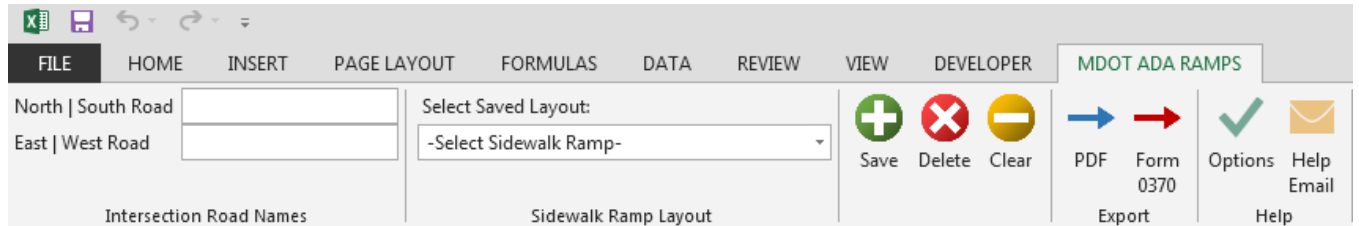


Misc | ADA Sidewalk Ramp Design Spreadsheet

Overview

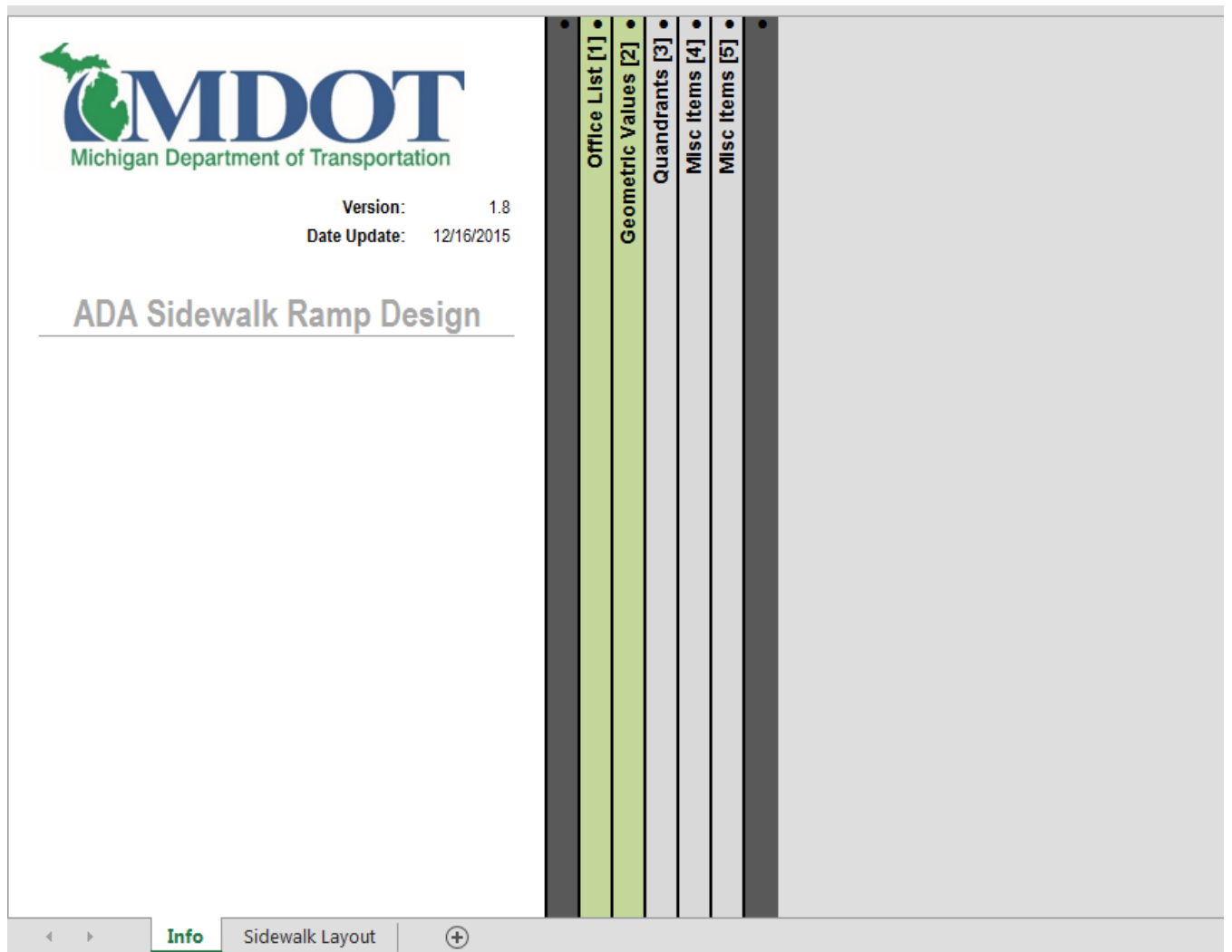
Created: 12/16/2015 MDV

This document is intended as a "how to" guide for the use of the ADA Sidewalk Ramp Design Spreadsheet.



The image shows the Excel ribbon for the 'MDOT ADA RAMPSPS' spreadsheet. The ribbon includes tabs for FILE, HOME, INSERT, PAGE LAYOUT, FORMULAS, DATA, REVIEW, VIEW, DEVELOPER, and MDOT ADA RAMPSPS. The MDOT ADA RAMPSPS tab is active and contains several groups of controls:

- Intersection Road Names:** Two input fields labeled 'North | South Road' and 'East | West Road'.
- Sidewalk Ramp Layout:** A dropdown menu labeled 'Select Saved Layout:' with the option '-Select Sidewalk Ramp-'.
- Save/Delete/Clear:** Three buttons: a green plus sign for 'Save', a red X for 'Delete', and a yellow minus sign for 'Clear'.
