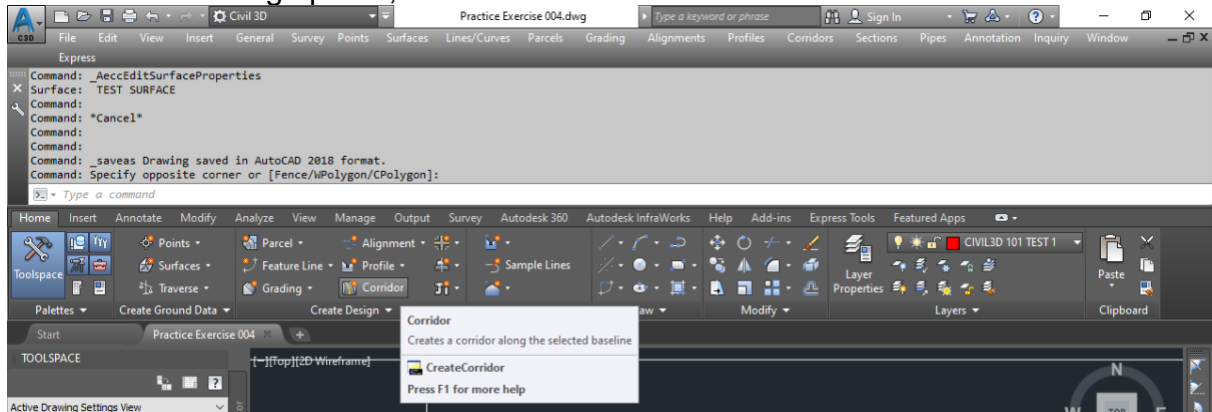


Solution Exercise 4

Create a Corridor



1. Open Practice Exercise 004.dwg.
2. In the Create Design panel, click Corridor.



3. In the Create Corridor dialog box, set the Alignment to TEST ROAD, the Profile to TEST PROFILE, the Assembly to TEST ASSEMBLY, and the Surface to TEST SURFACE. Click OK.

Create Corridor

Name:
Corridor - (<[Next Counter(CP)]>)

Description:

