DEPUTY ENGINEER

JOB DESCRIPTION

Classification Responsibilities: Under general direction, a Deputy Engineer performs highly responsible engineering work and assists in supervising the design and construction areas of the Engineering Department, or the engineering and planning and process controls groups in the Water Resources Department. A Deputy Engineer may also be assigned highly technical or politically sensitive economic development (private) projects to coordinate with the City. This class performs related duties as required.

Distinguishing Features: This classification has been designated as a non-classified, non-merit system, at-will position. A Deputy Engineer is responsible for performing advanced professional engineering work in planning, organizing, and directing the day-to-day activities of: the design and construction areas of the Engineering Department; or in the Engineering and Planning, the Electrical Controls and Utilities Control Systems groups in the Water Resources Department. An employee in this class is expected to resolve problems of a highly professional and technical nature. This class differs from the class of Supervising Engineer by the more difficult and diverse nature of the projects coordinated between the City and contractors, and by additional administrative and management duties. The Deputy Engineer reports to the Assistant City Engineer ***(Engineering Department Assignments)***, or the Water Resources Assistant Director ***(Water Resources Department Assignment)*** who reviews work through conferences, reports, and evaluations of results achieved. This class is FLSA exempt-executive.

***Engineering Assignments*:** Work involves the management of the design and construction of major arterial, collector, and local streets; public street improvements; public structures; water and sewer systems; and other types of City Capital Improvement Projects (CIP). This position is responsible for managing a diverse group of project managers that will utilize single point project management (SPPM) and alternative methods to deliver CIP's. SPPM responsibilities include oversight of all aspects of managing a project including scope, design, construction, closeout, and user department coordination. Direct supervision is exercised over professional and technical employees engaged in design, drafting, landscape architecture, gas engineering, field engineering, construction and scheduling, inspections, materials testing, and surveying. This position may also coordinate right-of-way permitting.

***Water Resources Assignment*:** Work involves overseeing the life cycle asset management program for all components of the water and water reclamation facilities and infrastructure, from inception through retirement and replacement. This position is responsible for the long-range capital improvement programs (CIP) for water and water reclamation systems, which involves analyzing the reliability and maximizing the efficiency of the resources and systems; planning for new growth; prioritizing projects based on funding, constraints, related utility rates, and acceptable rate increase; determining the impacts of utility regulations; and developing and implementing capital replacement schedules for assets. This position is also responsible for overseeing the following activities related to the Water Resources Capital Improvement Program: initiation of projects; coordination and partnering with the Engineering Department on the delivery of the capital projects from inception to completion; review of project

deliverables by Water Resources stakeholders including end users/plant operations staff; and partnering with the Engineering Department in making technical, budgetary, schedule, and other important project related decisions during the execution of the project. This position is a liaison with other City departments for coordinating and reviewing CIP's, ensures that project deliverables are completed, and serves as the escalation point for the Supervising Engineer in resolving design and construction issues with other City departments and contractors. The Deputy Engineer is also responsible for overseeing the activities of the Water Resources Electrical Control and Utilities Control Systems groups, who are responsible for the operation and maintenance of the electrical assets as well as the Supervisory Control and Data Acquisition (SCADA) System assets for the Water Resources Department. The Deputy Engineer supervises one or more: Water Resources Supervising Engineers, Electrical Control Supervisors, and Utilities Control Systems Supervisor; and serves as an escalation point for the aforementioned positions in resolving issues with other groups/divisions within the Water Resources Department or other City departments.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required.

***Engineering Assignments*:** Graduation from an accredited college or university with a Bachelor's Degree in Civil Engineering, Construction Management, or related field. Extensive (5+ years) administrative and supervisory experience in the Civil Engineering field, including some (6 months - 1 year) experience in construction and design management, and scheduling and coordinating a variety of Capital Improvement Projects.

***Water Resources Assignment*:** Graduation from an accredited college or university with a Bachelor's Degree in Civil, Chemical, or Environmental Engineering, or closely related engineering field. Extensive (5+ years) administrative and supervisory experience in Water and/or Wastewater Engineering, including some (6 months - 1 year) experience in capital improvement project planning and life cycle asset management. Extensive experience (5+ years) on project management of water and/or wastewater infrastructure including design and construction.

Special Requirements. Registration in the State of Arizona is required withing six months of hire or promotion. Must possess a valid Class D Arizona Driver's License by hire or promotion date. ***Engineering Assignment:*** must be registered as a Professional Engineer (Civil, Mechanical, or Electrical), Landscape Architect, or Architect by hire or promotion date. ***Water Resources Assignment:*** must be registered as a Professional Engineer (Civil, Mechanical, or Chemical) by hire or promotion date. Must complete Department of Transportation (DOT) Reasonable Suspicion Training for supervisors within 30 days of supervisory assignment of DOT safety sensitive employees.

Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug, and/or controlled substance testing as outlined in City policy and procedures ***(Engineering Assignment)***.

Preferred/Desirable Qualifications. A Master's Degree in Environmental Engineering with focus on Water and/or Wastewater Engineering is preferred ***(Water Resources Assignment)***.

ESSENTIAL FUNCTIONS

Communication: Communicates with the general public, local and other governmental officials, other City employees, management, and contractors in order to provide information and direction in the coordination of City project design and construction, and to ensure compliance with specifications, plans and applicable ordinances. Instructs and trains subordinates regarding City procedures and policies. Prepares written documents such as studies and memos with clearly organized thoughts; and uses proper sentence structure, punctuation, and grammar in order to evaluate proposed design and construction projects, and respond to information requests. Provides verbal reports and leads public discussions.

