

# MDOT CONSTRUCTION ADMINISTRATION UPDATES

## 2012

Friday, April 06, 2012



# PRESENTERS

**R. Jason Clark, P.E., MBA**

**MDOT Construction Contracts Engineer**

# PRESENTATION OVERVIEW

- CFS Issues / Organization / RCEs
- Buy America
- Overview of New Contract Modification Process
- Electronic Signatures
  - ❖ *Live Demonstration of E-Sign*
- General Questions / Discussion

# Buy America Requirements

## ➤ Why Buy America?

- Federal Requirements
- 2009 ARRA National Reviews by FHWA found:
  - Missing Certifications
  - Improper Certifications
  - Payment Without Certifications
- FHWA Compliance Focus Area



# Buy America Requirements

- 23 CFR 635.410 (b) – No Federal-aid highway construction project is to be authorized for advertisement or otherwise authorized to proceed unless at least one of the following requirements is met:
  - The project ...
    - (i) Includes no permanently incorporated steel or iron materials, or
    - (ii) If steel or iron material are to be used, all manufacturing processes, including application of a coating, for those materials must occur in the United States.



# Buy America Requirements

## ➤ 23 CFR 635.410(a)4:

- “Minimal” use of foreign steel allowed if...
  - Total cost < 0.10% of project cost OR
  - Total cost of steel is < \$2,500
  - Whichever is greater

## ➤ 23 CFR 635.410(c)(1):

- Waiver may be requested if
  - Application is “Inconsistent with the public interest”
  - Products not produced in the US



# Buy America Requirements

## ➤ Documentation Requirements

- Comprehensive List of Steel/Iron components
- Step Certification
- Packet of Information
- Payment is not to be processed until all Buy America certifications are received by the Engineer. This includes stockpile, delivered and partial payments.

# Construction Contract Modification (CM) Process Improvements

- Statewide Alignment of CM process
- Expedite Approvals
- Improve Oversight
- Eliminate Board Approvals/Delays
- Improve Document Routing (*all parties*)
- Start CM generation process sooner
- Simplify Entire Process
- Eliminate “Overrun” Status
- Use Available Tools like ProjectWise

# Goals of the Process Improvement

- Simplification, No More difference between:
  - Extras
  - Overruns
- All simplify to one measure of Percent over/under awarded budget (X%)
- Reduce timeline from about 200+/- days for approval of large project changes (including 60-70 days for SAB/STC approvals, and 16+ days of Mail time)
- Sometimes 300+ days for “Overrun” status
- In short – to streamline the entire process, expedite processing times, and not increase risk/lose oversight

