

Preliminary Plans

This chapter will assist you in submitting your initial bridge packet to our office. The owner, or his consultant, shall submit a packet, which will consist of: 3 sets of Preliminary Plans, Hydraulic Data Sheet, Risk Analysis and Soils Report.

Preliminary Plans typically contain (at a minimum):

- A title sheet
- A general plan and elevation showing span lengths, pier and abutment locations, and profile grade information
- The bridge cross section showing deck material and railing requirements
- Design & material specifications, painting requirements, loading requirements and construction notes
- Bridge layout sheet
- Survey sheets including hydraulic information and boring logs.

The State Aid Bridge Office will review and mark up the preliminary plan and make comments in red. Two sets of the plan will be returned to the owner for review – 1 set for owner's files and 1 set for the owner's consultant. Copies of the transmittal letter will be forwarded to the State Bridge Engineer, the DSAE, the consultant and to the SA Bridge file.

Information that may be useful in this chapter includes the preliminary plan review checklist, hydraulic guidelines including how to determine the road overtopping flood frequency and setting of the low member elevation. The Hydraulic Data Sheet has been included as well as an explanation of the Risk Analysis process. The section on bridge railings includes a link to the FHWA web site and the chapter on Bridge Railings from MnDOT's Bridge Design Manual. Lastly, the sections on Substructure and Superstructure describe the different elements of a bridge and gives design criteria.