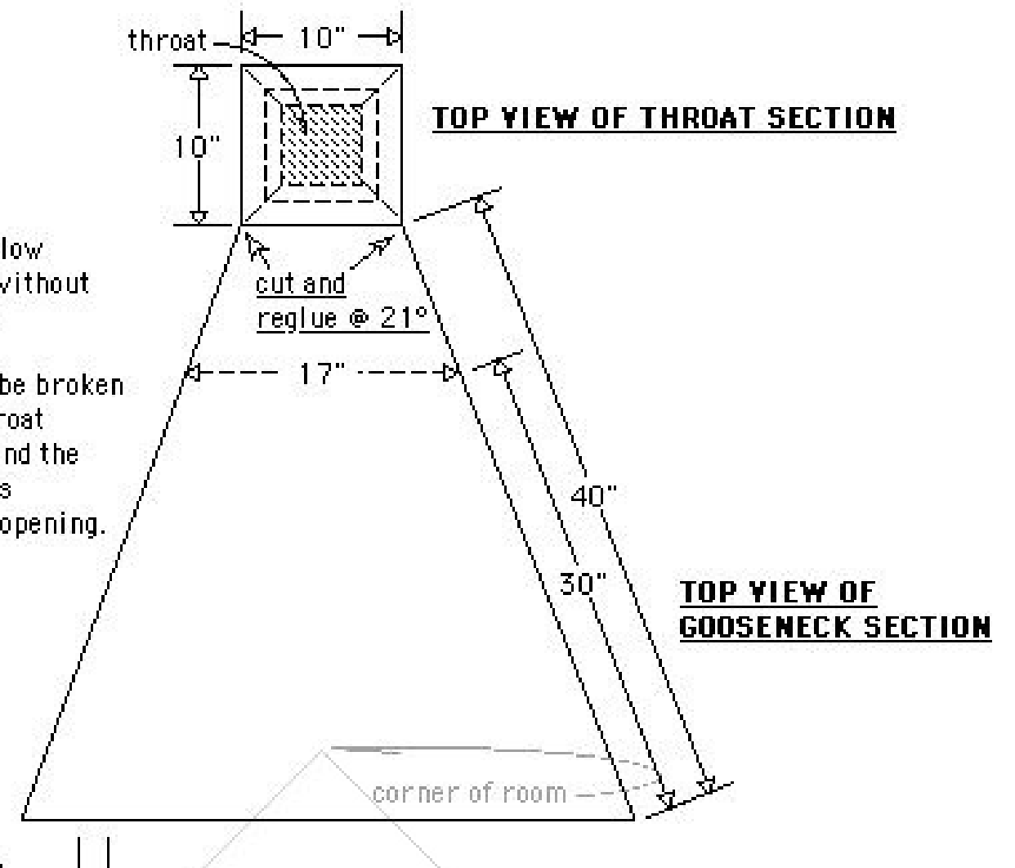
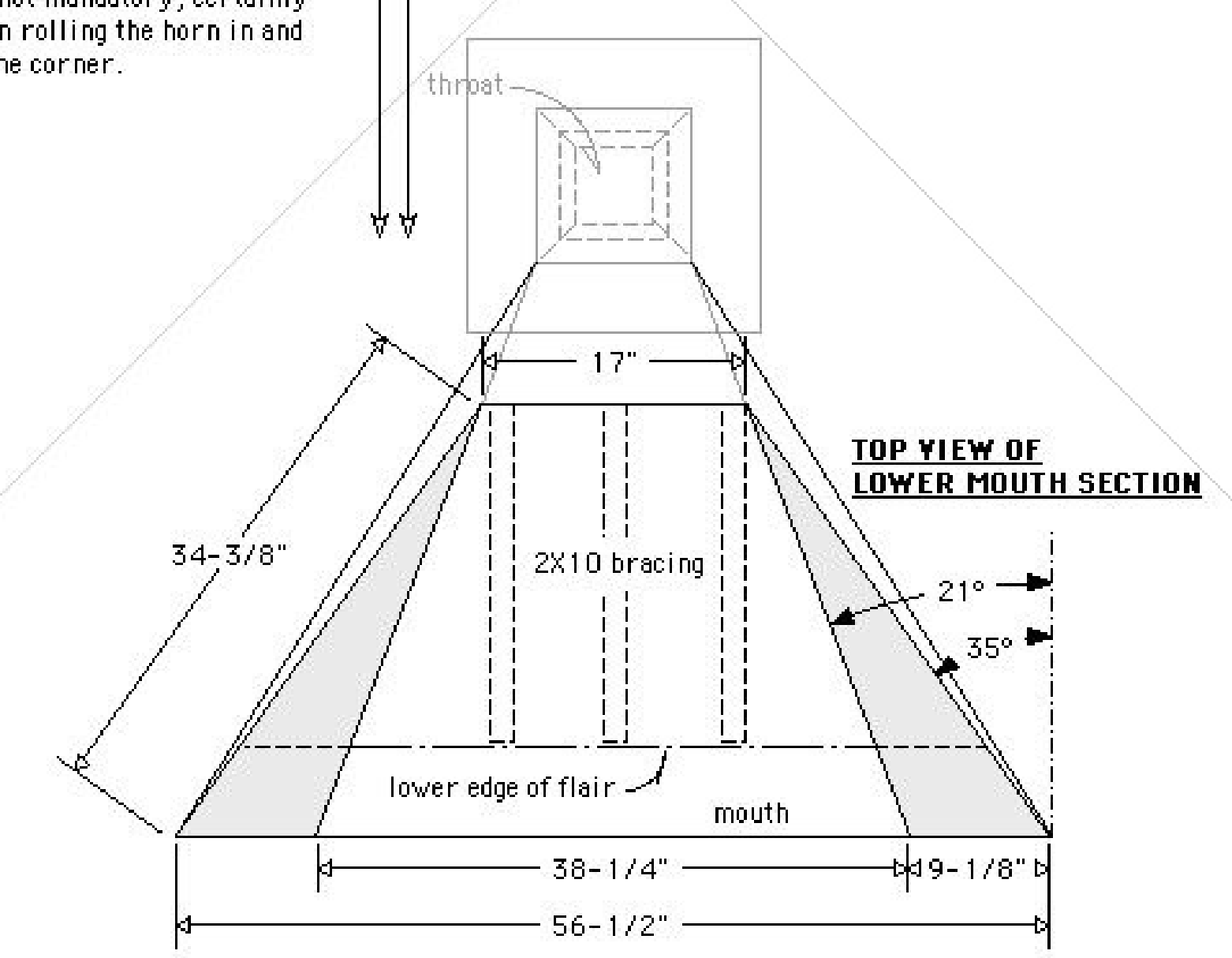
NOTE: ALL MEASUREMENTS ARE INSIDE DIMENSIONS

