



**ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
NOVEMBER 3, 2016 – 9:00 A.M.
MULTI-MODAL CONFERENCE ROOM**

Present: M. Van Port Fleet R. Ranck J. Gutting K. Schuster H. Zweng
B. Wieferich M. Geib C. Rogers M. Sweeney S. Bower
T. Marshall (FHWA)

Absent: R. VanPortfliet M. Bott

Guests: A. Kremer C. Brookes L. Doyle J. Hartman S. Shaughnessy
P. Wiese S. Minton S. Datta T. Pozolo C. Stein
J. Forster (FHWA)

OLD BUSINESS

1. Approval of the August 4, 2016 Meeting Minutes – M. Van Port Fleet

ACTION: Approved by Email, October 2016.

2. Alternate Pavement Bidding (APB) Selection Criteria – C. Stein

In July, 2015, the Engineering Operations Committee (EOC) was presented with proposed APB selection criteria. The EOC directed the Innovative Contracting Committee to seek input from the paving industries on the proposed criteria. Industry input has been received along with input from key Michigan Department of Transportation (MDOT) and Federal Highway Administration (FHWA) Division staff. Innovative Contracting staff have also conducted a thorough review of APB project bid results from 2009 through 2014.

Therefore, the Innovative Contracting Committee recommends the proposed criteria replace the existing criteria as listed on future APB projects:

Proposed Criteria

- a) Only projects in Limited Access Right of Way or Controlled Access Freeways will be eligible with a maximum of two access points per mile. Access points are defined as any roadway, interchange or driveway.
- b) The project fix type must be either a complete reconstruction or a major rehabilitation (separated concrete overlay or hot mixed asphalt (HMA) over rubblized concrete).
- c) Estimated construction costs must exceed \$15,000,000 dollars with road work amounting to at least 50% of the project's estimated cost. Road related work generally includes pavement removal, road related earthwork, restoration, paving, base, and subbase.
- d) Each pavement alternate must be expected to have similar environmental, right of way, drainage, and utility impacts.
- e) Road related work controls most the maintaining traffic concepts. The maintaining traffic plan must be similar for both pavement alternates.

- f) Work related to the paving, including pavement removal, earthwork, and placing the pavement is responsible for most the construction schedule's duration and impacts to thru traffic.
- g) If the project meets all the above criteria, the APB Coordinator will work with the Pavement Selection Engineer and the Region/Transportation Service Center (TSC) to develop an informational Life Cycle Cost Analysis. The proposed pavement designs will be developed using the MDOT Pavement Design and Selection Manual. The life cycle costs of the two pavement design alternates must be within 5% to be considered for alternate bid on Design-Bid-Build projects, and 10% for Design-Build (DB) projects.

ACTION: Approved by Email, September 2016.

3. Non-Freeway APB Project – C. Stein

Job Number: 116377

Control Section:

Route: US-131, Broadway Road to Coon Hollow Road in St. Joseph County

Project Cost: \$7,019,000

Letting Date: November 2017

MDOT will be letting a non-freeway pilot APB project. The project scope includes 1.169 miles of reconstruction to a boulevard section with two (2) lanes in each direction and indirect left turn lanes.

The Innovative Contracting Committee recommends this project for EOC approval.

ACTION: Approved by Email, September 2016.

4. Design-Build Procurement (Metro Region) – C. Stein

Job Number: 122288

Control Section: 82111

Route: M-10 under Martin Luther King Blvd. (S17 of 82111), City of Detroit, Wayne County

Project Cost: \$17,540,000

Letting Date: January 2017 (Tentative)

Approval for utilizing a design-build procurement for the referenced project is requested. There are several unresolved issues that need to be addressed before the project can proceed, including:

- a) Unknown Utility Locations: To help mitigate this risk, a full Subsurface Utility Exploration (Type B) will be completed and provided to the short-listed teams.
- b) Geotechnical Evaluation to assess global soil stability: The request for quotation (RFQ) will be enhanced to ensure we have appropriate specialists on each of the DB Teams.

- c) Funding Source: Still undetermined but Metro Region has committed to identifying funding of some type. This potentially will require addenda to be issued to the project advertisement.

