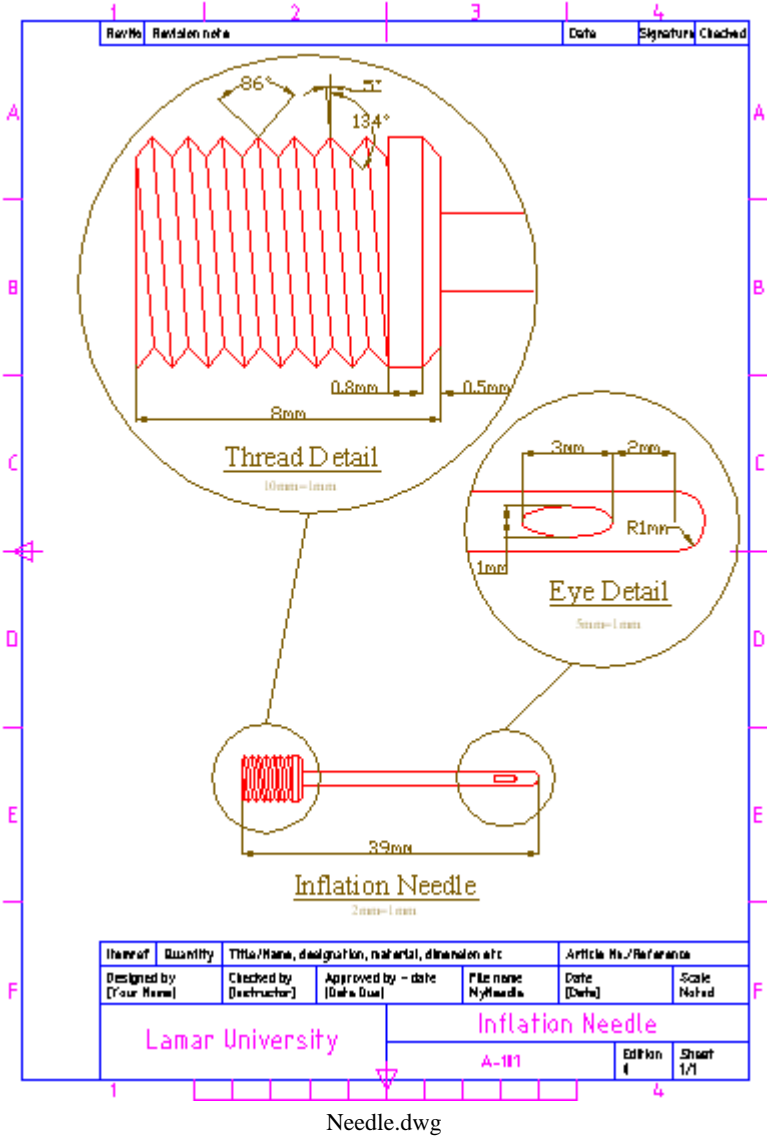


AutoCAD 2009: One Step at a Time

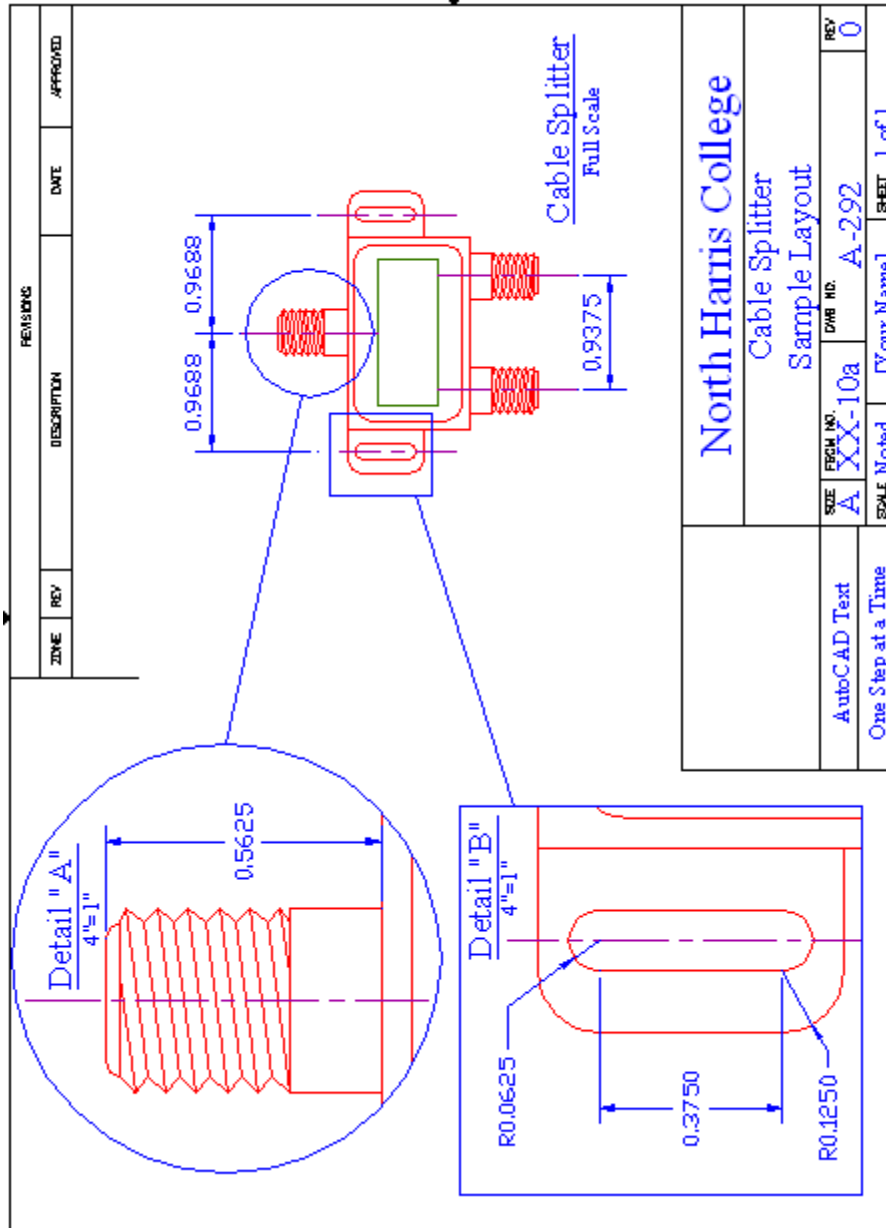
Lesson 24: The New Beginning Continues

09R24	Exercises
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1. Open the *MyNeedle* file in the C:\Steps\Lesson24 folder. (If that drawing isn't there, use the *needle 24* file in the same folder.) Complete the drawing configuration for plotting as shown. Some helpful information includes:
 - 1.1. The text height is 5mm and 2.5mm; the font is Times New Roman or Calibri.
 - 1.2. The title block text is attributed.
 - 1.3. I used two dimension layers (create new layers as required).
 - 1.4. Dimension text is 3mm.
 - 1.5. Remember that Floating viewports can overlap.