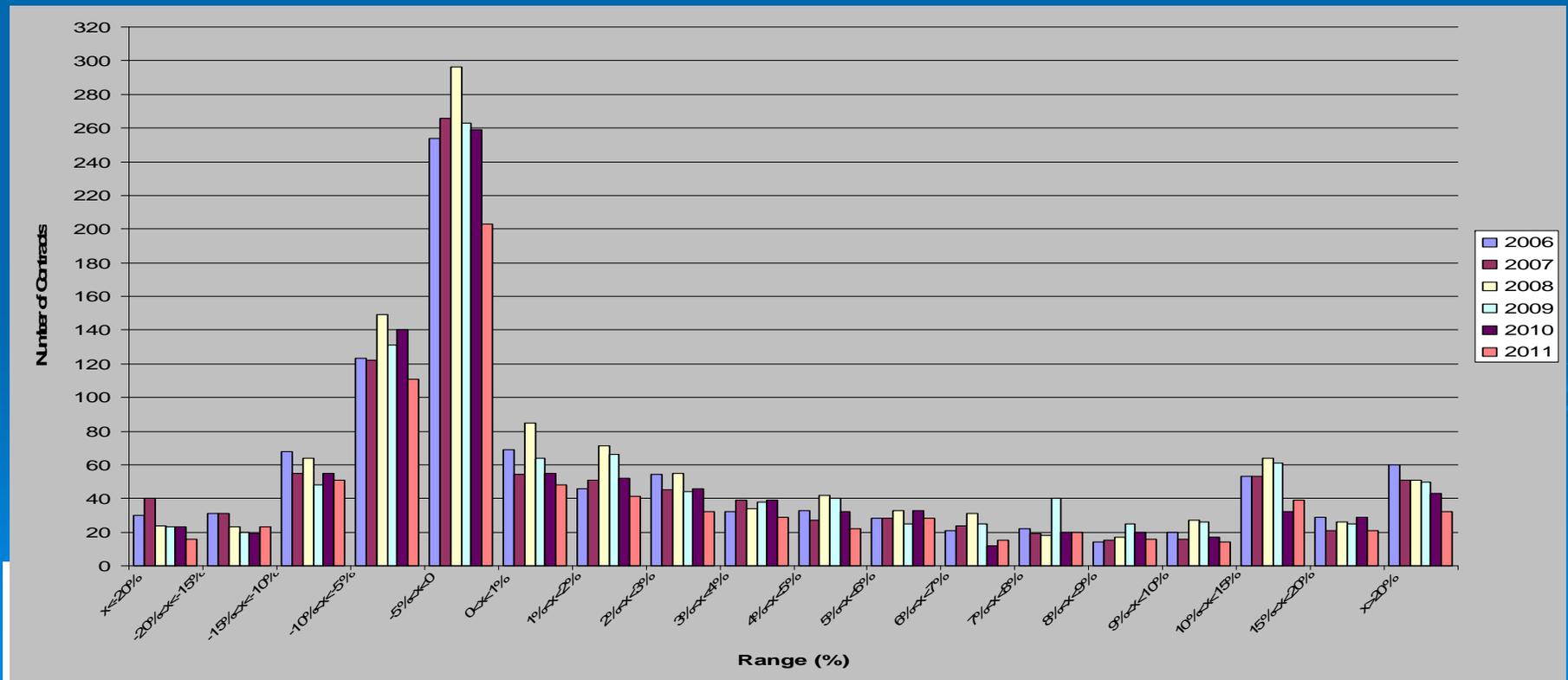
# Goals of the Process Improvement

- Maintain Oversight / Control of process
- MDOT already has exceptional record controlling overall project costs:

<b>Five Year Summary of MDOT Project Costs</b>			
<b>Calendar Year</b>	<b>Original Contract Cost</b>	<b>Final Contract Cost</b>	<b>Percent Difference</b>
<b>2007</b>	\$777,582,980.29	\$810,428,814.94	<b>4.22%</b>
<b>2008</b>	\$967,285,996.11	\$983,915,828.12	<b>1.72%</b>
<b>2009</b>	\$726,981,046.84	\$750,956,601.62	<b>3.30%</b>
<b>2010</b>	\$615,818,269.64	\$615,142,561.83	<b>-0.11%</b>
<b>2011</b>	\$77,220,571.77	\$76,269,548.73	<b>-1.23%</b>

# Goals of the Process Improvement

- MDOT has also been very consistent in controlling construction project costs.
- This shows the number of jobs with final project cost/original amount (final budget percentage) in each breakdown range (i.e. 0 to 1%, 2% to 3%, etc) for all jobs completed in the past 6 years.



# Goals of the Process Improvement

- Scope of Contract Changes on MDOT projects  
(Typically over 8,000 Contract Modifications/yr)
- MDOT has exceptional record of controlling these changes/costs overall (50%<budget, 25%<5%)

#Projects / % yr total	2006	2007	2008	2009	2010	2011
<b>Below Zero</b>	506 51.3%	514 53.7%	556 50.1%	485 47.8%	496 53.6%	404 53.1%
<b>0-5%</b>	234 23.7%	216 22.6%	287 25.9%	252 24.9%	224 24.2%	172 22.6%
<b>5-10%</b>	105 11%	102 11%	126 11%	141 14%	102 11%	93 12%
<b>over 10%</b>	142 14%	125 13%	141 13%	136 13%	104 11%	92 12%
<b>Total</b>	<b>987</b>	<b>957</b>	<b>1110</b>	<b>1014</b>	<b>926</b>	<b>761</b>

# Steps Achieved to Date

- Team formed in June to revise BOHIM 2004-14
- Effectively Removed State Ad Board from process (*Team helped write SAB Resolution 2011-2 in effect as of August 30, 2011*)
- State Attorney General approval of Digital Electronic Signatures
- Field Manager updates/changes (V4.8)
- STC role revised 3/23/12 from “Approval” to “Oversight”

# Steps Achieved to Date

➤ **New : IM12-02 and IM12-03 published on MDOT website on 2/29/12**

DRAFT  
2.9.12

MICHIGAN STATE TRANSPORTATION COMMISSION  
DRAFT RESOLUTION 2012-3

WHEREAS, The principal functions of the Michigan State Transportation Commission are outlined in Public Act 286 of 1964, as amended, and the State Constitution; and

WHEREAS, The Commission also has a responsibility to serve the best interests of the people of the State of Michigan, and their elected representatives; and

WHEREAS, Among its several duties and responsibilities, the Commission shall establish transportation program objectives to be pursued by the Director of the Department of Transportation with respect to all modes of transportation; and

WHEREAS, It is in the best interests of the State, the expeditious completion of transportation-related construction projects, the consistent and efficient operations of construction contractors and subcontractors and related vendors and employees; and

WHEREAS, The Department maintains data pertaining to key aspects of the Department's interactions with construction contractors in regard to construction contract modifications, including construction activities, communications with the construction contractors and subcontractors, and related data; now therefore be it

RESOLVED, That it is the Commission's intent that the Department of Transportation effectively and efficiently implement and maintain process and internal control to:

- Ensure that payments to construction contractors that result from construction contract modifications are accurate and timely and are in compliance with applicable laws, regulations, rules, contracts, and grants
- Ensure that the Department acquires and retains documentation that fully supports the propriety of each contract modification payment or financial adjustment, including the underlying reasons for the contract modification; and be it

RESOLVED, That the Commission, through the Office of Commission Audit, shall be kept informed of the Department's efforts to effectively and efficiently implement and maintain the resulting processes and related internal control.

