# 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: Project Development Engineer** 

Position Number: 33002, 33007, 33014, 33015, 33038 Location: Helena

**Department: Transportation** 

Division and Bureau: Rail, Transit, & Planning Division; Environmental Services Bureau

Section and Unit: Environmental Engineering Section

**Job Overview:** This position is responsible for ensuring that MDT's work is conducted in accordance with the National Environmental Policy Act (NEPA), Montana Environmental Policy Act (MEPA), Clean Water Act (CWA), Montana Water Quality Act (MWCA), and applicable MDT and Federal Highway Administration (FHWA) rules, standards and guidelines to accomplish the project development goals and objectives of MDT.

#### **Essential Functions (Major Duties or Responsibilities):**

## **Environmental Engineering Analysis and Project Development - 50%**

- Conducts in-depth engineering analysis and technical review of transportation design concepts, plans, specifications, and reports for each proposed project.
- Identifies and assesses potential social, economic, and environmental impacts and means to
  avoid, minimize, or mitigate those impacts in accordance with applicable laws. Provides
  recommendations, project progress reports, and technical guidance regarding
  environmental issues and concerns; establishes project priorities, and recommends sound
  engineering solutions to avoid, minimize, and/or mitigate adverse social, economic, and
  environmental impacts.
- Serves as the ESB champion for review of Department Milestone Reports by coordinating and incorporating comments and suggestions from all ESB Sections to prepare a single set of official ESB-wide comments concerning design.
- Evaluates engineering and design elements for various proposed MDT projects to determine potential social, economic, and environmental impacts that may result.

- Continually monitors ongoing project development and provides engineering insight to project engineers and consultants to ensure that interrelated technical features present in project design remain within the scope of continually changing environmental issues.
- For projects involving term consultants, the PDE develops bid solicitations and actively administers and monitors consultant agreements and consultant performance by reviewing and editing consultant reports, environmental documents, permit applications, and estimates for compliance with all applicable environmental and engineering standards and specifications, as well as adherence to terms of individual contracts. Monitors project budgets to ensure that all project billing is accounted for, and that project expenditures do not exceed budget allocations.
- Attends and participates in field review, design and plan review meetings with design team.

#### **Environmental Documentation and Permit Applications - 35%**

- Develops or directs preparation of appropriate NEPA/MEPA environmental documentation for MDT projects to ensure project compliance in terms of areas such as the Clean Water Act, Clean Air Act, environmental justice, secondary and cumulative impacts, Farmland Protection Policy Act, Section 4(f) of the Transportation Act, Section 6(f) of the Land and Water Conservation Fund Act, and other environmental considerations, as well as approximately forty laws, orders, and rules that may be applicable to each project.
- Secures the appropriate Clean Water Act Section 404 Permits, 401 Certifications, Tribal Water Resource Permits, and other environmental permits necessary for highway construction projects from the appropriate federal, state and tribal agencies. Negotiates permits and their conditions with the applicable agencies and MDT design staff. Evaluates permit conditions to determine the analysis required to fulfill permit application requirements and initiates discussion with individual engineering project managers to document steps taken to minimize or avoid impacts. Prepares appropriate special provisions for inclusion in the contract plans to ensure that contractors are informed of enforceable permit conditions and authorized activities.
- Determines necessity of incorporation of Permanent Erosion and Sediment Control (PESC)
  features into project plans and provides guidance regarding appropriate PESC features for
  site-specific conditions. Ensures project designs are in compliance with MS4 requirements,
  as applicable.
- Communicates with various internal design groups, consultants, and outside agencies to coordinate essential environmental data for use in the development of environmental documents, permits, erosion control plans, etc.
- Actively manages project activities and establishes work priorities utilizing MDT's Engineering Project Schedule system (EPS).
- Participates in Planning and Corridor studies to assess the potentially affected environment, identify potential environmental concerns, ensure appropriate communication with the

public and resource agencies, consider avoidance and minimization efforts, and produce a planning study that can feed directly into the NEPA/MEPA process.

