Pre-25% Design Scoping Procedure

General Guidance

This Engineering Directive provides a procedure for refining the scope of a project approved by the Project Review Committee (PRC) and establishing the basis for a 25% design submission. This procedure shall apply to all municipal and state projects except for various location maintenance projects or as otherwise determined through consultation with the Deputy Chief Engineer for Project Development or his/her designee.

1. PRC approves the project.
   1.1. Responsible section head assigns the Project Manager (PM).
   1.2. Project Manager requests PARS Numbers.
   1.3. Project Manager confirms purpose and need and evaluates need for Project Scoping Meeting (PSM) and consults with the Deputy Chief Engineer for Project Development, if needed.
   1.4. Project Manager notifies proponent to include PSM in design schedule, if needed.

2. Proponent issues the Design NTP or directs design advancement to begin within 24 months of PRC Approval and notifies MassDOT through the PM or local District office.
   2.1. Proponent includes direction to develop schedule for participating in a Project Scoping Meeting, performing data collection and conceptual design and conducting Over The Shoulder (OTS) Review within 6 months of Design NTP or direction to advance design.

3. Project Manager conducts the Project Scoping Meeting within 6 months of NTP or design advancement using the Project Scoping Checklist (Attachment 2). Proceed to Step 4 if PSM not needed.
   3.1. Create meeting invitation list using Attachment 1 as a guide.
   3.2. Consult with District to identify meeting site. On-site meetings are preferred unless conditions warrant a virtual site meeting using MaPIT or another digital tool.
   3.3. Project Manager and/or Designer conducts overview of existing conditions.
   3.4. Project Manager reviews Purpose and Need and Scope of Work as approved by PRC.
   3.5. Identify any risks to pursuing scope as approved by the PRC. Examples include underground utilities, limited right of way, environmental impacts.
   3.6. Obtain input for cross section(s) to accommodate all users, project limits and project scope; identify utility constraints, preliminary environmental permitting requirements, and design exceptions.
3.7. Determine data collection and conceptual analysis needs. Examples include draft design justification workbook, safety alternatives analysis, and typical section alternatives.

4. **Designer performs data collection and develops conceptual design(s).**

4.1. Data considerations: Utility survey, crash data, roadway safety audits, traffic counts, field survey and base plan, hydraulic analysis, borings, preliminary structures report, pavement test pits and cores, and other project data as required.

4.2. Design requirements: Consider public outreach meetings with local officials/general public/project abutters; perform early utility coordination; early environmental coordination; gather other data as needed. Develop conceptual (10% level) design(s) with critical cross sections, roll plan and preliminary profile views; preliminary Intersection Control Evaluation (ICE) Stage 2; prepare draft Design Justification Workbook identifying potential design exceptions; prepare preliminary project estimate; prepare design schedule using schedule template; prepare preliminary ROW impact summary; and provide preliminary construction staging using the default construction duration by project type.

5. **Project Manager conducts the Pre-25% OTS Review to confirm the scope and cross section within 6 months of Design NTP (for municipal/state projects) or design advancement (for MassDOT in-house design).**

5.1. Schedule meeting two weeks in advance using Attachment 1. Attach meeting material to the meeting invitation to provide materials in advance of the meeting.

5.2. Project manager conducts OTS Review of Purpose and Need and scope as approved by the PRC and the conceptual design(s) and analysis with the project team including all items identified in the Project Scoping Checklist (Attachment 2). In-person meetings are preferred on-site or in a District Office to confirm the scope, selection of preferred conceptual design, and resolve any remaining internal comments and public concerns.

5.3. Project manager documents the OTS Review and progress by summarizing the scoping meeting and OTS review.

6. **Project Manager/Proponent schedules public outreach as needed within 3 months.**

7. **Project Manager evaluates the current scope of work and public feedback against the PRC Approved Purpose and Need and Scope of Work.**

7.1. If the scope has changed as defined in the DSC/PRC Resubmission Criteria below the PM shall elevate the issue to the Office of the Chief Engineer through the Design Solutions Committee (DSC) for resolution in Step 8.