 **OFFICE MEMORANDUM**  
Michigan Department of Transportation

**DATE:** February 28, 2012

**TO:** Region Engineers  
Region Associate Operations Engineers  
Region Construction Engineers  
TSC Managers  
TSC Construction Engineers

**FROM:** Gregory C. Johnson, P.E.  
Chief Operations Officer  
  
Randy R. Van Peltfriet, P.E.  
Bureau Director of Field Services

**SUBJECT:** Bureau of Highway Instructional Memorandum 2012-03  
Digitally Encrypted Electronic Signatures

The Michigan Attorney General's office, in concurrence of the Federal Highway Administration, has issued a decision authorizing the Michigan Department of Transportation (MDOT) to use and accept digitally encrypted electronic signatures. These digital signatures are not scanned copies of handwritten signatures or faxed copies of a handwritten signature, but are a secure electronic "object" that is embedded into the electronic PDF document by the signer with their unique password, identity, and the date/time digitally encrypted into the electronic document.

Signatures are commonly used to authenticate documents. When you sign a paper document, you are authenticating its contents. Similarly, digital electronic signatures are used to authenticate the contents of electronic documents. These electronic signatures are unique to the signer and often provide enhanced verification of the signer's identity.

It has been legally acceptable to use digital electronic signatures for interstate and foreign commerce since passing the Electronic Signatures in Global and National Commerce Act (E-SIGN Act) on June 30, 2000, by the United States Congress. The act ensures the validity and legal effect of contracts entered into electronically and prevents these contracts from being treated differently from pen and paper equivalent contracts. This means that an electronic document with a validated digital electronic signature must be legally treated in the same manner as a paper document with an original handwritten signature.

To digitally sign a document, you must first have a digital identification (ID). This unique identifier can be obtained from various certification authorities, but MDOT will primarily use the Adobe Acrobat software. A digital signature can be placed anywhere on a document via the "Sign" toolbar icon in Adobe Acrobat software. Once a user has established their unique digital signature ID, digitally signing documents takes only seconds. The user must enter their unique

 **OFFICE MEMORANDUM**  
Michigan Department of Transportation

**DATE:** February 24, 2012

**TO:** Region Engineers  
Region Associate Delivery Engineers  
Region Construction Engineers  
TSC Managers  
TSC Construction Engineers

**FROM:** Gregory C. Johnson, P.E.  
Chief Operations Officer  
  
Randy R. Van Peltfriet, P.E.  
Bureau Director of Field Services

**SUBJECT:** Bureau of Highway Instructional Memorandum 2012-03  
Processing Contract Modifications  
(Supersedes BOH IM 2004-14)

This instructional memorandum sets forth changes to the Michigan Department of Transportation (MDOT) contract modification process for construction contracts. The procedures in this BOH IM are effective immediately and apply to all MDOT highway construction projects involving federal and/or state funding including all local or municipal projects with MDOT oversight. This procedure supersedes the procedures set forth in Section 103 of the MDOT Construction Manual and BOH IM 2004-14.

References to Standard Specifications in this document refer to either: the *MDOT 2003 Standard Specifications for Construction* or the *MDOT 2012 Standard Specifications for Construction*, and the selection will be whichever specification is referenced in the project's contract documents. References and citations in this BOH IM will refer to the new *MDOT 2012 Standard Specifications for Construction* but in any case where discrepancies between the specifications exist, the engineer shall refer to the applicable procedures in the respective governing specifications.

*This BOH IM contains multiple hyperlinks in both the Table of Contents and throughout the document for easy reference to other sections or attachments. To use the underlined hyperlinks just hold the "control" key and click on them with your mouse.*

# Overview of New MDOT CM BOHIM IM 12-03

- Provide as much or more oversight checks/balances as SAB/STC process
- New Tiered or layered approval process:
  - Tier I - 0-5% TSC Construction Engineer & TSC Mgr
  - Tier II - 5-10% Region Construction Engineer Approval
  - Tier III - 10%+ Bureau of Field Services Approval
- Statewide alignment – same process in all regions
- Reduce approval time (known Time Limits)
- Improve speed of payments for accepted work
- Predictable process (expected approval times).

# New MDOT CM BOHIM

## General Info

- Divided into seven (7) sections
- Modern format easier to use/locate information
- Interactive hyperlinks to quickly navigate to relevant information
- Sample documents included (examples)
- Details information required for CM
- Sets time limits for approvals (all parties)
- Tables and flow charts for visual reference

# SECTION – I

## Executive Summary & Terms

- Section I – Define all contract work changes, No more different evaluations or criteria for various types of changes in work such as:
  - Overruns, Extras, Changes, Adjustments, Modifications, Change orders, etc..
- To align with 2012 spec book, all contract changes are now referred to as:  
**“CONTRACT REVISIONS”**

# SECTION – II

## Contract Modification Development

- Synchronizes Negotiations to 2012 spec book guidelines
- Agreement on general price / scope / method of payment prior to Starting the work.
- Emphasize using estimated amounts, estimated unit increases, or budgets for force account work to start approval process sooner and create method to make payments. *(Approve general concept/budget first then make payments from budget based on actual costs)*
- CM must be generated by the engineer no later than seven (7) business days after the work commences.
- Any impacts to contract time must be addressed in the CM.
- Key Points:
  - Concept / Price agreed on before work starts
  - Contract modification generated within 7 days of work starting