 - 1.6. Save the drawing as *MyNeedle24* in the C:\Steps\Lesson24 folder.



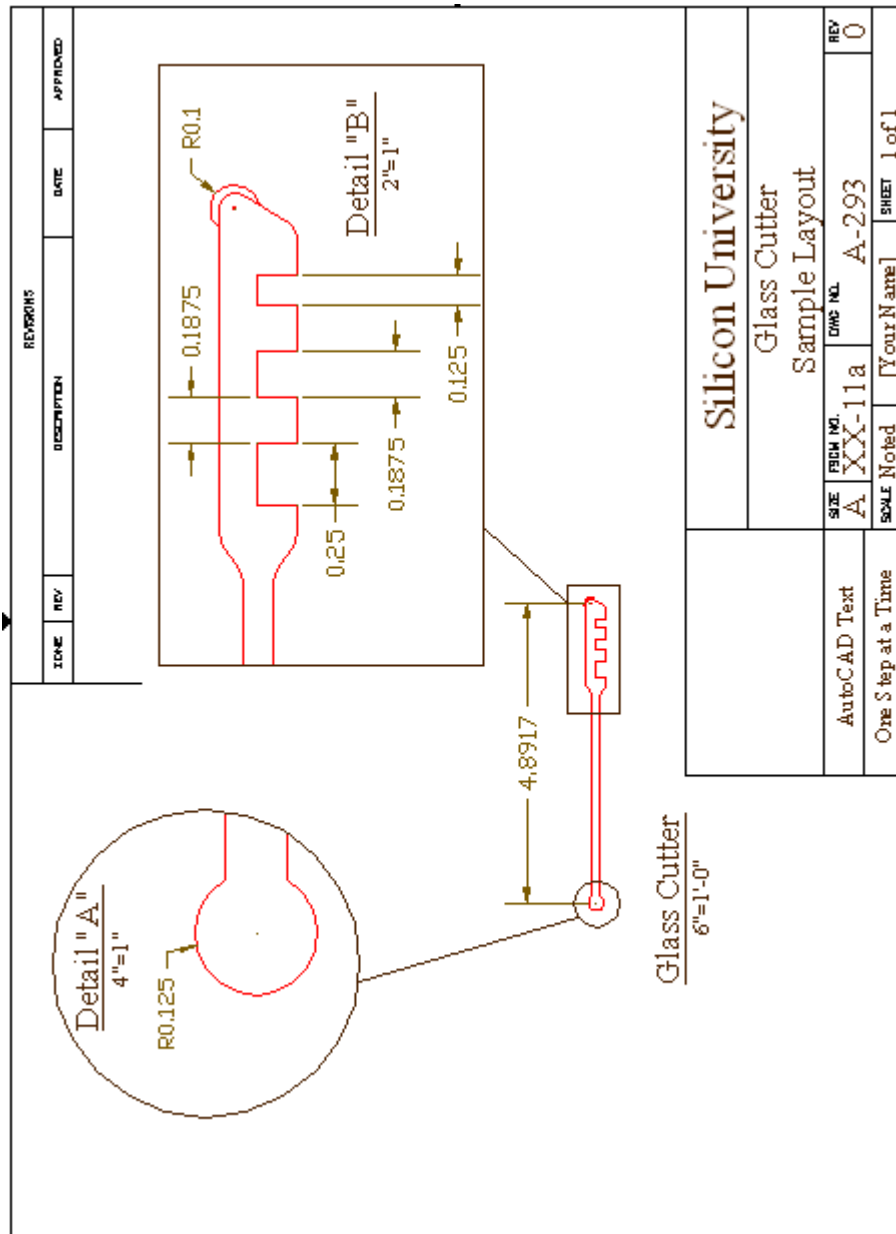
2. Open the *MySplitter* file in the C:\Steps\Lesson24 folder. (If this drawing isn't there, open the *cable splitter 24* file instead.) Complete the drawing configuration for plotting as shown. Some helpful information includes:
 - 2.1. The text height is 3/16" and 1/8"; the font is Times New Roman or Calibri.
 - 2.2. The title block text is 1/4", 3/16", and 1/8"; the font is Times New Roman or Calibri.
 - 2.3. I used two dimension layers (create new layers as required).
 - 2.4. Dimension text is 1/8".
 - 2.5. Remember that floating viewports can overlap.
 - 2.6. Save the drawing as *MySplitter24* in the C:\Steps\Lesson24 folder.



