Position Summary

This summary describes the organization, duties, and requirements of a State of Michigan vacancy. The official position description for this position is available from the HR office for the agency.

Position Code: LANSLICA

Civil Service Class and Level: Land Surveyor Licensed-A

Working Title (What the agency calls the position): Land Surveyor Licensed12

Name and Position Code Description of Direct Supervisor: JAMES, CHRISTOPHER; ENGINEER MANAGER LICENSED-3

Department/Agency: TRANSPORTATION CENTRAL OFFICE

Work Area: Metro Region

Work Location/Hours of Work: 18101 W 9 MILE RD; SOUTHFIELD, MI 48075 / Monday - Friday; 7:30AM- 4:30PM (hours may vary)

General Summary of Function/Purpose of Position: This position serves as the recognized resource in the Metro Region for coordinating and leading activities in the survey area to complete design surveys. This Land Surveyor position performs complex technical and professional assignments, and may, by law, regulation, policy or common practice, require licensure to be a Professional Surveyor in the State of Michigan. This position requires a licensed professional surveyor to prepare and review land surveys including legal descriptions of real property and make decisions in the determination of boundary locations. This position has the responsibility of coordinating, training, and mentoring survey tasks for employees while performing field surveys and processing survey data to complete design surveys. This position includes support duties associated with the administration of consultant contracts, and may include writing scopes of service, estimating, and reviewing survey work for compliance with Michigan Department of Transportation (MDOT) specifications, evaluations and other duties associated with consultant services. This position coordinates and supports Geographic Information Systems (GIS) data collection, management and applications.
This position requires possession of a valid driver’s license to conduct surveys.

Assigned duties and tasks for each duty.

Duty 1 **Percentage: 30**

Serve as the recognized resource in Metro Region for coordinating and leading activities in the survey area to complete design surveys.

This duty requires possession of a valid driver’s license to conduct surveys.

- Develop and implement work plans to effectively complete design surveys.
- Estimate time and equipment needed to complete design surveys.
- Report progress of design surveys to supervisor, project managers, Transportation Service Center (TSC) staff, and Region leadership.
- Make decisions in the field to complete design surveys on schedule and cost effectively.
- Complete field observations using survey equipment.
- Process survey data using Open Roads Designer (ORD) and other survey/design software.
- Prepare survey files and data per standard MDOT specifications for submission and use by design staff.
- Determine legal and as-constructed alignments and right-of-way.
- Ensure MDOT personnel working on design surveys are properly equipped and conform to all safety policies and guidelines.

Duty 2 **Percentage: 30**

Prepare legal descriptions and Certificates of Survey for the division and purchase of real property.
This duty requires possession of a valid driver’s license to conduct surveys.

- Perform survey field measurements necessary to complete property surveys.
- Review and analyze survey data determining property boundary locations.
- Draft certificates of survey using ORD.
- Write legal descriptions to be used by real estate personnel for purchase of property.

Duty 3 **Percentage: 10**

Perform support duties associated with the administration of survey contracts for MDOT design projects completed by consultant firms.

- Prepare survey scopes of work.
- Prepare survey hour and cost estimates.
- Review survey consultant work for completeness and compliance with MDOT specifications.
- Prepare survey consultant evaluations.

Duty 4 **Percentage: 10**

Provide construction support relating to the Control of Work, Construction Surveying and Staking, and Preservation of Boundary Monuments sections of the MDOT Standard Specifications for Construction.

- Perform quality assurance checks on contractor's work.
- Perform verification and densification of existing horizontal and vertical control on construction projects.
- Perform Right of Way staking on construction projects.
- Compile monument preservation packets for construction projects which may include field reviews for existing monumentation, research of MDOT and county records for existing documentation, and preparing reports recommending appropriate monument preservation action.
- Review Monument Preservation documentation submitted by contractors for completeness and compliance with MDOT specifications.

Duty 5 **Percentage: 10**

Assist the Region Surveyor as needed with training employees, completing GIS data collection and the use of common GIS platforms.