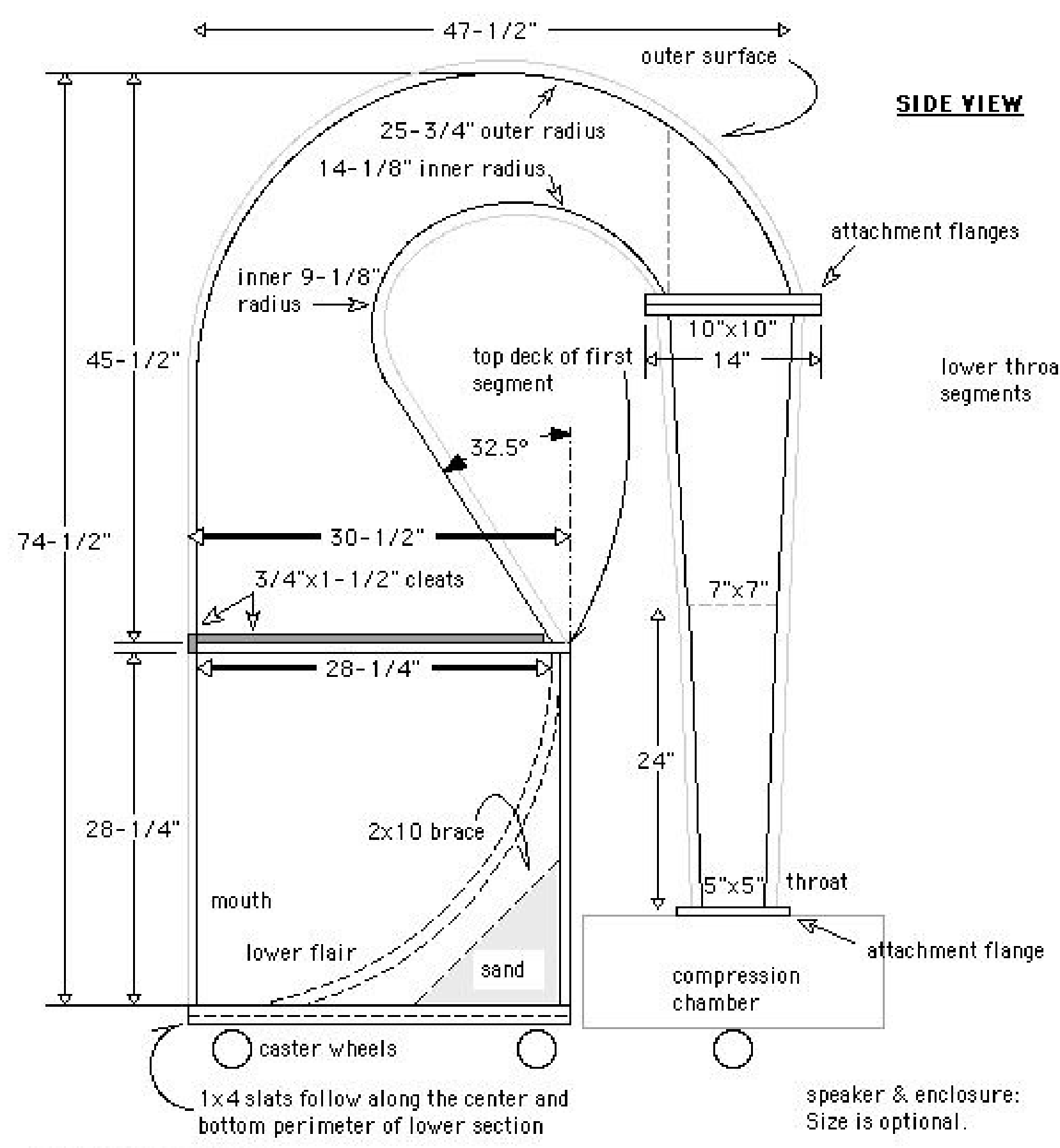
This corner horn is designed to be broken down into three sections: the throat section, the gooseneck section, and the lower mouth section. This allows passage through a standard 36" opening.

I suggest that this horn be constructed from no less than 3/4" A/C shop grade plywood. It is an excellent idea to fill the void located behind the lower mouth flair with sand or plaster. I've drawn in a set of caster wheels which, though not mandatory, certainly assist in rolling the horn in and out of the corner.



