

LANCASTER COUNTY ENGINEERING TECHNICIAN I

NATURE OF WORK

This is advanced level technical work in connection with the County Engineering Department.

Work responsibilities may include one or more of the following: manual and/or computer aided drafting under minimum supervision; advanced level surveying involving complex engineering construction projects; and construction inspection under a minimum of supervision. An individual within this classification may train and direct the work of subordinates on assigned projects. Limited supervision is received from a technical or administrative superior who makes general work assignments and periodic checks of work in progress, and reviews results to ensure adherence to accepted engineering principles and/or land surveying practices.

EXAMPLES OF WORK PERFORMED

Perform survey work for complex engineering construction projects; may train and direct the work of subordinates on a survey crew as instructed.

Conduct property surveys including researching records, obtaining and reviewing legal descriptions, plats and previous field notes; analyze collected data; physically set property corners; record and file completed survey results.

Assist in the re-establishment of section and quarter corners in the County in relationship to State and Federal Coordinate System; assist in the restoration of lost or obliterated monuments.

Monitor activities of contractor to ensure work is completed according to plans and specifications; review and revise construction plans to ensure accuracy and feasibility; prepare final copies of irregular tracts and field note descriptions.

Act as mediator between contractor and public affected by engineering projects.

Draft surveys and/or construction plans; check for errors and mathematical closure; compute area; and ensure all survey records are properly filed.

Assist in the annual inspection of County bridges in accordance with National Bridge Inspection requirements.

Perform quality control tests of materials used on construction projects.

Perform general labor work related to assigned engineering and/or surveying projects.

Assist State and County officials and the general public with information prepared and/or filed by the Department.

DESIRABLE KNOWLEDGE, ABILITIES AND SKILLS

Knowledge of the principles, methods and techniques of land surveying.

Knowledge of the principles, procedures, and standard specifications involved in planning, designing and constructing engineering projects.

Knowledge of quality control testing and inspection methods and practices utilized in engineering projects.

Knowledge of general computer hardware and software systems, including mapping and drafting system applications.

Ability to read and interpret maps, legal descriptions, construction plans and specifications.

Ability to perform mathematical computations as it relates to engineering, surveying and drafting responsibilities.

Ability to plan and complete assigned work with a minimum of supervision and guidance.

Ability to perform heavy manual work for extended periods of time under adverse weather conditions encompassing varied terrains.

Ability to establish and maintain effective working relationships with contractors, co-workers and the general public.

Ability to communicate effectively both orally and in writing.

Ability to train and direct the activities of a small group of subordinates as required.

Skill in the operation and maintenance of surveying, inspection and testing tools and equipment.

DESIRABLE TRAINING AND EXPERIENCE

Graduation from a senior high school or equivalent plus experience performing drafting, surveying and/or engineering work.

MINIMUM QUALIFICATIONS

Graduation from a senior high school or equivalent and some experience performing drafting, surveying, and/or engineering work; or any equivalent combination of training and experience which provides the desirable knowledge, abilities and skills.

NECESSARY SPECIAL REQUIREMENT

Possession of a valid driver's license when operating a vehicle is necessary to the satisfactory performance of assigned duties.

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