

Footprint Bridge Program – 5 Bridges in Various Locations Hingham, Townsend, Gardner, Pittsfield & West Tisbury; MA

Project Description:

Location

Hingham, Townsend, Gardner,
West Tisbury; MA

Owner

MassDOT

Duration

2005-Present

AI Engineers Inc. (AI) is being retained by MassDOT to provide bridge design and roadway/intersection improvement services under the Footprint Bridge Program at sites in the towns of Hingham, Townsend, and West Tisbury and the cities of Gardner and Pittsfield, MA. These projects required stage construction with detour and MPT of the roadway. The roadway approaches to the bridges were redesigned to meet current AASHTO/MassDOT safety standards and at several locations, required realignment and intersection improvements.

New bridge designs have included a cast-in-place concrete arch, precast concrete frame, precast concrete box beams and concrete deck units.

The scope of work typically includes preparing concept plans, preliminary design construction plans, special provisions and construction cost estimates. Bridge design activities include geometric modifications and the production of plans, specifications and construction cost estimates in accordance with MassDOT and FHWA standards.

The projects require drainage system design for the reconstructed section of the roadways, development of traffic control plans, erosion/sedimentation control plans, environmental permitting, preparation, and utility coordination. In addition, projects involved preparation of public hearing, documents and presentations. Environmental analyses and permit preparation includes early coordination with local commissions, NEPA category determination and documentation for categorical exclusion, ACOE Programmatic General Permit, Water Quality Certification, Section 4(f) determination and wildlife/biological assessments. As part of the assignments, easements and right-of-way plans being prepared for the necessary roadway/bridge impacts.



Salient Features

- Roadway/Bridge Design
- Prepare Concept & Preliminary Plans
- Construction Plans
- Cost Estimate
- MPT for Stage Construction/Traffic Controls
- Paving Plans
- Pavement Markings
- Detour Plans
- Storm Drainage Design
- Utility Coordination for Gas, Sewer Force Main, Electrical and Water
- Erosion/Sedimentation Control Plans
- Environmental Permits