

## **City of Dunedin, Florida**

### **Class Description**

**JOB TITLE: Senior Engineer**  
Public Works & Utilities Department  
Engineering Division

### **GENERAL STATEMENT OF JOB**

Under general direction, employee is required to exercise extensive initiative and independent judgment in planning, designing and managing major engineering programs and projects for the City. This is a highly responsible professional and supervisory position involving the administration and supervision of a variety of major complex engineering functions and design activities within the City right-of-way, on City owned lands, as well as at the City's water and wastewater treatment plants. This work is of an advanced nature dealing with critical city departments, agencies, and officials. Work may include. Infrastructure responsibilities include roadways, stormwater, utilities, plant work, and miscellaneous structures. Work is reviewed through reports, observations, and obtained results. This position reports to the Engineering Division's Section Engineer, and/or the Public Works & Utilities Director/City Engineer, or designee.

### **SPECIFIC DUTIES AND RESPONSIBILITIES**

#### **ESSENTIAL JOB FUNCTIONS**

***The duties recorded below are representative of the duties of the class and are not intended to cover all the duties performed by incumbent(s) of any particular position.***

Supervises and administers the planning and/or design of major engineering functions in Public Works, Transportation, Utilities, or Stormwater; determines or assists in the determination of priorities in the scheduling of projects; prepares estimates of costs and makes recommendations for inclusion in the annual department / division budget; supervises and participates in preparation of plans, specifications and contract documents for a large variety of projects requiring contract bid, or for internal use.

Selects work methods and formulates recommendations to meet program and project needs, objectives and goals, and is responsible for in-house design and contracted services for infrastructure design, rehabilitation, and/or renovation of City capital infrastructure.

Acts as project manager of major engineering programs and projects; supervises and coordinates all related activities including programming, contract administration, progress reports, and change orders; maintains continuous liaison with local, state and federal governments, and civilian agencies; reviews and initiates approval of plans and specifications prepared by consulting engineering firms; evaluates project status and sets project team milestones for completion of project tasks; evaluates and monitors project budget and expenditures of funds. Prepares Project Management Plans, compliance reports, drainage models and exhibits.

Administers projects and ensures targets and requirements are met and assignments, projects, operations, or services are completed and delivered on schedule and within budget. Ensures project files contain all correspondence related to a project from the estimates and bidding documents through construction phases; including plans, specifications, change orders, requests for information, invoices and backup documentation, and closeout materials.

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Reviews storm water calculations and construction plans to determine compliance with the City's land development codes.

Works closely with all internal and external organizations, and City Administration to ensure successful execution of the Capital Improvement Program (CIP) and completion of assigned responsibilities.

Replies to technical inquiries from the general public and from governmental agencies on policy, petitions, ordinances, engineering problems, and estimated construction costs; coordinates present and future needs of the department / division with other agencies.

Exercises general supervision over and participates in the training of professional, sub-professional, technical, and clerical personnel; completes evaluations; approves leave and training requests; recommends discipline; and assists in responding to grievances.

Supervises and advises City staff in their duties to ensure work is performed in adherence to contract documents, specifications, principles of quality workmanship, and meeting local, State, and Federal codes and guidelines, as well as City policies and standards.

Develops/assists in development of scopes of work, technical specifications, requests for bid, deliverables, and other requirements for projects supervised and produced by Engineering.

Researches and gathers required data to evaluate objectives, goals, and scope of projects and specifications.

Keeps detailed records and accounts of work performed related to City infrastructure projects; and ensures same of subordinate staff reporting to this position.

Identifies necessary field investigations and required permits for successful completion of project design. Develops strategies for acquisition of required project regulatory permits; Responds to "Requests for Information" (RFI's) through consulting with Section Engineer and/or City Engineer.

Prepares and/or reviews supporting exhibits, evaluations, and calculations for project related regulatory permits: (i.e.: Florida Department of Transportation [FDOT], Southwest Florida Water Management District [SWFWMD], Florida Department of Environmental Protection [FDEP], and Army Corp of Engineers [ACOE] permits); makes corresponding agency permit submittals and is responsible for acquiring same.

Oversees the City's Pavement Management System Model and is responsible for developing annual pavement preservation contracts based upon PCI recommendations and funding availability.

Oversees in-house and consultant production for the design of stormwater gravity conveyance systems in urban rights-of-ways, ponds, pumping station rehabilitations, forcemains, preparation of technical specifications and related bid documents;

Maintains contact with professionals engaged with the City in the execution of contracted services to ensure completion of projects within allotted time frames and allowable budget.

Evaluates progress on assigned subject matter area of responsibility, monitors progress, and reports to senior management.

Assists the Division's Construction Administration personnel, when necessary, with review of pay estimates for completeness and accuracy.

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Develops and establishes appropriate communications and manages the dissemination of information to all levels of city employees.

Examines and evaluates best practices of other departments, governments, agencies, or private sector organizations for potential division / departmental process improvements.

Maintains liaison role with other departments / divisions throughout design and project close-out in order to achieve successful project turnover upon completion.

**ADDITIONAL JOB FUNCTIONS**

Performs routine office and administrative work as required, including but not limited to attending meetings, answering the telephone, typing reports and correspondence, copying and filing documents, etc.

Performs related duties as required.

**MINIMUM TRAINING AND EXPERIENCE**

Graduation from an accredited college or university with a bachelor's degree with major coursework in civil engineering, or related field, and five (5) years of verifiable progressively responsible work experience, including three (3) years in a supervisory or lead role in the administration, management, and review of public works infrastructure projects.

Knowledge and experience using either Bentley's Geopak / Microstation, or Autodesk's Civil 3D CADD platform.

