

Course challenge exercise: Manage projects

Use the skills and the techniques that were covered in this course to solve the challenge.

The challenge is to link a model into a project and publish coordinates. Demolish existing objects and create a demolition plan. Create a design option for the roof of the building and review warnings in the project.

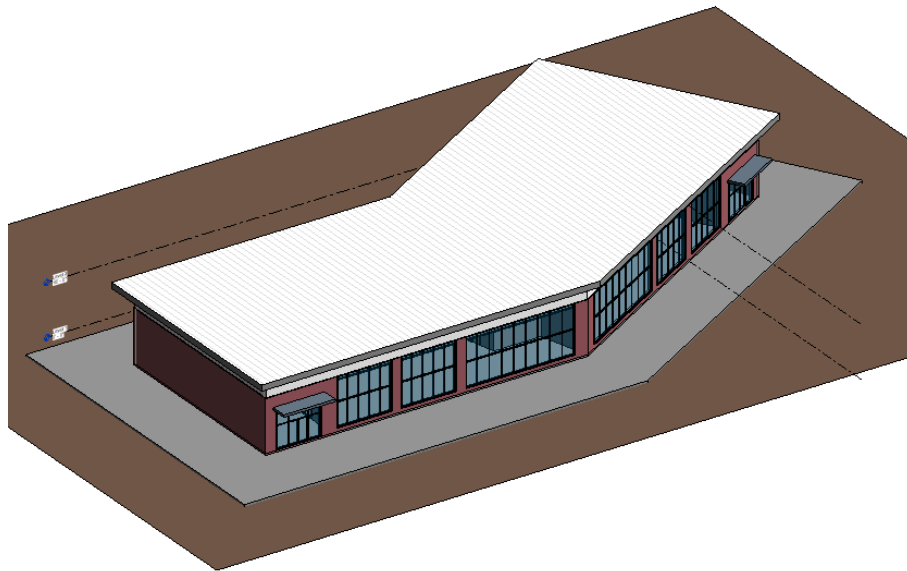


Figure 1. Office-Development.rvt

Learning Objectives:

- Link a model and publish coordinates.
- Demolish objects and create a demolition plan.
- Create a design option.
- Review and resolve warnings.

Complete the required activities:

Open the accompanying file **Office-Development.rvt** and then follow the tasks.

TASK 1 – Link the model and publish coordinates

1. Link the exercise file **Office-Structure.rvt**.
2. Align the linked model with the host model using the gridlines and levels.
3. Once aligned, publish coordinates to the linked model.

