

## PDDM MODIFICATION APPROVAL

**Discipline:** Project Management and Highway Design

**Section / Subsection(s):** Chapter 1, Subsection 1.1.3 Federal Lands Management of Risk, 1.1.5 Revisions and Updates, and various references and corrections throughout.

**Reason for modification:** Chapter 1 modifications includes updated risk guidance for R09 and R10, SHRP2, modification and approval process, and abbreviations and definitions related to 3D modeling.

**Expected consequences:** The updated Chapter will provide current and consistent guidance to all FLH staff.

Modification Text:

See PDDM Chapter 1 attached.

Completed Coordination:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> <u>Technical Services Branch Chiefs</u>       | <input checked="" type="checkbox"/> <u>Construction Branch Chiefs</u>       |
| <input checked="" type="checkbox"/> <u>Project Development Branch Chiefs</u>      | <input checked="" type="checkbox"/> <u>Project Management Branch Chiefs</u> |
| <input type="checkbox"/> <u>Design Discipline Champion</u>                        | <input checked="" type="checkbox"/> <u>Construction Discipline Champion</u> |
| <input type="checkbox"/> <u>Bridge Discipline Champion</u>                        | <input type="checkbox"/> <u>Hydraulics Discipline Champion</u>              |
| <input checked="" type="checkbox"/> <u>Project Management Discipline Champion</u> | <input type="checkbox"/> <u>Geotechnical Discipline Champion</u>            |
| <input type="checkbox"/> <u>Hydraulics Discipline Champion</u>                    | <input type="checkbox"/> <u>Environmental Discipline Champion</u>           |
| <input type="checkbox"/> <u>Safety Discipline Champion</u>                        | <input type="checkbox"/> <u>Materials Discipline Champion</u>               |
| <input type="checkbox"/> <u>Pavements Discipline Champion</u>                     | <input type="checkbox"/> <u>Planning Discipline Champion</u>                |

**Certification:** I certify the following:

- Above coordination was completed and all comments / concerns have been addressed and resolved in a manner satisfactory to all applicable parties. Comments and resolutions are on file with the FLH Discipline Champion.
- All research and development documentation needed to support the above modification(s) is on file with the certifying FLH Discipline Champion.

**ALAN T TEIKARI** Digitally signed by ALAN T TEIKARI  
DN: c=US, o=U.S. Government, ou=FHWA FHWAsterlingVA,  
ou=DOT FHWAsterlingVA, cn=ALAN T TEIKARI  
Date: 2017.11.16 15:02:38 -05'00'

FLH Discipline Champion

11/16/2017

Date

**Approval:** The above described modification(s) is approved for immediate implementation:

**LAURIN R LINEMAN**

Digitally signed by LAURIN R LINEMAN  
DN: c=US, o=U.S. Government, ou=FHWA  
FHWAsterlingVA, ou=DOT FHWAsterlingVA,  
cn=LAURIN R LINEMAN  
Date: 2018.02.08 14:52:32 -05'00'

Director, EFL Office of Project Delivery

Click to enter date.  
Date

**CURTIS R SCOTT**

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DN: c=US, o=U.S. Government, ou=DOT FHWA LakewoodCO,  
ou=FHWA FHWA LakewoodCO, cn=CURTIS R SCOTT  
Date: 2018.02.06 10:31:22 -07'00'

Director, CFL Office of Project Delivery

02/06/2018  
Click to enter date.  
Date

**EDWARD S  
HAMMONTREE**

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DN: c=US, o=U.S. Government, ou=FHWA  
FHWA LakewoodCO, ou=DOT FHWA LakewoodCO,  
cn=EDWARD S HAMMONTREE  
Date: 2018.02.06 09:12:23 -08'00'

Director, WFL Office of Project Delivery

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Date



Digitally signed by SCOTT T JOHNSON  
DN: c=US, o=U.S. Government, ou=FHWAHQ, ou=DOT  
Headquarters, cn=SCOTT T JOHNSON  
Date: 2018.02.08 15:09:04 -05'00'

Director, Office of Program Development

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Date

# PDDM MODIFICATION APPROVAL

**Discipline:** Design (Survey)

**Section / Subsection(s):** Chapter 5, Section 5.4.6

**Reason for modification:**

Added new Section 5.4.6 to describe the use of Unmanned Aircraft Systems (UAS) on FLH projects. Minor link updates made to rest of chapter.

