MONTANA
Department of Transportation

Project Development & Delivery - Digital Design and Modeling Services

Design Standards

Application/Tool(s): Excel Manager
Version(s): MDT 2026: v01.00.00
Released/Revised: 8/21/2026

SUPPORT
Open a Case

Road Plan Excel Summary Frames

Statement of Need

Road Plan Excel Summary Frames design standards ensure quality of production plans.

Acronyms/Definitions Used in This Document

MDT – Montana Department of Transportation

Mrg – Merged

Dc – Decimals

v – vertical

h – horizontal

Sta. – Station

Desc. – Description

References

Roadway Excel Manager Guides

Road Design Manual Chapter 13: Quantity Summaries

Standard Specifications

Revisions

8/21/2026 – Added Quantity Summaries section.

Summary Frame Template

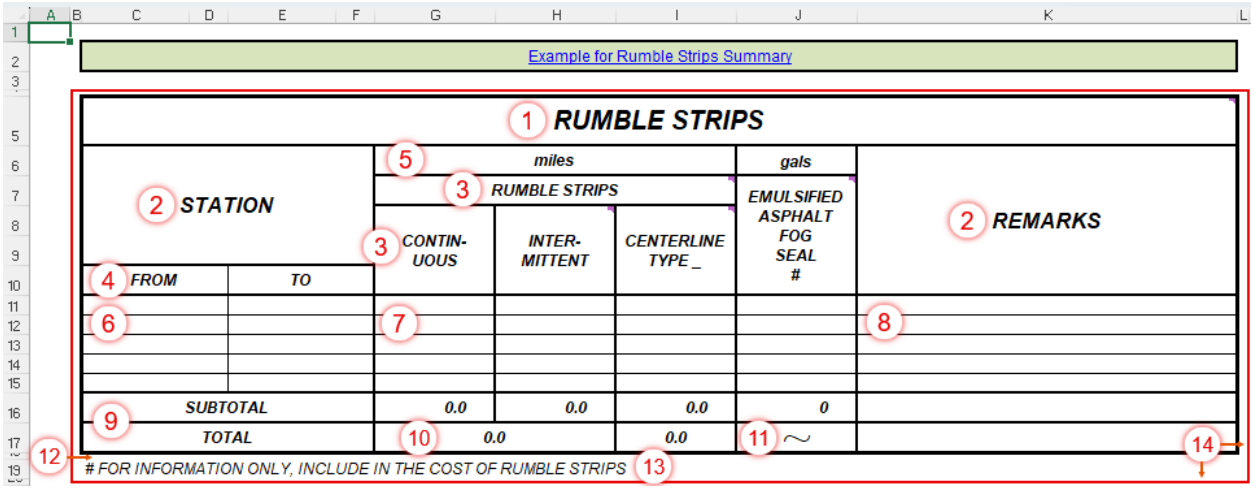
Summary frame templates are accessible within Civil 3D from the MDT Tools ribbon while using the MDT State Kit. All templates have pre-configured formatting as detailed in this guide. Subtle adjustments may be needed to accommodate the project data entered. They may also serve as a starting point for creating unique custom summary frames.

Note: Any adjustments should be checked for the following:

- subheadings for proper spelling
- word wrapping
- acceptable abbreviations

Applicable Start Up, Support, Tip, and Procedure guides can be accessed from the Project Development and Delivery Resources Library - Roadway Excel Manager Guides.

Template Definitions



1 - Summary Frame Title

2 - Headings (“Station” and “Remarks”)

3 - Subheadings (to match pay item wording from AASHTOWare)

4 - Heading and Subheading Input Descriptor

5 - Units

6 - Station (Input)

7 - Entry (Input)

8 - “Remarks” and “For” (Input)

9 - Subtotals and Totals

10 - Totals Merged

11 - Information only total symbol - tilde (~)

12 - Note spacer row

13 - Notes

14 - Exterior columns/rows for copy/paste border

Text Specifications

Cell Styles are used to set fonts, colors, borders and text/number formatting in the summary frames. The styles will not apply borders, height, or width to your cells. They should be considered when adjusting the summary frames. Cell Styles can be modified from the Styles panel of the Home tab in Excel once a summary frame is inserted. Text specifications are set in each cell style as indicated below. The styles can also be reviewed by inserting the Styles summary frame into any QMG file. Future changes to the library will not update your EMG file.