- Export:** Two buttons: a blue arrow for 'PDF' and a red arrow for 'Form 0370'.
- Help:** Two buttons: a green checkmark for 'Options' and a yellow envelope for 'Help Email'.



The main content area of the spreadsheet displays the MDOT logo (Michigan Department of Transportation) and the following text:

Version: 1.8
Date Update: 12/16/2015

ADA Sidewalk Ramp Design

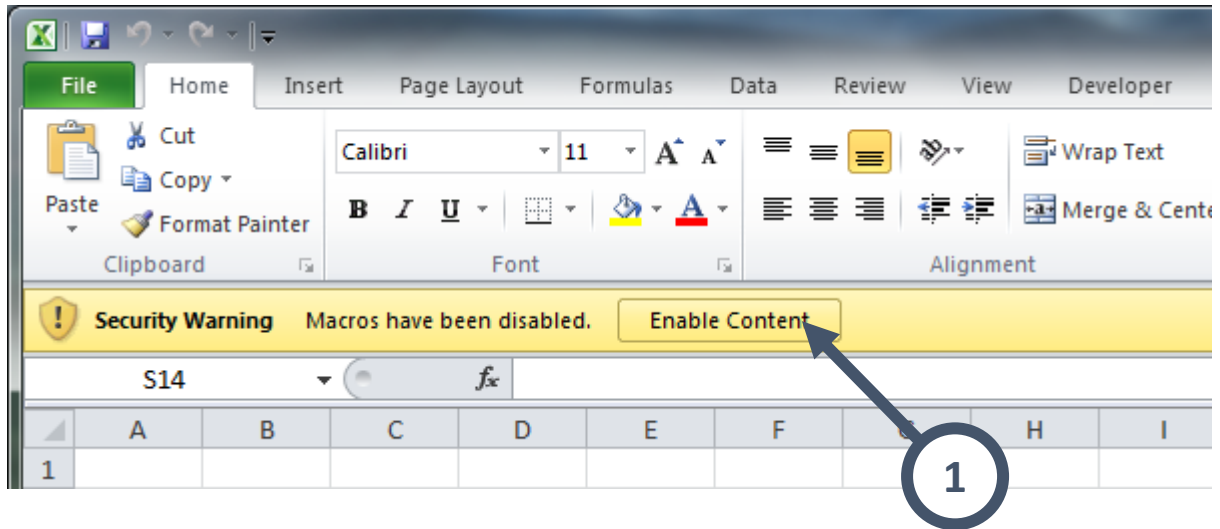
On the right side of the spreadsheet, there are five vertical columns with the following headers:

- Office List [1]
- Geometric Values [2]
- Quadrants [3]
- Misc Items [4]
- Misc Items [5]

At the bottom of the spreadsheet, there is a status bar with the following elements:

- Navigation arrows (left and right).
- An 'Info' button.
- The text 'Sidewalk Layout'.
- A plus sign icon (+).