**Expected consequences:**

The new section provides policy guidance for the use of UAS preparing FLH to take advantage of new technology.

**Modification Text:**

See attached

**Completed Coordination:**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> <u>Technical Services Branch Chiefs</u>          | <input type="checkbox"/> <u>Construction Branch Chiefs</u>        |
| <input checked="" type="checkbox"/> <u>Highway Design/Project Dev. Branch Chiefs</u> | <input type="checkbox"/> <u>Project Management Branch Chiefs</u>  |
| <input checked="" type="checkbox"/> <u>Design Discipline Champion</u>                | <input type="checkbox"/> <u>Construction Discipline Champion</u>  |
| <input type="checkbox"/> <u>Bridge Discipline Champion</u>                           | <input type="checkbox"/> <u>Hydraulics Discipline Champion</u>    |
| <input type="checkbox"/> <u>Project Management Discipline Champion</u>               | <input type="checkbox"/> <u>Geotechnical Discipline Champion</u>  |
| <input type="checkbox"/> <u>Hydraulics Discipline Champion</u>                       | <input type="checkbox"/> <u>Environmental Discipline Champion</u> |
| <input type="checkbox"/> <u>Safety Discipline Champion</u>                           | <input type="checkbox"/> <u>Materials Discipline Champion</u>     |
| <input type="checkbox"/> <u>Pavements Discipline Champion</u>                        | <input type="checkbox"/> <u>Planning Discipline Champion</u>      |

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- All research and development documentation needed to support the above modification(s) is on file with the certifying FLH Discipline Champion.

**STEPHEN C  
CHAPMAN**

FLH Discipline Champion

Digitally signed by STEPHEN C  
CHAPMAN  
Date: 2018.06.20 12:39:06 -07'00'

6/20/2018

Date

**Approval:** The above described modification(s) is approved for immediate implementation:

**LAURIN R LINEMAN**

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ou=DOT FHWAsterlingVA, cn=LAURIN R LINEMAN  
Date: 2018.07.19 13:22:44 -04'00'

Chief of Engineering, Eastern Federal Lands

7/19/2018

Date

**BRIAN M. KOZY**

Digitally signed by BRIAN M. KOZY  
Date: 2018.07.19 11:11:50 -06'00'

Chief of Engineering, Central Federal Lands

7/19/2018

Date

**EDWARD S  
HAMMONTREE**

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HAMMONTREE  
Date: 2018.07.19 10:05:07 -07'00'

Chief of Engineering, Western Federal Lands

7/19/2018

Date

**SCOTT T JOHNSON**

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JOHNSON  
Date: 2018.07.19 14:09:37 -04'00'

Director, Office of Program Development

Date

**PDDM MODIFICATION APPROVAL**

**Discipline:** Design

**Section / Subsection(s):** Chapter 12 – Right-of-Way and Utilities

**Reason for modification:** Chapter 12 has been updated to amend new program requirements; update technical references for regulations, manuals, websites, etc.; revise process flow charts; correct and clarify grammar and other miscellaneous revisions.

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**Expected consequences:** The updated Chapter will provide current and consistent guidance to all Survey, Mapping Right-of-Way, Utilities and Highway Design staff.

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**Modification Text:**

See PDDM Chapter 12, attached.

