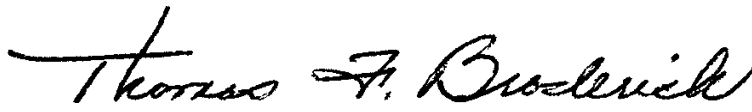


ENGINEERING DIRECTIVEA handwritten signature in black ink that reads "Thomas F. Broslevick".**ENGINEERING DIRECTIVE
OBSOLETE**EARLY ENVIRONMENTAL COORDINATION FOR DESIGN PROJECTS*Purpose*

This Engineering Directive establishes a standard procedure by which to identify initial project design parameters, initiate early coordination with the community to identify issues specific to the project, and define essential information to incorporate in 25% Design to initiate early environmental reviews.

Early Coordination**City/Town Designed Projects**

- The MassHighway letter to Cities/Towns notifying them that their projects are approved for construction funding shall include a reference to this Engineering Directive and a statement that it is understood that the requirements of this Directive must be met in order to expedite project design acceptance and regulatory clearances.
- MassHighway will send a copy of the proposed scope of work and/or a locus plan showing project limits to Massachusetts Historical Commission to initiate early coordination.
- The designer should initiate early coordination with the local boards and commissions to review the project area and identify any specific issues or concerns.
- The designer should consult with MassHighway Cultural Resources Section for early coordination with the Tribal Historical Preservation Officer (THPO).

MassHighway Designed Projects

- For consultant designs, this Engineering Directive shall be incorporated directly or by reference into the design consultant's contract scope of work.
- The designer (MassHighway or its design consultant) should request the community to identify any concerns or issues in the project area.
- MassHighway will send a copy of the proposed scope of work and/or a locus plan showing project limits to Massachusetts Historical Commission to initiate early coordination.
- The designer should send letter to local historical commission requesting information on known historic properties in the project area.
- The designer should initiate early coordination with the local boards and commissions to review the project area and identify any specific issues or concerns.
- The designer should consult with MassHighway Cultural Resources Section for early coordination with the Tribal Historical Preservation Officer (THPO).

25% Design Submission

The following information shall be included with the 25% Submission to assist in the identification of project impacts and to expedite environmental clearances.

Cultural Resources

- Show all bridges and culverts within or adjacent to the project limits and label all those having MassHighway structure numbers.
- Provide photographs of all known historically significant buildings/structures within or adjacent to the project limits, show their location and label all those having numbered street addresses, and show the location of historic district boundaries.
- Label all historical/locally significant monuments and markers and if possible show their future location, if they are proposed to be moved.
- Show a detail of the proposed type of street lighting.
- Label and show preliminary tops and bottoms of slopes and limits of all proposed takings and easements.
- Label all preliminary wall locations.
- Identify potential landscaping enhancement opportunities.
- Show all proposed trees to be removed that have a 14" (0.35 m) or greater DBH.
- Provide letter of support and all correspondence with the local historic commission.

Hazardous Materials

- Identify locations of known sources of hazardous waste and hazardous material releases within the project limits.

Wetland and Water Resources

- Show the location of all existing drainage structures and existing and proposed drainage discharge locations.
- Show the location of all wetland resource areas within 100 feet (30.5 m) of the project limits (e.g., bordering and isolated vegetated wetland areas and land under water) including the ordinary high water (i.e., one year flood) of waterways and waterbodies.
- Show the location of potential wetland replacement areas.
- Show on a separate locus any stormwater "critical areas" (cold water fisheries, Zone IIs, public swimming beaches, shellfish growing areas, and drinking water reservoir watershed).
- Show on a separate locus any Federal Emergency Management Administration (FEMA) floodplain.
- Show on a separate locus any Estimated Habitat for Wildlife or Area of Critical Environmental Concern (ACEC).
- Provide photographs of all bridge replacement/rehabilitation projects that include work in water or wetlands. Photographs should clearly show riverbanks of all four quadrants of the bridge and include any proposed wetland replication or flood compensation storage areas. All submissions for roadway reconstruction projects should include photos of all cross culverts where work is proposed.
- If a waterbody can be used for boating/canoeing, consideration should be given to maintaining or increasing the clearance under bridges and any related information should be clearly identified on the plans.

4(f) Properties

- Show and label the location of all publicly owned parks, recreational areas, waterfowl refuges and historic sites.

Information Sources

Project History

- Local Planning/Public Works/Economic Development Departments (Location/Feasibility Studies)
- Regional Planning Agency (Corridor Planning Studies)
- Major Environmental Documents (EA, EIR/EIS, 4(f) Documentation)
- Design Reports
- Bridge Type Studies

Hazardous Materials Site Screening (40 CFR, 310 CMR sec 30)

- MA GIS
- Federal: Comprehensive Environmental Recovery Compensation Liability Act (CERCLA) List (Federal Superfund Site List)
- State: Department of Environmental Protection (DEP) Bureau of Waste Site Clean-up (21E). Also known as the Massachusetts Oil and Hazardous Materials Release Prevention and Response Act (MA Superfund).
- Local: Contact Fire Department/Fire Prevention Office, Board of Health, for known underground tanks and/or spills.

Cultural Resources (Section 106 of the National Historic Preservation Act of 1966 as amended (36CFR part 800) & M.G.L. Ch. 9 ss. 26-27C as amended by Ch. 254 of the Acts of 1988 (950 CMR 70 & 71))

- Local Historical Commissions
- State/National Register of Historic Places (Available on MA GIS)
- The Inventory of Historical and Archaeological Assets of the Commonwealth (Available at Massachusetts Historical Commission (MHC))
- Corridor Planning Studies
- MA GIS
- Tribal Historic Preservation Officer (Consult with MassHighway Cultural Resource Section)

Wetlands and Water Resources

- FEMA Maps
- MA Surface Water Quality Standards (Outstanding Water Resources (ORW))
- MA Division of Fisheries & Wildlife (MA National Heritage Program)
- MA Natural Heritage Atlas

National Environmental Policy Act and Massachusetts Environmental Policy Act (NEPA/MEPA)

- Area of Critical Environmental Concern (ACEC): MA GIS, Executive Office of Environmental Affairs (EOEA) (MEPA Unit)

4(f) Properties (49 USC Section 303) publicly owned parks, recreational areas, waterfowl refuges, historic sites

- **Department of Environmental Management, EOEa**
- **Metropolitan District Commission**
- Local planning department, parks department, historic commission
- MA Division of Fisheries & Wildlife
- **Division of Conservation Services at EOEa**
- **MA GIS**

25% Design Process, Environmental

- MassHighway will evaluate the data collected from the information sources identified above and determine whether the project can be designed to desired design criteria, or if design exceptions will be required to resolve environmental issues and community concerns.
- The MassHighway Project Manager will also distribute to the Environmental Division any proposed design changes and/or the approved Design Exception Report, along with a summary of any design changes made to any previous submissions to the Environmental Section.

Project Correspondence

Using as a minimum the information sources provided herein, the MassHighway Project Manager shall submit copies of all relevant correspondence regarding resources, contaminants and project design to the Environmental Division.

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