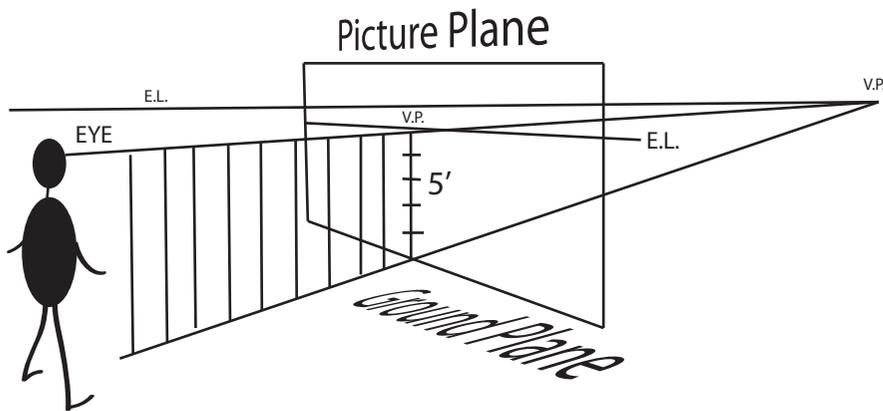


1 Point Perspective



Eye Level (EL)- the line representing your eye's distance from the ground. As your eyes move up or down the eye level changes. Also called Horizon Line.

Picture Plane (PP)- The picture plane is the actual surface of a drawing or painting.

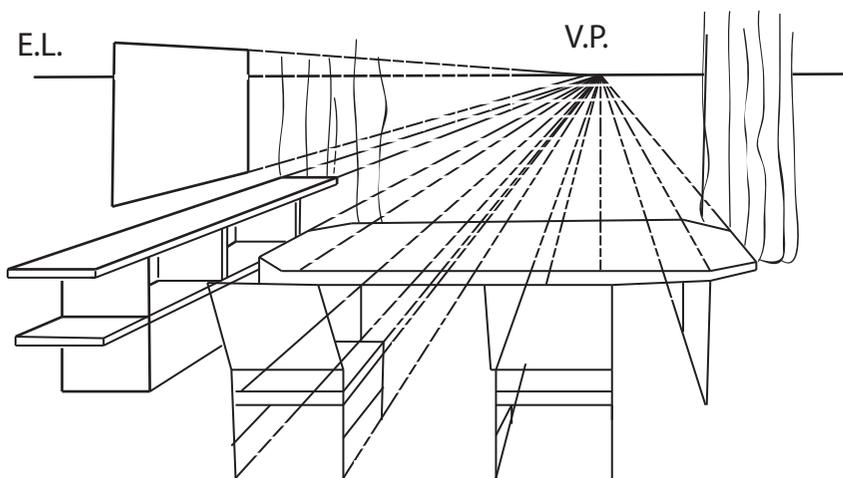
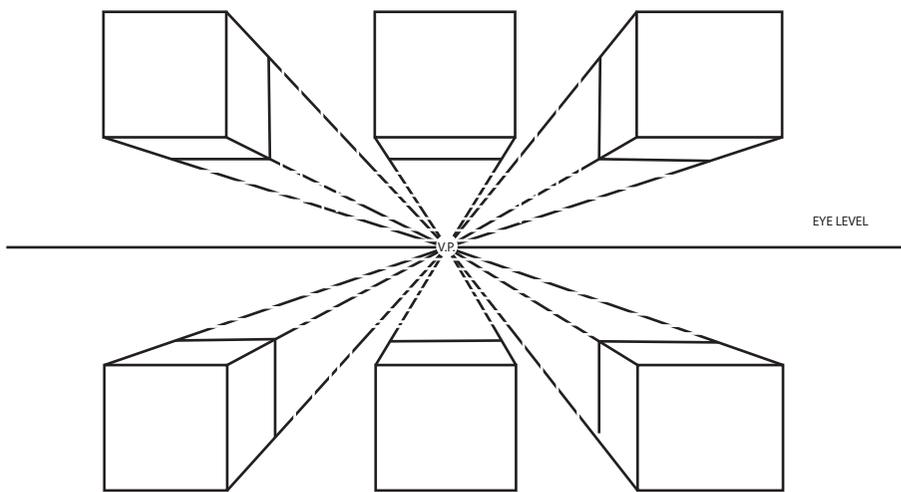
Plane- Any flat surface such as a wall, floor, or table top is a plane.

Vanishing Point (VP)- The vanishing point is a point at which parallel lines receding into space appear to meet.