**Completed Coordination:**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> <u>Technical Services Branch Chiefs</u>  | <input checked="" type="checkbox"/> <u>Construction Branch Chiefs</u>       |
| <input checked="" type="checkbox"/> <u>Project Development Branch Chiefs</u> | <input type="checkbox"/> <u>Project Management Branch Chiefs</u>            |
| <input checked="" type="checkbox"/> <u>Design Discipline Champion</u>        | <input checked="" type="checkbox"/> <u>Construction Discipline Champion</u> |
| <input type="checkbox"/> <u>Bridge Discipline Champion</u>                   | <input type="checkbox"/> <u>Hydraulics Discipline Champion</u>              |
| <input type="checkbox"/> <u>Project Management Discipline Champion</u>       | <input type="checkbox"/> <u>Geotechnical Discipline Champion</u>            |
| <input type="checkbox"/> <u>Hydraulics Discipline Champion</u>               | <input type="checkbox"/> <u>Environmental Discipline Champion</u>           |
| <input type="checkbox"/> <u>Safety Discipline Champion</u>                   | <input type="checkbox"/> <u>Materials Discipline Champion</u>               |
| <input type="checkbox"/> <u>Pavements Discipline Champion</u>                | <input type="checkbox"/> <u>Planning Discipline Champion</u>                |

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- All research and development documentation needed to support the above modification(s) is on file with the certifying FLH Discipline Champion.

**ALAN T TEIKARI**  
Digitally signed by ALAN T TEIKARI  
DN: c=US, o=U.S. Government, ou=FHWA FHWAsterlingVA,  
ou=DOT FHWAsterlingVA, cn=ALAN T TEIKARI  
Date: 2017.11.17 13:16:43 -05'00'  
\_\_\_\_\_  
FLH Discipline Champion

11/17/2017  
Date

**Approval:** The above described modification(s) is approved for immediate implementation:

**LAURIN R LINEMAN**

Digitally signed by LAURIN R LINEMAN  
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FHWASterlingVA, ou=DOT FHWASterlingVA, cn=LAURIN R  
LINEMAN  
Date: 2018.02.23 10:38:12 -05'00'

Chief of Engineering, Eastern Federal Lands

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Date

**CURTIS R  
SCOTT**

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DN: c=US, o=U.S. Government, ou=DOT  
FHWALakewoodCO, ou=FHWA  
FHWALakewoodCO, cn=CURTIS R SCOTT  
Date: 2018.02.26 07:57:08 -07'00'

Chief of Engineering, Central Federal Lands

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Date

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HAMMONTREE**

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DN: c=US, o=U.S. Government, ou=FHWA  
FHWALakewoodCO, ou=DOT FHWALakewoodCO,  
cn=EDWARD S HAMMONTREE  
Date: 2018.02.23 07:57:00 -08'00'

Chief of Engineering, Western Federal Lands

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Date



Digitally signed by SCOTT T JOHNSON  
DN: c=US, o=U.S. Government, ou=FHWAHQ,  
ou=DOT Headquarters, cn=SCOTT T JOHNSON  
Date: 2018.02.26 08:48:22 -05'00'

Director, Office of Program Development

Click to enter date.  
Date



U.S. Department  
of Transportation

**Federal Highway  
Administration**

# Memorandum

Subject: **INFORMATION:** Transmittal 16, Revision to the FLH  
Project Development and Design Manual (PDDM)

Date: December 29, 2014

From: Joyce A. Curtis   
Associate Administrator for  
Office of Federal Lands Highway

In Reply Refer To:  
HFDP-1

To: Federal Lands Highway Division Directors

**TRANSMITTAL No. 16**

This memorandum transmits the revised PDDM.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	
Chapter 10	3/2008	Chapter 10	12/2014	Minor updates throughout, added Section 10.3.8 on Non-Destructive Evaluation.

The updated PDDM with these chapter changes can be accessed at the FLH website located at <http://flh.fhwa.dot.gov/resources/manuals/pddm/>.

