

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE
TRANSPORTATION ENGINEER MANAGER

DEFINITION

Supervises a major section of a specialized transportation engineering program; manages and supervises a resident construction engineering office; 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

Supervises and evaluates the work of engineers, first line supervisors, technicians and staff; effectively recommends personnel actions related to selection, disciplinary procedures, performance, leaves of absence, grievances, work schedules and assignments, and administers personnel and related policies and procedures.

Oversees and administers highway and structure construction; ensures compliance with contracts and projects concepts and seeks to discover errors/omissions and resolve problems and issues; develops and recommends changes to contracts and approval of subcontract requests and Certificates of Completion/Final Acceptance.

Evaluates roadways, bridges, highway/railroad grade crossings, sign trusses, high mast lighting towers, traffic safety devices and rights of way, and identifies maintenance, repair and operational needs; utilizes pavement management information systems to develop and recommend maintenance and rehabilitation strategies.

Conducts biennial bridge inspections, identifying maintenance/repair needs and providing information for the bridge maintenance system (PONTIS); performs initial inspection of bridge damage, conducting structural and inventory analysis; determines safety of continued use.

Provides consultation for internal and external customers in technical areas assigned; assists staff in timely solutions to construction and maintenance problems; conducts project site visits to evaluate contract compliance, contractor work quality, traffic control and related transportation areas.

Performs technical and administrative work in the supervision and management of a major section in the development of methods manuals; production of technical detail plans; conduct of geotechnical investigations analysis and design; the testing, documentation, and assessment or acceptance of pavement and manufactured products; the management and direction of private consultants providing design services, the acquisition and preparation of survey and photogrammetric information or the development of design plans for interstate and primary roadway improvements statewide.

Responds to inquiries and resolves complaints on technical issues and department policies and regulations with internal staff, governmental agencies, private entities, legislators, news media and the general public; participates in public hearings, zoning meetings, City Council meetings and County Board of Supervisor meetings to monitor and resolve issues having potential impact on the primary road system, and explain the department's position.

Applies engineering knowledge in technical transportation areas such as evaluating the impact of new technology and regulations or contractor proposals/requests to substitute equipment, method or material; approving access (entrance) requests; and issuing utility permits; presents technical material at conferences and seminars.

Participates in the study and projection of present and future transportation needs and helps formulate alternative policies and means of meeting these needs through appropriate/available resources; develops single or alternative plans, policies, programs, and recommendations based upon costs, benefits, and

overall feasibility; evaluates program progress to assure that plan objectives are realized in implementing the plans.

COMPETENCIES REQUIRED

Knowledge of the principles, practices, techniques and state and federal regulations associated with the assigned area of specialization in the field of transportation engineering.

Knowledge of management practices and principles including personnel management, organizational management, budgeting and employee supervision.

Knowledge of the basic techniques of engineering drafting, project inspection, contract administration, highway maintenance and safety, structures and facility design, and transportation planning.

Ability to inspect completed and in progress work for completeness and compliance with specifications, standards, contract stipulations, safety, and adherence to sound engineering practices and related criteria.

Ability to read, write, and speak the English language to present facts, data and opinions clearly and concisely, to explain, persuade, negotiate and defend positions taken by the department.

Ability to develop or revise work priorities and schedules, methods, policies, procedures and specifications to carry out work objectives more efficiently, safely and cost effectively, and insure accomplishment of department goals and compliance with state/federal requirements.

Ability to train employees to understand, interpret and apply work procedures, methods and expectations of standards.

Ability to lead others and to work cooperatively in a team environment.

Ability to interact with agency staff/management, contractors, state/federal officials or the general public to negotiate acceptance/implementation of project recommendations or solutions.

Ability to apply the principles of transportation engineering and existing models to requirements of projects and develop/create or revise a design plan.

Ability to interpret, accurately obtain and apply, necessary information from engineering related source documents/data; to determine completeness or feasibility, to document proposals or theories, search for precedents and seek out alternative procedures for engineering problems or projects within the assigned area of specialization.

Ability to keep own emotions under control and restrain negative behaviors when provoked or when working under conditions of stress.

Ability to understand and appreciate different and opposing perspectives, to adapt own approach to changing situations and to change or easily accept changes in own organization or job requirements.

Ability to meet customer needs in a consistently helpful and courteous manner.

Ability to apply personal ethical standards such as honesty, responsibility and trustworthiness required to be a productive employee.

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

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

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

Follows policy and cooperates with supervisors.

Fosters and facilitates cooperation, pride, trust, and 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

Licensed as a professional engineer, and the equivalent of three years of full-time licensed professional transportation or related civil engineering experience, one year of which must have included project management or leadwork responsibilities. Must have, or prior to appointment, must obtain an active Iowa professional engineering license through the Iowa Professional Licensing Bureau – Engineering and Land Surveying Examination Board;

OR

a Masters degree in chemical, civil, construction, environmental, materials, structural or transportation engineering; or an area closely related to transportation engineering may be substituted for one year of the required experience;

OR

employees with current continuous experience in the state executive branch that includes experience equal to two years of full-time experience as a Transportation Engineer.

Effective Date: 8/14 SA