Center Line of Vision (CLV) - represented by a vertical line that is the equivalent to the center of your eyes. If an object is directly in front of you it is on the center line of vision (CLV)

Ground Line (GL)- represents the ground you are standing on.

Station Point (SP)- The point at which the viewer is standing.



Basic rules of perspective:

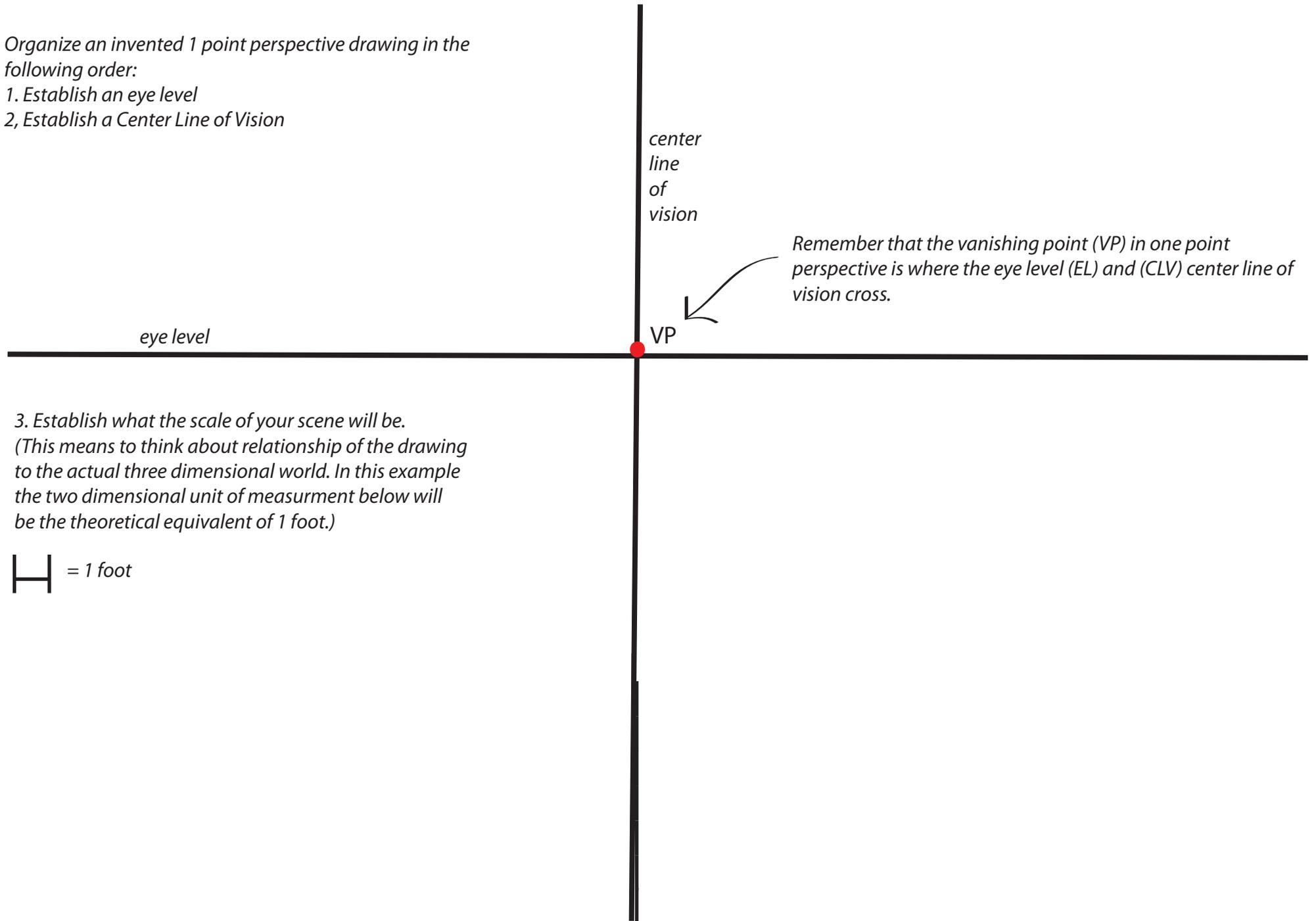
All parallel lines will converge to the same vanishing point.

