

**MICHIGAN DESIGN MANUAL
BRIDGE DESIGN**

CHAPTER 11

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CHAPTER 11

PLAN REVISIONS

11.01

**GENERAL INFORMATION
(8-20-2009)**

- A. When it is necessary to change the plans of a project, the CAD (Computer Aided Drafting) files shall be updated and new plan sheets shall be produced. A Revision of Plans [Form 291](#) shall also be prepared. If the revision is for a log job, then a revision box is created on the 8½" x 11" sheet and the revisions are made in the same manner as for plan sheets described in this chapter.
- B. Copies of the Revision of Plans [Form 291](#) in Adobe Acrobat "PDF" format shall be transmitted by the Design Division to the persons and agencies as outlined in Section [11.02](#). (8-6-92)

If the changes are extensive or complicated, the revised plan sheets, in Adobe Acrobat "PDF" format, shall accompany the Revision of Plans [Form 291](#). If the changes can be adequately described on the form, copies of the plan sheets need not be included in the distribution.

- C. If the revision results in a change in a quantity or the addition of a pay item not included in the Contract Proposal, the quantity change shall be identified on the Revision of Plans [Form 291](#). If the quantity change is of a bid item that is routinely balanced at the completion of construction (e.g., Structural Steel, earthwork) and the change is minor, it does not have to be included on the form, but instead it should be noted that the quantity adjustment will be included in the final balancing.

11.01 (continued)

- D. When making a plan revision, any change in dimensions or quantities should be made by crossing out the figures/details being revised (do not delete), adding the new figure/detail above or adjacent to the old figure/detail and circling the entire revision. The revision number is placed adjacent to the circled figures/details. As noted in subsection 11.01 A., update the CAD files without deleting the original details.
- E. The revision block on the plan sheets is to be used only for revisions made after plans are advertised for bidding. Revision numbers are prefixed with the letter B. Example: B-1.

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11.02

PLAN REVISION PREPARATION

11.02.01

General Procedure (8-20-2009)

The following guidelines should be used in preparing plan revisions:

- A. Revise CAD files affected and produce new plan sheets (8½" x 11" sheets for log job).
- B. Prepare Revision of Plans [Form 291](#) and Plan Revision Distribution [Form 211](#). For examples of these forms see [Appendix 11.02.01](#) or MDOT web site. (8-6-92) (5-28-2013)
- C. Submit the completed forms and revised plan sheet(s) (if required) in Adobe Acrobat "PDF" format to the following for signatures:
 - 1. Project Manager/ Development Engineer. (12-5-2005)
 - 2. Resident/Delivery Engineer (12-5-2005)

11.02.01 (continued)

- D. Combine signed/approved Revision of Plans [Form 291](#), Plan Revision Distribution [Form 211](#) and the revised plan sheets (if required) in Adobe Acrobat "PDF" format and name the file PLANREV1.PDF (or subsequent numerical naming if multiple).
- E. Save the file (drawings and forms) in ProjectWise (MDOT internal plan management system) in the folder entitled "Letting Plans and Proposal" and the sub-folder entitled "Plan Revisions and Shop Drawings". If the sub-folder has not been created, contact the local or central office ProjectWise Administrator for assistance.

For additional information and procedures regarding MDOT ProjectWise see [pwname://MDOTProjectWise/Documents/Reference_Documents/E-Proposal/Plan_Rev-Shop_Drawings](#)

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11.02.01 (continued)

General Procedure

F. Distribution

1. MDOT

From ProjectWise, send an email link from PLANREV1.PDF, to all affected "MDOT" staff notifying them that a plan revision is available. List of possible recipients includes:

- a. Construction Files
- b. TSC Delivery Engineer
- c. Bridge Design Unit (if structure affected)
- d. Road Design Unit (if grade, alignment or drainage affected)
- e. Bridge Management Unit – Design Division (Load Rating Engineer) (if change affects load capacity of structure)
- f. Structural Fabrication Unit – Operations Field Services Division (if change affects beams or other structural elements)
- g. Utilities-Permits Section – Development Services Division (if change in quantities chargeable to a utility company)
- h. Railroad Coordination Unit – Office of Rail

11.02.01 (continued)

2. Non-MDOT

Distribute copies of Revision of Plans [Form 291](#) and the revised plan sheets (if required) in Adobe Acrobat "PDF" format, to any "non-MDOT" affected agencies. List of possible recipients includes:

- a. FHWA (FHWA oversight projects)
See Section [11.02.03](#)
- b. Consultant
- c. City (if participating)
- d. County (if participating)
- e. County Drain Commission
- f. Utility
- g. Steel Reinforcement Fabricator
- h. Fabricator (if structural steel or prestressed concrete is affected)
 - 1) Steel beams or pile bents
 - 2) Tube railing
 - 3) Bearings
 - 4) Expansion joint device
 - 5) Stay in place forms
 - 6) PC beams
 - 7) MSE wall units
 - 8) Culverts

(10-22-2012)

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11.02.02

Plan Revisions Involving Shop Details and Suppliers

Plan revisions involving shop details and suppliers will always require that revised detail sheets be included with Revision of Plans [Form 291](#).

