

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

Position Code 1. TRNSTCHEA27R

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 TECHNICIAN-E	10. Division University Region
5. Working Title (What the agency calls the position) Construction Technician	11. Section Jackson TSC
6. Name and Position Code Description of Direct Supervisor FOSSITT, JASON S; ENGINEER MANAGER LICENSED-3	12. Unit Construction
7. Name and Position Code Description of Second Level Supervisor WALLACE, KELBY M; ENGINEER MANAGER LICENSED-4	13. Work Location (City and Address)/Hours of Work 2750 N. Elm, Jackson, MI 49201 / 7:00-4:30 Mon-Fri (Hours may vary)

14. General Summary of Function/Purpose of Position

This position participates in and oversees construction and quality control inspection activities to ensure that highways, bridges, and allied transportation facilities are constructed to the plans and specifications contained in contractual construction agreements using the current construction documentation system and eConstruction delivery methods. Reviews and documents project records for adherence to standards. Performs engineering technical support activities, including materials testing, inspection, surveying and other related office tech functions.

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

Performs construction and quality control inspection activities designed to ensure that highways, bridges, and allied transportation facilities are constructed to the plans and specifications contained in contractual construction agreements.

Individual tasks related to the duty:

- Performs inspection duties on construction projects to maintain contract compliance and adherence of standards and specifications. Duties include but are not limited to inspection of subgrade, culverts, sewers and drainage structures, aggregate base courses, hot mix asphalt and concrete pavements, bridges, turf restoration and landscaping, signing, pavement markings, soil erosion and sedimentation control and temporary traffic control inspection.
- Inspects construction projects to ensure that work is completed per specification, including sampling & material testing, ensures proper certification of materials, maintains records, prepares daily reports & project progress reports.
- Documents and maintains detailed project records of construction progress/activities, including material usage and test results, for the purposes of preparing Inspector Daily Reports (IDR's) within FieldManager/FieldBook and ProjectWise or the latest eConstruction documentation systems.
- Records work completed by the contractor using the latest computer technology, mobile devices, testing equipment and digital mapping tools (Total Station and GPS).
- Processes collected digital data for measurement, payment and as-built referencing purposes.
- Performs calculations and computations and records data collected in the field using electronic forms.
- Confers with contractors, public utilities, local agencies, other MDOT offices, and consultants for coordination of various construction project activities and conflict resolution.

Duty 2

General Summary:

Percentage: 30

Performs engineering technical support activities, including materials testing, inspection, and compliance. Ensures material acceptance activities are within standards and specifications. Assists with project documentation and file maintenance. Ensures right of way permit activities are performed and are completed consistently within the TSC, Region, and Statewide.

Individual tasks related to the duty:

- Performs data collection, analysis, tabulation, and application of engineering data within specific work situations.
- Performs material sampling and laboratory and/or field testing of aggregates, hot mix asphalt, concrete, geotextiles, etc.
- Performs aggregate gradation testing, density testing, and concrete testing.
- Performs Independent Assurance Testing relating to all testing on federal aid projects.
- Completes required documentation for material inspection and compliance with specifications.
- Interprets, complies with and enforces applicable standards, technical literature, regulations, plans, specifications and special provisions for material sampling, testing, acceptance and certification.
- Maintains sets of drawings, test reports, work changes, vouchers, & daily reports for projects. Maintains files.
- Performs select office technician functions such as review of daily reports, plans, proposals, specifications, manuals and contract documents. Computes quantities, marks-up as-built plans, assists with set up and maintenance of the project file, performs Disadvantaged Business Enterprise (DBE) checks and wage rate interviews.
- Trains seasonal and other employees as necessary.

Duty 3

General Summary:

Percentage: 20

Performs other miscellaneous field and office tasks related to design, permits, utility coordination, traffic and maintenance of transportation systems.

Individual tasks related to the duty:

- Assists in the scoping of highway and bridge projects. Reviews design plans and attends project design meetings to provide input from a construction perspective.
- Coordinates and inspects permits from public and private entities that are located within the limits of assigned construction projects.
- Assists in setting up of maintaining traffic plans and special provisions.
- Assists in inspection and coordination of maintenance work by the counties and private contractors.
- Operates Global Position System (GPS) and Electronic Distance Meter (EDM) equipment to take and check measurements.
- Performs freehand sketching, lettering, pencil layouts, and ink work on engineering charts & graphs.
- All 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.

Routine, non-complex technical decisions necessary to carry out the mission of the department.

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

When there is a deviation from an established procedure or when new situations arise which have not been dealt with before. Those which result in substantial cost. Those which alter work items schedules, staging, or have effect on third parties.