Objects will appear to get smaller as they get closer to the Eye Level (Horizon Line)

In both 1 and 2 point perspective, the (VP) vanishing points are always on the eye level

Organize an invented 1 point perspective drawing in the following order:

1. Establish an eye level
2. Establish a Center Line of Vision



3. Establish what the scale of your scene will be.
(This means to think about relationship of the drawing to the actual three dimensional world. In this example the two dimensional unit of measurement below will be the theoretical equivalent of 1 foot.)

 = 1 foot

4.

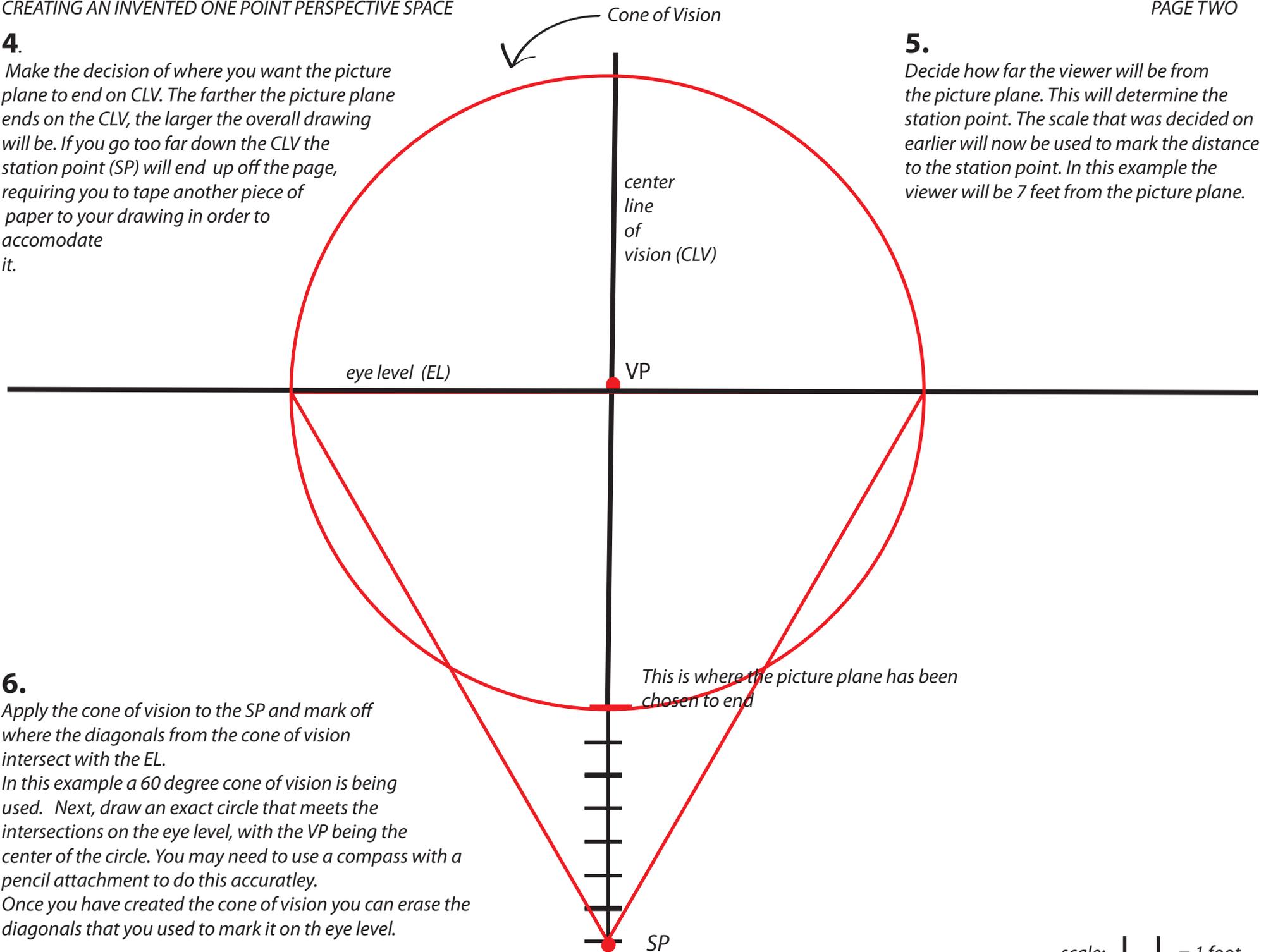
Make the decision of where you want the picture plane to end on CLV. The farther the picture plane ends on the CLV, the larger the overall drawing will be. If you go too far down the CLV the station point (SP) will end up off the page, requiring you to tape another piece of paper to your drawing in order to accommodate it.

