MassDOT Highway Construction Contract No. 128035 – Bridge Replacement, M-5-001=W-06-013 & W-06-016, Marion Road/Wareham Road (Route 6) Over Weweantic River in Marion and Wareham, MA

February 26, 2025



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- This project addresses the structurally deficient bridges carrying Marion/Wareham Road (Route 6) over the Weweantic River.
 - This project addresses state of good repair issues that affect reliability and resiliency along roadways according to MassDOT TAMP recommendations. (RAI1.8)



Overview

Project Location



Scope of Services

- Replace Structurally Deficient bridges carrying Marion Road/Wareham Road (Route 6) Over Weweantic River
 - Satisfy current design requirements; reduce maintenance needs; improve vertical clearance.
 - Work within requirements of all environmental regulatory agencies, including Time-of-Year restrictions for endangered species
- Reconstruct Marion/Wareham Road (NB & SB) to provide 4-11' lanes, 4'-0" shoulders and 10'-0" Shared Use Paths
- Construct retaining walls along Marion/Wareham Road
- Re-construction and Re-profiling of Marion/Wareham Road
- Relocation of utilities in newly constructed underground duct banks



Marion/Wareham Road over Weweantic River



Construction Management Approach

Public Outreach:

• Feb. 28, 2024, Design Public Hearing

Permits on the project include:

- National Environmental Policy Act (NEPA) Programmatic Categorical Exclusion approved by MassDOT and FHWA
- Section 106 Historic Preservation
- Bridge Exempt (no WPA, CH 91)
- NPDES Construction General Permit (CGP)
- MassDEP 401
- ACOE 404
- EFH/Section 7
- NOAA/Section 7
- USCG Advance Approval
- NHESP
- CZM

Construction Management Approach:

- Design-Build Project
- MassDOT District 5 Construction
- TMP accommodates 1 lane of vehicular travel in each direction and pedestrian access during all phases of construction.
- Anticipated Construction is April 2025 to May 2028



Existing conditions of deteriorating Marion-Wareham Bridge from underneath



Procurement and Budget

Project Advert	ised (RFP) Sep	tember 7, 202	24			
 Engineer's Estimate was \$46,147,735.00 			Line Item	Budget		
 Bid Opening was January 30, 2025 			Bid Amount	\$68,987,200.00		
			Contingencies	\$6,899,221.00		
Marion-Wareham					Construction Engineering	\$3,449,360.00
605311-128035	Shortlisted T	eams (Desig	n Builders)	STEP	Traffic Police	\$760,000.00
	Northorp		Aetna		Trainees	\$4,000.00
	Northern Construction/	MAS Building &	Bridge /Michael		Total	\$80,099,781.00
	Benesh	Bridge/TEC	Baker		 FA – Hwy Infrastructure Pr 	am. (NHPP/BRR &
				1- Pre-Entered	HIP BR) – Bridge	U
Technical Scores	84.44	82.72	78.38	by MassDOT	Programmed Cost in the	2024-29 TIP:
				2- Transferred	\$49.96M	
Price Proposal	\$68,987,200	\$74,955,640	\$83,333,250	from BidX		
Overall Value Rating = Price Proposal / Technical Scores	816,996.684	906,136.847	1,063,195.330	3- Calculated by MassDOT (Step2/Step1)		
					ma	assDOT

Massachusetts Department of Transportation

The Price Proposals were reviewed by engineers in the Construction, Construction Contracts, Design-Build Sections, and Preliminary Design Consultants, was found to be reasonable and recommended to be awarded to the contract apparent Best Value Design-Builder.

Request of the MassDOT Board of Directors

Staff request that the MassDOT Board of Directors authorize the Secretary of the Massachusetts Department of Transportation, or their designee, to award and execute MassDOT Construction Contract 128035: Bridge Replacement, M-5-001=W-06-013 & W-06-016, Marion Road/Wareham Road (Route 6) Over Weweantic River in Marion and Wareham with Northern Construction Services in the amount of \$68,987,200.00.

