

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE
CONSTRUCTION TECHNICIAN ASSISTANT

DEFINITION

Assists higher level Construction Technicians by performing journey level engineering support and construction trades related work including assisting in construction project inspection, monitoring and construction survey; performs related work as required.

The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

WORK EXAMPLES

Serves as an assistant to an inspector for routine phases of construction projects by observing contractors and ensuring adherence to plans and specifications; checks grades and elevations; collects and records routine measurements and compares them with project plans and specifications; maintains related records.

Performs or assists in performing standard tests on concrete, asphalt, soil, rock and other construction materials for conformity to specifications during plant inspections; observes batching of Portland cement and asphaltic concrete; checks weighing of rock and asphalt; maintains related records.

Operates the drilling equipment and/or vehicles to obtain requested soil samples so that minimum time is expanded and OSHA safety regulations are observed.

Works on survey crew to perform location, topographic, and related engineering and land survey work for construction projects; runs rod and pounds survey hubs.

Follows contractor behind a trimming machine to check grade; checks the slope and depth of the paving and ditches.

Prepares elementary drawings to show tile line locations, direction of flow, elevation of tile lines, tile size and tile condition.

Checks and maintains equipment needed for survey and inspection duties to ensure required supplies and equipment are stocked, calibrated and operating correctly.

Maintains project cost records and diaries which includes reviewing vouchers with records to verify information and enter necessary corrections; researches information relating to projects and preparing periodic summaries and reports from records.

COMPETENCIES REQUIRED

Knowledge of basic mathematics.

Knowledge of elementary physical and mechanical principles and earth science.

Knowledge of Departmental rules, regulations, policies and specifications as they relate to engineering projects.

Knowledge of engineering survey techniques.

Knowledge of the occupational hazards and safety precautions applicable to the work.

Ability to occasionally (1-33% of the time) lift/lower, carry and push/pull various amounts of force within the "heavy work" as defined by the US Department of Labor; team lift or mechanical assist recommended for weights over 75 pounds. Related work examples: 60 pound 6 inch diameter hollow stem auger (71 pounds with 11 pound cutter head), and 25 pound soil sample bags, etc.

Ability to work outdoors in all types of weather conditions, day or night, in normal and emergency situations.

Ability to climb, kneel, crouch, crawl, stoop and twist and perform duties using appropriate tools and equipment within safety standards.

Ability to walk over uneven ground.

Ability to drive vehicles in a safe and conscientious manner.

Ability to drive equipment with a manual transmission and clutch.

Ability to read and write English.

Ability to understand and follow verbal and written directions/instructions given in English.

Ability to accurately perform mathematic calculations.

Ability to operate computers and/or other electronic devices and use programs/applications to conduct Department of Transportation business.

Ability to record project notes accurately.

Ability to learn and properly utilize departmental specifications and policies.

Ability to communicate ideas and observations both orally and in writing.

Skill in the use of various types of engineering survey equipment.

Displays high standards of ethical conduct. Refrains from dishonest behavior.

Works and communicates with all clients and customers providing polite, quality professional service.

Displays a high level of initiative, effort, attention to detail and commitment by completing assignments efficiently with minimal supervision.

Follows policy, cooperates with supervisors and aligns behavior with the goals of the organization.

Fosters and facilitates cooperation, pride, trust, group identity and team spirit throughout the organization.

Exchanges information with individuals or groups effectively by listening and responding appropriately.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Graduation from high school, or G.E.D.;

OR

employment experience may be substituted on a year for year basis for the required education.

NECESSARY SPECIAL REQUIREMENTS

All of the following apply to Department of Transportation positions only:

Designated positions in this class require possession of a valid Commercial Learner's Permit upon hire. Within a timeframe determined by the appointing authority, a valid Class A Commercial Driver's License with the required endorsements and applicable restrictions must be obtained and subsequently maintained in order to continue employment.

If a CDL is not designated, all positions are required to have and maintain a minimum of a valid Class C Non-Commercial Operator's License.

In conjunction with Title 49 of the Code of Federal Regulations (parts 40 and 382), designated positions in this job class require a pre-employment drug screen and will require ongoing participation in the employer's random drug and alcohol testing program and will be subject to the regulations regarding the Federal drug and alcohol testing program.

Prior to starting employment, all persons are required to have a post offer pre-employment physical verifying the physical ability to perform the duties described.

Designated positions require certification for testing materials and operating specialized equipment as required by the Iowa Department of Transportation's Technical Training and Certification Program for Highway Materials and Construction; and/or other certifications as required.

NOTES

Employees must be able to travel and may be required to stay away from home overnight during assignments.

Effective Date: 11/17 SA