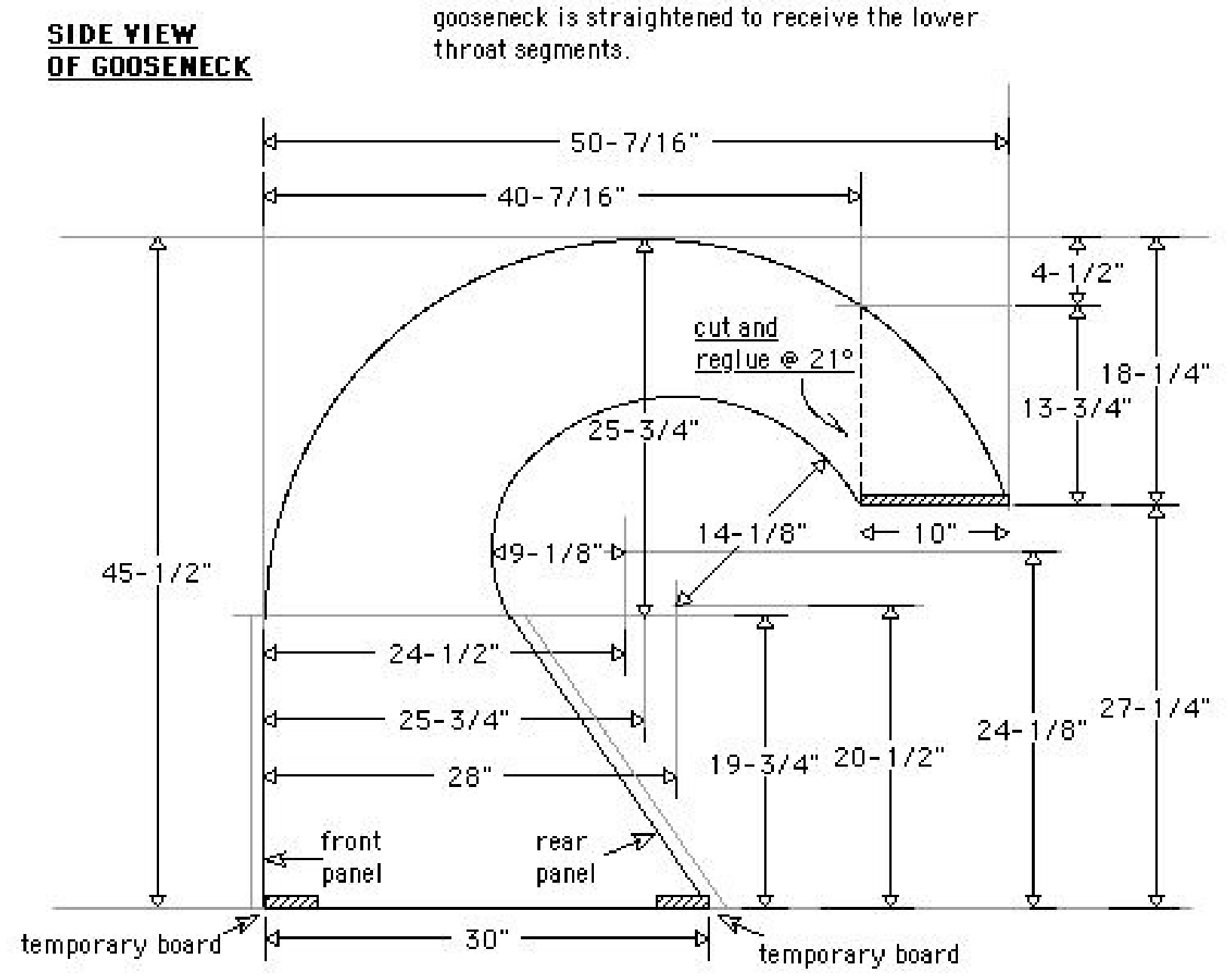


Plywood may be deeply curfed @ 1/2" intervals to create the necessary flexability to follow the gooseneck. It is important to use high grade plywood with many thin layers of veneer. Standard 5 ply 3/4" plywood tends to break the outer skin when bent. I would suggest two layers of high quality 3/8" 4 or 5 ply plywood. When employing the curf method allow the curfs to face outwards. This eases the task of filling the the voids between the curf cuts. Another approach is to cut 1" strips of wood. Bevel the outer radius boards at 1° on each edge. The inner radius boards are beveled at 2° for the 14-1/8" curve, and 3° for the 9-1/8" curve. Simply glue and fasten the pieces onto the gooseneck. They should wrap tightly around the contour of the gooseneck. Cut off excess lenth.



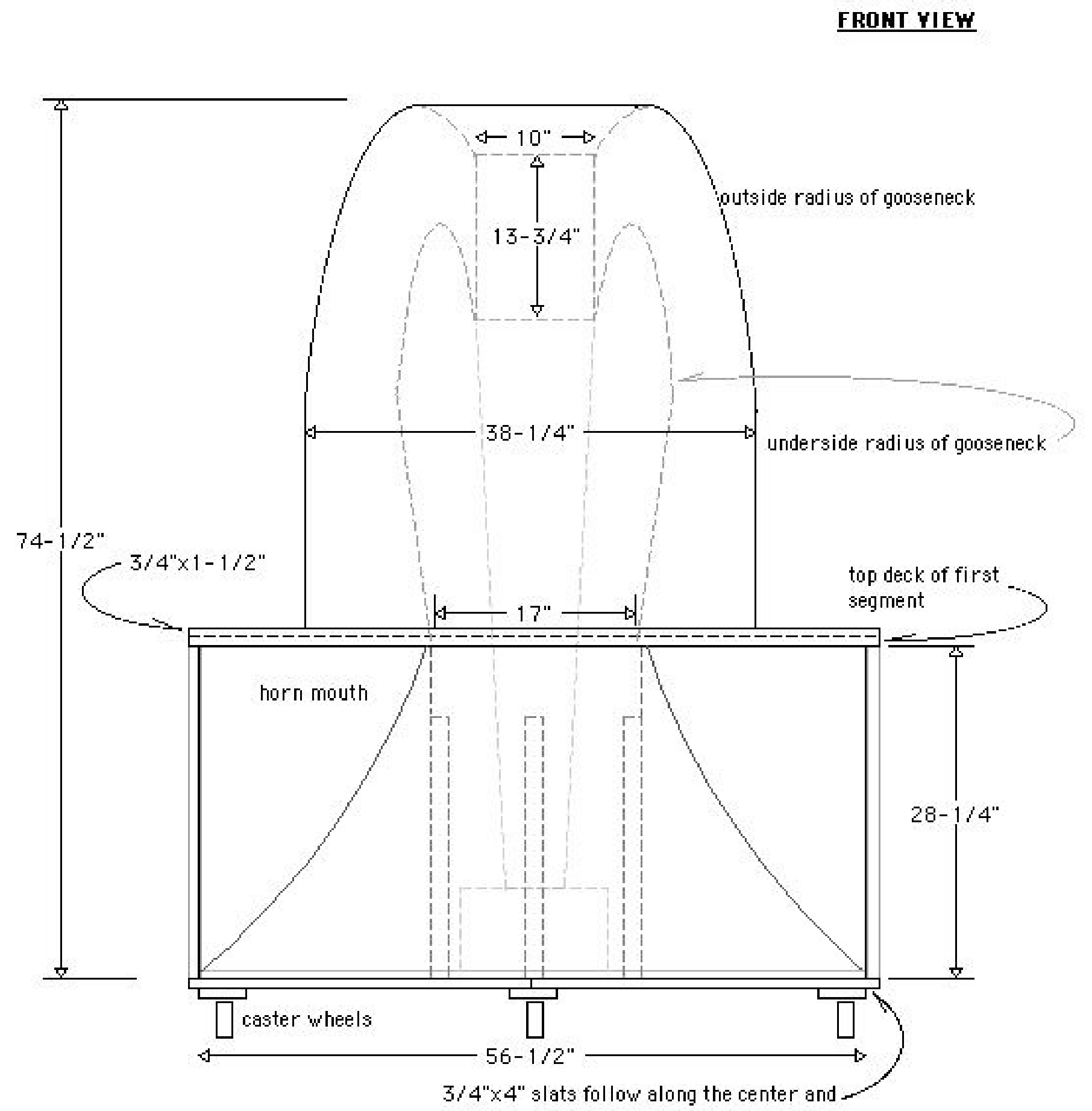
NOTE: ALL MEASUREMENTS ARE INSIDE DIMENSIONS

Transfer these measurements and the light gray lines onto plywood. Using the crosspoints, draw intersecting circles to create the flowing curves of the gooseneck. Two panels are required to complete the left and right portions of the neck. Notice the dash line: This is where the angle of the gooseneck is straightened to receive the lower throat segments.