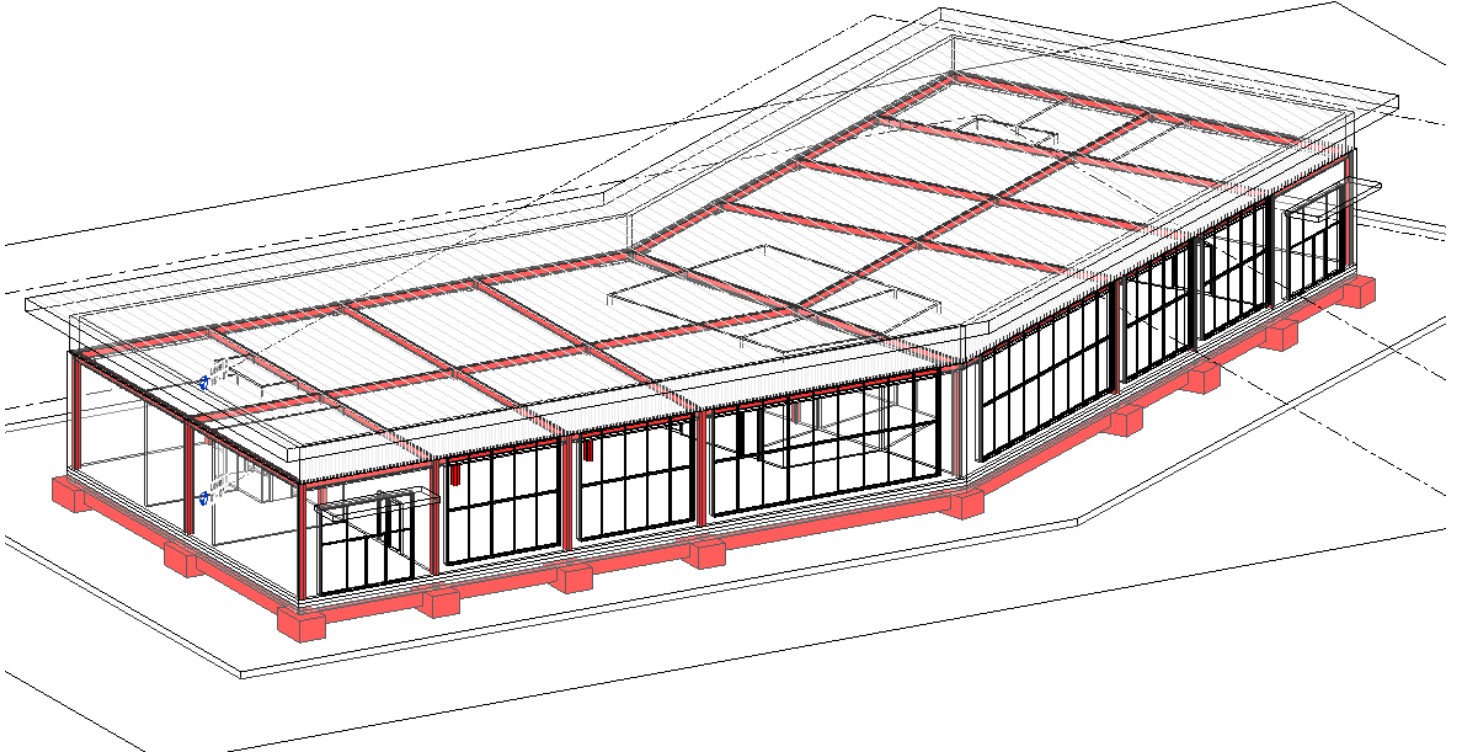


Figure 2. Office-Structure model linked and aligned

TASK 2 – Demolish existing objects

1. Set the lower central walls to be demolished in the New Construction Phase
2. Set the Phase Graphic Overrides to show the demolished elements in red.