ThankYou



STAFF SUMMARY					
Secretary Approval MassDOT Board Approval Prepared by: Narayana M. Kolla					
Department: Highway Division, Major Projects	Manager: Michael O'Dowd	email: Michael.ODowd@dot.state.ma.us		Telephone: 617-910-8564	
Contract No.128035 – B Road/Wareham Road (F	Date Prepared: 02/06/2025				
Implications					
Capital Budget	Operating Budget L	egal 🛛 Other.			

<u>PURPOSE</u>:

The purpose of this Staff Summary is to request that the Board of Directors authorize and approve the Secretary/CEO, or her designee, to execute MassDOT Contract No. 128035 – Bridge Replacement, M-05-001=W-06-013 & W-06-016, Marion Road/Wareham Road (Route 6) Over Weweantic River Design-Build Project with Northern Construction Service with Benesch , in the amount of \$68,987,200.00.00 for a total duration, not to exceed, 1264 days from Notice to Proceed (NTP).

TOTAL PROGRAM BUDGET:

The Capital program has a total program budget of \$80,099,781.00, which includes the following:

Bid	\$68,987,200.00
Contingencies	\$6,899,221.00
Construction Engineering	\$3,449,360.00
Traffic Police	\$760,000.00
Trainees	\$4,000.00

Total	\$80,099,781,00
101a1	\$80,099,781.00

DISCUSSION:

Project Description

The proposed Project is being advanced by the Massachusetts Department of Transportation, Highway Division (MassDOT) to replace the structurally deficient bridges on US 6 (Wareham Road and Marion Road) over the Weweantic River and provide safety, operational, and pedestrian improvements within the Project limits. The Proposed Project consists of constructing new bridges within the same general footprint of the existing structures. The proposed replacement of bridge M-05-001=W-06-013 is a two-span structure that will increase the vertical clearance over the Weweantic River to accommodate future sea level rise and increase the width of US 6 to provide 4' shoulders and a 10' wide shared use path on each side of the roadway. The proposed replacement of bridge W-06-016 is a three-span structure that

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Road/Wareham Road (Route 6) Over Weweantic River, Design-Build Project	t

will increase the vertical clearance over the Weweantic River to accommodate future sea level rise and increase the width of US 6 to provide 4' shoulders and a 10' wide shared use path on each side of the roadway. The vertical profile of the roadway will be raised to increase the minimum vertical clearance over the Weweantic River. Posted speed limits will remain unchanged.

Roadway Reconstruction

The Proposed Project includes roadway reconstruction and widening of Route 6 (Wareham/Marion Road) eastbound and westbound to tie the proposed bridge cross sections into the existing conditions at the limits of the project. The work includes pavement milling and overlay for modifications of pavement markings, removal of temporary pavement markings, restoration of roadway surfaces and transitions to existing conditions at the limits of work. The vertical profile of the roadway will be raised throughout most of the project to increase the minimum vertical clearance over the Weweantic River. Posted speed limits will remain unchanged. Roadway work includes sections of full depth pavement construction, lightweight aggregate backfill installation, pavement milling, and variable depth overlay and/or leveling course as required for development of proposed cross slopes and "Stage Construction" to maintain traffic during construction. Also included are construction of shared use paths (including integrated turtle mitigation), guardrail, pedestrian handrail, associated barrier end treatments, fences, granite curb, side slopes (including riprap placement, and updates to the drainage system.

Structural

The proposed Project BTC includes the design and construction of two bridge replacements. The Project also entails the design and construction of retaining walls on each side of the roadway, along each approach and the causeway. Phased stage construction is anticipated to maintain 2 lanes of traffic and pedestrian access on Route 6.

Traffic

Within the Project limits, pavement markings and signage will be replaced as depicted in the BTC plans. Rectangular Rapid Flashing Beacons shall be installed at each end of the project.

