



The City Beautiful

## City of Coral Gables Job Description

**Job Title:** CAD/GIS Engineer  
**Department:** Public Works  
**Classification:** 1018  
**Pay grade:** 23E  
**FLSA:** Non-Exempt

**Prepared Date:** 09/2012  
**Approved By:**  
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Patrick Salerno



### Summary

Performs drafting, design and entry level engineering work.

### Essential Duties and Responsibilities

The following duties are normal for this position. The omission of specific statements of the duties does not exclude them from the classification if the work is similar, related, or a logical assignment for this classification.

Assists in designs for roadways, drainage for parking lots and right-of-ways, sidewalks, parks, etc. using computer aided design system (CAD) and traditional drafting methods as directed by Civil Engineers.

Analyzes data and information obtained from surveys in order to design improvements.

Prepares, updates, revises, etc. the existing storm water and sewer atlas using ArcGIS or other software provided by the City and as directed by a supervisor.

Supervises support staff; issues discipline and takes other corrective measures as necessary.

Performs take-offs, estimates and prepares specification books as directed.

Prepares plans, maps, drawings and aerials under the direction of a supervisor.

Performs field inspections.

Reviews and completes design of various projects in compliance with Public Works standards.

Receives, investigates and responds to complaints regarding public right of way.

Analyzes the technical aspects, anticipated impact, and feasibility of proposed projects.

Maintains records, compiles data and prepares reports.

Performs other related tasks as required.

### **Knowledge, Skills, and Abilities**

Knowledge of engineering drafting methods, practices and techniques. Knowledge of the basic principles, practices and techniques used in civil engineering. Knowledge of the methods and techniques used in municipal construction. Knowledge of departmental policies and procedures and regulations. Knowledge of computer operating systems to include CAD, ArcGIS, word processing, and engineering related computer programs. Ability to read and interpret blueprints, plans and specifications applicable to public works construction. Ability to perform field inspections. Ability to prepare and design precise technical specifications and plans. Ability to adopt approved engineering methods and standards to the design and construction of municipal projects. Ability to investigate and respond to complaints.

Ability to supervise the work of others in a manner conducive to full performance and high morale. Skills in engineering drafting techniques. Skills in oral and written communication.

### **Physical Requirements**

Must have the use of sensory skills in order to effectively communicate and interact with other employees and the public through the use of telephone and personal contact as normally defined by the ability to see, read, talk, sit, stand, hear, use hands to fingers, handle, feel or operate objects, read and write English. Physical capability to effectively use and operate various items of office equipment; such as but not limited to a personal computer, calculator, copiers and fax machines.

Work is performed indoors within a quiet to moderately noisy environment. May include outdoor work involving inspection of various land use developments, construction sites. Must be able to lift, carry and or push articles weighing up to 25 lbs. Must be able to wear hard hat/helmet, safety glasses, safety shoes and gloves if necessary. Exposure to extreme temperatures, electrical hazards, noise, heights and dust are common. Must have the physical ability to enter into and inspect hazardous locations, climb stairs, reach above and below shoulders, walk and bend.

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of the job.

### **Minimum Education and Experience**

A bachelor's degree in engineering or related field.

Two (2) years of related engineering work experience to include experience with CAD and GIS systems.

A comparable amount of training or experience may be substituted for the minimum qualifications.

Valid Florida Driver's License.