
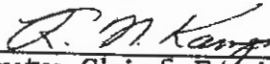


TO: ALL REGIONAL DIRECTORS SUPERSEDED BY EI 81-018 EFFECTIVE 3/26/1981	 ENGINEERING INSTRUCTION NEW YORK STATE DEPARTMENT OF TRANSPORTATION
Distribution: <input type="checkbox"/> Main Office <input checked="" type="checkbox"/> Regions <input type="checkbox"/> Special	SUBJECT: DESIGN REPORTS FOR BRIDGE REPLACEMENT PROJECTS Subject Code: 7.26-1
APPROVED:  <hr/> Deputy Chief Engineer (Structures)	Code: <u>EI-72-36</u> Date: <u>5/5/72</u> Supersedes:

In conformance with current Department policy, all bridge replacement projects which are eligible for Federal Aid shall be progressed to so qualify them. The following procedure will apply to all projects for the replacement of bridges on existing alignment in cases where no highway reconstruction project is included. The procedures in the "Design Procedure Manual" will apply to bridge replacement projects which are part of or combined with highway projects.

It will be necessary to comply with PPM 20-8 and other applicable Federal regulations. In accordance with paragraph 6c of PPM 20-8, public hearings will generally not be required where no Right-of-Way or minimal Right-of-Way taking is necessary. Likewise, a State Clearinghouse review and, where a memorandum of understanding is in effect, a metropolitan or a Regional Clearinghouse review will generally not be required. A negative declaration will generally satisfy the National Environmental Policy Act and PPM 90-1.

A Design Report must be prepared for all projects. In most cases concurrent Phase I and Phase II review may be undertaken as outlined in the Alternate Procedure on pages II-6 through II-8 of the Procedure Manual.

The design process will be initiated by Regional Office Design. The planning statement in the report shall be reviewed by the Regional Planning Engineer. (See Item 3 below.)

The Regional Office Design will submit to the Structures Subdivision for approval recommended bridge geometrics, together with supporting data such as existing highway widths, traffic and necessary right-of-way takings.

Report Content - Design report may be kept to the minimum contents listed below:

1. Project Identification.

- a. General Location Map showing the bridge, with a statement of how much approach work is required.
- b. Legal description including State Highway numbers and Project Identification Number.

2. Project Objective.

The objective is the reconstruction of the bridge.

3. Project Background.

- a. Cite the structural and geometric deficiencies of the bridge.
- b. Explain why the bridge should be replaced rather than rehabilitated. This could be due to the high cost of rehabilitation, limited structure life after rehabilitation, geometric deficiencies, or other reasons.
- c. State if the bridge has a posted loading or if it is anticipated that a posting will be required in the near future. List any specific restrictions which may be imposed by public or private agencies such as prohibitions against school buses or fire engines.
- d. Describe the effect on the traveling public of the loss of the bridge or of limiting loads on the bridge. There should be consideration of alternate routes, their capability to handle the additional traffic, and the additional travel distance which will be necessary.
- e. Describe the cross-section of the existing highway. Give present and projected traffic volumes in both Design Hour and AADT.
- f. Include a brief planning statement regarding any plans to reconstruct the highway within 20 years. Generally there should be none. If there is any likelihood that the highway will be reconstructed, justification must be made for replacement of the bridge as a separate, prior project.

4. Design Alternates.

- a. General.

There will be no design alternates.

b. Engineering Considerations.

1. Geometrics. The cross section of the new bridge may be described here although a section will be shown later in the report.
2. Traffic. The method of maintaining traffic during reconstruction should be outlined here.
3. Bridges. Omit.
4. Soils. If any soils problems are anticipated they should be mentioned here.
5. Maintenance. Maintenance responsibility should be defined here.
6. Right-of-Way. Any right-of-way taking necessary should be briefly described. Otherwise, state that no taking is necessary.
7. Landscaping. Omit unless it is felt that special treatment will be required.

c. Social, economic and environmental considerations.

Discuss any of the twenty-three items that apply to that particular bridge, and state that there are no other social, economic and environmental considerations affected by the project. If there are none, so state.

Plan Content -

No plan need be submitted. A cross section through the proposed bridge deck, omitting stringers or other supporting members, should be included in the report. A profile should be shown on this sheet with sight distances, if vertical curves are involved.

The report should include a list of any utilities on the existing structure, including the owner of each. (As design progresses, your office should determine whether there will be any changes in the utilities to be carried on the new bridge.)

Two advance copies of the design report shall be sent to the Preliminary Plan Review Bureau who will forward one copy to the Structures Subdivision. The Preliminary Plan Review Bureau will forward to the

Regional Office Design the comments of both offices and will advise how many copies are to be forwarded for distribution to Main Office functional units, State advisory agencies and the Federal Highway Administration. The Regional Office Design will distribute the report to appropriate local agencies.

After comments of the various agencies are resolved, the Regional Office Design will prepare the design recommendation and the Phase IV procedure of the Design Procedure Manual will be followed.

RNK/KM/LH