Corridor style:
Basic

Corridor layer:
C-ROAD-CORR

Baseline type:
☒ Alignment and profile
☐ Feature line

Alignment:
TEST ROAD

Profile:
TEST PROFILE

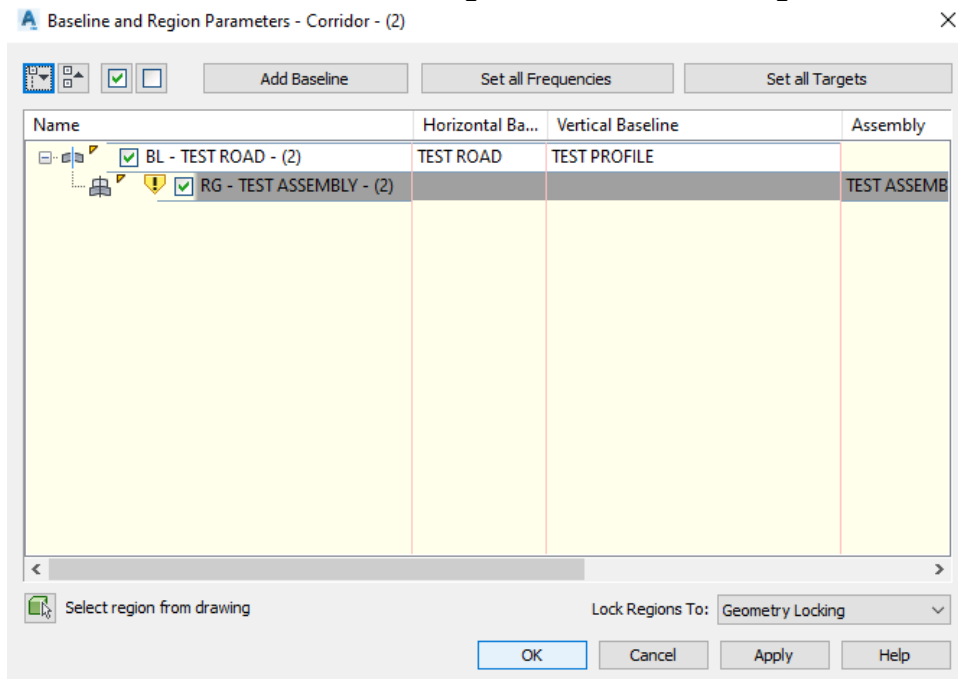
Assembly:
TEST ASSEMBLY

Target Surface:
TEST SURFACE

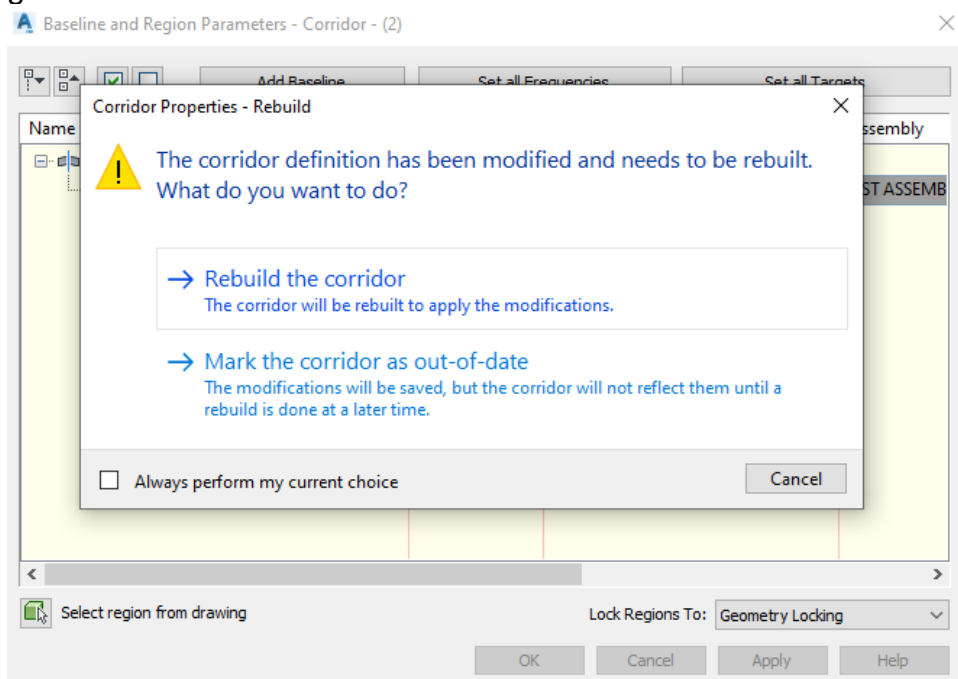
☒ Set baseline and region parameters

OK Cancel Help

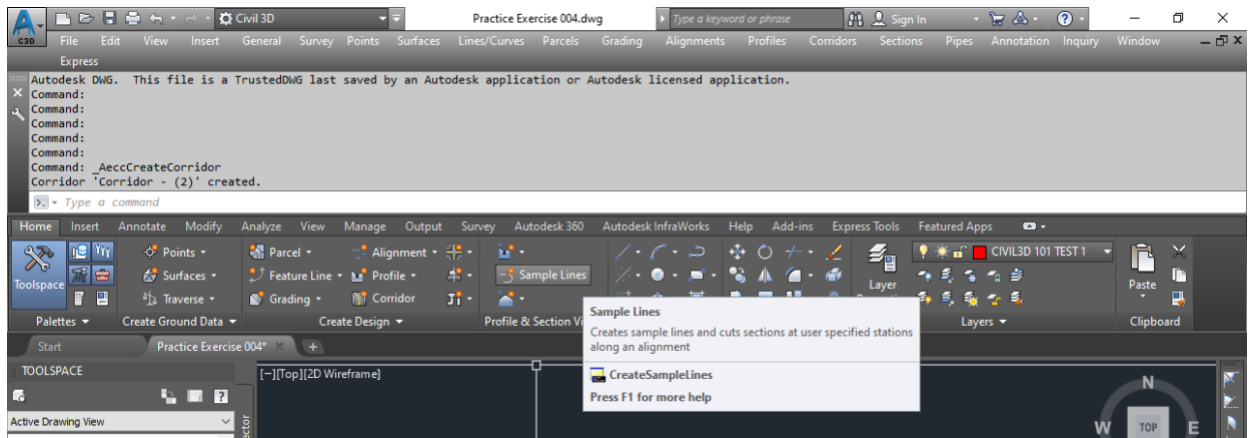
4. Click OK in the Baseline and Region Parameters dialog box.



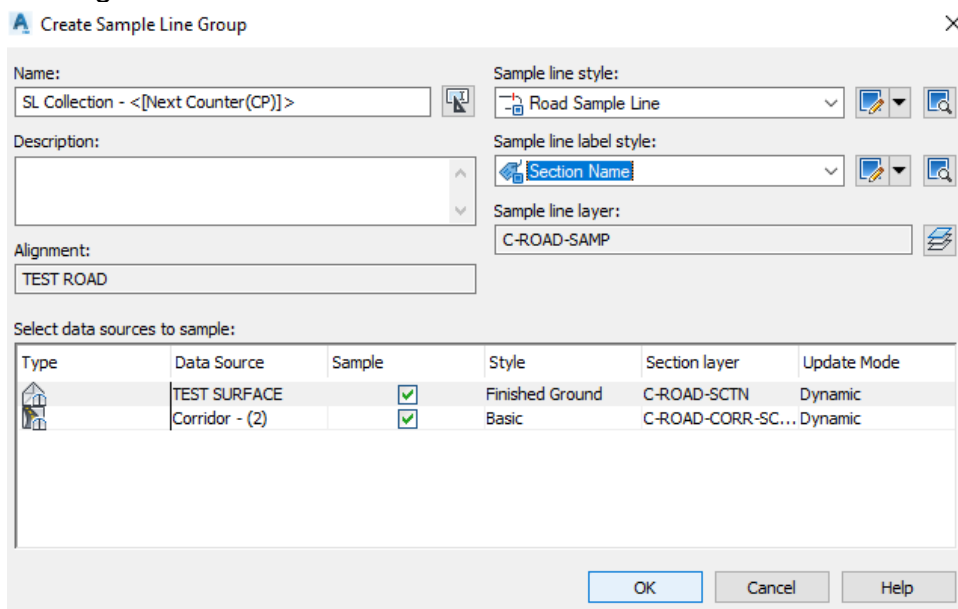
5. Select Rebuild Corridor and then close the Panorama window by clicking the green check mark.



