past storm events. Their opinion was that local residents who opposed raising the seawall in the past may have an open mind now following the March 2018 storms.

Paul Milone and others discussed the coastal resources, noting that salt marsh areas were growing, but shellfish were dying and not harvestable due to disease and this has been happening for the last four to five years around Boston Harbor. Stormwater water quality improvements (such as LID methods) would be challenging due to the terrain and land use constraints. The Town noted that prior storm events have highlighted the need to design the stormwater improvements to optimize flood water discharge to the extent possible with gravity flow.

Duncan discussed the sea level rise values that will be added to the design include the 0.6 feet of rise that has occurred since the walls were first built, 50 to 90 years ago. Additional wall height based on statewide sea level rise guidance will be within the range of 1.6-1.9 feet. Combination of these values, suggests a target top of new seawall between 2.2 to 2.5 feet above the current elevation, and may be higher to the north where wave fetch is greater. John and Christine discussed the home elevation program currently underway for six homes, elevating the structures well above the FEMA base flood elevation, which is one element of the path to enhancing coastal resiliency for the neighborhood.

Duncan described the past alternative designs from 2012-2015, and Town staff participated in describing the reactions to the alternatives by abutters, CZM, and outcome of the MEPA filing in 2017. T&B will consider lessons learned from these past feasibility concept designs.

Gabrielle Belfit reviewed the new MVP Action Grant, noting the project has a late start, but the survey was already underway the final schedule is not anticipated to be impacted. A revised schedule was presented and will be included in the November Progress Report. Monthly progress reports (and invoices) will be sent to both the Town, CZM, and EEA to fulfill the grant reporting requirements.

Duncan discussed the design approach, including wall configuration (existing recurve face and adaptable design to allow for future wall height increases) staying inside the current revetment footprint and thoughts on beach accessibility. Town staffs' initial reaction was to include as much height as possibleas part of the project design to avoid recurring construction impacts. The group discussed the goals for drainage including water quality improvements, preventing surcharging from incoming tides, and eliminating backyard drainage on private properties. Drainage options were discussed, noting that water quality improvements were likely limited to deep sump catch basins or other subsurface BMP's. Mary Ellen Schloss encouraged the use of LID stormwater BMPs to the extent feasible, but agreed that space limitations are an issue in this area.

The group discussed the current private status of the wall and the options for obtaining both temporary and permanent access to the wall for construction and future maintenance. There is one small portion of the wall that is Town-owned. The roadway was accepted as a Town road some time ago, but the plan was never registered. Jim McGrath will follow up next week with results of his deed and plan research to continue the discussion on public access agreement options.

Gabrielle and Chip discussed the plan for public outreach, starting with informal meetings with the neighborhood working group to discuss the access alternatives (easement, right of entry agreement, etc.) and provide the public with an update on the project. A public meeting is planned for late winter to present the new alternatives. In the interim, other outreach would be desirable, such as posting an update on the MVP grant on the Town's website, or possibly conducting a survey to gauge the community's midset on the seawall and continue opportunities for education on climate change.

Gabrielle presented examples to visualize alternatives using the software Infraworks, that T&B plans to use for Weymouth. The group was in favor of this technique, particularly for public outreach efforts.

The presentation ended with a discussion of plans for a two-year phased schedule to implement the project utilizing grants for final design and permitting in FY20 and construction in FY21.

Part 2 of the meeting with CZM focused on coastal concerns, especially getting a more detailed insight on what went wrong with the 2017 MEPA filing. Rebecca Haney was appointed the EEA liaison for Weymouth's MVP grant due to her historic involvement with the project. Progress reports will go to Rebecca at CZM and Valerie at EEA.

The group discussed Rebecca's concerns with the stair configuration for public access. Rebecca's preference was that stairs were built into the revetment, rather than stand-alone concrete steps perpendicular to the wall. If winter storms were a concern, the alternate that they prefer would be removable steel or wooden stairs. Rebecca noted that the salt marsh was growing and that encroachment into the marsh would be a negative impact and should be avoided. The group had a productive discussion on how the alternatives planned for the MVP project align with CZM goals, and the primary challenge is likely gaining public support. Methods for engaging the public were further discussed.

Rebecca understood the setback on the timeline and asked for the MVP schedule to be revised and submitted with the November progress report to CZM and EEA.

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Property Access Issues- Fort Point Road Seawall Repairs Project (Task 1.2 Deliverable)

To: Chip Fontaine, Weymouth Town Engineer

FROM: Gabrielle C. Belfit, CFM and Duncan Mellor, P.E.

COPY: David A. Murphy, P.E.

DATE: January 3, 2019

The seawalls along the along Fort Point Road in Weymouth are in poor condition and in need of improvements to reduce coastal flooding and enhance public safety issues along the shoreline extending from River Street to Bacon Road (the town-owned portion of Fort Point Road), and from Bacon Road to Caldwell Street where Fort Point Road is a private way. The purpose of this memorandum is to satisfy the Weymouth Fort Point MVP Action Grant Task 1.2 Deliverable, to identify seawall/ revetment and adjacent roadways that are not town-owned and present available options to the Town to formalize access and maintenance.

Tighe & Bond reviewed existing deeds and registered maps provided by the Town Engineering research to confirm detail on ownership and the history of the road and seawall. The research shows 13 properties in the study area with lot lines extending to the edge of the Town owned stretch of Fort Point Road (starting at 50 River Road and ending at 73 Fort Point Road, before Bacon Road. Deeds research show another eight (8) properties where lot lines extend to the edged the private way (79-119 Fort Point Road- Bacon Road to Birch Road), and four (4) properties where lot lines extend to the low water line, crossing over the roadway and the seawall structure (125, 129, 138 and 140 Fort Point Road). The twenty-five (25) deeds are included in Appendix A. The seawall is owned and maintained by the Town of Weymouth.

Property legal access options for wall repairs, improvements, and maintenance were considered from simple right of entry agreements (ROE) for short term access to complete borings or other studies and permanent access options including land taking, permanent right of way easements, and license agreements with specific property owners

The findings of the research and recommendations are preliminary and should be discussed with the Town's Legal Counsel before releasing it for public comment. The next steps include evaluating the pros and cons of how to establish permanent access. Tighe & Bond are not professional surveyor's so the research provided and our recommendations must be regarded as provisional.

1. Summary of Deeds Research

1.1 Methodology

The Weymouth Town Engineering department provided deeds for all properties along Fort Point Road. The Town provided two road taking documents for Fort Point Road including from River Street to Wolcott (1942) and Wolcott to Bacon Road (1973). Additional deed research and plan review was completed for a few parcels with existing easements using the Norfolk District Registry of Deeds on-line resources at:

http://www.norfolkresearch.org/ALIS/WW400R.HTM?WSIQTP=SY00
Additional registered plan drawings for parcels located along the privately-owned stretch of Fort Point Road are included in Appendix B. The road taking documents are included in Appendix C.

1.2 Results

The following Table 1 shows the results of properties researched, including dates of deeds and plans, and a brief description of potential access issues. Rows shaded in yellow have one or more easements, rows shaded grey have lots abutting the private way, and rows shaded in blue have property lines that extend to the low tide, crossing over the private way and seawall. Rows with no shading have no access issues.

TABLE 1

Property Research Summary

Block/ Lot	Address	Deeds (Dates)	Plans (Reference /Dates)	Issue Noted		
11/16	50 River Street	2016	None found	Public Road- 3-ft ROW over wall to low tide		
11/4	21 Fort Point Road	Public Road- None				
11/24	25 Fort Point Road	2015	Cert 37021 Bk 186	Public Road- None		
10/9	33 Fort Point Road	2005	Cert 6289, Bk 32/ 1922	Public Road- None		
10/8	39 Fort Point Road	1986	1922	Public Road- None		
10/6	43 Fort Point Road	3 Fort Point Road 2016 Cert 6289, Bk 32/ 1922				
9/6	/6 49 Fort Point Road 2015 Cert 6289, Bk 3			Public Road- None		
9/5	51 Fort Point Road	1987	Cert 14530, Bk 73	Public Road- None		
9/7	55 Fort Point Road 2006 Cert 179711, Bk 899		Cert 179711, Bk 899	Public Road- None		
9/3	59 Fort Point Road	9 Fort Point Road 1987 1926		Public Road- None		
8/3	67 Fort Point Road	2018	Cert 6289, Bk 32/ 1922	Public Road- None		
8/2	69 Fort Point Road	2018	Cert 6289, Bk 32/ 1922	Public Road- None		
8/1	73 Fort Point Road	1995	1922	Public Road- None		
7/13	79 Fort Point Road	1994	Cert 6289, Bk 32/ 1952	Private Way		
7/12	83 Fort Point Road	1976	Cert 45380, Bk227	Private Way- subject to easement (does not impact wall access)		
7/11	87 Fort Point Road	2002	Cert 6280, Bk 32	Private Way		
7/10	89 Fort Point Road	1968	Cert 6289, Bk 32	Private Way		
7/9	91 Fort Point Road	1975	Cert 6289, Bk 32	Private Way		

7/8	105 Fort Point Road	2007	Cert 40926, Bk 205	Private Way
7/7	111 Fort Point Road	2005	Cert 40926, Bk 205	Private Way
			Cert 6289, Bk 32	
7/2	119 Fort Point Road	2007	Cert 6289, Bk 32	Private Way
6/12	125 Fort Point Road	1997	Cert 6289, Bk 32	Private Way extends to low water
6/13	129 Fort Point Road	2017	None Found	Private Way- extends to low water
6/33	138 Fort Point Road	2006	Plan 129 of 1979 Book 5574, Pg 432	Private Way- extends to low water, house abuts seawall
5/21	140 Fort Point Road	2015	Book 2855, Pg 157/ 1949	Private Way- extends to low water, house abuts seawall

2 Property Access Options

2.1 Ownership Summary and Issues

The results of the property deeds research indicate there are three access issues along the study area. Table 2, below, summarizes the road ownership category and issues the Town will need to address for abutting property.

TABLE 2

Property Ownership Summary

Road Ownership Type/ Lot Layout	Addresses	Issues
Town Owned Road- Lots extend to edge of road	21-73 Fort Point Road	None, all work can be done on town-owned property
Town Owned Road ROW crossing wall	50 River Road	No easement for maintenance required as wall is Town owned and the ROW preceded the roadway
Private Way- Lots extend to edge	69-119 Fort Point Road	ROE for construction, accept as public way, or permanent easement required
of road		Degree of wall elevation may vary
Private Way- Lots cross private way and extend to Low	125 and 129 Fort Point Road	ROE for construction, accept as public way or permanent easement required
Water		Wall elevation may impact views
		Wall in use by abutters
Private Land- lot line crosses the	138 and 149 Fort Point Road	Can't make repairs unless uses removed
low water		ROE for construction
		Will need permanent easement

Wall elevation may impact views

2.2 Temporary Access: Right of Entry Agreement

The Right of Entry is typically an instrument prepared to provide a limited temporary access to a property. The Right of Entry is not a recorded instrument, is not transferable with a change in ownership, and its use generally terminates when the activity is completed. The advantage of this instrument is its simplicity and relatively short preparation time. An example right of entry agreement is provided in Appendix D.

2.3 Permanent Access: Options

2.3.1 Road Taking

A road taking procedure may be followed to allow unaccepted private ways accepted as public ways. This type of land taking does not require providing compensation to abutters. A road taking would address the access issues for construction, maintenance and allow the use of Chapter 90 funding for future road repairs.

2.3.2 Permanent Easement

A permanent easement is a nonpossessory agreement to use and/or enter onto the real property of another without actually possessing it. The owner of a property grants a defined right or rights to another party for use of a portion of the property. The easement is typically recorded and runs with the property deed until it is formally abandoned by legal instrument. An easement is transferable with the property ownership.

An easement may also be created by prior use, often referred to a prescriptive easement or adverse possession. Easements by prior use are based on the idea that land owners intended to create an easement but forgot to include it in the deed.

2.3.3 License Agreement

Licenses to use property in a nonpossessory manner are similar to but more limited than easements and are, under certain circumstances, transformed into easements by the courts. Some general differences do exist:

- A license is often revocable and is typically limited in duration
- A license is often uninsurable
- A license is typically not recorded
- A license is often vested in one person

Easements are regarded as a broader and more powerful than licenses, and licenses that have any of the properties of an easement may be bound by the higher standards for termination granted by an easement.

3 Recommendations

Data Collection/Site Investigations

The remaining site investigation activities for Fort Point Road includes confirming resource areas for permitting. These activities are short duration and limited in scope.

Access for permitting can be accomplished from the beach front, so no additional access agreements are required to complete the final design drawings.

Construction

The Town needs to have access across the private way, to complete the wall improvements. For the section of wall where there are homes abutting the public way, no additional access agreements are needed. For properties along the private way, obtaining a ROE described in section 2.2 is recommended. For sections where there are private homes abutting the wall, or the property lines cross the private way and extend to low tides, the repair/replacement of the walls may require both a ROE and a permanent easement to facilitate wall replacement and final grading and for future maintenance

Maintenance

A permanent easement on both side over the wall described in section 2.3.2. is recommended along the full stretch of seawall from Bacon Street to Parnell for future maintenance. At this time, the license option described in 2.3.3 is not recommended.

<u>Conclusions</u>

A ROE is recommended for construction for all properties from Bacon Road to Parnell Street. At this time the Town of Weymouth does not want to explore a road taking option. A permanent easement is recommended for all properties from Bacon to Parnell Street for future maintenance and minor repair of the wall following construction.

Attachments:

- 1. Appendix A- Deeds Research, and Map (location of town-owned versus private ways)
- 2. Appendix B- Additional Plans research for private ways
- 3. Appendix C- Road Taking Documents
- 4. Appendix D- Example Right of Entry Agreement
- 5. Appendix E- Draft Easement Descriptions and Draft Easement Plan (Draft Easement Description and Plan will be submitted once the existing conditions drawing is completed)

J:\W\W2176 Weymouth\005 Fort Point Road Seawall MVP\Task 1 Kickoff, Access and Maintenance\Access Memo\Fort Point Road Seawall Repairs Access Memo.docx

Tighe&Bond

APPENDIX A

Bloch	Ę	Owner	Reg Bk	Page	LC Bk	Pg	Cert	Plans	Building	# Street
ഹ	Ч	Edward C Russian	29343	194		I		38, 9540 🗸	161	Fort Point Rd
	7	Richard & Mimmarie Gauthier	21753	549				38, 9540	157	
	m	Thomas & Sandra Newcomb	35856	335				38, 9540	155	
	4	Robert F & Lorelyn A Brooks	7587	33				38, 9540	2	Caldwell St
	12	Sameh A Elgeziry	30803	363				38, 9540	-1	Caldwell St
	21	Kevin M. & Danielle J O'brien	33296	580				38, 8377, 8798, 9540	140	Fort Point Rd
9	33	Gregg Correia	23530	60				8377, 3521B	138	
	13	Cindy A & Richard D Urmston	35390	342				1792B1, 6539-B	129	
	12	Lisa A Nollet & Paula M Ayers	11872	390			169152	10029, 2626-B, 5962-B1	125	
7	2	Richard W & Jean A Walsh			961	194	192194	10029, 10591	111	
	∞	William E & Joann Norton, Trs			889	115	177715	10591, 5976, PP-1509	105	
	თ	David G & Carol Brown, Trs			908	149	181549	10029	91	
	10	Peter V Donegan, Tr			096	32	191832	10029, PP-2909	89	
	11	Michelle Mastrobattista			956	49	191049	10029	87	
	12	Ralph & Cynthia M D'Angelo			902	42	180242	10586A	83	
	13	Peter J & Doris L Flanagan			714	196	142796	10029, 10586A, 5579-B	79	
00	ч	James M Parsons & Cynthia Stebbins			740	60	147860	10029, 6025-B	73	
	7	Amy T Wedge, Tr-Tatreau Realty Tr			987	136	197336	10029	69	
	m	Bruce D Maltby & Diane M Pompeo Malt	þу		913	58	182458	10029	67	
6	ŝ	Debra A McAndrews			705	127	140927	6314-B, 6412-B1	59	
	S	51 Fort Point Road LLC			989	20	197620	10164	51	
	9	Donald E Trudeau, Tr-49 FPR Realty Trust			961	60	192060	10029	49	
	2	Christopher Newman			899	111	179711	6236-B, 6314-B, 6412-B	55	
10	9	Jacob K Stewart, Carly Dube			967	151	193351	10029	43	
	∞	Barbara M & Joseph D Taylor			760	18	151818	10029	39	
	6	James A Delory, Tr			985	111	196911	10029	33	
11	24	Erin E O'Brien			961	16	192016	10526	25	
	4	charles F & Cecelia N Hanrahan, Trs	27449	432				2926-B	21	
	16	Gerald J Wood	34234	377					50	River St

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QUITCLAIM DEED

We, Thomas P. Cunningham and Deanna Cunningham, husband and wife as tenants by the entirety in consideration of FIVE HUNDRED THIRTY FOUR THOUSAND NINE HUNDRED AND 00/100 DOLLARS (\$534,900.00) grant to Kevin M. O'Brien and Danielle J. O'Brien, husband and wife as tenants by the entirety of 140 Fort Point Road, Weymouth, MA with quitclaim covenants

The land with the buildings thereon situated in that part of said Weymouth known as North Weymouth shown as Parcel A on a plan entitled "Plan of Land in (North) Weymouth, Mass.," by Russell H. Whiting, Civil Engineer, dated August 9, 1949, recorded with Norfolk County Registry of Deeds in Book 2855, Page 157, being bounded and described as follows:

NORTHERLY	by Weymouth Fore River;
EASTERLY	by the prolongation of the center line of Caldwell Street so called, a private way, to Weymouth Fore River;
SOUTHERLY	by the westerly half of said Caldwell Street and by land of Walter F. Smith, a total distance of ninety-two and 36/100 (92.36) feet; and
WESTERLY	by land of Evelyn L. Webb for however otherwise bounded or described.

Excluding from the above described parcel so much thereof as is manifest in the Boundary Line Agreement recorded with said Deeds in Book 26012, Page 496.

Subject to and with the benefit of restrictions of record.

Being the same premises conveyed to grantor by deed dated August 29, 2008 and recorded with Norfolk County Registry of Deeds in Book 26012, Page 500.

Under pains and penalties of perjury, we, Thomas P. Cunningham and Deanna Cunningham, being the spouse of Thomas P. Cunningham, release all rights of homestead in the property at 140 Fort Point Road, Weymouth, MA, being conveyed by this deed.

MASSACHUSETTS STATE EXCISE TAX Norfolk Registry of Deeds Date: 07-10-2015 @ 11:40am Ct1#: 692 Doc#: 64771 Eas: \$2 439 60 Copy: \$534 900 00 WILLIAM P. O'DONNELL, REGI: NORFOLK COUNTY REGISTRY OF RECEIVED & RECORDED ELECTRO

Bk 33296 Pg581 #64771

Witness our hand and seal this 10th. day of July, 2015.

Thomas P. Cunningham

unningham

COMMONWEALTH OF MASSACHUSETTS

Norfolk, SS

On this 10th. day of July, 2015, before me, the undersigned notary public, personally appeared, Thomas P. Cunningham, and Deanna Cunningham who proved to me through satisfactory evidence of identification, which was their MA Driver's License, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily as his free act and deed for its stated purpose.

Notary Public: My Commission Expires:

CHRISTINE A. LINDSAY Notary Public Commonwealth of Massachusetts My Commission Expires May 16, 2019 RECEIVED AND RECORDED NORFOLK COUNTY REGISTRY OF DEEDS DEDHAM, MA CERTIFY JULIUM P. O. JONNELL, REGISTER WILLIAM P. O. DONNELL, REGISTER Bk 23530 Ps60 \$33889 03-31-2006 ∂ 09:28a

QUITCLAIM DEED

I, Roberta I. Eliason, of Weymouth Massachusetts, for consideration paid and in full consideration of Six Hundred Forty-Four Thousand Five Hundred and 00/100 (\$644,500.00) dollars grant to Gregg Correta, individually of 138 Fort Point Road, Weymouth, MA with quitclaim covenants,

The land with the buildings thereon now known and numbered 138 Fort Point Road in Weymouth, Norfolk County, Massachusetts, shown as Lot D on a plan of land entitled "Redivision of land of 'Fort Point' Weymouth, Mass. Scale 1'= 30" October 31, 1978 Acme Associates, Inc. Civil Engineers South Weymouth Mass." Said Lot D contains 7237 square feet more or less according to said plan. Said plan is recorded with Norfolk Registry of Deeds as Plan No. 129 of 1979 in Book 5574, Page 432. For reference to title see deed at Book 5350 Page 693 and Book 8715, Page 318 except that parcel conveyed by deed at Book 11988, Page 443

Subject to Right of Way as shown on said Plan.

For reference to title see deed recorded with Norfolk County Registry of Deeds at Book 16766, Page 213.

Witness my hand and seal this 31st day of March, 2006.

Roberta I. Eliason



100051 417460

THE COMMONWEALTH OF MASSACHUSETTS ,55

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On this 31st day of March, 2006 before me, the undersigned notary public, personally appeared , proved to me through satisfactory evidence of identification, which was/were

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, P drivers license

to be the person whose name is signed on the preceding document and acknowledged to me that she signed it voluntarily for its stated purposes.

Notary Public: Janice A. Wilson My Commission Expires: 09-05-08

Box 52

Janice A. Wilson Notary Public Comm. Exp: 9/5/2008 Commonwealth of MA

38 Fort Point Bd. Wey nouth, MA

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Bk 35390 Pg342 #801 08-25-2017 @ 09:32a

 MASSACHOSETTS
 STATE
 EXCISE
 TAX

 Norfolk
 Registry
 of
 Deeds

 Date:
 08-25-2017
 0
 09:32am

 Ctl#:
 181
 Doc#:
 80105

 Fee:
 \$4,240.80
 Cons:
 \$930,000.00

After Recording Return To: Cindy A. Urmston and Richard Urmston 129 Fort Point Road Weymouth, MA 02191

Quitclaim Deed

We, Natesa G. Pandian and Kannagi Pandian, a husband and wife, of Weymouth, MA, for consideration paid and in full consideration of NINE HUNDRED THIRTY THOUSAND AND 00/100 DOLLARS (\$930,000.00), hereby grant to Cindy A. Urmston and Richard D. Urmston, a wife and husband, as Tenants by the Entirety, now of 129 Fort Point Road, Weymouth, MA 02191, with QUITCLAIM COVENANTS:

A certain parcel of land with the buildings thereon situated in the North part of Weymouth, Norfolk County, Massachusetts, and bounded and described as follows:

SOUTHERLY:	by land of W. H. Castle, forty-three (43) feet;
WESTERLY:	by land of Hannah C. Cary, by a line running Northerly from Castle land, one hundred thirty-three (133) feet to a wall and thence continuing Northerly across the beach to low water mark;
EASTERLY:	by Parnell Street by a line running from the Northeast corner of said Castle land, one hundred twenty-two (122) feet to said wall and continuing Northerly to said low water mark; and
NORTHERLY:	by said wall, forty-five (45) feet and eight (8) inches.

