MicroSurvey inCAD 2020

Features and Benefits
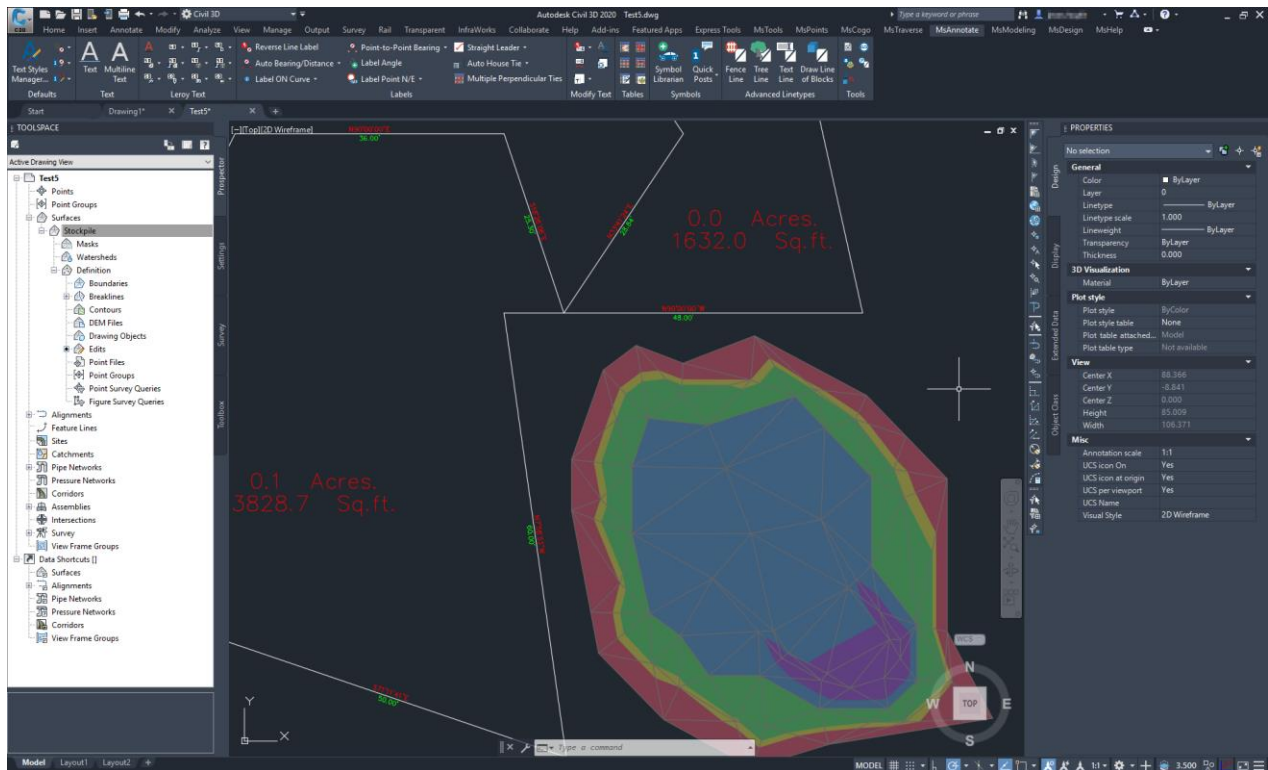
25 November 2019

Contents

MicroSurvey inCAD 2020

New: AutoCAD® 2020 Support

Feature	Benefit
AutoCAD 2020 Support	inCAD 2020 supports Autodesk® AutoCAD® 2020 products, including 64-bit English versions of AutoCAD 2020, AutoCAD Civil 3D™ 2020, and AutoCAD Map 3D™ 2020
Plugin Installation	inCAD 2020 now installs properly as a plugin, and will no longer modify user profiles