North Harris College		DATE	APPROVED
Cable Splitter		DWG NO.	REV
Sample Layout		A-292	0
SIZE	FROM IN.	SCALE	SHEET
A	XXX-10a	Noted	[Your Name] 1 of 1
AutoCAD Text		One Step at a Time	

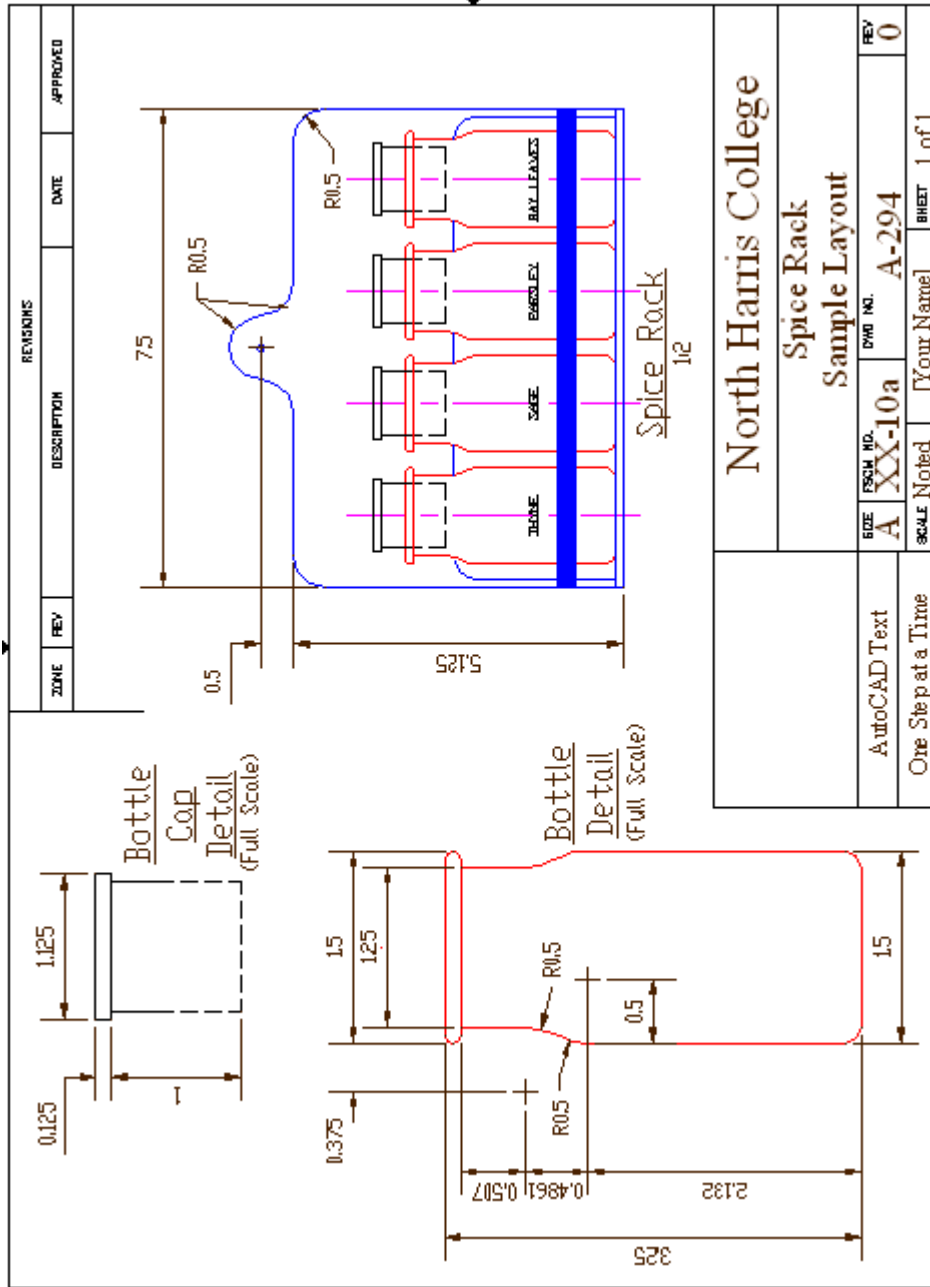
Cable Splitter.dwg

3. Open the *MyCutter* file in the C:\Steps\Lesson24 folder. (If this drawing isn't there, open the *glass cutter 24* file instead.) Complete the drawing configuration for plotting as shown. Some helpful information includes:
 - 3.1. The text height is 3/16" and 1/8"; the font is Times New Roman or Calibri.
 - 3.2. The title block text is 1/4", 3/16", and 1/8"; the font is Times New Roman or Calibri.
 - 3.3. I used two dimension layers (create new layers as required).
 - 3.4. Dimension text is 1/8".