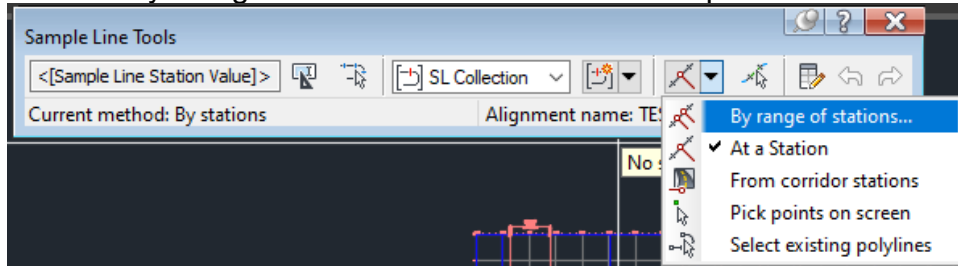
6. In the Profile & Section Views panel, click Sample Lines. Select the TEST ROAD alignment.



7. Accept the default settings in the Create Sample Line Group dialog box by clicking OK.



8. Choose By Range of Stations for the Create Sample Lines method.



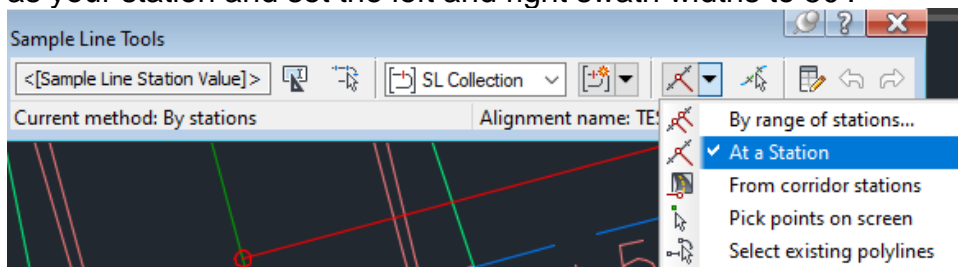
9. Accept all of the defaults: Station range start and end set to True, swath widths left and right set to False and 50, sampling increments set to True and 50 for all increments, and all additional sample controls set to False.

Create Sample Lines - By Station Range

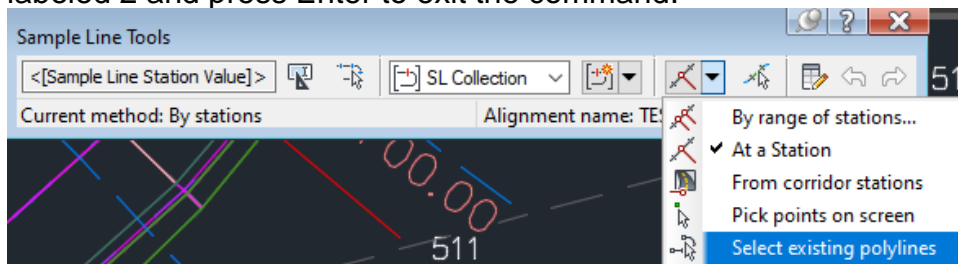
Property	Value
General	
Alignment	TEST ROAD
Station Range	
From alignment start	True
Start Station	0+00.00'
To alignment end	True
End Station	18+22.21'
Left Swath Width	
Snap to an alignment	False
Alignment	TEST ROAD
Width	50.000'
Right Swath Width	
Snap to an alignment	False
Alignment	TEST ROAD
Width	50.000'
Sampling Increments	
Use Sampling Increments	True
Increment Relative To	Absolute Station
Increment Along Tangents	50.000'
Increment Along Curves	50.000'
Increment Along Spirals	50.000'
Additional Sample Controls	
At Range Start	False
At Range End	False
At Horizontal Geometry Points	False
At Superelevation Critical Stati...	False

