

**State of Michigan
Civil Service Commission**
Capitol Commons Center, P.O. Box 30002
Lansing, MI 48909

Position Code

1. TRAENGA

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.

2. Employee's Name (Last, First, M.I.)	8. Department/Agency TRANSPORTATION CENTRAL OFFICE
3. Employee Identification Number	9. Bureau (Institution, Board, or Commission) Highway Operations
4. Civil Service Position Code Description TRANSPORTATION ENGINEER-A	10. Division Southwest Region
5. Working Title (What the agency calls the position) Staff Engineer	11. Section Marshall TSC
6. Name and Position Code Description of Direct Supervisor FINNILA, GREGORY M.; ENGINEER MANAGER LICENSED-3	12. Unit Projects & Contract Unit
7. Name and Position Code Description of Second Level Supervisor KREMER, ANNJANETTE M; ENGINEER MANAGER LICENSED-4	13. Work Location (City and Address)/Hours of Work 15300 West Michigan Avenue, Marshall, MI 49068 / 7:00 a.m. - 3:30 p.m. Mon-Fri (hours may vary)

14. General Summary of Function/Purpose of Position

This position functions as a senior worker, performing transportation engineering assignments in the areas of design plan preparation and reviews, program coordination, consultant contract oversight, traffic and safety engineering, utility and permit review, construction administration, and maintenance operations support. This position requires meeting tight deadlines and resolving issues to ensure the successful implementation and operation of Michigan Department of Transportation (MDOT) service and products. Successful and continuing customer contact is a requirement for this position. This position requires possession of a valid driver's license to perform field work and reviews.

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary:

Percentage:55

Designs and prepares plans and analyzes contract documents in order to develop contract proposals, including special provisions, for projects that include all portions of a reconstruct project such as storm sewers, drainage, major earthwork, alignment relocation, or road construction.

Individual tasks related to the duty:

- Designs and prepares preliminary and final design plans for highways, bridge approaches, drainage structures, municipal utilities, and other highway facilities.
- Prepares detailed cost estimates and proposal information to be included in contract documents. Writes special provisions for non-standard pay items
- Problem solves requests when the plans do not fit the existing environment. Recommends and implements necessary changes to the plans.
- Provides design and analysis to incorporate into plan documents. Use technical resources (e.g., American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets, geometric design guide, standard plans, road design manual) to design and coordinate changes. Problem solve requests from the Project Engineer when the plans do not fit the existing environment. Coordinate changes to the project design with the project manager and design team and implement necessary changes to the plans.
- Scopes future projects utilizing scoping manual and develops complete scoping packages with detailed cost estimates for the Transportation Service Center (TSC) call for projects.
- Reviews plans of other department staff, local agencies, and consultants for completeness and adherence to current standards, specifications, and methods. Recommends and implements necessary changes to plans.
- Represents the department at meetings with consultants, other State or Federal Agencies, and the public.
- Assists with the TSC call for projects process and scoping.
- Administers consultant contracts to support the design of projects.
- Participates in post-construction reviews to evaluate the projects and note suggestions for future projects.
- Assists construction personnel with questions related to design plans.
- Prepares preliminary and final right-of-way plans.
- Compiles and analyzes engineering data with conclusions and recommendations.
- Prepares information, exhibits, and develops data for public review, hearings, and informational meetings. Meets with representatives of private industry, local organizations, and citizens to inform and discuss the MDOT program.
- Uses, maintains, and develops geographic information system (GIS) maps for projects and assets.

Duty 2

General Summary:

Percentage: 15

Resolves complex traffic and safety issues within the TSC Area. This duty requires possession of a valid driver's license to perform field work and reviews.

Individual tasks related to the duty:

- Utilizes traffic engineering standards, guides, principles, and judgment to administer the safe operation and geometric design of highways and the installation of traffic control devices. Designs preliminary and final maintaining traffic plans.
- Prepares maintaining traffic plans for construction and maintenance projects within the TSC area.
- Participates in project milestone meetings for input of safety and mobility related work items.
- Conducts crash analyses and safety reviews for projects. Assists traffic and safety engineer for data collection or analysis.
- Reviews and analyzes traffic data and performs calculations.
- Conducts reviews of traffic control devices. Prepares safety work authorizations and coordinates work items.
- Performs mobility and work zone compliance reviews. Recommends safety and mobility strategies from findings.
- Performs field reviews of areas that will be affected by construction and determine methods of handling traffic during construction to minimize impacts.
- Prepares correspondence related to recommended design and/or traffic control.