# SECTION – III

## Generating Contract Modifications

- Mostly info for Engineers / Consultants in developing the content of CM
- Provides standard layout of information and samples

Appendix B  
Contract Modification

10/20/12 1:30 PM  
File Manager 4.5a

Contract: 0001-0001, I-75 RECONSTRUCTION WARNER RD TO BEARDSLEE ROAD

Cont. Mod. Number	Revision Number	Cont. Mod. Date	Electronic File Created	Net Change	Awarded Contract Amount
1		1/25/2012	Yes	\$107,150.00	\$933,177.00

Route	Managing Office	District
WARNER RD TO BEARDSLEE ROAD	Lansing - Construction Field Service Division	same

Contract Location  
WARNER RD TO BEARDSLEE ROAD

**Short Description**  
I-75 from Warner to Beardslee road milling and tree removal

**Description of Changes**  
 A. Original Contract Amount: \$933,177.00  
 B. Current Contract Value (including this revision): \$1,040,327.00  
 C. Net Total Change (B-A): \$107,150.00  
 D. Net Percent Change (C/A\*100): 11.5 %  
 E. FHWA Oversight Project:  
 a. FHWA Area Engineer: Sample Name  
 b. FHWA Form 1358 Approval Date: 12/21/2011  
 F. Revision Summary: This contract exceeds Tier III thresholds and approval of this contract modification is requested by the Bureau of Field Services.

This project was designed several years before letting and was awarded late in the construction season. A substantial number of trees have matured and need to be removed as they are in conflict with the proposed work. The Marquette County Road Commission observed the existing asphalt to be in better condition than was anticipated during the design phase. This allowed existing asphalt to remain in place versus complete removal. This observation necessitated the incorporation of the extra work item, cold milling HMA surface.

**Increases / Decreases**

Item Description	Item Code	Prop. Line	Proj. Line	Proj. Catg.	Item Type	Quantity	Unit	Unit Price	Dollar Value
Tree Rem. 10 inch to 30 inch	2003022	0010	0010	0001A	0001 Original	75,000	Es	400.00000	\$30,000.00

Reason: Additional quantity is required to remove a substantial number of trees that have matured and need to be removed as they are in conflict with the proposed work. This increase in quantity was discussed with and approved by the MCDOT Construction Engineer. The additional tree removal will not impact the open to traffic or contract completion date.

Total Dollar Value: \$30,000.00

Contract: 0001-0001      Cont. Mod.: 1, Rev.      Page 1 of 3

# SECTION – IV

## Approval Thresholds

- Gives overview, table & then detailed info on the new tiered contract modification approval system.