OK Cancel Help

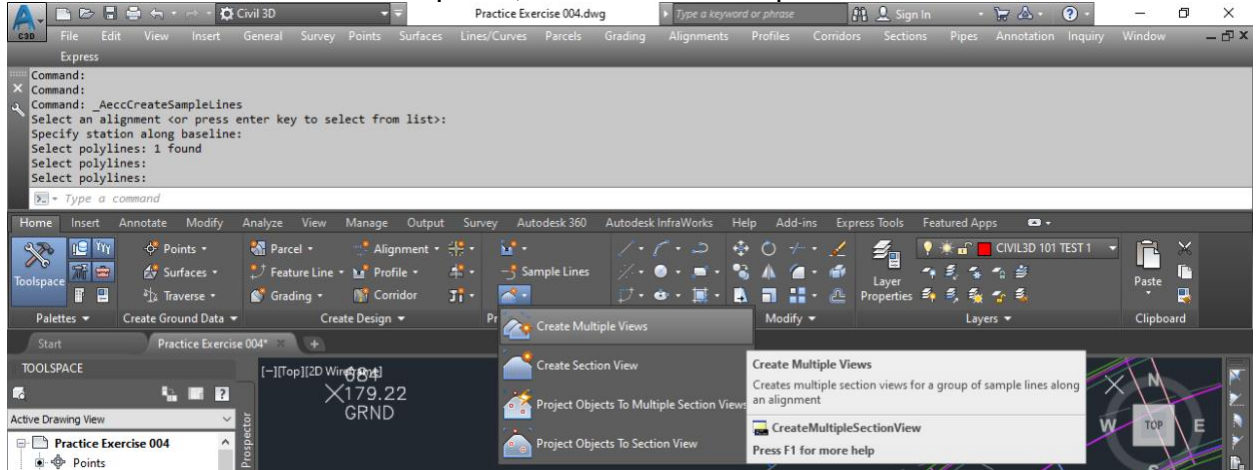
10. Choose the At a Station creation method. Use the center of the circle marked 1 as your station and set the left and right swath widths to 50'.



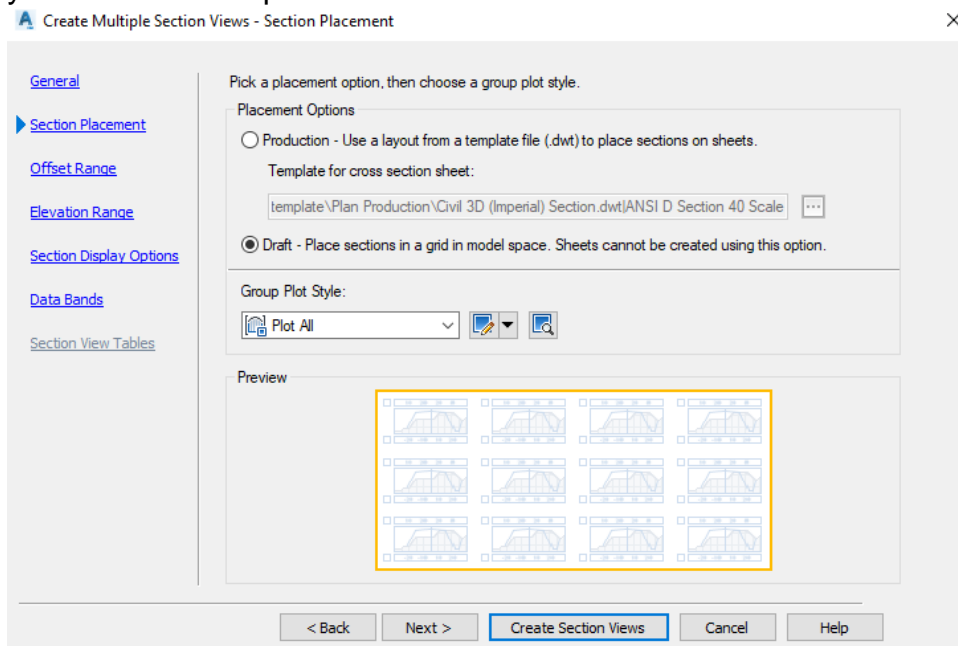
11. Choose the Select Existing Polylines sample line creation method. Select the line labeled 2 and press Enter to exit the command.



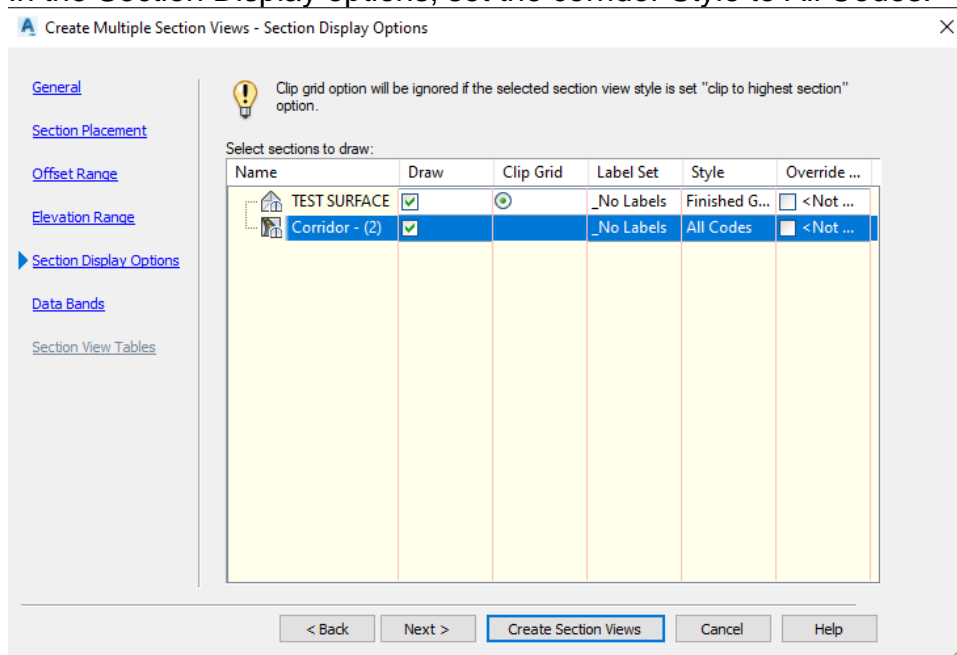
12. In the Profile & Section Views panel, click Create Multiple Views.



