

# ROAD DESIGN MDT EXCEL MANAGER

## Contents

<b>CONTENTS .....</b>	<b>1</b>
<b>OVERVIEW .....</b>	<b>2</b>
Process Provenance .....	2
<b>STATEMENT OF NEED .....</b>	<b>2</b>
<b>ACRONYMS/DEFINITIONS USED IN THIS DOCUMENT .....</b>	<b>2</b>
<b>REFERENCES .....</b>	<b>2</b>
<b>PROCESS DESCRIPTION AND EXAMPLES .....</b>	<b>3</b>
Section I.    Design Standards.....	3
Rounding Quantities.....	3
Section II.   Design Procedures.....	4
Procedure – Overview.....	4
Procedure – RUN MDT Excel Manager .....	5
Procedure – Linking Forms to Civil 3D files .....	6
Procedure – Cleaning up Cell Styles.....	6
Procedure – Adding Rows & Columns to Forms .....	8
Procedure – Turning Comment Indicators On or Off.....	9

## Overview

This document contains helpful information for use of the MDT Excel Manager Spreadsheet.

### Process Provenance

- Date of development: 1/13/2025
- Revision date: N/A
- Application/Tool(s): *AutoCAD / Civil 3D*
- Version(s): *13.6.1916.0 Civil 3D 2024.4 Update*
- Environment(s): *MDT Civil 3D State Kit r2024 v2.1.0*
- Author: [MDT EngOps Workflow Steering Committee](#)

## Statement of Need

The purpose of this document is to provide guidance to users of the Excel Manager for plans production in conjunction with Civil 3D for MDT projects. The procedures are used in preparing Summary Files and Excel Quantity Forms for construction plan sets and project cost estimates.

## Acronyms/Definitions Used in This Document

EMG – MDT Excel Manager file

OLE – Object Linking and Embedding. OLEs are embedded copies of information from another document.

## References

[Road Design Manual Chapter 13: Quantity Summaries](#)

[Standard Specifications](#)

[Summary Sheets in Autodesk](#)

[Tips for Summary Frames in Autodesk](#)

[Plans Production for Pavement Preservation Projects in Autodesk](#)

# Process Description and Examples

## Section I. Design Standards

### Rounding Quantities

1. Quantities should follow the rounding criteria shown in Appendix J of the Road Design Manual.
2. The rounding of some total quantities are superseded by **Table 109-1 Rounding Criteria** in the [Standard Specifications](#) for those that are more precise than Table 109-1.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.