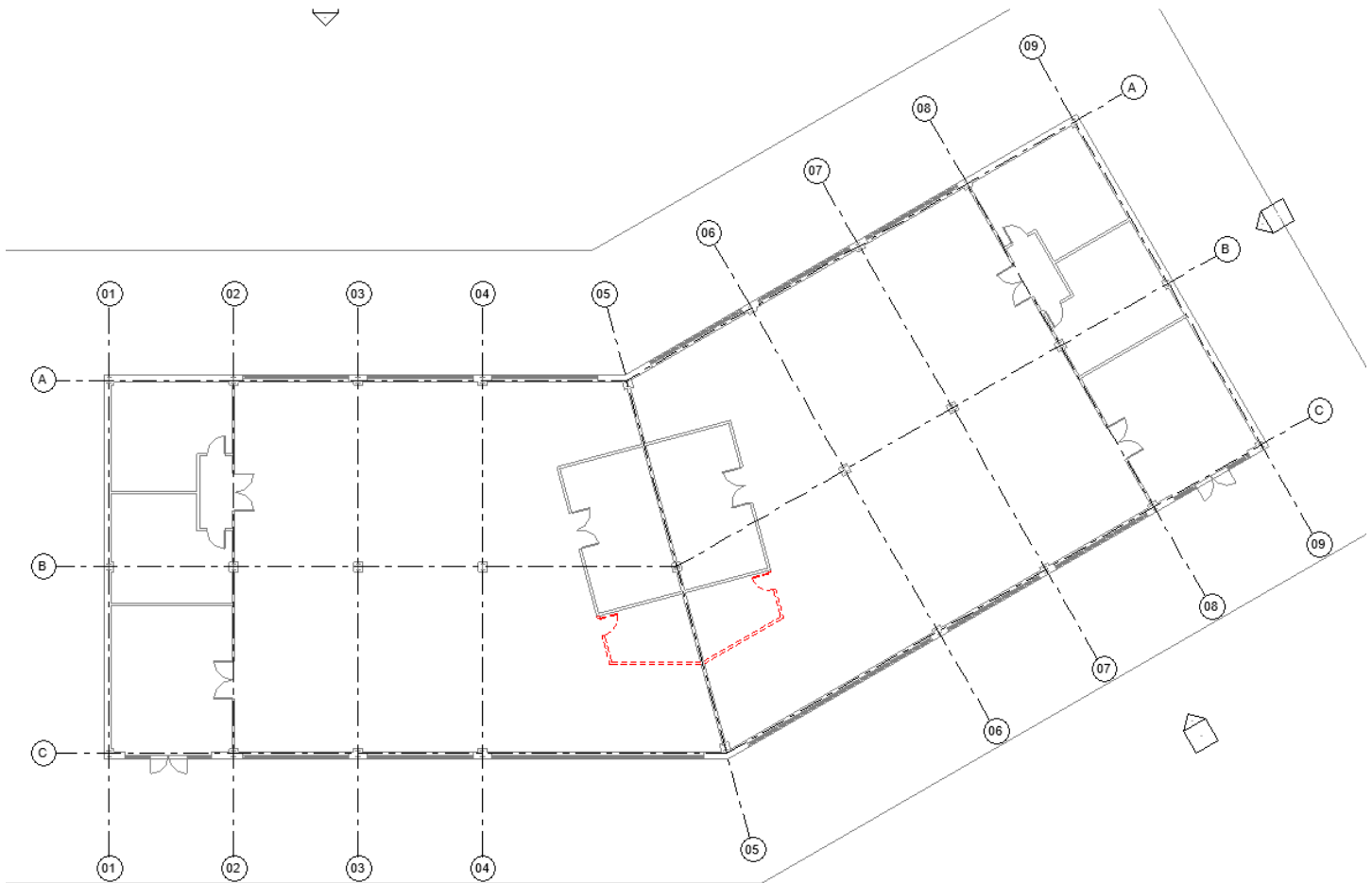


Figure 3. Demolished walls and doors shown in red.

TASK 3 – Create a design option

1. Create a Design Option Set named **Roof Options** and two options: **Option 1** and **Option 2**. Add the existing Roof and “Exterior - Panel on Mtl. Stud” walls (just under the roof) to both options.
2. In Option 2, modify the existing roof to slope on the 4 long edges, set the slope value to (negative) $-1\frac{1}{4}"/12"$. Attach the top of the walls to the underside of the roof so they follow the roof slope.
3. Duplicate the Exterior perspective view to create Roof Option 1 and Roof Option 2. Set each view to display the relevant design option for the roof.