13. In the Create Multiple Section Views dialog box, under Section Placement set your Placement Options to Draft.



14. In the Section Display options, set the corridor Style to All Codes.

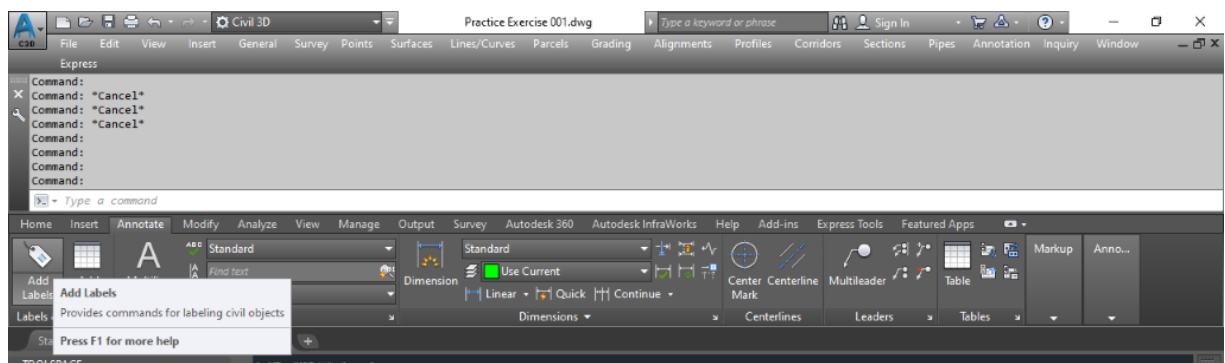


15. Click Create Section Views.

16. Pick a lower-left corner for your section views in model space.

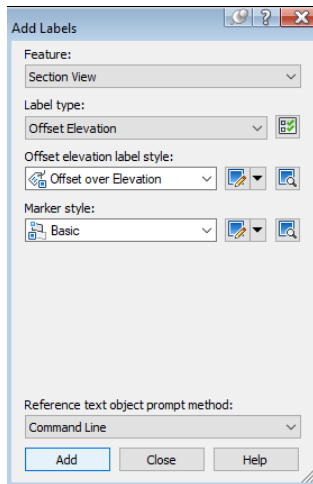
17. Determine which stations you need to get information from: 6+32.06, 10+50.00, 12+35.63.

18. In the Annotate tab of the ribbon bar, click Add Labels.

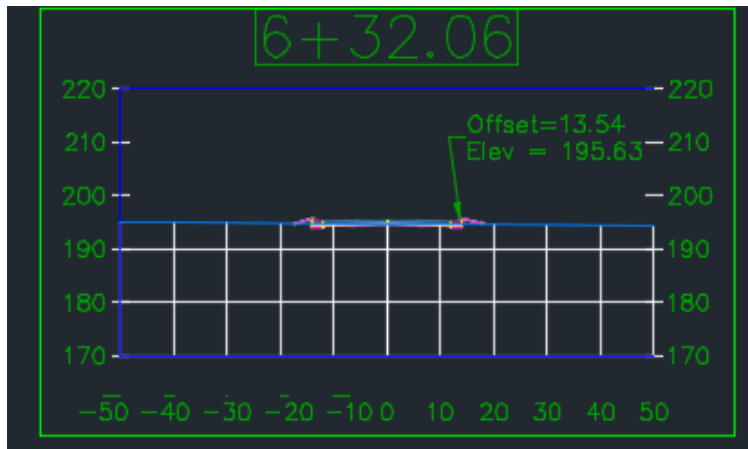


19. Change the Feature to Section View and the Label Type to Offset Elevation.

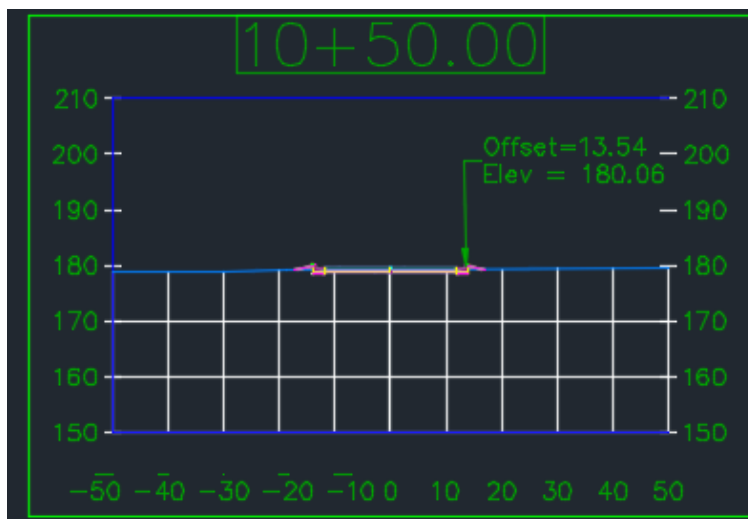
Make sure a label with at least Elevation is selected for Offset Elevation label style and click Add. Select the section view that data is needed from and then pick the location for the label (rinse and repeat for all sections that data is needed from).