**DSC/PRC Resubmission Criteria**

- The Project Contract Cost increases by an amount larger than the current contract cost + design contingency:
  - At the pre-25% Scoping Meeting, if an estimated contract cost is 10% greater than the PRC estimated construction cost (including design contingency), the project scope will be reviewed.
  - Post pre-25%, if the estimated construction cost of any design submission or updated cost is 5% greater than the pre-25% estimated construction cost (including design contingency), the project scope must be confirmed by the DSC. If no pre-25% submission, then the baseline will be the PRC construction cost.
• There is a change to the Project Scope or Project Limits that is outside of the original Purpose and Need of the project as approved at PRC, was not identified/approved during a Pre-25% Scoping Meeting or previous submission, or may cause a considerable delay to the schedule or deliverability of the project. Examples of project changes requiring review:
  ▪ A new design alternative is being recommended that was not previously considered.
  ▪ The addition of new or expanded assets beyond the established project limits or need.
  ▪ The project is combined with another project or split off from an existing project.
  ▪ Modifications to the project scope or limits negatively impact project deliverability or schedule. Examples include, but are not limited to:
    • New ROW impacts such as Article 97, 4f, 6f, cultural resources, rail permits, new State or Local ROW, relocations, or additional survey work.
    • New Environmental Permitting.

7.2. If the scope and public feedback align with the PRC Approved project, proceed to Step 10.

8. Design Solutions Committee (DSC) decides whether the design can proceed to the next design stage (Step 10) or must be resubmitted to the Deputy Chief Engineer for Project Development for review and submission to PRC for further evaluation (Step 9).

9. Deputy Chief Engineer for Project Development reviews and submits project to PRC for further evaluation.

10. Project Manager proceeds to 25% Design by updating the Purpose and Need, documenting the scope, confirming the project description and amending initial design scope, if needed.
  10.1. If the project description changes, the Project Manager coordinates with the Advertising Program Manager to finalize the description and notify the District and Planning regarding the need to amend the project in the STIP if necessary.
  10.2. Amend initial design scope based on above to include design through 25% Design Public Hearing or design completion depending on the project.

Attachments:
Attachment 1 – Meeting Invite Chart
Attachment 2 – Project Scoping Checklist
<table>
<thead>
<tr>
<th>Project Type</th>
<th>Core Discipline</th>
<th>Bridge</th>
<th>Intersection Improvements</th>
<th>Shared Path</th>
<th>New Construction</th>
<th>New Sidewalks, Curbing and Curb Ramps</th>
<th>Pavement Marking</th>
<th>Resurfacing</th>
<th>Roadway Reconstruction</th>
<th>Safety Improvements / SRTS</th>
<th>Traffic Signals</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designer (in-house or consultant)</td>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Bridge</td>
<td></td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Highway Design*</td>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>District Construction</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>District all other disciplines</td>
<td></td>
<td>District Projects staff shall attend all meetings but consult with the District PDE to determine which other disciplines are needed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td>R</td>
<td>O**</td>
<td>R</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Geotechnical</td>
<td></td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Hydraulics***</td>
<td></td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>FHWA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Consult with FHWA on all Projects of Division Interest (PODIs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape</td>
<td></td>
<td>O</td>
<td>O</td>
<td>R</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Materials</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Pavement</td>
<td></td>
<td>O</td>
<td>R</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>R</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>ROW</td>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Traffic and Safety****</td>
<td></td>
<td>O</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Utilities</td>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Transit</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Municipality</td>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
</tbody>
</table>

R = Required, O = optional. * Highway Design shall include the ADA, Complete Streets, and/or the Location Engineers. **Consider Hazmat involvement with Intersection Improvement projects. *** Include Hydraulics for projects over water or will affect a river, stream or water course. ****Safety involvement may be beneficial for certain project types.
MASSDOT
PROJECT SCOPING CHECKLIST

Project File No.: __________  Date: __________
Project Description: ________________________________________________________________

I. GENERAL PROJECT INFORMATION

A. Project Type (Select all that apply):

  □ Bridge: Bridge No.: __________  □ Safety Improvements / Safe Routes to School
  □ Intersection Improvements  □ Shared Use Path
  □ New Construction  □ Traffic Signals
  □ Pavement Markings  □ New Sidewalks, Curbing and Curb Ramps
  □ Resurfacing  □ Other: __________________________
  □ Roadway Reconstruction

