Practice 3c
Create Elevations and Sections

Practice Objectives

- Add building sections and wall sections.
- Add a framing elevation.

In this practice, you will add a building section and a wall section to an existing project. You will also add a framing elevation, as shown in Figure 3–65.
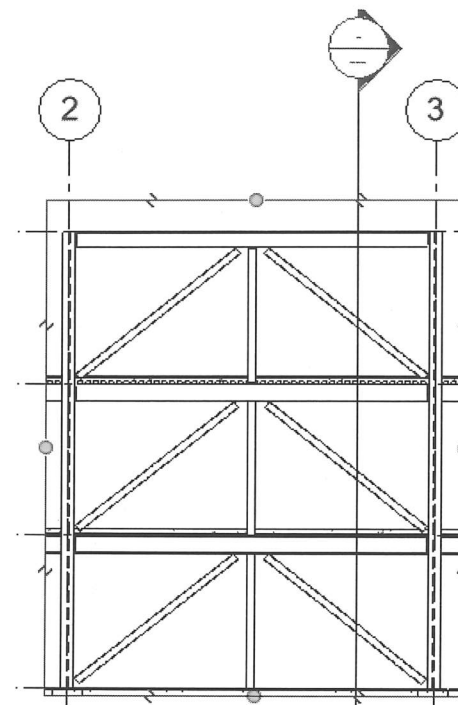
Figure 3–65

Task 1: Create sections.

1. Open **Structural-Sections-M.rvt** from the practice files folder.

2. In the Project Browser, open the **Structural Plans: Level 1** view.

3. In the *View* tab>Create panel or in the Quick Access Toolbar, click ⟋ (Section).

4. In Properties, select **Section>Building Section** from the type list.

5. Place a vertical section offset slightly from the middle, between grid lines **2** and **3**. Change the width of the section using the shape controls, as shown in Figure 3–66.
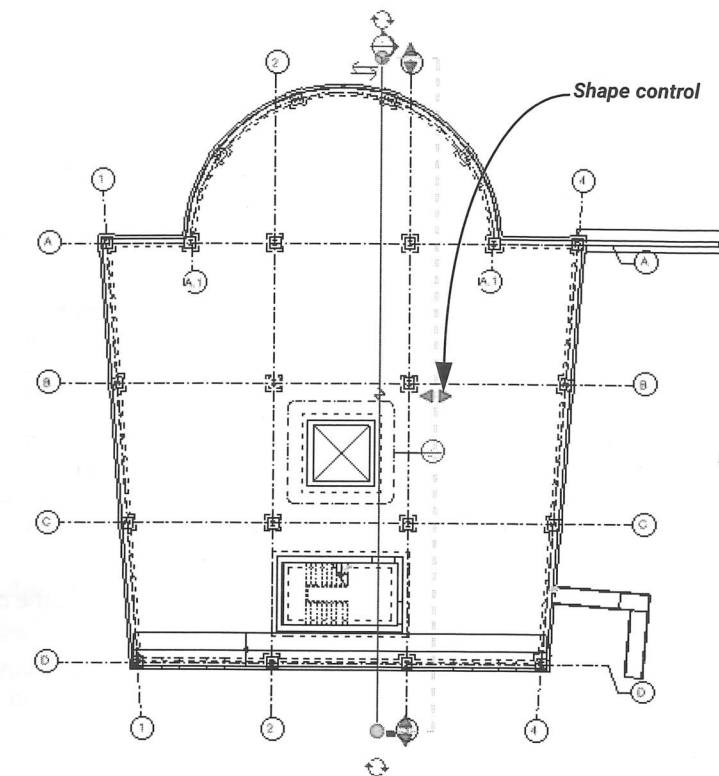
Figure 3–66

6. In the Project Browser, expand *Sections (Building Section)*. Right-click on the new section and rename it **Building Section A**, as shown in Figure 3–67.
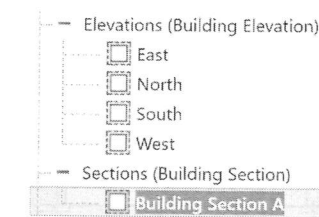
Figure 3–67

7. Open the new section by double-clicking on its name in the Project Browser. The entire building displays, as shown in Figure 3–68. Note that the view varies based on exactly where you placed the section.
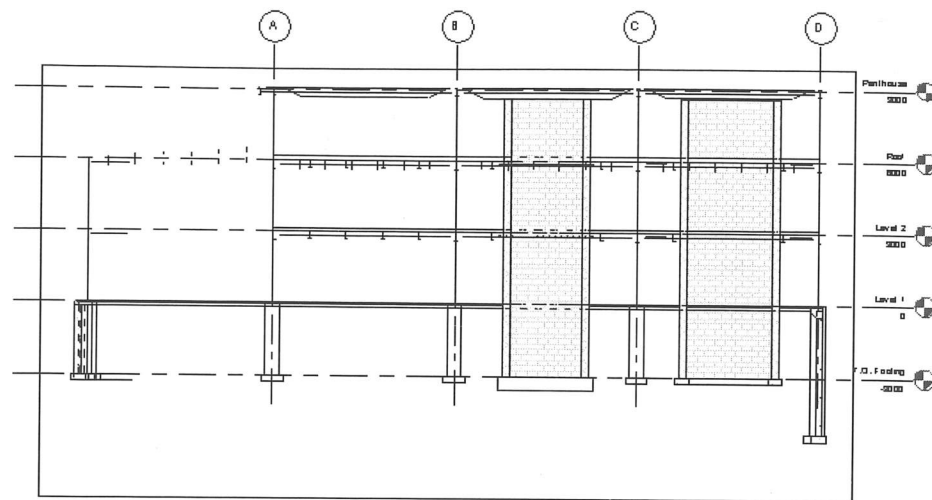