11.02.03

Plan Revisions Involving FHWA Oversight Projects

- A. Plan revisions involving **FHWA Oversight** projects that originate in Design Division are to be reviewed by and discussed with the FHWA before they are distributed. (8-6-92)
- B. Indicate on Revision of Plans [Form 291](#) the date of FHWA approval. (10-22-2012)
- C. Exceptions to the above would be plan revision(s) involving dimensions, small changes in quantities, or a similar omission in the plans.

11.02.04

Plan Revisions Involving Utilities

On a plan revision involving a change in quantities chargeable to a utility company, send a ProjectWise email link from PLANREV1.PDF to the Utilities-Permits Section in the Development Services Division. (8-20-2009) (10-22-2012)

11.02.05

Plan Revisions Affecting the Load Carrying Capacity of the Structure

If the plan revision will affect the load-carrying capacity of the structure, send a ProjectWise email link from PLANREV1.PDF to the Bridge Management Unit (Load Rating Engineer) of the Design Division. (8-20-2009) (10-22-2012)

11.02.06

Plan Revision on Package Contracts (8-20-2009)

- A. On plan revisions concerning bridges in package contracts, where more than one bridge is involved, it is necessary to identify the structure, sheet number(s) and detail(s) involved on the Revisions of Plans Form.
- B. Separate plan revisions should be made for each structure involved even though the revisions are the same or are distributed at the same time.

PLAN REVISION DISTRIBUTION

INSTRUCTIONS:

Combine revised plan sheets, Form 0291 and this form, all in "PDF" format, name the file PLANREV1.PDF. Coordinate Plan Revision folder creation per Road Design Manual 14.70.01 and place the combined PLANREV1.PDF file in the newly created Plan Revisions folder in ProjectWise.

From ProjectWise, send an email link from PLANREV1.PDF, to all affected "MDOT" staff notifying them that a plan revision is available. Send a copy of revised plan sheets and Form 0291 to all affected "non-MDOT" agencies as noted below.

DESIGN UNIT	REVISION
CONTROL SECTION	JOB NUMBER

DESCRIPTION

PROJECTWISE LOCATION

MDOT DISTRIBUTION	PLANREV1.PDF FILE	
CONSTRUCTION FILES	ProjectWise	
TSC CONSTRUCTION ENGINEER	ProjectWise	
BRIDGE DESIGN UNIT (if structure affected)	ProjectWise	
ROAD DESIGN UNIT (if grade, alignment or drainage affected)	ProjectWise	
BRIDGE MANAGEMENT UNIT – DESIGN DIVISION (Load Rating Engineer) (if change affects load capacity of bridge)	ProjectWise	
STRUCTURAL FABRICATION UNIT – OPERATIONS FIELD SERVICES DIVISION (if change affects beams or other structural elements)	ProjectWise	
UTILITIES-PERMITS SECTION – DEVELOPMENT SERVICES DIVISION (if change in quantities chargeable to a utility company)	ProjectWise	
RAILROAD COORDINATION UNIT – OFFICE OF RAIL (if agency directly affected)	ProjectWise	
NON-MDOT DISTRIBUTION	PLANS	FORM 0291
FHWA (FHWA oversight projects)		
CONSULTANT (if directly affected or consultant designed project)		
CITY OF: (for each city that participates)		
COUNTY OF: (for each county that participates)		
COUNTY DRAIN COMMISSION (if agency directly affected)		
UTILITY (if agency directly affected)		
STEEL REINFORCEMENT FABRICATOR (if revision directly affects Fabricator)		
FABRICATOR (if structural steel or prestressed concrete)		

CC:

REVISION OF PLANS

INSTRUCTIONS: ADD ADDITIONAL SHEETS, IF NECESSARY, FOR "DESCRIPTION OF CHANGES"

FUND/CONTROL SECTION/JOB NO.	LOCATION		
DATE			

DESCRIPTION OF CHANGES

QUANTITY CHANGES (Continue on page 2 if needed)

ITEM	UNIT	CONTRACT QUANTITY	CHANGE PREV. REV.	CHANGE THIS REV.	REVISED QUANTITY

NECESSITY FOR CHANGE

PREPARED BY (Unit)	DATE	DATE PLAN REVISED
APPROVED BY (Project Mgr/Development Engineer)	DATE	SHEET NO.'S
APPROVED BY (Resident/Delivery Engineer)	DATE	DATE REVISED SHEETS ISSUED

DATE FHWA APPROVAL (Oversight Non-exempt)
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ADDITIONAL INFORMATION (Attach additional pages if necessary)

