



Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Monica Tibbitts-Nutt, Secretary & CEO
Jonathan L. Gulliver, Highway Administrator



November 20, 2023

Donna A. Fisher
Bridge Program Manager
First Coast Guard District
408 Atlantic Av. Boston MA 02110
Donna.A.Fisher@uscg.mil

SUBJECT: MassDOT Project No. 605311
Route 6 (Marion & Wareham Roads) over Weweantic River
(M-05-001=W-06-013 & W-06-016)
Bridge Replacement Project
Request for Advanced Approval

Dear Ms. Fisher,

The Massachusetts Department of Transportation (MassDOT) respectfully requests Coast Guard concurrence that the reach of the Weweantic River in the location of Bridge M-05-001=W-06-013 in Marion and Wareham, Massachusetts and Bridge W-06-016 in Wareham, Massachusetts qualifies for Advance Approval pursuant to 33 CFR 115.70 - Advance approval of bridges.

Key documentation is included for your review, including a USGS Locus map and Google Satellite view of the area (**Attachment A**) and a NOAA chart view (**Attachment B**) of the waterway.

[Bridge No. M-05-001=W-06-013](#)

According to the Marion Harbormaster (**Attachment C**), no boats over 21-feet pass under this bridge due to the shallower bathymetry of the river at the bridge, whereby the bridge is over water that is too shallow for the passage of motorboats. This was also confirmed by two long-term employees of the Wareham Marina (**Attachment D**), who identified that only jet skis, canoes, or kayaks cross under the bridge. No sail boats were observed or reported.

[Bridge No. W-06-016](#)

A Navigation Survey is included from the Wareham Harbormaster (**Attachment C**). Most marine vessels including speedboats, center consoles, and dingy boats pass under Bridge No. W-06-016 as a result of the river bathymetry. According to two long-term employees of the Wareham Marina (**Attachment D**), the maximum length of boats crossing under this bridge are up to 26-feet in length. No sail boats were observed or reported.

[Site Walk](#)

On August 24, 2023, Elijah LeMacchio (USCG), Bryan Cordeiro (MassDOT), and Sara Kreisel (BSC Group) visited the Wareham Marina, approximately 0.4 miles upstream, to discuss the proposed project. While the owner was unavailable to join the meeting, two long-term employees spoke with the USCG and the Project Proponents.

Contemporaneous notes of the visit are included in **Attachment D**, and are summarized here:

- There is a significant history of sedimentation in the Weweantic River, which has already been dredged before. The sediment has since returned, which has resulted in 20% of the marina slips being inoperable.
- The marina confirmed that only jet skis and kayaks (or equivalent) utilize the Marion-Wareham (M-05-001=W-06-013) bridge.
- Commercial boats do not use this Marina, only recreational boaters.
- Boats up to 26-feet in length use bridge W-06-016.
- Raising the low chord of the bridges would add 1.5-2 hours of usage time for mariners each day but will not change what boats can use the marina. Navigable channels will also be widened as the bridge piers of the new structure will be moved.
- Anticipated future conditions are that existing users of the marina will be able to get more usable waterway time; however, there will likely not be an increase to the number of boats using the marina or the size of boats.

Additional dredging in the Weweantic is unlikely to occur, given that the waterway became re-sedimented as quickly as it did, the marina employees indicated that the site would need continual dredging, but did not know when it was last dredged. The employees had heard various information about the proposed construction, but outwardly appeared pleasantly surprised and even impressed when they were informed of the proposed navigable dimensions. Specifically, they noted that raising the bridges the proposed 2-2.5 feet would be good for the vessels using the crossing, which inherently provides local support from the Wareham Marina of the proposed replacement bridge which provides increased vertical and horizontal clearance.

Vessels On-Site

Images of the boats observed on-site, and at the upstream Wareham Marina are included in the attached photo log (**Attachment E**). This list generally includes boats such as dinghies, center consoles, & speedboats, most of which are under 20-feet in length. In addition to the boats seen in the river in-use and docked at the marina, the marina employees identified that jet skis, canoes, and kayaks are dropped in the water at the upstream public boat launch. All vessels using the marina and boat launch are for recreational use only, per discussion with the marina (**Attachment D**).