- Prepares scoping documents and cost estimates for safety and operations call for projects. Develops plans for safety and operations programs.
- Reviews right-of-way permit applications for traffic concerns and recommend solutions to provide safe and efficient transportation of people and goods.
- Participates in Road Safety Audits as assigned.
- Works with the Traffic and Safety staff in the development of other traffic related projects.

Duty 3

General Summary:

Percentage: 10

Provides engineering technical expertise and support to the Operations Engineer for maintenance and operational focus. This duty requires possession of a valid driver's license to perform field work and reviews.

Individual tasks related to the duty:

- Prepares, updates, and coordinates maintenance and operations maps.
- Determines scope, tracks, and designs high priority maintenance projects.
- Manages and updates the maintenance budget.
- Assembles design packages. Provides Quality Assurance/Quality Control (QA/QC) review of plans.
- Analyzes and reports mobility measurements. Creates technical documents to highlight analysis.
- Oversees contract administration for TSC maintenance operations.
- Coordinates and participates in field reviews for operational and maintenance issues.
- Troubleshoots drainage issues related to poorly operating ditches, culverts, underdrains, and storm sewer systems and provide solutions to fix the problems.
- Participates in asset data collection and measurement as part of Pavement Surface Evaluation and Rating (PASER) and performance-based maintenance (PBM) processes.

Duty 4

General Summary:

Percentage: 10

Administers utility coordination and the permit program within the TSC area. This duty requires possession of a valid driver's license to perform field work and reviews.

Individual tasks related to the duty:

- Utilizes standards, guidelines, and engineering judgment to respond to customer requests for use of MDOT right-of-way.
- Reviews, interprets, and approves complex permits utilizing MDOT standards (e.g. permits with multiple items that need to be reviewed as part of the project) e.g. drainage changes with a jack and bore utility installation, road diet, major street scaping improvements with parking changes, combination of multiple utility installations, and major utility improvements that would require complex traffic control and construction phasing.
- Recommends approval or rejection of permit applications for commercial/residential driveway applications as related to drainage, traffic and safety, design and construction concerns.
- Provides guidance in the coordination of inspection activities for permit and operations technicians to ensure permit conditions are followed.
- Coordinates utility relocations involving gas, electric, phone, cable, and water system adjustments needed for MDOT construction projects.
- Ensures uniformity in utility relocation needs for construction projects and utility company requests for usage of MDOT right-of-way.
- Facilitates information exchange between designers and utility owners for the location, adjustment, and/or relocation of utility facilities anticipated to be impacted by MDOT construction projects.
- Facilitates and monitors timely submittal, review, and issuance of permits for project-related utility work to avoid negative impacts on the project construction schedule.
- Maintains project files for all utility coordination activities. Update and maintain all utility information receipts and transmittals, and related correspondence.
- Utilizes the Construction Permit System (CPS), Lane Closure and Restrictions (LCAR), etc. to document projects and permit information and to monitor progress.

Duty 5

General Summary:

Percentage: 5

Assists in management and delivery of contractor/MDOT construction projects. This duty requires possession of a valid driver's license to perform field work and reviews.

Individual tasks related to the duty:

- Assists the construction engineer in the administration of consultant work that is needed to support the construction of projects.
- Provides oversight of construction projects and contracts.
- Performs engineering analysis of highway and bridge projects to fit field conditions to the plans.
- Interprets project plan documents and provides direction on the intent in the field
- Gathers written work orders and changes to contract quantities.
- Oversees a team of engineers and technicians in conducting final project documentation reviews on state and local government construction projects.
- Negotiates costs for extra work on projects.
- Designates staff assignments to successfully complete inspection and survey requirements.
- Conducts pre-construction meetings and post-construction meetings.
- Attends meetings with private citizens, utility companies, local officials, representatives from other MDOT divisions, representatives from other state departments, and Federal Highway Administration (FHWA) officials.
- Coordinates local agency projects, project reviews and oversight assistance.
- Recommends to the engineer of record, addresses questions concerning the approval of extra work, adjustments to the contract, and changes in work terms.
- Ensures that project records are complete and orderly.
- Ensures that projects are "finalized" in a timely manner.
- Administers construction budget for extras and overruns of local government projects.
- Recommends extensions of contracts due to traffic conditions, bad weather, and availability of materials and subcontracts.
- Reviews progress of contractual work, prepares reports, Field Manager, and project related correspondence.
- Oversees warranty administration of Transportation Service Area projects.
- Assists with public construction notifications.