### **Technical Assistance and Training - 10%**

- Through training and independent research, the incumbent maintains a contemporary knowledge of the continuously evolving National, Tribal, and State environmental statutes, regulations, standards, and legal cases and adapts their work efforts and strategies to meet continuously evolving needs associated with environmental compliance.
- Provides technical guidance and support to Department engineers and other units throughout project development and maintenance.
- Advises work units of unusual or unique project conditions, or the potential need for specialized resource analysis.
- Provides information to the public, consultants, and other agencies regarding environmental impacts and concerns, and responds to design-related questions.

#### Other Duties - 5%

• This position performs a variety of other professional and technical duties in support of Bureau and Division operations.

#### **Supervision**

The number of employees supervised is: N/A

The position number for each supervised employee is: N/A

#### **Physical and Environmental Demands:**

- Travel throughout the state to project locations.
- Ability to walk over uneven terrain or in water.
- Operating a personal computer for extended periods of time.
- Written and verbal communication.
- Continual walking or standing.
- Operation of motor vehicles.
- Ability to manage, prioritize, and coordinate a large number of tasks simultaneously.
- Ability to manage confrontational situations that may arise.
- Lift and carry items up to 10 pounds

#### **Knowledge, Skills and Abilities (Behaviors):**

- Extensive knowledge of environmental and civil engineering disciplines as they relate to environmental resource management.
- Knowledge of the methods and practices of highway construction, engineering and design, and related policies, methods, procedures, specifications, and standards and regulations; and contract administration.
- Environmental document development and analysis; erosion and sediment control; applicable state, federal, AASHTO, and FHWA requirements and standards; applicable state, federal, and tribal laws and permit requirements such as USDOT Act Section 4(f), NEPA, MEPA, COE, water acts, and all other applicable environmental requirements, laws, and acts.
- Ability to exercise sound engineering judgment when analyzing and developing solutions to complex environmental engineering problems, including those involving contextually sensitive issues.
- Knowledge of contract management relative to various contracted services, and project administration.
- Ability to communicate effectively in writing and verbally to technical and non-technical audiences.
- Ability to negotiate with others to benefit the project as well as preserving and/or improving long-term relationships.
- Ability to work collaboratively and independently to effectively manage multiple tasks.
- Ability to establish project priorities and organize work while coordinating a large number of projects simultaneously.

#### 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 environmental engineering, civil engineering, or a closely related engineering field.

This position requires a minimum of four (4) years of progressively responsible engineering work, preferably in an environmental field. In addition, the incumbent is expected to pursue continuing education and research to maintain a contemporary knowledge of the ever-evolving environmental field including engineering and design practices, technologies, environmental regulation

Certifications, licensure, or other credentials include: A passing score on the Fundamentals of Engineering exam (FE), or certification as an Engineering Intern. A Professional Engineer (PE) license is preferred.

Alternative qualifications: Any combination of additional related work experience and education equivalent to the minimum qualifications.

Specia	al Requirements:			
List an	y other special required	information for this position	1	
	Fingerprint check			Valid driver's license
	Background check			Other; Describe
N/A	Union Code			Safety Responsibilities
The sr	pecific statements sho	own in each section of this	descri	ption are not intended to be all inclusive.
-	•			cessary to perform the job successfully.
My sig		es the statements in the j	ob desc	cription are accurate and complete.
Imme	ediate Supervisor	Title		Date
Admi	nistrative Review	Title		Date
My sig	gnature below indicat	es that I have read this jo	b descr	ription.
Emplo	oyee	Title		Date

# **Human Resources Review**

Signature

Job Code Title: Engineering Analyst 2	Job Code Number: D25012 Level: 2
My signature below indicates that Human completeness and has made the following	Resources has reviewed this job description for determinations:
FLSA Exempt	☐ FLSA Non-Exempt
🔀 Telework Available	Telework Not Available
Classification Complete	Organizational Chart attached
Human Resources:	

Date

Title

Revision Date: 12/2019 6