Appendix E
Prepping CAD Files for AGTEK

The latest **AGTEK 4D** products import CAD files with few problems, but the discontinued **AGTEK 3D** products incorporate an outdated CAD reader and *AGTEK 3D* users will have issues with CAD data (*AGTEK 3D* users should request older-format CAD files that are readable with *AGTEK 3D*—see page 39 and below). When AGTEK users have issues with CAD files, issue-resolution options include:

♦ **AGTEK 4D** users can forward problem CAD files to AGTEK Support (see pages 247-248) for troubleshooting and problem resolution. AGTEK can solve most issues by manipulating problem CAD data—AGTEK Support has more CAD software (AutoCAD, Civil 3D, MicroStation, InRoads, GeoPAK, Terramodel, etc.) than most AGTEK users would want to purchase and learn to use. *Letting AGTEK help with problem CAD files can save time, frustration, and money*.

♦ An issue for **AGTEK 3D** users is the inability to import newer AutoCAD files (R2018+). Upgrading to **AGTEK 4D**, is the best solution, but a workaround is to use Autodesk's free **DWG TrueView** utility to convert R2018+ format DWG/DXF files to the old R2013 format that can be imported by AGTEK 3D (the YouTube video at *https://youtu.be/UcG1XeUf1_8* documents the file format conversion process—see *https://autode.sk/2yHkUL1* for a table showing compatibility between AutoCAD DWG/DXF file formats and AutoCAD release versions). It's recommended that DWG TrueView users also install Autodesk's free **Design Review** (see below) and **Civil 3D Object Enabler**. The Civil 3D Object Enabler allows DWG TrueView to display custom objects created by Autodesk Civil 3D, a popular civil design package. For links to the free/low-cost CAD utilities/programs referenced on this page, see *www.earthworksoftwareservices.com/resourcesw.htm#Free_CAD_Utilities*.

♦ DWG TrueView offers other CAD problem workarounds such as *binding xrefs* (page 306) and converting DWG/DXF files to layered vector PDF files (page 309).

♦ Some CAD problems require purchased CAD editing software with *insert* and *block* manipulations. **AutoCAD LT** ($505/year subscription) is a scaled-down version of AutoCAD (see page 311 for an example using AutoCAD LT for an *Architectural-to-Decimal Units* conversion). **TurboCAD Deluxe** ($300, see page 38) is an inexpensive CAD program that reads R2023 and earlier format DWG/DXF/ DWF files and V7/V8 MicroStation DGN files (see page 310 for an example using TurboCAD for an *Architectural-to-Decimal Units* conversion). **Print2CAD AI** ($249/year) provides various file-conversion functions, including PDF/DWF-to-DWG/DXF/DGN; and its companion product, **CADdirect AI** ($379), provides drafting and CAD file repair/cleanup functions (purge empty/off/frozen layers, bind xrefs, explode blocks, convert splines to polylines, and convert attributes to text).

♦ AGTEK can't read DWF files but these can be converted to vector PDF using **Design Review** (see above for download reference, and see the YouTube video for DWF file conversion at *https://youtu.be/4-L9X99yUY4*). Another option is **Print2CAD AI** (above; the video at *products.backtocad.com/video-print2cad-1-2/* provides a brief overview of Print2CAD's PDF-to-DWG function).

♦ See page 312 for methods to convert metric CAD data to imperial units, and see page 313 for a discussion of CAD spot elevation formats.