

Office of the Auditor General  
Preliminary Survey Summary

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**Selected Road and Bridge Construction  
Project Management Activities**  
Michigan Department of Transportation

May 2016

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**The auditor general shall conduct post audits of financial transactions and accounts of the state and of all branches, departments, offices, boards, commissions, agencies, authorities and institutions of the state established by this constitution or by law, and performance post audits thereof.**

*Article IV, Section 53 of the Michigan Constitution*

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# OAG

Office of the Auditor General

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**Doug A. Ringler, CPA, CIA**  
Auditor General

May 31, 2016

Mr. Todd Wyett, Chair  
State Transportation Commission  
and  
Kirk T. Steudle, PE, Director  
Michigan Department of Transportation  
Murray Van Wagoner Transportation Building  
Lansing, Michigan

Dear Mr. Wyett and Mr. Steudle:

I am pleased to provide this preliminary survey summary of Selected Road and Bridge Construction Project Management Activities, Michigan Department of Transportation. Because we did not identify significant concerns that would warrant the additional use of our audit resources, we have decided to terminate this performance audit.

We appreciate the courtesy and cooperation extended to us during our preliminary survey. If you have any questions, please call me or Laura J. Hirst, CPA, Deputy Auditor General.

Sincerely,

Doug Ringler  
Auditor General



# PRELIMINARY SURVEY SUMMARY

## SELECTED ROAD AND BRIDGE CONSTRUCTION PROJECT MANAGEMENT ACTIVITIES

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### RESULTS

Our preliminary survey did not identify significant concerns that would warrant the additional use of our audit resources to complete a performance audit. Therefore, we have terminated this project and did not conduct sufficient testing to conclude on the overall effectiveness and efficiency of the selected road and bridge construction project management activities.

### FACTORS IMPACTING AUDIT TERMINATION

- We reviewed 18 road and bridge construction project files and determined that the Michigan Department of Transportation (MDOT) maintained documentation to support that:
  - Inspectors completed inspector daily reports (IDRs) and senior technicians reviewed and approved the IDRs.
  - Contractors submitted weekly certified payrolls to MDOT.
  - Project engineers and contractors held preconstruction meetings.
  - Project engineers completed contractor and subcontractor performance evaluations.
  - Project billable activity, quantity and grade of construction materials used, and required tests of materials were completed and documented as required by MDOT procedures.
  - Contract modifications were adequately documented and properly approved.
  - Project engineers submitted final estimates for the 9 reviewed projects where construction had been completed.
- We examined final estimate reviews for 6 projects that required a review. We determined that each of the reviews were appropriately completed and signed by the review team leader indicating that the project engineer had corrected any noted deficiencies.
- We analyzed the contract amounts for 2,429 projects that MDOT closed between October 1, 2013 and February 22, 2016. We noted that MDOT's final project costs for the 2,429 projects exceeded the total original contracted amount by less than 1%. We also noted that final project

costs for 221 (9%) projects exceeded the original contracted amount by 10%.

- We traced overages to contract modification documentation for 4 of the 7 projects reported to the State Transportation Commission in January 2016 and determined that the overages were adequately supported and properly approved. MDOT reports to the Commission all projects that exceed 10% of the original estimated project cost and provides justification.
- We examined MDOT's estimating method for forecasting additional staffing needs for summertime monitoring of construction projects and compared MDOT's estimated need with actual staffing levels for 3 transportation service centers for fiscal year 2015. We noted that MDOT's estimates closely correlated to actual staffing levels.
- We verified that as of March 9, 2016, 22 (96%) of 23 MDOT construction engineers had received an MDOT certification indicating that their project documentation consistently supported conformance with project plans and the MDOT Standard Specifications for Construction, policies, and procedures.

## BACKGROUND

**Description:** Project management includes performing construction and quality assurance inspection activities designed to ensure that highways and bridges are constructed in accordance with the plans and specifications contained in contractual construction agreements. MDOT carries out numerous project management activities for construction projects including, but not limited to:

- On-site inspections.
- Reviews of on-site inspection documentation.
- Approvals for contract modifications.
- Final inspections.
- Final estimate reviews.

These activities are designed to help MDOT ensure that materials included in road and bridge construction projects are inspected and tested, meet applicable specifications, and are obtained from MDOT-approved suppliers. In addition, these activities help MDOT ensure that contractors are appropriately paid and that modifications to design plans are necessary, meet standards, and are properly approved. These activities also help MDOT ensure that the project was built to design plans and specifications and that pay items have been closed out and no longer have funds allocated to them.

**Construction Contract Costs:** MDOT began construction on 1,886 road and bridge projects between October 1, 2013 and February 29, 2016, with original contract amounts totaling \$2.4 billion.

**Employees:** During fiscal year 2015, 717 MDOT employees billed time to construction projects for project management activities including, but not limited to, inspecting and testing materials, verifying the quality and quantity of materials used, completing and reviewing IDRs, and performing final inspection and acceptance of completed projects.

## SCOPE

Our preliminary survey generally covered the period October 1, 2012 through February 29, 2016 and included a limited review of MDOT's documentation of the following selected road and bridge construction project management activities:

- Daily on-site inspections.
- On-site inspection reviews.
- Contract modifications.
- Final inspections.
- Final estimate reviews.
- Staff utilization and certification.

