

FILLMORE COUNTY JOB DESCRIPTION

Engineering Technician Sr.

DEPARTMENT: Highway Department		JOB TITLE OF SUPERVISOR: Assistant County Engineer
PAY GRADE/RANGE: 9	BARGAINING UNIT: Not Represented	FLSA STATUS: Non-exempt

GENERAL PURPOSE OF JOB

Serves as project manager of road, bridge and culvert construction projects. Coordinates the activities of engineering technicians involved in planning, design, survey, inspection, and completion according to specifications to ensure project is completed according to County standards. Performs higher level preliminary surveys, design and inspection projects/functions.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

	FREQUENCY
Determines best method to collect survey data, supervises and schedules survey work, coordinates survey work with contractors, evaluates survey data, prepares and reviews plans, determines if plans need to be altered, and completes final design plans and specifications for road, bridge and culvert projects according to established procedures and to comply with departmental standards.	Daily 40%
Supervises and performs all material testing for compliance with standards and specifications. Inspects projects in progress and completed including observing installation and testing of certain components to ensure compliance to project specifications and County standards. Maintains records of inspections performed as required.	Daily 15%
Determines staking lines for future construction and improvement projects, verifying staking and layout of each phase of project in association with plans and blueprints.	Weekly 10%
Reviews plans and specifications for projects and makes estimations regarding quantities of materials needed and computes mathematical data. Prepares proposals, abstracts, contract payment requests, construction changes, work orders, supplemental agreements, and plan drawings and submits for State approval. Completes all paperwork needed to finalize projects utilizing public funding. Review and authorize payment and determine which funds money should be paid from.	Weekly 10%
Supervises engineering technicians including assigning work schedules, monitoring assignments, training staff, and determining the priority of projects.	Daily 10%
Performs safety inspections of all bridges as mandated by Federal Guidelines when certified to do so. Assists in this process until certified.	Annually 5%
Interacts with public and contractors to respond to general inquiries and provide information.	Varies 5%
Performs other duties of a similar nature or level.	Varies 5%

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Requires minimum of Associate's degree (A.A.) or equivalent from two-year college or technical school; and four years related experience and/or training; or equivalent combination of education and experience.

CERTIFICATES AND LICENSES *(position requirements at entry)*

- MN DOT Certified Aggregate Production - Level 1
- MN DOT Certified Grading & Base – Level 1 & 2
- MN DOT Certified Bituminous Plant – Level 1
- MN DOT Certified Bituminous Street - Level 1 & 2
- MN DOT Certified Concrete Field – Level 1 & 2
- MN DOT-Certified Concrete Plant – Level 1
- MN DOT-Certified Bridge Safety – Level 1 & 2 (Level 2 only required for Sr. Techs performing that duty)
- MN DOT-Certified Bridge Construction Inspection – Level 2
- Minnesota Drivers License or evidence of equivalent mobility

REQUIRED KNOWLEDGES *(position requirements at entry)* knowledge of:

- Technical engineering methods, techniques, principles and procedures.
- Computer aided engineering tools such as Autocad and road design software.
- Windows and MS Office software.
- Survey principles and operation of survey equipment
- Current MN DOT specifications.
- Basic knowledge of supervisory approaches and methods.

REQUIRED SKILLS *(position requirements at entry)* skill in:

- Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations.
- Ability to write reports, business correspondence, and procedure manuals.
- Ability of effectively present information and respond to questions from groups of managers, clients, customers, and general public.
- Ability to work with mathematical concepts from basic math computations through trigonometry. Ability to apply concepts to field surveying and engineering computations.
- Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

- Requires the skill and persuasion in dealings with others both in and outside of the department. Interactions with others generally require influencing, instructing and negotiating with individuals to gain their understanding, cooperation, and action. Interactions may involve efforts to persuade and negotiate with other representatives or officials outside of the organization but does not have the authority to act on behalf of the County in matters where there are legitimate differences of opinion.
- Ability to operate surveying equipment.
- Ability to perform technical engineering procedures.
- Ability to operate drafting instruments and related equipment.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this 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 is regularly required to use hands to finger, handle, or feel and talk or hear. The employee is frequently required to sit, stand, walk, and reach with hands and arms. The employee is occasionally required to climb or balance, stoop, kneel, crouch, or crawl. The employee must frequently lift and/or move up to 50 pounds and occasionally lift and/or move up to 100 pounds.

Specific vision abilities required by this job include close vision, distance vision, peripheral vision, depth perception, and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this 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 is regularly exposed to outdoor weather conditions. The employee is frequently exposed to moving mechanical parts; fumes or airborne particles; and vibration. The employee is occasionally exposed to wet and/or humid conditions; high, precarious places; risk of electrical shock; and toxic or caustic chemicals. The noise level in the work environment is usually loud.

CLASSIFICATION HISTORY

Prepared By:	Date:
Revised By:	Date: