

## Earthwork Modeling Step-by-Step Error-Check and Correct Design Data Lines

The error-checking methods used for the Existing surface (page 87) are also used to identify data-entry and interpolation errors with the Design surface. But, again, AGTEK users will adjust their error-checking and editing efforts to the intended use of the surface model: A Design model that will be used for machine control requires more accuracy (more error-checking) than a model that will be used only for quantity takeoff purposes.

Design Surface Error-Check Method	Applicable to Modeling for Quantity Takeoff	Applicable to Modeling for Grade Setting/Checking/Control	Comments
2D Plan View Display in Edit Mode	Always	Always	Quickly identify crossing lines and other gross horizontal errors (see pages 134, 165)
3D View Display in Edit (or 3D View) Mode	Always	Always	Quickly identify gross vertical errors (see pages 135, 165, 167)
Find Elevation Function in Edit Mode	When 3D View Shows Multiple Elevation Spikes Imported from CAD	When 3D View Shows Multiple Elevation Spikes Imported from CAD	Select all objects with elevations above/below specified value (see page 93 and <i>Day 2 Handbook</i> )
Show Trimesh Utility in Edit/Entry Mode	Yes	Yes	Evaluate surface TIN for point-to-point interpolation errors like flat areas (see pages 166, 169)
Water Flow Utility in Edit/Entry Mode	Yes	Yes	Quickly identify surface drainage problems (see page 166)
Contour Surface Utility in Edit Mode	Yes	Yes	Generate close-interval contours (at 0.1 ft. or 0.2 ft.) to evaluate relatively flat areas (see pages 139, 166, 168)
2D Plan View Display in 3D View Mode	Potentially	Potentially	Evaluate interpolated <i>Ref</i> surface elevation at <i>Arrow</i> pointer (see page 167)
Profiles in Profile View Mode	Potentially	Potentially	Evaluate multiple-surface relationships at any user-specified alignment (see page 203)
Display Slope Colors in Edit Mode	Potentially	Potentially	Identify areas of user-specified slope by color (see page 214)