Subject to easements, restrictions, and rights of way insofar as same are in full force and effect and applicable hereto.

For grantor's title, see deed dated September 15, 2006 and recorded on September 18, 2006 in the Norfolk County Registry of Deeds at Book 24082, Page 418.

Under the pains and penalties of perjury, We, the Grantors named herein, do hereby voluntarily release any and all rights of homestead, if any, as set forth in M.G.L. Chapter 188, and state that there are no other persons or person entitled to any homestead rights.

QUITCLAIM DEED

Bk 35390 Pg343 #80105

Executed under seal this <u>8</u>th day of <u>August</u>, 2017. 8 cm

Natesa G. Pandian

Kannazi Pandian Kannagi Pandian

STATE OF CALIFORNIA

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the wethfolness, accuracy, or validity of that document.

COUNTY OF Orange

On this β day of August, 2017, before me, the undersigned notary public, personally appeared the above-named, Natesa G. Pandian and Kannagi Pandian, proved to me through satisfactory evidence of identification, which were <u>Alagesa L. Pandiane Kannagi Pandian</u>, to be the person(s) who signed the preceding or attached document in my presence, and acknowledged to me that he/she/they signed it voluntarily for its stated purpose.

Notary Public Signature

My Commission Expires: 06/16/2019



BK11872PG390

QUITCLAIM DEED

DECHINA MA

ERTER BARRY T HANNON, REGISTER

Lisa A. Nollet of Weymouth, Massachusetts for consideration of ONE and 00/100 (\$1.00) DOLLAR

Grant with quitclaim covenants to Lisa A. Nollet and Paula M. Ayers, as joint tenants, of Weymouth, Massachusetts

A certain parcel of land with the buildings thereon known as 125 Fort Point Road, Weymouth, Norfolk County, Massachusetts, all more particularly described in Exhibit "A" attached hereto and made a part hereof.

Witness my hand and seal this 23rd day of June, 1997. sa A. Nollet Witness:

COMMONWEALTH OF MASSACHUSETTS

Norfolk ss;

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June 23, 1997

Then personally appeared the above named Lisa A. Nollet and acknowledged the foregoing instrument to be her free act and deed, before me.

Notary Public: Willfam J. McNulty, Jr. Commission expires: 4/30/2004

MAIL TO: Ms. Lisa Nollet Ms. Paula Ayers 125 Fort Point Road Weymouth, MA 02191

BK11872PG391

EXHIBIT "A"

A certain parcel of land with the buildings thereon situated at 125 Fort Point Road in that part of Weymouth known as North Weymouth, Norfolk County, Massachusetts, bounded and described as follows:

Beginning at the southeasterly corner of the premises herein described at a corner of land now or formerly of J.L. Bates and land now or formerly of W.H. Castle thence running

by said land of Castle, 38.00 feet in a straight line EASTERLY to land now or formerly of Myrtle N. Barr; thence turning and running

NORTHERLY 134.00 feet, more or less, by land of said Barr to a wall, thence continuing in the same direction to low water mark; thence turning and running

by said low water mark, 38.00 feet to a point thence WESTERLY

turning and running SOUTHERLY by said Fort Point Road and said land of Bates, 144.00 feet to the point of beginning.

Subject to a driftway across the northerly end of the lot and a provision that no building shall be built north of said driftway.

Together with the right and easement to use Fort Point Road from the above-described premises to a public street and public utilities for all purposes for which streets are commonly used, including the installation and use of all utilities.

For title see deed recorded Norfolk Deeds in Book 7870, Page 687 and deed of Andrea B. Sutton recorded herewith.

DOC. NO. 1,047,856 CIT. NO. 169152 TRANSFER CERTIFICATE OF TITLE

From Certificate No. 160277, Originally Registered August 2,2001 in the Registry District of Norfolk County. THIS IS TO CERTIFY that PAULA M. AYERS, LISA A. NOLLET, as joint tenants, 123 Fort Point Road, Weymouth, Massachusetts 02191,

the owner(s) in fee simple,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 73 on Land Court Plan No.8371B filed with Certificate No.6289, Book 32.

The above described land is subject to and has the benefit of the rights as set forth in Document No.14794, so far as applicable.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS KARYN F, SCHEIER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the third day of December in the year two thousand and four

at 1 o'clock and 59 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorder.

DOC. NO. 1,341,914 CU: NO. 192194 TRANSFER CERTIFICATE OF TITLE

From Certificate No. 170841, Originally Registered August 10,2005 in the Registry District of Norfolk County.

Weymouth, Massachusetts 02191, MICHAEL R. WALSH, 29 Cedarwood Road, Hanover, Massachusetts 02339, THIS IS TO CERTIFY that RICHARD W. WALSH, JR., JEAN A. WALSH, 111 Fort Point Road,

the owner(s) in fee simple,

to said Richard and Jean of a life estate and to said Michael of the remainder in fee,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 69B on Land Court Ptan No.8371H filed with Certificate No.40926 Book 205 and lots 70 and 71 on Land Court Plan No.8371B filed with Certificate No.6289 Book 32

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS JUDITH C. CUTLER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the thirteenth day of November in the year two thousand and fifteen

at 10 o'clock and 51 minutes

Attest, with the Seal of said Court,

William P. O'Donnelle Assistant Recorders

Land Court Case No. 8371

21

Doc. No. 1,163,270 Cff. No. 177715 TRANSFER CERTIFICATE OF TITLE

From Certificate No. 174557, Originally Registered April 20,2007 in the Registry District of Norfolk County. THIS IS TO CERTIFY that WILLIAM E. NORTON, JR., JOANN NORTON, Trustees of NORTON REALTY TRUST under a General Laws Chapter 184, Section 35, registered as Document No. 1163271, 105 Fort Point Road, Declaration of Trust dated August 5,2008 as set forth in Trustee Certificate executed pursuant to Weymouth, Massachusetts 02191,

the owner(s) in fee simple,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lots 68 and 69A on Land Court Plan No.8371H filed with Certificate No.40926, Book 205.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS KARYN F. SCHEIER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the sixth day of November in the year two thousand and eight

at 9 o'clock and 18 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorder,

Doc. No. 1,214,726 Cff. No. 181549 TRANSFER CERTIFICATE OF TITLE

From Certificate No. 99700, Originally Registered May 12,1975 in the Registry District of Norfolk County. THIS IS TO CERTIFY that DAVID G. BROWN, CAROL A. BROWN, Trustees of BROWN REALTY TRUST under a Declaration of Trust dated November 22,2010 as set forth in Trustee Certificate executed pursuant to General Laws Chapter 184, Section 35, registered as Document No. 1214727, 91 Fort Point Road, Weymouth, Massachusetts 02191,

the owner(s) in fee simple,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 67 on Land Court Plan No.8371B filed with Certificate No.6289, Book 32.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS KARYN F, SCHEIER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the third day of December in the year two thousand and ten

at 10 o'clock and 12 minutes

Aftest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorder.

Doc. No. 1,338,115 Cff. No. 191832 TRANSFER CERTIFICATE OF TITLE

From Certificate No. 85517, Originally Registered August 30,1968 in the Registry District of Norfolk County. THIS IS TO CERTIFY that PETER V. DONEGAN, Trustee of DONEGAN FAMILY TRUST under a Declaration of Trust dated September 14,2015 and registered in Norfolk Registry District of the Land Court as Document No.1338116, 89 Fort Point Road, Weymouth, Massachusetts 02191,

the owner(s) in fee simple,

with power to sell, mortgage, lease, etc., See Document,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 66 on Land Court Plan No.8371B filed with Certificate No.6289, Book 32.

The above described land is subject to and has the benefit of the rights as set forth in Document No.14818.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS JUDITH C. CUTLER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the eighteenth day of September in the year two thousand and fifteen

at 12 o'clock and 11 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorden

Doc. No. 1,331,139 Cff. No. 191049 TRANSFER CERTIFICATE OF TITLE

From Certificate No. 162587, Originally Registered July 1,2002 in the Registry District of Norfolk County.

THIS IS TO CERTIFY that MICHELLE MASTROBATTISTA, 87 Fort Point Road, Weymouth, Massachusetts 02191,

the owner(s) in fee simple,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 65 on Land Court Plan No.8371B filed with Certificate No.6289, Book 32.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS JUDITH C. CUTLER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the nineteenth day of June in the year two thousand and fifteen

at 10 o'clock and 9 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorder.

DOC. No. 1,197,488 Ctf. No. 180242 TRANSFER CERTIFICATE OF TITLE

From Certificate No. 105950, Originally Registered January 25,1978 in the Registry District of Norfolk County. THIS IS TO CERTIFY that RALPH D'ANGELO, CYNTHIA M. D'ANGELO, husband and wife, as tenants by the entirety, 83 Fort Point Road, Weymouth, Massachusetts 02188,

the owner(s) in fee simple,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 64A on Land Court Plan No.8371J filed with Certificate No.45380, Book 227.

The above described land is subject to an easement as set forth in Document No.699379.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS KARYN F. SCHEIER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the thirteenth day of April in the year two thousand and ten

at 10 o'clock and 4 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorder.

Trausfer Certificate of Title

			Ne Book 714 Pe	o. 142796 196 196
Fiom	Transfer "	Certificate No.	141689) Originally Registered March 1 141690)	0,1994,in
Registra	ation Book	709	Paga s 89 and 90 for the Registry District of No.	rfolk County.
This	is in Cer	tify that	Pater J.Flanagan and Doris L.Flanagan,h	usband

of Weymouth in the County of Norfolk and Commonwealth of Massachusetts.

as tenants by the entirety, are the owners in fee simple

of that certain percei of land situate in WEYMOUTH

in the County of Norfolk and said Commonwealth, described as follows:

Said parcel comprises lots numbered 61,62 and 63 on a plan drawn by Russell II.Whiting, Civil Engineer, dated June 26,1922, as approved by the Land Court, filed in the Land Registration Office as No.8371B, a copy of a portion of which is filed in Norfolk Registry District with Certificate No.6289, Book 32; and lot numbered 64B on a plan drawn by Russell H.Whiting, Surveyor, dated February 4, 1952, as approved by the Land Court, filed in Land Registration Office as No.8371J, a copy of a portion of which is filed in Norfolk Registry District with Certificate No.45380, Book 227.

Said lots numbered 63 and 64B are subject to and have the benefit of the rights as set forth in Document No.14710,so far as applicable.

And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the little of said — Peter J.Flanagan and Doris L.Flanagan

to said land is registered under sold chapter, subject, however, to any of the encombrances mentioned in Section Forty six of said Chapter, which may be subsisting, and subject also as aforesaid and to any oncombrance(s) noted on the attached memorandum.

	WITNESS, ROBERT V.	CAUCHON, C	hiel Justice	of the Land C	loart, at	Dedham, in said Cou	nty of Norfolk,
the	first	ដើង	y af	August		in the year ni	neteen hundred and
ine	sty-four	, at	1	s'clock and	21	minutes in the	afternoon.
	Attest, with	the Seal of sal	d Court				

03-04 Assistant Recorder.

Form No. 108

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And it is further certified that said land is under the operation and provisions of Chapter 183 of the Chapter 193 of the land Corr. All States 193 of the Chapter 193 of the land Corr. States 193 of the land land is registered under said chapter, subject, however, to any of the encombrance mentioned in Section rysis of said Chapter, which may be subsisting, and subject also es of oresaid-and-or or of the land county of the land county. Filed at the land count of the land count, filed and the land count of the land count, filed and the land county of the second land situate in the land count of the land count of the land count of the land count, filed at the land count, which may be substating, and subject also es of oresaid-and to a substating. And it is further certified that said land is under the operation and provisions of Chapter 185 of the Centeral Laws, at the land count, subject how call the land count of the land count, subject how call the land count, subject how call the land count of the land		0 221			· ·
No. 14767 Book 740 Page Toron Transfor Certificate No. 145965, Originally Registered December 13:1595, bit signation Book 730 Page 166 for the Registery District of Norfolk County. Liftis is fur Certify that James Millard Parsonu and Cynthia Stebbins. Second Strate State Stebbins and State Stebbins and Commonwealth of Massachusetts is tenants by the entirety, are the owners in fee simple that certain parcel of land situate in WEYMOUTH the County of Norfolk and said Commonwealth, described as follows: Said parcol is shown as lot numbered 49 on a plan drawn by Russell H. Inter Land Registration Office as No.83718, a copy of a portion of which is lived in Norfolk Registry District with Certificate No.6288, Book 32. And it is further certified that said land is under the operation and provisions of Chapter 185 of the Center Laws, d that the tile of said James Millard Parsons and Cynthia Stebbins said land is registered under said chapter, subject, however, to any of the encumbrances mentioned in Section rty sit of fauld Chapter, which may be subsisting, and subject also es aforesaid-soft-o any encumbrances in the substating of Cutober suited fauid Chapter, which may be subsisting, and subject also es aforesaid-soft-o any encumbrances mentioned in Section rty sit of fauid Chapter, which may be subsisting, and subject also es aforesaid-soft-o any encumbrances (s) noted on subcheff Hereder Hereder Hereder Chapter, a to o Cutober in the year insteen humbed and another menomadus. PETER W. KLIBORN, Wronsex MONDERMENT CAUCHENT Chapter Cutoff Cutober in the year insteen humbed and another instruction at 10 oclock and 25 minutes in the forencon. Attex, with the Seal of said Court, at Do clock and 25 minutes in the forencon.	Trans	ster Certificate 1	of Title	8	ą.,
Transfor Certificate No. 145966, Originally Registered December 13, 1995, in tegistration Book 73 Page 166 As the Registry District of Nurfolk County. Ultis is the Ultriffy that unaband and wire, both James Millard Parsons and Cynthia Stabbins. of Waymouth in the County of Norfolk and Commonwealth of Massachusetts. s tenants by the entirety, are the owners interced of hand situate in WEYMOUTH are the owners in fee simple third, cyclid Bogiese, dated June 24, 1922, as approved by the Land Court, filed in the Land Registry District with Certificate No.6289, Book 32. Said parcel is shown as lot pumbered 49 on a plan drawn by Russell filed in Norfolk Registry District with Certificate No.6289, Book 32. And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, at the land Same Millard Parsons and Cynthia Stebbins side land is registered under said chapter, subject, however, to any of the encumbrances mentioned in Section ry six of said Chapter, which may be sublishing, and subject also se storessid and-to any encumbrance() octed on cauched menture. prover the residence NULL Prover, The day of the Color in the year inducen hundred and cauched menture. prover the day of cocber in the year inducen hundred and court, since in the forencon. Attext, with the Scal of said Court, at Color at the forencon. 25			Во	· No ok 740 Pa	». 147860 ge 60
Legistration Book 730 Page 166 And the Registry District of Norfok County. List is to Curtify the mathematical and wife, both James Millard Parsons and Cynthia Stebbins. of Weymouth in the County of Norfolk and Commonwealth of Massachusetts. s tenants by the entirety. are the owners in fee simple the county of Norfolk and said Commonwealth described as follows: Said parcel is shown as lot numbered 49 on a plan drawn by Fussell H. Said parcel is shown as lot numbered 49 on a plan drawn by Fussell H. is in Norfolk Registry District with Certificate No. 5289, Book 32. And it is further certified that said land is under the operation and provisions of Chapter 185 of the Centeral Laws, at the due to the encombrance mentioned in Section ry six of said Chapter, which may be sublising, and subject also se storessid and-to any encombrance() cord on cauchy for Extensions. stat land is registered under said chapter, subject, however, to any of the encombrances mentioned in Section ry six of said Chapter, which may be sublising, and subject also se storessid and-to any encombrance() cord on cauchy for Extensions. PTER W. PTER M. 10 October in the year inducen hundred and anoty of Norfolk. first day of October in the year inducen hundred and norty-six, with the Scal of said Court, at Do Norfolk and 25 finutes in the forencon.	From Transfer Configate No	145966, Original	ly Registered	December	13;1995, in
Unistist to Certify: the units of the county of Norfolk and Commonwealth of Massachusetts. of Neymouth in the County of Norfolk and Commonwealth of Massachusetts. s tenants by the entirety, are the owners in fee simple the county of Norfolk and said Commonwealth, described as follows: Said parcel is shown as lot numbered 49 on a plan drawn by Pussell H. htting,Civil Engineer, dated June 28, 1922, as approved by the Land Court, Filed in Norfolk kagistery District with Certificate No.6229, Book 32. And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, at the the like of said James Millard Parsons and Cynthia Stebbins said his registered under said chapter, subject, however, to any of the encumbrance mentioned in Section my six of raid Chapter, which may be subsisting, and subject also se sloressid-and-to any encumbrance() cords of subced binners. with the Stald State Millard Parsons Sectioner, st Decham, in said County of Norfolk. first day of October in the year inducet hundred and inverse. Norfolk Marking Court in the year inducet hundred and incty-six at 10 o'clock and 25 minuter in the foremoon.	Registration Book 730	Page 166	for the Registry	District of Norf	olk County.
If Weymouth in the County of Norfolk and Commonwealth of Massachusetts, s tenants by the entirety, are the owners in fee simple that certain purced of land situate in WEYMOUTH act county of Norfolk and said Commonwealth, described as follows: Said parcel is shown as lot numbered 49 on a plan drawn by Russell H. iting, Civil Engineer, dated June 26, 1922, as approved by the Land Court, File n the Land Registration Office as No.8371B, a copy of a portion of which is idw in Norfolk Registry District with Certificate No.6289, Book 32. And it is further certified that suid land is under the operation and provisions of Chapter 185 of the Central Laws, ut that the life of said James Millard Parsons and Cynthia Stebbins said and is registered under said chapter, subject, however, to any of the encombrances mentioned in Section my six of said Chapter, which may be sublisting, and subject also as aforesaid and-to any encombrance(s) noted on subchy moreoradum. PETER W.XILBORN WUNNARS, RODERT & CANCHER Chaf Justice of the Land Court, at Dedham, in said County of Norfolk, first day of October in the year nineteen hundred and incty-six of said Chapter, which may be sublisting, and subject also as aforesaid and-to any encumbrance(s) noted on subchy dimenormadum. PETER W.XILBORN Att 10 o'clock and 25 minutes in the forenoon. Attext, with the Seal of said Court, at Dedham, in said County of Norfolk, first May of October Attext, with the S	This is to Certify that	James Millard Par:	ions and Cyn	thia Stebbi	ns,
Maymouth in the County of Norfolk and Commonwealth of Massachusents. s tenants by the entirety. are the owners in fee simple that certain parcel of land situate in WEYMOUTH state County of Norfolk and said Commonwealth, described as follows: Said parcel is shown as lot numbered 49 on a plan drawn by Russell ff. hiting, Civil Engineer, dated June 26, 1922, as approved by the Land Court, filed in the Land Registration Office as No. 83718, accey of a portion of which is ited in Norfolk Registry District with Certificate No. 6289, Book 32. And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, at that the tile of said James Millard Parsons and Cynthis Stebbins said land is registered under said chapter, subject, however, to any of the encumbrances mentioned in Section ry six of said Chapter, which may be subsisting, and subject also as aforesaid-and-to any encumbrance(s) noted on a statechy memorandum. PETER W. XILBORN WEXALLORN October In the year ninsteen hundred and netword 25 minutes in the forencon. Attest, with the Seal of said Court.					
Meymouth in the County of Norfolk and Commonwealth of Massachusetta, stenants by the entirety, are the owners infectingle that certain parced of land situate in MEYMOUTH are the owners infectingle the County of Norfolk and said Commonwealth, described as follows: Said parceol is shown as lot numbered 49 on a plan drawn by Russell H. htting, Civil Engineer, dated June 26, 1922, as approved by the Land Court, filed the Land Court, filed htting, Civil Engineer, dated June 26, 1922, as approved by the Land Court, filed in Norfolk Registry District with Certificate No. 6289, Book 32.				******	
s tenents by the entirety, are the owners infectingle that centain parcel of hand situate in WEYMOUTH the County of Norfolk and said Commonwealth, described as follows: Said parcel is shown as lot numbered 49 on a plan drawn by Russell 4. htting, Civil Engineer, dated June 26, 1922, as approved by the Land Court, filed n the Land Registration Office as No.83718, a copy of a portion of which is iled in Norfolk Registry District with Certificate No.6289, Book 32. And it is further certified that said land is under the operation and provisions of Chapter 165 of the Ceneral Laws, at that the tile of said James Millard Parsons and Cynthia Stebbins said land is registered under said chapter, subject, however, to any of the encumbrances mentioned in Section ry six of said Chapter, which may be subsisting, and subject also as aforesaid and to any encumbrance(s) toted on a stuched memorandum. PTER W. KILBORN. WTNESS ROHENT CANCHENC Chief Justice of the Land Court, at Dedham, in said County of Norfolk. first day of October in the year nineteen hundred and nety-six of x and the Seal of said Court. Attest, with the Seal of said Court.	of Weymouth in the	e County of Norfold	and Co	mmonw c alth of	Massachusetts,
the county of Norfolk and said Commonwealth, described as follows: Said parcel is shown as lot numbered 49 on a plan drawn by Russell ff. hiting,Civil Engineer, dated June 26, 1922, as approved by the Land Court, filed in the Land Registration Office as No.83718, a copy of a portion of which is iled in Norfolk Registry District with Certificate No.6289, Book 32. And it is further certified that said land is under the operation and provisions of Chapter 185 of the Ceneral Laws, at the tile of said James Millard Parsons and Cynthia Stebbins said land is registered under said chapter, subject, however, to any of the encombrances mentioned in Section ry-six of said Chapter, which may be subsisting, and subject also as aforesaid and-to any encumbrance(s) noted on attached memorandum. PTERE W, XILBORN, WINNERS, KOHENY, CANECHONY, Chief Justice of the Land Court, at Dedham, in said County of Norfolk, first day of October in the year mineteen bundred and netw-six of said Court, Attest, with the Seal of said Court, Attest, with the Seal of said Court,	as tenants by the entirety,	*	ste	the owners	in fee simple
And it is further certified that said Iand is under the operation and provisions of Chapter 185 of the Ceneral Laws, and the tilt of said James Millard Parsons and Cynthia Stebbins said land is registered under said chapter, subject, however, to any of the encumbrances mentioned in Section rty-six of said Chapter, which may be subsisting, and subject also as aforesaid-and-to any encumbrance(s) noted on a stuched menorandum.	of that certain parcel of land situate in	WEYMAHTH		~	
Said parcel is shown as lot numbered 49 on a plan drawn by Russell H. hiring, Civil Engineer, dated June 26, 1922, as approved by the Land Court, filed n the Land Registration Office as No.8371B, a copy of a portion of which is iled in Norfolk Registry District with Certificate No.6289, Book 32. And it is further certified that said land is under the operation and provisions of Chapter 185 of the Ceneral Laws, ad that the title of said James Millard Parsons and Cynthia Stebbins' said land is registered under said chapter, subject, however, to any of the encumbrances mentioned in Section rty-six of said Chapter, which may be subsisting, and subject also es aforesaid and-to any encumbrance(s) coted on satuched memorandum. PETER W. KILBORN, WUNNESK, ROBERY - Chief Justice of the Land Court, at Dedham, in said County of Norfolk, first day of October in the year nineteen hundred and netty-six , at 10 o'clock and 25 minutes in the foremoon. Attest, with the Scal of said Court,	in the County of Norfolk and said Comm	ionwealth, described as follow	5: Če	c +	
And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, at that the title of said James Millard Parsons and Cynthia Stebbins said land is registered under said chapter, subject, however, to any of the encumbrances mentioned in Section rty-six of said Chapter, which may be subsisting, and subject also as aforesaid and to any encumbrance(s) noted on a attached memorandum. PETER W. KILBORN WINNESS, ROBERT & CAUCHON; Chief Justice of the Land Court, at Dedham, in said County of Norfolk, first day of October in the year nineteen hundred and nety-six at 10 o'clock and 25 minutes in the forencon. Attest, with the Seal of said Court,	Whiting,Civil Engineer,date in the Land Registration Of filed in Norfolk Registry D	ed June 26,1922,as a ffice as No.8371B,a District with Certif	opproved by t copy of a po ficate No.628	the Land Co Ortion of w 19,Book 32.	urt, Filed hich is
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And it is further certified that said land is under the operation and provisions of Chapter [85 of the General Laws, ad that the tuile of said James Millard Parsons and Cynthia Stebbins" said land is registered under said chapter, subject, however, to any of the encumbrances montioned in Section rty-six of said Chapter, which may be subsisting, and subject also as aforesaid and to any encumbrance(s) noted on e attached memorandum. PETER W. KILBORN WITNERS, ROBERT V. CAUCHONT Chilaf Justice of the Land Court, at Dedham, in said County of Norfolk, first day of October in the year nineteen hundred and nety-six at 10 o'clock and 25 minutes in the forenoon. Attest, with the Seal of said Court,					(M. 19) 10. Million
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And it is further certified that said land is under the operation and provisions of Chapter 185 of the General Laws, and that the title of said James Millard Parsons and Cynthia Stebbins said land is registered under said chapter, subject, however, to any of the encumbrances mentioned in Section rty-six of said Chapter, which may be subsisting, and subject also as aforesaid and to any encumbrance(s) noted on e attached memorandum. PETER W.KILBORN WITNESS, ROBERT & CAUCHON, Chief Justice of the Land Court, at Dedham, in said County of Norfolk, e first day of October in the year nineteen hundred and inety-six at 10 o'clock and 25 minutes in the forenoon. Attest, with the Seal of said Court,				20 A	- A
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e alluched memorundum. PETER W. KILBORN, WITNESS, ROBERT-V. CAUCHON, Chief Justice of the Land Court, at Dedham, in said County of Norfolk, e first day of October in the year nineteen hundred and nety-six , at 10 o'clock and 25 minutes in the forenoon. Attest, with the Seal of said Court,	forty-six of said Chapter, which may be	subsisting, and subject also-	aforesaid-and-to	any encumbran	cc(s) noted on
PETER W. KILBORN, WITNESS, ROBERT-V. CAUCHON, Chief Justice of the Land Court, at Dedham, in said County of Norfolk, e first day of October in the year nineteen hundred and nety-six , at 10 o'clock and 25 minutes in the forenoon. Attest, with the Seal of said Court,	the attached memorandum.				
PETER, W. KLLBORN, WITNESS, ROBERT-V. CAUCHON, Chief Justice of the Land Court, at Dedham, in said County of Norfolk, e first day of October in the year nineteen hundred and nety-six , at Attest, with the Seal of said Court,					
e first day of October in the year nineteen hundred and nety-six , at 10 o'clock and 25 minutes in the forenoon. Attest, with the Seal of said Court,	WITNESS, ROBERT-V. CAUCHON,	Chief Justice of the Land Cor	art, at Dedham, in s	aid County of N	orfolik,
Attest, with the Seal of said Court,	the first da	y of October	in t	be year nineteen	bundred and
Attest, with the Seal of said Court,	ninety-six , at	10 o'clock and	25 minu	tes in the fore	encon.
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Address of Owner (s): 73 Fort Point Rd., Weymouth, MR 02191