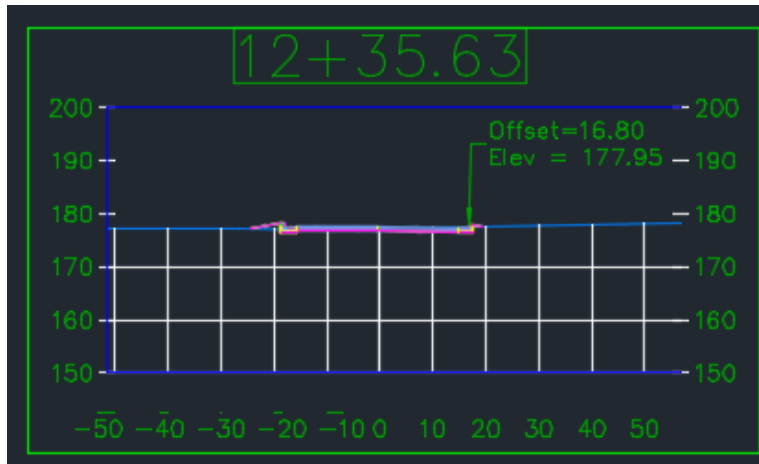
6+32.06 Curb Elevation



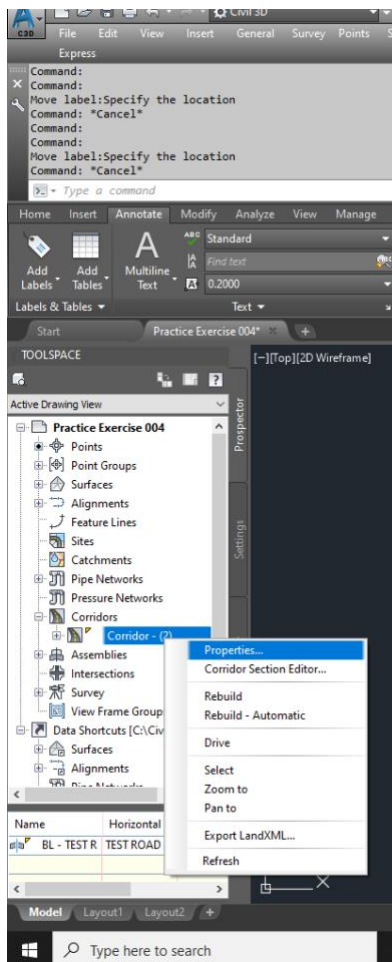
10+50.00 Curb Elevation



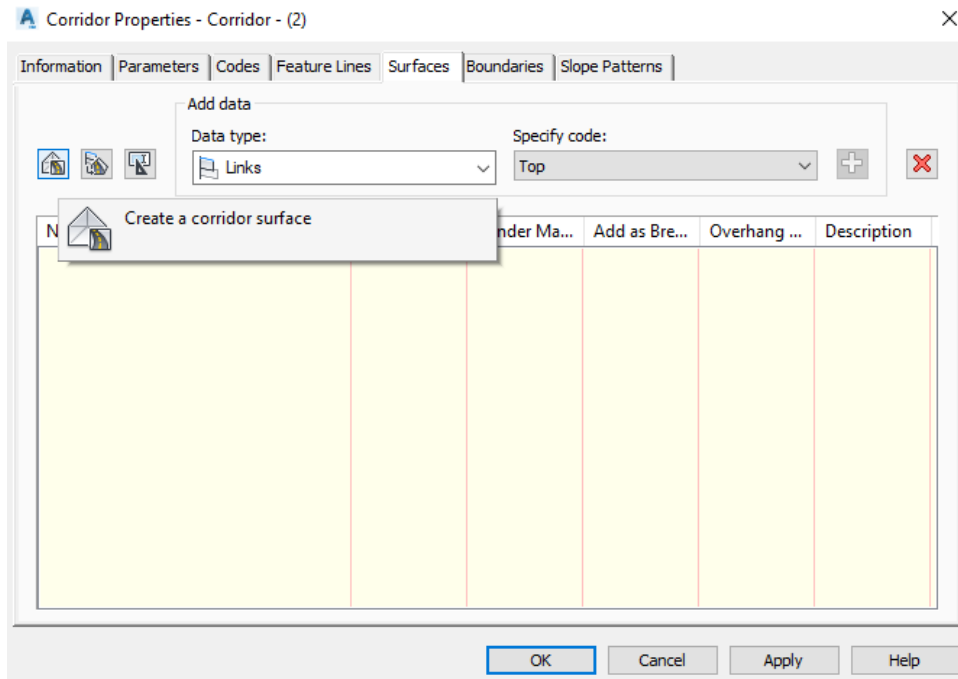
12+35.63 Right-hand Curb Elevation



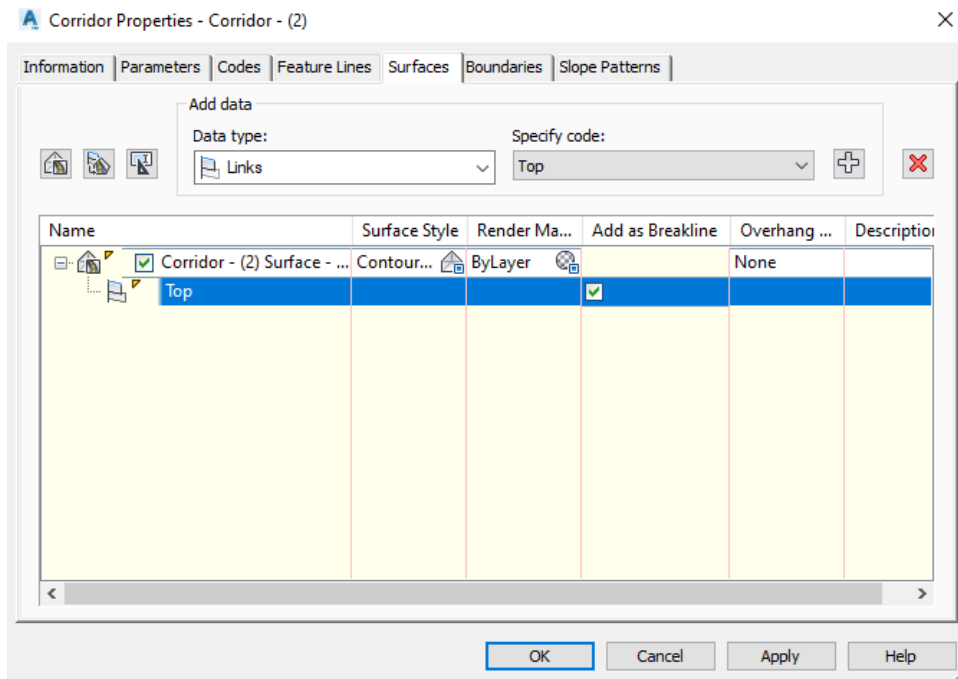
