

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

Position Code 1. TRAENGED51R
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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-E	10. Division Bay Region
5. Working Title (What the agency calls the position) Traffic and Safety Engineer	11. Section Mt. Pleasant TSC
6. Name and Position Code Description of Direct Supervisor ATKINSON, BRIAN E; ENGINEER MANAGER LICENSED-3	12. Unit Operations
7. Name and Position Code Description of Second Level Supervisor HOFWEBER, JACK M; ENGINEER MANAGER LICENSED-4	13. Work Location (City and Address)/Hours of Work Mt. Pleasant TSC, 1212 Corporate Drive, Mt. Pleasant, MI / Mon–Fri, 7:30 a.m. – 4:30 p.m. (hours may vary)

14. General Summary of Function/Purpose of Position

This is a multidisciplinary position specializing in the areas of traffic and safety, work zone safety and mobility, and Safety Program Coordination. This position utilizes Region and Transportation Service Center (TSC) staff, contract agencies, direct maintenance crews, contractors, the Federal Highway Administration (FHWA), and other resources to accomplish safe and efficient movement of people and goods on the state trunkline system within the area of the TSC. This position provides traffic and safety support to the TSC for region wide uniformity and consistency, as well as supporting construction administration, design plan preparation, maintenance support, and utility and permit right-of-way (ROW) review. This position requires meeting tight deadlines and resolving issues to ensure the successful implementation and operation of Michigan Department of Transportation (MDOT) services and products.

This position requires possession of a valid driver's license to perform field reviews and meet with various groups regarding ROW projects.

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: 65

Serve as the TSC Traffic and Safety Engineer. Provide expertise and support to the TSC for traffic and safety uniformity and consistency. Assist with resolving traffic and safety issues within the TSC area. Utilize traffic engineering standards, guides, principles. This duty requires possession of a valid driver's license to perform field reviews.

Individual tasks related to the duty:

- Assist in the preparation of maintaining traffic plans for construction and maintenance projects.
- Conduct 3R/4R reviews for all projects.
- Conduct design exceptions and safety reviews.
- Conduct mobility analyses and prepare Transportation Management Plans (TMP's).
- Participate in plan reviews for proposed projects for input of safety related work items. Coordinate and conduct data collection for analysis.
- Complete work zone compliance reviews.
- Prepare preliminary and final plans for maintaining traffic and mobility.
- Work with all areas of the TSC and region to complete the necessary traffic and safety support, analysis, and recommendations.
- Perform Delay Analysis on all projects (e.g. potential projects, permit projects, maintenance projects, etc.).
- Perform field reviews of areas to be affected by construction and determine methods of handling traffic during construction to minimize adverse impacts.
- Prepare correspondence relating to recommended design and/or traffic control.
- Develop plans for elimination of roadside hazards as part of the safety upgrading program on state trunklines. Review and analyze traffic data and perform calculations.
- Perform field reviews and take measurements, collect traffic volume data, turning movements, delays, etc.
- Assist the TSC manager on special traffic problems which arise during both active projects and normal operations.
- Participate in the Region Traffic & Safety and Operations Business Teams.

Duty 2

General Summary:

Percentage: 10

Design and prepare preliminary and final plans for highways, drainage, and miscellaneous highway facilities. Review plans from department staff, local agencies, and consultants for completeness and adherence to standards. Assist construction personnel with questions.

Individual tasks related to the duty:

- Prepare preliminary and final design plans using MDOT Computer Aided Design and Drafting (CADD) packages including MicroStation and Geopak.
- Prepare detailed cost estimates using various MDOT software programs.
- Follow the Bay Region scoping process to review potential road and bridge projects, scope and estimate quantities for programming, and gather field pick up information.
- Attend scope verification, plan reviews, Final Project Coordination (FPC) meetings, and incorporate findings in the plans.
- Assist in the review of partially completed plans of other department staff, local agencies, and consultants for completeness and adherence to current standards, specifications, and methods.
- Participate in post construction reviews to evaluate the projects and note suggestions for future projects. Assist construction personnel with questions related to design plans.
- Participate in pre-construction meetings to explain special design features to contractors.
- Prepare preliminary and final (ROW) plans.
- Prepare information and exhibits for public review, hearings, or informational meetings.
- Review Planisware networks and maintain project schedule.
- Assemble design package for Letting.

Duty 3

General Summary:

Percentage: 10

Assist in the oversight of traffic operations for construction projects.

Individual tasks related to the duty:

- Assist in the management of all aspects involved in the delivery of contractor and MDOT construction projects.
- Recommend changes to the plans to fit field conditions.

- Assist with staff assignments to successfully complete inspection and survey requirements.
- Assist with preconstruction meetings.
- Interpret the intent of project documents.
- Attend required meetings with private citizens, utility companies, local officials, representatives from other MDOT divisions, representatives from other state departments, and FHWA officials.
- Coordinate local government project administration and project reviews.
- Assist with public construction notifications.
- Complete work zone compliance reviews as required.
- Work with field staff to resolve construction traffic issues.

Duty 4

General Summary:

Percentage: 5

Provide technical support and recommendations for permits for MDOT construction projects that involve traffic and safety implications. Recommend approval/denial of commercial and residential driveway applications, drainage requests, and other permit related activity. This duty requires possession of a valid driver's license to meet with various groups regarding ongoing projects.

