TRANSPORTATION ENGINEER

Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities that are associated with specified positions. Therefore, specifications may not include all duties performed by individuals within a classification. In addition, specifications are intended to outline the minimum qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.

DEFINITION:
Performs work related to local and regional transportation issues affecting the City; performs project management and coordination of a variety of transportation and public works projects; Plans and carries out programs of traffic planning and control; makes surveys of traffic flow, volume, road capacity, circulations patterns, etc.; prepares and presents traffic reports with recommendations for action; investigates complaints, evaluates effectiveness of traffic control and warning devices; coordinates city’s traffic programs; evaluates accident data and prepares recommendations; provides technical data to other departments and the public; inspects and administers engineering projects under construction; confers with inspectors and private engineers and builders on construction projects.

DISTINGUISHING CHARACTERISTICS:
This is a journey level position that requires significant communication, administrative, analytical and technical skills acquired by advanced professional training and experience. Incumbents of this classification are expected to have a breadth of knowledge and experience to successfully manage complex programs and projects with considerable independence.

SUPERVISION RECEIVED/EXERCISED:
Receives general supervision from the City Engineer and Public Works Director.

Exercises supervision over technical support staff.

ESSENTIAL FUNCTIONS: (May include but are not limited to the following.)
- Plans and manages complex programs/projects, strategizes for complex engineering work, project management and represents the Engineering Division in regional meetings affecting the City;
- Manages preliminary design studies and analysis to assess the most suitable and satisfactory type of resolution to a wide range of engineering related problems;
- Makes presentations to the City Council, Traffic Safety and Parking Commission and other legislative bodies;
- Supervises and participates in the preparation of engineering design, plans, specifications and cost estimates for the construction of streets, street lighting, traffic signals, and other facilities;
- Serves as a staff liaison to the Traffic Safety and Parking Commission, prepares meeting notices, agendas and reports;
- Manages consultant contracts related to Traffic Engineering and Parking Studies;
- Manages accident/collision record system, radar speed survey and traffic count programs;
- Investigates, evaluates, and resolves traffic complaints from citizens and the general public;
- Prepares letters and written responses to public inquiries;
Reviews traffic/transportation analyses and reports;
Conducts various traffic studies, i.e. stop sign warrants, signal warrants, pedestrian volume counts, speed surveys, marked crosswalk evaluations;
Responds to parking issues, such as colored parking zones, metered parking, and parking lots;
Prepares forecasts and develops and monitors division and capital improvement project budgets;
Identifies potential funding alternatives and recommends program planning criteria and priorities for inclusion in the budget planning process;
Performs research and completes applications for grant funding;
Trains and develops technical and clerical support staff; assigns, reviews and evaluates the work of staff in developing computer analyses, technical and staff reports, plans and specifications for engineering design, construction and problem resolution;
Performs development plan checking for conformance to City standards;
Coordinates programs/projects with other departmental sections of teams, consultants, developers and property owners;
Provides field inspection and facilitates problem resolution of construction projects;
Approves plans and specifications and authorized payment for services rendered; and
Provides information to the public on department operations and current proposed projects.

KNOWLEDGE/ABILITIES/SKILLS: (The following are representative sample of the KAS’s necessary to perform essential duties of the position)

Knowledge of: Principles, practices and methods of Public Works Engineering with emphasis on transportation and traffic disciplines as applied to the planning, designing and construction of streets, traffic devices and other systems; design principles, city codes and ordinances; principles of supervision, training and performance evaluation; applicable State and Federal Traffic/Transportation regulation (MUTCD, CTCDC) as well as applicable laws, legal issues and regulatory codes related to design and construction; principles and practices of municipal management including personnel, budget planning and preparation and public relations.

Ability to: Plan, assign and manage division priorities; effectively supervise and train technical and clerical support staff; learn and retain City administrative, budgeting, purchasing and personnel processes and procedures; perform complex civil engineering studies, analyses and design; identify problem areas and develop alternative solutions and recommendations; determine adherence to engineering, specifications on a wide variety of improvements and construction projects; express technical information to non-engineering staff, maintenance personnel and consultants; develop plans and programs responsive to current mandates and needs; communicate clearly orally and in writing; manage a wide variety of projects simultaneously; develop and maintain cooperative working relationships with others to coordinate public works activities with other city departments, divisions and outside agencies such as bike and pedestrian interest groups, and school district personnel; remain calm during emergencies and when talking to irate citizens; exercise good judgment at all times; enforce regulations with tact and diplomacy; explain technical matters simply and patiently; analyze situations accurately and adopt an effective course of action; operate computer system and associated engineering applications; learn, retain and apply various laws and regulatory codes relevant to assigned area of responsibility.
Skills: Make accurate engineering computations and drawings; familiarity with Computer-Aided-Drafting is desirable; ability to operate survey equipment, e.g., level and the dolite. Familiarity with usage of calculator and experience with spreadsheets and word processing computer programs.

QUALIFICATIONS: (The following are minimal qualifications necessary for entry into the classification.)

Education and Experience: Bachelor’s degree in Civil Engineering or a related field from an accredited college or university. Five years of professional work including transportation and traffic responsibilities: plan checking; and project management. Additional related experience may be substituted for formal college education on the basis of two years’ experience for each year of formal college education.

License/Registration: Possession of a valid Class C California Driver’s License. Professional registration as a Civil Engineer or Traffic Engineer is desirable.

PHYSICAL, MENTAL AND ENVIRONMENTAL WORKING CONDITIONS:
Physically able to perform functions that would allow sufficient mobility to negotiate difficult construction terrain where crouching, climbing, and/or kneeling would be required. Ability to maintain cooperative working relationship with all those contacted in the course of work; to speak clearly and write clear and concise English; to sit for long periods of time at a desk or in a car; and sufficient vision, hearing and stamina to perform the above functions.