

Additional CAD Data Manipulation Examples

Data Prep for Auto Pad Utility

As we saw in the earlier Step-by-Step example (pages 116-118), the **Auto Pad** utility generates a 3D *Data Line* at (or inside) the *Annotation Lines* bounding each level pad area using selected corresponding elevation text labels. In this larger residential subdivision example, we'll look at some useful data-preparation and manipulation techniques for getting good results with the *Auto Pad* utility . . .

Step 1: Start AGTEK and open the **respads.dwg** CAD file for this exercise (see Appendix C). Click **Show All** in the *Show Hidden Layers* dialog.

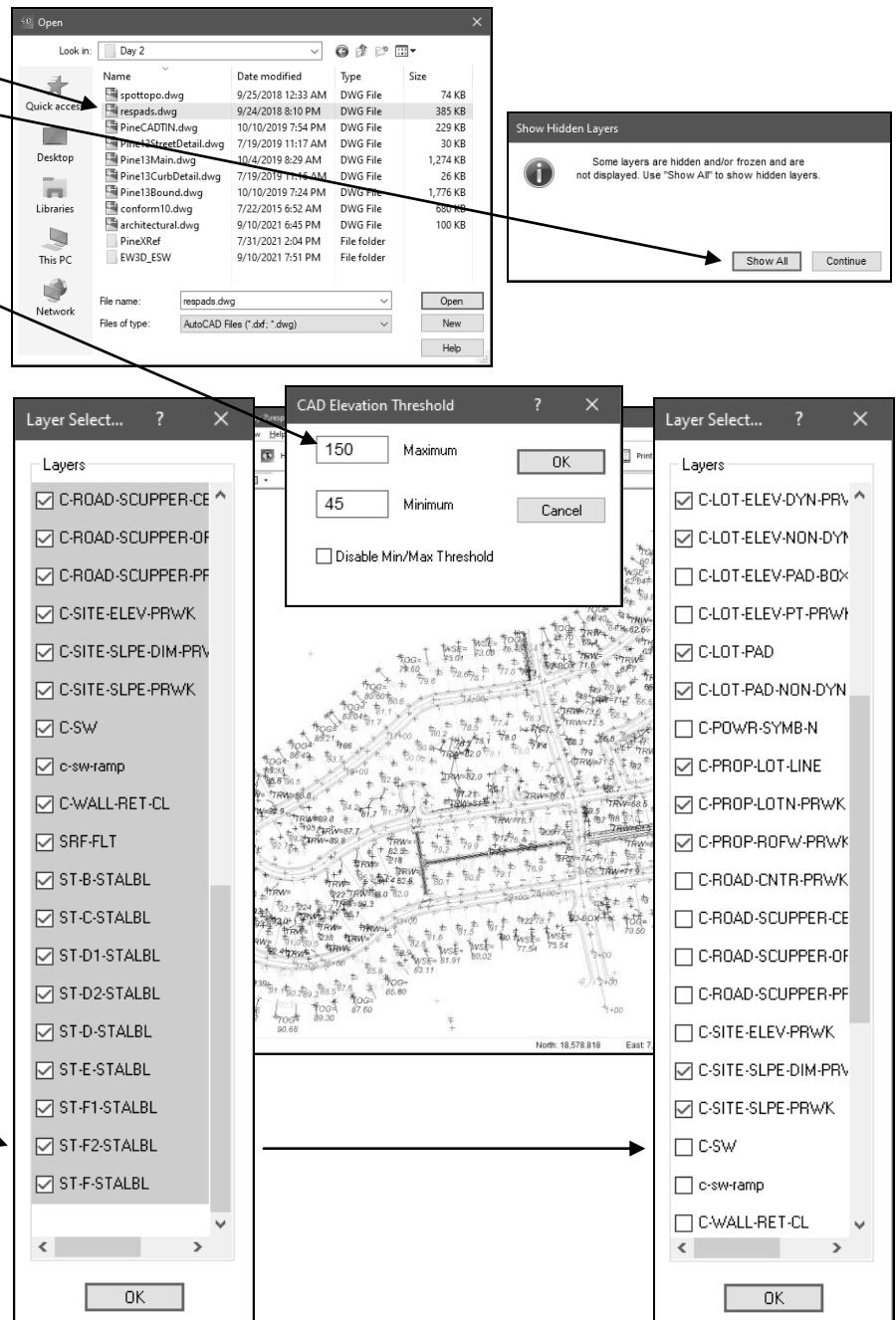
Step 2: In Import (CAD Transfer) mode, select **Data Transfer > Transfer Min/Max** from menu. In the *CAD Elevation Threshold* dialog, enter **150** for the **Maximum**, enter **45** for the **Minimum** then click **OK** (to eliminate some "spiked" elevations in this CAD file—see page 89).

We don't need every CAD layer for this **Auto Pad** example, but be sure to select and transfer the following eleven layers if you're working through this example on your own (it's ok to transfer additional layers but only the following eleven layers are needed for this example):

- 0
- C-ANNO-TEXT
- C-LOT-ELEV-DYN-PRWK
- C-LOT-ELEV-NON-DYN-PRWK
- C-LOT-PAD
- C-LOT-PAD-NON-DYN
- C-PROP-LOT-LINE
- C-PROP-LOTN-PRWK
- C-PROP-ROFW-PRWK
- C-SITE-SLPE-DIM-PRWK
- C-SITE-SLPE-PRWK

Step 3-A: Since we know the specific CAD layers needed, let's press **Alt-B** and use the *Layer Selection* dialog to filter out the unwanted layers for easier layer selection, per Steps 3-B and 3-C (see page 86 for additional *Layer Selection* dialog details).

Bug Alert: A bug in **Earthwork 4D** (v1.24.4+) and **Gradework 4D** (v1.06.4+) may prevent shading of the layers selected in Step 3-B; however, the layer filtering function in Steps 3-B and 3-C still works as described (but see the additional **Alt-B** functions on page 254 in Appendix B). The author has reported the shading bug to AGTEK and it will hopefully be fixed in a future software update.



Step 3-B: Press **Shift** and **Left** click layer **0** at top of list, scroll to bottom of list, press **Shift** and **Left** click last layer **ST-F-STALBL** then **Left** click any checkbox to *Uncheck* all layers.

Step 3-C: Check **on** only the layers to be transferred, click **OK** then go to Step 4.