

STATE OF MONTANA

JOB DESCRIPTION

Montana state government is an equal opportunity employer. The State shall, upon request, provide reasonable accommodations to otherwise qualified individuals with disabilities.

Job Title: Highways Design Engineer Location: Helena HQ Position Number: 30003

Department: Transportation Division and Bureau: Engineering, Highways Bureau

Section and Unit: Road Design Section

Job Overview: This position is the Highways Design Engineer and is responsible for the administration, management and coordination of all work within the Road Design and MSU Design Sections. This position reports to the Highways Engineer and is responsible for the management of approximately 40 FTE. Duties include highway program development, oversight of engineering projects, administration and management of bureau term-consultant contracts and administration of Bureau resources. Duties also involve the creation, review and revision of engineering policies, standards and practices. This position bears professional engineering responsibility for all plans prepared by the Highways Bureau and the District Road design staff in the absence of the Highways Engineer.

Essential Functions (Major Duties or Responsibilities):
Highways Program Oversight and Administration - 35%

Directs, plans and coordinates the Bureau's involvement in MDT's preconstruction program.

- Develops processes to synchronize work and communication with other units within MDT.
- Provides guidance for interaction with other agencies, local and tribal governments.
- Acts as a liaison with FHWA to ensure that project development complies with federal design, and administrative criteria.

Establishes policies and recommends changes in policies, specifications, standards, and design criteria.

- Assesses changes in national standards and criteria to ensure contemporary practices and technology are utilized.
- Researches, develops and reviews strategies for new technologies, innovations, and methods to determine the benefits and department-wide effects of their use.
- Coordinate and collaborate with other State Departments of Transportation regarding various engineering, design, contracting, and construction topics.
- Develops or participates in the development of business plans for implementation or new policies, technology, etc.
- Oversees development and implementation of general procedures and design criteria to ensure technical validity and uniformity in application.
- Provides MDT representation and technical consultation in the development of national specifications and engineering methods.

Bureau Coordination - 25%

Directs, plans, and coordinates the Bureau's involvement in MDT's planning, design, construction, and maintenance programs.

- Coordinates the bureau's involvement with cooperative projects, technical reviews, and adherence to design standards/criteria.
- Assessment of potential impacts to the Road Design, Hydraulics and Photogrammetry & Survey programs due to proposed changes in business practices.
- Strategies for coordination with other bureaus, divisions and the districts
- Direct involvement in the upgrading of design manuals
- Reviews, milestone reports, engineering reports, plans, specifications and estimates and provides comments to ensure designs meet current standards and guidelines

Maintains liaisons with FHWA and national transportation groups. Provides input for the development of local Federal guidelines and the development of national design criteria.

Administers Highways Bureau budget, policies, and equipment to ensure efficient and safe program operations, compliance with statutory responsibilities and related laws, and compliance with state, federal, and national standards.

Provide direction in the budget process by reviewing allocations and expenditures and determining major issues pertaining to compliance with federal laws, state laws and regulations.

- Develop recommendations for staffing and equipment needs.
- Ensure program compliance with Federal, State, and MDT laws, regulations, and policies by reviewing current policies and practices in relation to state and federal mandates and applicable legislation and mission mandates.

Develop and manage budgets and resource allocations for Highways Bureau activities to ensure adequate funding for planned and active projects, maximize federal funding, and ensure that Department resources are used in the most efficient possible manner.

Staff Management - 25%

Manages approximately 40 FTE in the Road Design and MSU Design Sections.

Manage professional supervisory and engineering staff and indirectly supervise program and design staff of the Highways Bureau by reviewing and revising overall section work plans, priorities, and procedures, and monitoring progress through meetings and consultations.

- Conduct staff meetings, disseminate data, and promote information exchange for support and advancement of bureau goals and staff development.
- Provides assessment of customer feedback

Establish and approve overall responsibilities, organizational structures, and allocation of positions within sections of the bureau.

- Recommend and justify requests for additional personnel.
- Develop and recommend rotational assignments to develop versatility and cross-training among personnel in the bureau.

Determine training needs of bureau staff through analysis of program effectiveness, new technology and policies, and staff performance.

- Prepare, present, or arrange training through subordinate supervisors, personnel specialists, training offices, or outside consultants to ensure modern technology and the latest design review and contract administration methods are used.

- Ensure consistency in the application of training opportunities for all staff.

Manage Highways Bureau recruiting and succession planning.