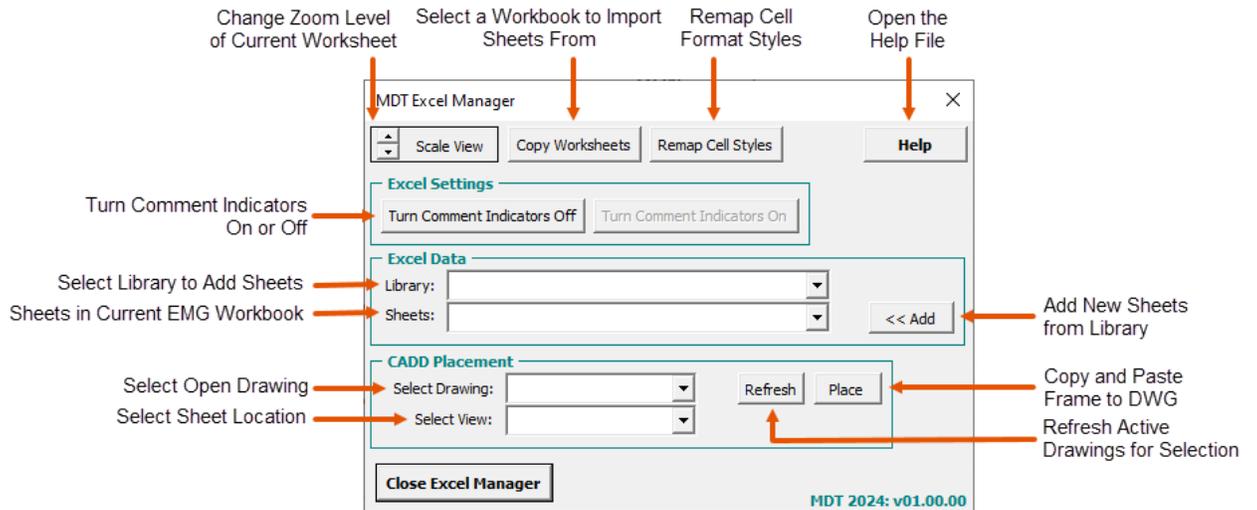
## Section II. Design Procedures

### Procedure – Overview

- The new File Class is EMG
- Frames are OLEs and Forms are Excel Spreadsheets
- Forms will be linked to Civil 3D Summary Files
- Form Names have been altered and classified for clarity
- Users are responsible for all formatting and calculations within the EMG file.
- Forms are added to the EMG file by the user from a default library so the user only sees the forms they add
- If construction users make use of the files, it may save time on as-built procedure.

## Procedure – RUN MDT Excel Manager

Open the MDT Excel Manager (EMG) file & Select **RUN MDT Excel Manager**. This will load the MDT Excel Manager dialog box.



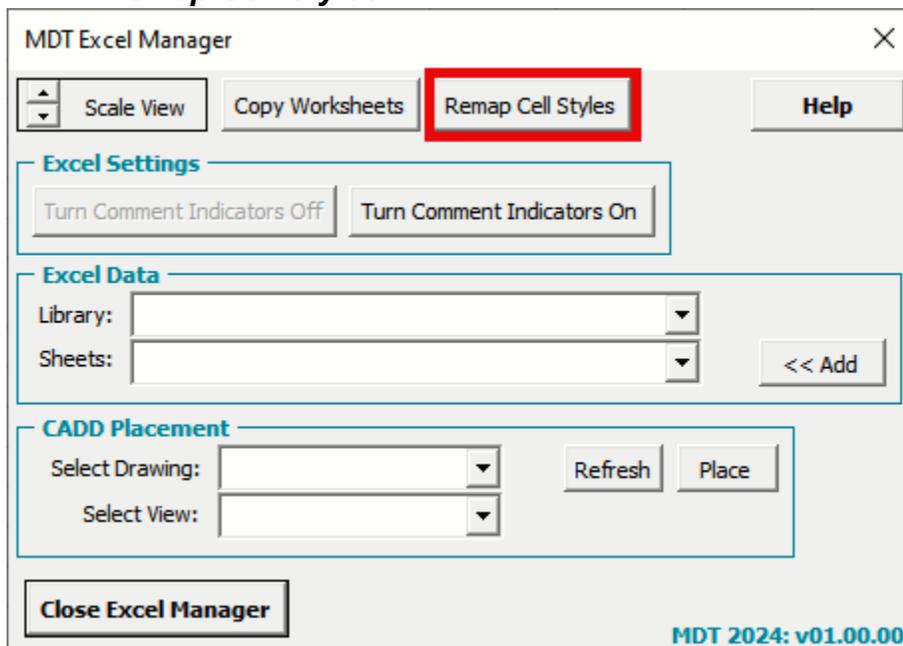
## Procedure – Linking Forms to Civil 3D files

See the following guidance document for linking the summary frames into the Summary Sheets in Civil 3D: [Summary Sheets in Autodesk](#)

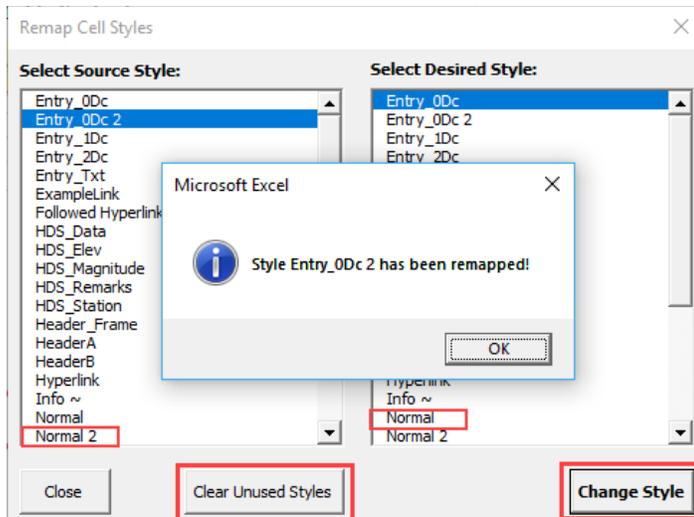
## Procedure – Cleaning up Cell Styles

Cell styles may sometimes enumerate (i.e. Normal 2, Normal 2 2, Hyperlink 2) and the end user may desire to clean these up. Use the following procedure to re-assign and clean up unused cell style formats. If the standard summary frame cell Styles specified in the ReadMe Guide sheet were not utilized, it is recommended to save a copy of the current workbook to refer back to.