As included in **Attachment E**, Photo #1 shows what is believed to be a 25-foot 2005 Robalo R235 Walkaround with a (small) interior compartment. While it could possibly be considered a cabin cruiser, this recreational fishing boat has more in common with a center console recreational fishing vessel than a cabin cruiser. The interior space on this vessel is not tall enough to stand up in and is not a "living space" as much as a storage space and place to escape from the weather (see **Figure 1 and 2**). There is only sleeping space for one adult and would be considered extremely limited living space overall. Beyond this particular boat, there are additional recreational vessels identified on-site with small interior compartments (**Attachment E**), but again, none of these include space large-enough for "living space" (i.e. sleeping, cooking, and eating).



Figure 1: Interior space (Robalo R235 Walkaround) **Figure 2:** Interior space (Robalo R235 Walkaround)

MassDOT does not believe that this boat or others similar to it, is a *cabin cruiser* as intended by the USCG regulations. By definition, a *cabin cruiser* is a:

*powerboat with facilities (such as a cabin and plumbing) necessary for living aboard called also cabin cruiser.*¹

The Robalo seen on-site on the day of the site visit is more similar to a center console fishing boat (**Figure 3**) than either a classic (**Figure 4**) or modern (**Figure 5**) cabin cruiser. The regulatory language is over 40 years old² and the 25-foot Robalo observed on the site visit is a hybrid more similar to a center console fishing boat in 2023 than to a cabin cruiser of the 1980s.

