

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

Position Code 1. TRAENGAE84R
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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-A	10. Division Grand Region
5. Working Title (What the agency calls the position) Muskegon TSC Staff Engineer	11. Section Muskegon TSC
6. Name and Position Code Description of Direct Supervisor FREDRICKSON, MARC P; ENGINEER MANAGER LICENSED-4	12. Unit Administration
7. Name and Position Code Description of Second Level Supervisor KIND, ERICK J; SENIOR POLICY EXECUTIVE	13. Work Location (City and Address)/Hours of Work 2225 Olthoff Dr., Muskegon, MI 49444 / M-F, 7:30am-4:30pm (hours may vary)
14. General Summary of Function/Purpose of Position This position functions as the lead in Development for the design of Capital Preventative Maintenance (CPM), bridge, and maintenance projects for the Muskegon Transportation Service Center (MTSC), as well as other duties in the areas of construction administration, traffic and safety engineering, and utility and permit right of way (ROW) review.	

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: 50

Administer CPM and bridge and maintenance projects in their entirety including development/design for the MTSC as a technical resource. Design and prepare plans and analyze contract documents to develop contract proposal, including special provisions, for projects that include all portions of a reconstruct project such as storm sewers, major earthwork, alignment relocation, or road construction as well as resurfacing projects.

Individual tasks related to the duty:

- Serve as the project leader/coordinator of CPM, bridge, and maintenance development projects. This includes developing a bidding package that contains design typicals and plan sheets, maintaining traffic plans, construction schedule and sequencing, material specifications, project coordination clauses, and other required documents for a complete bid proposal.
- Lead meetings, coordinate with Transportation Service Center (TSC), Region, and Lansing MDOT staff, and engage with the public and community leaders.
- Provide design and analysis of plan specifications, engineering reviews, and constructability issues 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, etc.) to design and coordinate changes to MDOT's infrastructure that meet federal and state policies.
- 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.

Duty 2

General Summary:

Percentage: 20

Define, monitor, and control the scope, cost, and schedule for all assigned projects.

Individual tasks related to the duty:

- Utilize Department information management systems to monitor, track, and change project cost schedules in systems such as Planisware and JobNet.
- During the conceptual and scoping phases of project, work with the TSC, Region, and Central Office staff including other lead Project and Contracts Engineers, Projects and Contracts Managers, System Managers, and functional area specialists to apply engineering principles and practices to recommend project scope, pavement fix, alternatives, costs, and schedules.
- Coordinate and maintain the flow of information and make recommendations relative to the project scope, cost, and schedule.
- Develop and implement quality assurance/quality control (QC/QA) measures related to project deliverables to ensure conformance with MDOT, Federal Highway Administration (FHWA), and AASHTO standards and guidelines.
- Assist the Projects and Contracts Engineer with project reviews, design, and call for projects processes.

Duty 3

General Summary:

Percentage: 15

Provide resolution of traffic and safety issues and permit applications within the MTSC area utilizing traffic engineering standards, guides, principles, techniques, and judgement.

Individual tasks related to the duty:

- Develop plans for elimination of roadside hazards as part of safety upgrading program on state trunk lines.
- Perform crash data trend analysis to categorize to determine potential roadway fixes and the year it can be accomplished. Perform analysis to determine the time of return for potential traffic and safety funding. Scope and submit operations and safety template projects.
- Review and analyze traffic data and perform calculations on volumes, signals, and speeds.
- Perform field reviews of areas to be affected by construction and determine methods of handling traffic during construction to minimize adverse impacts on traffic.
- Assist other MTSC staff engineers on special traffic problems (e.g., unique pedestrian crossing scenarios, signal timing coordination issues, unique pavement marking applications, etc.) which arise during active projects.
- Perform field reviews and take measurements, collect traffic volume data, turning movements, delays, etc. Analyze findings and make recommendations as needed.

- Review ROW permit applications for traffic concerns. Recommend solutions to provide for the safe and efficient transportation of people and goods.
- Utilize standards, guidelines, and judgment to respond to customer requests for usage of MDOT ROW.
- In collaboration with the Permits Engineer, review, interpret, and approve/deny 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.
- Provide traffic and safety guidance/expertise for the MTSC including recommending solutions to traffic concerns and questions.