Pending resolution of these issues, the Innovative Contracting Committee recommends this project for approval.

ACTION: Approved by Email, October 2016. Approval is contingent upon resolution of the issues outlined above.

5. Fixed Price/Variable Scope (FPVS) (Grand Region) – C. Stein

Job Number: 106329

Control Section: 84923

Route: Muskegon/Grand Haven, Muskegon and Ottawa Counties

Project Cost: \$4,000,000

Letting Date: January 2017

The project scope includes 4.6 mi of Intelligent Transportation Systems (ITS) infrastructure and device installations. It includes network integration, ITS cabinets, handholes, conduit, fiber optic cable, traffic surveillance cameras, dynamic message signs (DMS), microwave vehicle detection stations (MVDS), environmental sensor stations (ESS), and wireless communications to establish a connection to the West Michigan Transportation Operations Center (WMTOC) for the proposed devices, one (1) existing DMS in Muskegon, and three (3) existing surveillance cameras in Grand Haven.

Based on the single bid received and rejected for this project in the August 2016 letting, it was determined to be cost prohibitive to construct stand-alone ESS sites in various counties of the region due to the increased cost for minor traffic devices.

A Fixed Price Variable Scope approach will enable the limited construction budget to be maximized for construction of four (4) to six (6) of the original 11 ESS sites. The mobilization and traffic control will be significantly reduced by providing a variable scope for optional ESS site locations on the corridor(s) that encompass the main scope of ITS work.

Approval is requested to use a FPVS contracting method to install and implement ITS infrastructure along US-31 in the Grand Region. FPVS project will result in maximizing the amount of work that can be completed for a fixed dollar amount. A FPVS, Type 2 contracting method will be specified requiring the contractor to bid the number of sites they can complete with an associated bid price for the work.

The Innovative Contracting Committee recommends approval of the use of the FPVS procurement method.

ACTION: Approved by Email, October 2016.

NEW BUSINESS

1. Road Diet Submittal (M-54) Genesee County – L. Doyle

Route/Location: M-54 from Wilson Road to M-57
Job Number: 130042
Control Section: 25073
Letting Date: 03/03/2017

The project includes converting one mile of roadway from four lanes to three lanes and creating a designated turn lane between Wilson and M-57. The intersection of M-54 and Wilson Road has a high rate of crashes. Converting this stretch of road to three lanes will improve safety for motorists and allow safer access to driveways between Wilson Road and M-57.

The project meets the criteria required on the Road Diet Checklist. A public meeting was held with Township officials in attendance.

ACTION: For Information Only. No Action Required.

2. Road Diet Submittal (Grand River) Oakland County– T. Pozolo

Route/Location: Old 96 (Grand River Avenue), City of Farmington
Job Number: 127526
Control Section: 63821
Letting Date: 2/3/2017

The project scope includes converting the roadway from four lanes to three lanes and creating a designated turn lane between Shiawassee Street and Farmington Road. A bike lane will also be added in this section. Additionally, one eastbound lane of Grand River Ave will be converted to on-street parking from Grove Street to Mayfield Street. Converting to this new lane configuration will improve safety for both motorists and bicyclists in the City of Farmington. The Oakland TSC has worked with both Lansing Geometrics and Lansing Signals to ensure their concurrence

The project meets the criteria required on the Road Diet Checklist. The city of Farmington has endorsed the conversion with a city council resolution.

ACTION: For Information Only. No Action Required.

3. Corrections to Guidance Document for Pavement Preservation Operations Committee (P2OC) – J. Gutting

The Michigan Department of Transportation (MDOT)/Michigan Road Preservation Association (MRPA) partnership has been very successful but does not include contractor representation for all types of road preservation construction. The MRPA members perform

crack sealing, micro-surfacing, and chip seal fixes, but the MDOT Capital Preventative Maintenance (CPM) program also includes concrete pavement repairs and ultra-thin Hot Mix Asphalt (HMA) overlays as CPM treatments. The current partnership structure does not include contractor representation for the concrete pavement repair or ultra-thin overlay CPM fixes as these are not done by the MRPA members. Since much of the focus of the MDOT/MRPA partnership is on the CPM program, it would be beneficial to restructure the partnership to include contractor representation for concrete pavement repair and ultra-thin overlay CPM fixes.