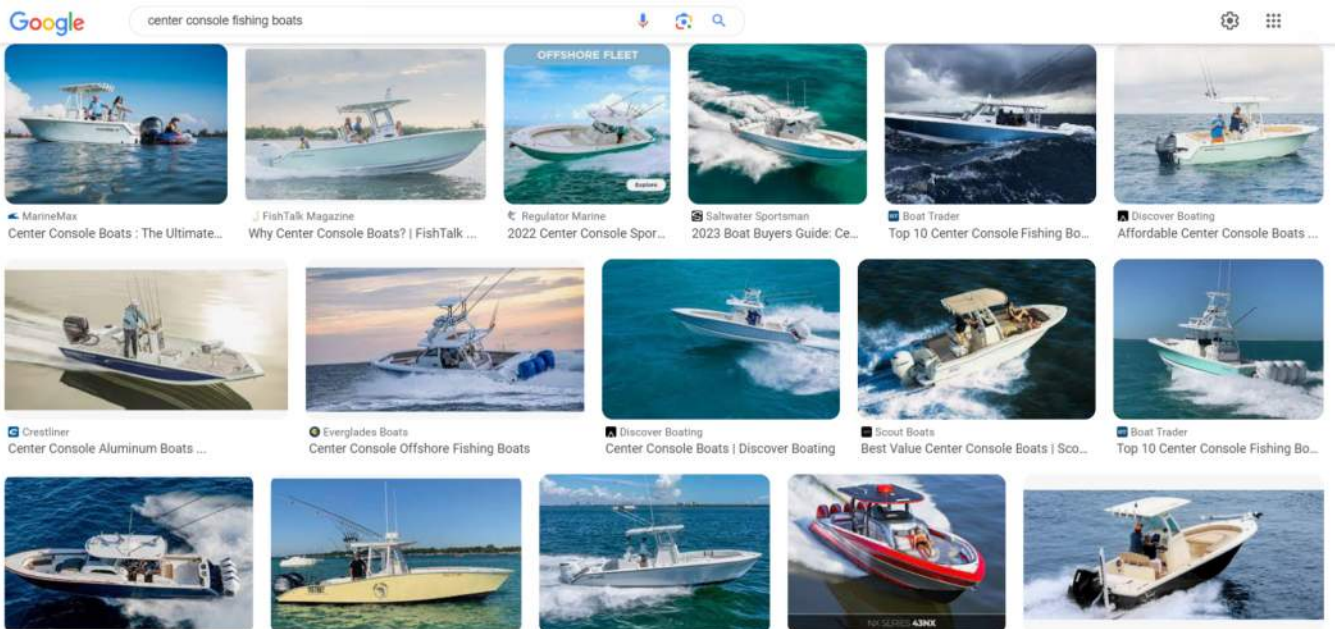


Figure 3: Center console fishing boats

¹ <https://www.merriam-webster.com/dictionary/cruiser>

² Federal Register, November 5, 1981, page 54935

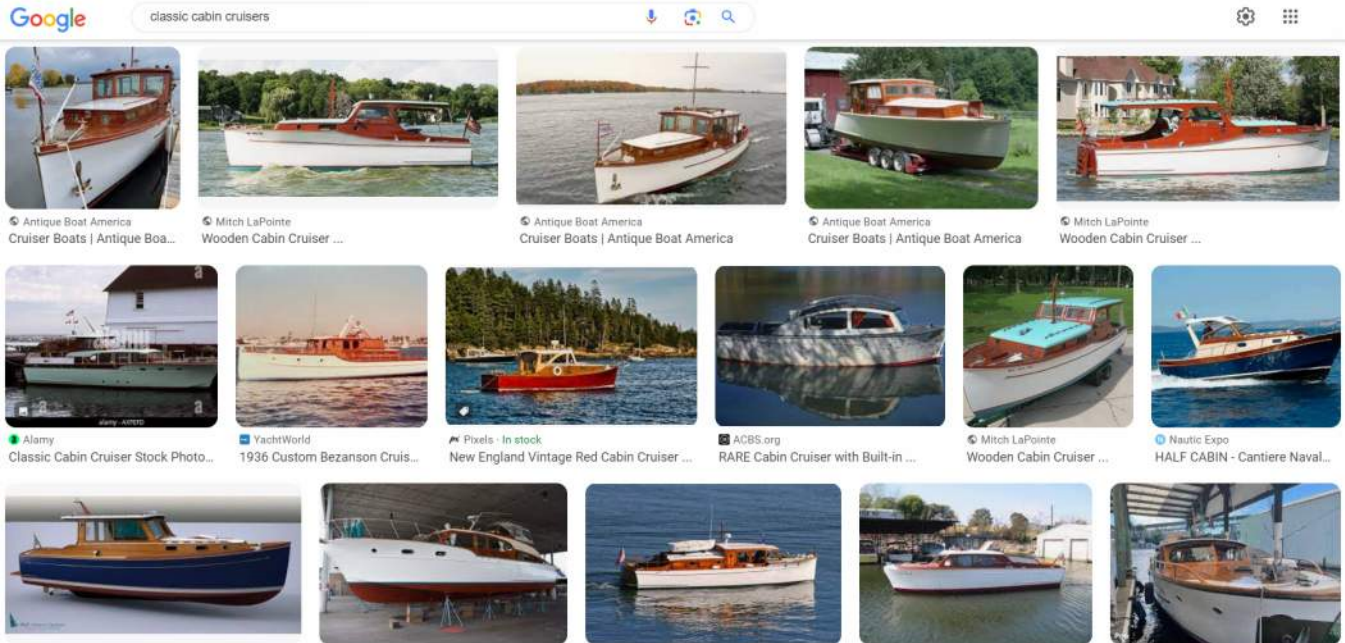


Figure 4: Classic cabin cruisers

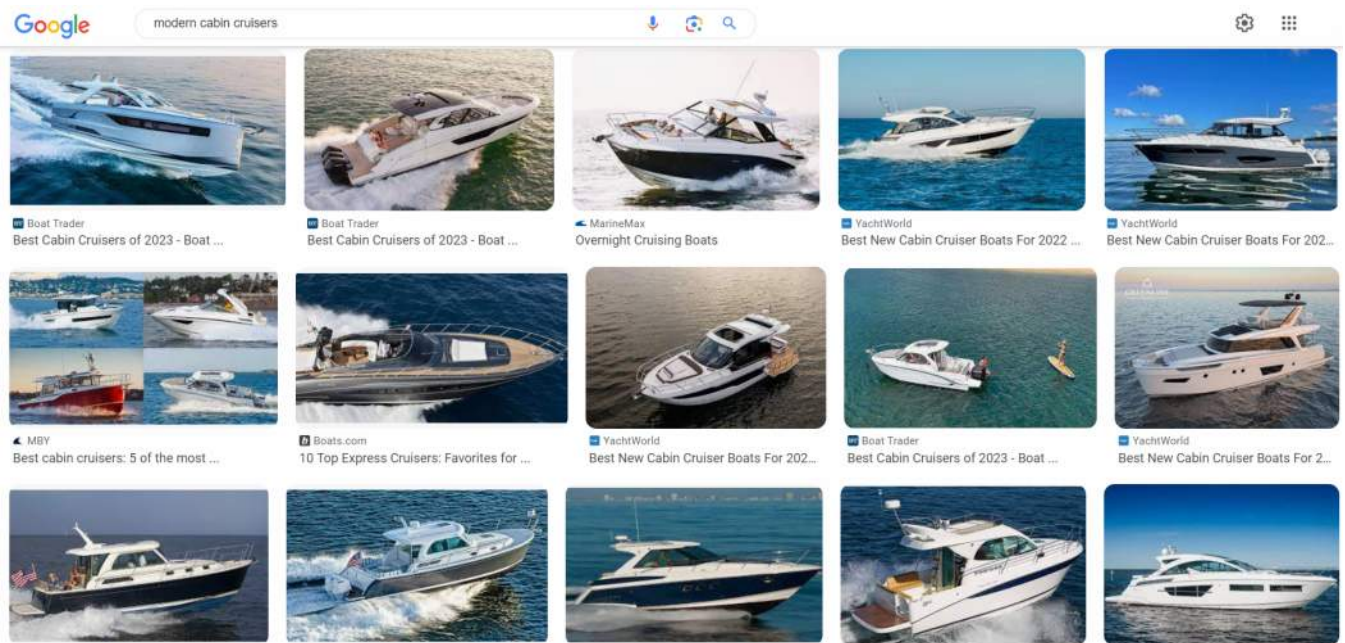


Figure 5: Modern cabin cruisers

Elevated Clearance

The proposed clearances for the bridges are greater than clearances of the existing bridges. The vertical profile of Bridge No. M-05-001=W-06-013 will be increased 2.15-feet to provide a hydraulic minimum vertical clearance of 8.05 feet, and Bridge No. W-06-016 will be increased 2.5-feet to provide a hydraulic

minimum vertical clearance of 7.42-feet. The width of the navigable channels will also be expanding, as the proposed bridges will include shifted piers. The proposed improvements on the bridge dimensions are summarized in Table 1 below.

Table 1 – Summary of Major Dimensions and Overall Proposed Improvements

Bridge No.	Span Length		Widest Navigable Channel		Hydraulic Min. Vertical Clearance	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
Marion/Wareham M-05-001=W-06-013	109-feet	136-feet	49.75-feet	60-feet	5.90-feet	8.05-feet
Wareham W-06-016	147.5-feet	184-feet	51.5-feet	68-feet	4.92-feet	7.42-feet

In conclusion, navigation on the Weweantic River will be improved by the proposed project which will increase the horizontal and vertical clearances of the bridge MassDOT will build. The proposed bridge replacements of M-05-001=W-06-013 and W-06-016 will benefit mariners, increase navigability of the Weweantic River, addresses sea level rise, and provides structurally-sound crossings of the Weweantic River for motorists, bicyclists, and pedestrians.

