

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE
HIGHWAY TECHNICIAN ASSOCIATE

DEFINITION

Operates equipment/performs physical laboring activities in the maintenance of roadway, roadside, right of way, shoulder, bridge and highway grading/paving projects; perform routine bridge inspections, traffic control and operates snow/ice removal equipment (e.g., heavy duty trucks equipped with various types of snow plows) to prepare/spread abrasives and de-icing chemicals on the roadway; incumbents do not rotate seasonally between maintenance and construction activities; 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

Performs roadway and right of way, shoulder, roadside, bridge, surface, drainage and related maintenance to include: surfacing, sealing and filling joints and cracks, removing bumps, filling depressions, and removing and replacing damaged pavements; filling edge ruts, smoothing shoulders, mowing shoulders, and rebuilding shoulders; picking up litter, cutting brush, repairing fence, controlling weeds, maintaining signage; and cleaning, washing, and lubricating working members of bridges.

Performs duties related to snow and ice removal, which include: accessing the Roadway Weather Information System (RWIS), weather reports, and other related computer software applications to record and receive data and make decisions regarding times, temperatures, weather conditions, and material usage to operate snow and ice removal equipment, such as, but not limited to single or tandem axle dump trucks that may be equipped with tailgate or hopper spreader, straight blades or V-plows, wing plows, and underside ice blades; includes preparing and spreading abrasives and deicing chemicals on the roadway by using a loader for mixing abrasives and chemicals.

Inspects phases of bridge, grading and paving projects as assigned; prepares written inspection reports and records as required. Performs materials sampling and testing, or construction or right of way survey activities as assigned.

Performs traffic control to assist motorists through work zones in a safe and orderly manner.

Services and performs routine maintenance and minor repairs on all assigned equipment such as oil changes, greasing and inspections; assists mechanic on major breakdowns and overhauls such as repairs on brakes, hydraulics, electrical, transmission and mechanical systems.

Performs construction and maintenance on Department of Transportation facilities and grounds including carpentry, electrical, plumbing, janitorial, masonry, and landscape maintenance.

Maintains waterways by reshaping fore and back slopes, cleaning vegetation from ditches, maintaining and repairing tile culvert pipes and intakes using backhoes, loaders, power shovels and draglines.

Performs herbicide-spraying operations in right of way areas by using a backpack sprayer, driving a truck and/or operating a pressure sprayer.

Loads and unloads materials, such as abrasives, deicing chemicals and rock into trucks, using end loaders, shovels and other hand tools.

Respond as directed to roadway emergency situations.

COMPETENCIES REQUIRED

Knowledge of the specialized highway maintenance equipment, its operation and use.

Knowledge of highway maintenance procedures, techniques, terminology and specifications.

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

Knowledge of the applicable department policies, procedures, and regulations pertaining to highway and equipment maintenance, record keeping, budgeting, and reporting requirements.

Knowledge of the characteristics and special needs of highways within assigned areas.

Knowledge of the effects of weather on road surfaces.

Knowledge of the rules and regulations pertaining to proper placement of signs and placards within and along the highway right of way.

Knowledge of winter maintenance operations, such as anti-icing and deicing principles.

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 jack hammer, 60 pound high speed and front plow ice blades, 50 pound calcium chloride and pavement patch, and 160 pound 9' ice blade, etc.

Ability to drive vehicles in a safe and conscientious manner.

Ability to drive equipment with a manual transmission and clutch.

Ability to communicate and comprehend directions and instructions.

Ability to work out doors 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 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 and use the tools required in highway maintenance work.

Ability to appropriately use anti-icing or deicing materials.

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

Ability to operate computers and apply related software applications to record and receive data and make decisions regarding times, temperatures, weather conditions, and material usage.

Ability to calibrate and maintain electronic and hydraulic controls to ensure proper amount of materials are being applied to the roadway.

Ability to assist with on-the-job training for new employees.

Skill in the use of the Roadway Weather Information System (RWIS) and weather reports and other related computer software applications.

Skill in the operation of hand tools, power tools, and light and heavy highway maintenance equipment requiring hand, foot and eye coordination.

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

experience equal to one year of full-time work in highway maintenance or equipment operation may be substituted for each year of the required high school education.

NECESSARY SPECIAL REQUIREMENTS

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.

In conjunction with Title 49 of the Code of Federal Regulations (parts 40 and 382), this job requires 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.

Within a period of time as determined by the appointing authority, designated positions are required to have and maintain a current Herbicide Applicator certification from the Department of Agriculture and Land Stewardship.

NOTES

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

Within a timeframe as determined by the appointing authority, employees are required to reside within 30 minutes driving time, during normal conditions, from assigned work location.

Employees must respond to emergency situations as required.

Employees must be able to work up to 16 consecutive hours.

Effective Date: 11/17 SA