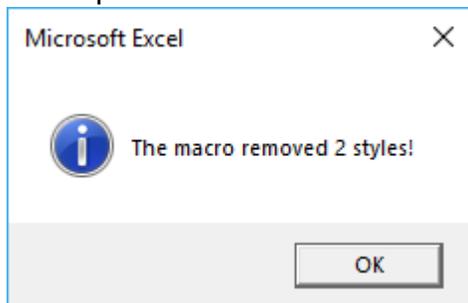
1. Select **Remap Cell Styles**



2. Select a **Source Style** and a **Desired Style** from the input boxes then choose **Change Style** and then **OK** to close the process. This may need to be repeated for other similar styles. Note in the example below Entry\_0Dc 2 and Normal 2 appear to be copies of the parent style which were copied when worksheets were copied in.

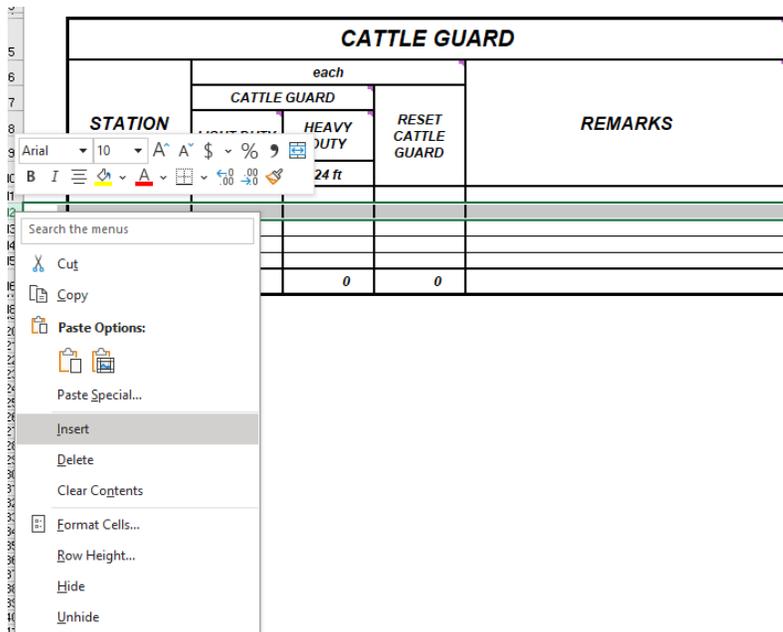


3. Select **Clear Unused Styles** after remapping a single style or after all styles, either process will work. Click **OK** to close the process.

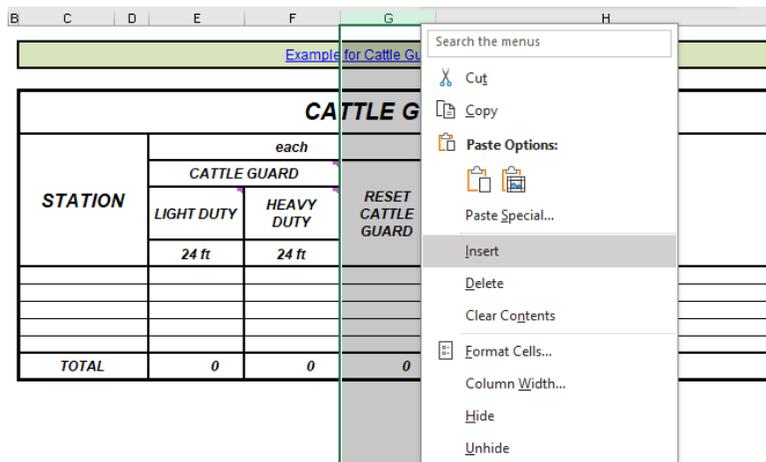


## Procedure – Adding Rows & Columns to Forms

1. Select the entire Row below the row you want to add a new row to.
2. Right click on the row heading and select **Insert**. This inserts a new row above the row that was selected.



