# Josephine County, Oregon

## Human Resources Office
Josephine County Courthouse
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**POSITION DESCRIPTION**

| | |
|---|---|
| Job Title: | Engineering Technician III |
| Department: | Public Works |
| FLSA Status: | Non-Exempt |
| Job Code: | 3493 |
| WC Code: | 9410 |
| Effective Date: | |
| Last Revised: | July 1, 2018 |
| Pay Grade: | A16 |
| Union: | AFSCME |

SUMMARY
Performs engineering work including land and road surveys, research, testing and inspection of engineering projects, does related work as required. Assignments require advanced experience as an engineering technician coordinating and performing engineering projects. Duties require the application of a full range of civil engineering skills and methods to solve difficult problems. Works under the general supervision of the Civil Engineer, who defines projects and assignments and reviews results for technical integrity, completeness, adequacy of professional judgment, compliance with standards, and achievement of results consistent with objectives. Responsibilities include reviewing output of Engineering Technicians in lower classification as required to complete project assignments. Performs civil engineering work to accomplish the research, design, and cost estimates for public works projects for the county.

ESSENTIAL DUTIES AND RESPONSIBILITIES
(Illustrative Only. Any single position in this classification will not necessarily involve all of the listed duties below and other positions will involve duties which are not listed. These duties represent the essential functions needed of persons in this classification.)

1.  Researches ownership, legal descriptions, departmental records, court records, and other sources to assemble background data and information for survey, design, and cost estimation projects, particularly when situation is technically complex, procedurally difficult, or unusual in nature.

2.  Researches and prepares engineering plans from surveys of existing and proposed roads and structures. Assembles survey information, including maps, notes, descriptions, specification, and computations; develops project engineering requirements.

3.  As assigned, performs public works design projects for roads, culverts, bridges, fresh water supply and sewage disposal systems, storm sewer systems and other such structures and installations. Reviews efforts of subordinates assigned to projects.

4.  Develops cost analyses and cost estimates for public works projects, including labor, materials, subcontracting, and right-of-way costs. Confers with and obtains assistance from superiors as needed to complete difficult phases of cost analysis and estimation.

5.  Lays out construction projects, works with contractors and construction workers as necessary, and oversees or personally performs periodic inspection to determine conformance with plans and specifications.

6. Confers with public with regard to a variety of complaints and inquiries related to public works projects and facilities.

## SUPERVISORY RESPONSIBILITIES
This position has no supervisory responsibilities; although may provide guidance and instruction to Engineering Technicians in lower classifications.

## QUALIFICATIONS
To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skill, and/or ability required. Requires working knowledge of the principles and considerable knowledge of the practices of civil engineering and construction for public works. Ability to perform research, compile information, conduct analysis, draft maps, plans and specifications, and prepare detailed and comprehensive designs and cost estimates for public works projects. Ability to organize, supervise, and review the work of assigned subordinates in a manner conducive to departmental proficiency. Ability to establish and maintain harmonious and cooperative working relations with county workers in other departments, outside construction contractors, and the general public.

## EDUCATION AND EXPERIENCE
Associates Degree in Engineering Technology, Land Surveying or related field and three (3) years technical engineering or land surveying experience; or any satisfactory combination of experience and training which demonstrates the knowledge, skills and ability to perform the above described duties.

## JOB IMPACT
Problems encountered generally revolve around obtaining permission/access to private property to conduct land surveys; ensuring contractors are following plans and specifications; and determining land ownership and accurate property lines. The consequence of errors in judgment could have an adverse impact on the structural or operational integrity of physical facilities under the county's jurisdiction, jeopardizing the safety, health, and welfare of the public. Additionally, errors could result in financial loss and/or exposure to legal liability due to property damage or personal injury, facility design error, errors in construction staking of roads and drainage systems as related to elevations, and errors in land surveys.

## JOB CONTACTS
Contacts are with County Planning, other County and City agencies, private engineers, surveyors, contractors, developers and the general public to coordinate projects and answer questions.

## LANGUAGE SKILLS
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 to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

## MATHEMATICAL SKILLS
Perform complex mathematical and engineering computations.

## REASONING ABILITIES
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.

## OTHER SKILLS AND ABILITIES
Use of drafting, surveying, and engineering equipment; utilizing associated computer software.

## CERTIFICATES, LICENSES, REGISTRATIONS
Possession of or ability to obtain a valid Oregon Driver's License; safe driving record.