New: Smart Point Blocks
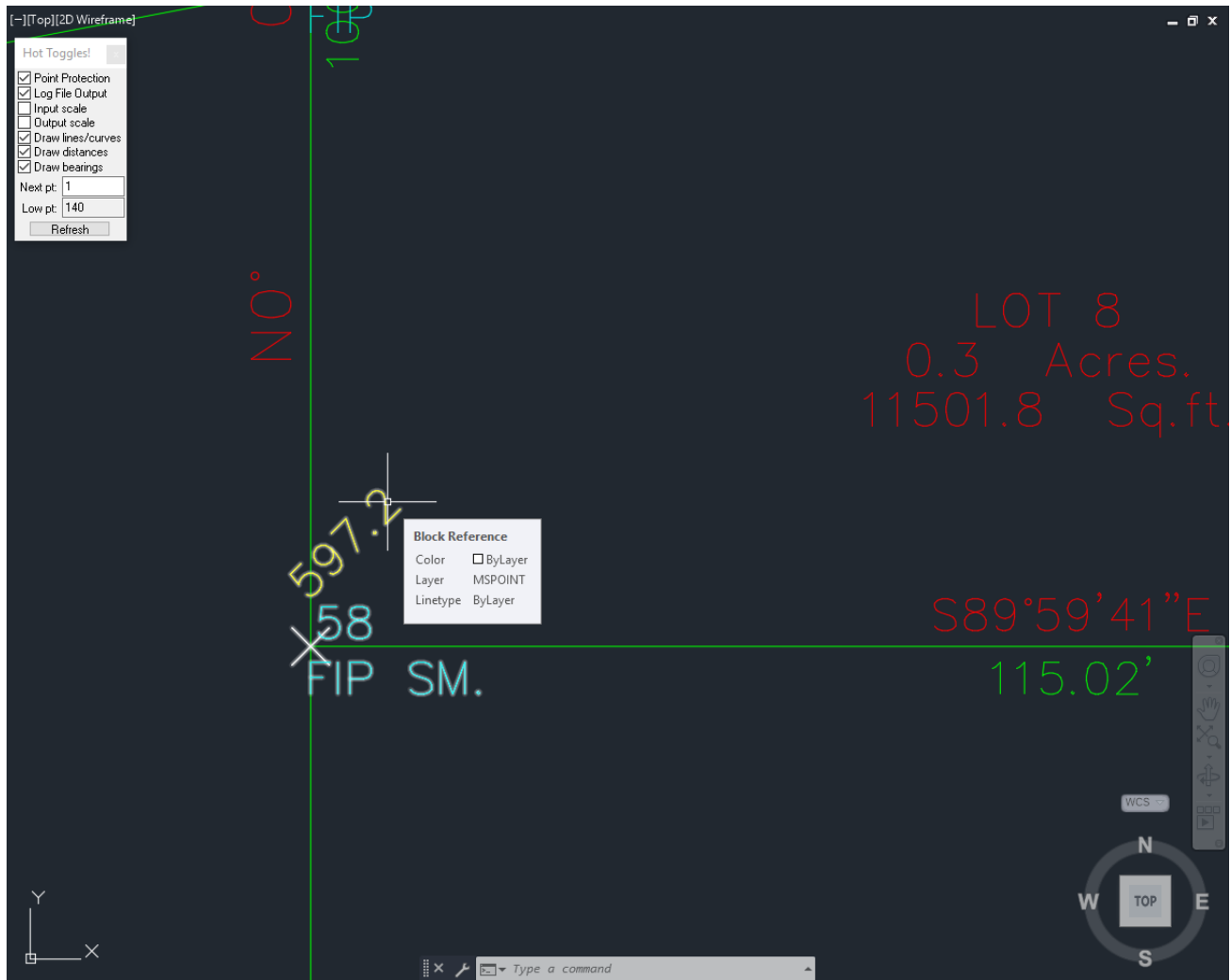
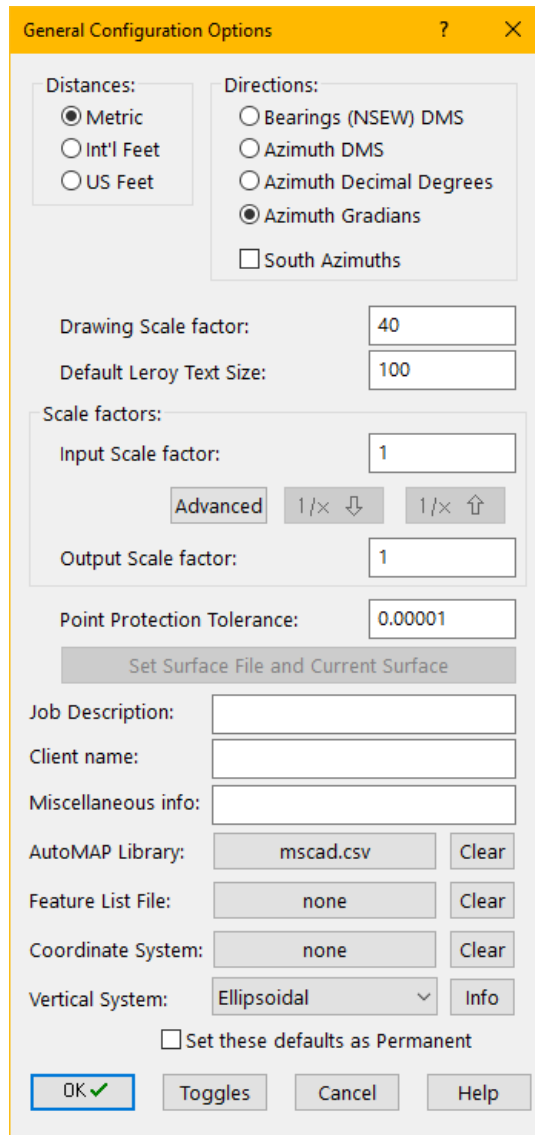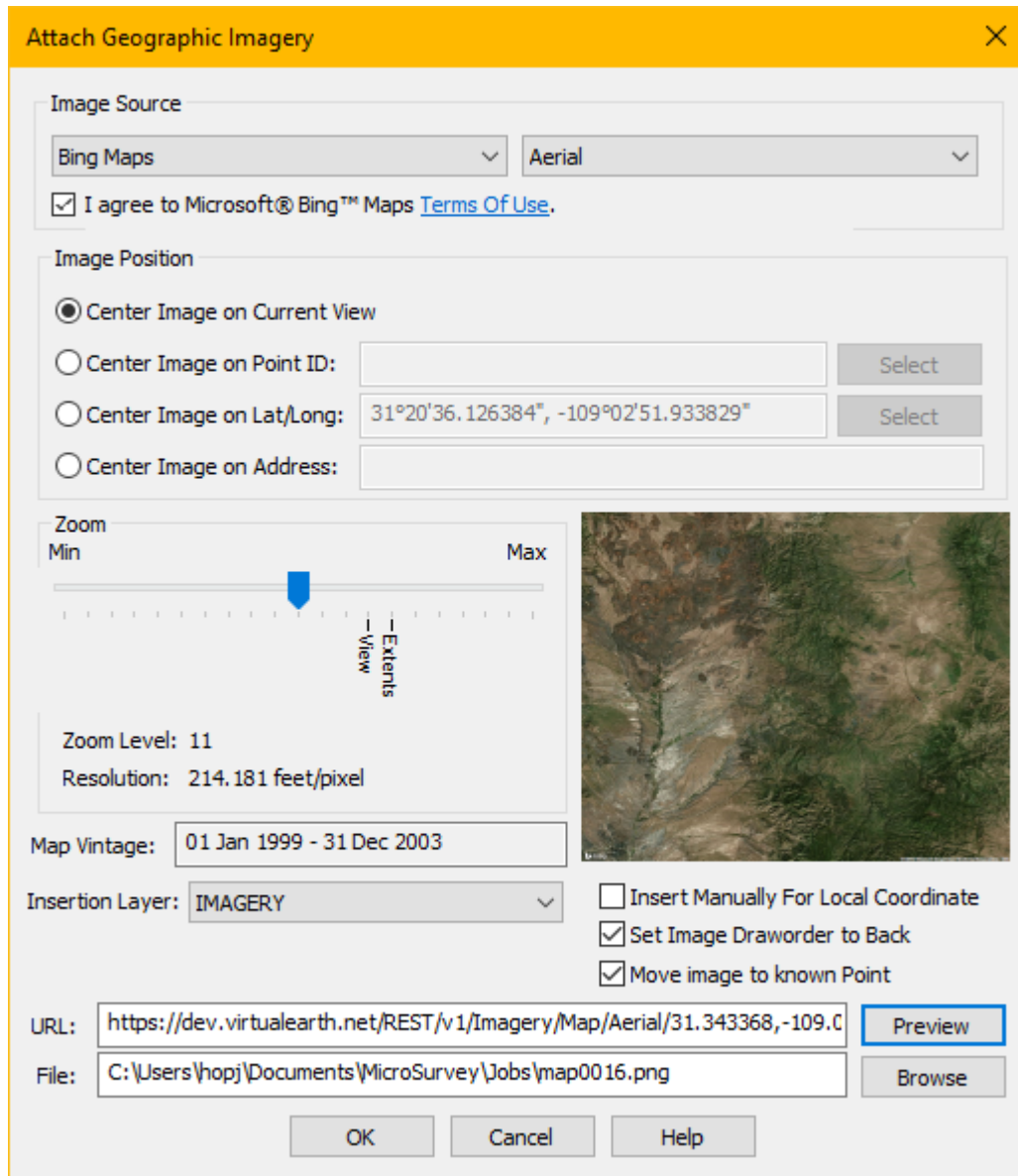| Feature	Benefit
Smart Point Blocks	Points can be drawn as either a point node and text labels (as in previous versions) or as a point block that combines these elements into a single block
Label Position, Rotation, Leaders	Labels within the point block can be edited with automatic leaders connecting from the labels back to the point node