6.

Apply the cone of vision to the SP and mark off where the diagonals from the cone of vision intersect with the EL. In this example a 60 degree cone of vision is being used. Next, draw an exact circle that meets the intersections on the eye level, with the VP being the center of the circle. You may need to use a compass with a pencil attachment to do this accurately. Once you have created the cone of vision you can erase the diagonals that you used to mark it on the eye level.

5.

Decide how far the viewer will be from the picture plane. This will determine the station point. The scale that was decided on earlier will now be used to mark the distance to the station point. In this example the viewer will be 7 feet from the picture plane.

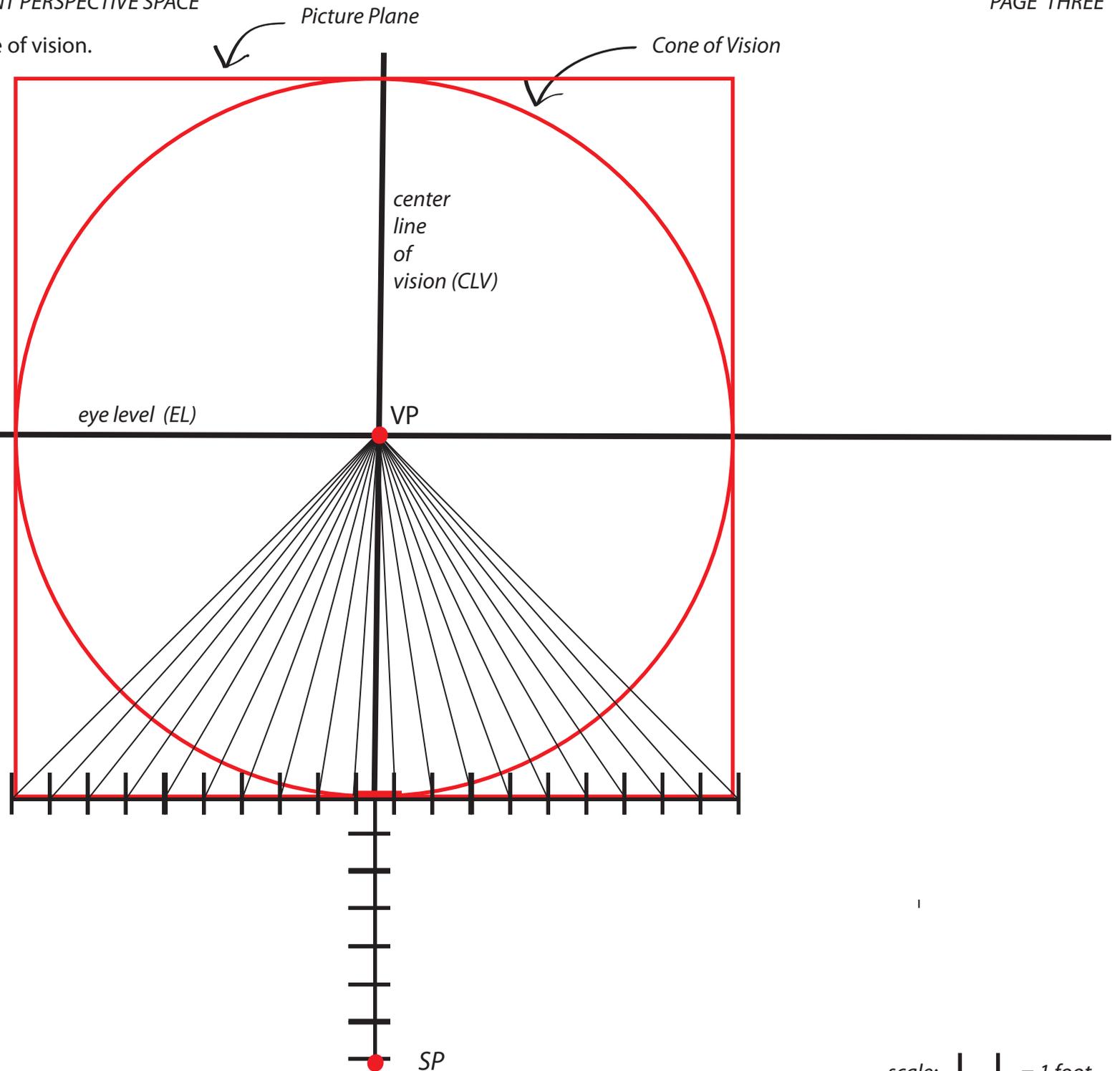


scale: [bar] = 1 foot

7. Draw a square around the cone of vision.
This will create the defined horizontal and vertical of the picture plane.

8. Mark off on the 1 foot lengths on the bottom of the picture plane using the scale for feet established in the beginning.