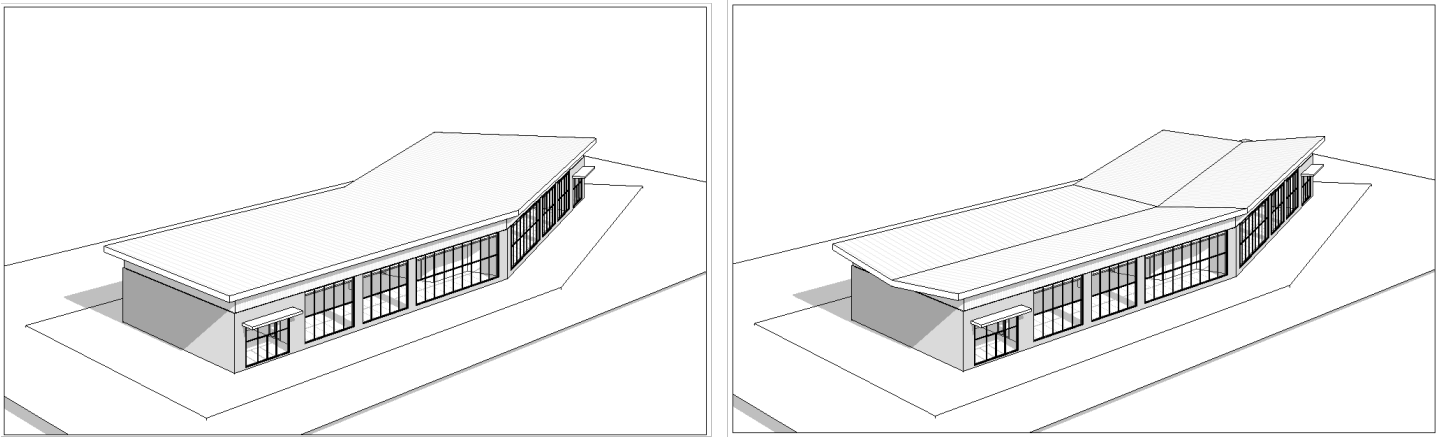


Figure 4. Roof design options.

TASK 4 – Review warnings

- Review the warnings in the project and resolve the issues that caused the warnings.

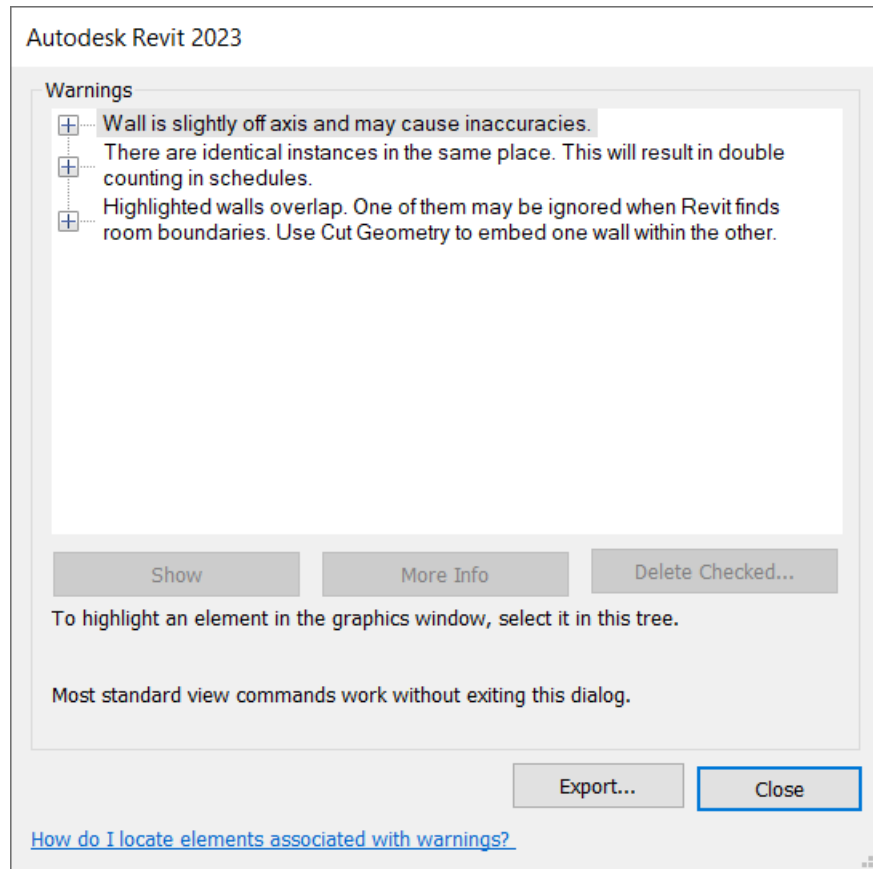


Figure 5. Resolve issues to clear the warnings in the project.