B. Project Initiation

  Project Proponent:  □ Municipality  □ MassDOT  □ Other: __________
  Asset Ownership:  □ Municipality  □ MassDOT  □ Other: __________

  Project Purpose & Need:

  ____________________________________________________________

  Estimated Construction Cost: __________________________
  Programmed Funds (if available): __________________________
II. BRIDGE SCOPING CHECKLIST

A. Examine Potential Bridge Project Types

☐ Candidate for Preservation
☐ If not Preservation; Substructure elements are worthy of analysis for re-use
☐ Candidate for Superstructure Replacement
☐ Candidate for Full Replacement

Comments:


B. Bridge Studies, Analysis & Reports Required

☐ Preliminary Structures Report (Check box if project to retain any portion of exist. structure)
☐ Boring / Probe Layout Plan
☐ Geotechnical Report
☐ Hydraulic Report:  □ Designer to Prepare  □ MassDOT to Prepare
☐ Bridge Type Selection Worksheet
☐ Sketch Plans
☐ Additional Studies:  


C. Determine Required Bridge Clearance and Bridge Geometry

☐ Bridge is over Railroad (indicate the Line; Segment; MP in Comments)
☐ If over Railroad, is this a Chapter 634 Bridge?
☐ Increase Channel Width for Hydraulic or Environmental Purposes

| Required Min. Horizontal Clearance for Bridge not over Railroad |
| Required Min. Horizontal Clearance for Bridge over Railroad, not Chapter 634 |
| Required Min. Vertical Clearance for Bridge not over Railroad |
| Required Min. Vertical Clearance for Bridge over Railroad, not Chapter 634 |

For Horizontal Clearance: Specify in comments the clearance from what Controlling Element. The Controlling Element may be face of abutment or pier; edge of travelled way, etc.

For Vertical Clearance: Specify in comments the clearance from what Controlling Element. The Controlling Element may be roadway shoulder; top of rail; design year flood; etc.

Comments:


Describe Bridge Geometry (indicate Span Length; Skew; Structure Depth; etc.)


III. ROADWAY CONTEXT

A. Project Area

☐ Project located within 1/4 mile (1500 feet) of an Environmental Justice and/or Title VI area?
   Environmental Justice Viewer

☐ Project located within 1500 feet of School, Library, Park, Transit, Senior Center, etc.
   Describe below:

☐ Existing if-road bicycle/pedestrian facilities within 1500 feet of project area; Describe below

☐ High Potential for Walkable Trips (Blue or Green layer) Potential for Walkable Trips by RPA

☐ High Potential for Everyday Biking (Blue or Green layer) Potential for Everyday Biking by RPA

B. Crash History

☐ Top 200 Intersection Crash Cluster located in Project Area; Describe below

☐ HSIP Crash Cluster located in Project Area; Describe below

☐ HSIP Bicycle Crash Cluster located in Project Area; Describe below

☐ HSIP Pedestrian Crash Cluster located in Project Area; Describe below

Crash Locations: Top Crash Locations

☐ Police Crash Reports Required:  ☐ All Intersections  ☐ Entire Length of Corridor

☐ Crash Diagrams Required

☐ Corridor Crash Mapping Required

☐ Road Safety Audit Required (prior to 25%) RSA Template & Guidelines

☐ Safety Alternative Analysis Required (Check box if project anticipates receiving HSIP funds) HSIP Eligibility & Alternative Safety Analysis Guide

IV. ROADWAY SCOPING CHECKLIST

A. Roadway Classification

☐ Interstate  ☐ Rural Principal Arterial Road Inventory Map

☐ Urban Principal Arterial  ☐ Rural Minor Arterial

☐ Urban Minor Arterial  ☐ Rural Major Collector

☐ Urban Collector  ☐ Rural Minor Collector

☐ Urban Local  ☐ Rural Local

☐ Proposed project is on the National Highway System (NHS)
### B. Existing Volumes

