



**ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
FEBRUARY 8, 2019, 9:00 A.M. – 11:00 A.M.
MULTI-MODAL CONFERENCE ROOMS**

Present:	Tony Kratofil Carol Aldrich Kim Avery Mark Geib	Jason Gutting Greg Losch Kristin Schuster Brandy Solak	Gorette Yung Hal Zweng
Absent:	Mark Bott Matt Chynoweth	Dee Parker Brad Wieferich	Ted Burch
Guests:	Matt Bellgowan Kitty Rothwell	Aaron Raymond Steve Shaughnessy (for M. Bott)	Brad Wagner

OLD BUSINESS

1. Approval of the December 6, 2018, Meeting Minutes

ACTION: Approved

2. LCCA: CS 78012 & 78014 JN 116377-US-131 – Ben Krom (December email approval)

ACTION: Approved

3. Bridge Railing Action Plan – Carlos Torres/Brad Wagner (February 2019 email approval)

ACTION: Approved

4. Design-Build Procurement – Reconstruct I-69 – Greg Losch (January email provisional approval with discussion at next EOC meeting)

ACTION: Approved

NEW BUSINESS

1. Michigan Department of Transportation (MDOT) New Materials and Products – Jason Gutting

Issue Statement – The MDOT receives numerous submittals of new materials and products. This process is meant to streamline the procedure and provide a review of submittals by the appropriate subject matter experts. Previous management suggestions are part of this draft procedure.

Background/History - In 2012, a new materials process and steering team were created, but not implemented. The submitted procedure streamlines submittals into specific focus areas that will review and provide recommendations on new material submittals.

Construction Field Services (CFS) has begun to share a new materials status report at each Engineering Operations Committee (EOC) meeting. This listing will provide the status of each new material submittal in a two-year rolling report.

Recommendation - Review, provide feedback, and eventual approval of the submitted new product evaluation procedure Guidance Document. Review and discussion of the new materials status report and formatting. This report will be provided to EOC members one week prior to all EOC meetings.

ACTION: CFS provided the New Materials Evaluation Status report to all committee members prior to the meeting. CFS is working with DTMB to revise the report to include which new materials subcommittee is reviewing each submittal. The status report will continue to be submitted to all committee members prior to each meeting.

2. Special Provision for Box Culvert Joint Tie Assembly and new Standard Plan R-84 – Therese Kline

Subject/Issue – Special Provision for Box Culvert Joint Tie Assembly and new Standard Plan R-84

Issue Statement – Addition of a Joint Tie Assemblies to the sides of all box culverts.

Major Issue(s) – The Department is experiencing movement of the end wingwalls and last few sections of box culverts, pulling away from the run of culvert.

Background – Historically MDOT has experienced the end wingwalls and last few sections of box culverts pulling away from the run of culvert. Even with aprons and curtainwalls the issue is happening as scour and settlement occurs over time. The movement results in maintenance problems such as soil and slope loss, shoulder damage, and impact to pavement integrity.

Discussion concerning this issue began in JPOC meetings in 2014. Research was performed by JPOC members to determine potential corrections and mitigation.

It was discovered that other states such as Iowa, Minnesota and Pennsylvania use culvert joint tie assemblies to circumvent this issue.

UP Pipe has used joint ties in Michigan for many of the smaller size diameter pipe in Chippewa county and is familiar with these techniques. They have also used this technology for various sizes of box culvert.

The Special Provision and Standard Plan were developed with JPOC input.

Recommendation(s) – Requiring the addition of culvert tie assemblies to the last 2 joints, fastening the last 3 sections of box culvert of any size together, as shown in the Special Provision and Proposed Standard Plan. This does not include the joint between the wingwall and the first box section.

ACTION: Approved

3. Design-Build Contracting Method–Relocation of US-31 – Greg Losch/Dharmesh Valsadia

Issue Statement – Request approval for the use of Design-Build contracting method on relocation of US-31 from Napier Avenue to I-94 (JN 205792). The contract would also include the currently Design-Bid-Build project (JN 130008) on I-94 from Napier Avenue to I-196 in Southwest Region, Kalamazoo TSC.

Major Issue(s) – JN 130008 is scheduled for June Plan Completion with December 2020 letting. JN 205792 is partially funded by BUILD Grant, which is required to have all phases obligated by June 2020. The project is currently going through re-evaluation of the Supplemental FEIS completed in 2004. This project has many risks including three pipeline relocations, biological reviews, permits such as DEQ, NPDES, and FAA along with IACR approval of the completed interchange.