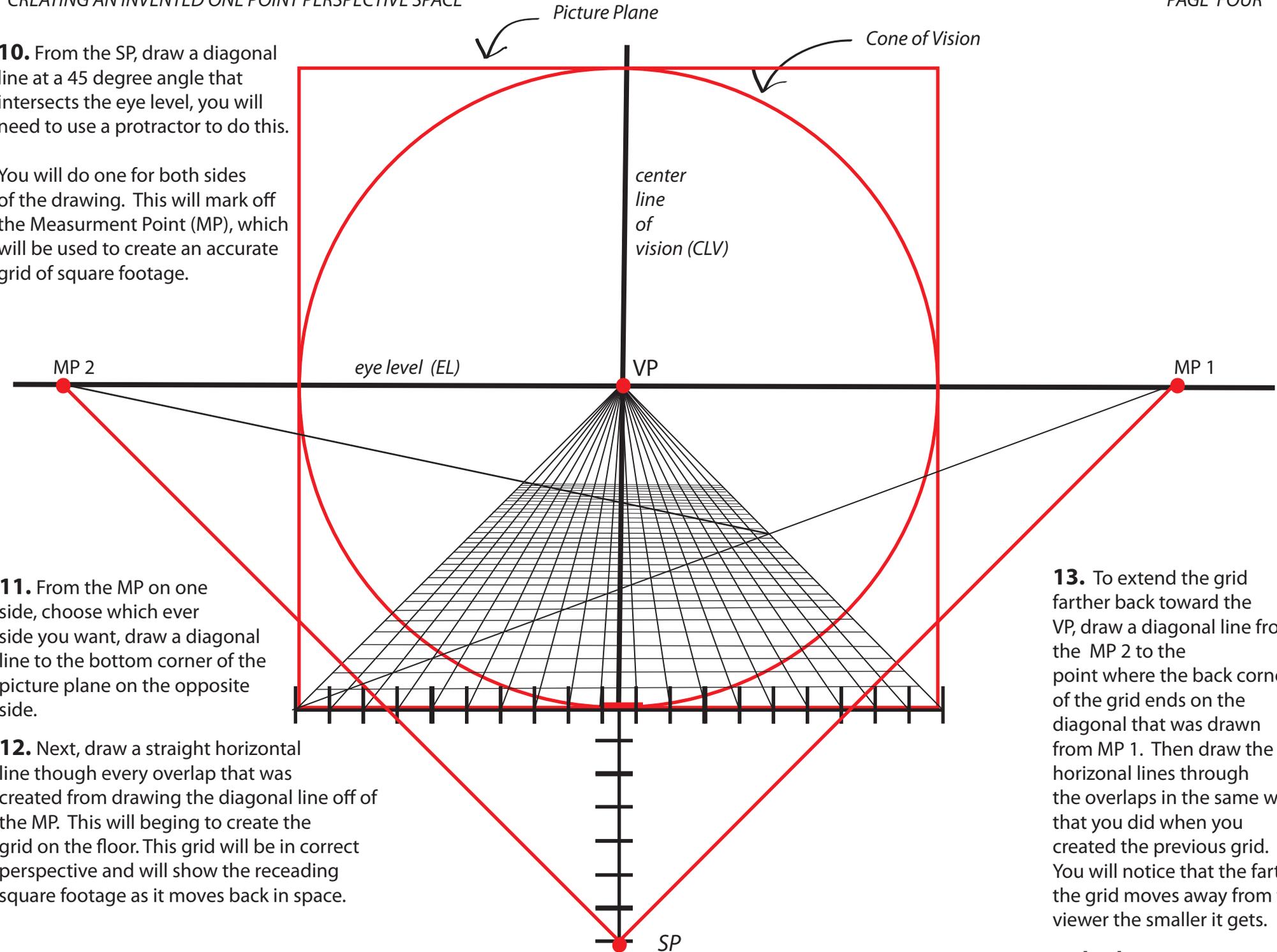
9. Draw a line from each section marked as 1 foot to the VP.



scale:  = 1 foot

10. From the SP, draw a diagonal line at a 45 degree angle that intersects the eye level, you will need to use a protractor to do this.

