ENGINEERING ANALYST

**CLASS SUMMARY:**
The Engineering Analyst is a broad professional classification that encompasses incumbents engaged in a wide range of professional engineering, environmental, surveying, waste management, and vegetation management duties. Incumbents are generally responsible for consulting, investigating, evaluating, planning, and designing a wide range of work processes and products; providing project management oversight, which may include the supervision of lower level staff; and leading, overseeing, or reviewing environmental, infrastructure and geomatic projects. Specific duties will vary in accordance with assigned area of responsibility:

**Engineering** - Responsibilities will generally include; conducting special studies, analyses and evaluation of transportation issues and quality assurance programs; reviewing plans and permit issues for development; designing and inspecting infrastructure enhancements; designing, inspecting and implementing water quality and other natural resource related projects; reviewing engineering plans and specifications; coordinating services with other agencies and departments; and overseeing assigned engineering projects.

**Environmental** - Responsibilities will generally include; researching and investigating County environmental issues to prepare scientific reports outlining recommended actions, programs, budgets and timelines; coordinating and managing required and voluntary environmental remediation and preservation programs.

**GIS** – Responsibilities will generally include; preparing and investigating mapping and spatial data; providing technical support for GIS related systems and programs; and maintaining the organization of GIS data.

**Surveying** - Responsibilities will generally include; examining public land system corners; researching survey records; performing field surveying and staking and performing complex calculations; updating and providing plat data for GPS mapping; and researching land records to determine right-of-ways.

**TYPICAL CLASS ESSENTIAL DUTIES:** (These duties are a representative sample; position assignments may vary.)

1. Analyzes and evaluates a variety of engineering information including work processes and products, plans, resources, and/or related information.

2. Develops, reviews, modifies, researches, and evaluates plans and specifications. Ensures compliance with applicable City, State and Federal requirements and sound engineering practice.

3. Develops, reviews, and updates scope of work and cost estimates for assigned projects; negotiates and coordinates work with contractors; continually evaluates assigned work and assists in allocation of resources.
4. Prepares and maintains a variety of records and reports related to operations in assigned area of responsibility.

5. May perform on-site inspections and evaluations of work to ensure compliance with regulations and ensure specifications are being met.

6. May supervise staff to include: prioritizing and assigning work; conducting performance evaluations; ensuring staff is trained; ensuring that employees follow policies and procedures; maintaining a healthy and safe working environment; and making hiring, termination, and disciplinary recommendations.

7. Performs other duties of a similar nature or level.

**COMPETENCY LEVELS**

Depending on the skill, experience, and responsibility level of the incumbent, may be responsible for overseeing and managing the work of lower level support staff. Following are descriptions of the competency levels:

**Entry Level (N4306)** – This is an entry level position in the professional classification series. Incumbent has successfully completed a 4-year educational degree in a field related to area of assignment.

**Contributing Level (N4305)** - Knows fundamental concepts, practices and procedures of assigned field; work is routine and instructions are usually detailed; little evaluation, originality or ingenuity is required.

**Journey Level (N4304)** - Knows and applies fundamental concepts, practices and procedures of a particular field of specialization; performs work that is varied and may be somewhat difficult in nature; moderate levels of evaluation, originality or ingenuity is required; may assist with evaluating progress and recommending major changes in procedures.

**Advanced (N4303)/Lead (N4302) Level** - Possesses and applies a broad knowledge of principles, practices and procedures of a particular field to the completion of difficult assignments, and may provide supervision to lower level staff; assignments are broad in nature, generally requiring a high level of ingenuity and originality; has appreciable latitude for unreviewed actions and/or decision; evaluates progress and results and recommends major changes in procedures. The difference in the Advanced Level from the Lead Level is the supervisory responsibilities.

**POSITION SPECIFIC RESPONSIBILITIES**

Positions assigned to **Engineering** may be responsible for:
- Reviewing permit applications;
- Performing engineering inspections and surveys;
- Performing on-site reviews to find constructability issues;
- Coordinating engineering projects and processes.

Positions assigned to **Environment** may be responsible for:
- Preparing natural resource technical reports;
- Conducting environmental assessments;
- Monitoring Federal and State environmental policies and regulations for changes and updates.

Positions assigned to GIS may be responsible for:
- Investigating GIS data;
- Downloading and processing GIS information;
- Analyzing data and updating data systems;
- Digitizing mappings and drawings.

Positions assigned to Surveying may be responsible for:
- Staking location and elevation features for measuring and alignments;
- Measuring surface areas and stockpile volumes;
- Establishing control points with GPS equipment;
- Processing and downloading GPS data.

**Knowledge of (position requirements at entry):**
- Engineering principles, practices and techniques applicable to area of assignment;
- Cost estimates and cost analysis;
- Applicable Federal, State, and local laws, rules, and regulations.
- Inspection principles;
- Recordkeeping principles and practices;
- Computers and related software applications;
- Supervisory principles and practices.

**Skills in (position requirements at entry):**
- Applying engineering principles and practices;
- Preparing project cost estimates and allocating resources;
- Preparing and maintaining records and reports;
- Analyzing and applying applicable laws, rules, and regulations;
- Organizing and coordinating activities in assigned area:
- Performing on-site inspections;
- Using a computer and related software applications;
- Prioritizing, assigning, and evaluating work;
- Communication and interpersonal skills as applied to interaction with co-workers, supervisors, the general public, etc. sufficient to exchange or convey information and to receive work direction.

**Training and Experience (positions in this class typically require):**
Bachelor's degree in a field related to area of assignment; and sufficient experience as necessitated by the competency level of the position. Or an equivalent combination of education and experience sufficient to successfully perform the essential duties of the job.

Entry (N4306): A 4-year degree in a field related to area of assignment is required at placement. Incumbent is expected to gain professional experience and flex to Contributing Level as defined in an offer letter.

Contributing Level (N4305): 0-2 years of professional experience; entry level for incumbents with Bachelor's degree.

Journey Level (N4304): 2-5 years of progressively responsible professional experience.
Advanced (N4303)/Lead (N4302) Level: 5-8 years of progressively responsible professional experience; fully competent professional.

Specialized knowledge specific to area of assignment may be required.

Or an equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

**Licensing Requirements** (positions in this class may require):
- Valid Oregon Driver’s License
- Professional Engineer (PE) Designation
- Professional Land Surveyor

**Physical Requirements**
- Positions in this class typically require: talking, hearing, seeing, and repetitive motions.
- Light Work: Exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force frequently, and/or negligible amount of force constantly to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for Sedentary Work and the worker sits most of the time, the job is rated for Light Work.
- Incumbents may be subjected to fumes, dusts, gases, chemicals, extreme temperatures, intense noises and travel.

**NOTE:** The above job description is intended to represent only the key areas of responsibilities; specific position assignments will vary depending on the business needs of the department.

These positions are represented by Admin Prof Org of Lane Co.

**Classification History:** Classification and grades (Job Codes N4300 through N4306) approved December 15, 2009 by Board Order 09-12-15-17 to become effective 12/12/09. Replaces Job Codes: J009, J010, J013, J014, J043, J046, J047, J049, & J050.
Update 7/1/19: Clarified class summary, competency levels, GIS duties, and training/experience minimums. Inactivated job codes N4300 and N4301.
FLSA Status: Exempt