Individual tasks related to the duty:

- Respond to customer requests for use of MDOT ROW utilizing standards, guidelines, and judgement. Review and recommend approval/disapproval of commercial and residential driveway applications as related to drainage, traffic and safety, design, and construction concerns.
- Assist in the coordination of needed utility relocations with utility companies.
- Ensure uniformity in driveway design and approvals, as well as other permit applications, as it relates to the safety and integrity of MDOT ROW.
- Review ROW permit applications for traffic concerns.
- Recommend solutions to provide for the safe and efficient transportation of people and goods.
- Meet with consultants, developers, local governmental agencies, and private individuals regarding access, geometrics, and traffic control along state trunk lines.

Duty 5

General Summary:

Percentage: 5

Attend and/or assist in facilitating project related meetings, public meetings, business team meetings, trainings, and conferences.

Individual tasks related to the duty:

- Participate in plan review meetings for proposed projects for input of safety related work items. This includes writing special provisions, designing detour routes, and developing rural and urban plans.
- Attend traffic safety committee meetings and represent MDOT in meetings of municipal planning organizations, public open houses, public hearings, and local government agencies.

Duty 6

General Summary:

Percentage: 5

Build, strengthen and maintain TSC external customer base.

Individual tasks related to the duty:

- Respond to questions from the general public, developers, business organizations, village and city officials, Metropolitan Planning Organization's (MPO's), and rural task forces.
- Continually strive to improve the MDOT image. Continue to help develop a partnering relationship with external customers.
- Provide training and mentoring to public and private customers on the design process and procedures to complete a road project.
- Attend traffic safety committee meetings and represent MDOT in meetings of MPOs, public hearings, and local government agencies.

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 the Department guidelines, policies, or procedures. Whenever possible, identify, recommend, and implement improvements in the work methods and materials utilized in the position.

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.
- Changes in previously approved project scope, cost, or schedules.
- Correspondence to or from elected officials.

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 uneven terrain including up and down roadway slopes during grade inspections. Moving up to 20 pounds. Moving in and out of heavy traffic while performing pavement markings and sign locations for new placement. Climbing under bridges, over water, wading in water to probe footings, and continually working near heavy traffic occurs almost daily. Moving around in an office setting including remaining in a stationary position at a computer for long periods of time. Occasional overnight travel to training classes may be required. This position requires possession of a valid driver's license. Position may require availability outside normal working hours based on operational needs.

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):

- | | |
|---|--|
| <input type="checkbox"/> Complete and sign service ratings. | <input type="checkbox"/> Assign work. |
| <input type="checkbox"/> Provide formal written counseling. | <input type="checkbox"/> Approve work. |
| <input type="checkbox"/> Approve leave requests. | <input type="checkbox"/> Review work. |
| <input type="checkbox"/> Approve time and attendance. | <input type="checkbox"/> Provide guidance on work methods. |
| <input type="checkbox"/> Orally reprimand. | <input type="checkbox"/> 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 is a multidisciplinary position specializing in the areas of traffic and safety, work zone safety and mobility, and Safety Program Coordination. This position utilizes Region and Transportation Service Center (TSC) staff, contract agencies, direct maintenance crews, contractors, the Federal Highway Administration (FHWA), and other resources to accomplish safe and efficient movement of people and goods on the state trunkline system within the area of the TSC. This position provides traffic and safety support to the TSC for region wide uniformity and consistency, as well as supporting construction administration, design plan preparation, maintenance support, and utility and permit right-of-way (ROW) review. This position requires meeting tight deadlines and resolving issues to ensure the successful implementation and operation of Michigan Department of Transportation (MDOT) services and products.

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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 Mt. Pleasant TSC covers a five-county area which provides customer service to the public, contract counties, and municipalities. This position coordinates and administers the TSC processes for system operations consisting of operations, traffic and safety engineering and analysis, scoping and programming, maintenance, construction administration, design plan preparation, utility coordination, and permit right-of-way review.

This position is a key member of the TSC Operations area. This area is responsible for all customer internal and external contact and communication in the areas of Traffic & Safety, Maintenance, Program Project Design, Traffic Incident Management, Utilities Coordination, and ROW Permits.

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 is preferred.

EXPERIENCE:

Transportation Engineer 9

No specific type or amount is required.

Transportation Engineer 10

One year of professional engineering experience involved in transportation systems and programs equivalent to a Transportation Engineer 9.

Transportation Engineer P11

Two years of professional engineering experience involved in transportation systems and programs equivalent to a Transportation Engineer, including one year equivalent to a Transportation Engineer 10.

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:

- Survey procedures.
- Record keeping.
- Computer functions and various software (e.g. Microsoft Word, Microsoft Excel, etc.).

Ability to:

- Communicate effectively.
- Work as a team member.
- Make presentations before groups.
- Meet and interact effectively with others.
- Use initiative in carrying out assignments while working independently.
- Apply engineering principles to construction and design problems.
- Successful and continuing customer contact is a requirement for this position.

**CERTIFICATES, LICENSES,
REGISTRATIONS:**

- Possession of a valid driver's license is required.

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