Background/History – Reconstruction of I-94 including the new interchange with US-31 is programmed as a Design-Bid-Build project. MDOT received BUILD Grant in Dec 2018 to complete US-31 connection from Napier Ave to the new interchange at I-94. Combined, this project will include 6.5 miles of road work, removal of three structures, construction of five structures including associated drainage, maintenance of traffic, ITS, signing and pavement marking. Design work on JN 130008 has already begun with interchange alternatives analysis. Design of US-31 was completed to the Pre-OEC stage in 2004.

Recommendation(s) – The Innovative Contracting Committee (ICC) has recommended the use of the Design-Build contracting method for this project considering the timeframe with the BUILD Grant and efficiencies gained by coordinating/combining with JN 130008.

Design-Build contracting method will minimize impacts to the traveling public, capture innovation, and best practices from contractor.

ACTION: Approved

4. Two-step Process to Select Vendor to Provide Adaptive Traffic Signal Control System – Greg Losch/Aaron Raymond

Subject/Issue: Request approval to use a two-step process to select a vendor to provide an Adaptive Traffic Signal Control system. The first phase includes design assistance; the second phase includes procurement, construction assistance, integration, and maintenance.

This is the delivery method recently used by MDOT to procure an ATSC vendor for the proposed system along two corridors in Traverse City (US-31 and M-72). The project is currently in the design phase and is proceeding successfully.

Major Issue(s) – The use of the two-step process to select an ATCS vendor is being requested to perform the signal upgrades on 47 intersections. The ATSC system is part of the Pre-Stage Maintenance of Traffic (MOT) Freeway Active Transportation and Demand Management (ATDM) project for the I-94 Modernization Project. The Gratiot Ave corridor is comprised of 25 signalized intersections and the Michigan Ave corridor is comprised of 22 signalized intersections (one intersection is currently unsignalized but proposed to be signalized as part of this project).

The overall goal of the project is for the ATSC system to be operational prior to mainline I-94 construction, which is proposed to begin in 2021. Therefore, it is critical the milestones provided below are met to ensure the system is operational before I-94 reconstruction begins in 2021.

A public interest finding (PIF) will be required to procure the ATCS system proposed by the selected vendor.

There may be potential utility conflicts associated with signal modernization improvements. There may also be potential right-of-way impacts associated with signal modernization improvements. This will be identified during design. Third-party coordination with City of Detroit will be needed at three closely spaced intersections.

Background/History – This project is located on M-3 (Gratiot Ave) from Randolph St/Broadway St to Harper Ave (approximately 4.5 miles) and on US-12 (Michigan Avenue) from Cass Ave to I-94 (approximately 5.3 miles).

The extent of the traffic signal upgrade at each of the 47 total intersections will vary based on existing infrastructure. Intersections have been separated into the following two categories:

- Full Traffic Signal Modernization – to include, but not be limited to, full traffic signal reconstruction, ADA ramps, signal heads, pushbuttons, vehicle detection, communications equipment, roadside units (RSU), closed-circuit television (CCTV) cameras, etc.
- Traffic Signal Modification – to include, but not be limited to, controller upgrade, vehicle detection, communications equipment, RSU, CCTV cameras, supporting traffic signal equipment (i.e. cabinets, conduits, handholes), etc.

Full Traffic Signal Modernization: 25

Traffic Signal Modification: 22

Total: 47

All equipment installed shall be interoperable with MDOT's communications network and existing traffic signal infrastructure. The quantities shown below are an estimate of equipment proposed as part of this project and are subject to change. Anticipated quantities and locations of the field equipment will be further refined by the design consultant during the design for this project.

Previous determination was made that this project has no environmental consequences and is classified as a categorical exclusion.

Job Number: 202534

Control Section: 82072, 82062

Project Cost: \$12,700,000 (\$1.2M-\$2M for ATSC)

Final Plans Submitted: December 2019

Construction and Burn-in Completion: January 2021

Recommendation(s) – The Innovative Contracting Committee (ICC) has approved the use of a two-step procurement process to select the ATSC vendor for this project.

ACTION: Approved

Carol Aldrich, Secretary
Engineering Operations Committee

RA:lrb

cc: EOC Members	M. DeLong	D. DeGraaf (MCA)
Meeting Guests	D. Jones	J. Becsey (APAM)
P. Ajegba	C. Libiran	D. Needham (MAA)
L. Mester	R. Jorgenson (FHWA)	M. Ackerson-Ware (MRPA)
D. Wresinski	R. Brenke (ACEC Michigan)	
Region Engineers	G. Bukoski (MITA)	
Assoc. Region Engineers		
TSC Managers		