Doc. No. 1, 393,730 Ctf. No. 197336 FRANSFER CERTIFICATE OF TITLE

From Certificate No. 197335, Originally Registered January 12,2018 in the Registry District of Norfolk County. THIS IS TO CERTIFY that AMY T. WEDGE, Trustee of TATREAU REALTY TRUST under a Declaration of Trust 184, Section 35, registered as Document No. 1393731, 37 Millwood Street, Unit 2, Dorchester, Massachusetts 02124, DOUGLAS M.TATREAU, ELLEN P.TATREAU, 67 Point Road, Weymouth, Massachusetts 02191, dated November 29,2017 as set forth in Trustee Certificate executed pursuant to General Laws Chapter

the owner(s) in fee simple,

to said Douglas and Ellen of a life estate and to said Amy, Trustee as aforesaid of the remainder in fee,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lots 47 and 48 on Land Court Plan No.8371B filed with Certificate No.6289, Book 32.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS JUDITH C. CUTLER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the tweifth day of January in the year two thousand and eighteen

at 9 o'clock and 13 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorder.

Doc. No. 1,227,609 Ctf. No. 182458 TRANSFER CERTIFICATE OF TITLE

From Certificate No., 166162, Originally Registered October 28,2003 in the Registry District of Norfolk County. THIS IS TO CERTIFY that BRUCE D. MALTBY, DIANE M. POMPEO-MALTBY, husband and wife, as tenants by the entirety, 67 Fort Point Road, Weymouth, Massachusetts 02191,

the owner(s) in fee simple,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 46 on Land Court Plan No.8371B filed with Certificate No.6289, Book 32

The above described land is subject to and has the benefit of the rights as set forth in Document No.15236.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS KARYN F. SCHEIER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the seventh day of June in the year two thousand and eleven

at 1 o'clock and 17 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorder.



Transfer Certificate of Title

ta	Book	ND. 140927 705 Page 127
From Pransfer Certificate No.	126340, Originally Registered	May 19,1997, in
Registration Book 632	Page 140 for the Registry	District of Norfolk County.
This is to Certify that and wife, both	David M.McAndrows and Debra A.M	icAndrews, husband

of Weymouth in the County of Norfolk and Commonwealth of Massachusetta,

as tenants by the entirety, are

of that certain parcel of land situate in WEYMOUTH

in the County of Norfolk and said Commonwealth, described as follows:

Said parcel comprises lot numbered 35^B on a plan drawn by Russell H. Whiting, Civil Engineer, dated June 6,1926, as approved by the Land Court, filed in the Land Registration Office as No.8371C, a copy of a portion of which is filed in Norfolk Registry District with Certificate No.14530, Book 73; and lot numbered 36 on a plan drawn by Russell H. Whiting, Civil Engineer, dated June 26,1922, as approved by said Court, filed in the Land Registration Office as No.83718, a copy of a portion of which is filed in Norfolk Registry District with Certificate No.6289, Book 32.

Said lot numbered 35^{10} is subject to and has the benefit of the rights, etc.as set forth in Document No.14719,so far as applicable.

Said lot numbered 36 is subject to rights, easements, etc., set forth in Document No.14722.

And it is further certified that said had is under the operation and provisions of Chapter 18h of the General Laws, and that the title of said — David M.McAndrewa and Debra A.McAndrews

to said land is registered under said chapter, subject, to vever, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may be subsisting, and subject also as aforesaid and to any encumbrance(s) noted on

the attached memorandum: ROBERT V.CAUCHON,

Wrness, TOIN-E-FENTON, R. Chief Justice of the Land Court, at Dedham, in said Courty of Norfolk, the fifteenth day of November in the year minetees hundred and ninety-three , at 9 o'clock and 17 minutes in the forencon. Attest, with the Seal of said Court,

Assistant Recorder.

the owner a In fee simple

Formi No. 106

Doc, No, 1,396,691 Ctf. No, 197620 TRANSFER CERTIFICATE OF TITLE From Certificate No. 127758, Originally Registered December 10,1987 in the Registry District of Norfolk County. THIS IS TO CERTIFY that 51 FORT POINT ROAD LLC, a Massachusetts limited liability company of Wellesley in the County of Norfolk and Commonwealth of Massachusetts, 104 Overbrook Drive, Wellesley, Massachusetts 02482,

the owner(s) in fee simple,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 34A on Land Court Plan No.8371C filed with Certificate No.14530, Book 73.

The above described land is subject to and has the benefit of the rights as set forth in Document No.14713, so far as now in force and applicable.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS JUDITH C. CUTLER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the ninth day of March in the year two thousand and eighteen

at 10 o'clock and 43 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorder-

Doc, No. 1,340,547 Ctf. No. 192060 TRANSFER CERTIFICATE OF TITLE From Certificate No. 100529, Originally Registered September 12,1975 in the Registry District of Norfolk County. THIS IS TO CERTIFY that DONALD E. TRUDEAU, Trustee of 49 FPR REALTY TRUST under a Declaration of Trust 184, Section 35, registered as Document No. 1340548, 15 Curtis Circle, Weymouth, Massachusetts 02189. dated October 15,2015 as set forth in Trustee Certificate executed pursuant to General Laws Chapter

the owner(s) in fee simple,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 33 on Land Court Plan No.8371B filed with Certificate No.6289, Book 32.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS JUDITH C. CUTLER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the twenty-third day of October in the year two thousand and fifteen

at 11 o'clock and 31 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorder,

DOC. NO. 1,190,301 Cff. No. 179711 TRANSFER CERTIFICATE OF TITLE

From Certificate No.,171993, Originally Registered February 6,2006 in the Registry District of Norfolk County. THIS IS TO CERTIFY that CHRISTOPHER J. NEWMAN, 55 Fort Point Road, Weymouth, Massachusetts 02191,

the owner(s) in fee simple,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 85 on Land Court Plan No.8371M filed with Certificate No.179711, Book 899

So much of the above described land as is included within the limits of lot 34B, shown on plan filed with Certificate No.14530, is subject to and has the benefit of the rights and restrictions set forth in Document No.14713, so far as applicable.

So much of the above described land as is included with the limits of lot 35A, shown on said plan filed with Certificate No.14530 is subject to and has the benefit of the rights and restrictions set forth in Document No.14719, so far as applicable. So much of the above described land as is included within the limits of lot 37 shown on plan filed with Certificate No.6289, is subject to and has the benefit of the rights and restrictions set forth in Document No.30326, so far as applicable

with Certificate No.40855, and lot 82, shown on plan filed with Certificate No.139605 is subject to and So much of the above described land as is included within the limits of lots 38A shown on plan filed has the benefit of the rights and restrictions set forth in Document No 28422

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter. And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

Doc. No. 1,354,449 Ctf. No. 193351 TRANSFER CERTIFICATE OF TITLE

From Certificate No. 190500, Originally Registered March 24,2015 in the Registry District of Norfolk County. THIS IS TO CERTIFY that JACOB K. STEWART, CARLY DUBE, as joint tenants, 43 Fort Point Road, Weymouth, Massachusetts 02191,

the owner(s) in fee simple.

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 21 on Land Court Plan No.8371B filed with Certificate No.6289, Book 32.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 135 of be subsisting

WITNESS JUDITH C. CUTLER, Chief Justice of the Land Court at Dedham, in said County of Norfolk,

the third day of June in the year two thousand and sixteen

at 2 o'clock and 58 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorder,

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From	Transfer	Certificate No.	12	1376 , Origina	lly Registere	d	Augus	1£ 20	1986 , ir
Registratio	n Book	622	Page	176	for the R	legistry Di	strict of t	vorfolk	County.
This i	s to Cert	ify that	William	C.Raymer,	Mary D.R.	aymer,B	arbara	M.T.	y lor
and Jos	eph D.Tayl	lor,all		Sec.	j.	1		1	12
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of	Reymouth	in the	County of	Norfolk		and Comm	ionwealth	t of Ma	ssachusetts
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in the Cour	ity of Norfolk	and said Commi	onwealth, des	cribed as follow	W5:	5	1		14
Russell Court,f of whic	Said parce H.Whiting iled in th h is filed	el is shown g.Civil Eng ne Land Reg d in Norfol	as lots ineer,da istratio: k Regist	numbered ted June 2 n Office a ty Distric	19 and 2 6,1922,a s No.837 t with C	0 on a s appro lB,a co ertific	plan d ved by py of ate No	the the a po. .628	by- Land rtion
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And i	t is further cer	ufied that said h	and is under t	he operation a	nd provisions	of Chapte	r 185 of	the Ger	neral Laws
and that the	title of said	William	C.Raymer	,Mary D.Ra	ymer,Bar	bara M.	Taylor	and	
Joseph i	J. Taylor			9				, er	A de
to said lane	t is registered	under said ch	apter, subject	, however, to	any of the	encumbrar	nces men	itioned	in Section
forty-six of	said Chapter,	which may be	subsisting, an	d subject also	as-aforesaid	to any	y encumt	prance(s) noted or
the attached	Incmorandum	l.	v = =0.			, i	1	н - ч У	18 F
WITNE	śś, peter' w	KILBORN, CH	ief Justice of	the Land Court	, at Dedham	in said Co	unty of N	lorfelk.	
the t	twenty-eig	hth day	of	April		in the v	car ninet	en hun	dred and
	1	~		-		· · · · · · · · · · · · · · · · · · ·			Contraction of the second

April in the year nineteen hundred and o'clock and 32 fininutes in the forenoon. ninety-eight 9 , at

Attest, with the Scal of said Court,

Bogoto Assistant Recorder.

Doc. No. 1,389,506 Ctf. No. 196911 TRANSFER CERTIFICATE OF TITLE From Certificate No. 171223, Originally Registered September 30,2005 in the Registry District of Norfolk County.

THIS IS TO CERTIFY that JAMES A. DELOREY, Trustee of JAMES A.DELOREY REVOCABLE TRUST under a Declaration of Trust dated October 27, 2017 as set forth in Trustee Certificate executed pursuant to General Laws Chapter 184, Section 35, registered as Document No. 1389507, 33 Fort Point Road, Weymouth, Massachusetts 02191,

the owner(s) in fee simple,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lots 17 and 18 on Land Court Plan No.8371B filed with Certificate No.6289, Book 32

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS JUDITH C. CUTLER, Chief Justice of the Land Court at Dedham, in said County of Norfolk

the second day of November in the year two thousand and seventeen

at 9 o'clock and 48 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorder.

DOC. No. 1,340,012 C#. No. 192016 TRANSFER CERTIFICATE OF TITLE

From Certificate No. 190281, Originally Registered February 2,2015 in the Registry District of Norfolk County. THIS IS TO CERTIFY that ERIN E. O'BRIEN, 25 Fort Point Road, Weymouth, Massachusetts 02191,

the owner(s) in fee simple,

of that land situated in WEYMOUTH

in the County of Norfolk and the Commonwealth of Massachusetts, described as follows:

Lot 1D on Land Court Plan No.8371G filed with Certificate No.37021, Book 186,

The aboved described land is subject to and has the benefit of the rights as set forth in Document No.16295, so far as now in force and applicable.

subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter, which may the General Laws, and that the title of said owner(s) to said land is registered under said Chapter, And it is further certified that said land is under the operation and provisions of Chapter 185 of be subsisting

WITNESS JUDITH C. CUTLER, Chief Justice of the Land Court at Dedham, in said County of Norfolk

the fifteenth day of October in the year two thousand and fifteen

at 2 o'clock and 54 minutes

Attest, with the Seal of said Court,

William P. O'Donnell, Assistant Recorders

Bk 27449 Ps432 #131: 02-09-2010 & 10:57a

RECEIVED AND RECORDED NORFOLK COUNTY REGISTRY OF DEEDS DEDHAM, MA

CERTIFY Multim PO Pormall WILLIAM P. O'DONNELL, REGISTER

QUITCLAIM DEED

We, CHARLES F. HANRAHAN, JR., a/k/a CHARLES F. HANRAHAN and CECELIA N. HANRAHAN, husband and wife, of Weymouth, Massachusetts,

for consideration of One (\$1.00) Dollar

grant to CHARLES F. HANRAHAN AND CECELIA N. HANRAHAN, TRUSTEES OF THE 21 FORT POINT ROAD NOMINEE REALTY TRUST u/d/t dated January 29, 2010 and, pursuant to M.G.L. c. 184, §35, as identified in the Trustees' Certificate recorded herewith,

of 21 Fort Point Road, Weymouth, MA 02191

with Quitclaim Covenants,

Gaker, Braverman & Barbadoro, P.C. 50 Braintree Hill Park Suite 108 Braintree, Ma 02164 The land with the buildings thereon, with all improvements, situate in Weymouth, Norfolk County Massachusetts, bounded and described as follows:

WESTERLY:	By Fort Point Road as shown on a plan hereinafter mentioned, Seventy-five and 60/100 (75.60) feet;					
NORTHERLY:	By land n/f of Stanley M. and Etta M. Brackett and land n/f of Waldon C. and Phyllis E. Nason, as shown on said plan, Ninety-six and 81/100 (96.81) feet;					
EASTERLY:	By land n/f of John P. and Catherine Cannavo, Jr. and land n/f of Arthur E. and Carmen G. Blaney, as shown on said plan, Fifty-five and 84/100 (55.84) feet; and					
SOUTHERLY:	By a Private Way, as shown on said plan by two lines, Seventy-eight and 25/100 (78.25) feet and Seventy-four and 10/100 (74.10) feet respectively.					
Said premises is shown on a plan entitled "Plan of Land, Fort Point Road, Weymouth, Massachusetts" dated July 5, 1973 made by Perkins Engineering, Inc., Engineers and Surveyors.						

Bk 27449 Pg433 #13122

Said premises are conveyed together with the right to use the streets and ways shown on said plan including, but not limited, to the way labeled "Private Way" on said plan, in common with others legally entitled thereto, for all purposes for which streets and ways are commonly used in the Town of Weymouth.

Said premises are subject to a Sewer Easement as shown on said plan.

Said parcel containing, according to said plan, 7,133 square feet of land.

Reserving also to the above grantor, CHARLES F. HANRAHAN, JR., all of his rights in a certain Declaration of Homestead filed by said CHARLES F. HANRAHAN, JR., dated January 29, 2010 recorded with Norfolk County Registry of Deeds in Book 27439 , Page 495

For title reference, see deed of Timothy M. McGillicuddy et ux. dated July 6, 1973 recorded with Norfolk Deeds in Book 4956, Page 644.

Property Address: 21 Fort Point Road, Weymouth, MA

WITNESS our hands and seals this 29th day of January 2010

Charles F. Konsala f. Charles F. HANRAHAN, JR. Cecelia M. HANRAHAN

COMMONWEALTH OF MASSACHUSETTS NORFOLK COUNTY, ss.

On the 29th day of January, 2010, before me personally appeared the above-named CHARLES F. HANRAHAN, JR. AND CECLIA N. HANRAHAN, proved to me through satisfactory evidence of identification, which were $\Box \underline{mn} \underline{le}$ or \Box known by me to be the persons executing the foregoing instrument, and they acknowledged said instrument by them so executed to be their free act and de

ed.	Menli	
2	LAWRENCE A. DINARDO Notary Public Commonwealth of Massachuset My Commission Expires August 12, 2016	The second secon
2		and an and a state of the state

Bk 34234 Ps377 \$6357 07-01-2016 ∂ 11=38α

RECEIVED AND RECORDED NORFOLK COUNTY REGISTIN OF DEEDS DEDHAM, MA

VILLIAN P. O'DOWNELL, REGISTER

MASSACHUSETTS QUITCLAIM DEED

I/We, Richard A. Burns and Jean E. Burns, a married couple, of Weymouth, Massachusetts, for consideration paid, and in full consideration of THREE HUNDRED THIRTY NINE THOUSAND NINE HUNDRED AND 00/100 Dollars (U.S. \$339,900.00) grant to Gerald J. Wood, a single man, of 50 River Street, Weymouth, Massachusetts with *quitclaim covenants* the following property in Weymouth, Norfolk County, Massachusetts.

The land in said Weymouth, with the buildings thereon, situated in that part of Weymouth called Fort Point, North Weymouth, and bounded and described:

Beginning at the Southeasterly corner of the granted premises at a point on River Street, 150 feet west of the Southeasterly corner of other land formerly of Albert L. Chapman, thence

South 82 Degrees 30' West by and with River Street, 80 feet to a point, thence

North 2 Degrees 58' West 17.12 feet to a point, thence

North 24 Degrees 24' West 58.6 feet to a point, thence

North 45 Degrees 47' East 32.08 feet to a point, thence

South 89 Degrees 30' East 80 feet to a point, thence

South 0 Degree 52' East to the point of beginning on River Street, 81.85 feet.

Containing 7800 square feet of land, by and or all of said measurements or contents more or less, or however otherwise said premises may be bounded, measured or described.

Together with the right-of-way three (3) feet wide from River Street to the low water mark as set forth in deed of Alice E. Pendleton to Blanche G. Allen, dated April 2, 1928 recorded with Norfolk Deeds, in Book 1789, Page 601.

Richard A. and Jean E. Burns also release any homestead rights in said premises, and states, under the pains and penalties of perjury that there are no other persons entitled to claim a homestead in said premises.

Being the same premises conveyed to the herein named grantor(s) by deed recorded with Norfolk County Registry of Deeds in Book 31679, Page 248.

MASSACHUSETTS STATE EXCISE TAX Norfolk Registry of Deeds Date: 07-01-2016 & 11:38am Ch14: 844 Doc4: 63570 Fee: \$1,550.40 Cons: \$337,900.00
Bk 34234 Pg378 #63570

Witness my/our hand(s) and seal(s) this <u>30</u> day of June, 2016.

Richard A. Burns

COMMONWEALTH OF MASSACHUSETTS

Norfolk, ss.

On this <u>3</u> day of June, 2016, before me, the undersigned notary public, personally appeared Richard A. Burns and Jean E. Burns, proved to me through satisfactory evidence of identification, which was/were [A Mass. driver's license(s) or []______, to be the person(s) whose name(s) is/are signed on the preceding or attached document, and acknowledged to me that he/she/they signed it voluntarily for its stated purpose.