When assemblying the two sides, it is useful to cut a board 38-1/4" long with a 21° angle on each end. 38-1/4" will be the long side of the board. This is temporarily tacked onto the inner front sides of the gooseneck. On the inner rear of the gooseneck tack a board that's 17" long and angled 21°. 17" will be the short side of this board. I also cut a block 10"x10" and temporarily tack it onto the inside of the small end of the gooseneck. This holds the gooseneck components in alignment to receive the tapered throat sections. When you lay out the gooseneck you will notice that the front and back require some beveling to properly receive their perspective panels. Construction glue works just fine if you don't wish to bother with extra beveling.

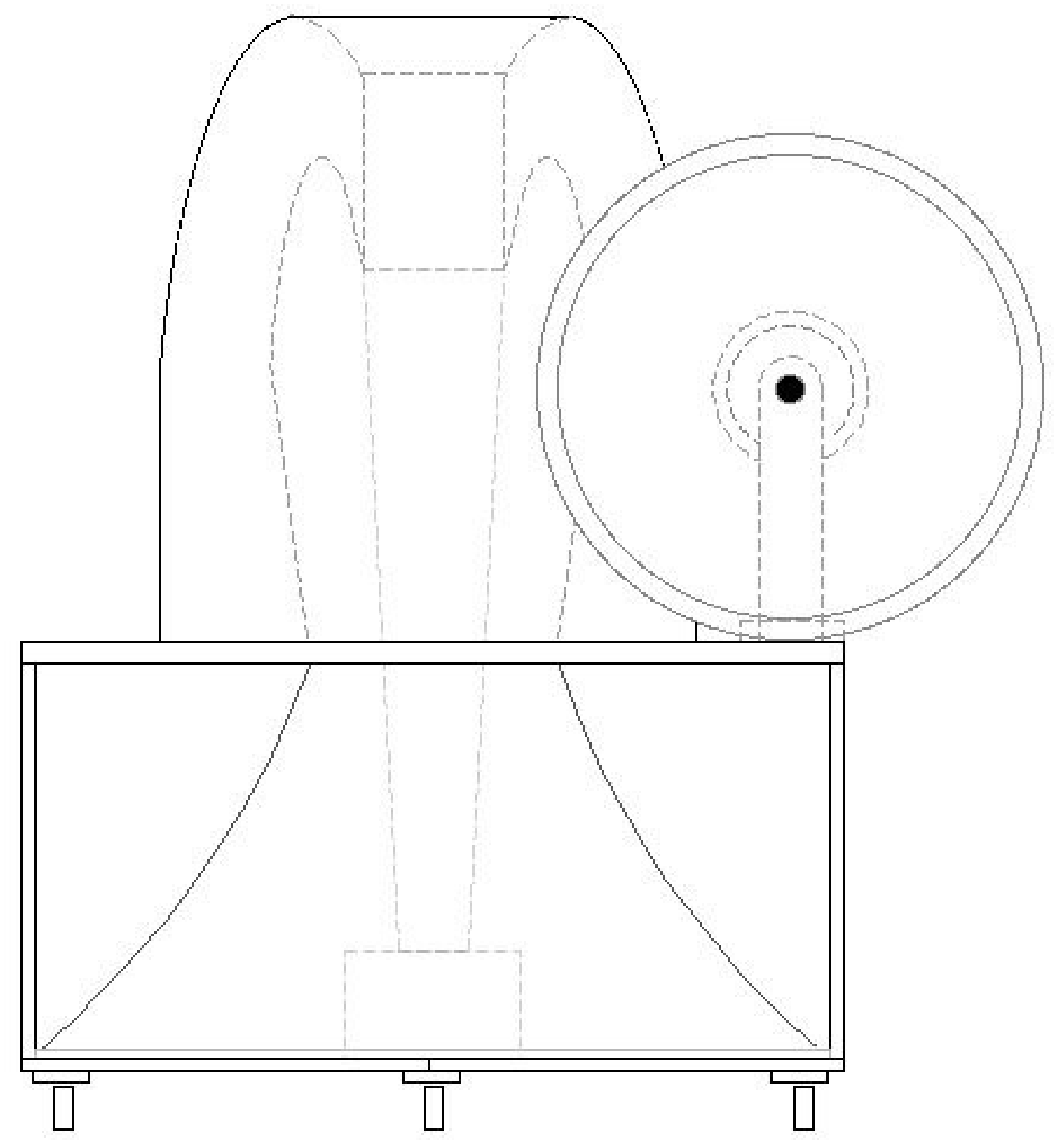
NOTE: ALL MEASUREMENTS ARE INSIDE THE HORN

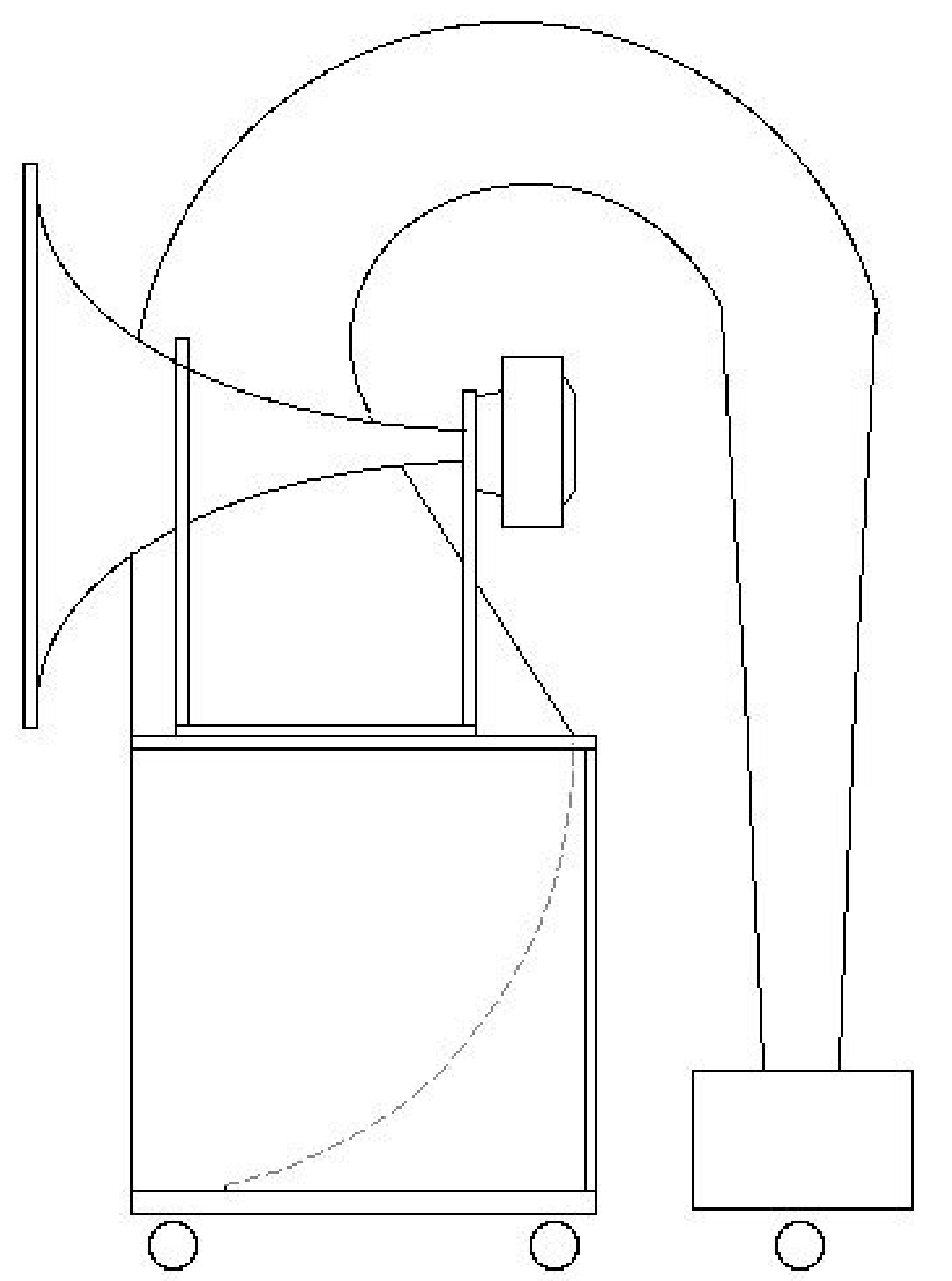


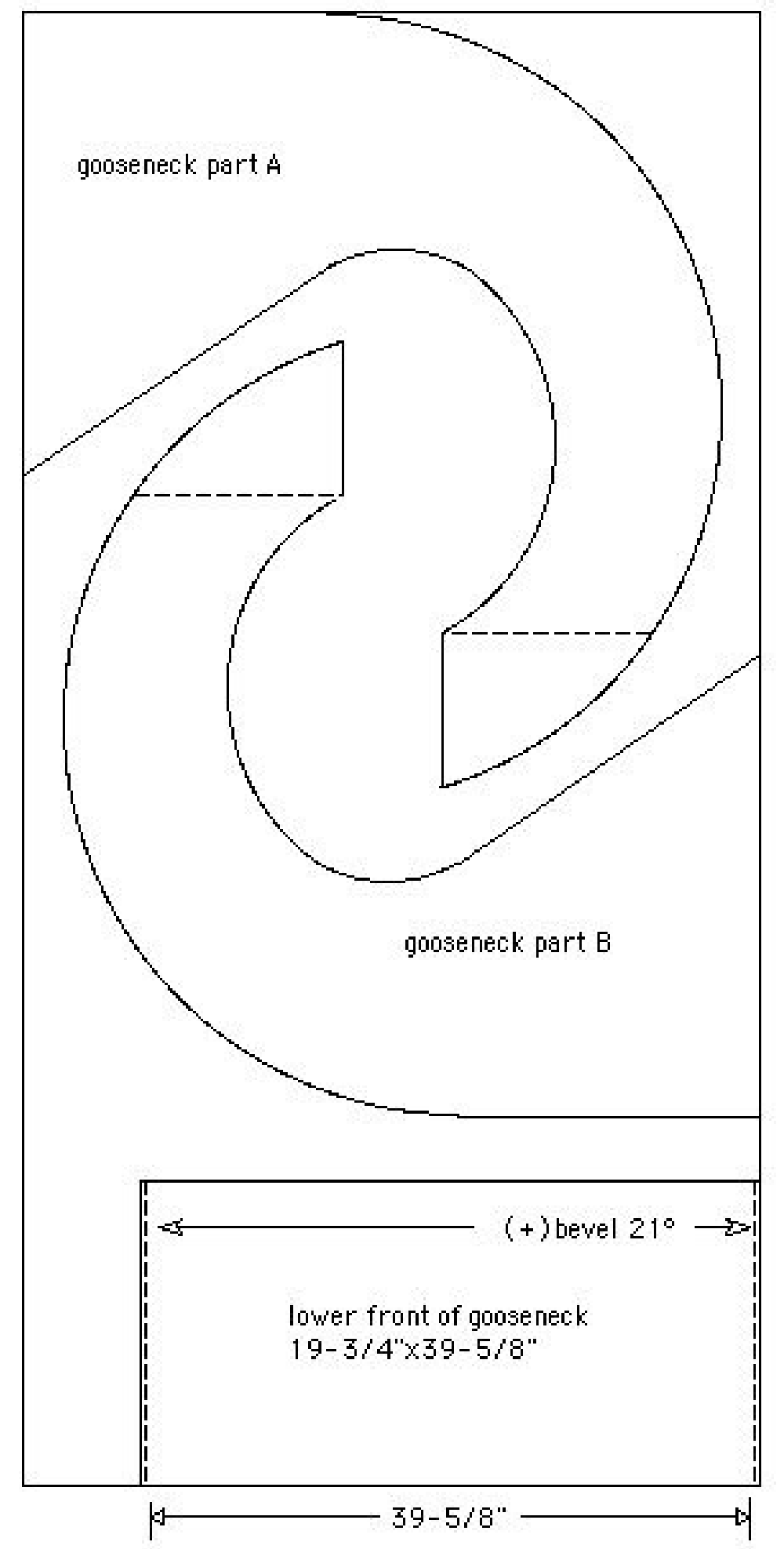
3/4"x4" slats follow along the center and bottom perimeter of lower section. Hold outside pieces in from the edge 3/4" to allow room to nail bottom to sides.