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Daily Traffic (ADT)</td>
<td></td>
</tr>
<tr>
<td>Daily Bicycle Volume</td>
<td></td>
</tr>
<tr>
<td>Percent Truck Traffic</td>
<td></td>
</tr>
<tr>
<td>Daily Pedestrian Volume</td>
<td></td>
</tr>
</tbody>
</table>

### C. Existing Speeds

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posted (or Statutory) Speed Limit</td>
<td></td>
</tr>
<tr>
<td>Measured Free Flow Speed (if available)</td>
<td></td>
</tr>
</tbody>
</table>

### D. Determine Target Design Speed

- Project area is candidate for Motor Vehicle and/or Multimodal Safety Countermeasures; Including Traffic Calming, Road Diet and other Safety Measures

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Design Speed</td>
<td></td>
</tr>
</tbody>
</table>

**Comments:**

### E. Determine Proposed Roadway Cross-Section

- Candidate for Shared-Use Path, Side Path, Separated Bike Lane or Buffered Bike Lane

<table>
<thead>
<tr>
<th>Description</th>
<th>Existing:</th>
<th>Proposed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width of Existing Right-of-Way Layout</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Travel Lanes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width of Travel Lanes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width of Turning Lanes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width of Shoulders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width of On-Road Bicycle Facility, include buffer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width of Shared-Use Path (note 1 side or both)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width of Separated Bike Lane (note 1 side or both)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width of Roadway Buffer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width of Sidewalk*, include curb (note 1 side or both)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width of On-Street Parking (note 1 side or both)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width of Median</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width of Bus Stops**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Less than 5.5’ Sidewalk Width, including curb, requires waiver

**Confirm proposed bus stop width with transit agency; 8.5’ Min., including curb, for MBTA
### F. Determine Roadway Profile
- Existing Profile appears to meet design standards (verify during preliminary design)
- Existing Sidewalks, Curb Ramps and Driveways appear ADA/AAB Compliant
- Maintain / Optimize Existing Profile
- Improve Profile; Consider Min. Vertical Clearance, Stormwater Low Points and Flood Resiliency

**Comments:**

### G. Determine Horizontal Alignment
- Existing Alignment appears to meet design standards (verify during preliminary design)
- Maintain / Optimize Existing Alignment
- Improve Alignment

**Comments:**

### H. Determine Project Limits
Describe Limits with proximity to nearest feature, intersection, mile marker, town line, address, etc.

**Begin Project:**

For Bridge: ___________ Feet beyond Abutment in this direction: ___________

**End Project**

For Bridge: ___________ Feet beyond Abutment in this direction: ___________

**Comments:**

---

Project Scoping Checklist, March 2021  
Page 5 of 12
I. Proposed Pavement Treatment

- Ultra Thin Bond, Microsurfacing, Fog Seal, Chip Seal, Waterproof Surface Course, etc.
- Mill & Overlay (Functional or Structural)
- Hot/Cold in Place Recycling
- Reclamation
- Full Depth Reconstruction
- New Construction
- Other: __________________________
- No Proposed Improvement

J. Other Roadway Design Issues

- Address Accessible Ramps and Missing Crosswalks at Intersection(s)
- Address Drainage Issues
- Address Existing Traffic Signals within Project Limits
- Address Existing Bridge(s) within Project Limits (Plans Required)
- Address Existing Culvert Condition
- Address Guardrail / Barrier
- Address Lighting
- Address Trees within Right-of-Way Layout
- Address MassDOT ITS, Weather Sensors, VMS, Counting Stations
- Other; Describe below

V. CONSTRUCTABILITY

- Candidate for Full Road Closure and Detour; Describe possible detour route in Comments
- Candidate for Accelerated Construction Techniques
- Candidate for Stage Construction
- Candidate for Alternative One-Way Traffic
- Candidate for Night Work
- Potential Construction Lay Down Area; Describe in Comments
- Potential for buried man-made objects / unidentified hazardous waste present
- Potential for unexpected geotechnical or groundwater issues present
- Seasonal or time restrictions required during construction
- Project overlaps and/or adjacent to another project scope and/or schedule

Comments:
VI. UTILITIES

A. Describe Existing Utilities

Overhead:

Underground:

Carried on Bridge (if applicable):

Under Bridge (if applicable):

B. Utility Design Considerations

☐ Can widening be done on a side of the road that does not have Utility Poles?
☐ Does City / Town need to upgrade water, sewer, or drainage?
☐ Does City / Town need to perform sewer / drainage separation?
☐ Does gas company need to upgrade old Cast Iron / Barrel Steel Pipe?