20. Navigate to Corridors in the Prospector tab and expand the label. Right-click on your corridor and choose Properties.



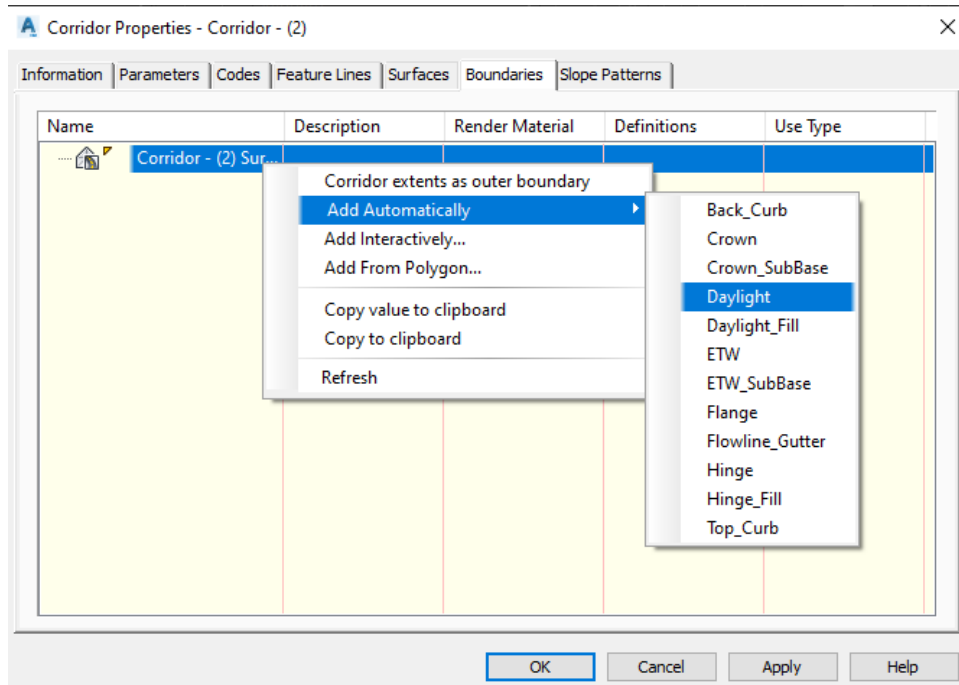
21. Click the Surfaces tab and click Create a Corridor Surface.