Duty 4

General Summary:

Percentage: 10

In coordination with the Construction Manager, assist in the administration of CPM and bridge and maintenance construction contracts by providing guidance, performance measurement of assigned tasks, and quality control review and direction.

Individual tasks related to the duty:

- Arrange for pre-construction meetings and oversee the meeting for CPM jobs that this position is design project manager for as assigned by management.
- Review requests from contractors for changes, extras, and adjustments to contracts. Provide recommendations to the construction manager.
- Prepare written work orders, authorizations, and issuing instruction to contractors for extra work needed on projects. Provide for the analysis and engineering justification of same.
- Oversee the preparation of project documentation, records, and files.
- Facilitate the timeliness of project paperwork.
- Manage project construction engineering budgets and construction budgets. When projects exceed budget, meet with Construction Manager to discuss potential next steps.
- Arrange and assist in project progress meetings.
- Perform constructability reviews which occur at any time during design to ensure the design plans are constructible and address field issues accurately. After construction, provide comments to design for corrections and further discussions.

Duty 5

General Summary:

Percentage: 5

Implement and administer improvements and other duties as assigned.

Individual tasks related to the duty:

- Receive, resolve, and respond to customer concerns by making decisions as to the resolution of customer claims, complaints, and applications per organizational policy in the areas of CPM and bridge and maintenance. Oversee, guide, and instruct others in the resolution of customer concerns.
- Serve on regionwide and statewide teams to improve business processes.
- Work with the TSC construction area to coordinate/clarify work from the development phase.
- 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.

Assist TSC Manager and construction staff in the determination of CPM project scoping to include pavement fix and project schedule. These are typically decisions that involve the application of standard design/maintenance practice of procedures for CPM and bridge projects. These decisions affect the design and construction of a project, project management, and the requirements needed to complete projects on time and within budget. If projects are over budget, arrange a meeting with the Construction Engineer to discuss and come up with possible solutions. Ensure all decisions are consistent with MDOT, FHWA, and AASHTO standards and guidelines.

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

- 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

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.

- Field work (site reviews) and exposures to high traffic and exposure to the natural elements (e.g., traversing various types of terrain and active construction sites).
- May require extended periods of time working on a computer.
- May require travel to meetings outside the normal working hours.
- Heavy workloads with specific deadlines.
- 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"/> N | Complete and sign service ratings. | <input type="checkbox"/> N | Assign work. |
| <input type="checkbox"/> N | Provide formal written counseling. | <input type="checkbox"/> N | Approve work. |
| <input type="checkbox"/> N | Approve leave requests. | <input type="checkbox"/> N | Review work. |
| <input type="checkbox"/> N | Approve time and attendance. | <input type="checkbox"/> N | Provide guidance on work methods. |
| <input type="checkbox"/> N | Orally reprimand. | <input type="checkbox"/> N | 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 the lead in Development for the design of CPM, bridge, and maintenance projects for the MTSC, as well as other duties in the areas of construction administration, traffic and safety engineering, and utility and permit ROW review.

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?

Coordinate, track, and report on CPM and bridge and maintenance projects in the development process for the MTSC area. Perform QC reviews on the design/scoping packages, perform program scoping and budget tracking, and assist with project selection in the areas of CPM and bridge and maintenance for the MTSC area. Assist the Projects and Contracts Engineer with project reviews, design, and call for projects processes; Operations Engineer with traffic and safety issues and permit reviews; and Construction Engineer with administration and oversight on CPM and bridge and maintenance projects.

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.

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:

- The requirements of the design, construction, or maintenance of highway pavements.
- Engineering office practices and procedures.

Skill in:

- Organization.
- Team building.
- Facilitation.
- Leadership.
- Communication.

Ability to:

- Read, interpret, and prepare engineering plans, specifications, and technical reports.
- Use and instruct others in the use of computer programs used in road design.
- Organize, evaluate, and present information effectively.
- Negotiate favorable solutions to complex issues.
- Provide exceptional customer service.
- Communicate both orally and in writing.

**CERTIFICATES, LICENSES,
REGISTRATIONS:**

N/A

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.

KELSEA COLE

3/8/2024

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