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: Surveyor I Position Number: 51052, 51053, 51054, 53050, 53053, 53054, 55005, 55056, 55057, 57046, 57047, 57048, 59061, 59063, 59066, 30006, 32054

Location: Helena Department: Transportation

Division and Bureau: Engineering Division/Highways Bureau

Section and Unit: Photogrammetry & Survey Section/Land Survey Unit

Job Overview:

This position is an entry level surveyor (Surveyor I) for the MDT. The position is responsible for performing a variety of technical and pre-professional survey duties. Examples of duties include: making measurements, collecting and recording survey data, operating survey equipment, setting stakes/monuments, researching records, recovering survey evidence, making rudimentary survey calculations, drafting at an entry level, maintaining survey equipment and sustaining an inventory of survey supplies.

The position reports directly to the Land Survey Manager or District Land Survey Manager.

Essential Functions (Major Duties or Responsibilities):

Field & Office Survey Duties - 70%

Performs a variety of technical and pre-professional field, office and administrative duties in support of ongoing land survey projects and operations.

- Researches public and private records (i.e. Bureau of Land Management, National Geodetic Survey, United States Geological Survey, county courthouse, county surveyors, private surveyors, etc.) under the direction of a LSI or PLS to recover title, monument, and/or other survey histories pertinent to the survey being conducted.

- Contacts landowners to notify them when survey crews will be on their property and finds out if there are any special circumstances survey crews need to be aware of since the right-of-entry forms were completed.
- Conducts field survey activities by recovering monuments and other survey evidence, operating survey instruments, recording data, setting stakes and monuments and performing other related field survey tasks. Operates machinery and equipment required to accomplish survey tasks including: vehicles, electronic total stations, engineering/digital levels, data collectors, GPS equipment, calculators, computers and software, other standard survey tools and equipment, and various hand tools used for digging, cutting, marking, etc.
- Organizes, computes, and adjusts survey data to be used in compiling reports, maps, plats and exhibits. Examples of these duties include: reducing field notes, making section break-down calculations, making proportionate measurement calculations, adjusting traverses and level notes, drafting, completing corner recordation forms and calculating surveys.
- Prepares documents (i.e. - maps, plats, exhibits, control diagrams, certificates of survey, reports, control abstracts, coordinate listings, etc.) to be used in engineering planning and design, right-of-way acquisition and/or for submission to other agencies.
- Performs survey reviews for compliance with established standards and for computational accuracy. Identifies areas of non-conformance or substandard work, makes recommendations for resolution and refers them to the Land Survey Manager or appropriate District Land Survey Manager for final action.

Survey Party Chief - 20%

Serves as party chief for routine field surveys by overseeing field activities under the guidance of a professional land surveyor.

- Identifies and gathers project background information by reviewing scope of project with professional surveyor. Determines what data needs to be gathered in the field, the resources needed to complete field survey activities information needed to complete survey, determines and gathers required survey background documentation and determines data collection activities for project through discussion with the professional land surveyor. Compares these requirements to available staff and their related expertise/abilities to determine how to complete projects.
- Performs the following land surveying tasks under the supervision of a professional land surveyor: property corner search, retracing GLO surveys, retracing property boundaries, retracing highway right-of-way, writing legal descriptions, preparing plats, preparing corner recordations, staking property boundaries, making land survey calculations, etc.
- Submits completed surveys to the professional land surveyor for review, approval, signature, and distribution.

Equipment Maintenance - 5%

Maintains equipment and supply inventories to ensure availability and proper functioning to support survey operations.

- Schedules repair and maintenance work for the survey vehicle.
- Evaluates, organizes, and prepares equipment to be used in surveys conducted by the Survey Unit.
- Adjusts, maintains, and cleans survey equipment to assure proper alignment, operation, and safety. This includes pegging levels, adjusting tribrachs, checking EDMs on calibration baselines, etc.
- Orders and maintains an inventory of survey supplies to assure availability when needed.

Other Duties - 5%

Performs a variety of other duties as assigned in support of Section, Bureau and MDT goals and objectives examples of other duties are:

- Assisting with other MDT programs on special projects.
- Attending training and educational sessions as required
- As assigned by the Land Survey Manager or appropriate District Land Survey Manager, conducts training sessions for district survey crews on complex survey procedures and the use of state-of-the-art survey equipment and methods.
- Participate in maintaining the National Geodetic Survey (NGS) vertical control network by replacing NGS bench marks, running levels in accordance with NGS specifications, and preparing level data for submission to NGS.

Supervision

The number of employees supervised is: N/A

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

Physical and Environmental Demands:

- Extensive statewide travel (travel is estimated to range from 10% to 30% of the time)
- Lifting objects in excess of 30 lbs.
- Ability to walk over uneven terrain or in water
- Continual walking or standing
- Exposure to extreme weather conditions and high-speed traffic
- Operation of motor vehicles and survey and related equipment

Knowledge, Skills and Abilities (Behaviors):

This position requires knowledge of standard surveying techniques, practices, and procedures; survey equipment, geometry; trigonometry; computers; survey computation and adjustment software; and documentation and research techniques. The position requires some knowledge of the B.L.M. Manual of Instructions for the Survey of Public Lands, the Montana Subdivision and Platting Act, the Certified Corner Recordation Act.

Knowledge of MDT survey policy and procedures and MDT highway design and construction is desirable.

This position requires skill in the use and operation of survey instruments of all types; operating computers and survey computation and adjustment software; and in reading and interpreting maps and plans.

Minimum Qualifications (Education and Experience):

The required knowledge and skills are typically acquired through a combination of education and experience equivalent to an Associate's or Bachelor's Degree in Land Surveying, Geomatics, or a related filed from an accredited college or university. Related degrees must include significant coursework in survey related maths, drafting, and surveying techniques, principles and practices.

No additional experience is required.

Certifications, licensure, or other credentials include: N/A

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

Special Requirements:

List any other special required information for this position

☐	Fingerprint check	☒	Valid driver's license
☐	Background check	☐	Other; Describe
MFPE	Union Code		Safety Responsibilities

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.

Immediate Supervisor	**Title**	**Date**

Administrative Review	**Title**	**Date**

My signature below indicates that I have read this job description.

Employee	**Title**	**Date**

Human Resources Review

Job Code Title: Survey Technician 1 Job Code Number: D12011 Level: 1

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**