If there are any questions, please contact Mr. Richard Seabrook, Design Champion, Office of Program Development at (202) 366-9490.

cc: FLH Directors, FLH Discipline Champions



U.S. Department  
of Transportation

**Federal Highway  
Administration**

# Memorandum

Subject: **ACTION:** Transmittal 15, Revision to the  
Federal Lands Highway (FLH)  
Project Development and Design Manual  
(PDDM)

Date: January 23, 2014

From: Terry K. Haussler  
Director, Office of Program Development

In Reply Refer To:  
HFPD-3

To: Federal Lands Highway Division Engineers

This memorandum transmits revisions to the PDDM.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	
Chapter 1	3/2008	Chapter 1	7/2012	Revised Sections 1.1.4, 1.1.5, 1.2.5, and 1.4.1.
Chapters 3 & 6 Chapter 5 Chapter 12	3/2008	Chapters 3 & 6 Chapter 5 Chapter 12	7/2012 9/2012 12/2012	Changed or removed links to obsolete resources
Chapter 4	3/2008	Chapter 4	7/2012	Modified text of Sections 4.3 and 4.6 to 4.9
Chapter 7	3/2008	Chapter 7	12/2012	Modified text of Sections 7.1 and 7.3 to 7.5
Chapter 9	3/2008	Chapter 9	8/2012	Updated entire chapter

These changes have been added to the web site copy of the PDDM located at <http://flh.fhwa.dot.gov/resources/manuals/pddm/>.

If you have any question, please contact Mr. John Seabrook P.E., Design and Project Delivery Engineer at (202) 366-9490.

cc: FLH Directors, FLH Discipline Champions



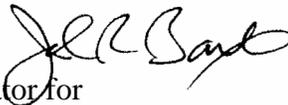
U.S. Department  
of Transportation

**Federal Highway  
Administration**

# Memorandum

Subject: **INFORMATION:** Transmittal 14, Revision to the  
Federal Lands Highway (FLH) Project Development and  
Design Manual (PDDM)

Date: February 8, 2008

From: John R. Baxter, P.E.   
Associate Administrator for  
Office of Federal Lands Highway

In Reply Refer To: HFDP-3

To: Federal Lands Highway Division Engineers

**TRANSMITTAL No. 14**

This memorandum transmits the revised PDDM.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	
Chapters 1 to 11	5/2005	Chapters 1 to 13	3/2008	Complete content revision to all chapters, new chapters on Pavements (Chapter 11) and Right-of-way (Chapter 12).

The WFLHD is adding this change to their web site copy of the PDDM located at <http://www.wfl.fhwa.dot.gov/design/manual/>.

The PDDM is approved for the FLH use through the Federal Lands Highway Office of Program Development. The PDDM has gone through a rigorous review and update by the Functional Discipline Leaders (FDL) and associated cross divisional teams.

**MOVING THE  
AMERICAN  
ECONOMY**



The PDDM has been reviewed by the Divisions, certified by the FDLs, assured as valid by the FDL's respective supervising directors and recommended for approval by the Board of Directors.

The PDDM documents the FLH best practices and standards for project development and design to be followed both internally and by our A/E consultants.

The FLH has developed the 2008 PDDM to provide current policies and guidance for the interdisciplinary project development and design related activities performed by FLH Divisions and their consultants. It also serves as a guide for administrators, public officials and others, both within and outside FLH, who are responsible for advancing projects through the project development process.

Begin to explore and follow the manual at <http://www.wfl.fhwa.dot.gov/design/manual/>. Western Federal Lands is charged with maintaining the official link for the PDDM, however a link is provided through any of the Division's internet or intranet sites.

Directors and Branch Chiefs should discuss the PDDM with their staff and reinforce the manual as FLH's policy and guidance for project development and design.