New: Smart Polylines
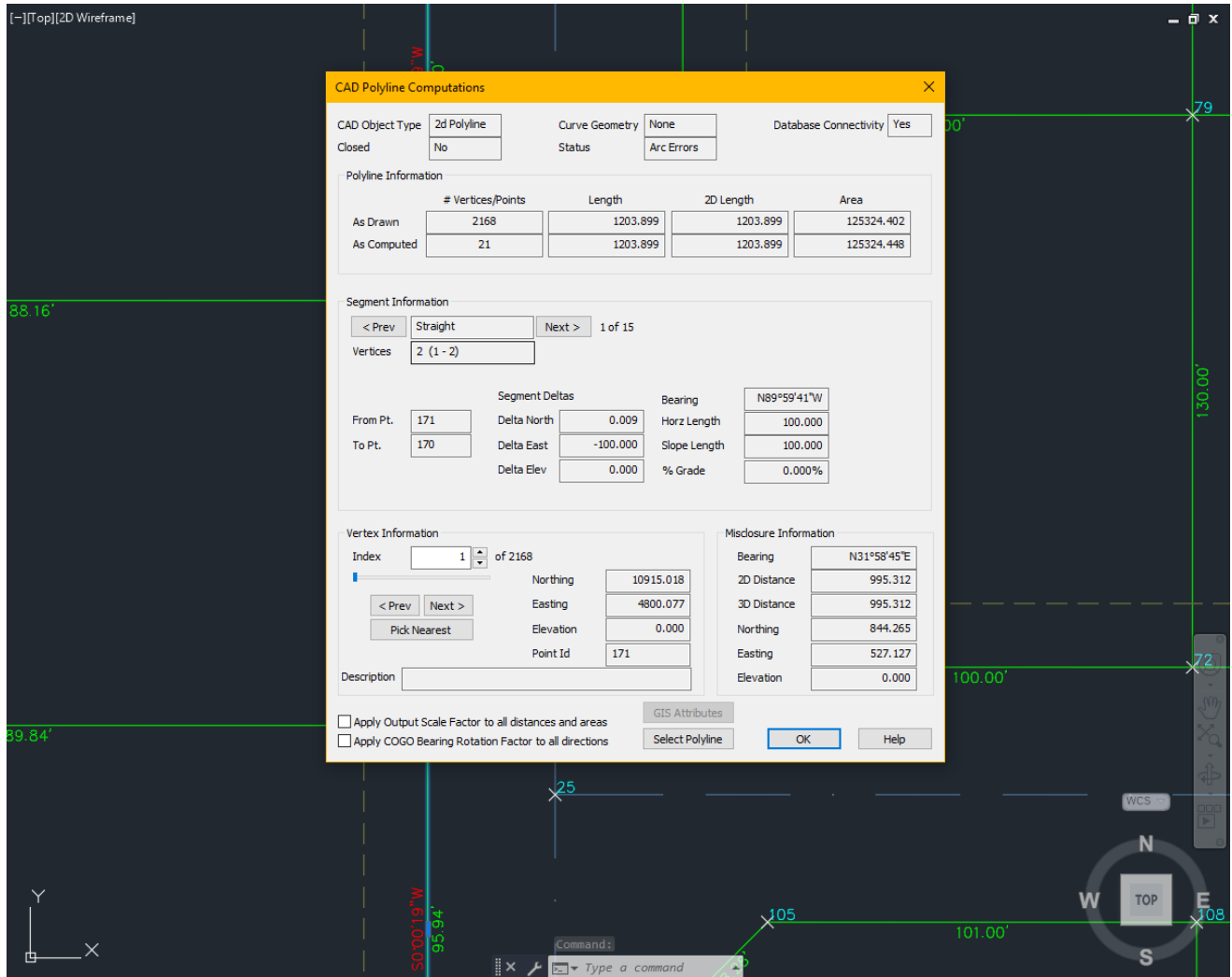
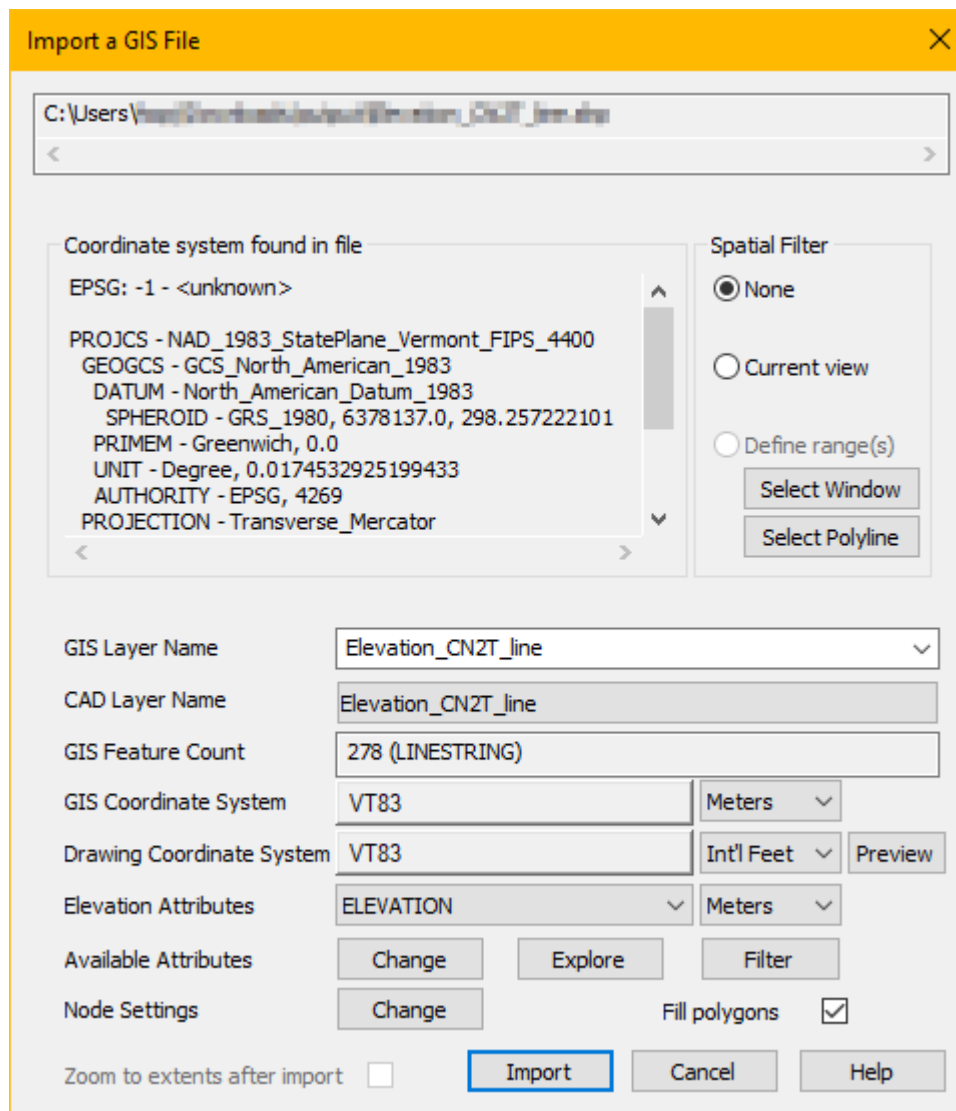| Feature	Benefit
Smart Polylines	Polylines, LWPolylines, and 3DPolylines can now be "smart" such that they will automatically update when points they connect are edited or deleted
Smart Polyline Creation	The following commands are now capable of creating Smart Polylines in your drawing: AutoMAP Library, Auto-Add Points to Objects, Bearing/Distance Auto-Labels, 3D Curve, FieldGenius Import, Leica DBX Import
CAD Polylines Dialog	The new "CAD Polylines Dialog" can be used to quickly access pertinent details about any polylines in your drawing.