In order to maintain traffic, the work will involve removal of the existing bridges and construction of the proposed bridges in the two initial stages with half of the structure being demolished/constructed at a time while maintaining one traffic lane in each direction with a lane shift. Pedestrian access shall also be maintained. A subsequent stage shall be utilized to construct the remaining shared use path. The retaining walls on each side of the roadway will also be constructed in the initial two stages.

The Design-Builder will be required to design and submit temporary traffic control plans (TTCP) consistent with their final design for MassDOT approval. The Design-Builder shall be responsible for preparing TTCP design plans and documents stamped by a Professional Engineer registered in the Commonwealth of Massachusetts.

Utility Impacts

Utility work on this Project includes design and construction of underground duct banks and utility manholes to facilitate the relocation of existing communication lines and installation of future electrical lines within the footprint of the Project. The work also includes the removal and relocation of overhead

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wires and utility poles at both approaches. The utilities to be relocated include private telecommunication companies, electric, water, and gas. The National Grid gas line at the east end of the project limits will be permanently relocated to avoid interference with the proposed Eversource electric duct bank and proposed guard rail. The Wareham Fire District Water Department water line at Briarwood Drive is to be cut and capped at the driveway to Briarwood Motel and the water line crossing US 6 at the driveway is to be abandoned.

Stormwater/Environmental

The Project includes design and construction of replacement stormwater management facilities at the approaches to both bridges and along the causeway, including comprehensive updates to the highway drainage system for temporary and permanent conditions, in accordance with Massachusetts Stormwater Management Standards.

The project team/MassDOT has obtained a 401 Water Quality Certification for dredge and fill with the MassDEP and a Section 404 Individual Permit with the US Army Corps of Engineers for permanent and temporary impacts to wetlands and waters of the U.S, and Advanced Approval from the United States Coast Guard. This includes Project Review Federal Consistency Review with the MA Office of Coastal Zone Management. Natural Heritage and Endangered Species Program, Section 106 clearance with the Massachusetts Historical Commission, Section 7 consultation with the US Fish and Wildlife Service, Section 7 and Essential Fish Habitat consultations with National Oceanic and Atmospheric Administration / National Marine Fisheries Service. The team has also provided Individual Categorical Exclusion documentation to the Federal Highway Administration (FHWA). The project includes a wetland replication and restoration plan and will require a Wetland Specialist and completion of several years of Wetland Monitoring Reports.

An NPDES Permit, SWPPP, SPCC Plan, and final Turtle Protection Plan (TPP) will be the responsibility of the Design-Builder.

Stakeholder Engagement

Public engagement undertaken during the preliminary design phase and will continue throughout construction. A Design Public Hearing was conducted on February 28, 2024.

This contract requires the Design Builder to deploy construction phase noise and dust controls to limit the impacts of construction on abutters.

BEST VALUE PROCUREMENT:

This project will be delivered utilizing the Design-Build methodology, as stipulated in MGL c 149A § <u>14</u> et seq and as implemented in accordance with MassDOT's Design-Build Guidelines approved by the Inspector General's office. This selection is Phase 2 of the two-Phase selection process and is an evaluation of the Technical and Price Proposals from the three (3) Proposers listed under the Contract Solicitation section. The apparent Best Value Design-Build was determined by dividing the Price amount submitted with the Proposal by the Technical Score provided by the Selection Committee. The lowest Overall Value Rating of the three (3) Proposers is the apparent Best Value Design-Build. Phase 1 of the two-Phase process

was the Request for Qualifications and Phase 2 is the Request for Proposals. The following is the process for review of the Requests for Proposals (RFPs):

- Develop Proposal Evaluation Form
- Confidential Draft Request for Proposals Meeting one on one with the proposers to get feedback on the project risks.
- Confidential Meetings with Proposers to evaluate Alternate Technical Concepts (ATCs)
- Accept/Reject ATCs
- Receive Proposals from three (3) short-listed Proposers and verify complete/ review Pass/Fail requirements
- Review Technical Proposal and prepare preliminary evaluations
- Meet to discuss preliminary evaluations/prepare questions for Oral Presentations
- Oral Presentations by Proposers
- Finalize Technical Scores prior to Price Proposal opening
- Open Price Proposals, divided by Technical Score for the lowest Overall Value Rating
- Provide recommendation for Best Value Design-Build

A Final RFP was issued on September 12, 2024. Twelve (12) addenda were issued and distributed to the Proposers. The addenda responded to Proposer questions submitted by a specified date and time, and provided data not contained in the RFP. All parties receiving these addenda were required to acknowledge receipt.