You will do one for both sides of the drawing. This will mark off the Measurement Point (MP), which will be used to create an accurate grid of square footage.



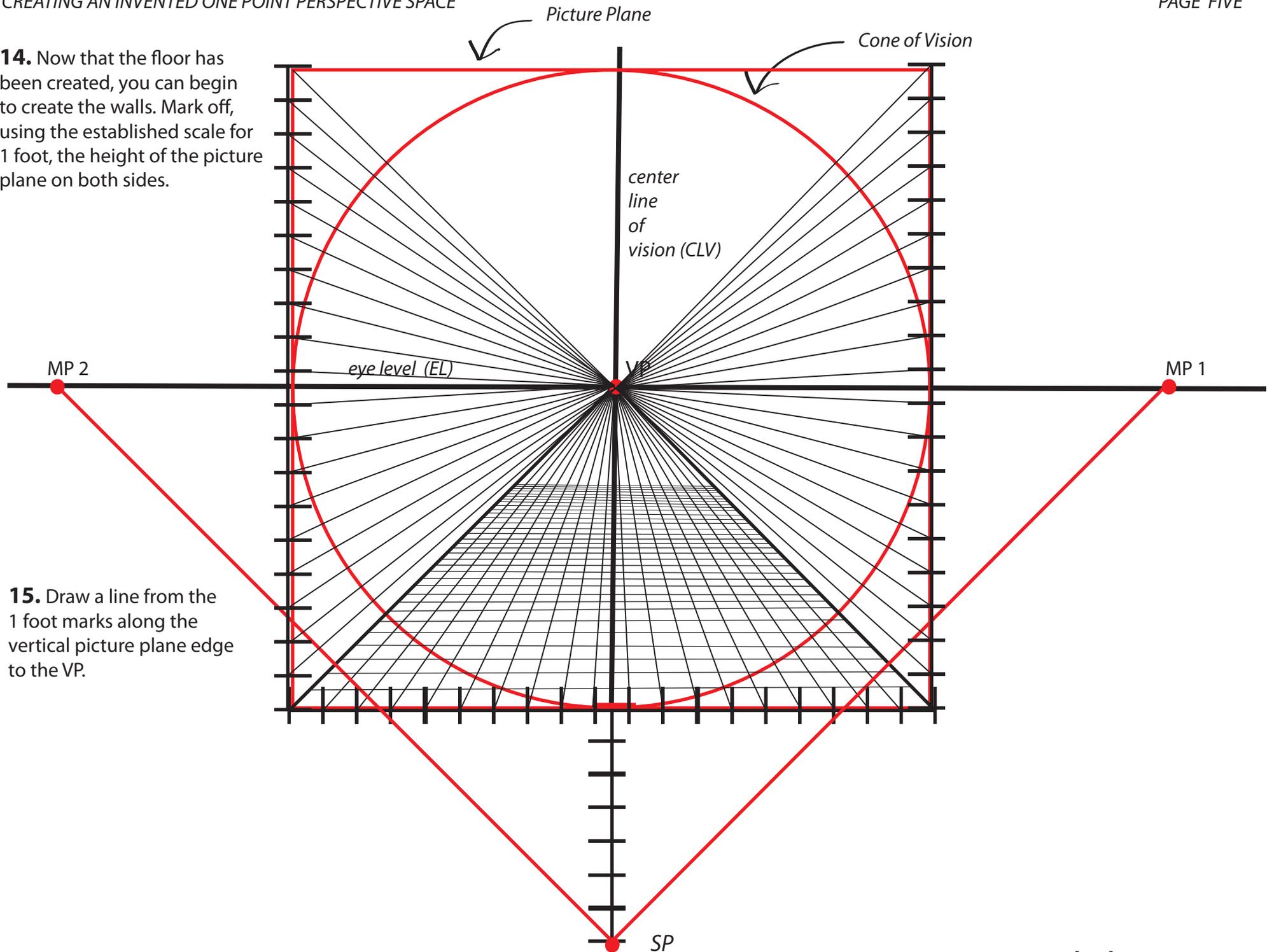
11. From the MP on one side, choose which ever side you want, draw a diagonal line to the bottom corner of the picture plane on the opposite side.

12. Next, draw a straight horizontal line though every overlap that was created from drawing the diagonal line off of the MP. This will beging to create the grid on the floor. This grid will be in correct perspective and will show the receding square footage as it moves back in space.