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.

May be required to work extended hours (standard work schedule 8 hours per day/5 days per week) and may work nights or other altered shift hours. Requires the ability to work in confined spaces, traverse on irregular & steep terrain and/or high structures. Requires ability to safely and properly use hazardous chemicals (storage of containers, applications requiring safety equipment respirators, hearing & eye protection, rubber gloves & protective clothing). Exposure to weather, traffic & construction hazards, noise, dirt, concrete & bit materials & other conditions associated with heavy construction. Requires ability to drive a motor vehicle and overnight travel may be required. Ability to transport items weighing up to 50 lbs. 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):

- | | | | |
|---|------------------------------------|---|-----------------------------------|
| N | Complete and sign service ratings. | N | Assign work. |
| N | Provide formal written counseling. | N | Approve work. |
| N | Approve leave requests. | N | Review work. |
| N | Approve time and attendance. | N | Provide guidance on work methods. |
| N | Orally reprimand. | 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 participates in and oversees construction and quality control inspection activities to ensure that highways, bridges, and allied transportation facilities are constructed to the plans and specifications contained in contractual construction agreements using the current construction documentation system and eConstruction delivery methods. Reviews and documents project records for adherence to standards. Performs engineering technical support activities, including materials testing, inspection, surveying and other related office tech functions.

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

Updating PD as industry certificates were left off.

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

Provides customer service to the public by providing quality assurance for highway, bridge and associated transportation facility construction projects and permits. Ensures the contractor is fulfilling all contract requirements.

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

EDUCATION:

Possession of an Associate's degree in concrete technology, civil technology, construction technology, surveying technology, construction management, mathematics, or computer science.

EXPERIENCE:

Transportation Technician 8

No specific type or amount is required.

Transportation Technician 9

One year of experience equivalent to a Transportation Technician 8.

Transportation Technician E10

Two years of experience equivalent to a Transportation Technician, including one year equivalent to a Transportation Technician 9.

Alternate Education and Experience**Transportation Technician 8 - 12**

Possession of a Bachelor's degree or higher in an Applied Science or Science with 16 semester hours (24 term) credits in job specific or related course work qualifies for the Transportation Technician E10 level.

OR

Completion of 60 semester (90 term) credits including 24 semester (36 term) credits in any combination of course work in the following areas: structures, materials, soils, hydrology, surveying, design, drafting, bituminous, concrete, aggregate, chemistry, physics, geology, environmental science, computer science, highway or traffic technology, construction management, engineering, or mathematics may be substituted for the associate's degree.

OR

Four years of technician level experience consisting of quality control inspections, drafting, materials and testing, surveying, or traffic may be substituted for the Associate's degree.

OR

Current certification in bituminous (hot mix), concrete, density testing, or aggregate gradation and one year of technician level field experience may be substituted for the associate's degree.

OR

Current certification in bituminous (hot mix), concrete, density testing, or aggregate gradation and three years experience equivalent to a Transportation Maintenance Worker 9 may be substituted for the associate's degree.

OR

Current certification in bituminous (hot mix), concrete, density testing, or aggregate gradation and two years experience equivalent to an Engineering Assistant may be substituted for the associate's degree.

OR

Current certification in bituminous (hot mix), concrete, density testing, or aggregate gradation and completion of 16 semester (24 term) credits in any combination of course work in the following areas: structures, materials, soils, hydrology, surveying, design, drafting, bituminous, concrete, aggregate, chemistry, physics, geology, environmental science, computer science, highway or traffic technology, construction management, engineering, or mathematics may be substituted for the Associate's degree.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- Math
- Proper use of equipment
- Safety practices
- Terminology
- Computer input forms & proper formatting of data
- English/metric conversion factors

Skills:

- Use of testing equipment

Ability to:

- Compute areas/volumes
- Work on high structures (less than 40 feet)
- Operate equipment.
- Traverse on uneven terrain
- Remain in a stationary position for long periods of time
- Communicate effectively
- Maintain favorable public relations
- Use computer programs
- Transport equipment/materials
- Work under extreme weather & environmental conditions; conduct tests
- Read/interpret design/construction plans/specifications
- Conduct field investigations/prepare recommendations
- Maintain records
- Prepare reports
- Understand/carry out detailed, technical instructions
- Interpret design/construction plans/specifications
- Operate equipment

CERTIFICATES, LICENSES, REGISTRATIONS:

Possession of a valid driver's license is required.

Possession of concrete, density, aggregate, bituminous, radiation safety, storm water management-construction site, and/or soil erosion & sedimentation certifications or possession within 12 months of the date of hire into the position.

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