TRAFFIC CIVIL 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:
Under direction, to perform traffic and civil engineering duties.

ESSENTIAL FUNCTIONS: (include but are not limited to the following)

- Plan and personally carries out programs of traffic planning and control;
- makes surveys of traffic flow, volume, road capacity, circulation patterns, etc.;
- prepares and presents traffic reports at city commission meetings with recommendations for action; investigates complaints, evaluates effectiveness of traffic control and warning devices;
- coordinates city’s traffic programs;
- supervises taking of traffic counts;
- evaluated accident data and prepares recommendations;
- provides technical data to other departments and the public; prepares drawings, contract specifications and estimates for construction and maintenance of streets, sewers, sidewalks, water mains, etc.;
- makes preliminary design studies of the most economical and satisfactory type of installations;
- inspects and administers engineering projects under construction;
- confers with inspectors and private engineers and builders on construction 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 traffic and civil engineering as applied to the planning, designing and construction of traffic control, streets, water and sewer systems; principles of mechanical engineering, structural engineering and surveying are also desirable. Mathematics, economics, design, equipment and materials used in traffic engineering, including operation of traffic signal equipment.

Ability to: Prepare accurate plans, specifications, cost estimates and engineering reports; make accurate engineering computations and drawings; supervise the work of assigned personnel; administer and inspect public works contracts; plan and carry out an effective traffic engineering program; personally perform and direct traffic studies; apply State and Federal traffic regulations; apply for and obtain State and Federal grants; speak and write effectively; analyze situations accurately and adopt an effective course of action; use good judgment and work with minimum supervision.

Skills: Operate and program traffic controllers and coordinated systems; ability to use calculator; familiarity of Traffic Engineering Computer Program; use of surveying equipment and radar speed monitor.
QUALIFICATIONS: (The following are minimal qualifications necessary for entry into the classification.)

Education and Experience: Sufficient education and experience to perform the above duties which typically includes graduation from a four-year college with a civil engineering or related degree and two years experience, at least one of which must be in traffic engineering.

License: Possession of an appropriate California operator’s license issued by DMV

PHYSICAL, MENTAL AND ENVIRONMENTAL WORKING CONDITIONS:
Establish and maintain effective and cooperative relationships with staff and the public. Ability to speak, read and write correct and effective English; to sit at a desk or in a car for long periods of time; to climb hills and ladders; to lift 25 lb boxes; ability to safely deal with exposure to electrical hazards; work outdoors in adverse weather; sufficient vision, hearing and stamina to perform the above functions; to deal with a wide variety of people with diplomacy, to enforce regulations with tact and firmness; to explain technical matters simply and patiently; to follow oral and written directions; keep accurate records and prepare clear and concise reports; to calmly deal with difficult people and with those from different cultures; to analyze situations accurately and adopt an effective course of action.