



## JOB DESCRIPTION SENIOR DESIGN ENGINEER

Conservation  
Commitment  
Community

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|                      |                                 |                     |                               |
|----------------------|---------------------------------|---------------------|-------------------------------|
| <b>DEPARTMENT:</b>   | <b>Engineering</b>              | <b>JOB TITLE:</b>   | <b>Senior Design Engineer</b> |
| <b>REPORTING TO:</b> | <b>Assistant Chief Engineer</b> | <b>GRADE:</b>       | <b>38</b>                     |
| <b>DATE PREPARED</b> | <b>January 2023</b>             | <b>FLSA STATUS:</b> | <b>Exempt</b>                 |

### **Job Summary:**

The Senior Design Engineer is responsible for leading the water and wastewater system design and development projects.

### **Essential Duties and Responsibilities:**

- Lead water and wastewater system design & development projects as assigned. This includes all aspects ranging from system modeling, planning, design, cost estimating and scope development under the direction and review of a manager or designee.
- Provide project management in the construction of complex water and wastewater system projects. This includes scope, resource and budget development, vendor selection and resource procurement, permitting, project coordination, site inspections, and testing under the direction and review of a manager or designee.
- Sign and seal system drawings, specifications and reports
- Prepare quality deliverables including drawings, calculations, specifications, and technical reports.
- Oversee field inspections including testing and report/document non-conformance with design plans and specifications.
- Use complex computer simulation software and interpret results.
- Train and mentor others in engineering, project management or other related aspects of the functional area.
- Coordinate with other internal and external stakeholders as required regarding engineering requirements and utility projects
- Perform other duties, as needed.

*The above cited duties and responsibilities describe the general nature and level of work performed by people assigned to the job. They are not intended to be an exhaustive list of all the duties and responsibilities that an incumbent may be expected or asked to perform.*

### **Education and Experience Requirements:**

- Bachelor's Degree in Civil Engineering from an ABET accredited school.
- Minimum of six years of water, wastewater, and reclaimed utility and plant engineering or related engineering experience.
- Project Management certification preferred.
- Florida Professional Engineering licensure (PE).
- Valid driver's license issued by the State of Florida and have a satisfactory driver's record based on the criteria listed in the Clay County Utility Authority handbook.

### **Knowledge/Skills/Abilities:**

- Job Specific KSA's – General knowledge in engineering design, regulatory compliance, permitting, risk management, contracting, project management, and constructability principals of the utility's water, wastewater, and reclaimed water systems components. Skilled in statistical analysis. Ability to prepare, understand, and evaluate complex technical concepts, calculations, processes, math, statistics, spreadsheets, and reports.
- Customer Service – Provide high level of service to targeted internal and external stakeholders. Respond promptly and accurately to requests for information.
- Team Orientation and Interpersonal – Develop and maintain collaborative relationships with all levels of the organization; collaborate and work with individuals containing a variety of knowledge levels and expertise. Work productively on a team and independently.

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- Communication – Effective verbal and written communication. Able to use correct language and grammar in a professional, diplomatic, and tactful manner. Public speaking and presentation skills. Proficient in business writing. Ability to maintain good rapport with other agencies, consultants, contractors, and citizens by being courteous, cooperative, and conscientious.
- Organization and Time Management – Able to work independently with minimal supervision; plan, prioritize, and organize work, meetings, and projects in order to meet deadlines. Able to quickly access and adapt to the daily changing needs. Manage multiple work assignments simultaneously. Work after business hours as needed.
- Analytical Problem-Solving and Decision Making – Critical thinking and creative problem-solving abilities. Research, analyze, identify viable options, draw sound conclusions, present findings and make thoughtful recommendations.
- Systems and Software – Proficiency in Microsoft Word, Excel, Project, Adobe Acrobat/Foxit, Innovyze, AutoCAD, and Civil 3D.

| <b>Skill Requirements: (X = Required for job)</b> |   |   |  |
|---|---|---|--|
| X   | Typing/computer keyboard  | X | Verbal communication   |
| X   | Utilize computer software (specified in this description)                         | X | Written communication  |
| X   | Retrieve and compile information  | X | Public speaking/group presentations  |
| X   | Maintain records/logs   | X | Research, analyze, and interpret information   |
| X   | Verify data and information   | X | Investigate, evaluate, recommend action  |
| X   | Organize and prioritize information/tasks   |   | Leadership and supervisory, managing people  |
| X   | Operate office equipment  | X | Basic mathematical concepts (e.g. add, subtract)   |
| X   | Advanced mathematical concepts (fractions, decimals, ratios, percentages, graphs) | X | Abstract mathematical concepts (interpolation, inference, frequency, reliability, formulas, equations, statistics) |
|   | Operate heavy equipment (e.g. bobcats, backhoes, dump trucks)                     | X | Operate motor vehicle  |

| <b>Physical Requirements: (X = Required for job)</b> |  |   |   |
|--|--|---|---|
| X  | Sitting for extended periods                 | X | Lifting/carrying up to 20 pounds (various items)        |
| X  | Standing for extended periods                |   | Lifting/carrying between 20 – 49 pounds (various items) |
| X  | Viewing computer screen for extended periods |   | Lifting/carrying over 50 pounds (various items)         |
| X  | Walking                                      | X | Repetitive Motions                                      |
| X  | Reading                                      | X | Bending/Stooping  |
| X  | Speaking                                     | X | Reaching/Grasping                                       |
| X  | Hearing                                      | X | Crawling/Crouching                                      |
| X  | Writing                                      | X | Climbing  |
| X  | Seeing 1-5 feet                              |   | Physical endurance under variable weather conditions    |
|  | Seeing 5+ feet                               |   | Other (list):   |
|  | Other (list):                                |   | Other (list):   |

| <b>Hazards: (X = Required for job)</b> |   |  |   |
|--|---|--|---|
| X                                      | Standard office environment   |  | Electrical current  |
|  | Toxic or caustic chemicals  |  | Housekeeping and/or cleaning agents   |
| X                                      | Outdoor weather conditions and outdoor terrain, wetlands, and/or dense vegetation |  | Proximity and use of hand-held powered equipment and/or moving mechanical parts |
|  | Other (list):   |  | Other (list):   |

### Employee Acknowledgement:

I have reviewed and understand the requirements stated in this Job Description.

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|----------------------|------|
|                      |      |
| Employee's Signature | Date |