- Assist in GIS field data collection and utilize GIS hardware and software for data collection.
- Utilizes GIS desktop and web-based platforms to generate data sets.
- Assist, training Region staff on GIS data collection for assets that need GIS data updates or collection of new assets.
- Review GIS data collected by consultants for completeness and compliance with MDOT and Region specifications.
- Assist Region Surveyor with adding Metro Region data to the Statewide Survey Alignment and right-of-way GIS database.

Duty 6 **Percentage: 10**

Perform other tasks as assigned.

- Maintain, test, and adjust survey equipment.
- Research records for MDOT personnel and other surveyor requests.
- Assist with survey training of other MDOT personnel.
- Other duties as assigned.

Types of decisions made independently and whom or what those decisions affect:
Typical decisions made independently would include the type of survey equipment to use and methods of collecting survey data. Decisions made would affect survey crew completion schedule of assigned work and type of survey information provided to designers.

Types of decisions that require the supervisor's review: To clarify instructions or when problems arise or regarding department policy.
• Matters involving high perceived risk of litigation.
• Unanticipated problems causing additional expense or additional time to projects.

Physical effort used to perform this job and environmental conditions of this position: Physical effort to traverse various terrain, reaching for plans, transporting heavy or bulky loads up to 90 pounds, and remaining in a stationary position for long periods of time using a computer or traveling in a vehicle may be required. Position performs frequent field reviews of proposed or active road/bridge survey projects requiring traversing irregular terrain. Environmental conditions include exposure to dirt, fumes, heavy and high-speed traffic or adverse weather conditions. Position requires possession of a valid driver’s license. Position may require availability outside normal working hours based on operational needs.

Names and classes and levels of employees whom this position immediately supervises:

Essential functions of this position: This position serves as the recognized resource in the Metro Region for coordinating and leading activities in the survey area to complete design surveys. This Land Surveyor position performs complex technical and professional assignments, and may, by law, regulation, policy or common practice, require licensure to be a Professional Surveyor in the State of Michigan. This position requires a licensed professional surveyor to prepare and review land surveys including legal descriptions of real property and make decisions in the determination of boundary locations. This position has the responsibility of coordinating, training, and mentoring survey tasks for employees while performing field surveys and processing survey data to complete design surveys. This position includes support duties associated with the administration of consultant contracts, and may include writing scopes of service, estimating, and reviewing survey work for compliance with MDOT specifications, evaluations and other duties associated with consultant services. This position coordinates and supports GIS data collection, management and applications.
This position requires possession of a valid driver's license to conduct surveys.

Function of the work area: The function of the Metro Region Survey unit is to perform and manage the region's property and perform engineering design surveys for the purpose of gathering data for road and bridge design. This position assists the Region surveyor and staff on the field crew reducing survey notes for compliance with MDOT standards. Additionally, the unit provides legal support for the departments of real estate, right-of-way, and litigation matters.

Education, experience, and credentials typically needed to perform the position's essential functions [Equivalent combinations of education and experience can also be evaluated on an individual basis for applications providing sufficiently detailed descriptions of the other experience.]:

EDUCATION:
Possession of a bachelor's degree with a major in surveying.

EXPERIENCE:

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Three years of professional experience conducting land surveys equivalent to a Land Surveyor, including one year equivalent to a Land Surveyor P11.

KNOWLEDGE, SKILLS, AND ABILITIES:

Ability to:
• Apply knowledge of land surveying to land surveying activities and techniques.
• Communicate effectively.
• Maintain records and prepare reports and correspondence related to the work.

Knowledge of:
• The principles and practices of land surveying.
• Surveying instruments and equipment and their use and care.

CERTIFICATES, LICENSES, REGISTRATIONS:
- Possession of a valid driver's license is required and must maintain throughout employment in the position.
- Possession of a professional surveyor's license as required by the State of Michigan and must maintain throughout employment in the position.