NOTE: ALL MEASUREMENTS ARE INSIDE THE HORN

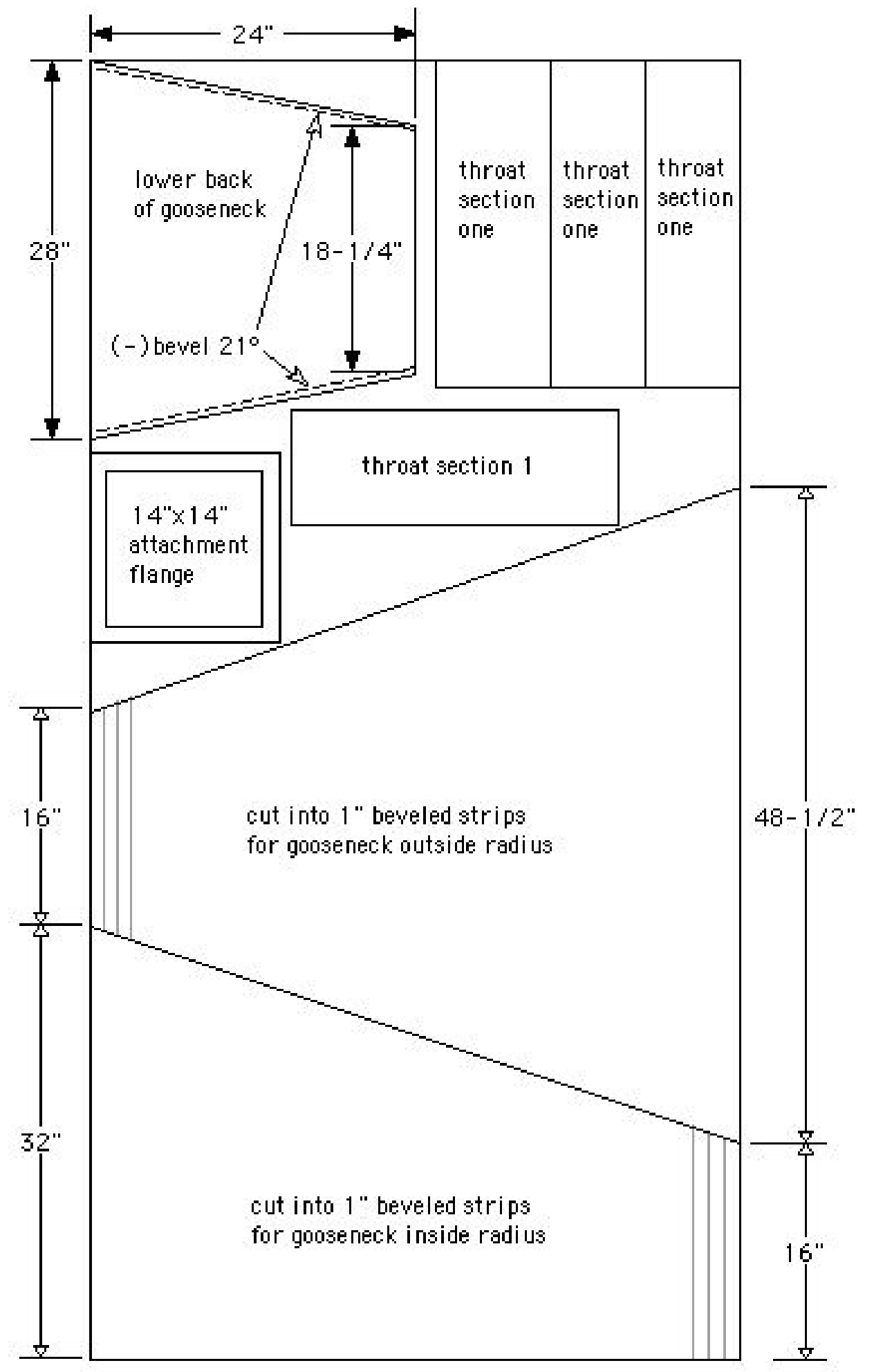
This is a drawing of the final layout. Notice the tractrix horn sitting on the right hand side of the mouth. When the shell of bass horn is finished, I would strongly suggest covering the entire horn with concrete board. The concrete board can then be covered with a nice looking hardwood, or plaster, or whatever you dream up.