 - 3.5. Remember that floating viewports can overlap.
 - 3.6. Save the drawing as *MyCutter24* in the C:\Steps\Lesson24 folder.



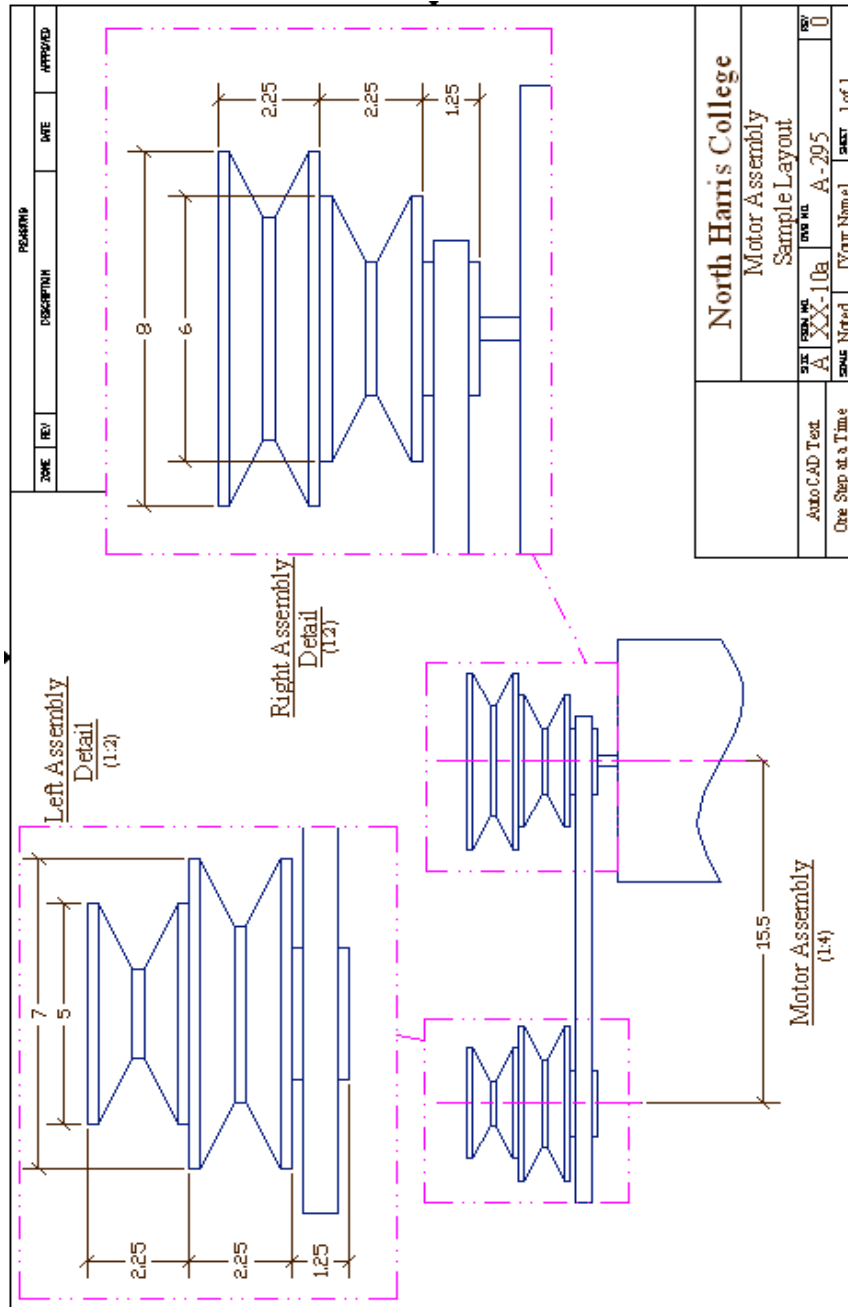
Glass Cutter.dwg

4. Open the *My Spice Rack* file in the C:\Steps\Lesson24 folder. (If this drawing isn't there, open the *Spice Rack 24* file instead.) Complete the drawing configuration for plotting as shown. Some helpful information includes:
 - 4.1. The text height is 3/16" and 1/8"; the font is Txt.
 - 4.2. The title block text is 1/4", 3/16", and 1/8"; the font is Times New Roman or Calibri.
 - 4.3. I used three dimension layers (create new layers as required).
 - 4.4. Dimension text is 1/8".
 - 4.5. Align the bottle and cap.
 - 4.6. Save the drawing as *My Spice Rack 24* in the C:\Steps\Lesson24 folder.