Significant Dates

The table below details the significant dates of the RFP selection process.

Draft RFP Issued to Short-Listed Proposers	NA	
Confidential one-on-one Draft RFP Meetings	9/24/2024	
Final RFP Released	9/12/2024	
Mandatory Pre-Proposal Meeting	10/8/2024	10:00 AM
Confidential ATC Meeting-1	10/16/2024	
Confidential ATC Meeting-2	11/6/2024	
Last Day to Submit Final ATC Submission for Approval	11/19/2024	
RFP Close Date for Questions	12/03/2024	5:00 PM
Technical & Price Proposals Due	12/19/2024	2:00 PM
Oral Presentations	1/15/2025	
Public Price Proposal Opening Date/BVDB	1/30/2025	11:00 AM

Technical Proposal Evaluation Criteria (100% of Technical Proposal)

The qualitative evaluation of the technical aspects of the Proposal will count for 100% of the total technical score. It will be focused on the following criteria:

DB Project Management and Coordination (35% of Technical Criteria)

The Committee will evaluate the following elements:

Project Management and Personnel Experience (5%) Quality Control System (10%) Design Management (5%) Construction Management (5%) Schedule and Cost Control (10%)

DB Technical Approach (65% of Technical Criteria)

The Committee will evaluate the following criteria:

Civil / Traffic (10%) Environmental (15%) Utilities (5%) Structures (20%) Construction Staging (15%)

CONTRACT SOLICITATION:

On January 31, 2024, the MassDOT Highway Division posted to CommBUYS a public solicitation (a Request for Letters of Interest) for 128035 – Bridge Replacement, M-05-001=W-06-013 & W-06-016, Marion Road/Wareham Road (Route 6) Over Weweantic River Design-Build Project. By March 11, 2024, MassDOT Highway Division received letters of interest from Ten (103) construction and design firms. On March 12, 2024, A Request for Qualifications (RFQ) was sent to those interested firms. By April 101, 2024, the due date, Statement of Qualifications (SOQs) from four (4) Prospective Proposers were received.

A Selection Committee of Six (6) individuals representing diverse disciplines was assembled and approved by the Chief Engineer.

The Statement of Qualifications were evaluated and ranked by the Selection Committee according to the criteria set forth in the RFQ. On May 13, 2024, the Selection Committee determined that three (3) Proposers would be included in the short list of teams asked to submit Technical and Price Proposals. The Proposers were:

- AETNA Bridge Co. and Michael Baker International
- MAS Building & Bridge Inc. and TEC
- Northern Construction Service and Benesch

The short-listed Proposers were notified in writing on June 26, 2024, that they were selected to receive a Request for Proposal (RFP) for the Bridge Replacement, M-05-001=W-06-013 & W-06-016, Marion

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Road/Wareham Road (Route 6) Over Weweantic River, Design-Build Project

Road/Wareham Road (Route 6) Over Weweantic River Design-Build Project. A Final RFP was issued to the three (3) Design-Builders on September 12, 2024.

The Proposers were advised the deadline for submittal of the Proposals. Before the Proposals were received, the Selection Committee developed a spreadsheet, outlining the evaluation criteria and weight factors identified in the RFP to be used in the Selection Process. The Proposers were advised in the RFP of the format the Proposals were to follow and the content for which they would be scored.

Technical and Price Proposals were received on December 19, 2024, from the three (3) Proposers. The electronically submitted Price Proposals were locked while the Selection Committee reviewed the Technical Proposals. The three (3) Proposers gave Oral Presentations on January 15, 2025, each Proposer was given up to one (1) hour to present their Technical Proposal and followed by half an hour of clarifying questions from selection committee.

