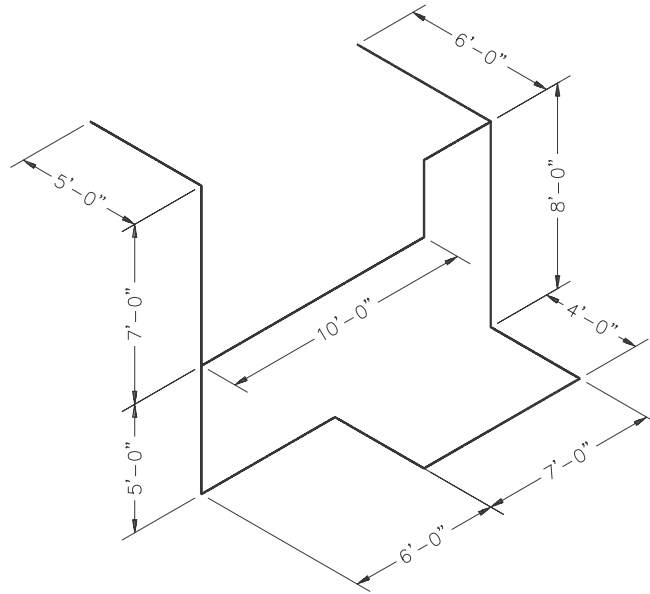


CHAPTER 37 EXERCISES

1. Piping Layout

Create a three-dimensional drawing of the piping layout shown in Figure CE37-1. These are the centerlines of the pipes only; the remainder of the drawing will be added later. You may simply draw *Lines* using X, Y, and Z coordinates to reproduce the drawing. Do not add dimensions. Display the drawing in a three-dimensional view using *3Dorbit* and *Plot the Display* so it is *Scaled to Fit* on an A-size sheet. *SaveAs* CE37EX1.

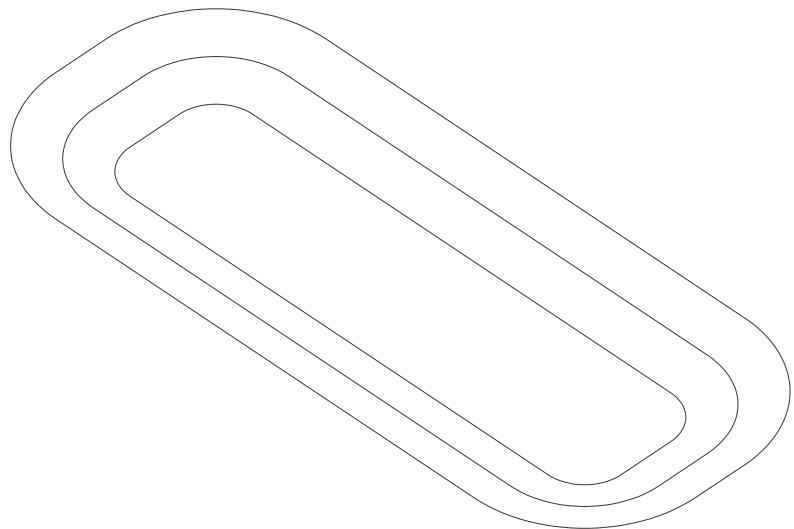
Figure CE37-1



2. Contours

Open the CE19EX4 drawing from the Chapter 19 Exercises. Activate the *Model* tab so you are working in model space only. If you have broken the contours and added text, *Freeze* the text layer and rejoin the contours. Use *Move* to change the elevation of each contour. For example, the 50' contour would be moved to a point @0,0,50'. Thus, the X and Y coordinates will not change, but the Z coordinate for the elevation will change. Repeat this process with the rest of the contours. Use *3Dorbit* to generate a three-dimensional view to check your work as shown in Figure CE37-2. *Plot* the drawing so it is *Scaled to Fit* on an A-size sheet. *SaveAs* CE37EX2.

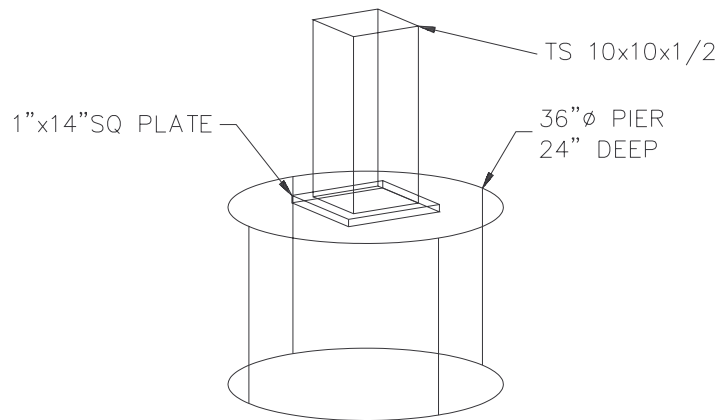
Figure CE37-2



3. Column on Pier

Begin a *New* drawing. Draw a wireframe model of the foundation pier, base plate, and column as shown in Figure CE37-3. Do not dimension. The foundation pier may be created by drawing two *Circles* and then drawing two *Lines* to connect the *Quadrants* of each circle. *Plot* a three-dimensional view on an A-size sheet. *SaveAs* 3DPIER.

Figure CE37-3



4. Column Layout

Create a column measuring 10" x 10" x 10' as a wireframe model. Use the *Array* command to create 4 columns and 3 rows of the object with 25' between each row and column. Create a floor slab to encompass the entire layout (75'-10" x 50'-10"). Use *3Dorbit* to view the drawing as shown in Figure CE37-4. *SaveAs* 3DCOLS.

Figure CE37-4