Manual/Physical:

Engineering Department Assignments: Reviews the work products of others to ensure compliance with standard operating procedures; federal regulations, such as Federal Highway Administration (FHWA); state regulations such as Arizona Department of Transportation (ADOT); or other standards/guidelines including Maricopa Association of Governments (MAG). Operates a motor vehicle requiring a standard Class D Arizona Driver's License to travel to project sites to inspect, monitor, and evaluate work.

Water Resources Department Assignment: Reviews work products of others to ensure compliance with Arizona Administrative Code; Environmental Protection Agency (EPA) regulations, such as the Safe Drinking Water Act and Clean Water Act; Arizona Department of Environmental Quality (ADEQ) rules and bulletins; and MAG standards and guidelines. Inspects, monitors, and evaluates work to determine compliance with plans and specifications. Operates a motor vehicle requiring a standard Class D Arizona Driver's License to travel to project sites to inspect, monitor, and evaluate work. Operates a variety of standard office equipment including a personal computer (PC). Prepares and updates project schedules to keep management informed of project status.

Mental: Plans, organizes, and directs the activities of the design and construction areas of the Engineering Department, or the engineering and planning and process controls groups in the Water Resources Department. Supervises and evaluates the work of subordinate personnel, including Supervising Engineers. Prioritizes and assigns work to personnel and prioritizes own work. Resolves procedural, operational, and other work-related problems, such as scheduling conflicts and contract disagreements by meeting with staff, other agencies, contractors, consultants, developers, architects, etc. Coordinates work activities and program functions with other City departments, other cities, and other agencies. Develops divisional policies and procedures and short- and long-term objectives. Conducts research and analyzes data regarding design and construction methods to assist in improving City standards. Performs mathematical calculations and cost analyses to verify contract costs and change order requests. Assists in preparing the department budget. Comprehends and makes inferences from written material, such as consultant reports and contract documents, to recommend course of action. Understands and interprets blueprints, schematic drawings, and layouts to ensure compliance with specifications and other City requirements.

Knowledge and Abilities:

Knowledge of:

the principles and practices of civil engineering, and the methods and techniques used in the design and construction of public water, sanitary sewer, storm sewer, underground utility lines, retention basins, pump stations, water storage tank sites, and public street improvements ***(by assignment)***;
federal, state, and local regulations and codes; and the engineering standards pertaining to the design and construction of municipal projects;
administrative and supervisory principles applicable to civil engineering and public works programs;
capital improvement project planning and life cycle asset management ***(Water Resources Assignment)***;
symbols and terminology used in engineering drawings;
the principles and techniques of modern public administration;
professional civil engineering theories, issues, practices, and trends; and
the principles and practices of employee supervision and training.

Ability to:

supervise employees, through subordinate supervisors in the preparation of plans and specifications for City and consultant designed/constructed capital improvement projects;
coordinate schedules and construction sequence operations with City work sections, contractors, and outside agencies;
advise personnel on the preparation of construction documents;
review proposed construction plan changes and contractors' requests for time extensions and make related determinations;
evaluate proposed designs for cost effectiveness, technical correctness, and compliance with objectives of budgeted projects;
supervise engineering design teams engaged in the review of subdivisions and private developments for compliance with City of Mesa guidelines and current professionally recognized engineering practices which are exemplified by, but not limited to the following: proper sewer line slopes; correct location of street lighting fixtures; soil reports which address special treatment of subgrade; whether the grading plan complies with the requirements of the Flood Zone regulations for designed Flood Zone plain; and hydrology reports and calculations for adequate storm drain design ***(by assignment)***;
analyze program achievements by evaluating activities to assure efficient operations and compliance with objectives, policies, and procedures, and to implement changes when needed;
meet with staff, developers, engineers, and architects to resolve problems relative to the proposed design and construction of projects with regard to City requirements;
effectively recommend personnel actions related to selection, disciplinary procedures, performance, leaves of absence, and grievances;
apply diversified, fundamental, scientific, and civil engineering concepts to practical, civil engineering problems with versatility;
manage the work of others through planning, organizing, motivating, and evaluating performance objectively;
resolve work procedure problems and questions presented by subordinate-level employees;
assess and assign priorities to problems and work assignments when confronted with several pressing demands at one time;
write clear, complete, accurate, and logical reports;

determine adherence to civil specifications on a variety of construction jobs;
communicate effectively and persuasively with contractors and developers in securing compliance with specifications, plans, and ordinances;
establish and maintain effective working relationships with contractors, engineers, architects, property owners, fellow employees, and the general public;
manage and assure responsibility of an economical project;
apply fractions, percentages, ratios and proportions, mensuration, logarithms, algebra, geometric constructions, and the essentials of trigonometry;
read and interpret construction drawings;
compute quantities and make cost estimates; and
conduct engineering research work.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

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MR/sb
CS5417.DOCX
EEO-O/A
JOB FCTN-ENG
Non-DOT Safety and Security-Y ***(Engineering Assignment)***
CDL-N
RESP-N

PAY GRADE: 63
IND-9410
SWORN-No
Non-DOT Random-N
DOT-N
INCREMENTS 65-200