



TRANSPORTATION ENGINEER

SCOPE OF WORK:

Work involves activities associated with planning, designing, and supervising the construction, maintenance, and improvement of transportation facilities and associated items in accordance with established engineering standards and state and federal policy.

DUTIES PERFORMED AT ALL LEVELS:

- Conduct engineering studies related to transportation planning and/or research.
- Prepare and present reports of engineering-related transportation information.
- Prepare plan and profile sheets, estimates, and detailed designs; develop specifications for transportation-related projects.
- Conduct tests and analyses of construction materials.
- Perform calculations to determine areas, quantities, and costs associated with transportation-related engineering projects.
- Participate in and supervise construction survey activities.
- Coordinate and inspect construction and maintenance activities for compliance and conformance to plans and specifications.
- Prepare field notes, log books, reports, and other forms to comply with department procedures for project documentation.
- May supervise engineering technicians and temporary staff assigned to transportation projects.

NOTE: The duties listed are not intended to be all-inclusive. Duties assigned any individual employee are at the discretion of the appointing authority.

TRANSPORTATION ENGINEER I

2021

GRADE J

LEVEL DEFINITION:

Individuals in positions assigned this classification perform activities requiring application of basic engineering principles.

ADDITIONAL DUTIES PERFORMED AT THIS LEVEL:

- None

MINIMUM QUALIFICATIONS:

Requires a bachelor's degree in engineering and eligibility to write the Fundamentals of Engineering exam as specified by the Board of Registration for Professional Engineers and Land Surveyors.

TRANSPORTATION ENGINEER II

2022

GRADE M

LEVEL DEFINITION:

Individuals in positions classified at this level are assigned projects requiring application of advanced engineering principles and requiring knowledge of engineering concepts and methodology generally acquired through considerable training or experience.

ADDITIONAL DUTIES PERFORMED AT THIS LEVEL:

- Provide technical assistance to cities, counties, and other entities in development of their transportation-related systems.
- Establish overall structural design concepts and design all components of roadways and associated items.
- Analyze field testing data and make recommendations.
- Supervise the inspection, materials testing, surveying, and/or office procedures to ensure construction projects are completed in accordance with contract requirements.
- Assist in providing instructions to other staff, contractors, and local entities regarding engineering standards and Department regulations and policies.
- May supervise engineers, engineering technicians, and temporary staff assigned to transportation projects.

MINIMUM QUALIFICATIONS:

Requires a bachelor's degree in engineering and two years of professional-level engineering work experience. Also requires eligibility to write the Fundamentals of Engineering exam as specified by the Board of Registration for Professional Engineers and Land Surveyors. A bachelor's degree with a major in construction management and successful completion of the Fundamentals of Engineering exam may substitute for the educational requirement for certain positions.

TRANSPORTATION ENGINEER III

2023

GRADE N

LEVEL DEFINITION:

Individuals in positions classified at this level are assigned projects and perform activities requiring the application of advanced and specialized engineering principles. Individuals oversee contractors or serve as an engineering specialist in assigned area involving a wide range of duties requiring knowledge gained through extensive experience.

ADDITIONAL DUTIES PERFORMED AT THIS LEVEL:

- Oversee consultant and contractor activities on projects.
- Establish policies and procedures for new programs, materials, and tests in area of specialty.
- Perform analysis and make recommendations to division heads or assistant division heads pertaining to construction and project management policies and practices.
- Provide instruction to other staff, contractors, and local entities regarding engineering standards and Department regulations and policies.
- Provide high level technical direction or assistance in area of assigned lead specialty.
- Perform more complex work in area of design, research, manual writing, etc.
- Identify project issues and resolve them or bring forth recommendations.
- Schedule and coordinate project development activities

MINIMUM QUALIFICATIONS:

Requires a bachelor's degree in engineering or construction management, four years of professional-level engineering work experience, and successful completion of the Fundamentals of Engineering exam.

Eff. Date: 10/74 – Highway Engineer I, II, III

Rev: 10/89 – Rewritten, title changed

Rev: 12/93 – Minimum qualifications changed

Rev: 10/96 – Rewritten in current format

Rev: 03/97 – Changed minimum qualifications - moved EIT to III level

Rev: 08/98 – Minimum qualifications revised

Rev: 03/02 – Revised minimum qualifications to remove specific majors

Rev: 07/12 – Conversion to Hay System

Rev: 01/14 – Revised 3rd level of series to reflect specialist function. Created separate class CL2010 Transportation Engineer Manager/Team Leader.