22. Add Links to Data Type. Add Top to Specify Code. Select Add as Breakline.

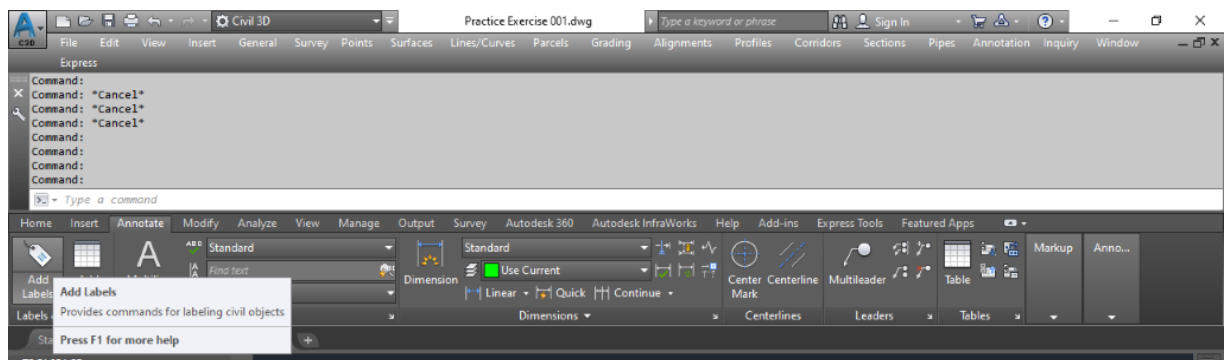


23. Select the Boundaries tab. Right-click your corridor surface and choose Add Automatically > Daylight.

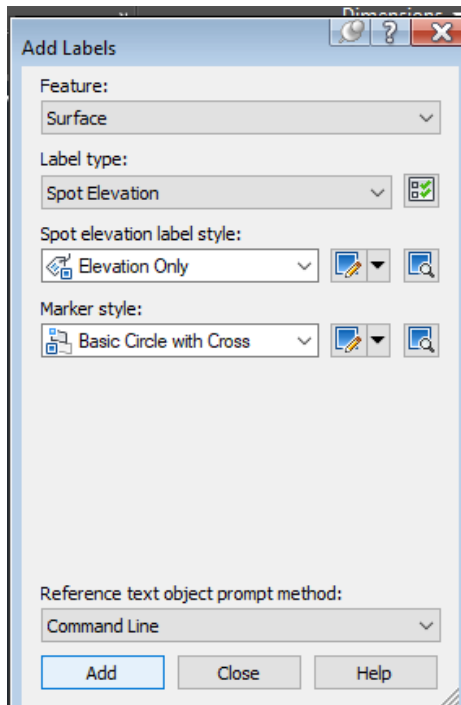


24. Click OK and Rebuild the Corridor.

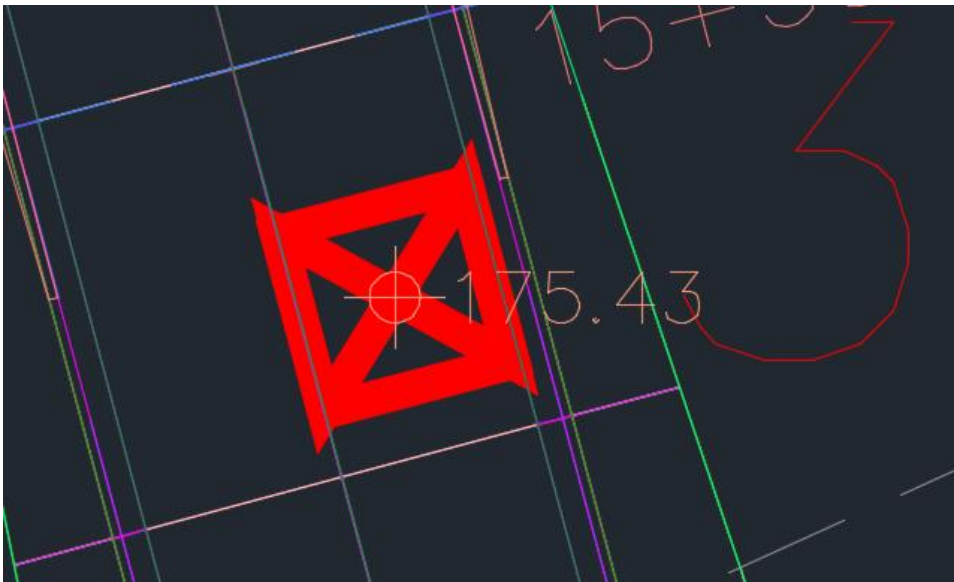
25. In the Annotate tab of the ribbon bar, click Add Labels.



26. Change the Feature to Surface and the Label Type to Spot Elevation. Make sure a label with at least Elevation is selected for Spot Elevation Label Style and click Add.



27. Specify the corridor surface and click the intersection of the X at 3.



ANSWERS

What is the top of curb elevation at station 10+50.00? **180.06**

What is the top of curb elevation for the section you created with the At Station method? **195.63**

What is the top of the curb elevation on the right-hand side for the section you created with the Select Existing Polyline method? 177.95

What is the elevation of the point at the intersection of the X on your corridor surface? 175.43