13. To extend the grid farther back toward the VP, draw a diagonal line from the MP 2 to the point where the back corner of the grid ends on the diagonal that was drawn from MP 1. Then draw the horizontal lines through the overlaps in the same way that you did when you created the previous grid. You will notice that the farther the grid moves away from the viewer the smaller it gets.

scale:  = 1 foot

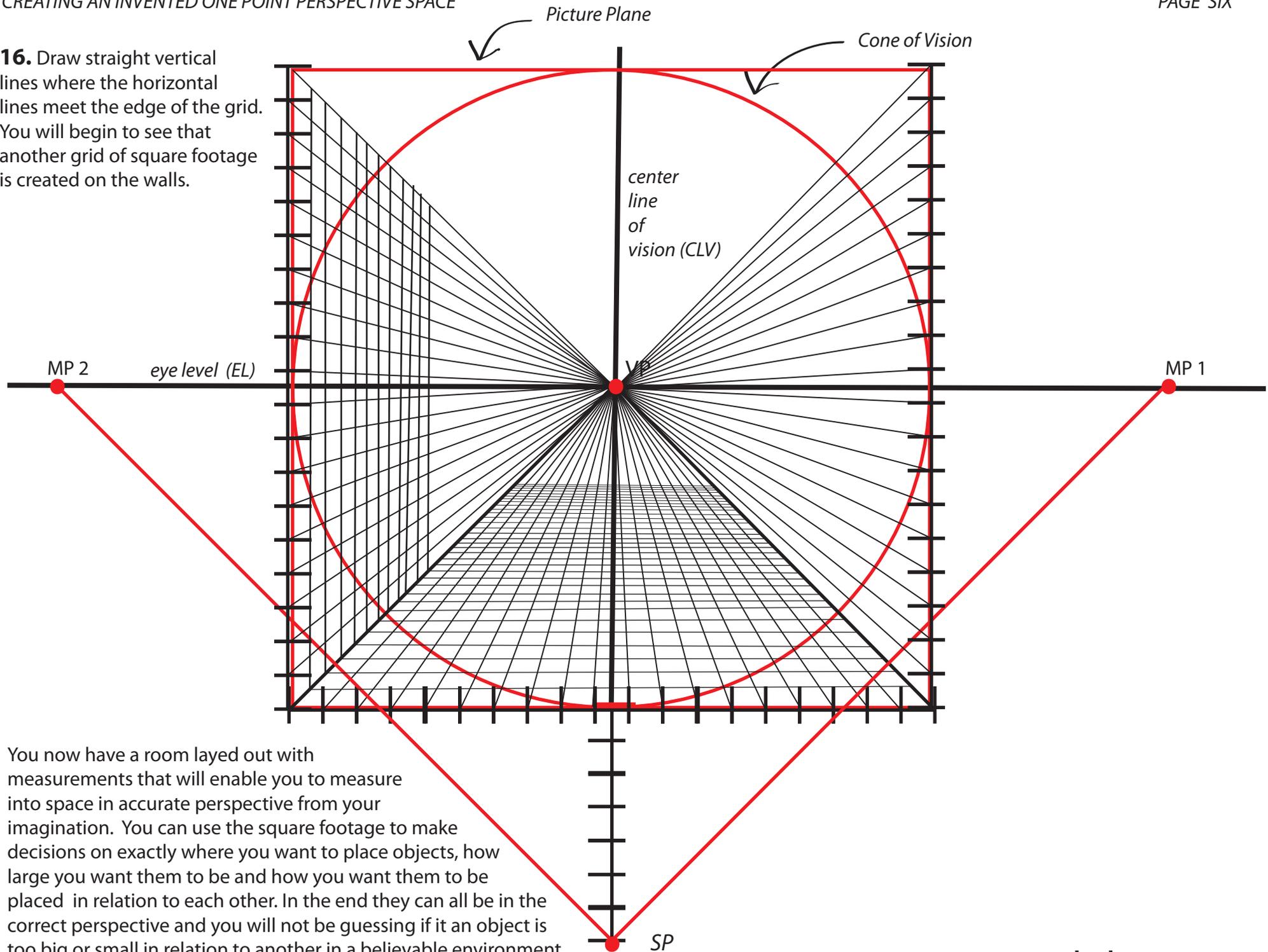
14. Now that the floor has been created, you can begin to create the walls. Mark off, using the established scale for 1 foot, the height of the picture plane on both sides.