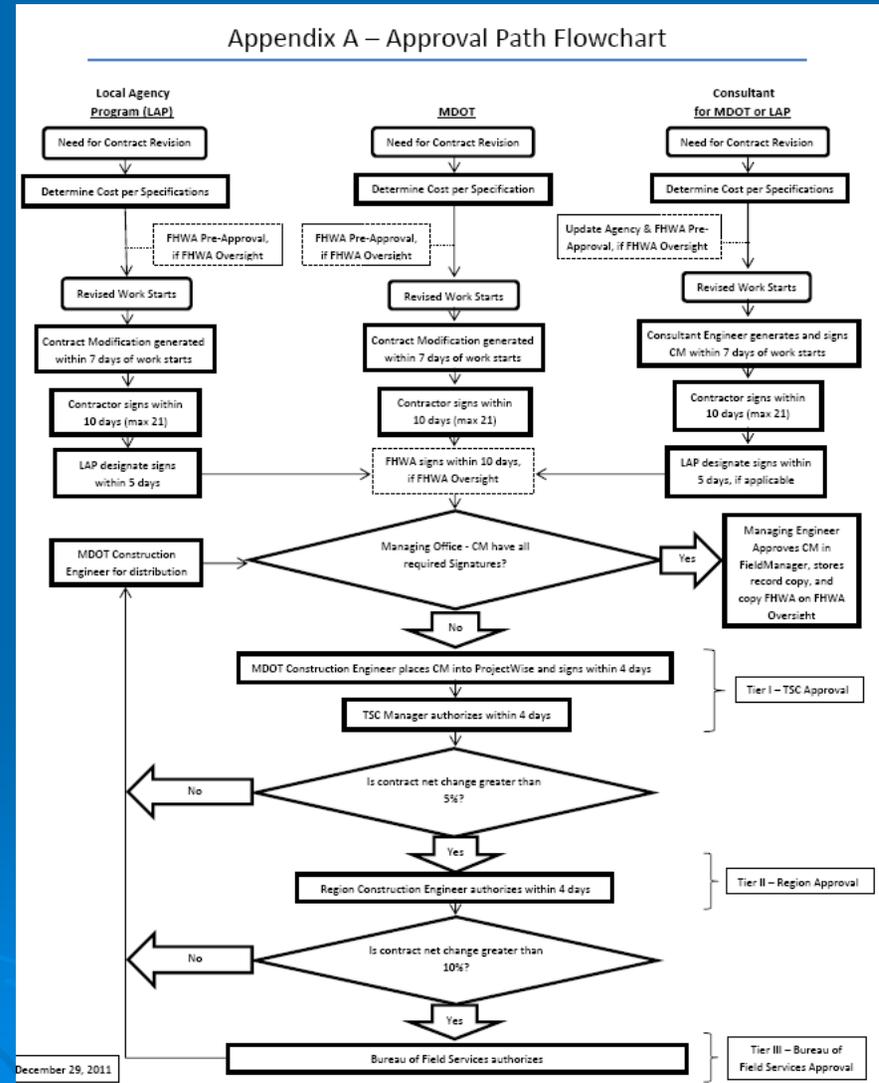
Figure 1 – Approval Thresholds

<u>Contract Modification Approval Level</u>	<u>Net Cumulative Increase to Contract</u> <i>(Sum of Current and all Previously Generated Contract Modifications over Original Contract Amount)</i>
<u>Tier I - TSC Approval</u>	Equal to or less than 5 percent (= or <5%)
<u>Tier II - Region Approval</u>	Greater than 5 percent (>5%) AND less than or equal to 10 percent (< or = to 10%)
<u>Tier III - Bureau of Field Services Approval</u> (Also includes external reviews by other agencies)	Greater than 10 percent (>10%)

# SECTION – V

## Authorization Paths

- Gives detailed information on each step of the CM approval process (flowchart included in the appendix)
- Time limits for each step
- Per FHWA: changes in Local Agency approvals for contract modifications & pay estimates. (All of them must be signed by a full time employee of the local agency)



# SECTION – VI

## Digital Electronic Signatures

- More detailed information in the E-sign BOHIM IM12-02
- E-sign in Contract Modifications:
  - Document Routing: inside and outside MDOT
  - Signature authorization sheet (next screen)
  - Pre-approved Backup signers
  - Very Possible that there may be a future change to **Require** e-sign on all CMs on MDOT bid projects

# Authorized Signature Form

- Required at pre-con meeting
- Required prior to any payments
- Only those shown can legally sign documents
- Backups for each party identified (vacations, etc.)
- Makes e-sign validation very easy

Appendix C  
**MDOT AUTHORIZED SIGNATURE FORM**

Michigan Department Of Transportation 1979 (02/12) Page 1 of 2  
File 113

Revision # \_\_\_\_\_

**INSTRUCTIONS:** 1) This form is mandatory and must be filed out completely prior to the preconstruction meeting. 2) Only those identified on this form are permitted to E-Sign the documents for this contract. 3) Any changes to personnel or names will require re-distribution of a revised list to all parties on the list.

**DISTRIBUTION:** Original: Projectwise; Copies: Project file, FHWA, CFSO-Lansing, Region Office, TSC Office, Contractor, When applicable: Local Agency and Consultant

**DEFINITIONS:**  
 Point of Contact: This will be the person receiving all the e-mails for distribution  
 Primary Authorized Signer: This will be the primary person authorized and expected to E-Sign  
 Backup Authorized Signer: This will be the secondary/backup person also authorized to E-Sign  
 Other Authorized Signer: This will be the other principals, owners, division managers, controllers or other

CONTRACT ID	REGION	FEDERAL PROJECT NUMBER				
PROJECT DESCRIPTION						
<b>FEDERAL HIGHWAY ADMINISTRATION</b>						
ROLE	NAME	COMPANY/AGENCY	TITLE	E-MAIL ADDRESS	PHONE #	E-SIGNATURE
Point of Contact		FHWA	Secretary			
Primary Authorized Signer		FHWA	Area Engineer			
Backup Primary Authorized Signer		FHWA				
Backup Primary Authorized Signer		FHWA				
<b>CENTRAL OFFICE – CONSTRUCTION FIELD SERVICES DIVISION</b>						
ROLE	NAME	COMPANY/AGENCY	TITLE	E-MAIL ADDRESS	PHONE #	E-SIGNATURE
Point of Contact	Adam King	MDOT	Departmental Analyst	kingA@mdot.gov	(517) 322-5859	
Primary Authorized Signer	Jason Clark, P.E.	MDOT	Construction Contracts Engineer	Clark.J2@mdot.gov	(517) 322-6930	
Backup Primary Authorized Signer	Jason Gutting, P.E.	MDOT	Engineer of Construction Operations	Gutting.J@mdot.gov	(517) 836-6334	
Backup Primary Authorized Signer	Brenda O'Brien, P.E.	MDOT	Engineer of Construction Field Svcs	O'Brien.B@mdot.gov	(517) 322-1086	
Other Authorized Signer	Mark Chaput, P.E.	MDOT	Deputy Director - CFSO	ChaputM@mdot.gov	(517) 322-5331	
Other Authorized Signer	Randy VanPortfliet, P.E.	MDOT	Director - CFSO	VanPortflietR@mdot.gov	(508) 786-1800	
Other Authorized Signer		MDOT				
<b>REGION OFFICE</b>						
ROLE	NAME	COMPANY/AGENCY	TITLE	E-MAIL ADDRESS	PHONE #	E-SIGNATURE
Point of Contact		MDOT				
Primary Authorized Signer		MDOT	Region Construction Engineer			
Backup Primary Authorized Signer		MDOT				
Other Authorized Signer		MDOT	Region Engineer			
Other Authorized Signer		MDOT				

