

CIVIL ENGINEER I – TRANSPORTATION

Position Code: 2705

WC Code: 9410

FLSA Status: Exempt

Pay Grade: 357

Location: Traffic & Transportation

Approval Date: 2023

General Statement of Duties

Performs difficult professional, technical, and administrative work participating in the planning, design, and implementation of transportation improvements.

Distinguishing Features of the Class

An employee in this class provides technical assistance in transportation engineering as it relates to land development, capital improvement and regional multi-modal transportation initiatives. Work involves preparing technical reports, design, and construction administration of street improvement projects, assisting in the Traffic Impact Analysis process, reviewing Traffic Impact Analyses, and ensuring contemplated transportation projects support the overall development vision of the Town. The employee represents the Town to a wide variety of citizens, developers, state, and federal regulatory officials, etc. Work is supervised by the Civil Engineer II - Transportation and is evaluated based on conferences and review of assignments.

Duties and Responsibilities

Assists in review of various types of projects for compliance with Town and State standards including traffic studies and design plans, speed limit studies, Transportation Impact Analyses, traffic safety analyses, traffic control plans, and traffic signal plans;

Performs data collection and analysis such as traffic volume, capacity, origin and destination, speed, crash reports, and pedestrian counts, to prepare engineering reports, work orders, graphs, tables or maps related to traffic and pedestrian safety, highway and intersection capacity, highway design and geometrics, and neighborhood traffic control;

Investigates citizen inquiries and coordinate with Civil Engineer II- Transportation related to signal operational issues, pedestrian or motorist safety, speeding, poor sight visibility, high crash areas, or other concerns;

Participates in the preparation of construction plans for in-house engineering design projects using AutoCAD Civil 3D, and coordinates with other departments as needed;

Prepares engineering designs, reports, and estimates for a variety of transportation related projects;

Provides technical support for the land development process for compliance with Town standards, ordinances, and long-term transportation plans;

Prepares miscellaneous project exhibits and maps as needed;

Provides developers, contractors and the general public with technical information relating to transportation projects and municipal services.

Coordinates pavement marking work and other contracted services;

Prepares cost estimates for projects and takes final measurements for use in payment certification;

Assists in the preparation of technical reports, bid documents, cost estimates, and other related documents;

Maintains files and records pertaining to transportation projects and activities;

Assists Civil Engineer II- Transportation and Public Services Director in the overall Public Services fields as required; and

Performs related duties and responsibilities as requested.

Recruitment and Selection Guidelines

Knowledge, Skills and Abilities

Considerable knowledge of the principles and practices of civil engineering as applied to traffic and/or roadway operations and safety;

General knowledge of the principles, practices and methodologies of transportation planning for roadways and transit systems.

General knowledge of land use planning and zoning as it relates to transportation;

Ability to plan projects and prepare related designs, estimates, and specifications;

Ability to perform difficult engineering computations;

Working knowledge of various software programs including AutoCAD, Syncro/TRAFFIC and Microsoft Office applications;

Working knowledge of Manual on Uniform Traffic Control Devices, ITE trip generation, and parking demand analysis;

Ability to establish and maintain effective working relationships with other employees, Town officials, and the general public;

Ability to express technical concepts clearly and concisely to a wide range of audiences, both in oral and written form;

Ability to provide leadership to committees and staff, build consensus and work collaboratively with developers, Town officials and the community.

Skill in facilitating meetings to obtain public input and build consensus;

Ability to make sound judgments.

Physical Requirements

While performing the duties of this job, the employee is frequently required to reach with hands and arms, sit, talk, and hear. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator. This position involves sedentary work requiring the employee to exert up to 10 pounds of force occasionally; and/or a negligible amount of force frequently or constantly to move objects.

Must possess visual acuity to produce and review written reports and records including mathematical calculations, operate a computer terminal, analyze data, and to read maps, schematic drawings and plans.

Minimum Education and Experience

Bachelor's Degree in Civil Engineering from an accredited college or university with coursework in Traffic and Transportation and three to four years of experience of a responsible nature in Traffic or Transportation Engineering; or an equivalent combination of education and experience.

Special Requirement

Possession of a valid North Carolina driver's license.

FE Certification required (passed the Fundamentals of Engineering Exam).