Comments:

C. Utility Exploration

☐ Utility Test Pits: ☐ Designer to Obtain ☐ MassDOT to Obtain

Subsurface Utility Exploration (SUE):

☐ Designer to Obtain ☐ MassDOT to Obtain

SUE Quality Level(s) - Check all that apply

☐ D: Collection & correlation of existing utility records
☐ C: Survey of visible utility facilities
☐ B: Determine existence and horizontal position of utility facilities within area of excavation
☐ A: Physically expose existing subsurface utility facilities to find vertical subsurface position

Comments:
VII. ENVIRONMENTAL

A. Stormwater Mitigation

☐ Project is anticipated to increase the impervious surface of the travelled way

__________ Square Feet of increase (if unknown, mark as TBD - to be determined)

☐ Project is anticipated to widen the roadway by 4 feet or more for half a mile or more

__________ Linear Feet of widening of 4’ or more (if unknown, mark as TBD - to be determined)

☐ Project is anticipated to meet, or exceed MassDEP Stormwater Standards

☐ Does the project area directly discharge (via pipe or overland flow) into any Category 5 Impaired waterbodies?

☐ Does the project propose how to treat, mitigate (or maintain if sufficient) discharge into this Impaired Waterbody (meeting TMDL requirements)?

B. Stormwater Best Management Practices (BMPs)

☐ Project is anticipated to include BMPs to ensure existing stormwater conditions will at least be maintained; Check anticipated BMPs below:

<table>
<thead>
<tr>
<th>Pretreatment BMPs</th>
<th>Conveyance</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Deep sump catch basins</td>
<td>□ Water quality swales</td>
</tr>
<tr>
<td>□ Sediment forebays</td>
<td>□ Grass channels (formerly biofilter swales)</td>
</tr>
<tr>
<td>□ Vegetated Filter Strips</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment BMPs</th>
<th>BMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Bioretention areas including rain gardens</td>
<td>□ Porous Pavement</td>
</tr>
<tr>
<td>□ Constructed stormwater wetlands</td>
<td>□ Infiltration basins and trenches</td>
</tr>
<tr>
<td>□ Extended dry detention basin</td>
<td>□ Leaching catch basins</td>
</tr>
<tr>
<td>□ Treebox filters</td>
<td>□ Subsurface structure(s)</td>
</tr>
<tr>
<td>□ Wet basins</td>
<td>□ Country Drainage</td>
</tr>
<tr>
<td></td>
<td>□ Other: ____________________</td>
</tr>
</tbody>
</table>

C. Field Reconnaissance

Provide photographs that clearly illustrate existing site conditions such as local land use and context (urban, suburban, rural, etc.); Provide additional details in the comments.

☐ Wetlands / waterways present

☐ Area buildings or public open space in close proximity to the site?

☐ Bridge Projects: Does the bridge appear to restrict the natural flow regime of the waterway?

☐ Bridge Projects: If the bridge is over waterway, is it navigable?

Comments:
### D. Environmental Studies, Permits & Reports Required

- Early Environmental Checklist
- Bridge Project: Determine Nat'l Register of Historic Places status of structure - Eligible or Listed
- Potential Permits / License required:
  - Chapter 91 Public Waterfront Act
  - Coastal Zone Management Act
  - MA Wetlands Protection Act
  - NEPA / MEPA
  - NPDES - Section 402 Clean Water Act
  - Section 4(f) and/or 6(f) if the DOT Act
  - Section 10 Rivers and Harbors
  - Section 106 - National Historic Preservation
  - U.S. Army Corps of Engineers - Section 404
  - U.S. Coast Guard - Section 9 Rivers and Harbors
  - Water Quality Certification - Section 401
  - Wild and Scenic Rivers Act
  - MA Coastal Flood Risk Model (MC-FRM)
  - Unknown, to be determined
  - Other: ____________________

