



MassDOT Highway Construction Contract: 107617

Bridge Replacement Br. No. D-03-018 (NEXT D Beams) Route 128 (Yankee Division Highway) over the Waters River and Related Work (Noise Barriers)

Joint Board Meeting

September 16, 2019

Overview



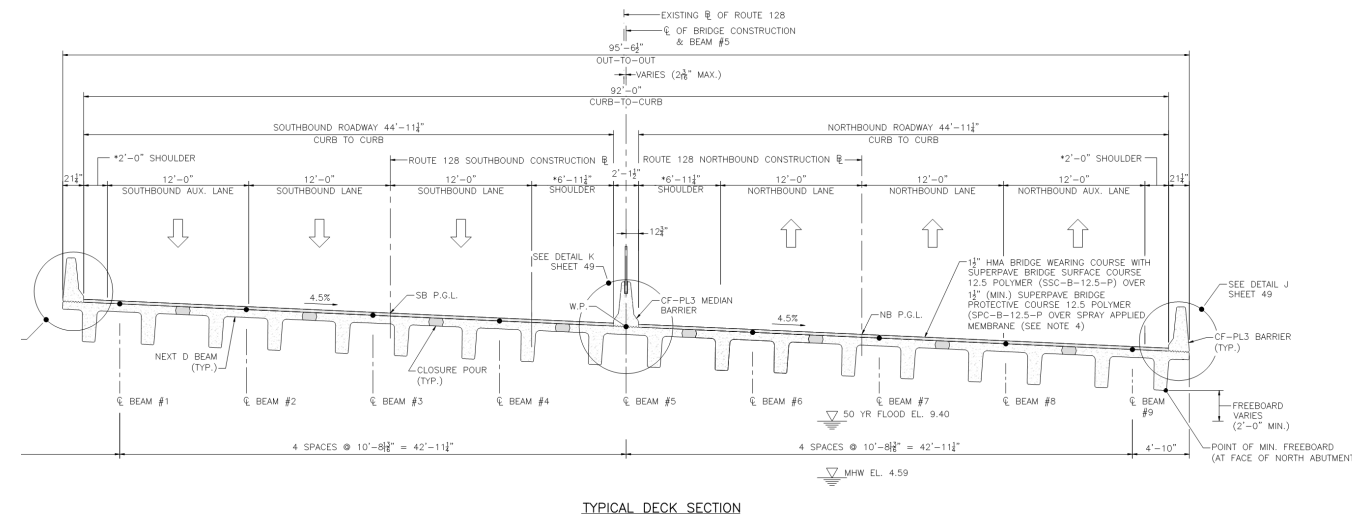
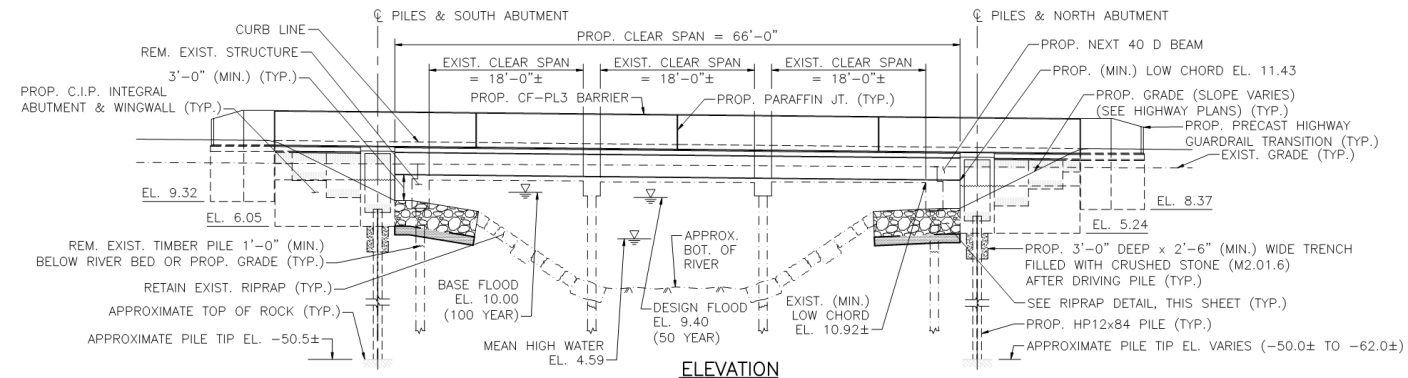
- Replacement of Bridge D-03-018 to address deterioration
- 2700 feet of Route 128 NB & SB reconstructed, including new auxiliary lanes between interchanges 24 & 25 and subgrade improvements
- 4000 feet of permanent noise barrier protecting abutting communities
- Requesting MassDOT Board approval of \$21.6M contract with D.W. White
- Work will take 5 years to complete; staged to maintain 2 lanes of traffic in each direction during daytime

