

**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.

<b>2. Employee's Name (Last, First, M.I.)</b>	<b>8. Department/Agency</b> TRANSPORTATION CENTRAL OFFICE
<b>3. Employee Identification Number</b>	<b>9. Bureau (Institution, Board, or Commission)</b> Highway Operations
<b>4. Civil Service Position Code Description</b> TRANSPORTATION ENGINEER-A	<b>10. Division</b> Bay Region
<b>5. Working Title (What the agency calls the position)</b> Traffic & Safety Engineer	<b>11. Section</b> Mt. Pleasant TSC
<b>6. Name and Position Code Description of Direct Supervisor</b> ATKINSON, BRIAN E; ENGINEER MANAGER LICENSED-3	<b>12. Unit</b> Operations
<b>7. Name and Position Code Description of Second Level Supervisor</b> HOFWEBER, JACK M; ENGINEER MANAGER LICENSED-3	<b>13. Work Location (City and Address)/Hours of Work</b> 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 position functions as a senior worker to coordinate and administer the Transportation Service Center (TSC) business 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. As a senior worker, maintain alignment with the other TSCs, Regions, Lansing, and the Federal Highway Administration (FHWA). This position is responsible for meeting complex deadlines, meeting MDOT customer needs, assisting in the resolution of complex issues to ensure successful process implementation, monitoring budgets, and ensuring continued operations for delivery of Michigan Department of Transportation (MDOT) services and products. The duties also include optimizing TSC efforts for mobility, reliability, and accessibility, as well as participating in the Region Traffic & Safety and Operations Business Team. This position requires possession of a valid driver's license to perform field 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: 65**

Resolve complex traffic and safety issues within the TSC area. Utilize traffic engineering standards, guides, principles, techniques, and judgment to administer the safe operation and geometric design of highways and the installation of traffic control devices as their use is related to the safe and efficient transportation of people and goods. Lead and coordinate TSC efforts to optimize system operations by focusing on mobility, reliability, accessibility, and safety. Reduce user delay costs through actions to reduce and eliminate delays caused within work zones, by incidents, and inclement weather. Ensure alignment with Region and Statewide policies and guidelines. This duty requires possession of a valid driver's license to perform field reviews.

**Individual tasks related to the duty:**

- Develop and coordinate maintaining traffic plans for multi-million-dollar construction and maintenance projects within the TSC area (i.e. situations where traffic is maintained on temporary roads, construction staging on rehabilitation projects where the total road is completely reconstructed involving more detours and requires more coordination with local government officials or law enforcement agencies).
- Conduct resurfacing, restoration, and rehabilitation (3R)/new construction and reconstruction (4R) reviews for all projects in the Mt. Pleasant TSC area.
- Conduct design exceptions/safety reviews for all projects in the Mt. Pleasant TSC area.
- Oversee a team of engineers and technicians in safety zone reviews to verify adherence to standards on state and local government projects.
- Coordinate and provide the Transportation Management Plan (TMP) development and execution for all TSC projects including those for the Call for Projects.
- Coordinate with other TSC and Region staff, as well as construction, maintenance, and permitted work activities to ensure mobility.
- Perform Delay Analysis on all projects in the Mt. Pleasant TSC area. This includes all potential projects, permit projects, and maintenance projects.
- Perform field reviews of areas to be affected by construction and determine methods of handling traffic during construction to minimize adverse impacts on traffic.
- Prepare correspondence relating to recommended design and/or traffic control.
- Assist Operations Engineer on special traffic problems which arise during active projects.
- Develop plans or elimination of roadside hazards as part of safety upgrading program on state trunklines.
- Perform field reviews and take measurements, collect traffic volume data, turning movements, delays, work zone reviews, etc.
- Review and analyze traffic data and perform calculations. Communicate results of studies to other MDOT divisions, local governmental agencies, law enforcement officials, or private individuals.
- Participate in plan reviews for proposed projects for input of safety related work items. This includes writing special provisions, designing detour routes, and developing rural and urban plans.
- Monitor and make recommendations to improve freight and passenger travel time.
- Participate in Intelligent Transportation System (ITS) development, implementation, and management.
- Help the Operations Engineer coordinate and improve incident and emergency management efforts.
- Full engagement is made with local government agencies, customers, and stakeholders relating to traffic operations. Lead and coordinate the results of road safety audits.
- Participate in crash data trend analysis to determine potential roadway fixes and the year it can be accomplished. Work with Central Office to determine the time of return for potential traffic and safety funding. Submit traffic and safety funding requests on behalf of the TSC. Scope and submit operations and safety template projects.
- Participate in the Region Traffic & Safety and Operations Business Teams.

**Duty 2**

**General Summary:**

**Percentage: 10**

Prepare design plans and review plans from department staff, local agencies, and consultants for completeness and adherence to standards. Provide program information and scoping for future projects. Resolve complex design issues. Assist construction personnel with questions. Resolve technology issues associated to computer hardware and software.