# Sample Contract Mod

- New: More Signature blocks for greater flexibility on specific projects
- Add: Consultant Project Manger / Contracting Officer
- Add: Region Construction Engineer
- Add: CFS
- Add: Local Agency
- Add: Aero/Airport Sponsor/FAA
- MDOT right side in signature order
- Upcoming FM enhancements will automate more of process



 <b>Contract Modification</b>	
Michigan Department of Transportation	
7/7/2011 12:18 PM FieldManager 4.7a	
If authorized, the contractor agrees to do the work outlined above under the direction of the Engineer, and to accept as payment in full the basis of payment as indicated. Prime Contractor, you are authorized and instructed as the contractor to do the work described herein in accordance with the terms of your contract.	
Prime Contractor: Ajax Paving Industries, Inc. _____ (Signature) _____ (Date)	Recommended by Delivery Engineer: Thomas J. Tellier _____ (Signature) _____ (Date)
Prepared by: Jim Delafuente _____ (Signature) _____ (Date)	Authorized by TSC Manager: Erick Kind _____ (Signature) _____ (Date)
Recommended by Consultant _____ (Signature) _____ (Date)	Region Authorization _____ (Signature) _____ (Date)
Authorized by Local Agency _____ (Signature) _____ (Date)	Construction Field Services Approval _____ (Signature) _____ (Date)
Recommended by Airport Sponsor _____ (Signature) _____ (Date)	Authorized by Airports Division _____ (Signature) _____ (Date)
<b>FEDERAL PARTICIPATION - ACTION BY F.H.W.A.</b>	
___ Approved ___ Not Eligible ___ See Letter Dated _____	_____ (Signature) _____ (Date)

# SECTION – VII

## Records Retention

- For Engineers - Gives detailed information on construction project documentation records retention in ProjectWise.
- *(CA on Const Docs in ProjectWise forthcoming)*
- Electronic Signatures does change Records Retention
- Electronic PDF file is the “original”
- Printouts are meaningless and discouraged

