

6.1—DEFINITION AND MINIMUM REQUIREMENTS

A Bridge Rehabilitation/Repair project shall be defined as any bridge project in which the scope of work is to address deficiencies in an existing structure and/or to add functional capacity to an existing structure, such as bridge widening.

For rehabilitation/repair projects, an in-depth investigation of the condition of the existing structure shall be performed in accordance with the “Guidelines for Existing Structure Evaluation” established in this policy to identify all deficiencies and determine the scope of possible rehabilitation/repair. Design criteria for a rehabilitation/repair project shall be developed on a project-by-project basis depending on the given scope of work. Bridge widening design shall additionally follow the “Guidelines for Bridge Widening Design” established in this policy.

For repair-only projects, whose clearly defined scope of work is to restore damaged elements to a serviceable condition, the requirements of this BDTM may be waived with the approval of the Bridge Design Engineer Administrator.

The minimum requirements of a Bridge Rehabilitation/Repair project are as follows:

1. All deficiencies in the existing structure shall be identified and documented.
2. The existing structure shall be rehabilitated to improve the overall condition of the bridge to extend its service life and/or improve its bridge load rating as appropriate.

The minimum requirements for Bridge Widening projects shall include the following:

1. All deficiencies in the existing structure shall be identified and documented.
2. The existing structure shall be rehabilitated to improve the overall condition of the bridge to extend its service life and/or improve its bridge load rating as appropriate.
3. The widened portion of the structure shall be designed in accordance with the latest *AASHTO LRFD Bridge Design Specifications* and LADOTD Bridge Design Manuals including Bridge Design Technical Memoranda.
4. Existing bridge components, such as exterior girders, bent caps, columns, piles etc., that are subject to new loadings from the widening sections shall be evaluated based on the current specifications to determine their adequacy. Bridge components with insufficient capacity shall be replaced or rehabilitated as appropriate.

6.2—GUIDELINES FOR EXISTING STRUCTURE EVALUATION

For all bridge rehabilitation/repair projects, including bridge widening projects, an in-depth evaluation of the existing structure(s) shall be included in the scope of work. The evaluation shall be conducted in accordance with the guidelines listed below prior to proceeding with the design of the project.

6.2.1—Review of All Existing Project Documents

Review all relevant project information including as-built plans, shop drawings, rehabilitation work previously done to the structure, inspection reports, bridge load rating reports, accident records, maintenance records, geotechnical and test pile information, hydraulic analysis, scour information, and any other information pertaining to the structure(s).