Figure 3–68

8. Select the crop region and use the controls to shorten the section so that the curved walls to the left do not display, shown in Figure 3–69.
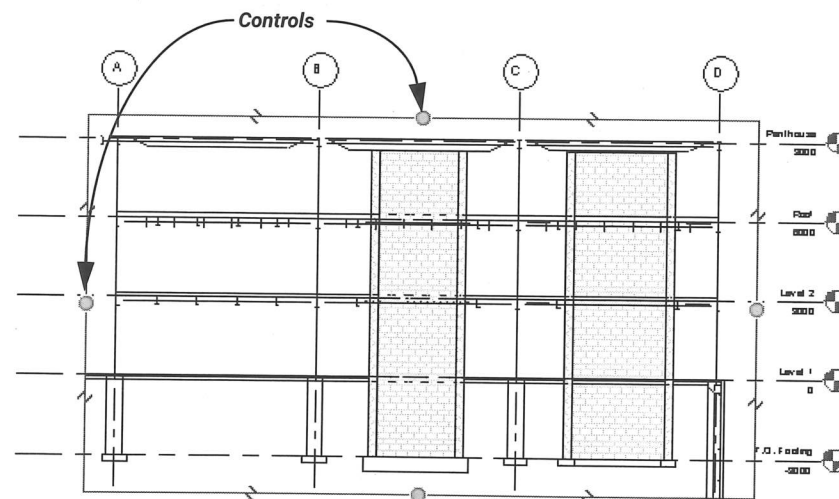

Figure 3–69

9. Return to the Level 1 view. The boundary of the section has changed, as shown on the left in Figure 3–70. Use the segment control to move the section marker's head down, as shown on the right in Figure 3–70.
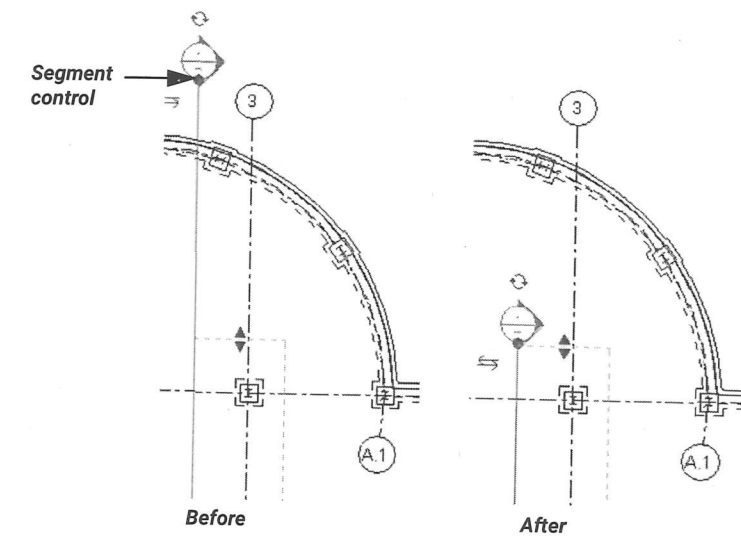

Figure 3–70

10. Start the **Section** command again.

11. In the Type Selector, select **Section: Wall Section**.

12. Draw a short section through the wall shown in Figure 3–71. Modify the section boundary so that it does not touch anything other than the wall.
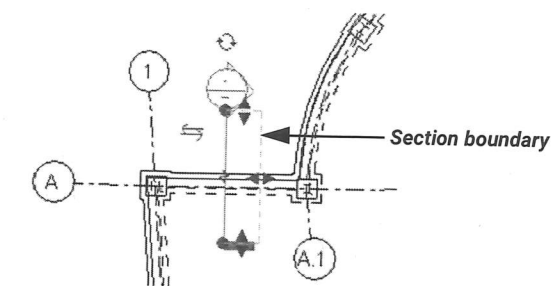

