Field Services Unlimited

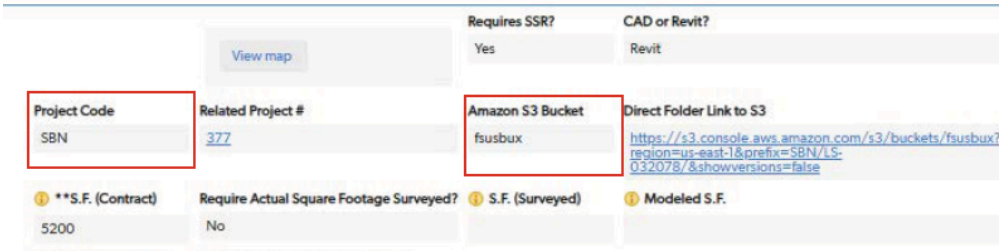
Site Modeling Setup

Humana Conviva 3D - HC3D

FSU uses **Amazon S3** to store point cloud scans, organized into **buckets**. To efficiently download these scans, use **S3 Browser** (Download here). The **Pro version** is optional but improves speed and supports multi-thread uploads. Alternatively, you can mount S3 buckets as drives using **TNTDrive** (Download here).

For this program the drive used is: **FSU365**

1. Mount the **FSU365** drive or access it via S3 Browser.
2. Navigate to the relevant **HC3D**, identified by the **Project ID** (found in QuickBase under the **Site Info** tab).
3. Open the **Scan Files** sub-folder and download the **RAF file** (Register 360 data).
4. Save the **RAF file** directly into your **Cyclone Register 360 Archive Folder** to maintain organization.

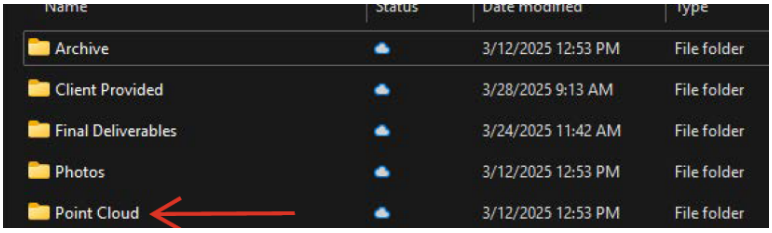


Follow the steps for Registering a site: Registration

Once registration is complete, export the following deliverables from Register 360:

- LGS File (For virtual tour viewing)
- RCP File (For integration into Revit)

Upload both files to Dropbox (Right), inside the Point Cloud Folder of the respective project.

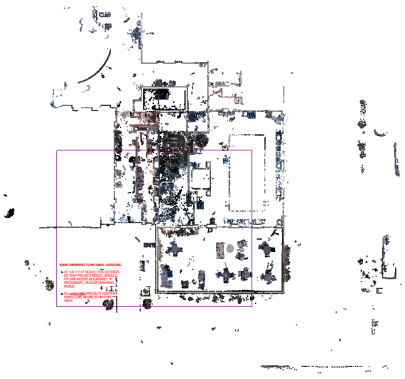


Once the files are completely exported from Register 360, Open Revit. In this case it is: *Revit 2024.*

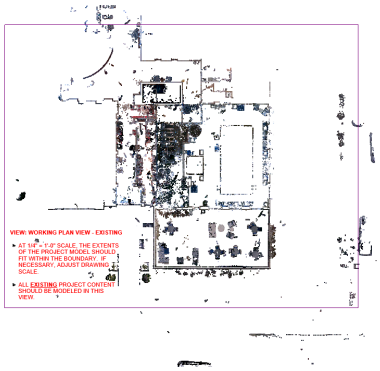
The template file is located at \FSU Team Dropbox\3D team\FSU Revit Library

1. Navigate to the main floor plan view.
2. Go to the Insert tab → Insert Point Cloud (or use Manage Links).
3. Use Positioning: Origin to Internal Origin to correctly place the floor at the proper elevation.
4. Adjust the working view extents to fit within the Purple Border. If needed, scale the point cloud accordingly.

Incorrect:



Correct:



1) Align Levels:
   a) Create a left-to-right section through the entire building (ideally covering the **Humana** area).
   b) Set the view depth to 1-2 feet to ensure level accuracy.
   c) Align the floor level to the Interior 1st Floor Level and adjust as needed.
2) Align Horizontally:
   a) Create an up-down section through the building.
   b) Set the view depth to 1-2 feet and align the Interior 1st Floor Level correctly.
   c) Align the floor level to the Interior 1st Floor Level and adjust as needed.
3) Fine-tune in Ceiling Plan:
   a) Open Ceiling Plan: 1st Floor - Working Ceiling - Existing.
   b) Change the Top Primary Range to 10 feet to view ceiling walls clearly.
   c) Place a Reference Plane along a long exterior or interior wall for alignment.
4) Final Adjustments:
   a) In the Floor Plan, extend the section view range to capture the full space.
   b) Adjust the Interior 2nd Floor Level to align with the highest point of the decking.

Save the Revit file using the naming format: “Site ID” - assign

Once you’ve completed QC and finalized the point cloud in Register360, export the RAF file and rename it by appending “-clean” (for example, “SiteA-clean.raf”). This naming convention makes it easy to tell your polished, QC’ed model apart from the original raw deliverable. Finally, upload the “-clean” RAF to the exact folder or path where you pulled the original scan, keeping both versions organized in the same location.