



Directly responsible to the Deputy Director - Engineering.

The Bridge Division is responsible for:

Providing consultation to the Divisions and Districts on issues concerning construction and maintenance of structures and representing the Department at meetings and conferences pertaining to structural design and maintenance.

Assisting the Construction Division in resolving field construction problems, and providing the necessary structural information to project managers.

Maintaining a record of all bridge sized structures within the State of Nebraska.

Managing the reallocation of resources to achieve scheduling deadlines.

Reviewing shop plans and drawings.

**BRIDGE DESIGN & STEEL INSPECTION SECTION**

In addition to the common duties listed, the Bridge Design & Steel Inspection Section is responsible for:

Providing preliminary recommendations for bridge projects.

Establishing final bridge data sheets and TS&L's for all bridges and special structures from site survey and inspection data.

Managing the preparation or review of complete structural plans, specifications and special provisions for rural, urban, federal-aid county, interstate and expressway bridges.

Directing Computer Aided Design and Drafting (CADD) operations in plan preparation.

Reviewing bridge design plans, specifications and drawings prepared by consulting engineers for rural, urban, federal-aid county, interstate and expressway bridges.

Providing construction consultation to project managers and inspectors.

Managing the quality assurance inspection of steel fabrication for rural, urban, federal-aid county, interstate and expressway bridges and other steel structures.

**BRIDGE DESIGN SECTION**

In addition to the common duties listed, the Bridge Design Section is responsible for:

Providing preliminary recommendations for bridge projects.

Establishing final bridge data sheets and TS&L's for all bridges and special structures from site survey and inspection data.

Managing the preparation or review of complete structural plans, specifications and special provisions for rural, urban, federal-aid county, interstate and expressway bridges.

Directing Computer Aided Design and Drafting (CADD) operations in plan preparation.

Reviewing bridge design plans, specifications and drawings prepared by consulting engineers for rural, urban, federal-aid county, interstate and expressway bridges.

Providing construction consultation to project managers and inspectors.

Managing and developing items for the Bridge Office Policies and Procedures Manual.

**BRIDGE MANAGEMENT/NBI ADMINISTRATION SECTION**

In addition to the common duties listed, the Bridge Management/NBI Administration Section is responsible for:

Directing CADD operations in plan preparation.

Monitoring the schedule of projects in the bridge design process.

Administering the analysis and reporting of inventory, inspection, ratings and data collection to the Federal Highway Administration for all public highway bridges.

Providing analysis for the efficient maintenance and replacement of state-owned bridges in Nebraska.

Providing technical support, maintenance of personal computers and structure-related software.

Specifying the monitoring of bridge coatings.

Supporting "Clarity" within the Bridge Division.

Developing and managing a document and photo management system for the Bridge Division.

**BRIDGE REPAIR, CULVERT DESIGN, EMERGENCY RESPONSE & BRIDGE INSPECTION SECTION**

In addition to the common duties listed, the Emergency Response & Bridge Inspection Section is responsible for:

Managing the preparation or review of complete structural plans, specifications and special provisions for repair of rural, urban, federal-aid county, interstate and expressway bridges.

Managing the preparation of complete structural plans, specifications and special provisions for bridge size and non-bridge size structural elements (i.e., drainage inlets, box culverts).

Providing inspection of damages, recommendation and preparation of contract plans for repairing structures damaged through accidents. Assisting district personnel in the repair of damaged bridges.

Administering the statewide bridge inspection program.

Providing field inspection, coding and recording data for the structural inventory and appraisal of all state-owned highway bridges.

**RESEARCH & LOAD RATING SECTION**

In addition to the common duties listed, the Research & Load Rating Section is responsible for:

Performing load capacity ratings for all state and county bridges. Analyzing bridges for overload permits and load restrictions. Providing research and development for various bridge engineering applications.

Consulting with industry and academic representatives concerning new products and processes.

**HYDROLOGY AND HYDRAULICS SECTION**

In addition to the common duties listed, the Hydrology and Hydraulics Section is responsible for:

Providing independent review of consultant hydrological analysis and preliminary bridge data sheets for state and federal-aid county bridges.

Directing hydrological analysis and the development of preliminary bridge data sheets for state bridges designed by state personnel.

Provide an Interdisciplinary Scour Assessment Team for the scour critical bridge program.

Develop design details and permit information for hydraulic related maintenance issues.