3. Select the entire column to the right of the column you want to add the new column to.
4. Right click on the column heading and select **Insert**. This inserts a new column to the left of the column that was selected.



## Procedure – Turning Comment Indicators On or Off

Comment indicators are intended to provide additional guidance for summary frame inputs. When creating the EMG file for the first time, they are turned on by default.

1. Hovering over the cell with the comment indicator will show the guidance comment.

CATTLE GUARD				
STATION	each			REMARKS
	CATTLE GUARD			
	LIGHT DUTY	HEAVY DUTY	RESET CATTLE GUARD	
	24 ft	24 ft		
TOTAL	0	0	0	

 Beran, Joey H6  

Callout reset cattle guard size in remarks section.

November 04, 2019, 4:02 PM

2. When linking the Summary Frame as an OLE to a Civil 3D drawing, and choosing to print, the sheet set that is printed will reference what was most recently saved in the EMG file. In the **RUN MDT Excel Manager** Macro, select **Turn Comment Indicators Off**.

MDT Excel Manager ✕

**Excel Settings**

**Excel Data**

Library: 
 Sheets:

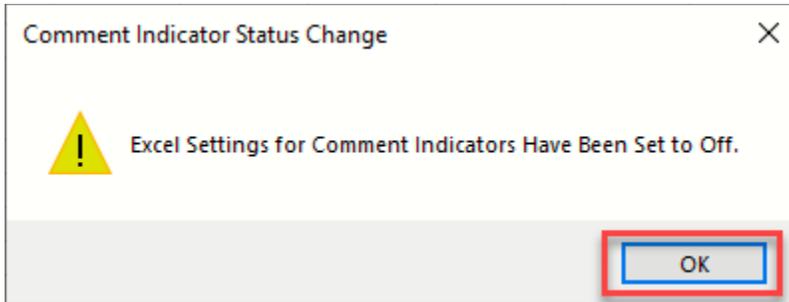
**CADD Placement**

Select Drawing:

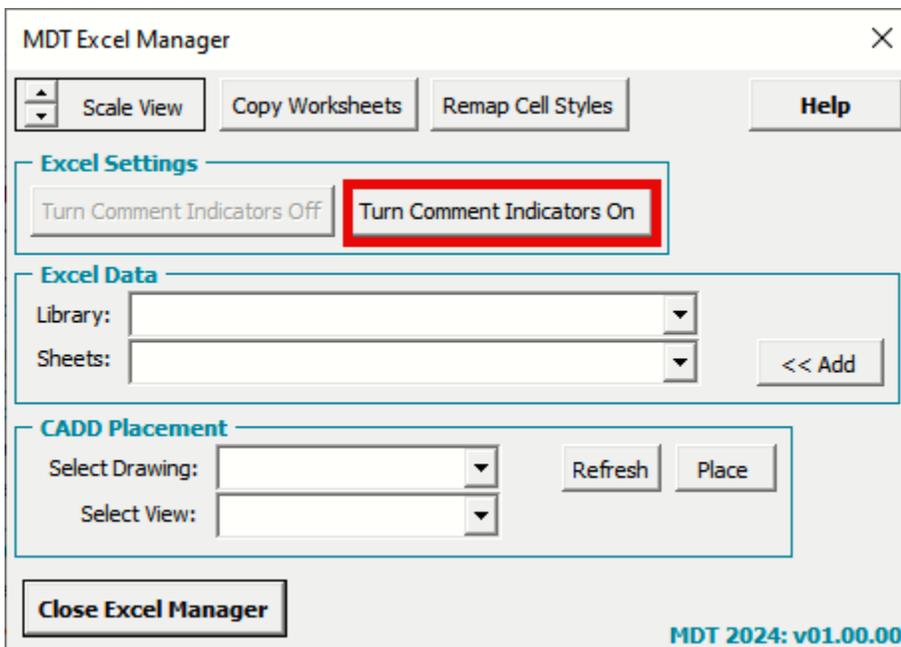
Select View:

MDT 2024: v01.00.00

3. The settings for comment indicators will be set to off. This will hide the comment indicators until turned back on by the user. Click **OK**.



4. Save The EMG File.
5. If it is desired to turn on the comment indicators back on, the **Turn Comment Indicators On** button can be utilized.



6. If the links do not update, refer to [Summary Sheets in Autodesk](#) documentation. Refer to *Update OLE Links* procedure.