Getting Started




1. If the Security Warning appears, click **Enable Content** or the spreadsheet will not function properly.

Creating New Sidewalk Design

North | South Road

East | West Road

Intersection Road Names



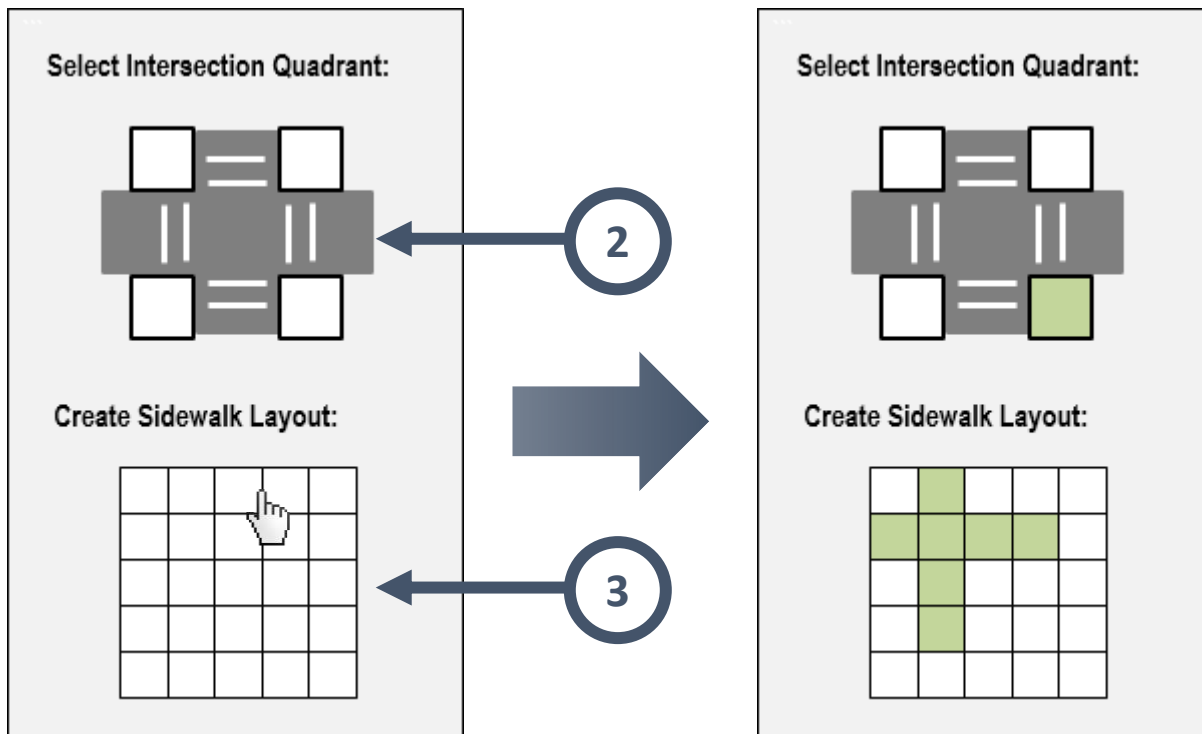
Tip

If sidewalk design is for midblock crossing, considering the following naming convention:

[North | South]
Route or road name
Ex: Apple St.

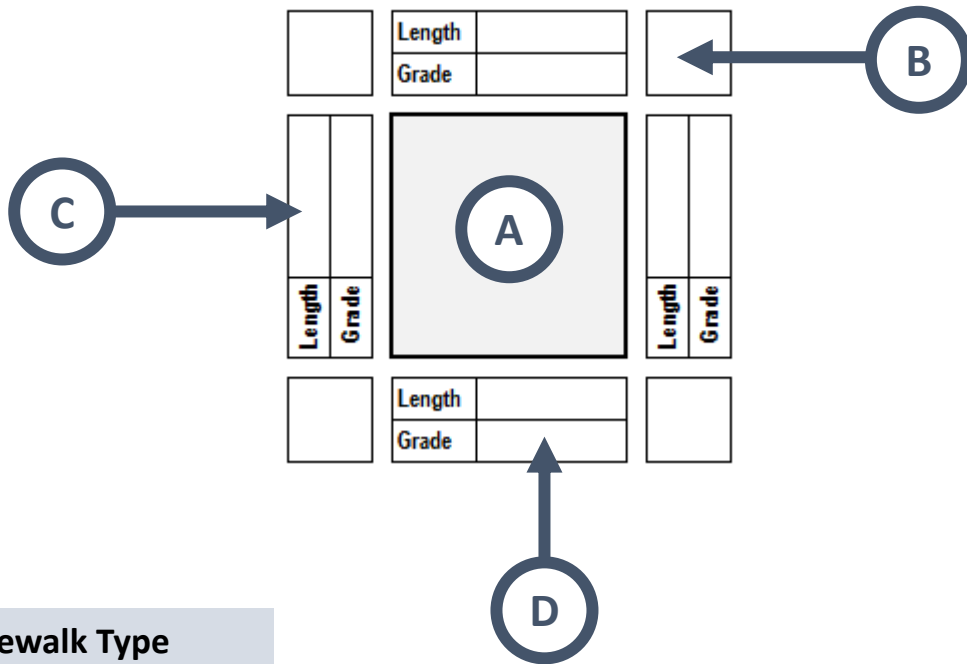
[East | West]
Midblock Sta or #
Ex: Midblock Sta 100+00