**Individual tasks related to the duty:**

- Prepare preliminary and final design plans and analyze contract documents in order to develop contract proposal, including special provisions, for project that include, but are not limited to, all portions of a reconstruction project such as storm sewers, major earth work, alignment relocation, or road construction, resurfacing projects, roads, bridges, drainage structures, water mains and other miscellaneous related facilities.
- Provide 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 Resident/Project Engineer when the plans do not fit the existing environment. Recommend and coordinate changes to the project design with the project manager and design team and implement necessary changes to the plans.

- Represent the department at meetings with consultants, other State for Federal Agencies, and the general public.
- Following the Bay Region scoping process, review potential road and bridge projects, scope and estimate quantities for programming, and gather field pick up information.
- Attend plan reviews and Final Project Coordination (FPC) and incorporate findings in the plans.
- Set up and apply for various departmental grants.
- Review partially completed plans for other department staff, local agencies, and consultants for completeness and adherence to current standards, specifications, and methods.
- Recommend changes and incorporate experimental and new techniques based on sound engineering judgment.
- Participate in pre-letting briefings and pre-construction meetings to explain special design features to contractors.
- Participate in post-construction reviews to evaluate projects and note suggestions for future projects.
- Assist construction personnel with questions related to design plans.

### Duty 3

#### General Summary:

Percentage: 10

Oversee traffic operations of complex construction projects. Responsible for the engineering analysis of highway and bridge projects to fit field conditions to the plans. Interpret the intent of the project documents and recommend changes. Responsible for gathering written work orders and changes to contract quantities. Oversee a team of engineers and technicians in conducting construction reviews, both on state and local government projects.

#### Individual tasks related to the duty:

- Assist in the management of all aspects involved in the delivery of contractor/MDOT construction contracts.
- Recommend to the engineer of record, answers concerning maintaining traffic, adjustments to the contract and changes in work items.
- Participate on region-wide team for state and local government projects.
- Work with field staff to resolve construction traffic issues.

### Duty 4

#### General Summary:

Percentage: 5

Coordinate utility relocations involving gas, electric, phone, cable, and water system adjustments needed for MDOT construction projects with affected public utilities. Approve/disapprove commercial and residential driveway applications, drainage requests, and all other permit activity.

#### Individual tasks related to the duty:

- Utilize standards, guidelines, and judgment to Respond to customer requests for usage of MDOT right-of-way (ROW) utilizing standards, guidelines, and judgement.
- Coordinate with the TSC Utilities and Permits Engineer to determine the need for, schedule, and conduct utility relocation meetings. Review, interpret, and approve or deny commercial and residential driveway applications as related to drainage, traffic and safety, design, and construction concerns.
- Ensure uniformity in utility relocation needs for future construction projects and utilize company request for usage of MDOT ROW.

### Duty 5

#### General Summary:

Percentage: 5

Attend and/or facilitate 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.
- Meet with consultants, developers, local governmental agencies, and private individuals regarding access, geometrics, and traffic control along state trunk lines.
- 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 and other duties as assigned.

#### Individual tasks related to the duty:

- Respond to questions from the general public, business organizations, village and city managers, Metropolitan Planning Organization's (MPO's) and rural task forces.
- Jointly resolve transportation issues.
- Document the creation of a partnering relationship with external customers.
- Proactively meet the operational needs of the external customer.
- 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.**

This position makes decisions as to the means and methods to collect facts and analyze and present data to improve overall highway operations. Also, decisions that involve standard practices, procedures, and policies applying engineering principles and practices consistent with MDOT, FHWA, and American Association of State Highway and Transportation Officials (AASHTO) standard and guidelines. This position's decisions affect and impact the TSCs, Region, and Statewide direction toward an operationally focused department. Decisions also 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, and procedures.
- When existing policy is unclear.
- When changes in policy are required.
- Changes in previously approved project scope, cost, or schedules.
- Conflicts in engineering standards, practices, or legal requirements.
- Correspondence to or from elected officials.
- Issues that may have Statewide impacts or could be precedent setting.
- When a decision may be required from the executive level, personnel matters, or assistance in mitigating controversies.

**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 on foot 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 position functions as a senior worker to coordinate and administer the Transportation Service Center (TSC) business 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. As a senior worker, maintain alignment with the other TSCs, Regions, Lansing, and the Federal Highway Administration (FHWA). This position is responsible for meeting complex deadlines, meeting MDOT customer needs, assisting in the resolution of complex issues to ensure successful process implementation, monitoring budgets, and ensuring continued operations for delivery of Michigan Department of Transportation (MDOT) services and products. The duties also include optimizing TSC efforts for mobility, reliability, and accessibility, as well as participating in the Region Traffic & Safety and Operations Business Team. This position requires possession of a valid driver's license to perform field 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 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 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:**

Requirements of the design, construction, and maintenance of transportation projects  
Traffic engineering practices and procedures  
Ongoing customer service efforts

**Ability to:**

Read, interpret, and prepare engineering plans, specifications, and technical reports  
Organize and prioritize duties  
Communicate effectively  
Work with a team  
Use and instruct others in the usage of computer programs used in road design  
Organize, evaluate, and present information effectively  
Negotiate favorable solutions to complex issues

**CERTIFICATES, LICENSES,  
REGISTRATIONS:**

- Possession of a valid driver's license is required.
- Possession of a registered professional engineering license as required by the State of Michigan is 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.

None

***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