The determination of the Technical Score for each of the short-listed Proposer was calculated in accordance with the Design-Build Procurement Guide.



Request For Proposal (RFP) - Design/Build Score Sheet MARION - WAREHAM - BRIDGE REPLACEMENT, M-05-001=W-06-013 & W-06-016, MARION ROAD/WAREHAM ROAD (ROUTE 6) OVER WEWEANTIC RIVER - Design-Build Project

	Shortlisted DB Teams		
	AETNA-MB	MAS-TEC	NORTHERN-BENESCH
	Score	Score	Score
DB Projec	t Management and Co	ordination (35%)	
Project Management and Personnnel Experience - 5%	4.33	4.22	4.41
Quality Control System - 10%	7.86	8.46	8.88
Design Management - 5%	3.95	4.11	4.27
Construction Management - 5%	3.87	4.18	4.25
Schedule and Cost Control -10%	7.82	7.96	8.48
)B Technical Approacl	h (65%)	
Civil/Traffic - 10%	7.82	8.66	8.64
Environmental - 15%	11.25	11.73	12.03
Utilities - 5%	4.01	4.10	4.21
Structures - 20%	15.56	16.76	16.64
Construction Staging - 15%	11.91	12.54	12.63
Total Score	78.38	82.72	84.44

A public Price Proposal opening was held on January 30, 2025, at 11:00 AM via Microsoft Teams virtual meeting. The total Technical Scores were displayed on the screen within the spreadsheet template. Prices were downloaded from BidX. The prices are as follows:

Co	ontract N	lo./Subject: lo.128035 – Bridge Replacement, M-05-001=W-06-013 & W-06-016, Marion eham Road (Route 6) Over Weweantic River, Design-Build Project	Prepared by: Narayana M. Kolla Date: 02/06/2025
	0	AETNA Bridge Co. and Michael Baker International	\$83,333,250.00
	0	MAS Building & Bridge Inc. and TEC	\$74,955,640.00
	0	Northern Construction Service and Benesch	\$68,987,200.00

The Overall Value Rating was determined by dividing the Price by the Technical Score. The scores and calculations are provided below:

AETNA Bridge Co. and Michael Baker International	\$83,333,250.00/78.38 = 1,063,195.330
MAS Building & Bridge Inc. and TEC	\$74,955,640.00/ 82.72 = 906,136.847
Northern Construction Service and Benesch	\$68,987,200.00/ 84.44 = 816,996.684

The Northern Construction Service and Benesch team. was determined to be the apparent Best Value Proposer with a low Overall Value Rating of 816,996.684. The Price Proposal packages were reviewed, and it has been determined Northern Construction Service and Benesch Team is the apparent Best Value Proposer.

The Price Proposals were reviewed by engineers in the Construction, Construction Contracts and Design-Build Sections. A Price Proposal Review was conducted by the Preliminary Design Consultant, Parsons Engineering for the Design Build documents for the project. The Highway Division has accepted the Price Proposal submitted by Northern Construction Service and Benesch Team at \$68,987,200.00 which is 149.48% of the Office Estimate of \$46.150.000.00.

MILESTONES:

The project has the following two (2) Milestones:

- Milestone No. 2: Substantial Completion
- Milestone No. 1: Design-Builder Field Completion ٠

These Milestones are defined and restricted as identified below:

Milestone No. 2 – Full Beneficial Use/Substantial Completion

The Design-Builder shall achieve Milestone No. 2 within 1180 Calendar Days from NTP

Milestone No. 1 – Design-Builder Field Completion

The Design-Builder shall achieve Milestone No. 1 within 1264 Calendar Days from NTP

Prepared by: Narayana M. Kolla Date: 02/06/2025

DISADVANTAGE BUSINESS ENTERPRISE PARTICIPATION:

Disadvantaged Business Enterprise ("DBE") participation is required. The DBE requirement for this Project is 14% of the design component and 14% of the construction component for this Contract. MassDOT's Office for Diversity and Civil Rights has reviewed the DBE information included in the Proposal of the chosen bidder and recommends award of the DB Contract to this team.