1. Enter [North | South] & [East | West] intersecting road names.



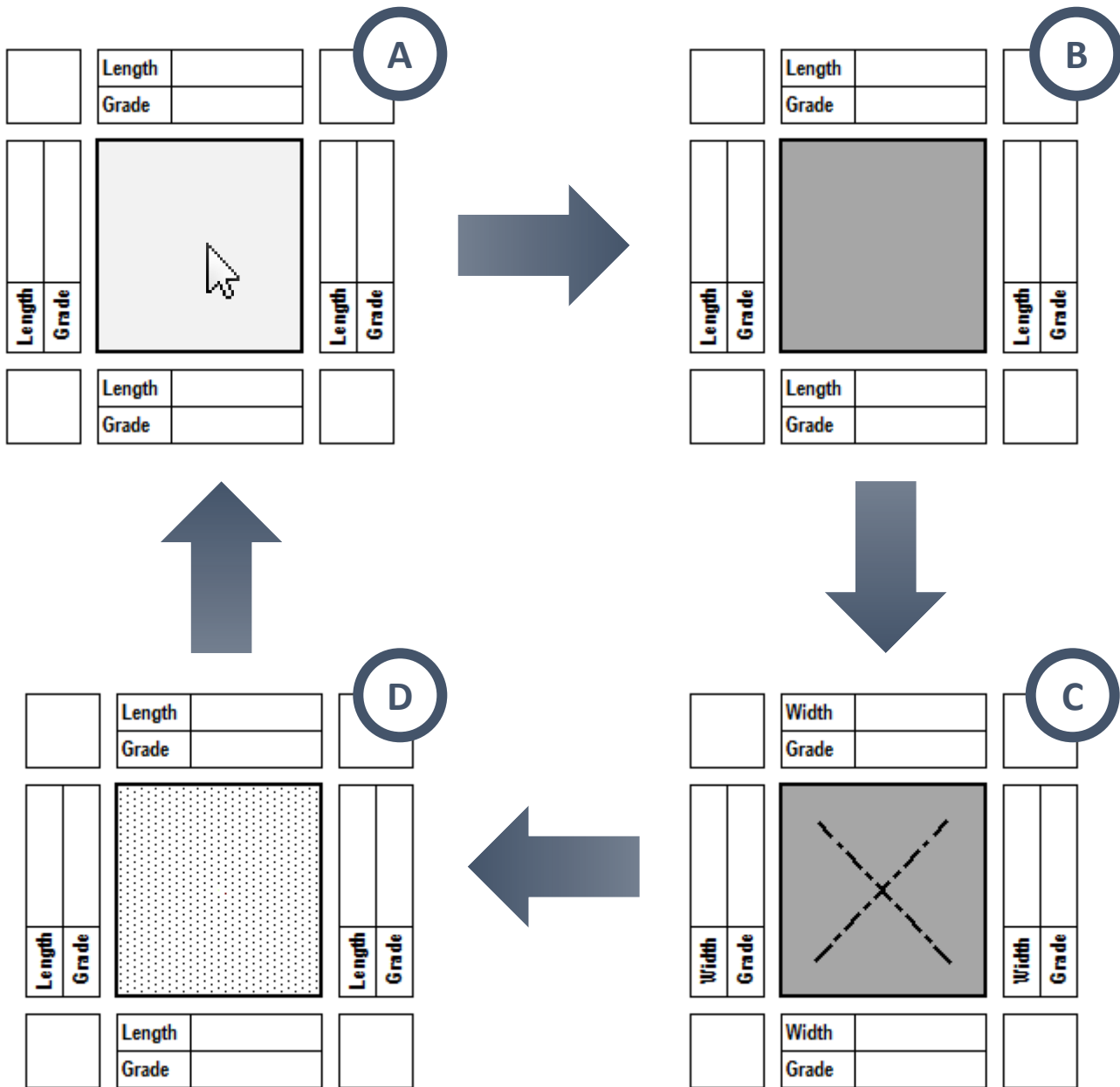
2. Select intersection quadrant.
3. Create sidewalk layout by clicking on desired boxes in the grid. This will activate the associated sidewalk diagram and the box will turn green.