Possession of Florida Department of Transportation (FDOT), and/or Florida Department of Environmental Protection (FDEP) certifications in maintenance of traffic, asphalt, concrete, earthwork / sediment and erosion control is a plus.

**SPECIAL REQUIREMENTS**

Must possess a Professional Engineering certification from the State of Florida, and maintain said license certification throughout incumbent's employment with the City of Dunedin.

Florida Driver's License and endorsements, if any.

This is a Category A position for the purposes of Emergency Management. Employees in this category may be assigned to work a variety of schedules, including compulsory work periods in special, emergency, and/or disaster situations. Category A employees are required to stay on premises during a declared state of emergency, or as otherwise mandated.

**PERFORMANCE INDICATORS**

**Knowledge of Job:** Has thorough knowledge of the methods, procedures and policies of the City of Dunedin as they pertain to the performance of essential duties of the Senior Engineer. Has knowledge of the laws, ordinances, standards and regulations pertaining to the specific

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duties and responsibilities of the position. Considerable knowledge and experience in the application of engineering and administrative management procedures, practices and methods; effective supervisory techniques. Understands specific City and County ordinances as they apply to the duties and responsibilities of the position. Has knowledge of the principles, theories, practices and methodologies of engineering, drafting and other fields applicable to the requirements of the position. Knowledge of general management practices and principles, and procedures of public administration and project management. Knowledge of plant process design and construction procedures for water and wastewater facilities / infrastructure. Knowledge of automated project management documentation, tracking, and control processes. Has the ability to plan, organize, assign, direct, supervise, and review the work of others engaged in a variety of engineering assignments for completeness and accuracy; manage and organize major projects and programs. Ability to make critical decisions affecting a project in a timely manner and without the need of direct supervision. Has the ability to plan, organize and prioritize daily assignments and work activities. Has the ability to effectively train others in the assigned area; Ability to facilitate management level teams and to bring teams to consensus decisions. Skilled at identifying, analyzing, isolating problems, and problem resolution. Must possess effective interpersonal team building, and communications skills. Skill in networking, and productive negotiations is a requirement. Clearly understands any occupational hazards and adheres to all safety precautions inherent in performing the essential functions of the work.

**PERFORMANCE APTITUDES**

**Data Utilization:** Requires the ability to coordinate, manage, strategize and/or correlate data and/or information. Includes exercising judgment in determining time, place and/or sequence of operations. Includes referencing data analyses to determine necessity for revision of organizational components. Ability to assemble and analyze information, organize in report form and present sound recommendations effectively, both orally and in writing; able to and make written reports and records in a concise, clear and effective manner.

**Human Interaction:** Requires the ability to provide guidance, assistance and/or interpretation to others on how to apply procedures and standards to specific situations. Ability to coordinate department activities, establish and maintain effective relationships with staff, employees in other City departments, consultants, contractors, government officials and governmental/private agencies in order to accomplish goals and complete projects. Ability to react professionally at all times, dealing with sensitive situations with tact and diplomacy.

**Equipment, Machinery, Tools and Materials Utilization:** Requires the ability to use, operate and/or handle equipment such as a computer, copier, technical calculator, telephone, engineer's scale, surveying instruments, and drafting instruments. Requires the knowledge of and skill in the use of computer-aided design technology, and other automated systems to enter and retrieve information, monitor work performed, and to communicate information in reports, etc. Requires the safe operation of City vehicles for attendance at meetings, conferences, and site visits.

**Verbal Aptitude:** Requires the ability to use conceptual data and information, as well as reference, descriptive, advisory, consulting, synthesis and design data and information. Ability to speak, write and understand the English language. Ability to read and interpret

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complex materials pertaining to the responsibilities of the job. Requires the knowledge of proper English usage, grammar, vocabulary and spelling.

**Mathematical Aptitude:** Requires the ability to apply advanced algebraic and calculus concepts and algorithmic and modeling techniques in areas such as engineering design and alternative cost analysis. Requires the ability to use principles of probability and statistical inference.

**Functional Reasoning:** Requires the ability to apply principles of logical or synthesis functions. Ability to deal with several concrete and abstract variables, and to analyze major problems that require complex planning for interrelated activities that can span one or several work units. Must possess the ability to assimilate both technical and theoretical concepts and apply the knowledge in creative and intuitive ways to solve unique problems. Is able to make sound, educated decisions.

**Situational Reasoning:** Requires the ability to exercise the judgment, decisiveness and creativity required in situations involving the evaluation of information against sensory, judgmental or subjective criteria, as opposed to that which is clearly measurable or verifiable.

**ADA COMPLIANCE**

**Physical Ability:** Field work requires the ability to exert moderate, though not constant physical effort, typically involving some combination of climbing, balancing, stooping, kneeling, crouching and crawling, and which may involve some lifting, carrying, pushing and/or pulling of objects and materials of moderate weight (10 - 20 pounds). Office tasks involve the ability to exert a small amount of physical effort in sedentary to light work involving moving from one area of the office to another; some positions require sufficient hand/eye coordination to perform semi-skilled repetitive movements, such as data entry, drafting, filing and/or the use of office equipment or supplies.

**Sensory Requirements:** Some tasks require visual and auditory perception and discrimination as well as oral communications ability.

**Environmental Factors:** Office tasks are regularly performed without exposure to adverse environmental conditions; field work may require exposure to adverse weather conditions, temperature extremes, wetness/humidity, machinery and traffic hazards, smoke/dust/pollen, and noise extremes. Tasks may require extensive VDT exposure.

*The City of Dunedin is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the employer will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the employer.*

  
Public Works & Utilities Director / City Engineer

01/09/18  
Date