Notary Public: John J. Walker My Commission Expires: 5/1/2020



Tighe&Bond

APPENDIX B

30;5
I, Katherine F. McDonald, widow,
of Weymouth......Norfolk County, Massachusetts,
being unmarried, for consideration paid, and in full consideration of Twenty-six Thousand and 00/100
(\$26,000.00) Dollars,
grants to Louise B. Quinlan *
of with quitidatus robusants

MEXEMAXE The land in said Weymouth, with the buildings thereon, situated
in that part of Weymouth called Fort Point, North Weymouth, and bounded
and described: (Decription and enumbrances if an)
Beginning at the Southeasterly corner of the granted premises at a point
on River Street, 150 feet west of the Southeasterly corner of other
land formerly of Albert L. Chapman, thence
South 82'30' West by and with River Street, 80 feet to a point, thence
North 2'52' West 17.12 feet to a point, thence
South 89'30' East 80 feet to a point, thence
South 69'52' East to the point of beginning on River Street, 81.85
feet.
Containing 7800 square feet of land, be any or all of said measurements
or contents more or less, or however otherwise said premises may be
bounded, measured or described.
Fillmore T. Blaisdell et ux
Being the premises conveyed to My deed from Harold C. Hamilton et ux
dated May 29, 1953, recorded Norfolk Deeds, Book 3173, Page 113.
Together with the right-of-way three (3) feet wide from River Street
to the low water mark as set forth in deed of Alice E. Pendleton to
Blanche C. Allen, dated April 2, 1928, recorded with Norfolk Deeds, in
Book 1769, Fage 601.

For title reference, see deed dated June 18, 1956, recorded with Norfolk Deeds, in Book 3,64, Fage 553, John F. McDonald being deceased at Weymouth on December 27, 1965, intestate.

I,Alice E.Pendleton, a single

woman, of Boston, Suffolk County, Massachusetts, being unmarried, for consideration paid, grant to Blanche G.Allen of said Boston, with QUITCLAIM COVENANTS the land in that part of WEYMOUTH, Norfolk County, Massachusetts, called Fort Point, North Weymouth, with the buildings thereon, bounded and described as follows: Beginning at the Southeasterly corner of the granted premises at a point on River Street One Hundred Fifty (150) feet West of the Southeast erly corner of other land formerly owned by Albert L. Chapman; Thence South 82°30' West, by and with River Street Eighty (80) feet to a point; Thence North 2°58' West Seventeen and 12/100 (17.12) feet to a point; Thence North 24°24 West, Fifty-eight and 6/10 (58.6) feet to a point; Thence North 45°47' East Thirty-two and 8/100 (32.08) feet to a point: Thence South 89°30' East, Eighty, (80) fest to a point; Thence South 0°52' East to point of beginning on Rive Street, Eighty-one and 85/100 (81.85)feet. Containing 7800 square feet of land more or less, and being the same premises conveyed to me by deed of Mary E.Smith, dated October 17, 1916, and recorded with Norfolk Deeds, Book 1507, Page 84. This conveyance is made subject to a Mortgage for \$2000 held by the Weymouth Savings Bank and duly recorded with Norfolk Deeds, which has been reduced to \$1500. This conveyance is made together with a Right of Way Three (3) feet wide, from River Street to low water mark, over the South westerly part of my property deeded to me by Laura C.Webb, by deed dated September 12,1923 and recorded with Norfolk Deeds Book 1570, Page 108; said Right of Way to be for any and all usual purposes in order to gain access WITNESS my hand and seal this from River Street to the water front. 2nd day of April 1928.

) Alice E.Pendleton (seal) Commonwealth of Kassachusetts, Suffolk, ss. Boston, April 5, 1928. Then personally appeared the above named Alice E.Pendleton and acknowledged the Penál ston to

Allen

50 River Street- 1972 Deed above 1928 Deed Below





Plan of 105 and 111 Fort Point Road

Doc:1,136,028 08-17-2007 3:00 Ctf‡:175325 Norfolk County Land Court

QUITCLAIM DEED

Michael G. Letorney and Lisa M. Letorney, currently of 4 Blackhorse Lane, Hingham, Massachusetts 02043, for the full consideration of FOUR HUNDRED SEVENTY-NINE THOUSAND TWO HUNDRED AND 00/100 (\$479,200.00) paid, grant to Pamela J. Duprez, currently of 130 Pilgrim Road, Weymouth, Massachusetts 02191, solely as an individual, with quitclaim covenants a certain parcel of land situated in Weymouth, Massachusetts in the County of Norfolk and said Commonwealth, described as follows:

Said parcel is shown as lot numbered 72 on a plan drawn by Russell H. Whiting, Civil Engineer, dated June 26, 1922, as approved by the Land Court, filed in the Land Registration Office as No. 8371B, a copy of a portion of which is filed in the Norfolk Registry District with Certificate No. 6289, Book 32.

The above described land is subject to and has the benefit of the rights as set forth in Document No. 14624.

Being the premises known as 119 Fort Point Road, Weymouth, Massachusetts 02191 and being under the operation and provisions of chapter 185 of the Massachusetts General laws, and subject to any and all encumbrances mentioned in Section 46 of Chapter 185 of the Massachusetts General Laws which may be subsisting.

For out title see deed to us from Michael G. Letorney dated April 1, 1995 and recorded at the Land Court section of the Norfolk County Registry of Deeds as part of Certificate of Title number 144393 in Book 722, Page 193.

19 Fort Point Road, Werkweith, M. Executed as a sealed instrument this $\frac{|l|}{l}$ day of August, 2007. Lisa M Letorney Michael G. Letorney 3

Deed for 119 Fort Point Road, plan is shown as part of subdivision.

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2			7553		-2541	687
	WE, Geoffrey of Weymo	W. Caterer and J uth,	oan M. Caterer, Nor	Husband an folk	d Wife, both County, Massachu	sette
	being unmarried, for	consideration paid, and is	n full consideration of	\$151,900	.00	
16. cl	grant to Lisa as te	A. Nollet and An mants in common, bo	drea B. Sutton, th	as joint	tenants and not	•
Š E	of 125 Fort P	oint Road, North	Weymouth, MA 0	2191 w	ith quitclaim coven	anžs
123	the land in					
CER.		Descrip	tion and encumbrances, if any]			
38	a certain par 125 Fort Poin bounded and d	cel of land with t Rcad in that p escribed as foll	the buildings part of Weymouth lows:	thereon s known as	situated, at 3 North Weymour	th,
1612	Beginning at at a corner of of W.H. Castl	the southeaster) fland now or for e thence running	ly corner of the merly of J.L. B	e premise: Bates and	s herein descr land now or f	ibed ornerly
kin e	EASTERLY	by said land of land now or for and running	Castle, 38.00 merly of Myrtle	feet in a N. Barr	a straight lin ; thence turni	e 1:0 ng
Mar Ke	NORTHERLY	134.00 feet, mo wall, thence co mark; thence to	ore or less, by ontinuing in the orning and runni	land of : same di ing	said Barr to a rection to low	witer
)eym	WESTERLY	by said low wat turning and run	ter mark, 38.00	feet to	a Point thence	1
147	SOUTHERLY	by said Fort Po to the point of	pint Road and sa f beginning.	aid land	of Bates, 144.	00 feet
teer: 125	Subject to a provision that Together with the above-des for all purpo installation	driftway across the building shat the right and of scribed premises uses for which si and use of all	the northerly of hall be built no easement to use to a public str treets are common utilities.	end of th orth of s Fort Poi reet and only used	e lot and a aid driftway. nt Road from public utiliti , including th the premises	es Ie
e Akd	shown on a pl and filed in Book 4715, Pa	the Norfolk Reg	derson, Jr., RL istry of Deeds	5, dated as No. 77	January 25, 19 of 1971 in	71,
Ľ	For title see	e Norfolk Deeds,	Book 7330, Page	e 139.		
; Otas	Address of P	coperty and Gran	tee: 125 Fort MA 02191	Point Roa	d, North Weymo	outh,
Brocky.	CHIN	AWEALTH OF MASSAC	S B			



Plan for 125 Fort Point Road



Plan for Lot 138 Fort Point Road

-We, John A. DeGust and Dorothy C. DeGust, husband and wife, as tenants by the entirety, both

Maymouth	Nontolk	Country Manager
eterminated for consid	eration paid, grant to Frank J. Villa	and Winnifred M. Villa.
husband and wife	a, as tenants by the entirety	and not as joint tenants
or tenants in c	ammon, both	
BOSLO	Suffolk	with guttelsis covenants
he land m .with the Weymouth known a	buildings thereon, situated is as North Waymouth, shown as pr (Description and cocumbrances, if any)	in that part of said arcel A on a plan
entitled, "Plan Whiting, Civil H being bounded ar	of Land in (North) Weymouth, Angineer, dated August 9, 1949 ad described as follows:	Mass.", by Russell H. 9, to be recorded herewith,
NORTHERLY	by Weymouth Fore River;	
EASTERLY	by the prolongation of the ca Street so called, a private m River;	enter line of Caldwell Way, to Weymouth Fore
SOUTHERLY	by the westerly half of said by land of Walter F. Smith, a ninety-two and 36/100 (92.36)	Caldwell Street and total distance of feet; and
WESTERLY	by land of Evelyn L. Webb or bounded or described.	however otherwise
Being a por deed of Lillian with Norfolk Dee	tion of the premises conveyed C. Gladwin et als, dated Auru ds, Book 2775, Page 100.	to these grantors by st 2, 1948, recorded
Said promis easements, restr water liens, and	es are hereby conveyed subjec fictions, zoning by-laws, all other municipal liens and as	t to all rights of way, unpaid taxes, tax titles, sessments if any there be.
I, Dorothy C. D	eÇust	the books of said granter.

Deed for 140 Fort Point Road, no plan attached to filed deed. Eastern bound refers to Weymouth Fore River.

2773 We, Lillian C. Gladwin, a widow, of Weymouth, Mass., Rowe A. Gladwin of Newton, Mass., Leland L. Gladwin of Weymouth, Mass., Muriel G. Rand of Weymouth. Mass., and Albert B. Gladwin of Weymouth, Mass., 100 Annu and wife, as tenants by the entirety. of Weymouth, Norfolk County, Massachuaetts with gattelata covenants the landen with the buildings thereon situated in that part of said Weymouth, Norfolk County, known as North Meymouth, being bounded and (DANNERS MEXANIZATION (DANNERS) described as follows: NORTHERLY by Weymouth Fore River; EASTERLY by land now or formerly of Robert S. Bradley and Bradley Estates, Inc.; SOUTHERLY by land now or formerly of Brent Hyndman, Frederick H. Hall, Joseph M. Donahue, Mildred N. Turner, and Caldwell Street; WESTERLY by land now or formerly of Edwin J. Tirrell. Said premises are hereby conveyed subject to rights of way, easements, restrictions, zoning by-laws, current taxes and assessments. Fortitle see Norfolk Deeds, Book 905, Page 323; Norfolk Deeds, Book 2271, Page 484; and the Estate of Albert E. Gladwin, Norfolk Probate #113074. Edith J. Gladwin, wife of Rowe A. Gladwin Mabel B. Gladwin, wife of Leland L. Gladwin Lealey L. Gladwin, wife of Albert 8. Gladwin AND X OF XILL XURSEN wifer George L. Rand, husband of Muriel G. Rand release to said grantee all rights of dower and homestead and other interests therein. Etterns our hand and seal this second dav of August 19 48 Aner all men by the future Bast that 9, Anancell Ridef Welfeld Norfelk County Wear Sound to Films in consideration of forty encountered dellaw tome price by Maria & There Hatking & Koster, in the canty of Suffe and state alowed, the securit when the justice advantedy deturby gaing not, targain, sell and come whit the said that porce of land situated in Kraintier, Rolatk Soundy Mounhaller igether with the hulding round, trande desculat as folien on to soit, Communing at 2 r northe setuly serve of Charles thenco unming to deepy on said the of stand new or fermuly of William Pegg then so turning and ranving contriactuly on land nor of fermuly of William Jogo, Wild and the alder, and frihus Wilkind themotiving and

Early Deeds 1948 (above) and 1876 (below) for 140 Fort Point Rad- eastern boundary was land in 1948.

J:\M\M1476 Manchester MA Hydro Study\012-Sawmill_Central Pond Restoration\Task 1- Kickoff and Access\9.11.18 Staff Kickoff Meeting\Sawmill Brook Restoration Property Access Memo.docx

Tighe&Bond

APPENDIX C



ves s under General Laws (Ter. Ed.) Chapter 114, is Plai

UIREMENT

in 1942

surance Fund

how and under whose direction the money conditions and restrictions thereon which the how much money so appropriated shall be General Laws (Ter. Ed.) Chapter 40, Section 5, any, sums so appropriated shall remain availathe terms and conditions of any loan or loans funds and to authorize the issue of bonds or erm rate of interest of any such bonds universe of fixed by the Town Meeting; and he drawing of compensation from the Town any other action in relation to any of the

in of Selectmen). To see what sum of se or borrow and appropriate for providing fit to the Town or its inhabitants, or take ernment in unemployment relief and other to.

TEE REPORTS

of Selectmen). To take any action the of the several Town Boards and Commity Committee that the Town may think

FINANCES

of Selectmen). To see if the Town will er, with the approval of the Selectmen, to anticipation of the revenue of the finanand to to issue a note or notes therefor, ew any note or notes as may be given for accordance with General Laws (Ter. Ed.)

own will vote to authorize its Treasurer on and after January 1, 1943, to borrow year 1943.

of money the Town will vote from surdetermining the tax rate for the year ion t' etc.

12

ARTICLE 7. To see if the Town will vote to authorize the Selectmen to sell or otherwise dispose of any real or personal property of which the Town may be possessed or seized and for which it has no further use, including all real estate of which the Town has possession or title for non-payment of taxes; to see if the Town will vote to authorize any other department to sell or otherwise dispose of any personal property in its possession and to determine the manner or conditions of such sales, or take any other action in relation thereto.

ARTICLE 8. To see if the Town will vote to authorize its Board of Selectmen to accept conveyances or mortgages of any real or personal property belonging to persons receiving relief from the Town and to dispose of said property in the manner they may judge for the Town's best interest and to authorize them to discharge any encumbrances on said property if they consider it for the best interest of the Town so to do, and to see what sum of money the Town will vote to raise and appropriate for the discharging of such encumbrances.

STREETS AND SIDEWALKS

ARTICLE 9 (By Direction of Selectmen). To see if the Town will accept the several reports of the Selectmen laying out as Town ways the following designated private ways and parts of ways or any of them, to wit:-

- (a) Arcadia Road.
- (b) Morningside Path from Lambert Avenue to its easterly end.
- (c) Brae Road.
- (d) Weyham Road.
- (e) Fuller Road.
- (f) Greenwood Avenue.
- (g) Southern Avenue.
- (h) Clark Road.
- (i) Fort Point Road from River Street to and including property of Bessie Vigneau.
 - (j) Lantern Lane from 509 to 523 Commercial Street.
 - (k) Clematis Avenue from Pleasant View Avenue easterly to Idlewell Boulevard.
 - (1) Sachem Street between Weybosset and Birchbrow Streets.
 - (m) Burton Terrace to Torrey Street.
 - (n) Seaver Road.
 - (o) Whitcomb Terrace.
 - (p) Brewster Road.

or any portion of said ways and will authorize the Board of Selectmen to acquire by gift or purchase or take by right of eminent domain in fee or otherwise for all purposes of a public street and highway in and over each said. streets as so laid out and accepted, and to see what sum of money the Town will vote to raise and appropriate for the working of each of the above named streets including the acquisition of the fee above referred to and for the building of any bridges, drains and conduits or securing easements which may be necessary in connection therewith and to see whether the Town will authorize the Board of Selectmen to accept deeds of any reservation strips existing in connection with any of said streets, or take any other action in relation thereto.

ARTICLE 10. To see what sum of money the Town will vote to raise and appropriate to extend, reconstruct, resurface, widen, straighten, relocate

13

* CONKIRMED WITH REGISTRY THAT THIS WAS NOT RECORDED 12-6-18 JEIN 19

the above, we have no suitable building · wood and metal finishing. If quarters ant, it will be necessary to have class-ir study periods. It will require 30,000 for the complete vocational school pro-

ILFRED B. MATHEWSON, Chairman

>mmittee moved: That \$1.00 be raised tee and the committee be continued. \$1.00

ittee of the Laban Pratt Hospital read

the Committee report and recommenf the Warrant and so recorded. Un-

ropriation Committee moved: That artic nittee Ss offered by Mr. Field was

iation Committee moved: That the of the Selectmen be and hereby is 134 to borrow such money form time ue of the fiscal year beginning Jantes therefor payable within one year ebt or debts incurred under this vote fiscal year in which they were con-

littee as offered by Mr. Field was

priation Committee moved: That se in determining the tax rate for

ttee as offered by Mr. Field was

tion Committee moved: That the wwise dispose of personal property n has posession or title including taxes, all such cases of sale to be ; as the Selectmen may deem for the Board or Officer in charge of h the approval of the Board of vate sale as the Board of Selectty belonging to said department oard in charge of the department hich in the opinion of the Select-Department.

ee as offered by Mr. Field was

ARTICLE 8. Mr. Field for the Appropriation Committee moved: That the Board of Selectmen be authorized to accept conveyances or mortgages of any real or personal property belonging to persons receiving relief from the Town and to dispose of said property under the provisions of Article . 8 of this Warrant in such manner as they may judge for the best interest of the Town and where said property is subject to any encumberances if they are hereby authorized to do so. Motion of the Appropriation Committee as offered by Mr. Field was

unanimously adopted.

ARTICLE 9. Mr. Field for the Appropriation Committee moved: That the Town accept the report of the Selectmen laying out the following designated private ways or parts of ways to wit: Arcadia Road, Morningside Path from Lambert Avenue to its easterly end, Brae Road, Weyham Road, Fuller Road, Fort Point Road from River Street to and including property of Bessie Bigneau, Lantern Lane from 509 to 523 Commercial Street, Burton Terrace to Torrey Street, and that the Board of Selectmen be authorized to acquire by gift or purchase or take by right of eminent domain in fee or otherwise for all purposes of a public street or highway in and over said street or streets as so laid out and accepted that the sum of \$17,040. be raised and appropriated for materials and the acquisition of the foregoing taking, gift of purchase including all damages, provided further that they may build bridges, drains, or con-duits and secure any easements which may be necessary and the Board of Selectmen are hereby authorized to accept deeds of any reservation strips existing in connection with any of said streets; and provided further that no work shall be done on any of these streets until at least 90 percent of the abutters, or 100 percent, if in the opinion of the Town Counsel that becomes necessary, have signed, executed and delivered to the Town Counsel proper releases. Provided further that the final naming of these streets must meet with the approval of the Planing Board, and the work on these streets shall be performed under the direction of the Superintendent of Streets. \$17,040.00

Mr. Jesson moved that Clematis Avenue be added to this group of streets. Moderator declared the motion as lost.

Mr. Sands moved that Southern Avenue be added to this group of streets. Moderator declared the motion as lost.

Motion of the Appropriation Committee as offered by Mr. Field was unanineously adopted.

ARTICLE 10. Mr. Field for the Appropriation Committee moved: That the sum of \$6,420. is hereby raised and appropriated for materials in the working of Browning Street, Carson Street, Astor Circle and Worthen Avenue and providing that the work performed shall be under the direc-tion of the Superintendent of Streets and any damages occasioned by aforesaid work shall be a charge against the sum appropriated.

Selectman Lane moved an amendment to the Appropriation Committee recommendations classified under caption C of Article 10 as follows. That the sum of \$4,000. be raised and appropriated to widen, relocate and work Derby Street at Pond Street and that the Board of Selectmen be authorized to acquire by gift, or purchase in fee or otherwise land with buildings thereon in accordance with plan drawn by Russell H. Whiting dated September 27, 1929. This amendment requiring a two-third vote the Moderator requested the appointed tellers to tabulate the vote. Tellers reported as follows: Affirmative 140, Negative 12. Moderator then declared the motion adopted.

Mr. John W. O'Donnell moved an amendment to the recommendations of the Appropriation Committee as follows: That the sum of \$5,000. be

43

* FPR NOT RECORDED.

333363

Martola County Registery District

APR 2 0 1973

NOTED 24 CERTIFICATE NO. 61451

COMMONWEALTH OF MASSACHUSETTS

MORFOLK, ss:

11

TOWN OF WEYMOUTH

LAYING OUT - ORDER OF TAKING

FROM NO. 65 FORT POINT ROAD, 160 LINEAR FEET NORTHERLY TO BACON ROAD

AT A MEETING OF THE BRAPD OF SELECTMEN OF THE TOWN OF WEYNAUTH HELD THIS TWENTY-SIXTH DAY OF FEPRUARY, 1973 11 IS RDERED:

WHEREAS, THE DARD OF SELECTMEN OF THE TOWN OF WEY-MOUTH HAVING DETERMINED AND ADJUDGED THAT COMMON CON-VENIENCE AND NECESSITY REQUIRE THAT A TOWN WAY BE LAID OUT AS AND IN THE LOCATION HEREINAFTER DESCRIBED, WHICH IS SUBSTANTIALLY THE PRESENT LOCATION OF A PRIVATE WAY KNOWN AS FORT POINT RUAD (FROM NO. (5 FORT POINT ROAD, ICO LINEAR FEET NORTHERLY TO LACON RUAD) AND HAVING COM-PLIED WITH THE REQUIREMENTS OF LAW RELATING TO NOTICE, DID IN THE NINETH DAY OF MARCH, 1973, LAY OUT SUCH TOWN WAY AGO RDINGLY AND DULY FILED THEIR REPORT THEREOF WITH THE BOUNDARIES AND MEASUREMENTS OF THE SAME IN THE "FFICE OF THE TOWN CLERK OF SAID TOWN IN THE NINETH DAY OF MARCH, 1973, AND

WHEPEAS, THE ANNUAL TOWN MEETING OF THE TOWN OF WEY-MOUTH WAS DULY CALLED TO THE SECOND DAY OF APRIL AND SUBSEQUENT ADJOURNED SESSIONS HELD IN APRIL THIRD, FOUR-TH, FIFTH, SIXTH AND SEVENTH, AND FINALLY ADJOURNED ON THE SEVENTH DAY OF APRIL, 1973.

PAGE ONE

NOW, THEREFORE, WE, THE UNDERSIGNED, BEING & MAJOR-TTY OF THE BOARD OF SELECTHEN OF THE TOWN OF WEVHOUTH, DULY ELECTED, QUALIFIED AND ACTING AS SUCH AND IN THE EXERCISE OF THE POWER VESTED IN US BY THE VOTE, REQUIRED BY LAW, OF THE ANNUAL TOWN MEETING 1973, UNDER ARTICLE ", SAID VORE BEING DULY RECORDED IN THE DEFICE OF THE T WE CLERK OF THE T WN OF WEYWOUTH AND INCORPORATED HEREIN UY REFERENCE AND MADE A PART HEREOF, DO HEREBY TAKE AUD IN FEE SIMPLE, ANY AND ALL RIGHT, TITLE AND INTEREST OF ANY NATURE OR DESCRIPTION THEREIN, BY RIGHT OF EVELENT DIMAIN UNDER THE PROVISIONS OF CHAPTER 79 OF THE GENERAL LAWS (TER. ED.) AND OF ANY AND EVERY OTHER POWER AND AUGH REPY IN US HEREBY ENABLING FOR THE PUR-PRISE F A WE WAY FOR THE USE F SAID TOWN & WEYMOUTH, THE LAND IN SALE TWN BOUNDED AND DESCRIBED AS FOLLOWS: EGINNING AS A DOINT ON THE WESTERLY STDELINE OF FOR PANEFAD, PANT DEING THE END DE THE ENSTING PULLIC WAY PETT DEF FRE POINT DAPT THENCE DEMUND AL NG SA D WESTERLY STRELINE OF FIRE D INT D AD 1173 1114 D D F & DISTANCE OF 113.76 rent: THENCE OF THE NUMBER OF ENDERLY AL HE A CUEVE WITH A PADIUS F DALIZIES F & AN APO LENGTH F 40.34 FEET: THE DE DUNITING N 74" 17' 29" E FOR A DISTANCE OF 20.00 FEET to THE EASTERLY SIDELINE OF FORT POINT ROAD; THENDE NUMBERS ALONG SAIN EASTERLY SIDELINE SOUTHERLY ALONG & SURVE WITH A RADIUS OF 1012.17 FEET FOR AN ARC LENGTH OF 41.15 FEEL; THENCE CONTINUING S 13" 22" 45" E FOR A DISTANCE OF 113.76 FEET;

1.325

THENCE RUNNING S 70° 37' 15" WEUE A DISTANCE OF 20.00 FEET T. POINT OF BEGINNING.

