

Position Code 1. TRAENGA

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

This position description serves as the official classification document of record for this position. Please complete this form 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
3.Employee Identification Number	9.Bureau (Institution, Board, or Commission)
	Bureau of Field Services (BFS)
4.Civil Service Position Code Description	10.Division
Transportation Engineer - A (12)	Transportation Systems Management & Operations (TSMO)
5.Working Title (What the agency calls the position)	11.Section
Traffic Signal Design Engineer	ITS Operations
6.Name and Position Code Description of Direct Supervisor	12.Unit
Erik Smalley, Engineer Manager Lic - 2 (13)	Signals Operations / Signal Design
7.Name and Position Code Description of Second Level Supervisor	13.Work Location (City and Address)/Hours of Work
Hilary Owen, Engineer Manager Lic - 4 (15)	6333 Old Lansing Road, Lansing, MI 48917 7:00 a.m. - 4:00 p.m.; Monday – Friday *Remote Work and flexible work schedule availability with supervisor approval.

14. General Summary of Function/Purpose of Position

Function as a senior transportation engineer, completing or overseeing a variety of assignments in one or more specialized areas of traffic engineering involving traffic signals. The senior worker is responsible for updating specifications and getting them approved. The senior worker will review pre-qualification submittals to determine if a consultant is qualified to perform signal work and will train and guide employees in the work unit. Finally, the senior worker will prepare and coordinate engineering reports and studies for implementation of signal optimization projects and will explain the department's policy regarding the use of electronic control devices at meetings.

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 of Duty 1 % of Time 45

Review traffic signal design plans prepared by consultant or in-house personnel for accuracy and completeness. Prepare and compile all documents including plan and proposal information for construction bidding. This includes providing assistance and guidance to experienced level engineers on large, complex or sensitive projects. Assist in the process of updating specifications for approval.

Individual tasks related to the duty.

- 1. Review traffic signal plans
- 2. Prepare and compile bid packages for traffic signal installations.
- 3. Provide assistance and guidance to journey level engineers on large complex and sensitive projects.
- 4. Assist in the process of updating specifications and getting them approved.
- 5. Take responsibility for a specific geographical area within the state.

Duty 2

General Summary of Duty 2 % of Time 20

Review base, preliminary, and Omission and Errors Check (OEC) plans prepared by the department or consultants. Review congestion and access management studies. Review consultant pre-qualification applications to determine if consultant is qualified to perform signal work.

Individual tasks related to the duty.

- 1. Prepare engineering calculations, justification reports, geometric drawings, and analysis of the adequacy of proposed designs.
- 2. Develop, compare, and justify alternatives for major improve and expand projects.
- 3. Reduce the impact of major development on trunkline traffic by reviewing and developing recommendations regarding intersection sight distance, driveway spacing, traffic signals, the need for passing flares, or left or right turn lanes and alignments.
- 4. Take responsibility for specific geographic areas within the state.

Duty 3

General Summary of Duty 3

% of Time 20

Represent the unit at meetings within the department or with representatives of local governmental units and interested citizens to explain the department's policy regarding the use of electronic control devices. Prepare correspondence to interested citizens and governmental officials in response to requests concerning operational issues. The meetings may be politically sensitive in nature. The consequences of such meetings may be adverse publicity to MDOT and/or possible litigation against the Department.

Individual tasks related to the duty.

- 1. Represent the unit at meetings with representatives of local governmental units and citizens to resolve proposed department action.
- 2. Prepare correspondence to interested citizens and governmental officials.
- 3. Provide assistance to the entry/experienced level engineers at public meetings in explaining or clarifying policy information or the department's position on sensitive or critical issues.
- 4. Utilize teaming to improve customer service.

Duty 4

General Summary of Duty 4

% of Time 10

Prepare and oversee preparation of survey requests. Training and guiding employees in the work unit in the professional and technical aspects of the assigned work.

Individual tasks related to the duty.

- 1. Review preparation of engineering reports concerning operational changes.
- 2. Train new employees in the subunit in the technical aspects of the assigned work.
- 3. Take responsibility for a specific geographic area within the state.

Duty 5

General Summary of Duty 5 **% of Time 5** _____

Perform and oversee preparation and implementation of computer analysis programs necessary for designing improved traffic signal system coordination and optimization. Prepare and coordinate engineering reports and studies for implementation of signal system optimization projects. Assist Traffic signal design manager with JobNet job creation and Phase Initiator duties. Assist Traffic signal design manager with JobNet job creation and Phase Initiator duties.

Individual tasks related to the duty.

- Selecting appropriate Funding sources using JobNet.
- Utilizing financial programs to fund programs.

Duty 6

General Summary of Duty 6 **% of Time** _____

Individual tasks related to the duty.

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

Facilitate resolution of traffic signal design issues.

Select appropriate method for implementation of traffic control device replacement and/or upgrade.

Select appropriate funding alternatives.

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

This position is provided administrative supervision as follows:

1. Explanation of policies, procedures, guidelines and practices.
2. Short and long-term goals.

Receives minimal supervision on day to day activities.

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

Most of the work involves sitting at a desk or computer terminal for an extended period of time with intense concentration required. Must be able to travel statewide. Must be able to perform outdoor work under heavy traffic conditions and adverse weather conditions. During this time, walking over rough terrain and standing are activities that occur frequently.

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. (If more than 10, list only classification titles and the number of employees in each classification.)

<u>NAME</u>	<u>CLASS TITLE</u>	<u>NAME</u>	<u>CLASS TITLE</u>

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?

See item # 15.

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

This position functions at the Senior Transportation Engineer level. The employee is satisfactorily performing the duties of the senior level Transportation Engineer in accordance with the approved senior standards. The education and experience requirements to be reclassified to the Transportation Engineer have been met.

- Work description 1 is in duty 1
- Work description 2 is in duty 2
- Work description 5 is in duty 3
- Work description 3 is in duty 4
- Work description 4 is in duty 5

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

This unit establishes the design and standard application for installation and operation of traffic control devices and traffic signal systems on the state trunk line system. This includes, development of standard design guides and specifications, as well as preparation of correspondence, reports, program evaluations, contract documents, work authorizations.

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

EDUCATION:

Bachelor of Science degree in engineering.

EXPERIENCE:

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.

KNOWLEDGE, SKILLS, AND ABILITIES:

Ability to write clear and concise letters and reports; effective verbal communication skills are necessary. Knowledge of traffic engineering principles and practices applied to operations, geometrics, sign and signal design and crash analysis. Knowledge of the use and applications of computer models.

CERTIFICATES, LICENSES, REGISTRATIONS:

Valid Michigan driver's license.

In accordance with Guidance Document 10146, this classification has been identified as having to disclose any interest or conflicts with regards to the duties/responsibilities of the position.

NOTE: Civil Service approval of this position does not constitute agreement with or acceptance of the desirable qualifications for 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's Signature

Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

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

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

Appointing Authority Signature

Date

TO BE FILLED OUT BY EMPLOYEE

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's Signature

Date

NOTE: Make a copy of this form for your records.