Purpose and Need

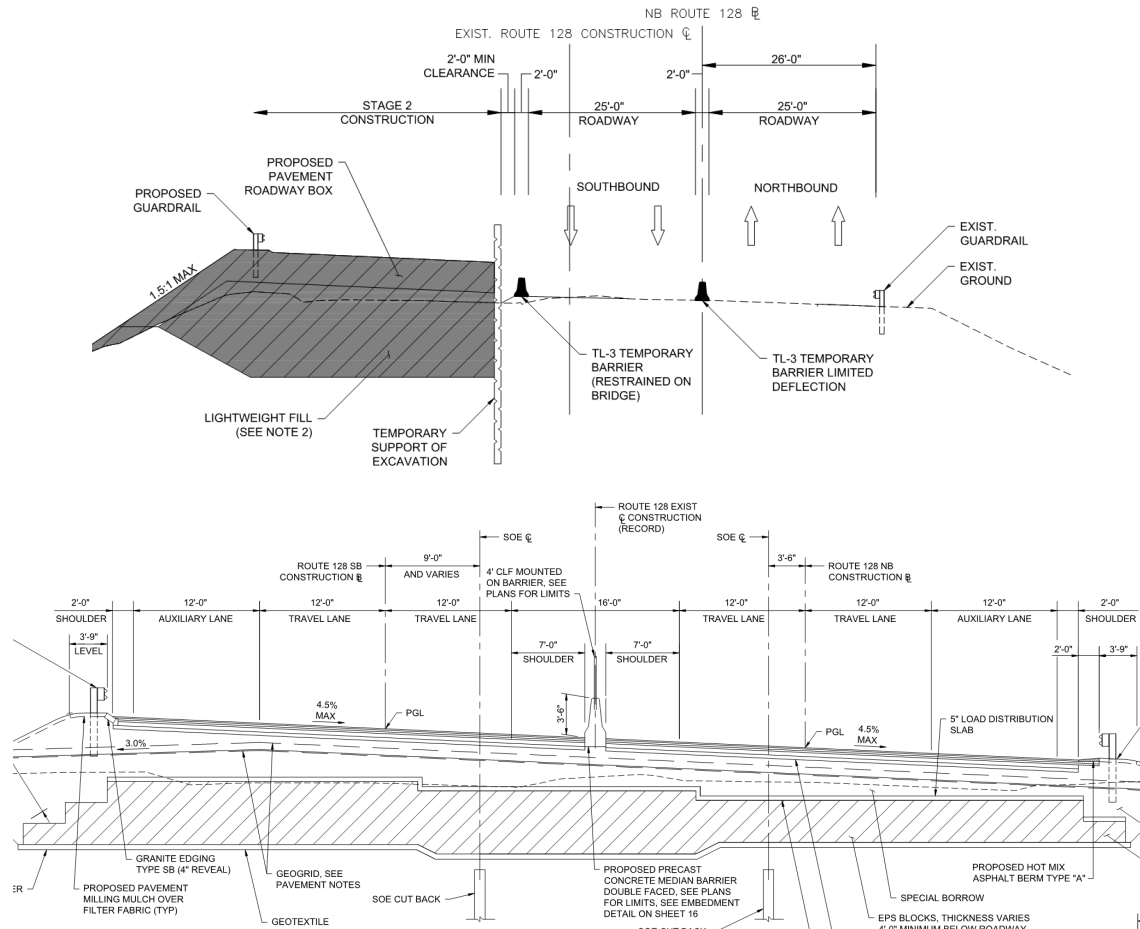
- Bridge D-03-018 is structurally deficient
- Sidewalks are impassable due to significant holes in the concrete deck
- District has been forced to install barrier across the outside curb lines to prevent vehicles from traversing the deteriorated area
- Highway reconstruction needed to raise the grade and meet freeboard requirements over the Waters River
- Noise barrier warranted to mitigate traffic noise³
 - Addition of new auxiliary lanes qualifies this project under the MassDOT Type 1 Noise Barrier program

Construction Scope

- Bridge replaced in thirds with 6 total stages of construction
- NEXT D beams with integral abutments placed behind the existing abutments to minimize impacts to the river
- Existing 3-span bridge replaced with single span to improve hydraulics



Construction Scope (cont'd)



- Two lanes of traffic maintained during daytime hours; reduction to 1 lane during night work
- Reconstruction of 128 with Expanded Polystyrene backfill to mitigate settlement issues
- Noise barrier along SB and NB improves conditions for abutters

Public Process

- Public Meeting in May 2017 for main project
- Public Meetings in June 2018 for Noise barriers
- Noise barrier added to project in 2018 to mitigate residents' concerns about noise impacts

Traffic Impacts

- Too much traffic on 128 for lane reductions during peak hours or on weekends.
- Two lanes of traffic in each direction will be maintained in all daytime hours
- Night time lane closures are expected in some phases
- 45mph speed limit during construction
- Temporary closure of Exit 24 NB and Exit 25 SB during final stage

Procurement



- Project was advertised April 27, 2019
- Engineers Estimate was \$21,330,856.42
- Bid Opening was August 13, 2019
- Six (6) bids were received:
 - **D W White Construction Inc** **\$21,549,327.83**
 - MIG Corporation \$25,137,500.60
 - Daniel OConnells Sons Inc \$25,320,438.00
 - SPS New England Inc \$26,406,408.00
 - J F White Contracting Co \$26,847,072.50
 - Barletta Heavy Division Inc \$31,387,000.00

Overall Project Budget



Line Item	Budget
Bid Amount	\$21,549,327.83
Contingencies	\$2,154,932.78
Construction Engineering	\$1,077,466.39
Total	\$24,781,727.00

- 80% Federal funding, 20% State funding
- Programmed Cost in the 2020-25 TIP: \$25M

Request of the Board

- Staff request that the MassDOT Board authorize the Secretary of the Massachusetts Department of Transportation, or her designee, to award and execute MassDOT Construction Contract 107617: Bridge Replacement Br. No. D-03-018 (NEXT D Beams) Route 128 (Yankee Division Highway) over the Waters River and Related Work (Noise Barriers) with DW White Construction Inc. for an amount not to exceed \$21,549,327.83.