- Ensure compliance with state and federal employment and civil rights law, and collective bargaining agreements throughout the hiring process, assign personnel screening and selection committees, review results and making final recommendations for hiring, and ensure proper training and orientation of new employees.
- Develops succession plans for the Road Design and MSU Design Sections.
- Assists the Highways Engineer with various initiatives within the Bureau including revising, updating and creating new design guidance and procedures
- Assists in the revision and creation of new engineering project workflows and activities

Perform performance planning and appraisals of direct reports and ensure performance planning and appraisals are completed for subordinate staff.

- Implement and monitor corrective action including discipline and termination.
- Enforce discipline policies to ensure consistency in application of disciplinary action.

Highway Project Oversight - 10%

Provides professional engineering oversight and technical direction for the Road Design and MSU Design Sections.

- Provides engineering review of project plans, designs, proposals and project documentation.
- Assesses geometric controls and reviews designs to ensure they can provide adequate level of service.
- Monitors compliance with established policies in all sections, and review and approve atypical or developmental methods and procedures.
- Assesses the application of context sensitive solutions and practical based performance design across the agency.
- Provides engineering design advice and technical assistance to Helena, District and consultant design personnel.
- Perform Highways Bureau management of term-consultants and administration of term-consultant contracts.

Other Duties - 5%

Performs a variety of other engineering, project management, and public relations activities as assigned by MDT Management in support of the MDT mission and division objectives.

Supervision: The number of employees directly supervised is: 2. The total number of FTE managed (direct and indirect): approximately 40.

Physical and Environmental Demands:

- Light lifting (less than 10 lbs.)
- Remaining seated for extended periods of time, with occasional walking; standing; bending
- Travel within the state to project locations, meetings, conferences, and out of state travel by airline to national conferences and meetings.

- Ability to walk over uneven terrain or in water.
- Ability to communicate to technical and non-technical audiences.
- Deal with the public on a regular basis
- Ability to multi-task
- Making decisions in a timely manner to avoid a negative effect on construction and engineering operations.
- Demands for accuracy in all aspects of work.
- Ability to meet inflexible deadlines.

Knowledge, Skills and Abilities (Behaviors):

Comprehensive knowledge of the theory, principles, methods and techniques of civil engineering and associated mathematics and physical sciences; the methods and practices of the appropriate specialty such as planning design, construction materials; the engineering policy, methods and procedures of the Department of Transportation and applicable regulations, standards and specifications. Considerable knowledge of the practices and regulations of personnel management and supervision; administrative and management concepts and practices, organizational theory and budget development. Comprehensive knowledge of program requirements, contract administration, risk management and tort liability.

Ability to plan, organize and direct multiple engineering activities; to manage and supervise a staff of professional, technical and support personnel in varied engineering disciplines; to apply analysis and professional judgment in complex situations to arrive at solutions and make appropriate choices among options and alternatives; to solve unusual and difficult engineering problems; to establish and maintain effective working relationships with employees, MSU-Bozeman, other agencies and the public; to communicate effectively orally and in writing; to make engineering presentations to the public; to work effectively in a multi-task environment. Ability to evaluate resources and assess risks to achieve Departmental goals. Ability to make timely, technical decisions to meet project deadlines and budget.

Minimum Qualifications (Education and Experience):

The required knowledge and skills are typically acquired through a combination of education and experience equivalent to bachelor’s degree in Civil Engineering, or a related field.

This position requires a minimum of 5 years of progressive experience in highway related engineering. This position requires a minimum of 4 years of supervision or team lead experience. Certifications, licensure, or other credentials include: Montana Professional Engineer licensure
Alternative qualifications include: A Master’s degree in an engineering field may substitute for 1. year of work-related experience.

Special Requirements:

- Fingerprint check/Background check
- Valid driver’s license
- Safety Responsibilities

- Union Code
- Other;
Describe.

The specific statements shown in each section of this description are not intended to be all inclusive. They represent typical elements and criteria considered necessary to perform the job successfully.

Signatures

My signature below indicates the statements in the job description are accurate and complete.

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| Immediate Supervisor | Title | Date |
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| Administrative Review | Title | Date |
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My signature below indicates that I have read this job description.

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| Employee | Title | Date |
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Human Resources Review

Job Code Title: Engineering Supervisor Job Code Number: D2502M

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My signature below indicates that Human Resources has reviewed this job description for completeness and has made the following determinations:

FLSA Exempt

FLSA Non-Exempt

Telework Available

Telework Not Available

Classification Complete

Organizational Chart attached.

Human Resources:

Signature

Title

Date