



Carlson 2023 Feature Updates

General

- AutoCAD 2023 – Added support for this new version
- IntelliCAD 11.0 (pre-release) – Added support for this new version
- Improved interaction between Rollover Tooltips and Drawing Inspector display
- Export KMZ file has improved shading/transparency
- Improved consistency of dialog boxes
- Added Search function for selecting Zones for State Plane Projections and consistency of Projection selection
- Drawing Inspector dialog box now allows multiple changes at a time

Survey

- Added ability to select and draw multiple centerline files.
- Added support for GONS in Annotate Defaults and Label Angle
- Improved control over stationing centerlines including when importing from a CL file
- Added the ability to Edit a GNSS base point coordinates and adjust the associated side shots
- Added option to invert arcs when using sketch tree line
- Improved processing speed for Field to Finish
- Added access to the Symbol Library directly from the Draw Field to Finish dialog box
- Added option to use Point Names when converting Civil 3D Points to Carlson Points
- Added individual horizontal and vertical residual display and process control in Best-Fit Point
- Added new option in Field to Finish to Auto-Annotate Lines, Arcs and Areas
- Added support for GONS in radial stakeout
- Added option to set a symbol rotation in Field to Finish
- Added option to use Mtext in Label latitude longitude coordinates
- Added more decimal options for Map Check
- Added option in Edit/Process Raw to draw side shots from single occupied point for draw traverse/sideshot lines
- Added Global Edit options for GIS/Note/Point Attribute Labels in Field to Finish
- Added option for reporting residuals between measured and stored points in Edit/Process Raw

Civil

- Improved control over the display and functionality of the Polyline Elevation Editor
- Added ability to edit slope in and slope out for the Polyline Elevation Editor and added display options

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- Added warning for polyline vertices that overlap
 - Added new Edit Curb Ramp Tag to modify ramp parameters for existing ramp tags
 - Added ASC file format support for Importing Grid/DEM files
 - Added option to manually enter elevation units if non exist in DEM.GeoTIFF files
 - Elevate Text now supports user defined character for decimal place
 - Added graphic to display to identify intersections in Road Network
 - Improved Sewer Network Plan View Data Table display
 - Improved naming convention for ParkingNet
 - Added more labeling control for lateral connections in Draw Profile
 - Added pipe crossing dimension control regarding minimum cover
 - Added utility network profile pipe sleeve hatch feature and draw label feature.
 - Added 3D graphic view to Retaining Wall Design
 - Added options for 2nd and 3rd Cut/Fill horizontal label boxes in Draw Profile
 - Added Line Name Prefix/Suffix option for sewer lines in Draw Profile
 - Added option for Intersecting Edge in Road Network to connect to an existing roadway edge

Hydrology

- Added Import Carlson Profile and Sta/Elev .CSV file to Channel Design
- Updated functionality and dialog for HydroNET including Import/Export to HydroCAD
- Added pipe sleeve preview.
- Added Broad-Crested Weir and updated outlet, pond and HydroNET accordingly
- Added improvements to Utility Network including profile types, settings and dynamic redraw when the network is revised
- Added known flow different amounts for different rational rain events
- Added Non Erodible Channel preview window, and updated report and draw on screen features
- Added label options for lateral connections including depth at connection
- Added option to draw laterals at station and offset

GIS

- Improved interface and functionality for Importing Shape files
- Added ESRI REST Services (Feature Services, Image Services, Map Services)
- Added option to import GIS Attributes from a CSV file

Point Cloud

- Improved functionality and interaction between mouse cursor and cloud when drawing and editing polylines
- Selecting polyline from project panel now highlights in scene as well
- Polyline selection now limits to those that exist in the current scene
- Added prompt to view imported polylines into existing scene when imported into a project
- Added the ability to control elevation units of DEM/GeoTIFF if none are contained in the file
- Improved speed of inserting and deleting objects in cloud
- Added informative prompt if user attempts to create a new scene when one already exists containing those same objects
- Improved color edge identification which includes preset defaults for grass and pavement
- Added improved editing tools to trim and adjust color edges
- Added informative message when importing solids with errors
- Improved Autosave function including matching CAD save time and ability to disable
- Added Undo function to Draw All Parking Lines
- Improved Paint Line and Parking Stripe detection
- Added recognition of existing Paint Stripes and Parking Lines to avoid duplication
- Improved feature extraction for poles, hydrants and trees including ability to draw perimeter base
- Color Polyline now works in all color modes
- Added unit based defaults dimensions and additional control over curb extraction
- Added Red warning labels for missing items in the Project Tree
- Improved consistency of the ESC key while in commands
- When performing Bare Earth to Regions, the Regions tab is automatically displayed
- Profile extraction now uses a modeless dialog box for more controlled viewing
- Improved cloud visibility with Intensity Color by automatically setting Minimum and Maximum range limits
- Added adjustment options for Parking Lines and the ability to count and export Stall Numbers
- Added ability to extract Parking Lines, Paint Stripes and Color Edges in other than direct color mode
- Added more options for color selection including sphere, window and perimeter

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- Added Shift->right Click Menu Point Filters when creating and editing polylines
 - Added new Building Extraction feature
 - Improved Bare Earth with more automation and simplified user input
 - Added prompts to view cloud when modified with commands such as Clean or Bare Earth
 - Added option to set CAD view to approximate cloud view
 - Added Station and Width control for Polyline Cross Section view in Camera Tab
 - Improved user interaction for Extract Plane command
 - Added angle parameter to rotate the survey by grid points
 - Added point preview for survey by grid.

Carlson Cloud

- User setting to control the purge of the Chat history
- Option to minimize cloud dialog box to keep connection open
- Improved text and font display
- Now displays the total number of unread messages.

Mining

- Hid legacy menu options and commands
- Improved Block Model Import now supports user-defined block sizes and will properly divide sub-blocked models to the specified size
- Block Model Statistics now reports block dimensions and average block elevations
- Added option to scale Block Models in 3D Viewer
- Added Spreadsheet preview for Import Block Model
- Added commands to import and edit interval data for mineral drillholes

TakeOff

- Added Wall Polyline Feature