

# LIVINGSTON COUNTY JOB DESCRIPTION

## ASSOCIATE ENGINEER

**Supervised By:** Chief Deputy Drain Commissioner

**Supervises:** Inspection & Construction Manager, Engineering Surveyor, Field Supervisor

**FLSA Status:** Exempt

### **Position Summary:**

Under the supervision of the Chief Deputy Drain Commissioner. Provides engineering and operations support to the Chief Deputy Drain Commissioner as well as to the Deputy Drain Commissioner. Responsible for assistance as-needed to the Chief Deputy and Deputy Drain Commissioners, including plan review, easement acquisition, construction inspection, construction management oversight, permit acquisition, project report generation, research on behalf of the Deputy and Chief Deputy Drain Commissioners.

### **Essential Job Functions:**

An employee in this position may be called upon to do any or all of the following essential functions. These examples do not include all of the duties, which the employee may be expected to perform. To perform this job successfully, an individual must be able to perform each essential function satisfactorily.

1. Works extensively with property owners to: (1) acquire easements necessary for maintenance activities and drain construction; (2) respond to customer complaints regarding drainage issues, and (3) evaluate solutions to flooding problems on or near Drain Commissioner-maintained drainage systems.
2. Works directly with the Engineering Surveyor and Field Supervisor on project planning, design, construction, and follow-up.
3. Defines scope of data collection for Engineering Surveyor and Field Supervisor to create, cross sections, drain profiles, topographic maps, reports, and to analyze design and construction options for both existing and proposed storm water drains.
4. Allocates workflow of Inspection and Construction Manager.
5. Supervises consulting engineer review of construction plans for new developments. reviews storm drainage construction plans using regional topography to evaluate plans for their protection of public health, safety, and welfare.
6. Reviews sanitary collection system designs for conformance with County Sanitary Design Standards. Evaluates sanitary designs for impact on sanitary maintenance

operations to minimize added future maintenance burdens to the Livingston Regional Sewer System and other Drain Commissioner-maintained sanitary sewage and treatment systems.

7. Conducts public informational meetings to inform the residents of impending storm water and sanitary projects and possible impacts.
8. Works with Engineering Surveyor on the acquisition and interpretation of surveying information necessary for sanitary collection and treatment system planning.
9. Works with the Engineering Surveyor, using computerized mapping maintenance systems (CMMS) to design, implement, and maintain the department GIS mapping database for both storm water and sanitary operations. Issues work orders (currently using Cityworks).
10. Works with the Engineering Surveyor to prepares and maintains the department assessment database including drains and sanitary sewer systems. Assist the Chief Deputy Drain Commissioner and Engineering Surveyor with development of special assessment rolls as needed.
11. Creates and designs individual maps and map series for a variety of different uses.
12. Provide lead assistance to maintenance crew in the absence of the Field Supervisor - Drain as needed.
13. Assists the Environmental Projects Manager with the reporting requirements of Part 307 of the Natural Resources and Environmental Protection Act (NREPA), as amended, with respect to Dam Safety Inspections. Reviews reports prepared by consulting engineers for high hazard dams. Prepares reports for submittal to EGLE for low hazard dams.
14. Performs other duties as directed.

**Required Knowledge, Skills, Abilities and Minimum Qualifications:**

The requirements listed below are representative of the knowledge, skills, abilities and minimum qualifications necessary to perform the essential functions of the position. Reasonable accommodations may be made to enable individuals with disabilities to perform the job.

Requirements include the following:

- Bachelor's Degree in civil engineering, surveying, building construction management, GIS, resource development or related field and four years of progressively more responsible experience in surveying, mapping, and GIS development, and construction.
- The County, at its discretion, may consider an alternative combination of formal education and work experience.

- Michigan Department of Energy, Great Lakes, & Environment Storm Water Operator certification.
- Michigan Vehicle Operator's License.
- Thorough knowledge of the principles and practices of civil engineering and drainage, surveying, and construction.
- Considerable knowledge of conducting surveys and inspections, soil erosion control, GIS and cartography, preparing general construction plans, analyzing assessment and map programs and paper documents, and applicable local, state and federal, laws, rules and regulations.
- Skill in assembling and analyzing data and preparing comprehensive and accurate reports.
- Skill in effectively communicating ideas and concepts orally and in writing.
- Skill in communicating with the public and property owners to respond to complains regarding drainage issues and to gain easements necessary for maintenance activities and drain construction.
- Ability to establish effective working relationships and use good judgment, initiative and resourcefulness when dealing with County employees, contractors to the County, representatives of other governmental units, professional contacts, elected officials, and the public.
- Ability to assess situations, solve problems, work effectively under stress, within deadlines, and in emergency situations.
- Skill in the use of office equipment and technology, including Microsoft Suite applications and department specific software, database development, and the ability to master GIS/mapping software.
- Skill in the use of specialized GPS device equipment.

**Physical Demands and Work Environment:**

The physical demands and work environment characteristics described here are representative of those an employee encounters while performing the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee regularly works both in an office and in the field. While in the office, the employee is regularly required to communicate in person and by telephone, read regular and small print, review plan sheets, view and produce written and electronic documents, and enter data on a computer keyboard with repetitive keystrokes. The

employee must be mobile both in an office setting and in the field with the ability to stand, sit, stoop and kneel, use hands to finger, handle, or feel and reach with hands and arms. The employee must lift or push/pull objects of up to 50 lbs. without assistance. Accommodation will be made, as needed, for employees required to lift or move objects that exceed this weight.

While performing the duties of this job, the employee regularly works both indoors and outdoors and regularly travels between work sites using a motor vehicle. The noise level in the work environment varies from quiet to loud.