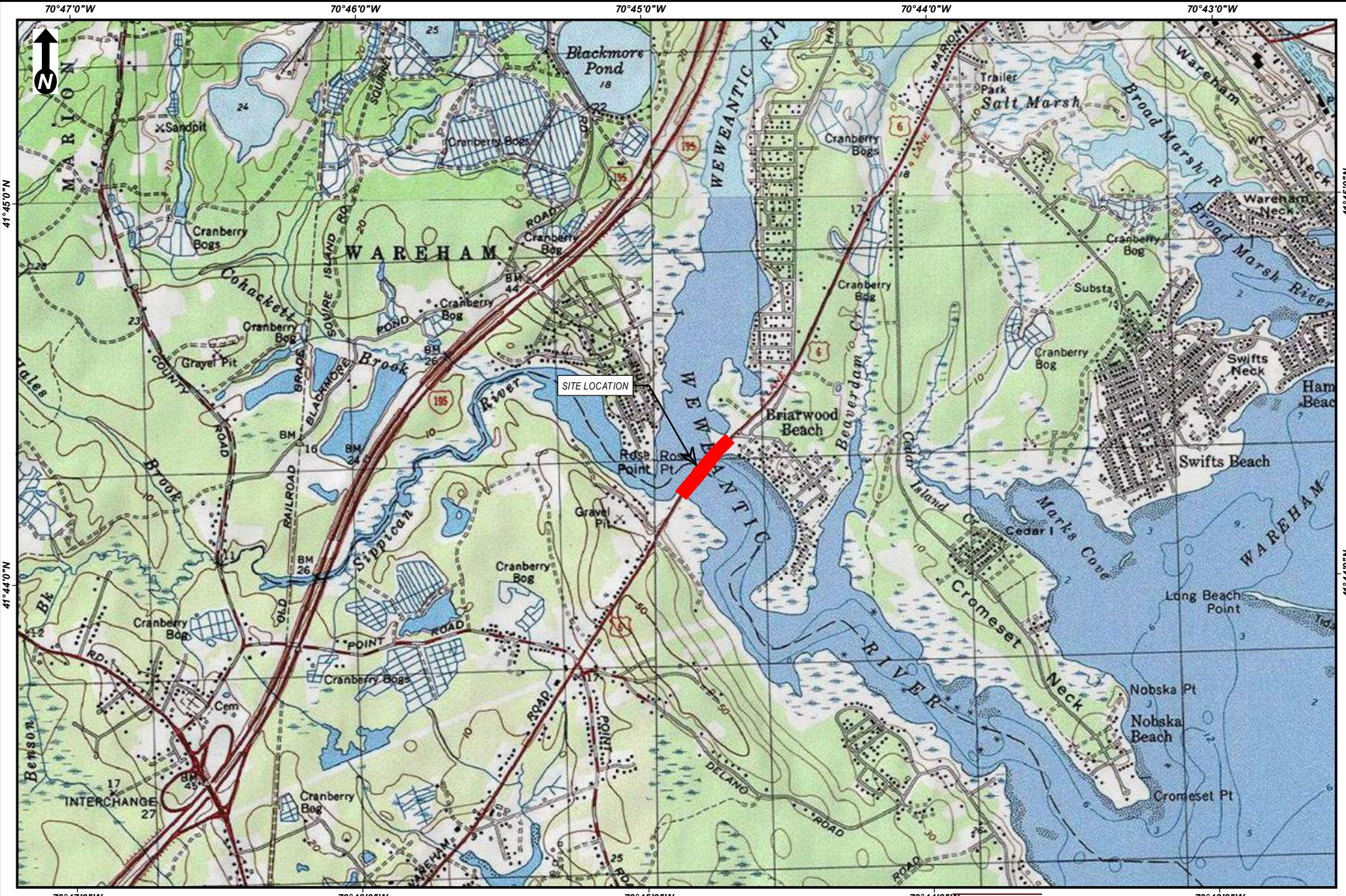
Therefore, MassDOT is requesting USCG's *Advanced Approval* of these bridges in their currently proposed design, pursuant to 33 CFR 115.70 Advance approval of bridges.

If you have questions regarding the subject project, please contact me by at email at bryan.cordeiro@dot.state.ma.us, or at (774) 993-9632.