New: Angular Units

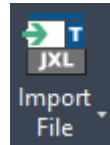| Feature	Benefit
Angular Units	Users may specify an angular unit for each drawing, including Degrees-Minutes-Seconds (as in previous versions), Decimal Degrees, or Gons/Gradians. The specified angular unit setting will be used for all input/output throughout the program.

New: Attach Imagery

Feature	Benefit
Bing Imagery Insertion	Users may instantly download and attach imagery from Bing® as a raster image. The area of interest may be specified by Point ID, Current View, Lat/Long, or Address. Resolution, coverage area, and image type may be selected, and imagery may be easily aligned to georeferenced or local coordinates.

New: GIS Import

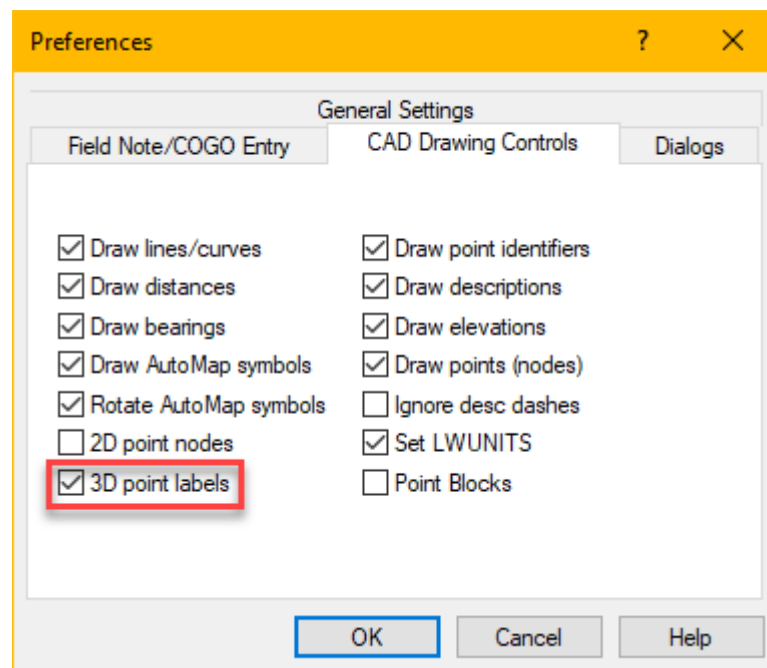| Feature	Benefit
GIS Import	Import GIS files (.shp, .gpx, .kml, .kmz, .json, .geojson) into your drawing, with filters to control data limits; remap attribute names, import points to the MicroSurvey database, import geometry as 3-dimensional objects, auto-fill polygons, and review the attribute data from within the project.

New: JobXML (.jxl) Import

Feature	Benefit
JobXML Import	Users may now import Trimble® or Spectra Precision® JobXML (.jxl) format files, including point coordinates, GNSS coordinates, and total station measurements.

New: 3D Point Labels

Feature	Benefit
3D Point Labels	Point labels may be drawn at their correct elevation, rather than at zero, for users who prefer to work in three dimensions.
2D Point Nodes	Previous versions' "2D Draw Mode" has been renamed to clarify the difference between these options.