To achieve this goal the Design-Builder, Northern Construction Service and Benesch Team has identified 3 design firms and 9 construction firms.

The following is a summary of the identified design and construction firms, scope of work and value for this project:

DBE - Design Firms Identified:

Firm	Scope of Work	Amount Eligible
CDW Consultants Inc.	Environmental professional services	\$ 366,030.00
Regina Villa Associates	Public Relations professional services	\$ 198,479.09
Bryant Associates Inc. Civil professional services		\$ 339,500.00
	Total Amount	\$ 903,560.09

The total "DBE" design bid value is \$903,560.00 netting a 17.59% value which meets the goal of 14% as established for the design component of this project.

DBE - Construction Firms identified:

Firm	Scope of Work	Amount Eligible
Don Martin Corporation	F&I Asphalt Paving	\$ 1,193,437.50
South Coast Steel, LLC	F&I Reinforcing	\$ 2,267,695.60
Strategic Environmental Services	Soil Disposal	\$ 1,232,895.00
Island Pavement Cutting Co, Inc.	Membrane Waterproofing for Bridge Deck	\$ 169,566.00
DeLuca Fence Co.	Fencing	\$ 501,850.00
EDM Construction Inc.	Bridge Structure	\$ 2,183,912.47
K DaPonte Construction Corp.	Curb & Sidewalks	\$ 346,317.50
Lindon Group Inc.	Supplier	\$ 1,953,582.97
Markings Inc.	Line Painting, Pavement Markings	\$ 89,759.45
	Total Amount	\$ 9,939,016.49

The total "DBE" Construction bid value is \$9,939,016.49 netting 14.41 % value which meets the goal of 14% as established for the construction component of this project.

FINANCIAL IMPACT/BUDGET SOURCE:

This action is funded through various sources:

FA-Next Gen Bridge GANs, NFA - Site Specific (State)

FUTURE ANTICIPATED AUTHORIZATIONS:

None

<u>RECOMMENDATIONS</u>:

It is recommended that the Board of Directors authorize the Secretary, or her designee, to award and execute MassDOT Contract No. 128035 – Bridge Replacement, M-05-001=W-06-013 & W-06-016, Marion Road/Wareham Road (Route 6) Over Weweantic River Design-Build Project, with Northern Construction Service and Benesch in a form approved by the General Counsel, in the amount of \$68,987,200.00.

COORDINATION WITH:

Office of Diversity and Civil Rights Engineering and Maintenance Environmental Capital Programs Budget and Finance Legal Department

SIGNATURE PAGE:

See Page [final page #]

ATTACHMENTS:

Tab A – Vote [to be completed by Legal]

RESOURCE/REFERENCE DOCUMENTS:

[list here]

STAFF SUMMARY SIGNATURE PAGE						
Secretary Approval	MassDOT Board Approval Prepare			ed by: Narayana M. Kolla		
Department: Highway Division, Major Projects	Program Manager: Michael O'Dowd	email: michael.odowd@dot.state.ma.us		Telephone: (617)-910-8564		
Contract No. 128035 – Bridge Replacement, M-05-001=W-06-013 & W-06-016, Marion Road/ Wareham Road (Route 6) Over Weweantic River, Design-Build Project				Date Prepared: 02/06/2025		
Implications						
□ Capital Budget □ Operating Budget □ Legal □ Other						
RECOM	IEND APPROVAL:	RECO	OMMEND AF	PROVAL:		
Michael O'Dowd Director Major Projects		John Bechard P.E. Deputy Chief Engineer				
RECOMMEND APPROVAL:		RECOMMEND APPROVAL:				
Chief Financial Officer		Susan Cobb				
		Acting General Counsel				
RECOM	IEND APPROVAL:					
	nica Tibbits-Nutt ecretary/CEO					