AND WE DO HEREBY IN ACCORDANCE WITH AND IN PURSUANCE OF THE AUTHORITY AFORESAID TAKE THE RIGHT OR EASEMENT IN EACH PARCEL OF LAND ADJOINING THE LOCATION OF SAID TOWN WAY, AS SHOWN ON SAID PLAN, TO HAVE THE LAND OF THE LOC-ATION THEREOF PROTECTED BY HAVING THE SURMACE OF THE AD-JOINING LAND SLOPE FROM THE BOUNDARY OF THE LOCATION.

SAID LAND IS SHOWN UPON A PLAN ENTITLED, "PLAN AND PROFILE OF FORT POINT, BAC.N AND BIRCH ROADS IN WEYMOUTH MASS.," DATED SEPTEMBER 15, 1972 BY LANONT R. HEALY, SURVEYOR, FILED IN THE OFFICE OF THE TOWN GLERK WITH OUR REPORT AFORESAID AS A PART THEREOF, A COPY OF WHICH IS TO BE RECORDED HEREWITH.

ANY AND ALL TREES AND STRUCTURES UPON THE LAND ABOVE DESCRIBED ARE NOT TO BE INCLUDED IN THE TAKING AND THE OWNERS OF SAID LAND ARE TO HAVE SIXTY (60) DAYS FROM THE DATE HEREOF TO REMOVE THE SAME.

WE DETERMINE THAT NO DAMAGES ARE SUSTAINED BY PERSONS IN THEIR PROPERTY BY REASON OF THIS TAKING AND WE AWARD NOVE.

THE NAMES OF THE OWNERS OF SUPPOSED OWNERS OF THE LAND AFFECTED BY THIS FAKING ARE AS FILLOWS:

NAME	DOOK	TITLER	FERENCE	
ELEANOR MILLARD PARSONS	40	SI	#11451	CERL
EDWI'L SPENCER PARSONS AND ELEANOR M. PARSONS	433	104	# 0 5504	
19 CAL DAY OF AP	s af We ril, On	EMADUTH A	NFORESALD	THIS
AND SEVENTY THREE.				

PAGE THREE

BOARD OF SELECTMEN William BErnin Rober

47

Tighe&Bond

APPENDIX D



Department of Public Works 120 Winter Street Weymouth, MA 02188

Kenan J. Connell Director of Public Works 781-337-5100

RIGHT OF ENTRY – WITHOUT PREJUDICE

Project: Seawall Repair

Property Owner:

Address of Property Owner: Address, Weymouth, MA Zip

Permission is hereby given to the Town of Weymouth or its duly authorized agents, to enter upon my property in the Town of Weymouth in connection with completing repairs/improvements to the sea walls along Fort Point Road. The purpose of this Right of Entry is to allow for the construction work as described in the attachment (TBD).

The right of men, equipment, machinery and material to enter upon and occupy my land located at *Address, Weymouth, Massachusetts* in order to perform the construction work on my property for the above project and other work deemed necessary for the completion of the work. All disturbed areas will be repaired to match the existing undisturbed condition, by loaming and seeding, installing a pavement patch, or other surface repair, as needed.

This Right of Entry is made of my/our free will. I/we waive my/our right(s) to an appraisal and compensation. This entry to be made without prejudice to my rights in settlement of any claims for damages that may have hereafter appear.

Granted by:

Owner(s) or Authorized Representative

Date:	

Recommended by:

Date:

Weymouth Town Engineer

Joseph Callanan Town Solicitor

Town of Weymouth 75 Middle Street Weymouth, MA 02189

JCallanan@weymouth.ma.us (781) 682-3503 Town of Weymouth, Massachusetts



Marsha L. Conley, Paralegal Legal Department

Town of Weymouth 75 Middle Street Weymouth, MA 02189

<u>MConley@weymouth.ma.us</u> (781) 682-3648

Property Owner Fort Point Road Weymouth, MA 02191

LAND DAMAGE AGREEMENT AND RIGHT OF ENTRY Property located at Fort Point Road, Weymouth Massachusetts

I, ______, the undersigned ("Landowners"), as an authorized signatory and owners of said property, listed on the Town of Weymouth Atlas as Map ____, Block _____ and Lot _____, do hereby grant to the Town of Weymouth the right to enter upon my property to repair, replace or reconstruct the drainage, seawall and stone revetment located between my property and the Fore River shore line.

In acceptance of this agreement, the Landowner and the Town agrees to the following:

The Landowner enters into this agreement for full settlement of any and all claims for damage incurred or to be incurred by the Town of Weymouth as a result of the construction and alteration relating to the work identified above.

The Landowner agrees to accept the sum of \$ Zero in full settlement of any and all claims whatsoever to remaining property of the owner, whether caused by the construction activity, limitations of access, changes in grade or drainage or alteration relating to the above described work. The Landowner hereby releases the Town of Weymouth from any and all claims, due to said construction. The owner agrees to grant a permanent easement for the town to make repairs to the coastal protection upon completion of the construction.

The town agrees to the above described construction items and to restore the roadway to its original condition upon completion of construction.

It is understood that this is an agreement to allow the construction to proceed and that I, the undersigned, agree to grant permission to the town, and the town's contractor(s), to perform this work.

Landowners:		
By:	Dated:	
Printed Name:		
Witness:		
Printed Name:		
Town of Weymouth:		
	Dated:	
Robert L. Hedlund, Mayor		
As to form:		

Joseph Callanan, Esq., Town Solicitor

Tighe&Bond

APPENDIX B

Fort Point Seawall: Field Summary (Task 2.1 Deliverable)

To:	Andrew Fontaine, P.E. Weymouth Town Engineer Weymouth Department of Public Works
FROM:	Gabrielle Belfit, CFM; Project Manager & Duncan Mellor, Principal Coastal Engineer
Through:	David Murphy, P.E.; Principal In Charge
DATE:	January 3, 2019

The Town of Weymouth has recently received a grant from the Executive Office of Energy and the Environment (EOEEA) under the Municipal Vulnerability Preparedness Program (MVP) to improve the resilience of infrastructure in the Fort Point Road vicinity.

The scope of services includes engineering services for the existing conditions assessment, alternatives analysis, public outreach, and permit level design, to improve the approximately 3,100-foot section of Fort Point Road seawall and rock revetment and adjacent stormwater systems. The seawall and revetment run along the west and north edge of Fort Point Road, beginning at the intersection of River Street and Fort Point Road and extending to the end of Fort Point Road and Riverview Place, in Weymouth, Massachusetts. Drainage structures include a mix of catch-basins, man-holes concrete pipes, and a check-valve in the vicinity of Fort Point Road, Wolcott Street, Bacon Street, Birch Road, Parnell Street, Caldwell Street, and Mayflower Avenue. With the assistance of funding from the MVP Action Grant, the Town of Weymouth is proposing to redesign the seawall and drainage system structures to provide a resilient, holistic system capable of functioning properly over the 50-year life of the new infrastructure, including project climate change impacts.

Task 2.1 includes an assessment of coastline conditions, apparent sediment movements, tides, currents, prevailing wave orientations, beach sediment and shellfish characterization, revetment and seawall assessment, and the drainage system within the project area. These assessments will form an engineering basis for concept development and outreach discussions.

Existing Seawall & Revetment:

The current coastal engineering structure, within the project area was constructed circa the 1950s. The purpose of these structures, most of which include stone berm revetment, precast concrete seawall blocks on a cast in place levelling slab, is to break waves and stabilize the shoreline. This stone berm/seawall configuration is not intended to be water tight or act as a levee preventing flooding. In consideration of the wave exposure and the wave protection it provides for at least 84 homes, this structure has been identified as the highest priority for coastal resiliency mitigation in both the Weymouth Hazard Mitigation Plan, and the Weymouth Municipal Vulnerability Preparedness Plan.

This seawall is in typically poor condition with localized failures of the precast concrete seawall units and typical deterioration of the foundation slab. Most of the seawall units have varying degrees of map cracking and spalling indicative of freeze-thaw deterioration. Some of the units have mid height horizontal cracks full length, with some units having previously failed and the top of the failed units having been re-poured with patching concrete. Examples of conditions along Fort Point Sea wall are shown in Attachment A. The extent of this severe deterioration does indicate these seawall units are at or beyond their service life, are not cost effective to repair and need to be replaced. There is a short length of seawall (about 160 LF) between Parnell Street and Caldwell Street with houses immediately behind the seawall where the seawall is used to support walls and decks. Removal and replacement of these precast concrete seawall units is not feasible unless the privately-owned structures are removed off the wall. If this is not possible, another alternative such as a concrete overlay, may be necessary.

The original stone revetment was typically a trapezoidal cross section stone berm extending under the seawall and into the backfill/roadway. This state Public Works design saved on construction cost, but also distributed seawall weight and loads over a large footprint, making this design well suited to a wide variety of project conditions, including soft soils, and is tolerant of subsidence. The stone was typically set with flat faces parallel to the exposed slope as slope paving, which does enhance resistance to stones being dislodged by waves or ice, but also increases wave runup and overtopping of the seawall. Unless there is an existing Chapter 91 license that shows the full limit of the revetment, the reconstruction of this seawall and revetment is constrained by the Massachusetts state regulators to work within the existing stone/seawall visible footprint, even when the revetment is known to extend under the beach. This limits the preliminary design options and existing revetment stone may need to be replaced or supplemented by larger armor stone, particularly at the visible toe of slope, and adequately sized to be stable under wave loading when set in random and rough surface configurations. Preliminary stone sizing indicates revetment stone exposed to wave action should be in the 2.5-ton to 5-ton size range with appropriate underlayer stone sizes.

Design Tide Levels:

Based on the Boston National Oceanic and Atmospheric Administration (NOAA) tide gauge, mean sea level has risen about 0.6 feet since this seawall was built, resulting in a gradual loss of freeboard and wave overtopping protection. This relative sea level rise over the decades has also made the neighborhood more prone to tidal flooding and the Federal Emergency Management Agency (FEMA) repetitive flood loss claims emphasize this neighborhood is a high priority for coastal resiliency enhancements. The NOAA Boston tide gauge data for tide levels (see right), includes a tide gauge-based NOAA 100-year static storm surge level (in meters).



Due to the significant uncertainty involved in modeling future climate change, an approach to predict future risk for the seawall design is proposed based on recent sea level rise projections developed by the Northeast Climate Science Center (NESCS), and used in the Statewide

Climate Projections $(2017)^1$ The uncertainty regarding projections approaching 2100 becomes so high that they can be considered unreliable, therefore the 2070 scenario was used as a long-term projection for sea level rise. This time frame also corresponds to the 50-year design life of the seawall. The NECSC median expected range of sea level rise for 2070 is 1.6 -1.9 feet including the Medium- High emission scenario. Combining the sea level rise (0.6') that has already occurred, plus a projected future sea level rise of another 1.6 to 1.9 feet, suggests seawall reconstruction should include at least 2.2 to 2.5 feet of additional height. It is recommended that the new seawall be designed with an allowance for adding additional 1.5 feet of wall height at some point in the future without having to redesign or modify the seawall base.

Wave Analysis:

Some prior wave analysis has been performed for this site by others. A 2014 study proposing a cobble berm was performed by Applied Coastal Research and Engineering, Inc. utilizing wind data from Logan airport to develop return probabilities for 2-minute wind speeds. This study indicated a 100-year return period wind speed of 54 mph from the northeast sector, producing a 3.6-foot significant wave height with a 3.6 second period. This wave height was not defined and is assumed to be a wave height prior to beach shoaling and wave breaking.

A 2015 study by Bourne Consulting Engineering presented different wave parameters for revetment and seawall design, not including sea level rise and not listing wind speed utilized, it indicated a 100-year return period wave with 4.6-foot significant wave height, and a 3.9 second period (not further defined) and no apparent transformation of the wave onto a shoaling beach

Tighe & Bond performed a limited wave forecasting suitable for preliminary design for this site, using primary wave fetches from the north northeast (NNE) and west, for multiple design tide levels and wind speeds. The wind wave fetch (3 miles) from the NNE controls, resulting in a 5.4' significant wave height (average of highest one-third of waves) in deeper water at the NOAA 100-year flood level and a steady 75 mph wind speed (95 mph Fastest Mile speed equivalent). This design wind speed is the recommended wind speed for Weymouth based on the American Society of Civil Engineers standard ASCE 7-10, Minimum Design Loads for Buildings and Other Structures, after removing the strength design load factor included in the mapped wind speeds.

A higher wave height is associated with the less frequent H_{10} and H_1 waves (average of the highest 10% and highest 1% of wave heights, respectively), however when transposed into shallow water over the beach, the breaking wave heights are all about the same at around a 4-foot high breaking wave. Breaking wave conditions, as a function of design tide level, do result in the highest wave loads on the seawall. Higher design tide levels will result in more wave overtopping of the seawall but may have lower wave lateral loading if the resulting wave is not a breaking wave.

Wave forces for preliminary design were checked with conventional wind and wave-based Army Corps of Engineers criteria, and alternatives using the methods in the American Society of Civil Engineers standard ASCE 7-10, which uses FEMA flood mapping criteria. The ASCE

¹ EEA, Statewide and Major Basins Climate Projections Final

7-10 method results in lower breaking wave maximum pressure, but higher total lateral force on the seawall. The method calculations to eliminate overtopping results in an impractical seawall height of approximately 20 feet above beach level. The ASCE method based on FEMA flood mapping does not appear reasonable for seawall design at this site. Based on prior input from the neighborhood, we do anticipate the reconstructed seawall will be limited in height as a compromise to loss of water views and public beach access, and the new seawall will be designed to tolerate some storm event wave overtopping without failure.

Coastal Resources:

Input has been received from multiple town staff regarding coastal resources at this location. The Weymouth Harbor Master and Conservation Commission Administrator noted that salt marsh areas are growing, but shellfish are dying and not harvestable due to contamination and disease, ongoing for the last four to five years around Boston Harbor (see Figure 1). Stormwater water quality improvements (such as LID methods) would be challenging due to the terrain, depth to groundwater and land use constraints. The Town noted that prior storm events have highlighted the need to design the stormwater improvements to optimize flood water discharge to the extent possible with gravity flow.



Figure 1: Weymouth Shellfish Area Classification (MA DMF)

The beaches fronting this project (Fort Point) are typical semi-protected headland sediments of coarse grained material, typically coarse gravel to cobble with indications that net littoral drift is to the west (due to the longest wind fetch) with sand accumulation west of the project at the groin stabilized beach along River St/Regatta Road and at Wessagusett Road. These beach sediments with associated headland wave exposures do indicate vegetative shoreline stabilization and salt marsh creation are very unlikely to survive without a substantial artificial reef or stone sill for toe protection from waves and ice. Proximity of this point to the adjacent deep water federal navigation channel reduces the beneficial wave reductions from shallow bay waters, it increases current scour potential, has high speed vessel wake input and may act as a sink for longshore sediment transport deposition. These issues are illustrated in review of aerial photos, including a visible plume of turbidity shedding off Fort Point on a flood tide (see Figure 2). It is also noted however, that the beach features such as the triple cobble spits at Fort Point are stable over time.



Figure 2: Sediment Transport- Weymouth, MA Fort Point (Google Earth)

Drainage:

As noted in earlier existing conditions summaries, stormwater drainage in the Fort Point Area includes three independent stormwater systems, with the remaining areas draining by sheet flow towards the beach. The systems lack any oil/water separation, and condition of the piped system is in fair conditions. The neighborhood drainage system is critical to collect and remove rain water, but also tidal flood waters coming through the soils, seawall/stone berm and from wave overtopping. Previous coastal flooding has highlighted problems with seepage and backflow through the drainage system, leaking or blocked drainage check valves, leaking pipe joints and a lack of sufficient gravity drainage capacity to drain floodwaters in a timely manner at low tides following a storm surge flooding event. The project intent is to replace the drainage systems (including pipe) identified as deficient in prior events with enhancements to improve coastal resiliency and address water quality to the extent practical. It is expected that older system check valves will be replaced and upgraded to the current second generation

J:\W\W2176 Weymouth\005 Fort Point Road Seawall MVP\Task 2 Survey and Existing Conditions\Field Investigations -12.31.18.docx



Client: Town of Weymouth

Job Number: W2179-

Site: Fort Point Road Seawalls

Photograph No.: 1	Date: 6/21/18	Direction Taken: Northwest
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Description: Example deterioration of the back side of the seawall near Harlem Road (circa 1955)



Photograph No.: 2	Date: 6/21/18	Direction Taken: South
Description: Example	e near 125 Fort Point F	Road, showing voids, wall and toe deterioration
		Company and
States In Contract	- The state of the state of the	
and the second sec		the second secon
		The second



Client: Town of Weymouth

-

Job Number: W2179-

Site: Fort Point Road Seawalls

Photograph No.: 3	Date: 6/21/18	Direction Taken: Southeast
Description: Corner of stairs, and poor wall a	of 138 Fort Point Road nd revetment conditior	showing private wall built on top of seawall, damage to

Photograph No.: 4	Date: 6/21/18	Direction Taken: East
Description: 138 and	140 Fort Point Road, p	private structures built onto seawall



Job Number: W2179-

Client: Town of Weymouth

Site: Fort Point Road Seawalls

Photograph No.: 5	Date: 6/21/18	Direction Taken:			
Description: Example	Description: Example repair of toe wall				
Photograph No.: 6	Date: 6/21/18	Direction Taken:			
Description: Example	Description: Example of wall spalling above mean high tide				



Client: Town of Weymouth

Job Number: W2179-

Site: Fort Point Road Seawalls

Photograph No.: 7	Date: 6/21/18	Direction Taken: South west
Description: Example	e toe wall failure, crack	ing and spalling, center a replacement unit
	Contraction Contraction Con-	
	The second second	
		A Provide State
	Torus -	
A State of the sta		

Photograph No.: 8	Date: 6/21/18	Direction Taken:	
Description: Example of wall deterioration with help through seawall			

Description: Example of wall deterioration with hole through seawall





Job Number: W2179-

Client: Town of Weymouth

Site: Fort Point Road Seawalls

Description: Cracking				
	Description: Cracking and spalling			
Photograph No.: 10	Date: 6/21/18	Direction Taken:		
Description: Spall revealing concrete core				


Client: Town of Weymouth

Job Number: W2179-

Tighe&Bond

Site: Fort Point Road Seawalls



Photograph No.: 2	Date: 6/21/18	Direction Taken: East
Description: Typical	deterioration of precas	t wall unit, and prior toe repair
· How	1 2	Difference in the second
2-Jan	and the second	
	The second	The second se
- Alexandre and alexandre	M. P. Same	



Job Number: W2179-

Client: Town of Weymouth

Site: Fort Point Road Seawalls



Description: End to end cracking of unit, and voids underneath prior toe repair





Job Number: W2179-

Client: Town of Weymouth

Site: Fort Point Road Seawalls

Photograph No.: 13	Date: 6/21/18	Direction Taken: West
(

Description: View of limit of repairs and added revetment (center of photo) Town owned section of Fort Point Road







Client: Town of Weymouth

Job Number: W2179-

Site: Fort Point Road Seawalls

Photograph No.: 15 D	Date: 6/21/18	Direction Taken: West

Description: Inside severe cracking of precast blocks, road repairs done behind wall



Photograph No.: 16	Date: 6/21/18	Direction Taken: West
Description: Inside s	evere cracking of preca	est blocks, road repairs done behind wall





Client: Town of Weymouth

Job Number: W2179-

Site: Fort Point Road Seawalls

Photograph No.: 17	Date: 6/21/18	Direction Taken: North
Description: View al bags at failing seawall	ong Fort Point Road wh unit	nere revetment was added and toe wall repaired, sand
<u>A</u>		
	A CARLER AND A CARLE	



SCALE IN FEET



Project: Fort Point Road Seawall File No.