Spice Rack

5. Open the *MyAssbly* file in the C:\Steps\Lesson24 folder. (If this drawing isn't there, open the *motor assbly 24* file instead.) Complete the drawing configuration for plotting as shown. Some helpful information includes:
 - 5.1. The text height is 3/16" and 1/8"; the font is Times New Roman or Calibri.
 - 5.2. The title block text is 1/4", 3/16", and 1/8"; the font is Times New Roman or Calibri.
 - 5.3. I used three dimension layers (create new layers as required).
 - 5.4. Dimension text is 1/8".
 - 5.5. Save the drawing as *MyAssbly24* in the C:\Steps\Lesson24 folder.

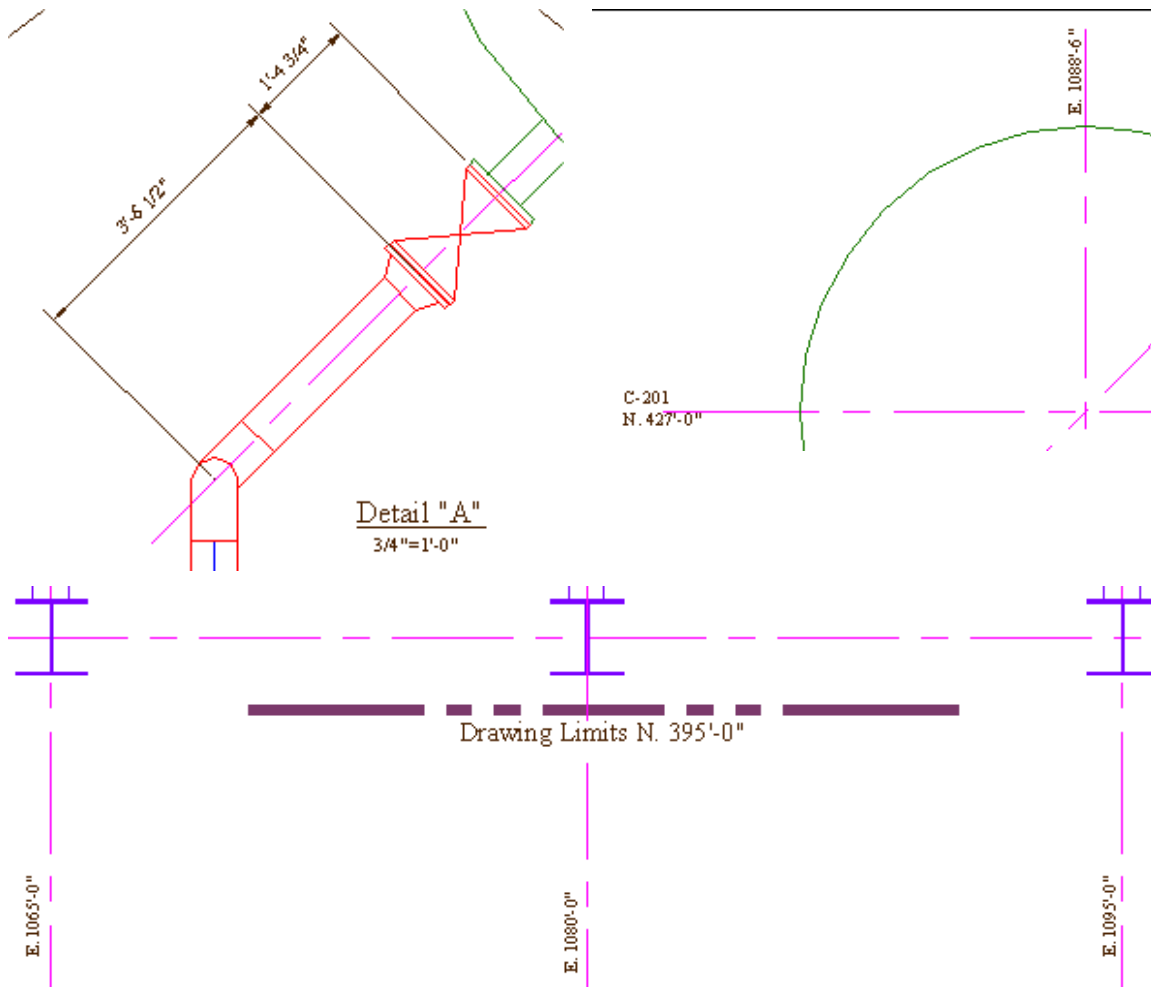


Motor Assembly

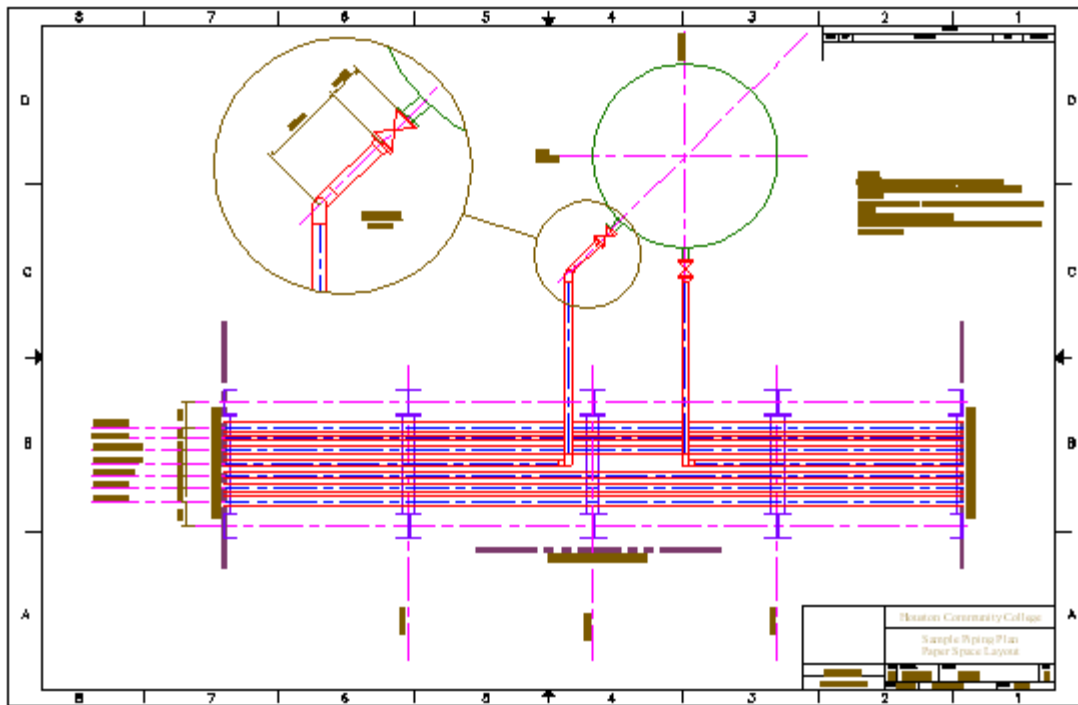
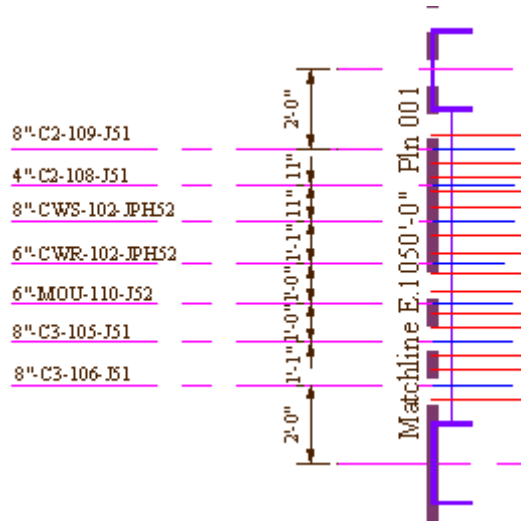
6. Open the *My Piping Plan* file in the C:\Steps\Lesson24 folder. (If this drawing isn't there, open the *Piping plan 24* file instead.) Complete the drawing configuration for plotting as shown in the details (see the final drawing on the next page). Some helpful information includes:
 - 6.1. The text height is 3/16" and 1/8"; the font is Times New Roman or Calibri.
 - 6.2. The title block text is 1/4", 3/16", and 1/8"; the font is Times New Roman or Calibri.
 - 6.3. I used two dimension layers (create new layers as required).
 - 6.4. Dimension text is 1/8".
 - 6.5. Use the details to help you.
 - 6.6. Save the drawing as *MyPipingPlan24* in the C:\Steps\Lesson24 folder.

NOTES:

1. High and low point vents and drains required on all pipe.
2. See drawings *SPC 4001* through *SPC 4009* for Piping Support Standards.
3. See drawings *INS2022* through *INS2025* for Instrumentation Installation Details.
4. **Hold drawing for Stress Analysis.**
5. See customer spec *TXC0502331-103a/b* for construction specifications.
6. HPFS is 101'-0"



		Houston Piping College		
		Sample Piping Plan Paper Space Layout		
AutoCAD Text	SIZE D	FIG. NO. XX-101	DWG. NO. D-295	REV 0
One Step at a Time	SCALE 3/8" = 1'-0"	[Your Name]	SHEET	1 of 1



Piping Plan

7. Open the *drillguide24* file in the C:\Steps\Lesson24 folder. Complete the drawing configuration for plotting as shown. Some helpful information includes:

7.1. The title block is the *ANSI B title block* file found in AutoCAD's Template folder.

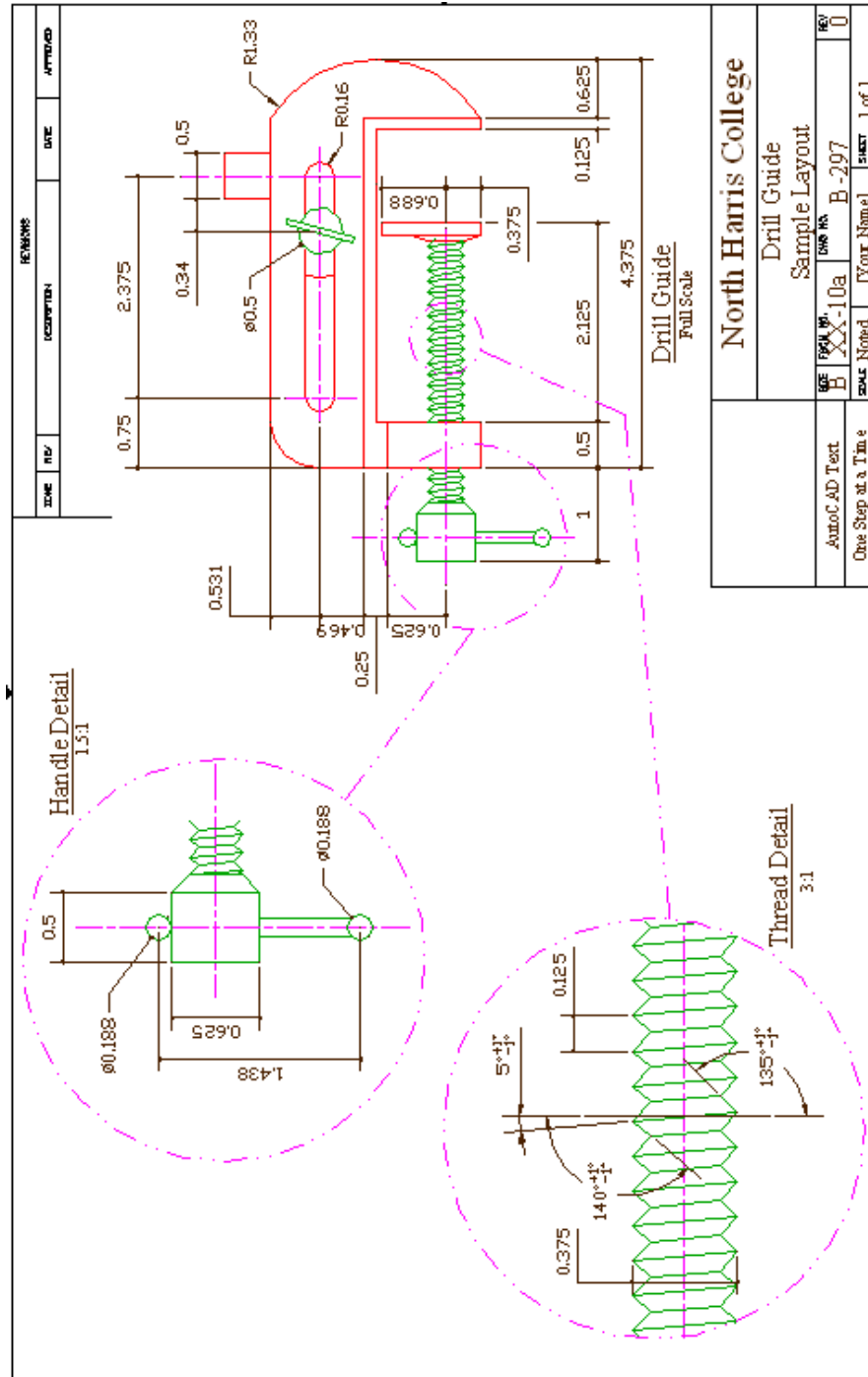
7.2. The text height is 3/16" and 1/8"; the font is Times New Roman or Calibri.

7.3. The title block text is 1/4", 3/16", and 1/8"; the font is Times New Roman or Calibri.

7.4. I used three dimension layers (create new layers as required).

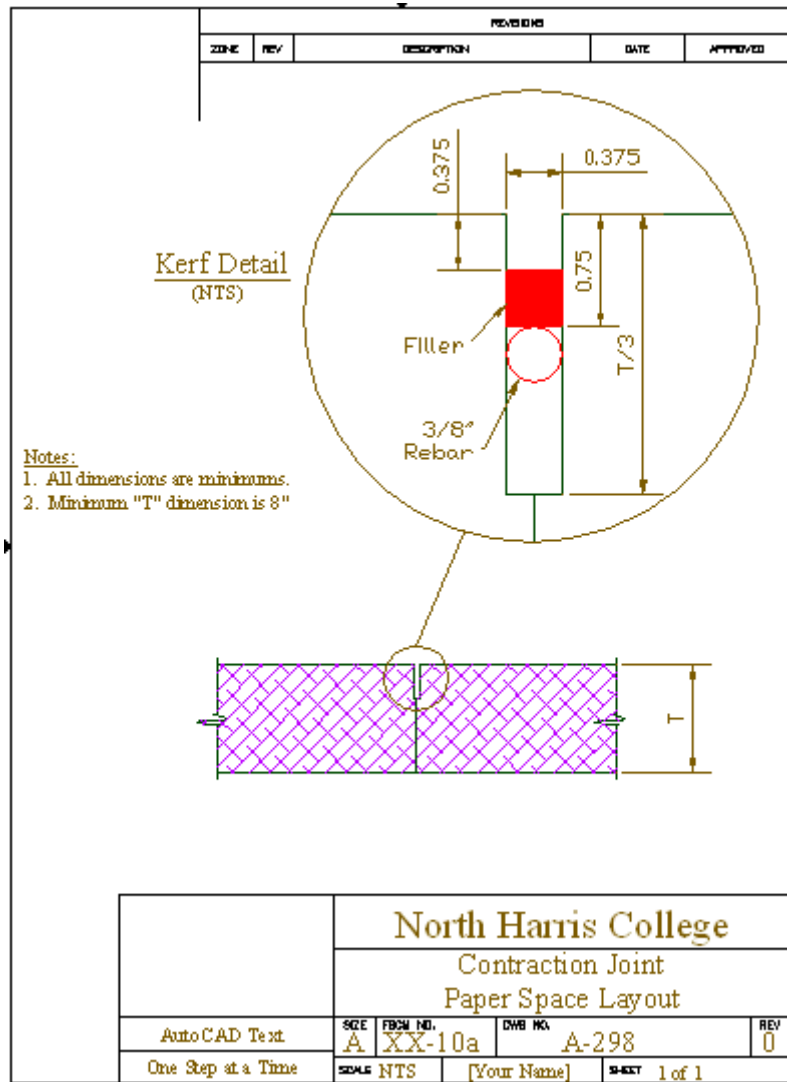
7.5. Dimension text is 1/8".