EOC approved the formation of the new Pavement Preservation Operations Committee (P2OC) and the associated Guidance Document at the March 3, 2016 meeting. Subsequent to that approval, minor revisions were required to the guidance document.

EOC is requested to approve the revised Guidance Document.

ACTION: Approved.

4. Revision to the Work Zone Safety and Mobility Manual (WZSMM) – C. Brookes

The last manual update occurred in 2010. Several new directives related to work zone safety and mobility have occurred since 2010. These requirements have been communicated throughout the Department using a variety of methods resulting in the manual containing outdated information. In addition, the manual required reorganization and the addition of completely new information related to work zones.

An updated 2016 version of the manual is presented for EOC consideration. EOC is requested to provide direction on completing updates to the new manual to ensure alignment throughout MDOT.

ACTION: EOC recommends that further steps be taken to ensure proper review of the new draft manual. These steps include the following,

- a) Conduct a review of other MDOT manuals including the Road Design Manual to ensure that content is consistent and non-redundant.*
- b) Assemble a WZSMM review team working with the Region Engineer liaisons to Operations Field Services. The review should include seeking advice from the Attorney General's office to address various legal issues. These issues include manual terminology including the use of the terms "should" versus "must".*

EOC will review the completed draft manual at a future meeting.

5. Revision to Guidance Document 10229 – Continuing Education for Professional Engineers and Surveyors – K. Schuster

The Professional Engineers/Professional Surveyors Continuing Education Team requests a revision to Guidance Document 10229, "Continuing Education for Professional Engineers

and Surveyors”. Revisions include requiring the MDOT coordinator of an activity to sign attendance certificates instead of the class instructor(s) as previously required. Additionally, the guidance document required minor organizational changes. EOC is requested to approve the revised Guidance Document.

ACTION: Approved

6. Use the Construction Manager/General Contractor (CMGC) procurement method to complete landscaping of Segment One of the I-75 Mega Project from Coolidge to South Blvd.) – C. Stein/S. Datta

Job Number: TBD

Control Section: 63174

Project Cost: Estimated between \$2-\$5M

Letting Date: Winter 2017 or early Spring 2018

Segment 1 of the I-75 Mega Project (JN 115576) was let earlier this year. The contract type was Design-Build. Landscaping and tree plantings were removed from the contract and will be addressed under a subsequent landscaping and tree planting contract that will include an MDOT specified design.

This will ensure that the stakeholder concerns are adequately addressed regarding landscaping along the corridor. Additional Community outreach and coordination will be needed for this segment due to the time lapse between roadway construction and landscaping. A CMGC contracting method will further assist and help with this coordination. The contract is intended to be a longer-term contract (5-10 years) to ensure the plants are well established and will also include performance metrics and deductions if found in non-compliance. The CMGC contracting method will allow MDOT to partner with the selected contractor to fully develop these terms and ensure the terms are commercially reasonable.

The Innovative Contracting Committee (ICC) has approved the use of the CMGC contracting method pending the completion of the following tasks:

- a) The Request for Qualifications needs to stress the importance of fully addressing stakeholder engagement.
- b) DBE participation will need to be further discussed with the Office of Business Development including the recommended 0% DBE participation level for the pre-construction services.
- c) Need to ensure the landscaping construction contract is well coordinated with the Design-Build mega project to limit conflicts and redundancies.

EOC is requested to approve the use of CMGC pending completion of the outlined tasks.

ACTION: Approved.

Steven Bower, Secretary
Engineering Operations Committee

RA:SB

cc: EOC Members	D. Parker	D. DeGraaf (MCA)
Meeting Guests	M. DeLong	J. Becsey (APAM)
K. Steudle	D. Jackson	D. Needham (MAA)
L. Mester	W. Tansil	Monica Ackerson Ware (MRPA)
D. Wresinski	C. Libiran	
M. Chaput	R. Jorgenson (FHWA)	
Region Engineers	R. Brenke (ACEC Michigan)	
Assoc. Region Engineers	G. Bukoski (MITA)	
TSC Managers		