Location: Fort Point Road, Weymouth, Massachusetts

Client: Town of Weymouth

Boring No. B-1A

 Page
 1
 of
 1

 File No.
 W-2176-005
 W-2176-005
 W-2176-005

Checked by:

Drilling	Co.: New E	ingland Boring	g Contractor	S		Casing	asing Sampler			Groundwat	water Readings			
Forema	n: Ken S	mith			Type Split Spoon Date			Time	Depth	Ca	asing	Sta. Tin	ne	
T&B Re	p.: E. Lar	kin			I.D./O.D.	4" / 4-1/4"	1-3/8"/2"			Refer t	o Not	e 1		
Date Sta	art: 04	/01/19	End:	04/01/19	Hammer Wt.		140#							
GS. Ele	V. ± 2'	Datum: NA			Other		Autohammer							
											N			
Depth	Casing	Sample	Sample	Blows							0			
- 1	Blows	NU.	Depth	Per 6"		Sample D	Description		General S	Stratigraphy	t e	W	ell Constructio	n
(ft.)	Per Ft.	Rec. (in)	(π.)								s			
		S-1/11	0-2	10-7	Medium dens	se brown	fine to coars	e SAND	0.5' A	sphalt				
				7_11	little Gravel, t	race Silt		0 0/ 110,						
				7-11					SA	AND				
		S-2/5	2-4	9-6	Medium dens	se, brown	, fine to coars	e SAND,						
				6-8	little Silt				4'					
		S-3/4	4-6	10-13	Medium dens	e brown	medium to c	oaree	GRAV	EL AND	1			
5				17-17	SAND and G	RAVEL, li	ittle Silt	Uaise	SA	AND				
		S 1/5	6.8	11.0					6					
		3-4/3	0-0	11-0	Medium Den	se, GRAV	′EL, some me	edium to	GR	AVEL				
				13-10	coarse Sanu	, liace Sil	L		8'					
						Refusal	at 8 feet							
10														
15												N	o Well Installe	d
20														
					1									
25														
25		1			1									
30														
Notes [.]					1		Proportion	ns Used	<u>.</u>][De	nsitv/0	Consiste	ency	
1) Grou	ndwater en	countered at	four feet.				TRACE (TR.)	0 - <10%	VERY	LOOSE	0-4	VEF	RY SOFT <	2
							SOME (SO)	10 - <20% 20 - <35%	LOOS MEDIL	E JM DENSE	4-10 10-30		DIUM 4-	-8
							AND	35 - <50%	DENS VERY	E DENSE	30-50 >50	VEF	Y STIFF 15-	30
							1		II .			HAP	~ >:	



Project: Fort Point Road Seawall Location: Fort Point Road, Weymouth, Massachusetts Client: Town of Weymouth
 Boring No.
 B-1B

 Page
 1
 of
 2

File No. W-2176-005 Checked by:

Drilling (Co.: New E	ngland Boring	g Contractor	S		Casing	Sampler			Groundwat	er Re	adings		
Forema	n: Ken Sr	nith			Туре		Split Spoon	Date	Time	Depth	Ca	asing	sing Sta. Time	
T&B Re	p.: E. Lark	kin			I.D./O.D	4" / 4-1/4"	1-3/8"/2"							
Date Sta	art: 04	(01/19 (ploration or	End:	04/01/19	Hammer Wt.		140#							
GS. Ele	V. ± 2'	Datum: NA	AVD88		Other		Autohammer							
					- <u> </u>						N		1	
Depth	Casing	Sample	Sample	Blows							0			
	Blows	110.	Depth	Per 6"		Sample De	escription		General S	tratigraphy	t e	W	uction	
(ft.)	Per Ft.	Rec. (in)	(π.)								s			
-														
5		S-1/10	8-10	10-12	Hard, brown, S	Silt & Cla	y, some Gra	vel, some	SILT ar	nd CLAY	1			
				50-36		coarse	Sand		10'					
10		S-2/9	10-12	20-33	Very dense, br	own, GR	AVEL and m	nedium to	10					
				29-23	coarse SAND,	some Si	lt		GRAVEI	and SAND				
									ORAVEL					
									14'					
45		S-3/4	14-16	12-13				0.11				Ι.		
15				11-22	Medium dense	e, gray, G	RAVEL, trac	e Silt				N	lo Well Ins	talled
									GR	VEL				
									19'					
		S-4/12	19-21	24-21	Dense brown	fine to c		and						
20				16.21	SILT. some Gr	avel	Uaise SAND	anu						
				10-21	- ,					nd SII T				
									0, 110 0					
		S-5/10	24-26	50_41					24					
25		3-5/10	24-20	50-41	Very dense, fir	ne to coa	rse SAND ar	nd						
				21-26	GIVAVEL, SOM									
									GRAVEL	and SAND				
		S 6/12	20.21	12 20										
		0-0/12	29-01	12-20	Dense, gray, G	RAVEL	and coarse S	SAND,						
30				23-25										
Notes: 1) Groiu	Indwater en	countered at	eight feet.				Proportion TRACE (TR.) LITTLE (LI.) SOME (SO.) AND	n <u>s Used</u> 0 - <10% 10 - <20% 20 - <35% 35 - <50%	VERY LOOSI MEDIL DENSI	Der LOOSE M DENSE	0-4 4-10 10-30 30-50	Consiste VEF SOF MEI 0 STI	Ency RY SOFT T DIUM FF RY STIFF	<2 2-4 4-8 8-15 15-30
									VERY	DENSE	>50	HAF	. חא	>30



Boring No.

Page

B-1B

2 of 2 W-2176-005

File No. Checked by:

Sample Casing Sample Depth 0 No. Blows Blows t Depth Sample Description General Stratigraphy Well Construction Per 6" е (ft.) s (ft.) Per Ft. Rec. (in) GRAVEL and SAND 34' S-7/18 34-36 25-33 35 Hard, gray, Clayey SILT, some Gravel 32-40 CLAYEY SILT 39' 39-41 S-8/14 21-47 GRAVEL 40 Very Dense, gray, GRAVEL and Silty Clay 49-34 41' Bottom of Exploration at 41 feet 45 50 55 60 65 Notes:

Project: Fort Point Road Seawall

Client:

Town of Weymouth

Location: Fort Point Road, Weymouth, Massachusetts



Drilling Co.: New England Boring Contractors

Foreman: Ken Smith

T&B Rep.: E. Larkin

Project:	Fort Point Road Seawall
Location:	Caldwell Street, Weymouth, Massachusetts
Client:	Town of Weymouth

Casing

4" / 4-1/4"

Туре

I.D./O.D.

Sampler

Split Spoon

1-3/8"/2"

Date

Time

Boring No. B-2 Page

File No. W-2176-005 Checked by:

Groundwater Readings

Depth Casing

Refer to Note 1

Date Sta	art: 04	/02/19	End:	04/02/19	Hammer Wt.	140#						
Location	See Ex	ploration Loc	ation Plan		Hammer Fall	30"						
GO. EIE	v. <u>± 2'</u>	Datum. INF	AV D00			Autonammer						
Depth	Casing Blows	Sample No.	Sample Depth	Blows	Sample D	escription		General Stratigraphy		N o t	Well C	construction
(ft.)	Per Ft.	Rec. (in)	(ft.)	Fero						s		
		S-1/8	0-2	5-6	Medium dense, brown	, fine to medium	n					
				9-11	SAND, some Silt, little	Gravel						
								SA	ND			
-												
-		0.0/0	1.0	44.5	-		-	4'				
5		5-2/8	4-6	14-5	Very stiff, brown, Claye	ey SILT, some f	fine					
				11-10	Sand, trace Graver							
								CLAYE	Y SILT			
								0'				
		S-3/14	9-11	14-18	Verv dense brown fin	e to coarse SAI	ND and	0		1		
10				18-17	SILT, little Gravel							
-												
-					•							
-												
-							-	14'				
15		S-4/18	14-16	15-23	Hard, brown, Clayey S	ILT and GRAVE	EL, little				No W	ell Installed
				35-34	medium to coarse San	d			bne T III			
								GRA	VEL			
-												
-								401				
-		S-5/9	19-21	24-24		т		19				
20		0.010	10 21	26.34	coarse Sand	I, some Grave	i, iittie					
-				20-34				CLAYE	Y SILT			
-												
-												
								24'				
25		S-6/15	24-26	13-18	Hard, gray, Silty CLAY	, some Gravel,	trace					
20				19-25	coarse Sand							
								SILTY	CLAY			
		S-7/16	29-31	14-17		little Crevel to						
30		0 1/10	20 01	27-34	coarse Sand	little Gravel, tra	ace					
50				21-04	1	Drementie	Llood	1	D	noit	Consistence	
1) Groundwater encountered at nine feet.						TRACE (TR.) 0 - <10%				DFT <2		
				LITTLE (LI.) 1 SOME (SO.) 2	10 - <20% 20 - <35%	LOOSE	E M DENSE	4-10 10-30		2-4 4-8 8 15		
						AND 3	35 - <50%	DENSE VERY	E DENSE	30-50 >50	VERY ST HARD	IFF 15-30 >30
						L						

1 of 2

Sta. Time



Boring No.

B-2

Page 2 of 2

File No. Checked	by:	W-2176-005	
General Stratigraphy	N o t e s	Well Construction	

Tighe& Bond Engineers Environmental Specialists				Project: Location: Client:	Fort Point Road Seawall Caldwell Street, Weymouth, Massachusetts Town of Weymouth	Boring Page File N Checl		
Depth (ft.)	Casing Blows Per Ft.	Sample No. Rec. (in)	Sample Depth (ft.)	Blows Per 6"	Sample Description	General Stratigra		
35		S-8/19	34-36	18-21 26-32	Hard, gray, Silty CLAY, little Gravel, trace coarse Sand	SILTY CLAY		
40		S-9/20	39-41	11-12 22-36	Hard, gray, Silty CLAY, little coarse Sand, trace Gravel Bottom of exploration at 41 feet	41'		
45								
50								
55								
60								

65 Notes:



Drilling Co.: New England Boring Contractors

Foreman: Ken Smith

T&B Rep.: E. Larkin

 Project:
 Fort Point Road Seawall

 Location:
 Fort Point Road, Weymouth, Massachusetts

 Client:
 Town of Weymouth

Sampler

Split Spoon 1-3/8"/2" Date

Time

Casing

4" / 4-1/4"

Туре

I.D./O.D.

Boring No. B-3

Casing

Sta. Time

 Page
 1
 of
 1

 File No.
 W-2176-005
 Checked by:
 V

Groundwater Readings

Refer to Note 1

Depth

Date Sta	art: 04	/02/19	End:	04/02/19	Hammer Wt.	140#					
Location	See E	xploration Loc Datum: NA	AVD88		Hammer Fall	30" Autohammer					
00. LIE	v. <u>± z</u>		AV D00			Autonammer					
Depth (ft.)	Casing Blows Per Ft.	Sample No. Rec. (in)	Sample Depth (ft.)	Blows Per 6"	Sample [Description	(General Stratigraphy	N ot s	Well (Construction
		S-1/12	0-2	8-9	Medium dense, brown		VEI .	8' Asphalt			
				6-4	little Asphalt, trace Silt		\V∟∟,				
ŀ					-			Fill			
ŀ											
-		0.0/5	4.0		-		4	1'	1		
5		5-2/5	4-0	4-1	Soft, brown, CLAY, litt	le Gravel, little fir	ne to				
				2-4	coarse Sand						
10		S-3/5	9-11	6-5	Stiff gray CLAY trace	e coarse Sand					
10				4-4	oun, gray, oerri, tract						
ſ											
ſ											
ľ								CLAY			
		S-4/24	14-16	2-5				OLAI			
15				8-7	Stiff, gray, CLAY					No W	ell Installed
ŀ											
-											
ŀ											
-		S 5/24	10.21	0.9	-						
20		5-5/24	19-21	9-0	Stiff, gray, CLAY						
-				7-10							
ļ					l		2	24'			
25		S-6/13	24-26	14-24	Hard, brown, SILT and	I GRAVEL, some	e fine	SILT and GRAVEL			
				33-21	to coarse SAND		2	26'			
					Bottom of the explorat	ion at 26 feet					
ſ											
ľ											
30					1						
Notes:		•			·]	Proportions L	Jsed	De	ensity/	Consistency	
1) Groundwater encountered at four feet.						TRACE (TR.) 0	- <10%) - <20%	VERY LOOSE	0-4 4-10	VERY SOFT	DFT <2 2-4
						SOME (SO.) 20) - <35%	MEDIUM DENSE DENSE	10-30 30-50		4-8 8-15 TIFE 15 20
							,,	VERY DENSE	>50	HARD	>30

Tighe&Bond

APPENDIX C

Town of Weymouth Department of Public Works

Kenan J. Connell Director of Public Works

120 Winter Street Weymouth, MA 02188

781-337-5100 FAX 781-337-6940



Robert L. Hedlund Mayor

75 Middle Street Weymouth, MA 02189

781-335-2000

An informal meeting regarding a proposed new seawall design at Fort Point Rd., as well as discussion of an upgraded drain system in surrounding streets, will be held at 6:00 p.m. on Thursday, March 21, 2019 in the McCulloch Building's Mary McElroy Meeting Room at 182 Green Street, North Weymouth.

The meeting will begin with a presentation on proposed reconstruction of the seawalls and coastal infrastructure. The town's consultant, Tighe & Bond, will present a slide show and answer questions. Staff from the Emergency Management Division, DPW Engineering Division and Planning & Community Development Department will be present and answer any questions.



Weymouth looks to build a taller seawall in Fort Point Road area

By <u>Ed Baker</u> ebaker@wickedlocal.com

Posted Mar 5, 2019 at 12:00 PM

Flood waters crashed over a seawall in the Fort Point Road neighborhood and damaged properties during a March 2018 nor'easter, but plans are being developed to construct a taller barrier along the shoreline, according to James McGrath, an assistant town engineer.

"We are working with a new consultant engineer for the project," he said. "They are in the preliminary stages of gathering information to begin the process of some design plans to raise the seawall. It has been crumbling for a few years now. It is in a state of disrepair."

McGrath said Tighe and Bond, a Westwood based engineering firm, has been hired to take a "fresh look" at previous plans to increase the seawall's height by Bourne Consulting Engineering.

"Our consultant will take into account sea level rise with the design," he said.

Sea levels are expected to increase by three feet along Weymouth's shoreline by the end of this century, according to Stantec's Urban Places Group, a Boston-based firm which has been working with town officials to plan for climate changes.

A storm with eight-foot tides coupled with the projected three-foot sea level rise would inundate Weymouth Landing and low-lying areas along the Back River and Fore River, according to Stantec's Urban Places Group.

The seawall design plans are being done under a \$130,000 grant awarded to Weymouth last year by the state's Municipal Vulnerability Preparedness program.

The Municipal Vulnerability Preparedness grant program (MVP) provides support for cities and towns in Massachusetts to begin the process of planning for climate change resiliency and implementing priority projects.

Mayor Robert Hedlund said he played a leading role with creating the Municipal Vulnerability Preparedness grant program in 2014 while serving as a state senator.

"We have a couple of seawall designs under consideration for the Fort Point Road neighborhood," he said. "We are in the design phase, and when we have an idea of a final construction cost, we will seek a grant through the state's Dam and Seawall Repair or Removal Program."

McGrath said a public information meeting will be held at 6 p.m. March 21 at the Whipple Senior Center to discuss the progress on a design for a planned new seawall along Fort Point Road.

"The Weymouth DPW and engineering consultant Tighe & Bond will discuss a brief history of the project and recent progress that has been made to provide a more resilient sea wall design and field questions from the public," he said.

In 2013, Bourne Engineering previously recommended raising the seawall heights by two feet on portions of the barriers near Fort Point Road and Fore River Avenue to reduce ocean overflow during storms.

Weymouth received a \$1.6 million state grant in January 2018 to repair a 324-foot segment of a well-worn seawall near Fore River Avenue.

The grant was awarded to Weymouth under Gov. Charlie Baker's annual capital budget and the state's Dam and Seawall Repair or Removal Fund.

"That is the first grant the town got for seawalls," Hedlund said.

Hedlund said his administration has been aggressive with seeking grants to cover seawall repairs.

The grant will cover 75 percent of an estimated \$2.2 million expense needed to repair the eastern portion of the seawall. The funding also will include the cost of reconstructing stormwater management systems with proprietary separators and check valves to pre-treat discharge and control backflows, according to State Rep. James Murphy, D-Weymouth.

Weymouth is required to pay \$561,963 to cover a portion of the cost to replace the seawall under the terms of the state grant, and the process by the town to secure permits for the repair project is underway, according to Hedlund.

Any redesign for replacing or repairing a seawall must allow for public access to the waterfront, be aesthetically pleasing and protect natural resources like saltwater marshes.

McGrath said a new seawall project will include placing new stone revetments near the barrier.

"The rocks break the wave action before it hits the wall," he said.

Hedlund said a new seawall on Fort Point Road will require the town to get some easements or access to private properties to construct the barrier.

"Much of Fort Point Road is privately owned," he said. "If all goes well and we get some cooperation from neighbors, we could secure a grant and begin construction in 2021. It's an aggressive schedule."

Follow the Weymouth News on Facebook.

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For

Thursday, March 21, 2019

Name	Address	E MARI	Desc
Pilpen Kryle Collins	7 CLRCH RD	SKINC Col. AU. ED	781335
			lar >
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Fort Point Seawall Public Meeting

Thursday, March 21, 2019

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Fort Point Seawall Public Meeting

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Name	Address	E-Mail	Phone
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George Powrea	51 BROAD REACH		
Clear Lewherd	ghe 15 Acritish Rd.		
Jo Curran	93 Lucino Qt		
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Town of Weymouth, Neighborhood Meeting March 21, 2019

Adam Yanulis | Vice President Duncan Mellor, PE | Principal Coastal Engineer Gabrielle Belfit, CSM | Project Manager



MVP PROGRAM GOALS

- Enhance flood protection for homes and public infrastructure
- Improve structural integrity to withstand major storm events with minimal damage
- Improve stormwater quality to benefit shellfish
- Reduce coastal flooding by designing to meet climate change projections, reducing risk to life and property





• WEYMOUTH GOALS FOR FORT POINT AREA

Address Risk and Climate Hazard Impact

Major Coastal Floods:

- Nor'easters, sea level rise, increased precipitation
- Erosion to coastal landforms, damage to roads and infrastructure,
- Building and property flooding

Improve Building Resilience

- Maintain & enhance coastal Infrastructure, revetment and seawall
- Create functional, holistic drainage system
- Elevate homes in velocity zones



Project Need

- Most vulnerable area for coastal flooding (84 homes)
- Up to a 3 mile wave fetch exposure
- Seawalls and Drainage systems inadequate to address natural hazards
- Identified as highest priority for building resiliency
 - Weymouth Hazard Mitigation Plan
 - Municipal Vulnerability
 Preparedness Plan
- Protect coastal resource areas including shellfish habitat





Current Conditions

- Wall (precast concrete, 55-87years old, 3,100 ft)
- Sea Level Rise about 0.6' since 1950's
- "Immediate" need of repair to address "Public Safety and Welfare"
- Drainage: past useful life
- Current drain system surcharges with tidal groundwater





• Damages

- FEMA Repetitive Loss Properties (16% of study area)
- Blizzard of '78- \$150,000
- No-Name Storm "91- \$30,000
- Blizzard of '72- \$75,000
- Winter Nor'easters of 2018- prolonged flooding and wall damage

Assessments, Repairs and Improvements

- 2008 and 2011 Bourne Consulting Seawall Assessment
- 2011 Preliminary Design for Repairs/ Replacement
- 2012 Emergency Repairs (700 feet)
- 2014 Alternative Design Options

MVP SCOPE

- Seawall Redesign
 - Consider past alternatives
 - Consider public input
- Drainage Improvements
 - Holistic system, with rapid drainage and water tight design to prevent surcharge
 - Pretreatment will remove TSS
- Climate change drivers
 - Sea Level Rise
 - Storm Surge
 - Increased Precipitation





Design Elevation

- FEMA VE 100-year flood zone (16 feet NAVD88)
- FEMA AE 100-year flood zone (11-12 feet NAVD88)
- The FEMA VE Zone flood level is significantly higher than the seawall and Fort Point Road.
- The seawall is not water proof and will not protect the area from every storm
- Raising the wall excessively is not desirable for the neighborhood as it interferes with public access.
- Protecting the wall for reasonable risk is preferred rather
 - than raising the seawall above FEMA flood levels.



Design Elevation

NOAA 100-year flood (9.6 feet NAVD88)

A design elevation of 12 feet was used to accommodate 1.6-1.9 feet of SLR by 2070.

Assume 50 year useful life of wall



Sea Level Rise Boston (w 0.84mm/yr subsidence)



Sea Level Rise computer modeling by NOAA indicates possible rise acceleration of 1.6' to 1.9' by 2070



PREVIOUS SEAWALL ALTERNATIVES

Views & beach access issues

SEAWALL ALTERNATIVES

Design Issues

- Flood elevation
- Wave action and sediment transport
- Impact on resource areas
- Public accessibility
- Visual impact

Previous Concepts Considered

- No Build
- Cobble Beach Nourishment
- Expanded rip rap revetment
- Seawall reconstruction of varying heights and widths
 - Preferred was 2 feet increase in height and expand the rip rap- ENF was filed in 2013 and withdrawn to explore more options
 - New ENF filed in 2016(7?) wall at same location and same height with new layer of armor stones, no additional flood protection





NEW ALTERNATIVE CONCEPTS



EXISTING SEAWALL

FEMA ZONE VE: ELEV. = 16' NAVD88 (ELEV. = 21.52 MLLW)



EXISTING SEAWALL




PROPOSED SEAWALL: CONCEPT 1A

FEMA ZONE VE: ELEV. = 16' NAVD88 (ELEV. = 21.52 MLLW)



PROPOSED SEAWALL: CONCEPT 1A





PROPOSED SEAWALL: CONCEPT 1B

FEMA ZONE VE: ELEV. = 16' NAVD88 (ELEV. = 21.52 MLLW)



PROPOSED SEAWALL: CONCEPT 1B







SAWTELLE ROAD



PROPOSED SEAWALL: CONCEPT 2A























PROPOSED STAIR CONCEPT



PLAN VIEW

DRAINAGE IMPROVEMENTS

- Drainage Design
- Assume 15% increase in 24hour rainfall due to climate change



SUMMARY OF ALTERNATIVES

OPTION NUMBER	PROS	CONS	APPROX COST
No Build	No jurisdictional impactsNo cost	 Wall blocks are deteriorating Does not provide additional freeboard for SLR 	\$
 1A Install concrete encase sheet pile wall Raise wall 2' to EL 12' 	 Prevents seep through w Provides additional freebo for SLR Can be adapted for future expansion 	all • High cost oard • Must reset some revetment e •	\$\$\$\$
 1B Install concrete encase sheet pile wall Raise to EL 13.5' 	 Prevents seep through w Wave overtopping reduce Consider raising road 	all • High cost ed • Must reset some revetment • Loss of some views over the wall	\$\$\$
 2A Replace existing wall b in kind Raise wall 2' to EL 12' 	 Simple solution Provides additional freebo for SLR Can be adapted for future expansion 	 Allows water through revetment Large cast-in-place leveling slab 	\$\$
 2B Replace existing wall b in kind Raise wall to EL 13.5' 	 Simple solution Wave overtopping reduce Consider raising road 	 Allows water through revetment Large cast-in-place slab Loss of some views over the wall 	\$\$
3A-Install concrete gravity-Raise wall 2' to EL 12'	 Provides additional freebo for SLR Can be adapted for future expansion 	oard • Provides additional freeboard for SLR e • Can be adapted for futur expansion	\$\$\$ e
3B – Install concrete gravity – Raise wall to EL 13.5'	Wave overtopping reduce wall Consider raising road	ed • Wave overtopping reduced	\$\$\$





PUBLIC ACCESS FOR REPAIRS



PUBLIC ACCESS AND PROJECT SITE OWNERSHIP

• Temporary Options for Access

Right of Entry Agreement

- Limited to one property
- Terminates when activity completed

Long Term Options for Future Maintenance

Permanent Easement

 Owner grants defined rights to another party for use of portion of land









3-YEAR PROJECT PHASING



PHASING THE INFRASTRUCTURE IMPROVEMENTS

- Preliminary Design-FY19
- Permitting- FY20
 - Conservation Commission
 - CZM
 - ACOE
 - MassDEP Waterways Chapter 91
- Final Design- FY20
 - Construction Drawings
 - Specifications
- Construction Services-FY21
 - Bidding
 - Construction Observation





GRANTS FOR INFRASTRUCTURE IMPROVEMENTS

- Permitting and Final Design- FY20
 - MVP Action Grant (4/19/19)

Construction FY-21

- Dam and Seawall Repair
 Program
- FEMA HMGP





Fort Point Seawall: Public Meeting Summary

(Task 3.1 Deliverable)

То:	Andrew Fontaine, P.E. Weymouth Town Engineer, Department of Public Works
	Jim McGrath Assistant Town Engineer, Department of Public Works
FROM:	Gabrielle Belfit, CFM; Project Manager Duncan Mellor, Principal Coastal Engineer
Through:	David Murphy, P.E.; Principal-in-Charge
DATE:	April 18, 2019

The Town of Weymouth has recently received a grant from the Executive Office of Energy and the Environment (EOEEA) under the Municipal Vulnerability Preparedness Program (MVP) to improve the resilience of infrastructure in the Fort Point Road vicinity. The scope of services includes engineering services for the existing conditions assessment, alternatives analysis, public outreach, and permit level design, to improve the approximately 2,348 linear feet of Fort Point Road seawall and rock revetment and associated stormwater drainage systems.