### Comments:

### VIII. RIGHT-OF-WAY

- Easements, Takings or Alterations anticipated to be required
  - Responsibility: □ Municipality □ MassDOT □ Other:

- Potential Article 97; Describe below
  - Consider potential impacts to Conservation Land, Open Space including Public Parks & Monuments, Public Reservations, Public Athletic fields, Public Concert area, Municipal commons and Public Playgrounds. Consider impacts to Public watershed properties, Fish & Wildlife property, DCR property, properties having an Agricultural Restriction or Conservation Restriction.

- Easements, Permits or Licenses from DCR, Fisheries & Wildlife, MBTA or MWRA; Describe below

- Impact to Railroad or Public Utility Corridor; Describe below

### Comments:
IX. DATA, STUDIES, ANALYSIS & REPORTS

A. Pre-25% Services

- Field Survey & Base Plan  □ by Designer  □ by MassDOT
- Traffic Counts  □ by Designer  □ by MassDOT  [Survey Guidelines]
- Crash Data  □ by Designer  □ by MassDOT  [MassDOT IMPACT Crash Portal]
- Road Safety Audit
- Pavement Cores  □ by Designer  □ by MassDOT
- Wetlands Delineation  □ by Designer  □ by MassDOT
- Field Verify ADA/AAB Compliance for Sidewalks and Curb Ramps to be retained
- Preliminary Decision Value calculation per Bridge Manual 2.1.4 (for Accel. Bridge Construction)
- Project Design Schedule  [Design Schedule Templates]
- Pre-25% "Over-the-Shoulder" (OTS) Review Meeting (see required deliverables in section B)
- Public Information Meeting, if needed (after Pre-25% OTS)
- Intersection Control Evaluation (ICE) - Stage 3 (after Public Informational Meeting, if needed)
- Other:  

Comments:

B. Pre-25% "Over-the-Shoulder" (OTS) Meeting Deliverables - provide in advance of OTS

- Conceptual (10% level) design with critical cross sections, roll plan and preliminary profiles
- Typical Section Alternatives Analysis
- Draft Design Justification Workbook  [Design Justification Workbook]
- Safety Alternatives Analysis  [Safety Alternatives Analysis Guide]
- Intersection Control Evaluation (ICE) - Stage 2
- Preliminary Estimate
- Preliminary Construction Staging
- Preliminary ROW Impact Summary for Alternatives
- Other:  

Comments:
C. 25% Design Submission

- Functional Design Report
- Pavement Design Report
- Checklists per PDDG Checklist & Submission Workbook
- Estimate
- Preliminary Right of Way Plans
- Preliminary Utility Coordination & Colored Utility Plans
- Estimate of utility adjustments / relocations @25%
- Initial Contract Time Determination
- Other:

Comments:

D. Post-25% Submission Items

- Design Public Hearing
- Design Justification Workbook (after Design Public Hearing)
- Contract Time Determination
- Incentive / Disincentive
- Other:

Comments:
# PROJECT SCOPING MEETING SIGN-IN SHEET

**Project File No.:** ________  
**Scoping Meeting Date:** ________  

**Project Description:**  

**Checklist Prepared by:**  

**Meeting Location:**  
- [ ] On-Site  
- [ ] Virtual

**Attendee Disciplines (Refer to Meeting Invite Chart in the Pre-25% Engineering Directive)**
- [ ] Project Manager  
- [ ] Environmental  
- [ ] Municipality  
- [ ] Designer  
- [ ] FHWA  
- [ ] Pavement  
- [ ] Bridge  
- [ ] Geotechnical  
- [ ] Right-of-Way  
- [ ] District Bridge  
- [ ] Highway Design  
- [ ] Traffic and Safety  
- [ ] District Construction  
- [ ] Hydraulics  
- [ ] Transit  
- [ ] District Project Development  
- [ ] Landscape  
- [ ] Utilities  
- [ ] District Traffic  
- [ ] Materials  
- [ ] Other: ____________

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization / Discipline:</th>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>