Sidewalk Diagram Basics



- A. Sidewalk Type
- B. Elevation
- C. Length or Width
- D. Grade

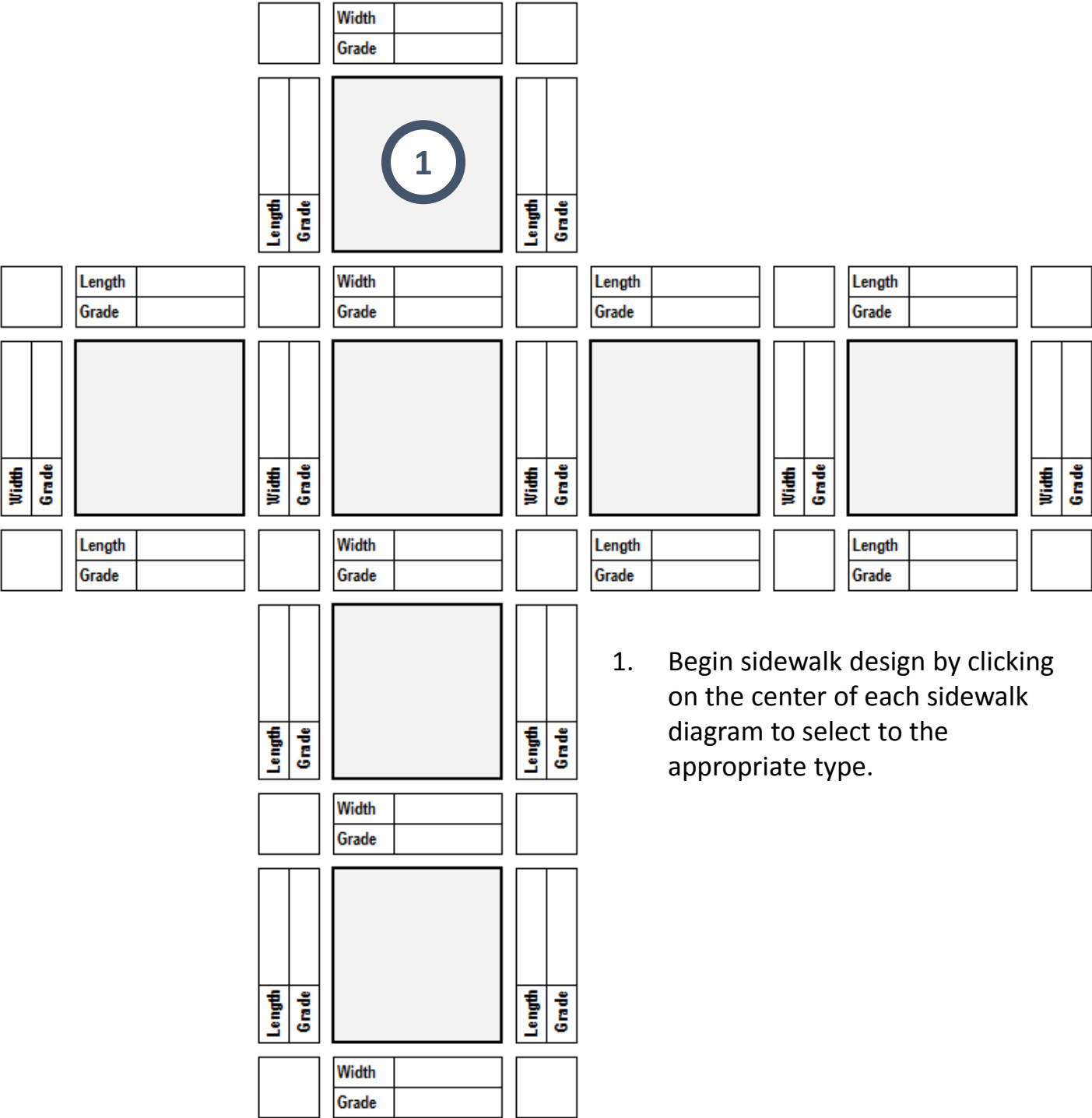
Selecting Sidewalk Type



Click on the center of the sidewalk diagram to cycle through type options:

