

**MICHIGAN CIVIL SERVICE COMMISSION  
JOB SPECIFICATION**

**LAND SURVEYOR**

**JOB DESCRIPTION**

Employees in this job complete and oversee a variety of professional assignments to facilitate the completion of roads, building sites, recreational areas or bridges; and the completion of legal descriptions for the taking and marking of right-of-way. Work is performed by conducting land surveys for determination of boundary lines, retracement of government survey lines, and re-establishment of land survey corners.

There are four classifications in this job.

**Position Code Title – Land Surveyor-E**

Land Surveyor 9

This is the entry level. As a trainee, the employee carries out a range of professional land surveyor assignments while learning the methods of the work.

Land Surveyor 10

This is the intermediate level. The employee performs an expanding range of professional land surveyor assignments in a developing capacity.

Land Surveyor P11

This is the experienced level. The employee performs a full range of professional assignments in a full-functioning capacity. Considerable independent judgement is used to make decisions in carrying out assignments that have significant impact on services or programs. Guidelines may be available, but require adaptation or interpretation to determine appropriate courses of action.

**Position Code Title – Land Surveyor-A**

Land Surveyor 12

This is the advanced level. The employee may function as a lead worker or senior worker. At this level, employees are responsible for overseeing the work assignments of other professionals or have regular assignments that have been recognized by Civil Service as having significantly greater complexity than those assigned at the experienced level.

**NOTE:** Employees generally progress through this series to the experienced level based on satisfactory performance and possession of the required experience.

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### **JOB DUTIES**

**NOTE:** The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

Conducts land surveys for determination of boundary lines, retracement of government survey lines, and re-establishment of land survey corners.

Makes ties to subdivisions, property lines and government land corners.

Assembles field data, reduces field notes and makes survey calculations.

Assembles pertinent reference data before field surveys.

Plots field data, using survey computer programs, constructs maps, and prepares reports.

Establishes control for alignment and benchmarks; makes required line and elevation ties to existing centerlines and U.S.G.S. benchmarks.

Makes vertical control surveys for aerial surveys; determines elevations for various surfaces.

Makes topographical surveys and site surveys for the development and/or clean up of contaminated recreational facilities, and the design of buildings, roads, and bridges.

Maintains records and prepares reports appropriate to the classification and other non-essential functions as required.

Performs related work as assigned.

### **Additional Job Duties**

#### **Land Surveyor 12 (Lead Worker)**

Oversees the work of professional staff by making and reviewing work assignments, establishing priorities, coordinating activities, and resolving related work problems.

#### **Land Surveyor 12 (Senior Worker)**

Performs on a regular basis professional land surveyor assignments that are recognized by Civil Service as more complex than those assigned at the experienced level.

**JOB QUALIFICATIONS**

**Knowledge, Skills, and Abilities**

**NOTE:** Some knowledge in the area listed is required at the entry level, developing knowledge is required at the intermediate level, considerable knowledge is required at the experienced level, and thorough knowledge is required at the advanced level.

Knowledge of mathematics, survey computer programs, and survey computations applicable to the work.

Knowledge of the use of mechanical drawing instruments or survey computer programs.

Knowledge of the nomenclature and symbols of drafting.

Knowledge of surveying instruments and equipment and their use and care.

Knowledge of the principles and practices of land surveying.

Knowledge of principles, practices and materials that could include computer programs used in survey work.

Knowledge of state law regarding the establishments of plats, property lines, and survey monuments.

Ability to apply knowledge of land surveying to land surveying activities and techniques.

Ability to make arithmetic computations accurately and record results legibly.

Ability to do transit and level work, which may include application of total station instruments to survey projects.

Ability to use surveying instruments

Ability to reduce and plot field notes to make computations required.

Ability to make engineering sketches, maps and drawings.

Ability to read and interpret engineering plans and specifications.

Ability to carry out written and oral directions.

Ability to communicate effectively with others.

Ability to maintain favorable public relations.

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Ability to maintain records, and prepare reports and correspondence related to the work.

### **Additional Knowledge, Skills, and Abilities**

#### **Land Surveyor 12 (Lead Worker)**

Ability to organize and coordinate the work of others.

Ability to set priorities and assign work to other subordinates.

### **Working Conditions**

Some jobs require an employee to work under extreme weather conditions and environmental conditions of the work site.

Some jobs require travel.

### **Physical Requirements**

The job duties require an employee to stand or walk for extended periods of time.

The job duties may require an employee to traverse rough terrain.

### **Education**

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

### **Experience**

#### **Land Surveyor 9**

No specific type or amount is required.

#### **Land Surveyor 10**

One year of professional experience conducting land surveys equivalent to a Land Surveyor 9.

#### **Land Surveyor P11**

Two years of professional experience conducting land surveys equivalent to a Land Surveyor, including one year equivalent to a Land Surveyor 10.

#### **Land Surveyor 12**

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

### **Special Requirements, Licenses, and Certifications**

None.

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**NOTE:** Equivalent combinations of education and experience that provide the required knowledge, skills, and abilities will be evaluated on an individual basis.

**JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION**

**Job Code**  
LANDSRVYR

**Job Code Description**  
Land Surveyor

**Position Title**  
Land Surveyor-E  
Land Surveyor-A

**Position Code**  
LANSRVYE  
LANSRVYA

**Pay Schedule**  
H21-001  
H21-009

ECP Group 2  
Revised 6/1/06  
TeamLeaders