

Adjustable Plant Holder

The current plant holder measures 7" wide (from square beam to square beam) and 8.25" long (from threaded rod to threaded rod). An adjustable plant holder was requested by the customer so that plants of various sizes can be used. Our design idea is displayed below in figure 1. This design allows for flower pots of various sizes to be carried by the Wandering Ambassador. The two V-shaped brackets move along the two rods and are fixed in place with bolts. A design feature of the layout below is that the "Indiana Jones" switch will remain in the center, and thus under the pot, for all plant sizes.

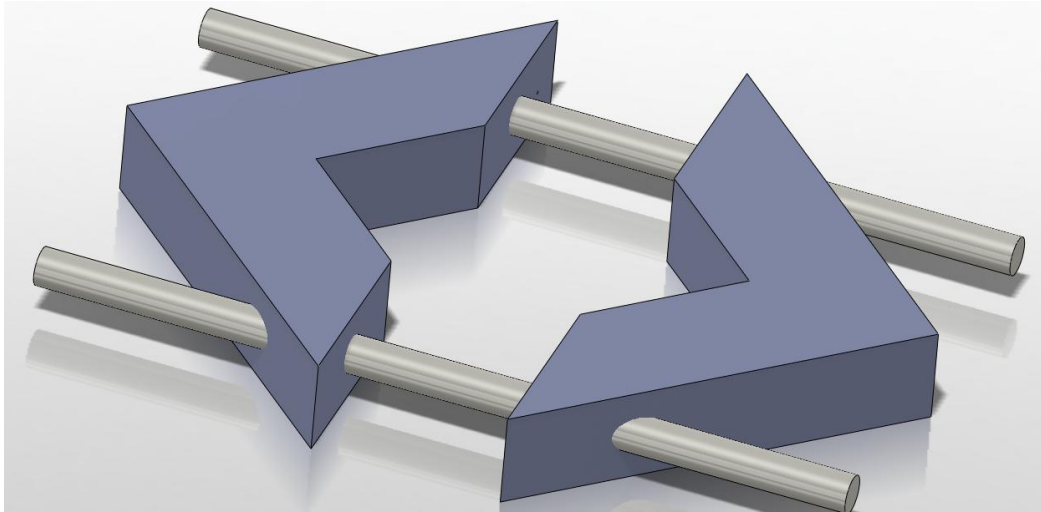


Figure 1: Bracket Diagram

Another request the customer had was to implement additional, smaller plants around the robot. The implementation of this request is still in the process of being decided, however figure 2 displays the one of the designs Terra provided. As you can see, this would allow the robot to be entangled with plants and strengthen the relationship between the robot and the plants. Depending on the complexity of the design, additional features to water the smaller plants may be implemented.

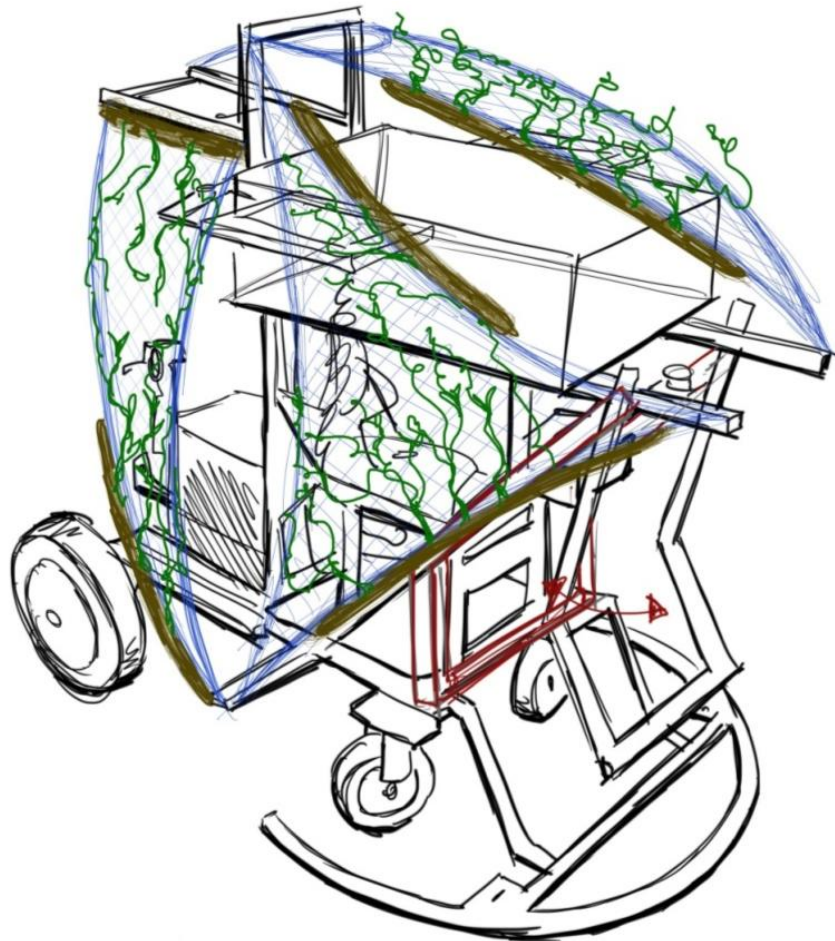


Figure 2: Additional Plants on Wandering Ambassador

Various sizes of Terra Cotta flower pots were looked at on the [Lowe's website](#). The Terra Cotta pot is made of clay and has a hole on the bottom for proper drainage. The pot sizes ranged from 4" to 14.5" diameters, in increments of two inches. A table breakdown of the diameters and heights of the pots available at Lowe's is available in table 1, below.

| Title on of flower pot at Lowe's | Width | Diameter | Height | Depth |
|----------------------------------|-------------|-------------|-------------|-------------|
| 4" Terra Cotta Flower Pot | 4.25 inches | 4.00 inches | 3.75 inches | 4.00 inches |
| 6" Terra Cotta Flower Pot | 6.00 inches | 6.00 inches | 6.00 inches | 6.00 inches |
| 8-1/4" Terra Cotta Flower Pot | 8.25 inches | 8.00 inches | 8.00 inches | 8.00 inches |
| 10" Terra Cotta Flower Pot | 10.0 inches | 10.0 inches | 9.50 inches | 10.0 inches |
| 12" Terra Cotta Flower Pot | 12.0 inches | 11.5 inches | 11.0 inches | 11.5 inches |
| 14" Terra Cotta Flower Pot | 14.5 inches | 14.5 inches | 12.5 inches | 14.5 inches |