Sincerely,

Bryan Cordeiro
Bryan Cordeiro
MassDOT Project Manager

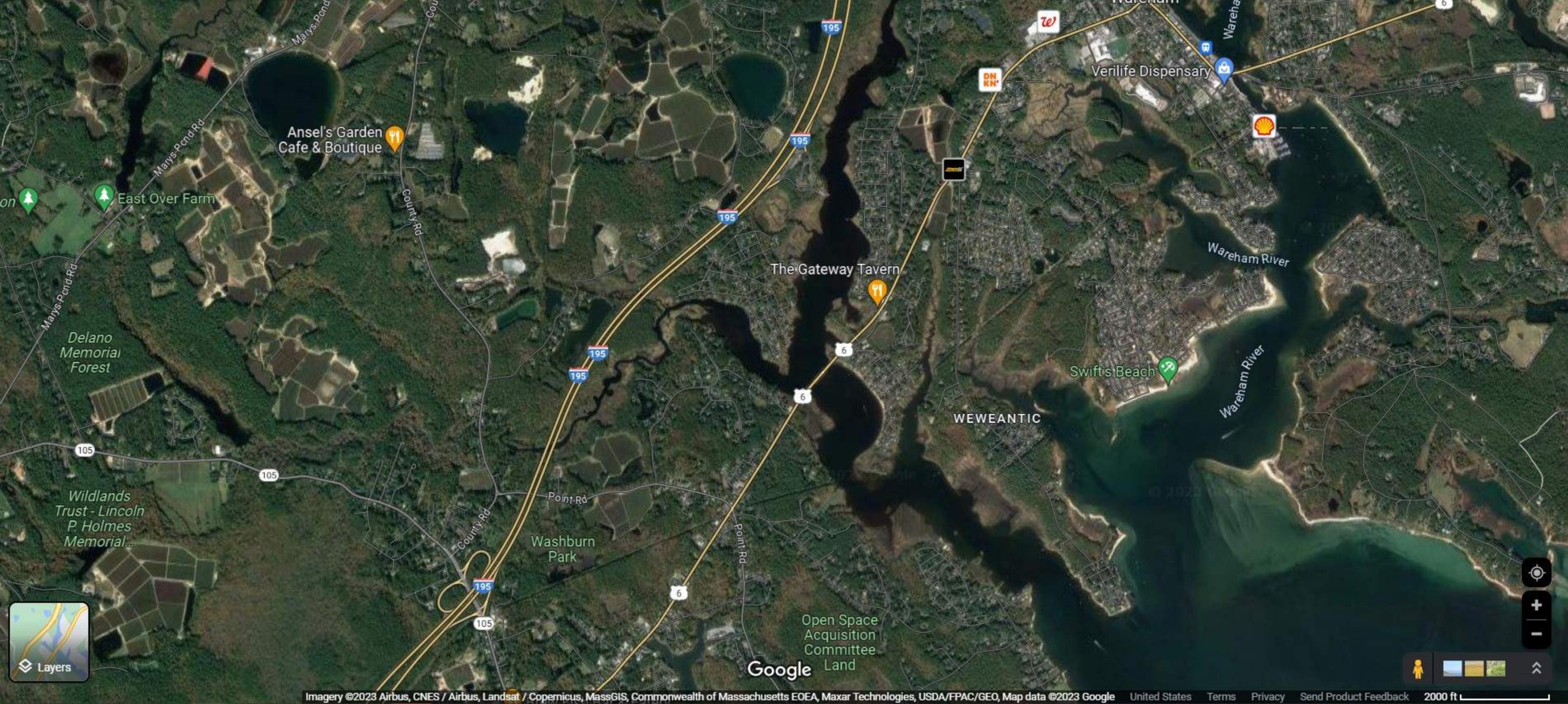
- Encl: Attachment A – USGS Map and Google Satellite view of the area
Attachment B – NOAA chart view of Buzzard Bay Cape Cod Canal and approaches
Attachment C – Navigability Surveys from Marion and Wareham Harbor Masters
Attachment D – Contemporaneous Notes: August 24, 2023 Visit to the Wareham Marina
(USCG / MassDOT / BSC Group / Wareham Marina Employees)
Attachment E – Photographs of Vessels in the Weweantic River, north of Route 6



Scale:
1 inch = 2,000 feet
0 1,000 2,000
Feet
(Page Size 8.5 x 11)

**MASSDOT PROJECT 605311, ROUTE 6 OVER THE WEEANTIC RIVER
MARION / WAREHAM BRIDGE REPLACEMENT PROJECT**
USGS Site Location Map
Marion & Wareham, MA

Source: Copyright ©
2013 National
Geographic Society, i-
cubed



Ansel's Garden Cafe & Boutique

The Gateway Tavern

Swift's Beach

Wareham River

Wareham River

WEWEANTIC

Washburn Park

Open Space Acquisition Committee Land

Google



The Commonwealth of Massachusetts

Massachusetts Department of Transportation

NAVIGABILITY SURVEY

For

Marion Harbormaster-Sippican/Weweantic River bridge

Directions: This form must be completed and signed by the local harbormaster where a proposed project involves the reconstruction or replacement of an existing bridge over a US Coast Guard navigable waterway.

1. From your personal observations, please describe the current extent of recreational and/or commercial boating use of this waterbody, particularly upstream of the above bridge.
Very minimal...only have a few moored boats north of the bridge (small 13-15' skiffs/whalers)

2. Are there any moorings, boat ramps, marinas, etc., located up river of the bridge? Please describe.

A few moorings plus a small kayak launch area on River Rd (Sippican River), small marina/ramp and state ramp on the Wareham side

3. Do boats 21 feet in length or greater navigate under the bridge?
Not from the Marion Side

4. Are the banks of the river at the bridge currently or potentially used for launching vessels or for putting in canoes or kayaks? Please explain.