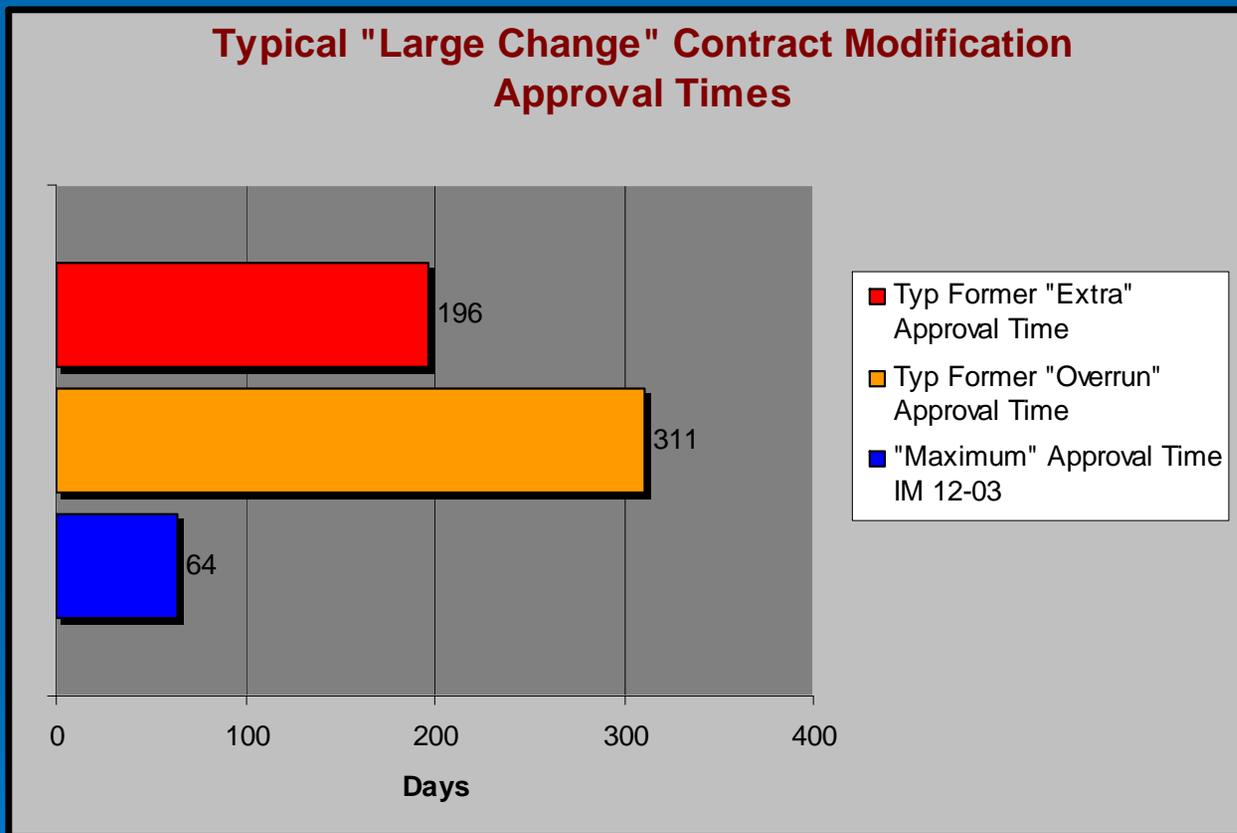
# Results – Oversight

Former Process	Sign	New Process	Sign
Technician		Technician	
Contractor	X	Contractor	X
Delivery Engineer	X	FHWA (if oversight)	X
FHWA	X	Tier I - Construction Engineer	X
TSC Manager	X	Tier I - TSC Manager	X
C&T Contracts		Tier II - Region Construction Engineer	X
CFS - Engineer		Tier III - CFS - Engineer	X
OCA		Tier III - CFS – OCA	
AG		Tier III - CFS - AG	
SAB			
T&NR			
SAB			
STC			

-More Accountable:  
50% more signatures

-Twice as many Professional Engineers reviewing

# Results – Approval Time



-From 16 days mail time to 0 days

-From about 200 days to 64 days for approval

# Contract Modification BOHIM

## Key Points

- Integral use of E-signatures in CM process
- Time limits on CM generation / approval times
- No person signing CM in more than one location
- Multiple people reviewing / signing all CMs
- MDOT Engineer and TSC Manager have to sign every CM for it to be valid. (Two Licensed MDOT Engineers)
- Emphasis on establishing scope/cost prior to start
- Focus on producing CM's sooner
- Faster payments to contractors for accepted work

# Contract Modification Process Improvement Team

## Sponsors:

Randy Van Portfliet – Bureau Director of Field Services  
Mark Chaput – Deputy Director of Field Services  
Brenda O'Brien – Engineer of Construction Field Services  
Bobbie Welke – Southwest Region Engineer

## CM Team:

Chair: R. Jason Clark - Construction Contracts Engineer  
Co-Chair: Bill Mayhew - Mt. Pleasant TSC Manager  
Mick Reilly – Attorney General / State Ad Board Rep  
Pete Pfeiffer – Coloma TSC Manger  
Molly Grabowski – Local Agency Program  
Cliff Farr – Field Manager Project Manager  
Jill Mullins- Department Manager F&A CSD Contracts  
Mo Azam – Operations Review Engineer  
Adam Iding – Construction Contracts Dept Analyst  
Janine Cooper – SW Region Delivery Engineer  
Channing Page –Senior Transportation Technician Lan TSC  
Kurt Zachary - FHWA

## Subject Matter Experts:

Dee Parker – Administrator F&A CSD  
Jason Gutting – Engineer of Field Operations  
Dave Brickey – Attorney Generals Office  
Dave Calabrese - FHWA  
Carol Rademacher – Mgr Consultant Contracts  
Sue Powers – Contracts  
Carol Aldrich – MDOT Aeronautics  
Mike Trout – MDOT Aeronautics  
Betsy Steudle– MDOT Aeronautics  
Ruth Proctor – Field Manager  
Sherry Bond – State Admin Board Secretary  
Jack Cotter – Office of Commission Audits  
Dear Harr – Office of Commission Audits  
& many other MDOT staff..

## Also in collaboration with our Partners at:

MITA, ACEC, CRAM, MML, MAAE, and several contracting companies.



# Digital Electronic Signatures

- Electronic Signatures in Global and National Commerce Act (E-SIGN ACT) June 30, 2000 United States Congress.
- E-sign = legally the same as handwritten signature
- Authorized for MDOT use in September 2011 by Attorney Generals Office
- MDOT E-sign BOHIM IM12-02 on Feb 29, 2012



DEPARTMENT OF  
ATTORNEY GENERAL  
MEMORANDUM

TO: Jason Clark  
Construction Contracts Engineer  
Construction & Technology Division  
Michigan Department of Transportation

FROM: James C. Shell  
Assistant Attorney General  
Transportation Division

RE: ELECTRONIC SIGNATURES -- Review of Electronic Signatures

QUESTION

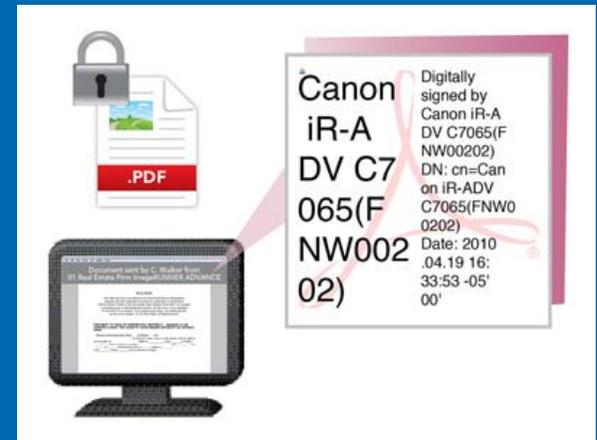
You have asked whether the Michigan Department of Transportation (MDOT) may use signatures that are "electronic" and bear "electronic signatures" rather than paper documents bearing written signatures.