	Cell Style	**Font/Cell Format**	**Text Size and Alignment**
Summary Frame Title	***Header_Frame***	Arial - Italic, Bold, Black, No Fill	Size 20 (description in parenthesis - Size 12) Centered (v & h)
Headings (“Station” and “Remarks”)	***HeaderB***	Arial - Italic, Bold, Black, No Fill	Size 16 Centered (v & h)
Subheadings, Units, Heading and Subheading Input Descriptors	***HeaderA***	Arial - Italic, Bold, Black, No Fill	Size 12 Centered (v & h)
Station (Input)	***Sta_0Dc*** ***Sta_1Dc*** ***Sta_2Dc*** ***Sta2ndClmn***	Arial - Italic, Black, No Fill	Size 12 Right (h) – Sta. (1st column) Left (h) – Desc. (2nd column) Centered (v)
Entry (Input)	***Entry_0Dc*** ***Entry_1Dc*** ***Entry_2Dc*** ***Entry_Txt***	Arial - Italic, Black, No Fill	Size 12 Indent 2 Right (h) – Dc Centered (v) - Dc Centered (v & h) - Txt
“Remarks” and “For” (Input)	***TextRemark***	Arial - Italic, Black, No Fill	Size 12 Indent 1 Left (h) Centered (v)
Subtotals and Totals	***Total_0Dc*** ***Total_1Dc*** ***Total_2Dc***	Arial - Italic, Bold, Black, No Fill	Size 12 Indent 2 Right (h) Centered (v)
Totals Merged	***TotalMrg_0Dc*** ***TotalMrg_1Dc*** ***TotalMrg_2Dc***	Arial - Italic, Bold, Black, No Fill	Size 12 Centered (v & h)
Information only total symbol - tilde (~)	***Info ~***	Centaur - Regular, Black	Size 36 Centered (v & h)
Notes	***TextNote***	Arial - Italic, Black, No Fill	Size 12 Left (h) Centered (v)

Row Heights and Column Widths

	Height	**Width**
Summary Frame Title	37.50	Frame width
Headings (“Station”)	Vary depending on “Units”, “Subheadings”, and “Descriptors” - increments of 22.50	Vary, matching input width
Headings (“Remarks”)	Vary depending on “Units”, “Subheadings”, and “Descriptors” - increments of 22.50	55
Subheadings, Heading and Subheading Input Descriptors	Vary - increments of 22.50	Vary, matching input width
Units	22.50	Vary, matching input width
Station (Input)	15	15 - Sta. (1st column) 5 - Desc. (2nd column) - resize as needed for restricted space
Entry (Input)	15	15 - resize as needed for restricted space
“Remarks” (Input)	15	55 - suggested minimum, resize as needed for restricted space
“For” (Input - Surfacing)	15	40 - suggested minimum, resize as needed for restricted space
Subtotals and Totals	22.50	Vary, matching input width
# Note spacer row	5	Frame width
Notes	15	Frame width
Exterior columns/rows for proper copy/paste	5	1

Borders

	Line Style
Exterior Border	Thick
Vertical borders between Heading input data and Subheading input data	Medium
Horizontal and vertical borders for Title, Heading, Subheading, Units, Subtotals, and Totals	Medium
Horizontal border for Heading and Subheading Input Descriptor	Medium
Vertical border between Heading and Subheading Input Descriptor	Thin
Horizontal borders for input rows	Thin

Quantity Summaries

See Road Design Manual Chapter 13: Quantity Summaries.

Rounding Quantities

Quantities should follow the rounding criteria shown in Appendix J of the Road Design Manual.

Note: The rounding of some total quantities are superseded by Table 109-1 Rounding Criteria in the Standard Specifications for those that are more precise than Table 109-1. The Summary Frames are set up to round accordingly for these select items in the TOTAL quantity cell.