On Thursday, March 21, 2019, a public meeting was held at the McCulloch Building's Mary McElroy Meeting Room at 182 Green Street, North Weymouth from 6-8PM. The purpose of the meeting was to informally present and discuss the work completed on the proposed new seawall design at Fort Point Road, in addition to upgrading the storm drain system associated with the seawall.

Approximately 45 residents and Town staff attended the meeting (sign in attached) which began in an open format with proposed cross sections of conceptual designs provided for viewing, along with light refreshments. Staff from the DPW Engineering Division, Harbor Master, Conservation Commission, Emergency Management Division and Planning & Community Development Department were available throughout the evening to answer any questions.

Opening remarks were provided by Weymouth Town Engineer, Chip Fontaine highlighting the long history of issues with the Fort Point Seawall and introducing the Town's consultant, Tighe & Bond, to present a slide show on proposed reconstruction of the seawalls and coastal infrastructure and answer questions.

The highlights of the presentation are provided below. Questions from the audience are not included in the meeting summary for the sake of brevity, but it is worth noting that participation from the audience was excellent. Individuals commented on their personal experiences from the March 2018 Nor'easters to help support the case for the project, and also mention past concerns with the wall concepts. Questions were predominantly clarification of a point that was being presented, and time was taken as the meeting went on to answer the question or defer it to Weymouth staff that had more knowledge on the issue. After the meeting, residents continued to engage with the Town and presenters to highlight concerns and express their appreciation that the Town was working to move the project forward

Gabrielle Belfit provided a synopsis of the MVP action goals. Weymouth adopted similar specific goals for Fort Point coastal infrastructure improvements, including addressing risk and climate hazard impacts from major coastal flooding due to Nor'easters, sea level rise and extreme precipitation. These impacts have resulted in coastal erosion along Fort Point Road, undermining the roadway, damaging utilities and the seawall, leaving homes and property more vulnerable to wave action. Weymouth goals for Fort Point are to enhance coastal revetment and seawalls, create functional, holistic drainage, and encourage elevation of homes in velocity zones. The MVP Grant awarded to Weymouth will address the seawall and associated drainage enhancement goals.

The seawall and revetment run along the west and north edge of Fort Point Road, beginning at the intersection of River Street and Fort Point Road and extending to the end of Fort Point Road and Riverview Place, in Weymouth, Massachusetts. The current coastal engineering structure, within the project area was constructed circa the 1950s. This stone berm/seawall configuration is not intended to be water tight or act as a levee preventing flooding. In consideration of the wave exposure and the wave protection it provides for at least 84 homes, this structure has been identified as the highest priority for coastal resiliency mitigation in both the Weymouth Hazard Mitigation Plan, and the Weymouth Municipal Vulnerability Preparedness Plan.

The precast concrete seawall ranges from 55-87 years old. It is in typically poor condition with localized failures of the precast concrete seawall units and typical deterioration of the foundation slab. The extent of this severe deterioration does indicate these seawall units are at or beyond their service life, are not cost effective to repair and need to be replaced. There is a short length of seawall (about 160 LF) between Parnell Street and Caldwell Street with houses immediately behind the seawall where the seawall is used to support walls and decks. Removal and replacement of these precast concrete seawall units is not feasible unless the privately-owned structures are removed off the wall. If this is not possible, another alternative such as a concrete overlay, may be necessary. Discussion during the meeting with one of these owners, did indicate the decks founded on this length of seawall will be removed as part of their house elevating work.

Drainage structures include three stormwater systems, each a mix of catch-basins, manholes, concrete pipes, and a check-valve the Fort Point Area. The neighborhood drainage system is critical to collect and remove rain water, but also tidal flood waters coming through the soils, seawall/stone berm and from wave overtopping. As noted in earlier existing conditions summaries, stormwater drainage in the Fort Point Area includes three independent stormwater systems, with the remaining areas draining by sheet flow towards the beach.

The neighborhood did express significant concern about tidal groundwater flooding. Previous coastal flooding has highlighted problems with seepage and backflow through the drainage system, leaking or blocked drainage check valves, leaking pipe joints and a lack of sufficient gravity drainage capacity to drain floodwaters in a timely manner at low tides following a storm surge flooding event. The systems also lack any oil/water separation and in many locations the drain system surcharges due to inflow of tidal groundwater.

The pipes and check valves have reached the end of their useful life and will be replaced as part of this project. The project intent is to replace the drainage systems (including pipe) with enhancements to improve coastal resiliency and address water quality to the extent practical. New pipes and modern second-generation elastomeric coated check valves will be installed, enhancing the performance of the seawall drainage system.

Statistics were presented showing repetitive losses in the Fort Point Area. Sixteen percent of the properties sustained damages in the Blizzards of 1972, 1978 and Nor'easters in 1991 and

March 2018. Assessments for improvements and temporary repairs a have been completed over the past 10 years, but a design that would work for the permitting agencies and abutters was not agreed on.

Tighe & Bond reviewed the past design work, abutters and regulator concerns to craft alternatives that could work with a design balancing habitat protection, climate change impacts and abutter requirement for water views and physical access to the beach.

Duncan Mellor, Principal Coastal Engineer with Tighe & Bond explained the criteria used in determining the design elevation of the seawall. He first explained the FEMA flood map, showing a slide of the 100-year flood elevation, pointing out properties located in the Special Hazard Flood Area including high velocity zones (VE), where the 100-year flood elevation was set at 16 feet NAVD88, and the coastal area AE 100-year flood elevation is set at 11-12 feet NAVD88 depending on location.

The FEMA VE Zone flood level is significantly higher than the seawall and Fort Point Road. The seawall is not water proof and will not protect the area from every storm. Raising the wall excessively is not desirable for the neighborhood as it interferes with public access. Protecting the wall for reasonable risk is preferred rather than raising the seawall above FEMA flood levels.

Tighe & Bond looked at the actual tide elevations at the Boston Harbor Tide Gauge and noted that the NOAA 100-year flood was elevation 9.6 feet NAVD88. To accommodate sea level rise, and assuming that the seawall would be constructed to last at least 50 years, 2070 was chosen as a reasonable planning horizon. A design elevation of 12 feet was used to accommodate 1.6-1.9 feet of SLR by 2070. This range of sea level rise is supported by the statewide climate change information included in the 2018 Massachusetts State Hazard Mitigation Plan. Duncan also presented a slide showing the trend of sea level rise at the Boston Harbor Tide Gauge to further demonstrate that the trend and predictions are reasonable design criteria.

A brief discussion of the previously considered wall alternatives highlighted the design issues and previous concepts considered including:

- No Build. Cobble Beach Nourishment
- Expanded rip rap revetment
- Seawall reconstruction of varying heights and widths

In 2011 the preferred was a 2-foot increase in height and expanding the rip rap. An ENF was filed in 2013 and then withdrawn to explore more options. A new ENF was filed in 2017 with the wall at same location and same height with a new layer of armor stones, no additional flood protection.

The design issues including flood elevation, wave action and sediment transport, impact on resource areas, public accessibility and visual impact have not altered. So the solution will be a design that is permittable, more robust than the current design, and adaptable to accommodate sea level rise in the future. There was discussion about enhancing the stone revetment to better absorb wave energy, which was agreed as beneficial, however enlarged revetment enhancements are not permittable with Massachusetts regulators. At least one abutter did ask about an artificial reef beyond the beach to reduce wave energy reaching the seawall, and it was agreed to be the state of the art in coastal engineering, but to date none have been approved in Massachusetts. This was noted as an option to pursue for future coastal resiliency improvements to help avoid future wall height increases.

Duncan presented several seawall designs that could meet these criteria. A synopsis of the alternative pros and cons from the presentation is included in Table 1. The slide show included renderings of the wall alternatives to get an idea of the different perspectives one would have walking along the side of the road with the different wall heights.

Concept 1 is to install a concrete encased vertical sheet pile wall. The wall is proposed to be raised about 2.5 feet to an elevation of 12' NAVD88. This wall is one of the more expensive options, and some of the revetment would need to be reset for installation. Some of the improvements with this concept are the prevention of seepage through and under the seawall, the height of the wall will provide the additional freeboard necessary for sea level rise, and the wall would be built in such a way that future expansion would be possible. If this wall concept was raised to elevation 13.5' NAVD88, all previously stated benefits would still apply as well as the reduction of wave overtopping, however a taller wall would reduce the visibility for some of the property owners. A show of hands during the meeting indicated this concept, incorporating a sheet pile cutoff wall, was strongly favored.

Concept 2 is an in-kind replacement. The existing, deteriorating blocks would be removed and replaced with a recurved precast concrete wall block with a concrete leveling slab poured to the elevation necessary to bring the wall to the desired elevation of 12.0' NAVD88. The existing revetment would be reset as necessary. Some of the benefits of this concept include the additional freeboard for sea level rise, it can be adapted for future expansion, and that it is a proven solution. This solution allows water though the revetment, which was a concern of some of the citizens of the area. If this wall concept was raised to elevation 13.5' NAVD88, all of the previous benefits and negative effects would still apply, as well as the reduction in wave overtopping and the loss of some views over the wall.

Concept 3 is to install an L-shape cast-in-place concrete gravity wall to be raised 2 feet to elevation 12' NAVD88. The bottom portion of the L-shape would be constructed beneath the road. This option was another more expensive option, with benefits including the additional freeboard for sea level rise, and it can be adapted for future expansion. This solution would also allow water through the revetment. If this wall concept was raised to elevation13.5' NAVD88, all of the previous benefits and negative effects would still apply as well as the reduction of wave overtopping and the loss of some views over the wall.

It was noted that future seawall height raising might be balanced by raising the road to a higher elevation, if future conditions would allow corresponding driveway and cross road raising.

OPTION NUMBER	PROS	CONS	APPROX COST
No Build	No jurisdictional impactsNo cost	 Wall blocks are deteriorating Does not provide additional freeboard for SLR 	\$
 1A - Sheet Pile Supported Wall Install concrete encased sheet pile wall Raise wall 2.5' to EL 12' 	 Prevents seep through wall Provides additional freeboard for SLR Can be adapted for future expansion 	High costMust reset some revetment	\$\$\$\$

Table 1

Summary of Wall Alternatives

1B - Sheet P tall – In: en – Ra	vile Supported Wall- stall concrete ncased sheet pile wall aise to EL 13.5'	Prevents seep through wall•Wave overtopping reduced.•Adaptable for future•expansion•	High cost Must reset some revetment Loss of some views over the wall	\$\$\$\$
2A - Inkind F – Re blo – Ra	Replacement eplace existing wall • ocks in kind • aise wall 2.5' to EL 12'	Proven solution • Provides additional freeboard for SLR • Adaptable for future expansion	Allows water through revetment Large cast-in-place leveling slab	\$\$
2B- Inkind R – Re blo – Ra	teplacement - talleplace existing wallocks in kindaise wall to EL 13.5'	Proven solution•Wave overtopping reducedAdaptable for future•expansion•	Allows water through revetment Large cast-in-place slab Loss of some views over the wall	\$\$
3A- Concret – In: wa – Ra	e Gravity Wall stall concrete gravity • all aise wall 2.5' to EL 12' •	Provides additional • freeboard for SLR Adaptable for future • expansion	Provides additional freeboard for SLR Can be adapted for future expansion	\$\$\$
3B - Concret — In: wa — Ra	te Gravity Wall-tall stall concrete gravity • all • aise wall to EL 13.5'	Wave overtopping reduced • Adaptable for future expansion •	Wave overtopping reduced to manageable levels Can be adapted for future expansion	\$\$\$

The proposed concept for the public access stairway that would have the least impact on the beach was discussed. The stairway wraps around the top of the seawall and drops down over the revetment with pilings to support the foot of the stairs. Different wall finishes were presented. These options would be decided at the final design phase. The steps over the seawall would be concrete, while the final run onto the beach would be of open construction to address regulatory constraints.

Options to improve the drainage design were limited due to the tight site constraints and slope. Improvements to the layout, pipe sizing, material and check valves would be the focus of the design. A 15% increase in the 24-hour rainfall will be included to accommodate larger storm events anticipated due to climate change.

The options to provide public access locations down to the beach were also discussed. The suggested locations for stairs included a stairway at the end of Bacon Road, and one at the end of Parnell Street. Based on comments from the audience the second stairway would likely be more appropriate at the end of Parnell Street, and an additional set of access stairs at Caldwell Street were requested.

Jim McGrath, Weymouth Assistant Town Engineer discussed the construction and maintenance issues involved in the project. The stretch of Fort Point Road from Bacon Road to Parnell Street is a private way providing access for 12 homes. All but four of the homes show property boundary extending up to the end of the roadway, but four of the houses shown property boundary extending over the roadway and seawall onto the beach. For the

homes located along this stretch of Fort Point Road, two types of access agreements will be needed. A temporary access agreement for construction will be needed for all 12 of the homes, and for the 4 homes at the end of the road, a permanent easement will be needed, both for construction and long-term maintenance. Jim offered to discuss the easements with any of the homeowners at the end of the meeting.

The presentation wrapped up with a discussion of the next phase of the project, permitting and final design. An FY20 MVP action grant was targeted to fund this next phase of the work. Once all of the permits were in hand, there were a few options to pursue construction funding in FY21.

After the slide presentation, a serios of video renderings of the wall options were shown to the audience. The rendering started at River Street and proceeded along the road to the end of Parnell. The main difference between the renderings were the wall heights.

Chip Fontaine closed the hearing with an informal vote from the audience on which alternate was preferred. A loud majority of the audience favored option 1A. Individual residents engaged in follow-up questions with the Town and speakers for an additional 45 minutes while enjoying refreshments. The neighborhood expressed much appreciation that the project is moving forward, after years of perceived inaction under the prior consultant.

Tighe&Bond

APPENDIX D

TOWN OF WEYMOUTH FORT POINT COASTAL INFRASTRUCTURE IMPROVEMENTS WEYMOUTH, MASSACHUSETTS

LIST OF DRAWINGS		
SHEET NO.	SHEET TITLE	
	COVER SHEET	
G.001	NOTES & LEGEND SHEET	
V.101-V.106	EXISTING CONDITIONS & DEMOLITION PLANS	
C.101-C.106	SITE PLANS	
C.501-C.502	DETAILS	



PERMIT SET NOT FOR CONSTRUCTION

MAY 30, 2019





PREPARED FOR: TOWN OF WEYMOUTH 75 MIDDLE STREET WEYMOUTH, MA 02189

DEPARTMENT OF PUBLIC WORKS 120 WINTER STREET WEYMOUTH, MA 02188

LOCATION MAP 0 1,000 2,000 2,000

TOWN ENGINEER ANDREW FONTAINE, PE



<u>REFERENCE PLANS:</u>
1. "EXISTING CONDITIONS SURVEY" BY ALPHA SURVEY GROUP, LLC, DATED JANUARY 8, 2019.

- EXISTING CONDITIONS NOTES: 1. EXISTING CONDITIONS BASED ON ON-THE-GROUND SURVEY BY ALPHA SURVEY GROUP, LLC ON NOVEMBER 29, 2018 AND JANUARY 7, 2019.
- 2. VERTICAL DATUM BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988
- (NAVD88). 3. HORIZONTAL DATUM BASED ON MASSACHUSETTS STATE PLANE COORDINATE
- SYSTEM, REFERENCED TO NORTH AMERICAN DATUM OF 1983 (NAD83). 4. TIDAL DATUMS ELEVATIONS SHOWN ARE BASED ON THE NATIONAL
- OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION (NOAA) TIDE STATION "WEYMOUTH FORE RIVER MA" #8444788 FOR THE 1983-2001 TIDAL EPOCH. 5. FLOOD ZONES SHOWN ARE APPROXIMATE FROM THE FEDERAL EMERGENCY MANAGEMENT ADMINISTRATION (FEMA) FLOOD INSURANCE RATE MAP (FIRM)
- #25021C0093E BASED ON FEMA SHAPE FILE DATA. 6. PARCEL LINES SHOWN ARE FROM MASSGIS AND ARE APPROXIMATE.
- 7. SEE REFERENCE PLANS FOR BENCHMARK INFORMATION.
- 8. ELEVATIONS GIVEN ARE IN FEET.
- 9. BASELINE STATIONING SHOWN ON PLANS BASED ON SEAWARD FACE OF THE SEAWALL BLOCKS.
- 10. UTILITY LOCATIONS PROVIDED BY SURVEYOR AND ARE APPROXIMATE BASED ON FIELD SURVEY AND RECORD DRAWINGS/GIS DATA PROVIDED BY TOWN OF WEYMOUTH.
- 11. SALT MARSH AND RESOURCE AREAS DELINEATED BY TIGHE & BOND, INC. DURING FIELD SUVEY ON NOVEMBER 29, 2018 AND JANUARY 7, 2019. DATUM ELEVATION

DATUM	ELEVAII
HAT	6.83'
MHHW	4.81'
MHW	4.37'
NAVD88	0.00'
MLW	-5.19'
MLLW	-5.52'

NOTE: SEE EXISTING CONDITIONS NOTE #4, SHEET G.001.

ABBREVIATIONS		LEGEND
СВ	CATCHBASIN	· · · ·
CMP	CORRUGATED METAL PIPE	
CONC	CONCRETE	
CPP	CORRUGATED PLASTIC PIPE	
DMH	DRAIN MANHOLE	
FW	FACE OF WALL	
G	GROUND	
HAT	HIGHEST ANNUAL TIDE	
HSE	HOUSE	
INV	INVERT	OE
MHHW	MEAN HIGHER HIGH WATER	G
MHW	MEAN HIGH WATER	W
MLLW	MEAN LOWER LOW WATER	SS
MLW	MEAN LOW WATER	D
PVC	POLYVINYL CHLORIDE	
SMH	SEWER MANHOLE	
STRY	STORY	
TR	TOP OF REVETMENT	
TS	TOP OF SLAB	
TW	TOP OF WALL	
TBR	TO BE REMOVED	
OF-#	OUTFALL	ص
STA	STATION	GG
PCB	PROPOSED CATCHBASIN	GSO
CPP	CORRUGATED POLYPROPLYENE PIPE	WSO
PDMH	PROPOSED DRAIN MANHOLE	, and the second se
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	TOP OF COASTAL BANK MEAN LOWER LOW WATER				
	MEAN LOW WATER				
- ·	HIGHEST ANNUAL TIDE				
	RESOURCE AREA BUFFER EXISTING EDGE OF GRAVEL BOAD				
	EXISTING OVERHEAD ELECTRIC LINE				
	EXISTING GAS LINE EXISTING WATER LINE				
	EXISTING SANITARY SEWER LINE				
	EXISTING DRAIN LINE 1' CONTOUR LINE				
	5' CONTOUR LINE				
·	EXISTING WALL ALIGNMENT				
	SALI MARSH				
	EXISTING REVETMENT				
	EXISTING UTILITY POLE				
	EXISTING GAS SHUT OFF				
	EXISTING WATER SHUT OFF EXISTING HYDRANT				
	EXISTING SEWER MANHOLE				
	EXISTING CATCHBASIN EXISTING DRAIN MANHOLE				
	PROPOSED SEA WALL				
	UTILITIES TO BE ABANDONED				
	PROPOSED STORM LINE PROPOSED CATCH BASIN				
	PROPOSED 60" DOUBLE CATCH BASIN				
	PROPOSED 48" DRAIN MANHOLE				
	PROPOSED 60" DRAIN MANHOLE				
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NOTE:

INSTALL PER MANUFACTURERS RECOMMENDATIONS.