If you have any question, please contact Mr. John Seabrook P.E., PMP, Design and Construction Operation Engineer at (202) 366-9490.

cc: FLH Directors, FLH Functional Discipline Leaders



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

# Memorandum

Subject: **INFORMATION:** Transmittal 13, Revision to the FLH  
Project Development and Design Manual (PDDM)

Date: JUN 13 2005

From: J.B. Wlaschin   
Director, Office of Program Development

Reply to  
Attn. of: HFPD-1

To: Federal Lands Highway Division Engineers

**TRANSMITTAL No. 13**

This memorandum transmits the revised PDDM and updates to the FLH Standard Drawings.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	
Chapters 1 to 11	-	Chapters 1 to 11	6/10/2005	Minor corrections to all chapters, updated in dual units, re-formatted style for electronic publishing, hyperlinked, and 508 compliant.
Chapter 9, Exhibit 9.38	12/4/1998	Chapter 9, Exhibit 9.38	6/10/2005	New and revised standard drawings. (Revised List of Approved Standard Drawings and Description of Revisions to Standard Drawings.)

The WFLHD is adding this change to their web site copy of the PDDM located at <http://www.wfl.fhwa.dot.gov/design/manual/>. Standard drawings may be viewed at <http://www.wfl.fhwa.dot.gov/design/standard/>.

Attachments

cc: FLH Directors, FLH Functional Discipline Leaders



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

# Memorandum

Subject: **INFORMATION:** Transmittal 12, Revision to the FLH  
Project Development and Design Manual (PDDM)

Date: **NOV 28 2000**

From: J.B. Wlaschin <sup>for</sup> *B.M.L.*  
Director, Office of Program Development

Reply to  
Attn. of: HFPD-1

To: Federal Lands Highway Division Engineers

**TRANSMITTAL No. 12**

This memorandum transmits the revised Chapter 7 and a minor correction to Chapter 9.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	
Chapter 7	6/13/1996	Chapter 7	11/10/2000	Revises all of Chapter 7 including the index and exhibits
Chapter 9, page 129	6/13/1996	Chapter 9, page 129	11/10/2000	Corrects dimensions of letter sized sheet

The WFLHD is adding this change to their web site copy of the PDDM. The address of this site is <http://www.wfl.fhwa.dot.gov/projects/pddm/pddm.pdf>.

Attachments

cc: Jose Ramirez



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

# Memorandum

Subject: **INFORMATION:** Transmittal 11, Revision to the FLH  
Project Development and Design Manual (PDDM)

**DEC 4 1998**

From: Chief, Engineering and Operations Division

To: Federal Lands Highway Division Engineers

**TRANSMITTAL No. 11**

This memorandum transmits the revised Chapter 8 and approves one new and several revised standard drawings for inclusion in the PDDM. The electronic copies of the revised standard drawings have been forward directly from the WFLHD.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	
Chapter 8	6/3/1996	Chapter 8	12/4/1998	Revises all of Chapter 8 including the index and exhibits.
Chapter 9, Exhibit 9.38	1/15/1998	Chapter 9, Exhibit 9.38	12/4/1998	New and revised standard drawings. (Revised List of Approved Standard Drawings and Description of Revisions to Standard Drawings.)

A summary of the resolution of the comments, which includes each Division's incoming comments from the September 21 draft distribution of Chapter 8, is also attached. The WFLHD is adding this change to their website copy of the PDDM as well as the CD-ROM Library version they are currently producing.

  
J.B. Wlaschin

3 Attachments



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

# Memorandum

Subject: **INFORMATION**: Transmittal 10, Revision to the FLH  
Project Development and Design Manual

From: Chief, Engineering and Operations Division  
Federal Lands Highway Office

To: Federal Lands Highway Division Engineers

**TRANSMITTAL No. 10**

This transmittal documents the approval of standard drawings for inclusion in the Project Development and Design Manual (PDDM). The electronic files and hard copies of the revised drawings are being forwarded directly from the WFLHD.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	
Index for Exhibit 9.38 Pages 1-4	9/8/1997	Index for Exhibit 9.38 Pages 1-4	1/9/1998	Revise Exhibit 9.38 Index to reflect new and updated standard drawings

The attached Index for Exhibit 9.38 includes the original approval date and latest revision date for each approved standard drawing. A summary is also attached that briefly describes the reasons for the current revisions.