Duty 6**General Summary:****Percentage: 5**

Builds, strengthens, and maintains TSC external customer base. Assists and resolves customer inquiries.

Individual tasks related to the duty:

- Responds to questions from the general public, developers, business organizations, and local municipality officials.
- Strives to improve the MDOT image.
- Provides training and mentoring to public and private customers on the processes and procedures to complete road projects.
- Participates in employee teams to improve the TSC/Region business processes.
- Responds to Freedom of Information Act (FOIA) requests for information.
- Meets with consultants, developers, contractors, local agencies, utility owners, and private individuals regarding access, geometrics, and traffic control along trunklines.
- Other duties as assigned.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

Independent decisions based on prior experience, and concrete direction by Department guidelines, policies and procedures. Whenever possible, identify, recommend, and implement improvements in the work methods and materials utilized in the position. The decisions affect and impact the traveling public, transportation providers, and stakeholders within the region on present and future highway operations.

17. Describe the types of decisions that require the supervisor's review.

When there is a need for interpretation of Department guidelines, policies or procedures.

When extras, overruns and field changes are required during construction.

When existing policy is unclear.

When a decision may be required from the executive level, personnel matters, assistance in mitigating controversies and/or revision of a program schedule.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

Traversing on uneven terrain including climbing up and down roadway slopes. Transporting up to 25 pounds. Moving in and out of traffic. Climbing under bridges, wading in water, and working near heavy traffic. Moving in and around an office setting, including extensive use of a computer. Occasional overnight travel to training classes and conferences. Position may require availability outside normal working hours based on operational needs. This position requires possession of a valid driver's license.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

- | | |
|---|--|
| ☐ Complete and sign service ratings. | ☐ Assign work. |
| ☐ Provide formal written counseling. | ☐ Approve work. |
| ☐ Approve leave requests. | ☐ Review work. |
| ☐ Approve time and attendance. | ☐ Provide guidance on work methods. |
| ☐ Orally reprimand. | ☐ Train employees in the work. |

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes

23. What are the essential functions of this position?

This position functions as a senior worker, performing transportation engineering assignments in the areas of design plan preparation and reviews, program coordination, consultant contract oversight, traffic and safety engineering, utility and permit review, construction administration, and maintenance operations support. This position requires meeting tight deadlines and resolving issues to ensure the successful implementation and operation of Michigan Department of Transportation (MDOT) service and products. Successful and continuing customer contact is a requirement for this position. This position requires possession of a valid driver's license to perform field work and reviews.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

25. What is the function of the work area and how does this position fit into that function?

The Marshall TSC covers a three-county area which provides customer service to the public, contract counties, business agencies and municipalities. Marshall TSC responsibilities include coordination of construction projects, design of road and bridge projects, development of traffic plans, issuance of permits, maintenance of state trunk lines, and evaluation and inspecting road assets. This position is essential to all the work areas listed. The main tasks of this multi-disciplinary position, producing road plans, consultant contract oversight, traffic and safety engineering, and maintenance/operations support, are essential to implementing MDOT's five-year plan and serving the TSC's customer base.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Possession of a bachelor of science degree in engineering.

Possession of a bachelor of science degree in civil engineering preferred.

EXPERIENCE:

Transportation Engineer 12

Three years of professional engineering experience involved in transportation systems and programs equivalent to a Transportation Engineer, including one year equivalent to a Transportation Engineer P11.

Alternate Education and Experience

Transportation Engineer 9 - 12

Possession of a registered professional engineer license as required by the State of Michigan may be substituted for 6 months of experience at the Transportation Engineer 9-12 levels. This substitution may only be used once for any employee for qualification of appointment or early reclassification.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- Department policy and legal authority.
- Engineering principles, practices, standards, and specifications.
- Engineering tools including computers and engineering workstations.
- Survey procedures and record keeping.

Ability to:

- Work as a team member.
- Oversee and train others.
- Meet and deal effectively with others.
- Communicate effectively.
- Work independently.
- Use initiative in carrying out assignments.
- Make presentations before groups.

**CERTIFICATES, LICENSES,
REGISTRATIONS:**

- Possession of a valid driver's license is required.
- Working toward professional engineering license preferred.

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor

Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

I certify that the entries on these pages are accurate and complete.

Appointing Authority

Date

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee

Date