

Iowa Department of Administrative Services – Human Resources Enterprise
Job Classification Description

Roadside Development Specialist 1

Definition

Under immediate to general supervision, performs entry-level professional work in the development and enhancement of the right-of-way and adjacent areas of the state highway system; performs related work as required.

The work examples and competencies listed below are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

Work Examples

Visits proposed sites for erosion control construction to determine design and material requirements by examining soil, existing trees, shrubs, herbaceous plants, and topographical features.

Selects appropriate plant materials for projects along highway right-of-way and building sites in order to control soil erosion and promote highway safety.

Develops the design and prepares preliminary sketches for landscape and erosion control projects and safety rest areas.

Develops special provisions and standards for safety rest areas and landscaping and erosion control projects to ensure conformance to design specifications.

Instructs maintenance personnel in the planting and management of all plant materials explaining methods of establishment and maintenance (planting depth, establishing watering, and pruning schedules), and providing information regarding the identification of common plant disease and insect problems.

Collects and analyzes information about landscape design techniques and environmental problems associated with roadside development to determine the most effective application of erosion control materials by comparing data with current agency practices.

Assists civic organizations in their preparation of plans for primary rest areas and planting projects by identifying environmental problems associated with projects and providing information about plant materials and landscape design techniques.

Speaks before public groups to explain the purpose of and gain support for roadside development projects and to provide guidance for the safe and effective use of herbicides and pesticides.

Investigates and estimates cost of tort claims involving alleged chemically-caused damage to plants on State or private property to determine liability of the State by visiting sites, taking samples, and collecting information regarding the extent of damage and value of plants involved.

Competencies Required

Knowledge:

- Engineering and Technology – The practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
- Design – Design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
- Biology – Plant and animal organisms, tissues, cells, functions, interdependencies, and interactions with each other and the environment.
- Public Safety and Security – Relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
- Building and Construction – Materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.

Abilities:

- Oral Comprehension – Listen to and understand information and ideas presented through spoken words and sentences.
- Oral Expression – Communicate information and ideas in speaking so others will understand.
- Visualization – Imagine how something will look after it is moved around or when its parts are moved or rearranged.
- Written Comprehension – Read and understand information and ideas presented in writing.
- Problem Sensitivity – Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- Category Flexibility – Generate or use different sets of rules for combining or grouping things in different ways.
- Mathematical Reasoning – Choose the right mathematical methods or formulas to solve a problem.

Skills:

- Critical Thinking – Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Active Listening – Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Reading Comprehension – Understanding written sentences and paragraphs in work-related documents.
- Speaking – Talking to others to convey information effectively.
- Complex Problem Solving – Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Minimum Qualification Requirements

Applicants must meet at least one of the following minimum requirements to qualify for positions in this job classification:

- 1) Graduation from an accredited four-year college or university with a degree in agronomy, landscape architecture, engineering, horticulture, or forestry.
- 2) A total of four years of education (as described in number one) and/or full-time experience, where thirty semester hours of accredited college or university course work in agronomy, landscape architecture, engineering, horticulture, or forestry equals one year of full-time experience in landscape architecture, nursery supervision, agronomy, farm management, or forestry.

Effective date: 09/18 SA