SUMMARY RESPONSE

Yes. Based upon a review of federal and state law, MDOT may use and accept signatures that are electronic.

# E-Sign

- Clarification: E-sign is NOT scanned, faxed, cursive fonts or other variations. *(all of which are still not recognized by the Attorney Generals office as valid signatures in the State of Michigan)*
- E-sign is like a stamp that is physically embedded into an electronic PDF file.
- E-sign is unique to each person, is password protected, & contains a unique key with information on the owner.
- Electronic signatures must legally be treated the same as hand written signatures.
- Easy to use, immense potential, and large cost savings to all parties.



# E-Sign

- Federal Gov has been using since 2003 and has sophisticated forms with e-signatures.
- New records retention/storage issues  
*(The electronic file is the original copy, a printed out paper copy of an E-sign is meaningless. MDOT will use ProjectWise to store construction records)*
- **All or nothing**, not possible to mix hand written signatures with e-sign on same document.
- Illegal to allow someone else to use your electronic signature (Fraud) but often can “Sign for” someone with your e-sign



# E-Sign Issues:

- Requires Validation of sender's identity
  - Reason for MDOT signature authority form (#1979)
  - Federal Standards for Verification (*min two criteria met*)
    - (*i.e. The Name expected, source, etc*)
- Some concern over software cost. (Full Std Adobe ~\$115)  
*However, per Adobe, if you are using the free reader version of Adobe (personal use) for business purposes, you are already violating the terms of the license agreement.*
- Working to facilitate e-sign approval use on handheld devices, blackberries, tablets, and smart phones.



# Samples of E-Signatures

Thank you,



**R. Jason Clark, PE**

Digitally signed by R. Jason Clark, PE  
 DN: cn=R. Jason Clark, PE, c=US, o=MDOT, ou=Construction  
 Contracts Engineer, email=ClarkJ25@Michigan.gov  
 Reason: I am the author of this document  
 Location: C&T, Lansing, MI

R. Jason Clark, PE  
 Construction Contracts Engineer  
 Michigan Department of Transportation

cc: Brenda O'Brien  
 Mark Chaput  
 Randy Van Portfliet  
 Cliff Farr

 <b>Adam Iding</b>	Digitally signed by Adam Iding DN: cn=Adam Iding, o=MDOT, ou=CFS, email=adinga@Michigan.gov, c=US Date: 2012.02.21 08:24:47 -0500
 <b>Jason Clark, PE</b>	R. Jason Clark, PE cn=R. Jason Clark, PE, o=MDOT Bureau of Field Services, ou=Construction Contracts Engineer, email=ClarkJ25@Michigan.gov, c=US 2012.02.16 17:52:42 -0500
 <b>Jon Gutting, PE</b>	Digitally signed by Jon Gutting, PE CN: Jon Gutting, PE, o=MDOT Bureau of Field Services, ou=Construction Operations, email=jgutting@Michigan.gov, c=US Reason: I attest to the accuracy and integrity of this document Date: 2012.02.17 17:15:08 -0500
 <b>Brenda J. O'Brien, P.E.</b>	Digitally signed by Brenda J. O'Brien, P.E. DN: cn=Brenda J. O'Brien, P.E., o=MDOT, ou=Construction Field Services Division, email=obrienb3@Michigan.gov, c=US Date: 2012.02.22 15:07:47 -0500

 **Gregory C. Johnson, P.E.**

Digitally signed by Gregory C. Johnson, P.  
 E.  
 DN: cn=Gregory C. Johnson, P.E.,  
 o=MDOT, ou=Executive,  
 email=johnsong2@michigan.gov, c=US  
 Date: 2012.02.28 10:59:39 -0500'

Chief Operations Officer



A Valid "PE"  
 stamp / seal on  
 a PDF Drawing



Digitally signed by R. Jason  
 Clark, PE  
 DN: cn=R. Jason Clark, PE,  
 c=US, o=MDOT, ou=Construction  
 Contracts Engineer,  
 email=ClarkJ25@Michigan.gov  
 Reason: I attest to the accuracy  
 and integrity of this document  
 Location: MDOT Bureau of Field  
 Services – C&T, Lansing, MI  
 Date: 2011.12.14 14:37:44 -05'00'

# Potential Uses of Digitally Encrypted Electronic Signatures

- Wide range of potential uses including:
  - Letters / Correspondence
  - Certified Mail
  - Contract Modifications
  - Pay Estimates
  - Pre-Construction / Progress Meeting Minutes
  - Contractors Certified Payrolls
  - Material Certifications
  - Shop Drawing Approvals
  - Contractor Performance Evaluations
  - Professional Engineer / Architect Stamps on Plan Sheets
  - Etc.

**Better Question..**

*What can't your print to PDF or Scan into a PDF, etc...?*

# QUESTIONS on E-SIGN?

- Contact Field Manager Help Desk Line  
Or Construction Contracts Unit Staff:
- Ruth Proctor 517-322-5028
- Adam Iding 517-322-5659
- Cliff Farr 517-322-6039
- Mohammad Azam 517-636-0832
- Jason Clark 517-322-6630

# QUESTIONS??

- Contract Modifications?
- Electronic Signatures? (Demo)
- Other?

# Construction Field Services

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