## BACKGROUND INVESTIGATION
Those employed in this position may be subject to pre-employment drug testing and a background investigation, including but not limited to criminal background investigation. Conviction of a crime will not necessarily disqualify an individual for this classification.

## WORK ENVIRONMENT
Work is performed primarily in an office environment and occasionally in the field when reviewing project construction. Field work involves exposure to adverse weather conditions and considerable walking.  The position is impacted by heavy or uncontrollable work flow; the need for extreme accuracy or precision; the need for attention to fine detail; and the need to constantly shift attention before tasks are complete.

## PHYSICAL REQUIREMENTS
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.   Good physical condition to work outdoors on rough terrain.

## PHYSICAL REQUIREMENTS Engr Tech III

| Check if required for essential job function | Activity | Never 0% | Occasionally 1-33% | Frequently 34-66% | Continuous 67-100% |
|---|---|---|---|---|---|
| ☒ | Standing | ☐ | ☐ | ☒ | ☐ |
| ☒ | Sitting - 1/2 hour plus | ☐ | ☒ | ☐ | ☐ |
| ☒ | Moving about work area | ☐ | ☐ | ☒ | ☐ |
| ☒ | Bending forward | ☐ | ☒ | ☐ | ☐ |
| ☒ | Stoop position - 1 minute plus | ☐ | ☒ | ☐ | ☐ |
| ☒ | Climbing stairs - 1 floor | ☐ | ☒ | ☐ | ☐ |
| ☒ | Crawling - hands & knees | ☐ | ☒ | ☐ | ☐ |
| ☒ | Reaching overhead | ☐ | ☒ | ☐ | ☐ |
| ☒ | Lifting strength | **# of pounds = 50lbs** | | | |
| ☒ | Lifting | ☐ | ☒ | ☐ | ☐ |
| ☐ | Patient Lifting | ☒ | ☐ | ☐ | ☐ |
| ☒ | Lifting Overhead | ☐ | ☒ | ☐ | ☐ |
| ☒ | Moving carts, etc. | ☐ | ☒ | ☐ | ☐ |
| ☒ | Carry items | ☐ | ☒ | ☐ | ☐ |
| ☒ | Dexterity/Coordination | ☐ | ☐ | ☒ | ☐ |
| ☒ | Keyboard Operation | ☐ | ☒ | ☐ | ☐ |
| ☒ | Rapid-mental/hand/eye coord. | ☐ | ☒ | ☐ | ☐ |
| ☒ | Operation of motor vehicle | ☐ | ☐ | ☐ | ☒ |

### Speech, Vision & Hearing

| | Activity | | | | |
|---|---|---|---|---|---|
| ☒ | Distinguish colors | Yes: ☒　No: ☐ | | | |
| ☒ | Distinguish shades | Yes: ☒　No: ☐ | | | |
| ☒ | Depth perception | Describe:　Maps/Drawings/Plans | | | |
| ☒ | Ability to hear | Normal Speech Level: | | | |
| ☐ | Other Spec. Hearing Req. | Describe: | | | |

### Exposure - Environmental Factors

| | Activity | Never 0% | Occasionally 1-33% | Frequently 34-66% | Continuous 67-100% |
|---|---|---|---|---|---|
| ☒ | Heat | ☐ | ☐ | ☒ | ☐ |
| ☒ | Cold | ☐ | ☐ | ☒ | ☐ |
| ☒ | Humidity | ☐ | ☐ | ☒ | ☐ |
| ☒ | Wet Area/Slippery | ☐ | ☒ | ☐ | ☐ |
| ☒ | Noise | ☐ | ☐ | ☒ | ☐ |
| ☒ | Dust | ☐ | ☐ | ☒ | ☐ |
| ☒ | Smoke | ☐ | ☒ | ☐ | ☐ |
| ☒ | Vibration | ☐ | ☒ | ☐ | ☐ |
| ☒ | Chemical Solutions | ☐ | ☒ | ☐ | ☐ |
| ☒ | Uneven Area | ☐ | ☐ | ☒ | ☐ |
| ☒ | Ladder/Scaffold | ☐ | ☒ | ☐ | ☐ |
| ☐ | Ionization | ☒ | ☐ | ☐ | ☐ |
| ☐ | Radiation | ☒ | ☐ | ☐ | ☐ |
| ☐ | Body Fluids | ☒ | ☐ | ☐ | ☐ |