Corner-Plot CAD Bridge

Function-by-function user guide

Bring corner records, reference ties and sketch linework into your drawing.

Work from the Corner-Plot website or open it inside the Bridge. Review the original corner record, then send source-backed points and linework to the active drawing in AutoCAD, Civil 3D or Carlson/IntelliCAD.

AutoCAD / Civil 3D / Carlson-IntelliCAD

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Before you send

1. Use the published corner-plot.com website on the same workstation as the installed Bridge. The development preview cannot connect to CAD.

2. Load the updated Bridge DLL for your CAD host with its existing dependencies and genuine FIPS reference. Original, unchanged installers alone do not install the new Corner-Plot features.

3. For insertion, the original source easting/northing, source CRS and horizontal units must be verified, with a real POINTID. Source and drawing CRS/units must match exactly. FIPS supplies reference context; it does not verify the source document.

4. No automatic projection, datum change, unit conversion or shift of saved corner coordinates is performed. A missing or conflicting source remains blocked.

5. AutoCAD uses drawing points; Civil 3D can use COGO points when supported. Carlson currently receives ordinary DWG points, not Carlson CRD survey points.

6. Z=0 is the 2D drawing plane, not surveyed elevation. PDFs, imagery and raw LiDAR are not embedded by these CAD commands.

7. The updated plugin targets have compiled, but actual Windows CAD loading, menus, insertion and live sync have not been verified here.

Website: https://corner-plot.com/cad-bridge

Support: https://corner-plot.com/support

01 / Connect the Bridge and inspect the drawing

Check the actual workstation connection, active drawing and supported capabilities.

Where: CAD / Bridge > Bridge connection

1. Load the matching updated plugin in the CAD host and run LEGALPLOTBRIDGE. Open the drawing you intend to use.
2. Open corner-plot.com on that workstation, or run CORNERPLOT to open the embedded Corner-Plot site.
3. Choose Bridge connection, then Check Bridge and active drawing.
4. Review the returned capabilities and drawing context. An unavailable capability requires the updated plugin; a failed connection is not an insertion.

Result: The website shows the Bridge response and active drawing context. This check is read-only and does not add entities.

02 / Browse and view a corner record

Find a record and inspect its source PDF, monument description, recording information and evidence before sending.

Where: CAD / Bridge > Browse corner records; then View corner record

1. Open the corner list or Corner Map and choose a record.
2. Choose View corner record to inspect the original document.
3. Review POINTID, PLSS assignment, source-record citation, monument description and location warnings.
4. Use the record's CAD controls for point insertion, ties or the CAD sketch.

Result: The record and its saved attachments remain in Corner-Plot. CAD annotations link back to the record; opening a record does not insert it.

03 / Search for corner records at a location

Search using geographic coordinates or coordinates from the active drawing.

Where: CAD / Bridge > Find corner records

1. Choose geographic latitude/longitude or drawing easting/northing.
2. For geographic search, enter WGS84 latitude and longitude. For drawing search, enter actual WCS coordinates, not rotated/local UCS coordinates.
3. Enter a search radius from 1 to 10,000 metres. Drawing-coordinate search reads the active drawing and its FIPS-supported CRS.
4. Search, review the returned distances and choose View / Click to CAD for the desired result. If the result limit is reached, narrow the radius.

Result: The website returns saved records near the entered location. Search is read-only and does not relocate records or insert drawing geometry.

04 / Automatically deliver an uploaded corner to CAD

Queue the corner point and selected annotation when a record is successfully uploaded and attached.

Where: CAD / Bridge > Import corner records; Upload Record

1. Before uploading, connect the intended drawing and leave Automatically send uploaded corners to CAD enabled.
2. Choose MText, Leader + MText or MLeader. The destination drawing and annotation choice are captured for this upload.
3. Upload one record for guided review, or multiple PDFs for batch processing, and finish saving the records.
4. After a successful document attachment, monitor the delivery queue. It waits for verified original XY, CRS, units and POINTID.
5. When ready, the point and annotation are sent without a second Send click. Save the drawing after a confirmed insertion.

Result: A visible queue reports waiting, inserted, blocked or uncertain delivery. Without a connected destination, the record saves without CAD delivery. A changed drawing or text/CRS/unit context blocks the queued send.

05 / Review original source coordinates

Review or supply the documented native coordinate frame before inserting a corner.

Where: Corner record > Insert corner point or Insert ties > source-coordinate review

1. Review the source document's original easting/northing, horizontal datum, CRS, units and coordinate citation.
2. Where you have permission to edit, use the source-coordinate review controls to record the actual documented values.
3. Resolve assignment or source conflicts using the record and its evidence. Do not substitute an estimated map position or infer a source CRS from FIPS.
4. Choose Connect and prepare again after correcting the source. The website compares the verified source frame with the actual drawing.

Result: Insertion is available only for matching verified source and drawing context. Reviewing source coordinates does not automatically move the stored corner or reproject the drawing.

06 / Insert a corner point

Send a source-backed corner position and linked annotation to the active drawing.

Where: Corner record > Insert corner point; or CAD / Bridge > Insert corner point

1. Open the intended corner record and choose Insert corner point.
2. Choose the annotation type, then Connect and prepare.
3. Review source XY, POINTID, source and drawing CRS/units, recording information and drawing identity.
4. Choose Insert point and annotation. Wait for the committed insertion receipt and entity handles, then save the drawing.

Result: The Bridge creates a corner point and linked annotation. POINTID, recording reference and geometry role identify the output layers. Civil 3D COGO creation is used only when supported.

07 / Choose MText, Leader + MText or MLeader

Control how the corner's monument and recording information appear in CAD.