  
J.B. Wlaschin

2 Attachments



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

# Memorandum

Subject: **INFORMATION**: Transmittal 9, Revision to the FLH  
Project Development and Design Manual

From: Chief, Engineering and Operations Division  
Federal Lands Highway Office

To: Federal Lands Highway Division Engineers

**TRANSMITTAL No. 9**

This transmittal documents the approval of 29 revised standard drawings for inclusion in the Project Development and Design Manual (PDDM). The electronic files (on CD ROM) and hard copies of the revised drawings are being forwarded directly from WFLHD. They are also available on the WFLHD's Web file server (Internet address ftp://198.145.188.2).

Most of the drawing changes were required due to the decision by the Concrete Reinforcing Steel Institute not to stock hard converted reinforcing steel sizes. The drawings reflect the comments received from the drafts that were forwarded for comments on January 9.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	
Index for Exhibit 9.38 Pages 1-4	6/3/1996	Index for Exhibit 9.38 Pages 1-4	9/8/1997	Revise Exhibit 9.38 Index to reflect revisions to standard drawings (sent separately)

Besides the revised Index for Exhibit 9.38, a table briefly describing the changes is also attached.



J.B. Wlaschin

2 Attachments



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

# Memorandum

Subject: **INFORMATION:** Transmittal 8, Revision to the FLH  
Project Development and Design Manual (PDDM)

From: Chief, Engineering and Operations Division  
Federal Lands Highway Office

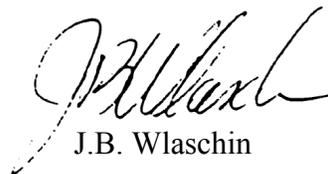
To: Federal Lands Highway Division Engineers

**TRANSMITTAL No. 8**

Several revisions to the PDDM are underway, including the rewrite of several chapters. The current revision is the first since the electronic version was transmitted in June 1996. The WFLHD will include the revisions in the electronic version on their Web Page. The WFLHD is also continuing efforts to update the standard drawings for the reinforcing steel changes and will make the standard drawings and other exhibits in the PDDM available on CD ROM in the near future.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	
Exhibit 8.3 Pages 1-3	6/3/1996	Exhibit 8.3 Pages 1-3	5/28/1997	Revise Exhibit 8.3 to reflect correct NCHRP Report number.

This change is needed to prevent users outside FLH from mistakenly believing that the aesthetic barrier systems noted have been tested under NCHRP 350. Currently, FLH has no plans to retest those systems under NCHRP 350. As new systems are developed, they will be tested under the criteria approved by FHWA at the time of testing.

  
J.B. Wlaschin

Attachment



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

# Memorandum

Subject: **INFORMATION:** Electronic Metric Version  
Project Development and Design Manual

From: Chief, Engineering and Operations Division  
Federal Lands Highway Office

To: Federal Lands Highway Division Engineers

**TRANSMITTAL No. 7**

The metric version of the Federal Lands Highway Project Development and Design Manual (PDDM) is attached on floppy disks. Comments received from users of the August 1995 "Working Draft" have been incorporated. This metric version is intended to be kept only electronically. Information on extracting the compressed files is included on the attached Supplemental Information sheet.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	
All (Chapter 1 through Chapter 11)	10/21/1988 to 6/29/1994	Chapter 1 through Chapter 11	6/3/1996	Metric Revision of Entire PDDM

Several chapters have comprehensive revisions underway or planned, and some exhibits are not included on the disks. The supplemental Information sheet also has the status of the revisions and exhibits.

  
Hugh B. Jones

3 Attachments