Canoes, kayaks and rowboats only

5. Are there any historical records of vessels using the river for recreational and /or commercial purposes? If so, please explain the extent of the use.

unknown

6. If information is available, please provide the elevations of mean low, mean high and spring high tides where the bridge crosses the river.

Spring High Tide: estimated 3'

Mean Low Tide: estimated 9' clearance under the bridge

Mean High Tide: estimated 4-5'

7. Please provide information as to whether there are any active shellfish resources in the immediate area of the bridge?

Minimal

Signature: Isaac Perry, Marion Harbormaster _____

Date: 4/21/21 _____

The Commonwealth of Massachusetts
Massachusetts Department of Transportation
NAVIGABILITY SURVEY
For
Town of Wareham Weweantic River

Directions: This form must be completed and signed by the local harbormaster where a proposed project involves the reconstruction or replacement of an existing bridge over a US Coast Guard navigable waterway.

1. From your personal observations, please describe the current extent of recreational and/or commercial boating use of this waterbody, particularly upstream of the above bridge.

Vessel traffic within this area is primarily recreational vessel with the occasional commercial small fishing vessel. We have a fairly large collection of seasonally moored vessels North of the bridge in addition to the Wareham Boatyard that has room for up to 50 vessels of varying size at time. The State of Massachusetts Boat Ramp located at the 195 Rest Area has also seen a significant increase in vessels launching.

Wareham Boatyard in addition to being a Marina is also now a Massachusetts approve Shellfish Hatchery for growing out shellfish for aquaculture programs.

2. Are there any moorings, boat ramps, marinas, etc., located up river of the bridge? Please describe.

1. Two kayak and cartop launch sites
2. Commonwealth of Massachusetts Boat Ramp, 195 Rest Area.
3. Wareham Boatyard located at Rose Point, 73 Leonard Street, Wareham, MA 02576
4. 30 private moorings
5. Shellfish Hatchery
6. Private Boat Ramp located at Wareham Boatyard
7. Marine Fuel Sales located at Wareham Boatyard
8. Recreational and Commercial Shellfish grounds North of the bridge
9. Private docks with vessels attached located along the Northern portion of Weweantic and Sippican River

3. Do boats 21 feet in length or greater navigate under the bridge?

Yes

4. Are the banks of the river at the bridge currently or potentially used for launching vessels or for putting in canoes or kayaks? Please explain.

Canoes and kayaks launch from the nearby beaches. There is also a parcel of private property near the Wareham span of the bridges that has gained some interest from

the Division of Marine Fisheries and Mass. Public Access to potentially install a car-top launch site.

5. Are there any historical records of vessels using the river for recreational and /or commercial purposes? If so, please explain the extent of the use.

This area has historically been utilized by commercial shellfishermen from the Town of Wareham and Marion for harvesting. The area is determined by the Division of Marine Fisheries to be "Conditionally Opened" for the harvesting of Shellfish primarily by boat.

6. If information is available, please provide the elevations of mean low, mean high and spring high tides where the bridge crosses the river.

Spring High Tide: 4.5'-5.5'

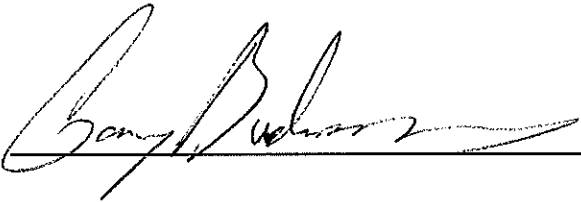
Mean Low Tide: 3.7'-4.5'

Mean High Tide: 3.7' – 4.5'

7. Please provide information as to whether there are any active shellfish resources in the immediate area of the bridge?