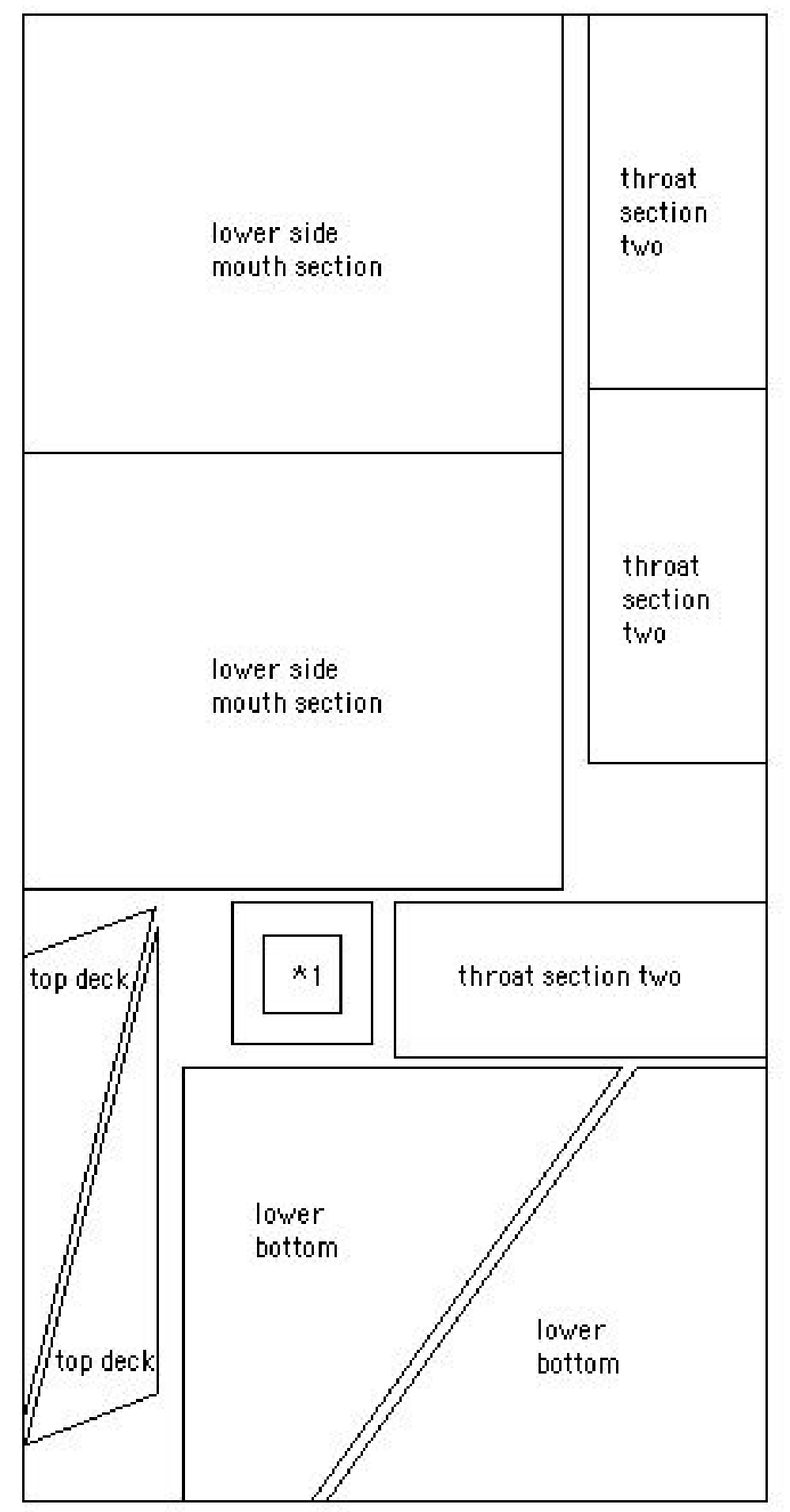




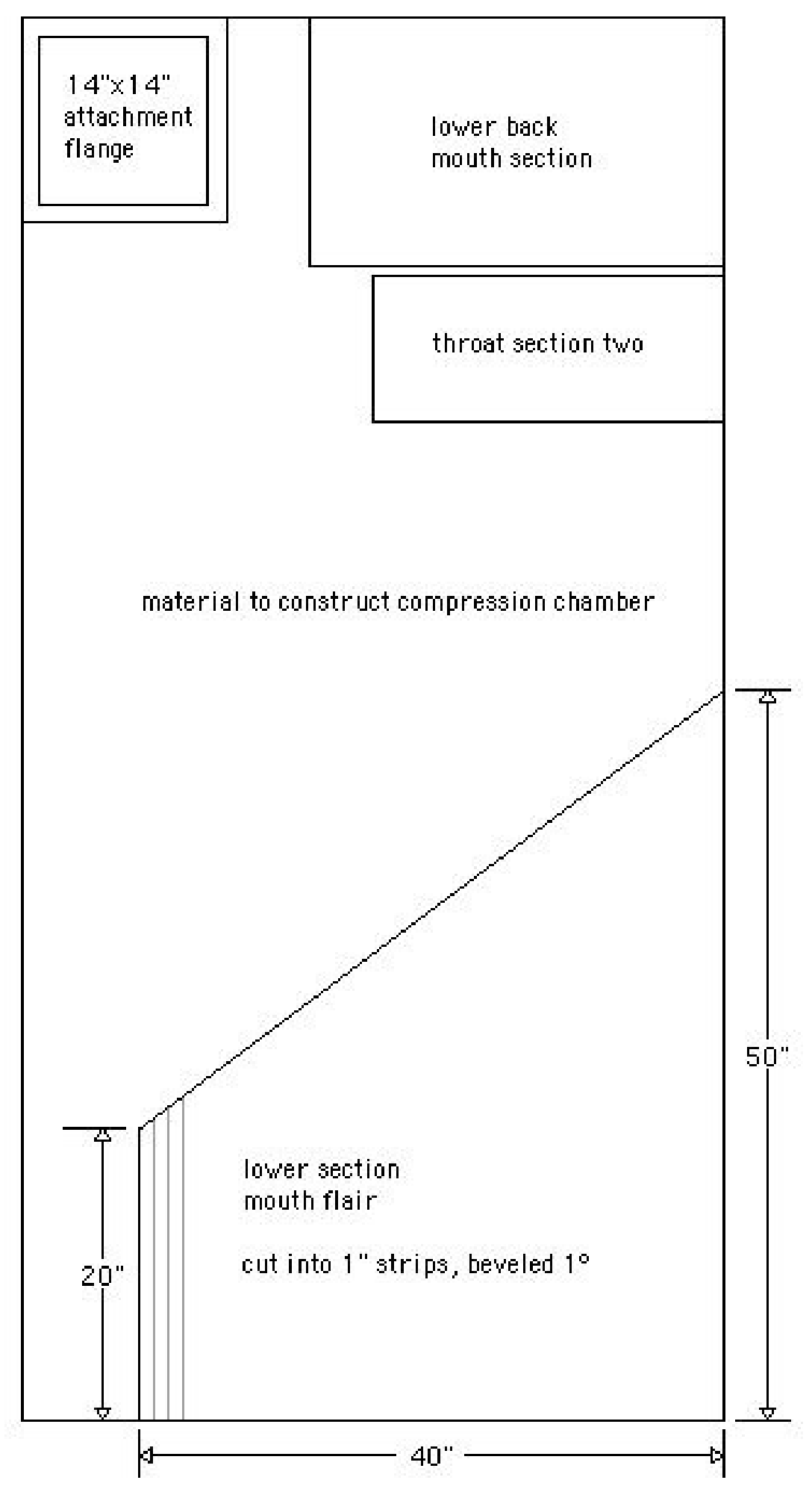


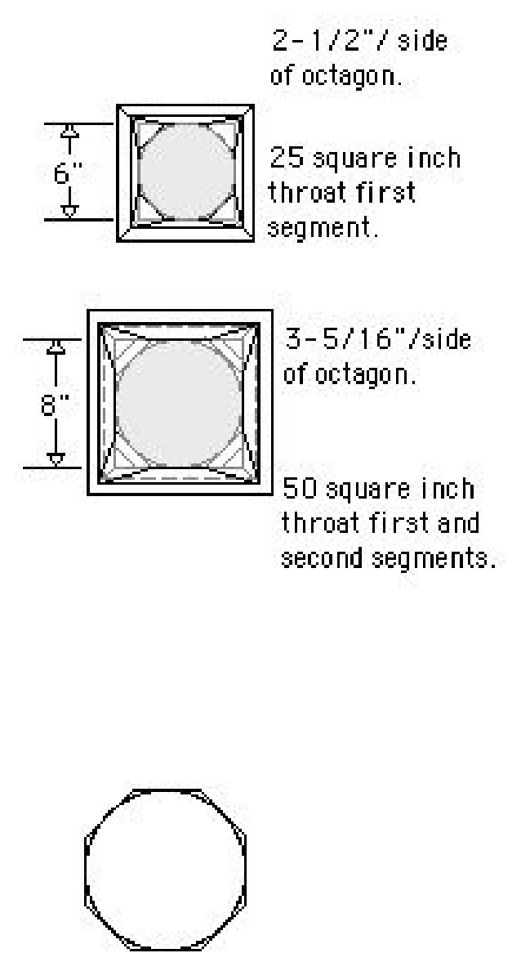
This is a plywood/material layout suggestion. When I use the term (-) bevel, it means you remove material from the backside of the posted dimension. When I use the term (+) bevel, it means you add material to the backside of the posted dimesnion.





