
Road Design Details

Design Manual

Chapter 1

General Information

Originally Issued: 09-22-00

Revised: 07-27-21

This section contains information related to modifications and revisions of road design details. Road design details are developed to aid the designer in the development of detailed design plans. They can be accessed through the DOT's website <https://iowadot.gov/design/Road-design-details>.

Road design details consist of:

- Design and Tabulation Forms,
- Standard Notations,
- Design Detail Sheets, and
- Typical Components, Grading Typical, and Detour Typical.
- 2000s through 9000s

Design and Tabulation Forms

These are numbered between 100 and 199. Many of these forms are used for listing and tabulating quantities of materials required for a project. Others are tables used for listing design or quantity information relevant to a project such as circular curve data or tabulation of utilities. These forms are typically placed on the C, CD, CE, J, or M sheets of a plan.

Standard Notations

These are numbered between 200 and 299. They provide information pertaining to the construction of the project itself and are placed on the C sheets of a plan ([hyperlink](#)).

Design Detail Sheets

These are numbered between 500 and 599. They provide construction details for a specific design situation. Detail sheets are similar to standard road plans, but feature design situations that are less frequently encountered and are more specialized. They are usually placed on the U sheets of a plan ([hyperlink](#)).

Typical Components, Grading Typical, and Detour Typical

These are cross sections of the components used to build models. These are placed in the [B sheets](#) of a plan.

2000s through 9000s

These consist of the [2000s](#), [4000s](#), [6000s](#), [7000s](#), [8000s](#), and [9000s](#). They are similar to design detail sheets, but are more focused on a particular design feature. These are placed in the [B sheets](#) of a plan.

Modifications of Road Design Details

Occasionally it is necessary to modify a road design detail. The process is slightly different for each type.

Design and Tabulation Forms

When a design or tabulation form is modified, remove the date and replace it with the word MODIFIED. The upper right should appear similar to Figure 1.

110-08
MODIFIED

Figure 1: The upper right corner of a modified design or tabulation form.

Standard Notations

When a standard notation is modified, remove the date and replace it with the word MODIFIED. The upper right should appear similar to Figure 2.

253-1
MODIFIED

Figure 2: The upper right corner of a modified standard notation.

Design Detail Sheets

When a design detail sheet is modified, the Iowa DOT logo is replaced with MODIFIED. State the reason for the modification. The revision number and date are left the same. The upper right should appear similar to Figure 3.

MODIFIED	REVISION	
	NEW	10-17-17
ROAD DESIGN DETAIL	500-10	
	SHEET 1 of 1	
REVISIONS: Changed to 6" subdrain.		
OUTLETS FOR LONGITUDINAL, TRANSVERSE AND BACKSLOPE SUBDRAINS		

Figure 3: Box in lower right hand corner of modified design detail.

Typical Components, Grading Typicals, and Detour Typicals

When a typical component, grading typical, or detour typical is modified, remove the date and replace it with MODIFIED. The tab in a typical component should appear similar to Figure 4.

2P_ MODIFIED

Figure 4: The tab of a modified typical component.

The upper right of a grading typical or detour typical should appear similar to Figure 5.

G_4D_Grade
MODIFIED

Figure 5: The upper right corner of modified a grading typical or detour typical.

2000s to 9000s

When a typical is modified, remove the date and replace it with the word MODIFIED. The box should appear similar to Figure 6.

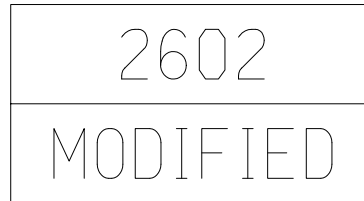


Figure 6: The upper right corner of a modified 2000 to 9000.

Road Design Detail Revisions

Occasionally it is necessary to revise road design details to incorporate changes in technology, procedures, or specifications. Notify the [Methods Engineer](#) if revisions are needed to a Road Design Detail. The Methods Section will make the changes.

Chronology of Changes to Design Manual Section:

001E-004 Road Design Details

7/27/2021	Revised Removed 3000s from list of details.
11/26/2019	Revised Revised to include information on Typical Components, Grading Typical, and Detour Typical.
6/25/2019	Revised Updated hyperlinks. Updated header logo and text.
9/13/2012	Revised Updated and eliminated outdated references and figures.
1/23/2004	Previously Updated