Area is opened conditionally and utilized during the fall months for the harvesting both by recreational and commercial shellfishermen each year

Signature: _____



Date: _____

4-22-21

ATTACHMENT D – WAREHAM MARINA SITE VISIT SUMMARY

MASSDOT PROJECT 605311

ROUTE 6 (MARION AND WAREHAM ROADS) OVER WEWEANTIC RIVER (M-05-001=W-06-013 & W-06-016)

BRIDGE REPLACEMENT PROJECT

US COAST GUARD ADVANCED APPROVAL REQUEST

PAGE 1 OF 2

On August 24, 2023, representatives from the US Coast Guard (USCG), Massachusetts Department of Transportation (MassDOT), and BSC Group, Inc (BSC) met at the Wareham Marina at 73 Leonard St in Wareham, MA to meet with the Marina. Below is a summary of items discussed:

- Surrounding Area Environmental History
 - The area around the Marina itself used to be plentiful with oyster beds but has become heavily sedimented / muddy due to offline dams upstream, cranberry bogs, erosion, and other factors.
 - Especially during storm events, the riverbanks continue to erode, and upstream mud and silt suffocates the oyster and riverbed fauna according to the Marina.
 - The river was dredged at least one time already, and has since filled back-in. The site would require continual dredging. It is unknown when the dredging last occurred.
 - During Hurricane Bob in 1991, the causeway protected the Northern side of Route 6. While the Marina flooded approximately 4.5 feet of water, water levels were another 1.5 feet higher south of the bridge, road, and causeway.
 - Recent tidal flushing analyses (completed in 2021 by BSC Group) identified that the water movement upstream and downstream of Route 6 is not hindered by the causeway.
- Business at the Wareham Marina
 - The Wareham Marina first opened in the 1970s with 25 slips. As of the 1980s, there are fifty slips; however, only forty are rented as ten of these slips are now too shallow or generally in areas with too much mud as a result of upstream sedimentation.
 - Commercial boats do not use this Marina, only recreational boaters.
 - The largest boat currently using the bridge / marina slips is 26-foot long. The marina has been generally losing customers with larger vessels because the slips cannot accommodate larger vessels as a result of the influx of sedimentation.
- Existing Bridge Crossings
 - Siltation in the river has limited mariners' ability to get into and out of the harbor which must be timed with low tides.
 - M-05-001=W-06-013 bridge is a two-equal-span bridge. It is used by jet skis and kayaks, only. Due to shallow bathymetry, the crossing is not usable by larger boats.
 - Boats crossing under Route 6 cross under W-06-016, a three-equal-span bridge.
- Impacts of the proposed bridges
 - The proposed bridge design will raise the low chord of each bridge:
 - Bridge W-06-016 will be raised 2.5 feet.
 - Bridge M-05-001=W-06-013 will be raised 2.15 feet.
 - Raising the low chord will not change what boats can use the marina; however, it will afford users 1.5-2 more hours of usage each day.
 - The bridge piers will be moved on both bridges which will effectively increase the width of each navigable channel:
 - Bridge No. M-05-001=W-06-013 will remain a two-span bridge, but with new unequal span lengths. The new wider navigable channel will increase to be 60-foot wide (approximately +8 feet).

ATTACHMENT D – WAREHAM MARINA SITE VISIT SUMMARY

MASSDOT PROJECT 605311

ROUTE 6 (MARION AND WAREHAM ROADS) OVER WEWEANTIC RIVER (M-05-001=W-06-013 & W-06-016)

BRIDGE REPLACEMENT PROJECT

US COAST GUARD ADVANCED APPROVAL REQUEST

PAGE 2 OF 2

- Bridge No. W-06-016 will remain a three-span bridge, but with new unequal span lengths. The new wider navigable channel (center span) will increase to be 68-feet wide (approximately + 16-feet).
- Future Wareham Marina plans
 - Proposing a pontoon boat which will essentially be moored at the marina.
 - Anticipated future conditions are that existing users of the marina will be able to get more usable waterway time; however, there will likely not be an increase to the number of boats using the marina or the size of boats.



Photo #1: Cabin cruiser type-vessel with limited living space at the Wareham Marina (August 2023). It is believed to be a 25-foot 2005 Robalo R235 Walkaround and that this boat has a small interior compartment.



Photo #2: Example of a few of the boats docked at the Wareham Marina, including dinghies, speedboats, cabin cruisers, and center consoles.



Photo #3: Speedboat in the Weveantic River, upstream of the bridges at Route 6 (June 2023).



Photo #4: Center console vessel utilizing the Wareham bridge (W-06-016) at Route 6 (June 2023).



Photo #5: Speedboat parked at the Wareham Marina (August 2023)



Photo #6: Speedboat at the Wareham Marina (August 2023)



Photo #7: Center console-type vessel at the Wareham Marina (August 2023).