7.6. Save the drawing as *MyDrillGuide* in the C:\Steps\Lesson24 folder.



Drill Guide

8. Open the *Sawed Joint* file in the C:\Steps\Lesson24 folder. Complete the drawing configuration for plotting as shown. Some helpful information includes:
- 8.1. The title block is the *ANSI A title block (portrait)* file found in AutoCAD's Template folder.
 - 8.2. The text height is 3/16" and 1/8"; the font is Times New Roman or Calibri.
 - 8.3. The title block text is 1/4", 3/16", and 1/8"; the font is Times New Roman or Calibri.
 - 8.4. I used two dimension layers (create new layers as required).
 - 8.5. Dimension text is 1/8".
 - 8.6. Save the drawing as *MyJoint* in the C:\Steps\Lesson24 folder.



Contraction Joint

Please write your answers on a separate sheet of paper.

1. Any modifications to a viewport must be done in _____ space.
2. Use the _____ command to freeze a layer in one viewport only.

To scale hatch patterns to a viewport's scale, place a check in the (3) or (4) boxes of the (5) dialog box.

- 3.
- 4.
- 5.
6. In a drawing that uses Paper Space, place all the text in Paper Space unless _____.
7. Write the formula you would use to size text in Paper Space.
8. Use the _____ command to print or plot a Paper Space layout.
9. (T or F) You can't work in Model Space on a layout tab.
10. (T or F) Most basic modifying tools will work in Paper Space as they do in Model Space.
11. Thanks to the Layout Wizard, the MVSetup command is more useful today as a _____ tool.
12. (T or F) MVSetup can be used to set up Model Space.

To refresh or regenerate all of the viewports at one time, use the (13) or the (14) command.

- 13.
- 14.
15. Use the _____ command to reshape a viewport that was created by converting a closed polygon to a viewport.
16. Reshape a viewport using the _____ command.
17. (T or F) To automatically scale dimensions in a Paper Space drawing, place a bullet in the Scale dimensions to layout radio button on the Fit tab of the Dimension Manager.
18. (T or F) In a Paper Space drawing, the scale factor must be considered on the Fit tab of the Dimension Style Manager.
19. (T or F) After the user has placed a bullet in the Scale dimensions to layout option button, the user can't change any more dimension variables.
20. (T or F) Grips or the Stretch command may be used to resize a viewport in which dimensions or other objects don't fit.
21. (T or F) The user may place dimensions in Paper Space for objects drawn in Model Space.
22. (T or F) To scale crosshatching properly on a model viewed through a Paper Space viewport, place a check in the Relative to paper space check box on the Quick tab of the Hatch and Gradient dialog box.
23. (T or F) The user can use the Properties palette to change the layer of existing viewports.

24. (T or F) Only one viewport in a drawing can be rescaled by MVSetup.
25. (T or F) When using MVSetup to rescale a viewport, it's necessary to identify both Paper Space and Model Space units.
26. (T or F) To reset both size and position of dimensions, the user gives the Update command only.
27. (T or F) To refresh both the active and inactive viewports at the same time, use either the Redrawall or Regenall command.
28. Use the _____ button to toggle between the view in an active viewport and the same view on the Model tab.
29. If the _____ system variable is set to one, you see annotative dimensions in a viewport regardless of scale of either the viewport or the dimensions.
30. (T or F) When working in paper space, AutoCAD automatically shows several new viewport-related columns in the Layer Properties Manager.
31. To move all the model and paper space objects to a model space drawing, use the _____ command.

Answers

- | | |
|----------------------------|-----------------------|
| 1. Paper | 17. T |
| 2. Layer control box | 18. F |
| 3. Relative to Paper Space | 19. F |
| 4. Annotation scale | 20. T |
| 5. Hatch and Gradient | 21. T |
| 6. It is part of the model | 22. T |
| 7. 1=1 | 23. T |
| 8. Plot | 24. F |
| 9. F | 25. T |
| 10. T | 26. F |
| 11. Modifying | 27. T |
| 12. T | 28. Minimize Viewport |
| 13. Refreshall | 29. AnnoAllVisible |
| 14. Regenall | 30. T |
| 15. PEdit | 31. ExportLayout |
| 16. VPclip | |