*1: throat attachment flange



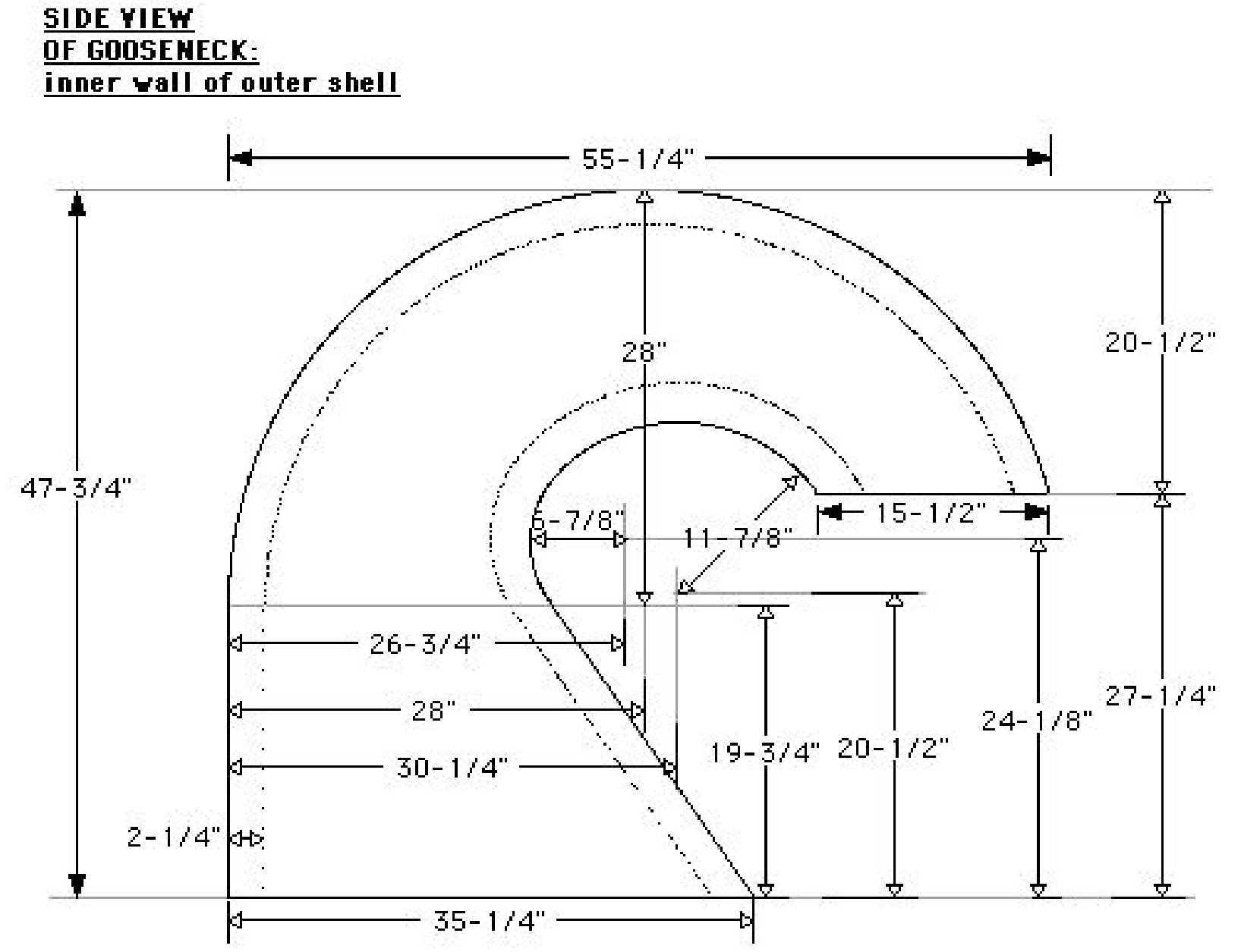


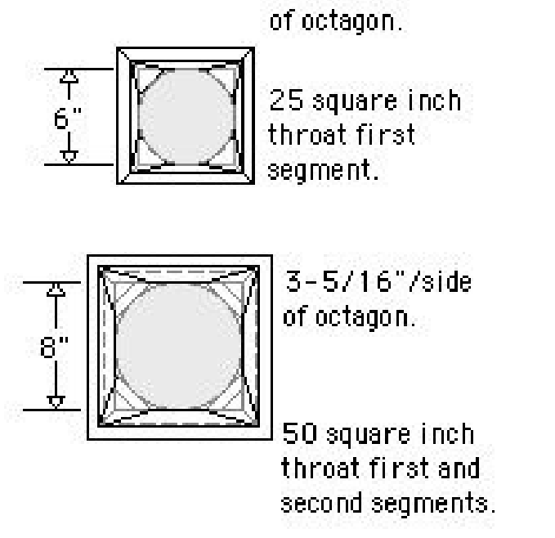
2-1/2"/ side of octagon.

25 square inch throat first segment.

3-5/16"/side of octagon.

50 square inch throat first and second segments.





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