## PURPOSE

Within a performance audit, we design the preliminary survey to obtain an understanding of the core activities within an entity or a program and to identify potential program improvements and/or deficiencies that could impair management's ability to conduct its operations in an effective and efficient manner. If the results of a preliminary survey do not identify significant concerns, our practice is to terminate the planned performance audit.

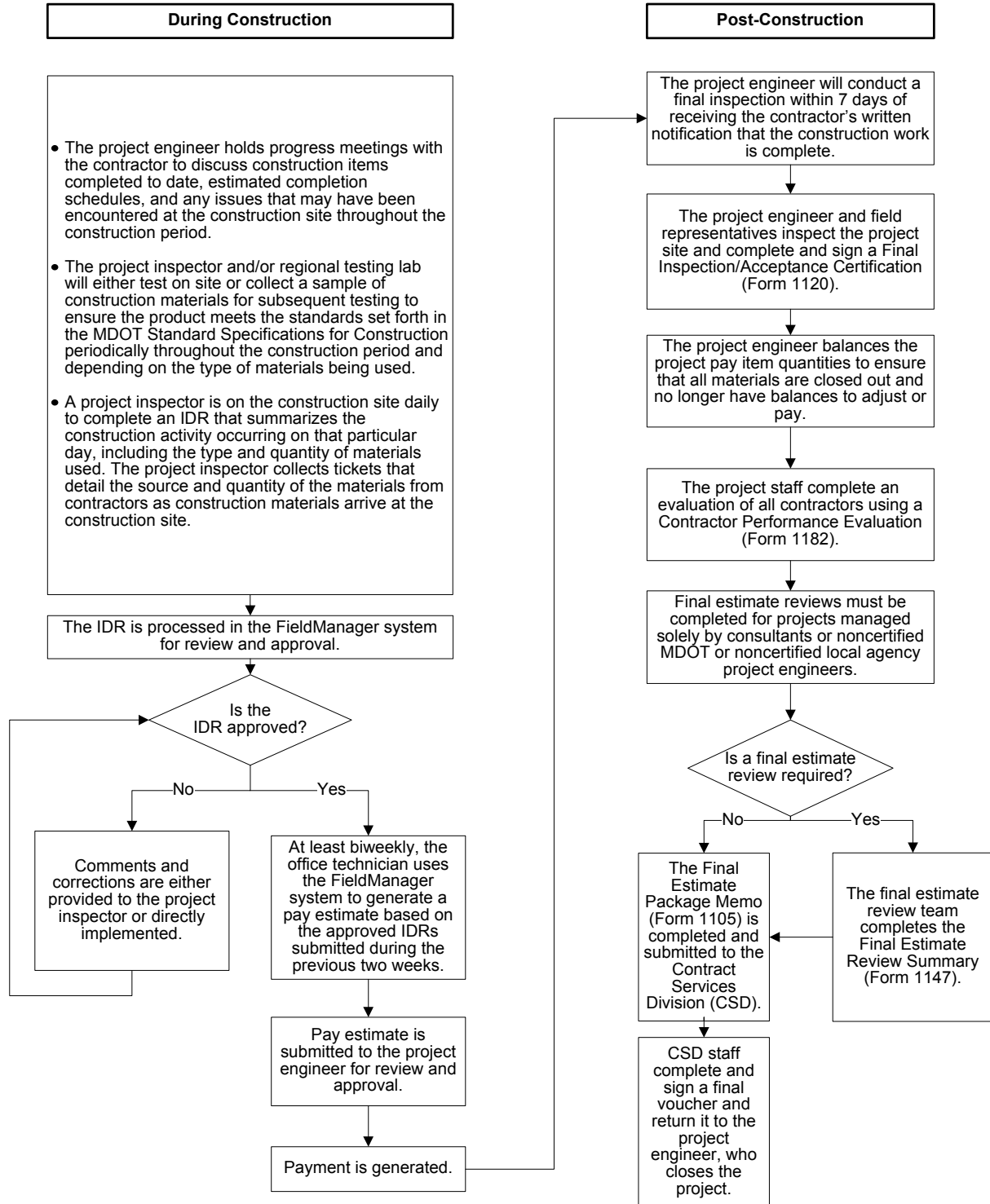
Preliminary survey procedures are limited in nature and should not be considered a completed performance audit in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States. In addition, our preliminary survey procedures would not necessarily disclose the presence or absence of any material conditions and/or reportable conditions. Given that the procedures we employed did not constitute a performance audit, we will not issue a performance audit report and we do not express conclusions regarding the effectiveness or efficiency of the selected MDOT road and bridge construction project management activities.

# SUPPLEMENTAL INFORMATION

UNAUDITED

## SELECTED ROAD AND BRIDGE CONSTRUCTION PROJECT MANAGEMENT ACTIVITIES Michigan Department of Transportation

### Construction Project Management



The project engineer, project inspector, and office technician could be MDOT or local agency employees or consultants.

Source: The Office of the Auditor General prepared this supplemental information based on information provided by MDOT.