INLET PROTECTION BARRIER NO SCALE



THE FOLLOWING ASSUMPTIONS: NO HYDROSTATIC PRESSURE UNIT WEIGHT OF SOIL (γ s) = 120 PCF

NOTES:

- 1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION, WITH THE EXCEPTION THAT THE INITIAL BACKFILL MAY EXTEND TO THE CROWN OF THE PIPE. SOIL CLASSIFICATIONS ARE PER THE LATEST VERSION OF ASTM D2321. CLASS IVB MATERIALS (MH, CH) AS DEFINED IN PREVIOUS VERSIONS OF ASTM D2321 ARE NOT APPROPRIATE BACKFILL MATERIALS.
- 2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED. 3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE AS JUDGED BY THE ENGINEER, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- 4. <u>BEDDING</u>: SUITABLE MATERIAL SHALL BE CLASS I, II, III, OR IV. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 12"-24" (300mm-600mm) DIAMETER PIPE; 6" (150mm) FOR 30"-60" (750mm-1500mm) DIAMETER PIPE. THE MIDDLE 1/3 BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED. PLEASE NOTE, CLASS IV MATERIAL HAS LIMITED APPLICATION AND CAN BE DIFFICULT TO PLACE AND COMPACT; USE ONLY WITH THE APPROVAL OF THE GEOTECHNICAL ENGINEER.
- 5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II, III, OR IV IN THE PIPE ZONE EXTENDING TO THE CROWN OF THE PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED. PLEASE NOTE, CLASS IV MATERIAL HAS LIMITED APPLICATION AND CAN BE DIFFICULT TO PLACE AND COMPACT; USE ONLY WITH THE APPROVAL OF THE GEOTECHNICAL ENGINEER.
- 6. MINIMUM COVER: FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" (300mm) UP TO 48" (1200mm) DIAMETER PIPE AND 24" (600mm) OF COVER FOR 60" (1500mm) DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

HP STORM TRENCH INSTALLATION D NO SCALE

<u>PLAN VIEW</u>

-

→ 4^y → ►

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37' | 26' | 18' | 14' | 19' | 14' | 14' TABLE 3, MAXIMUM COVER FOR ADS HP STORM PIPE FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12,

CLASS II CLASS III CLASS IV PIPE DIA. COMPACTED 95% 90% 85% 95% 90% 95% 28' 21' 16' 20' 16' 16' 42' 29' 21' 16' 21' 16' 16' 44' | 30' | 21' | 16' | 22' | 17' | 16'

TABLE 2, MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITION * VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

	CONDITION		
PIPE DIAM.	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *	
12" - 48"	18"**	48"	
60"	24"	60"	
** AT STRUCTURES			

SURFACE LIVE LOADING

Ir Ir	nfras npro	tructure vements		
To W	Town of Weymouth			
Weymouth, Massachusetts				
MARK	DATE	DESCRIPTION		
PROJE	PROJECT NO: W-2176-005			
DATE:	DATE: May 30, 2019			
FILE: W-2176-005_WF-DTLS.dwg				
DRAWN BY: JAK				
CHECKED: DCM				

DETAILS

C-502

DAM

AS SHOWN

APPROVED:

SCALE:

PERMIT SET

NOT FOR CONSTRUCTION

Fort Point

Coastal

1" REBAR FOR BAG REMOVAL

> -DUMP STRAP (TYP. OF 2)







Opinion of Probable Cost

Town of Weymouth, Massachusetts Fort Point Seawall Replacement

May 2019

ITEM #	EST.QTY	DESCRIPTION	Unit Price	Total Price	Assumptions/Notes
1	1	Erosion & turbidity controls, install, maintain, remove	ŚE 000	ŚE 000	Allowance
2	1	Traffic Control, contractor	\$5,000	\$5,000	Allowalice
	LS		\$20,000	\$20,000	Allowance
3	1	Uniformed Traffic Police			
	LS		\$10,000	\$10,000	Allowance
Δ	335	Existing Seawall Unit Removal			All seawall units removed, each seawall unit 7 LF (2348
Ţ	EA		\$250	\$83,750	
5	47 Davis	Excavation incl. revetment stone	\$E 000	\$225 000	50 LF per day, 2348 LF total
	Days		\$3,000	<i>4233,000</i>	
6	2348	New Concrete Seawall, Elev. 12' NAVD88	¢1.010	¢2 704 017	
7	2400	Backfill armor stone	\$1,612	\$3,784,917	Coated steel sneet pile seawall encased in concrete
	ton		\$65	\$156,000	assumes some reuse existing
8	3 EA	Solid Concrete Stairways	\$30.000	\$90.000	New public access solid core stairs, concrete
9	180	Processed Gravel Borrow			3 foot offset from back of sewall
10	CY 2348	Remove and Reuse Coastal Revetment Stone	\$65	\$11,700	8" of gravel
10	LF		\$150	\$105,660	Selected areas of revetment to be reset
11	3	Wood Stairs			Wood stairs including balical anchors
	EA		\$12,000	\$36,000	
12	8 TON	Calcium Chloride for Dust Control	\$1,200	\$9,600	
13	13	60-inch Precast Concrete Manholes	<i>\</i>	<i>\$3,000</i>	Price estimated from local precast concrete
	EA		\$5,500	\$71,500	structure company estimates
14	EA	48-inch Precast Concrete Manholes	\$4,000	\$92,000	Price estimated from local precast concrete structure company estimates
15	26	Manhole Frame & Cover/ Grate			
16	EA	20. inch Eloy Valva	\$1,400	\$36,400	
10	EA		\$6,000	\$12,000	
17	193	20" CPP Storm Drain Pipe	6120	¢22.400	Price estimated form MADot weighted bid prices
18	499	30-inch CPP Storm Drain Pipe	\$120	\$23,160	Price estimated form MADot weighted bid prices
10	LF	24 inch CDD storm Dunin Ding	\$160	\$79,840	Duine estimate of forms MAD at unions which a bid unions
19	454 LF	24-Inch CPP storm brain Pipe	\$120	\$54,480	Price estimated form MADot weighted bid prices
20	352	15- inch CPP Storm Pipe	ć o o	¢20.400	Price estimated form MADot weighted bid prices
21	2	24- inch Flex Valve	\$80	\$28,160	Price estimated based on Emergency Contract
	EA		\$5,500	\$11,000	
22	332 LF	18- Inch CPP Storm drain Pipe	\$87	\$28,884	Price estimated form MADot weighted bid prices
23	1	18- inch Flex Valve			Price estimated based on Emergency Contract
24	EA 79	10- inch CPP Storm Drain Pipe	\$5,000	\$5,000	Price estimated form MADot weighted bid prices
	LF		\$75	\$5,925	· · · · · · · ·
25	1 EA	T2- INCU FIEX AGINE	\$4,000	\$4.000	
26	183	12- inch CPP Storm Drain Pipe			Price estimated form MADot weighted bid prices
27	LF 800	Fine Grade Compaction	\$80	\$14,640	
	SY		\$10	\$8,000	3 toot offset from back of seawall
28	BA	Outrail Penetration & Encasements	\$25,000	\$75.000	Allowance
29	1600	Non-woven Geotextile Fabric (Geotech 801)			Area calculated by 6 foot offset multiplied
30	SY 1	Vibration Monitoring	\$6	\$9,600	by length of seawall being replaced 2 houses
	LS		\$35,000	\$35,000	
31	1 LS	Hot Mix Asphalt	\$170.000	\$170.000	Price estimated form MADot weighted bid prices Allowance
32	1	As built survey			
	LS	SUBTOTAL BID PRICF:	\$16,000 \$5.328.216	\$16,000	
		Contingency (20%):	\$1,065,643		
		General Conditions (15%):	\$159,846 \$6 552 705		
		Bid Phase Eng.	\$6,000		
		Engineering Services During Construction / Observation	\$490,600		
		I UTAL OPCC	\$7,030,305		

DISCLAIMER:

This is an engineer's Opinion of probable Construction Cost (OPCC). Tighe & Bond has no control over the cost or availability of labor, equipment or materials, or over market conditions or the Contractor's method of pricing, and that the estimates of probable construction costs are made on the basis of the Tighe & Bond's professional judgment and experience. Tighe & Bond makes no guarantee nor warranty, expressed or implied, that the bids or the negotiated cost of the Work will not vary from this estimate of the Probable Construction Cost.

Identification and Assessment of Permits Needed for Coastal Infrastructure Improvements in the Fort Point Area

То:	Andrew "Chip" Fontaine, PE, Town Engineer			
	Jim McGrath, PLS, Assistant Town Engineer			
FROM:	Gabrielle Belfit, CFM, Amanda Houle, PWS, CERP, Tighe & Bond			
THROUGH:	Duncan Mellor, PE, Tighe & Bond			
	David Murphy, PE, Tighe & Bond			
DATE:	June 4, 2019			

This memorandum presents an overview and assessment of permitting and regulatory review needs for the Fort Point coastal infrastructure project proposed to address coastal flooding in Weymouth as part of the Municipal Vulnerability Preparedness Program (MVP) grant for the Fort Point Road Coastal Infrastructure Resilience Project. The Town of Weymouth proposes to improve approximately 2,348 linear feet of the Fort Point Road seawall and rock revetment and associated stormwater drainage systems. The 75% design for these improvements will be completed as part of the FY18 MVP Action Grant. This memorandum describes the permits and other regulatory review processes that will likely be required to authorize the improvements to the coastal infrastructure, including applicability, permit timelines, and studies needed to support permit applications. Potential opportunities to optimize the cost and effort to file the required project permits is discussed. This memorandum can be considered a preliminary permitting evaluation. Once projects move into final design, permits and review processes will be further evaluated to confirm requirements based on the preferred design and associated impacts.

1. Overview of Project

Coastal infrastructure in the Fort Point Road neighborhood protects some of the most vulnerable areas in Weymouth from coastal flooding and proves to be inadequate protection to maintain safe conditions during major coastal storms. The Town of Weymouth is proposing to redesign the seawall in the Fort Point area to provide a resilient, holistic system capable of functioning properly over the 50-year life of the new infrastructure. This holistic and resilient design approach will take into account projected climate change impacts, sea level rise, and increased frequency and severity of coastal storms.

The project area is densely populated by single-family homes bordered by coastal infrastructure (seawall, rock revetment, and drainage structures) located along the following coastal roadways in North Weymouth generally adjacent to the upper Fore River: Fort Point Road, Birch Road, Bacon Road, Harlem Road, Wolcott Street, Sawtelle Street, Parnell Street, Caldwell Street, and Mayflower Avenue.

The Fort Point Road seawall and associated revetment are proposed to be redesigned and reconstructed to better respond to projected climate change impacts over the life of the infrastructure. The proposed seawall would be reconstructed as a concrete encased sheet pile wall and will be raised approximately 2 feet to an elevation of 12' NAVD88 (Figure 1).



Figure 1: Proposed Seawall Design

The proposed project also includes public access stairways in three locations. The design of the concrete and timber stairways wraps around the top of the seawall and drops down over the revetment with helical anchor pilings to support the foot of the open timber stairway (Figure 2). The suggested locations for stairs include a stairway at the end of Sawtell Road, Bacon Road, and the north end of Caldwell Street.



Figure 2: Proposed Stairway Design

2. Overview of Permits Assessed

Tighe & Bond evaluated local, state, and federal permits and regulatory review processes that may be required to implement the coastal infrastructure improvements in the Fort Point area. The proposed project area is situated within jurisdictional wetland resource areas (e.g., Coastal Bank, Coastal Beach, and Land Subject to Coastal Storm Flowage). As part of this evaluation, we reviewed the following permitting programs for applicability to the proposed seawall and drainage repairs:

- Massachusetts Environmental Policy Act (MEPA) Environmental Notification Form (ENF)
- Massachusetts Wetlands Protection Act Notice of Intent (NOI)
- United States Army Corps of Engineers (USACE) Pre-Construction Notification (PCN) under the Massachusetts General Permit (Section 10)
- Massachusetts Department of Environmental Protection (MassDEP) Section 401 Water Quality Certification
- MGL Chapter 91, The Massachusetts Public Waterfront Act Waterways License
- Historical Review and Notification Massachusetts Historical Commission, Massachusetts Bureau of Underwater Archaeological Resources, and pertinent Tribal Historic Preservation Officers
- Division of Marine Fisheries (DMF) Consultation
- Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Permits
- Zoning permits
- Massachusetts Office of Coastal Zone Management Federal Consistency Review

This list will be refined as the 75% design is revised and finalized, and once resource area impacts are quantified. The permitting required will ultimately depend on the overall magnitude of the necessary repairs and construction methodology, which will not be known until the selected alternative is reviewed by the necessary regulatory agencies for comment. Once comments from these agencies are received, the extent of permitting can and will be determined. Additionally, work that takes place within the footprint of the original seawall may be exempt from one or more permitting agencies if it is considered a maintenance or replacement project.

The following section provides more detail on the permits reviewed, including preparation time and permit timelines, fees, and relevant references.

2.1 State and Local Permits and Other Required Reviews

2.1.1 Massachusetts Environmental Policy Act (MEPA) Review ¹

The MEPA review process provides for coordinated state agency and public review of projects that meet certain review thresholds defined at 301 CMR 11.03 and that require a State Agency Action (e.g., Permit, Financial Assistance, or a Land Transfer). Through the MEPA process, relevant state agencies are required to identify any aspects of the proposed project that require additional analysis or mitigation prior to completion of the agency action. Single and complete projects must be considered for MEPA review; division of a project into elements for separate MEPA review is defined as segmentation and is not allowable. Due to the nature of the proposed project, it is anticipated that an ENF will be required based on one or more wetlands thresholds.

The seawall repairs will likely require state approval (i.e., Agency Action) which, in this case, would be a Chapter 91 Waterways License for the seawall and is anticipated to receive Financial Assistance (MVP Action Grant funding). The proposed project is likely to trigger one or more review thresholds related to wetlands, including impacts to Coastal Bank and new fill or structure in a velocity zone. These triggers are review thresholds for an Environmental Notification Form (ENF) and additional MEPA review if the Secretary so requires.

Based on current assumptions related to the project impacts, the project is not expected trigger a mandatory Environmental Impact Report (EIR). The ENF will need to describe the project, its alternatives, and proposed mitigation measures. It will also need to describe how the project will comply with the performance standards of any required state permits. The ENF should also discuss compliance with CZM's Federal Consistency Standards.

The ENF will need to be produced and distributed in accordance with the MEPA circulation requirements. The Town's consultant will need to coordinate and attend a MEPA public site meeting for the project and respond to any comments or questions from MEPA, other regulatory officials, and/or the public. Upon issuance of a MEPA Certificate, the Certificate is valid for a period of five years.

Generally, an ENF takes up to two months to prepare and the MEPA review process takes on average two months, without extensions. EIRs are additional work and can take as much as six months to prepare. There is no application fee, but several regulatory agencies are required to receive copies of the submittals.

2.1.2 Notice of Intent

A Notice of Intent (NOI) will be required for the proposed seawall repairs within jurisdictional resource areas in accordance with the Massachusetts Wetlands Protection Act (WPA) M.G.L. Chapter 131 Section 40 and implementing regulations (310 CMR 10.00), along with the Weymouth Wetlands Protection Ordinance. Work associated with the project

¹ <u>http://www.mass.gov/eea/agencies/mepa/</u>

is expected to occur within Coastal Bank, Coastal Beach, Land Subject to Coastal Storm Flowage, and the 100-foot Buffer Zone, at a minimum.

Accordingly, the Town's consultant will prepare and submit an NOI concurrently to the Conservation Commission and MassDEP. The NOI will also need to be submitted to the MA Division of Marine Fisheries (DMF), as the work involves work below the mean high water line in coastal waters. The NOI should demonstrate how the proposed work meets, to the extent feasible, the performance standards established for each resource area where work is proposed. The NOI application will need to include the following:

- The appropriate permit application forms;
- Project narrative including construction sequence;
- Resource maps (e.g., USGS, floodplain, tax map);
- Site photographs
- Site plans and drawings depicting the existing conditions and the proposed activities
- MassDEP Stormwater Checklist and Drainage Report
- Request for certified list of abutters and abutter notification
- Alternatives analysis
- Attendance at one site walk with the Conservation Commission
- Attendance at two public hearings with the Conservation Commission

After an Order of Conditions (OOC) is received from the Conservation Commission, the OCC will need to be recorded at the Norfolk County Registry of Deeds. Following the completion of construction activities, the Town's consultant will need to develop a Request for Certificate of Compliance to close out the project.

Typically, it takes a minimum of one month to prepare the NOI and then another three months to obtain the Order of Conditions from the date of submittal, given the anticipated number of hearings, OOC issuance turnaround, and appeal period. The timeframe can be less, depending on the complexity of the project. For Town projects, the fee is waived. The Order of Conditions is for three years and may be extended for an additional three years upon formal request to the Commission.

2.1.3 Army Corps of Engineers Review (Section 10)²

The New England District of the U.S. Army Corps of Engineers (Corps) regulates activities subject to Corps jurisdiction in Waters of the U.S. within the boundaries of, and off the coast of the Commonwealth of Massachusetts through a permitting and review process pursuant to the Massachusetts General Permit. The proposed project is subject to jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 due to potential work within tidal waters of the United States. Temporary and permanent impacts to Waters of the United States in excess of 5,000 square feet but less than one acre, and which do not impact special aquatic sites, or which otherwise do not meet Self-Verification review thresholds, are subject to

² <u>http://www.nae.usace.army.mil/Missions/Regulatory/StateGeneralPermits/MassachusettsGeneralPermit.aspx</u>

review under a Pre-Construction Notification (PCN) under the Massachusetts General Permit (MA GP). For the purposes of this assessment, it is assumed that the project will trigger a PCN. A PCN application will need to be developed that includes the appropriate application forms, a detailed narrative describing the project, site photographs, site plans and details, resource maps and any other required information.

There is no application fee for this review process. The PCN review period takes on average three to four months upon the date of submittal of a complete application. Coordination with the Corps will be required following the PCN submittal to respond to comments and provide any additional information requested by the Corps or other federal agencies participating in the project review.

2.1.4 Massachusetts 401 Water Quality Certification ³

The Water Quality Certification regulations implement Section 401 of the federal Clean Water Act (CWA) in Massachusetts by establishing permitting requirements to ensure that dredging projects, or proposed discharges of dredged or fill material, protect the public health and the Commonwealth's water resources.

A Section 401 Water Quality Certification (WQC) is triggered by the filing of a federal permit. If the project results in a loss of 5,000 square feet cumulatively of Bordering or Isolated Vegetated Wetlands and Land under Water, the amount of any proposed dredging is greater than 100 cubic yards, or if any of the other thresholds listed in 314 CMR 9.04 are met. This project is not anticipated to exceed these thresholds. Driving the sheet pile only required moving stones along the sheet pile alignment so there would be no disturbance below the regulated area. Work proposed around the outfalls will not likely trigger the 401 WQC threshold.

2.1.5 MGL Chapter 91, The Massachusetts Public Waterfront Act⁴

The Commonwealth's primary tool for protection and promotion of public use of its tidelands and other waterways is Massachusetts General Law Chapter 91, the waterways licensing program.

Based on recent correspondence with MassDEP, there is no existing Chapter 91 license for the seawall. Public works projects which were completed before 1984 did not require the filing on a Chapter 91 license. Generally, maintenance and minor repair work within the footprint of the original fill does not require the filing of a new license. Repair work that extends beyond the original footprint of existing fill requires the filing of a Chapter 91 license. It may be possible to pursue a Chapter 91 Minor Modification for an existing unauthorized public works project. The Town's consultant may prepare and submit a request for a Minor Modification to the Waterways staff at MassDEP. Pending review of the modification request and following consultation with MassDEP Waterways staff, the Town's consultant may need to develop a Chapter 91 license application and project plans in the

³http://www.mass.gov/eea/agencies/massdep/water/regulations/314-cmr-9-00-401-water-qualitycertifications.html

⁴http://www.mass.gov/eea/agencies/massdep/water/watersheds/chapter-91-the-massachusetts-public-waterfrontact.html

required License format for submittal to MassDEP should the Minor Modification be determined insufficient to authorize the work. If a license is required, the Town's consultant will also need to notify abutters and provide copies of the filings in accordance with MassDEP's distribution requirements. Comments from MassDEP during the review process will need to be addressed and the License and License plans will be recorded at the Registry of Deeds upon authorization.

Time periods are established in MassDEP's regulations (310 CMR 9.00), but on an average, the estimated timeframe for this process is one year. The ENF filing must occur before filing an application for a Chapter 91 License. Following application, the process includes determining water dependency, public notice period (15 to 30 days), public hearing (if requested), written determination, appeal period, file completion, and recording the license. A Request for Certificate of Compliance must be submitted within 60 days of the completion of construction. Application fees are waived for municipal applicants.

2.1.6 Massachusetts Historical Review ⁵

Any new construction projects or renovations to existing structures that require funding, licenses, or permits from any state or federal governmental agencies must be reviewed by the State Historic Preservation Officers, including the Massachusetts Historical Commission, (MHC) and the Massachusetts Bureau of Underwater Archaeological Resources (BUAR), as well as pertinent Tribal Historic Preservation Officers (THPOs) for impacts to historic and archaeological properties in accordance with Section 106 of the National Historic Preservation Act of 1966 and 950 CMR 71. The purpose of this review is to ensure that projects minimize or mitigate adverse effects to properties listed in the National and/or State Register of Historical review and a copy of the Corps' SHPO/THPO Notification Form will be completed and circulated during the PCN application process to initiate Section 106 review. There is no application fee for this process.

2.1.7 Division of Marine Fisheries (DMF) Consultation

The project site is located within a coastal water and is also adjacent to Land Containing Shellfish. Therefore, the Town will need to coordinate with DMF during project design and permitting to identify ways to avoid, minimize, and mitigate impacts to fishery and shellfish resources. Although MA DMF participates in the MEPA review process and the NOI review, advance consultation with this agency is recommended for coastal projects of this nature.

2.1.8 U.S. Environmental Protection Agency National Pollutant Discharge Elimination System (NPDES) Permit

Construction activities that result in the disturbance of one or more acres of land are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). Prior to construction, a Notice of Intent (NOI) must be submitted to the Environmental Protection Agency (EPA) and a Stormwater Pollution Prevention Plan (SWPPP) must be developed for the project. Based on the

⁵ <u>http://www.sec.state.ma.us/mhc/mhcrevcom/revcomidx.htm</u>

preliminary design, we do not anticipate this project will disturb one or more acres of land and therefore coverage under the EPA NPDES CGP is not applicable.

Stormwater discharges from land owned or operated by the Town of Weymouth are regulated by EPA's NPDES Small Municipal Separate Storm Sewer System (MS4) General Permit. Construction of a new outfall is allowed by this permit assuming minimum control measures are met and enhanced BMPs are undertaken to protect already impaired waterbodies. However, because this permit is co-issued by the MassDEP, an antidegradation review for new outfalls is required for compliance with 314 CMR 4.04. Official guidance has not yet been published by MassDEP; Tighe & Bond is working to obtain confirmation on this process from MassDEP. Any requirement for enhanced BMP's will be addressed in the final design phase.

2.1.8 Zoning Permits

The Town of Weymouth has several local zoning, permitting and review processes. Based on our review of the Town of Weymouth zoning regulations, it is assumed that Site Plan Review or a Special Permit are not required for this project.

2.1.9 Massachusetts Office of Coastal Zone Management Review

The proposed projects may be subject to Federal Consistency Review by the Massachusetts Office of Coastal Zone Management (CZM) pursuant to 301 CMR 21.07(3), as they require a federal license or permit and are located within the Massachusetts Coastal Zone (as defined by 301 CMR 21.00). Typically, CZM will not require a stand-alone Federal Consistency Determination and CZM's review will be limited to providing comments to other agencies during the permitting processes.

3. Recommendations to Reduce Permitting Costs and Effort

Given the number of permits required, lengthy review timelines associated with each, and level of effort required to prepare each submittal, Tighe & Bond makes the following recommendations for permit application sequencing.

It is recommended that the MEPA process be initiated and completed prior to preparation and submittal of other permit applications. We have found additional information is required during MEPA review at the request of permitting agencies (that will also need to be incorporated into permit applications) and that minor design changes may also result over the course of the public comment process. Identifying information, design, or narrative deficiencies during the MEPA process allows for a more efficient permitting process, as this information may then be incorporated into permit applications and narratives at the outset, rather than at the request of the agency reviewer at some point during the review timeline, which could further stall the project.

During or before the MEPA process, it may be beneficial to commence the Minor Modification Request process with MassDEP Waterways. MassDEP is allowed 30 calendar days for response to the modification request. Denial or approval of the Minor Modification would inform the need to prepare and submit an application for a Chapter 91 Waterways License.

Given the extended review timelines required for both the Section 401 Water Quality Certification and the Chapter 91 License (if License is required), it is recommended applications for these authorizations are submitted following the conclusion of the MEPA process. MassDEP offers a Joint 401/91 application process, allowing the applications to utilize the same public notice and comment period and provides other minor efficiencies in review that would otherwise not be provided were they submitted separately. Should a Chapter 91 License not be required, the Section 401 WQC will be submitted as a standalone application to MassDEP.

We also recommend that the NOI be submitted shortly after the 401 WQC and Chapter 91 applications, to secure an OOC for the work, as the OOC is required by MassDEP to complete both the 401 WQC and Chapter 91 processes. We then suggest submitting the PCN on or around the time of the NOI submittal. Submitting all permit applications over the course of three to four weeks commences a concurrent review from all regulatory authorities and provides more efficiency than a staggered review.

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