- A. Proposed Sidewalk**
- B. Ramp**
- C. Turning Space**
- D. Existing Sidewalk**

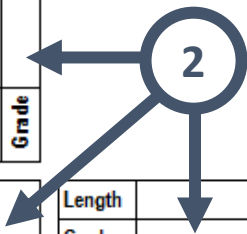
Sidewalk Design



- 1. Begin sidewalk design by clicking on the center of each sidewalk diagram to select to the appropriate type.

Sidewalk Design

		Width							
		Grade							
		Length	Grade		Length	Grade			
	Length				Length				
	Grade				Grade				
	Width	Grade			Width	Grade		Width	Grade
	Length				Length				
	Grade				Grade				
	Width	Grade			Width	Grade		Width	Grade
	Length				Length				
	Grade				Grade				
	Length	Grade			Length	Grade		Length	Grade
	Width				Width				
	Grade				Grade				



2. Enter known or desired values. A good place to start is by entering tie-in elevations, followed by desired grades and lengths or widths.

Sidewalk Design

623.85	Width	6.06 ft	623.77
	Grade	-1.32%	
		→	
Length	Grade		Length
	Width		
	Grade		
		X	
Width	Grade		Width
	Length		
	Grade		
Width	Grade		Width
	Length		
	Grade		
Length	Grade		Length
	Width		
	Grade		

3

- {Gray} – Calculated value. After the user has entered enough known or desired information, the spreadsheet will begin to calculate elevation, length/width, and grade values. The spreadsheet recalculates every time a value is changed or a new value added.

Sidewalk Design

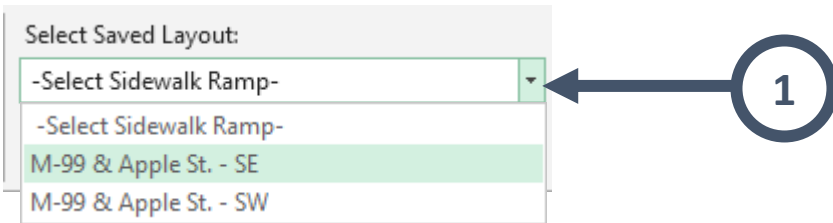
	623.85	Width 6.06 ft Grade -1.32%	623.77						
	6.72 ft Length Grade -5.21%		10.14 ft Length Grade -5.23%						
4	623.80	Length 5.20 ft Grade 7.69%	624.20	Width 5.00 ft Grade 2.00%	624.30	Length 5.00 ft Grade 3.20%	624.46	Length 5.00 ft Grade 1.20%	624.52
	5.99 ft Width Grade -0.83%		5.00 ft Width Grade -2.00%		5.00 ft Width Grade -2.00%		5.00 ft Width Grade -0.80%		5.00 ft Width Grade -0.40%
	623.85	Length 5.00 ft Grade 9.00%	624.30	Width 5.00 ft Grade 2.00%	624.40	Length 5.00 ft Grade 2.00%	624.50	Length 5.00 ft Grade 0.80%	624.54
5	5.00 ft Width Grade -4.60%		5.00 ft Width Grade -4.40%						
	624.53	Width 5.00 ft Grade 1.80%	624.62						
	5.00 ft Length Grade -2.60%		5.00 ft Length Grade -3.00%						
	624.66	Width 5.00 ft Grade 2.20%	624.77						

4. {Orange} – Exceeds desired value.
5. {Red} – Exceeds required value.
6. Grade flow arrows
7. Low point
8. Save sidewalk layout & design.



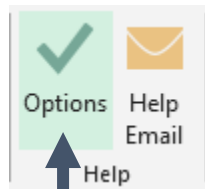
8

Selecting Saved Sidewalk Design & Layout



1. Use dropdown to load a previously saved design.

Options



1. Select Options.
2. Select to turn on sidewalk compliance warnings.
3. Enter desired {orange} and required {red} values to be used for compliance warnings.
4. Set desired and required values back to default values.