15. Draw a line from the 1 foot marks along the vertical picture plane edge to the VP.

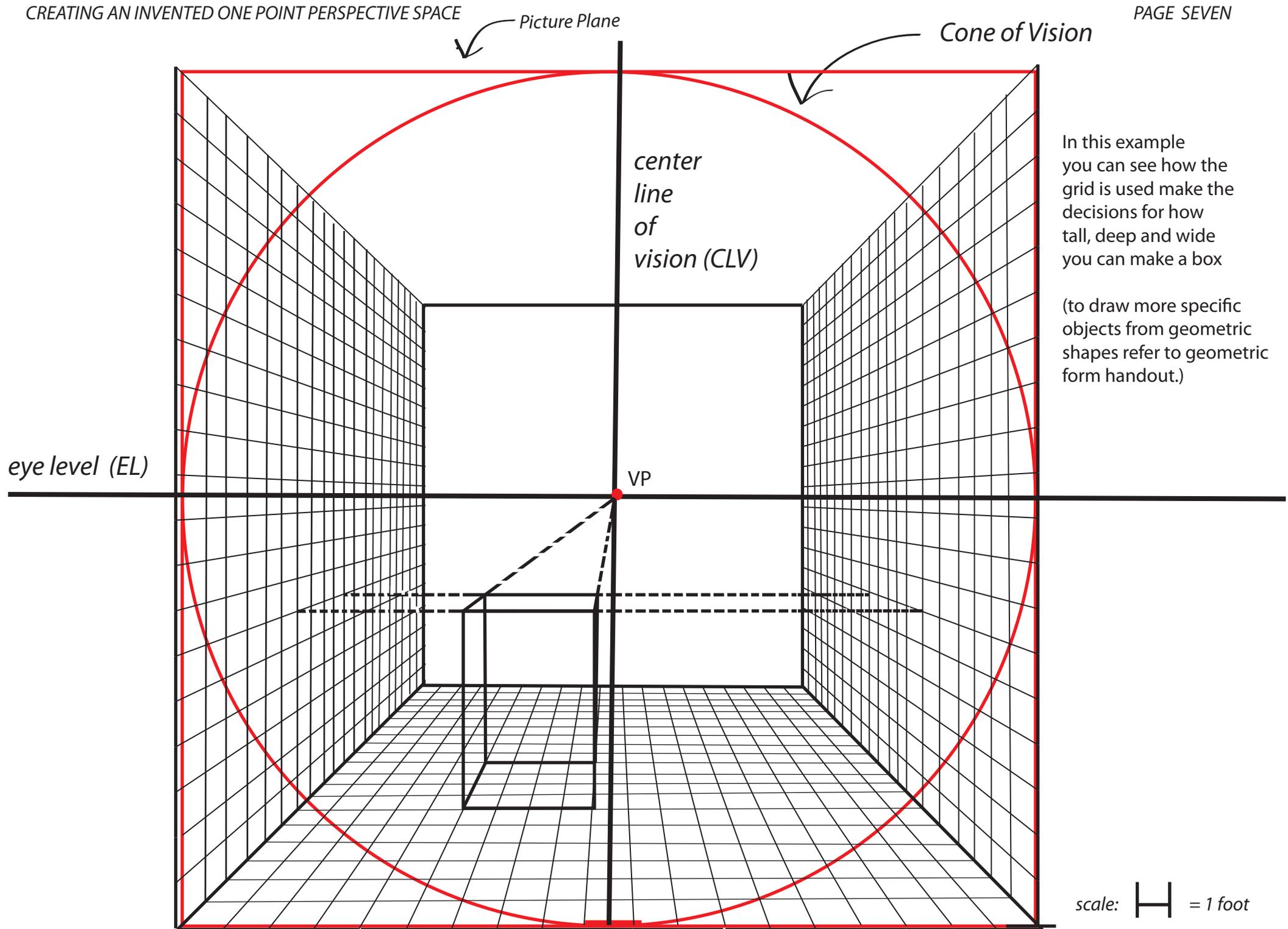
scale:  = 1 foot

16. Draw straight vertical lines where the horizontal lines meet the edge of the grid. You will begin to see that another grid of square footage is created on the walls.



You now have a room layed out with measurements that will enable you to measure into space in accurate perspective from your imagination. You can use the square footage to make decisions on exactly where you want to place objects, how large you want them to be and how you want them to be placed in relation to each other. In the end they can all be in the correct perspective and you will not be guessing if it an object is too big or small in relation to another in a believable environment.

scale:  = 1 foot



In this example you can see how the grid is used make the decisions for how tall, deep and wide you can make a box

(to draw more specific objects from geometric shapes refer to geometric form handout.)

scale:  = 1 foot