New: COMPARE
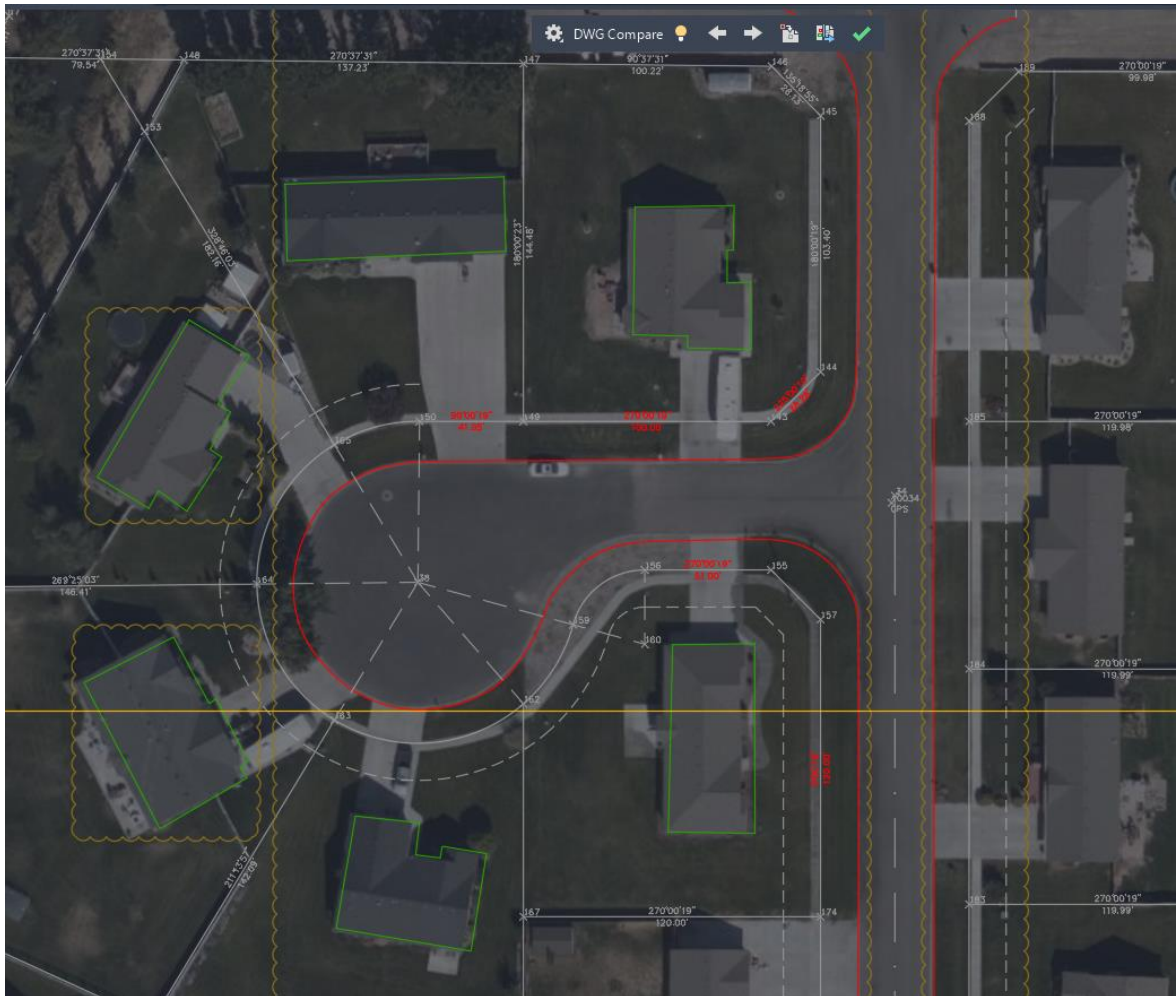
Feature	Benefit
COMPARE	Users may now utilize the AutoCAD® COMPARE command to display differences between two drawings. Objects are colored according to their containing drawing, and are encircled by revision clouds. Users can pan between revision clouds to explore differences.
COMPAREIMPORT	Users may now use COMPAREIMPORT from within the COMPARE command to import objects from compared drawings to the current one. This function will import MicroSurvey database objects, but will remove them from the database
COMPAREEXPORT	Users may now use COMPAREEXPORT from within the COMPARE command to export the comparison results to a separate drawing for later review. This drawing is not automatically created with a database, but it can be created by saving the drawing.

Enhanced: LandXML Export

Feature	Benefit
LandXML Export	Exporting plan features now includes smart polylines from your database

Enhanced: Google Earth (.kml) Export

Feature	Benefit
Google Earth Export	Exporting linework now includes smart polylines from your database

Enhanced: Coordinate System Engine

Feature	Benefit
CS-Map Engine	The coordinate system engine has been upgraded and now includes over 125 new coordinate systems. The areas with the most additions include Africa (Namibia and Morocco), Asia (Korea and Malaysia), Australasia (GDA2020 systems), Europe (several zones), and US OCRS systems. A common package is now shared by MicroSurvey CAD, STAR*NET, FieldGenius, embeddedCAD, and inCAD so future changes made by MicroSurvey for one product can be efficiently integrated into the others.

Important Fixes

Feature	Benefit
Important Bug Fixes	There are over 100 important bug fixes included in inCAD 2020. Please see the release notes to review them all.