Figure 3–71

13. In the Project Browser, expand *Sections (Wall Section)* and rename the section **Foundation Section**.

14. Open the new section view.

15. In the View Control Bar, change the *Scale* to **1:20**.

16. By default, the section expands the entire height of the project. Use the controls to resize the section so that only the foundation displays, as shown in Figure 3–72.
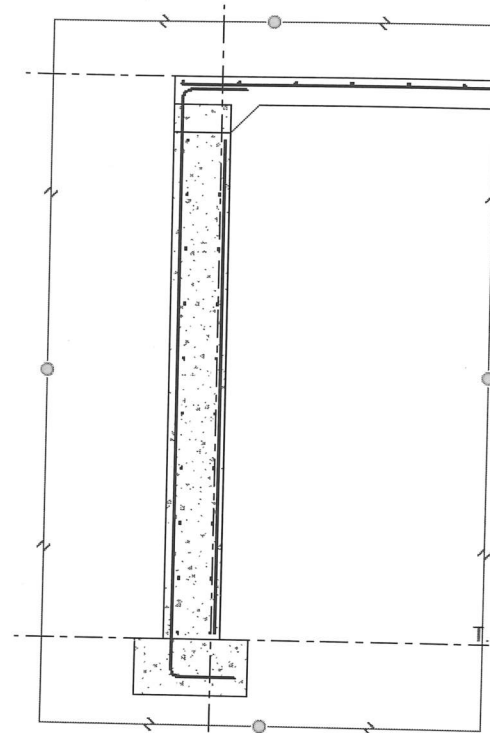

Figure 3–72

17. Save the project.

Task 2: Add a framing elevation.

1. Open the **Structural Plans: Level 1** view.

2. Zoom in on the south wall of the building between grid intersections **D2** and **D3**.

3. In the *View* tab>Create panel, expand ⬠ (Elevation) and click ⬠ (Framing Elevation).

4. Hover the cursor over grid line **D**, as shown in Figure 3–73. Pick a point when the framing elevation marker displays on the outside of the building.
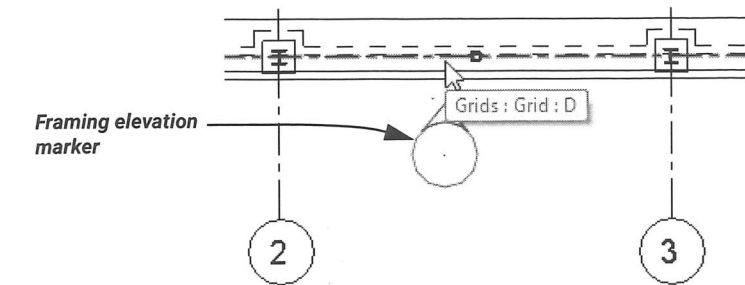

Figure 3–73

5. In the Project Browser, in the *Elevations (Framing Elevation)* area, rename the view as **Typical Bracing**.

6. Click on the arrowhead of the elevation marker to show the boundary. Using the controls, lengthen the elevation boundary so that it is just on each side of the columns, as shown in Figure 3–74.
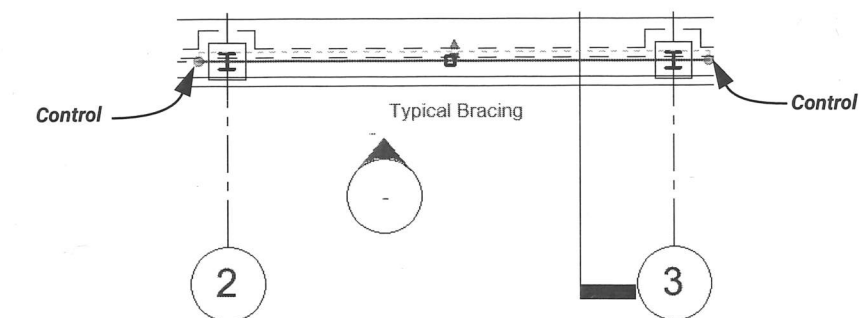

Figure 3–74

7. Open the framing elevation and in the View Control Bar, change the *Detail Level* to ▨ (Fine).

8. Modify the size of the elevation to only display the bracing, as shown in Figure 3–75.
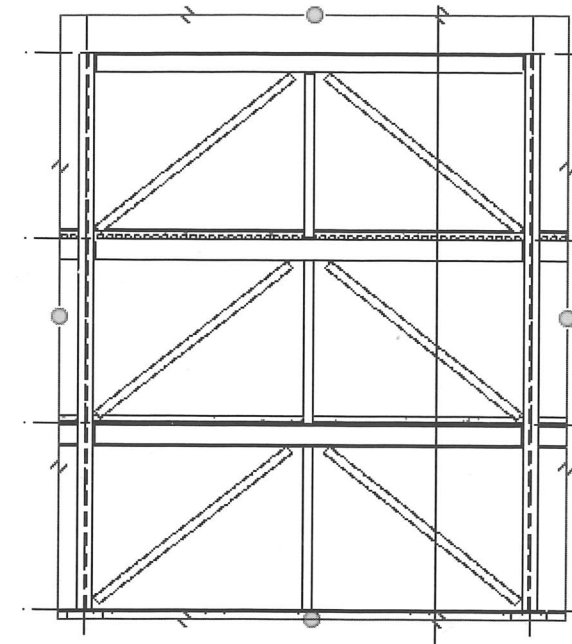

Figure 3–75

9. Return to the **Structural Plans: Level 1** view.

10. Zoom out to display the entire building.

11. In the Quick Access Toolbar, click [icon] (Close Inactive Views).

12. Save and close the project.

End of practice