Where: Upload Record > Annotation; or Insert corner point > Annotation

1. Choose MText for a text annotation without a leader.
2. Choose Leader + MText for a classic Leader entity with a separate MText annotation.
3. Choose MLeader for a multileader with embedded MText.
4. Review the drawing's current text style and positive text height before preparing the send.

Result: The linked annotation carries available corner identity, monument description and source-record recording information. Annotation placement may be offset for readability; the actual survey point is not moved.

08 / Insert extracted reference ties

Plot selected recorded ties as endpoint points, connecting lines and bearing/distance annotations.

Where: Corner record > Insert ties; or CAD / Bridge > Insert recorded ties

1. Open Insert ties and choose Connect and prepare.
2. Review each extracted description, bearing, distance and unit. Select only the eligible ties you intend to plot.
3. Confirm that the selected bearings use the drawing's grid north and the distances use its exact horizontal units, including the foot definition.
4. Choose Insert selected ties. Wait for confirmed entity receipts and save the drawing.

Result: Selected ties receive individual colored POINTID/recording-reference layers. The corner point is not inserted again. Unknown or incompatible bearings/units are not silently rotated or converted.

09 / Control tie colors and layer visibility

Reduce clutter by displaying and sending only the reference ties you need.

Where: Corner record > Sketch or Aerial Photo > tie-layer controls; Insert ties; CAD sketch

1. Use the record's tie-layer controls to distinguish reference ties by color and toggle individual layers.
2. Review the selected ties again in Insert ties or the CAD sketch's CAD linework controls.
3. Hidden tie layers are omitted from new CAD sends. Unselected ties remain saved with the record.
4. Manage previously inserted drawing entities in CAD; a website visibility toggle is not a delete command for independent prior imports.

Result: Selected tie linework uses the map's tie colors and individual POINTID/source-record layers. Recording citations that are unavailable are explicitly unknown, not invented.

10 / Draw and save a source-frame sketch

Sketch the corner and references against an aerial or elevation-shaded background.

Where: Corner record > CAD sketch / live sync

1. Open CAD sketch / live sync. The verified source-coordinate frame is required.
2. Choose an available aerial or elevation reference background and use the sketch tools to add linework, points, circles or description labels.
3. Choose whether to include the corner and recorded references, and select the eligible ties.
4. Review any changed-reference warning and save the draft. Only the saved revision can be sent manually.

Result: The draft is saved on the corner record in the verified source frame. Hand-traced features are draft geometry, not original survey observations. Backgrounds are reference images, not CAD raster or raw LiDAR attachments.

11 / Send saved sketch linework

Transfer a reviewed saved sketch, optional corner and selected references into CAD.

Where: CAD sketch > CAD linework > Send sketch linework

1. Save the current draft and review the included corner, sketch features and reference ties.
2. If sending recorded references, confirm their grid north and exact units.
3. Choose Send sketch linework. The current source, saved revision and active drawing are checked again.
4. Review the committed entity handles and save the drawing. If the outcome is uncertain, inspect CAD before allowing another send.

Result: The saved geometry is inserted on POINTID/recording-reference layers. A manual send is not the same as enabling live sync and does not automatically replace independent earlier manual imports.

12 / Enable or pause live CAD sketch sync

Automatically save and send sketch edits while the live-sync switch is enabled.

Where: CAD sketch > CAD linework > Live CAD sync

1. Review the sketch, destination drawing, eligible reference ties and required grid/unit confirmation.
2. Enable Live CAD sync explicitly. It is off by default.
3. Edit the sketch. The current implementation saves and sends the latest sketch about 0.75 seconds after editing stops.
4. Watch the sync status. Turn the switch off to stop updates; source/drawing/reference conflicts or uncertain outcomes pause delivery.
5. After reloading or changing sessions, explicitly reconnect and enable sync again. Save the drawing to retain committed changes.

Result: Updates replace only entities owned by that sync session. Unrelated drawing entities and saved corner coordinates are not moved. This is website-to-drawing sketch sync, not general two-way CAD editing.

13 / Use the Corner-Plot ribbon, menu and commands

Open the same Corner-Plot website workflows from inside the CAD host.

Where: CAD host > Corner-Plot ribbon/pull-down; File > Corner-Plot where supported

1. Generate/load CornerPlot.cuix from the updated Bridge source and keep CornerPlot.mnl beside it.
2. Use CUILOAD for the CUIX; never NETLOAD a CUIX file. On compatible Carlson hosts, APPLOAD the MNL if it does not auto-load.
3. Open Corner-Plot, find/view a record, import a corner point, insert ties, open the sketch or manage the Bridge connection.
4. If File-menu attachment is unavailable in the host, use the standalone Corner-Plot menu/ribbon instead.

Result: Menu commands open Corner-Plot workflows rather than Title-Plot. Opening a command does not itself insert geometry; an enabled automatic upload queue or live-sync session sends when its conditions are met.

14 / Read delivery status and recover safely

Distinguish an actual committed insertion from a request that was merely received.

Where: Upload delivery queue; Insert corner point / Insert ties results; CAD sketch status

1. Waiting means processing or source-readiness checks are incomplete. Read the displayed reason.
2. Blocked means a required source, capability or drawing context is missing or changed. Resolve that issue before checking readiness again.
3. Inserted means the expected committed entities and handles were returned. Save the drawing.
4. Uncertain means the website cannot confirm the outcome. Inspect the drawing and recorded handles before explicitly allowing another send.
5. Cancel a waiting upload delivery when it should not be sent. Dismissing a status does not undo CAD geometry.

Result: Interrupted or uncertain writes are not automatically retried. Cross-tab locking and recorded outcomes reduce duplicate sends; they do not replace checking and saving the drawing.