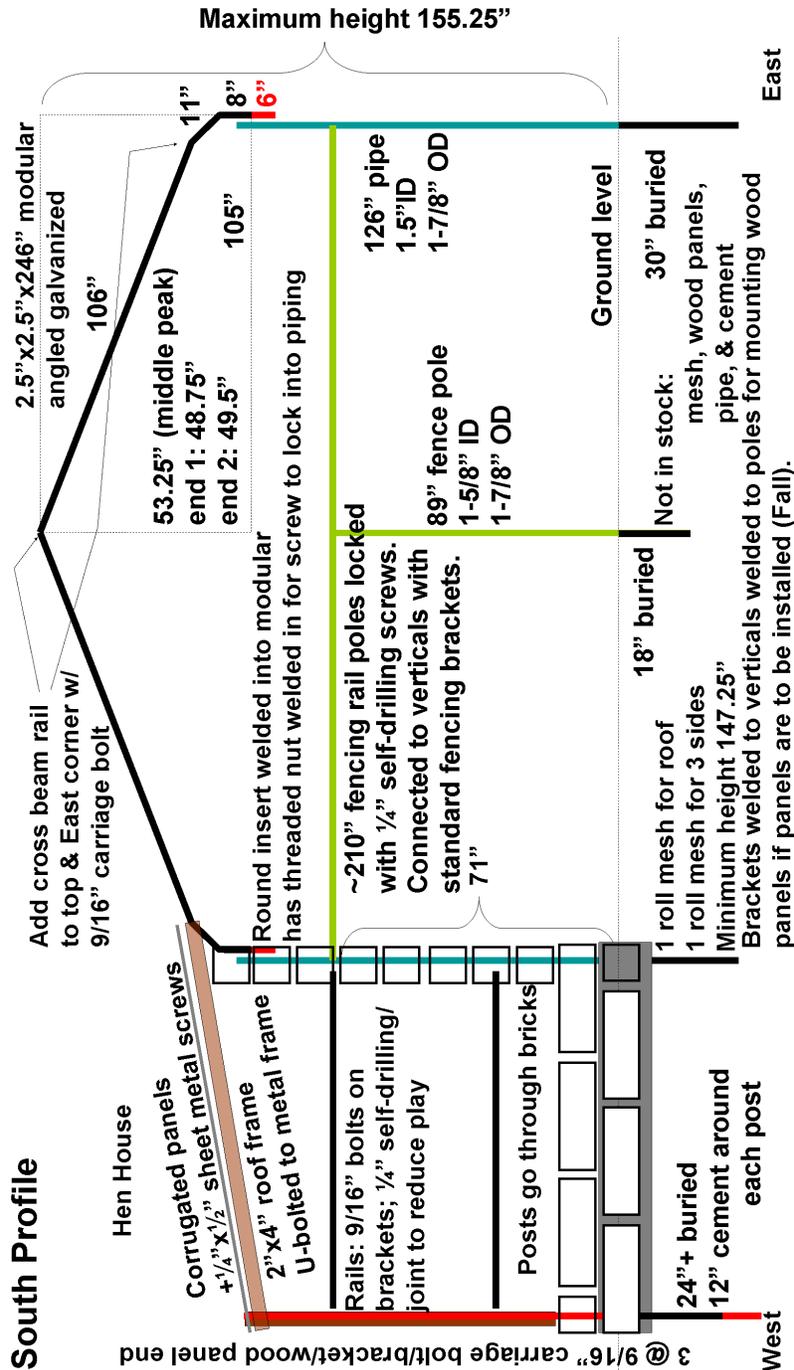


The perimeter will be lined with bricks (8"x8"x24" aerated autoclaved white block). The center will be lined with gravel, then rebar placed and cement filled to within 1/2 of the top of the bricks (4" above ground level).

The open aviary requires six load-bearing 1-7/8" OD posts buried 30" (labeled P). All posts will have at least 12" of cement around them to anchor them. To accommodate the force and weathering, galvanize plumbing pipe with 1.5" ID will be used. These are the only metal frame items needed to be purchased (~\$235). These will be buried and cemented 30" into the ground.



The open-air aviary will be reinforced by two 1-7/8" OD 1-5/8"ID fencing posts, connected to the main structure by fencing rail. All fencing rails (except the two along the top) will be attached by a standard fencing bracket on each end with 9/16" bolts, and everywhere a sleeve connection is made a self-drilling 1/4" screw is added to further secure the rail in that connection.

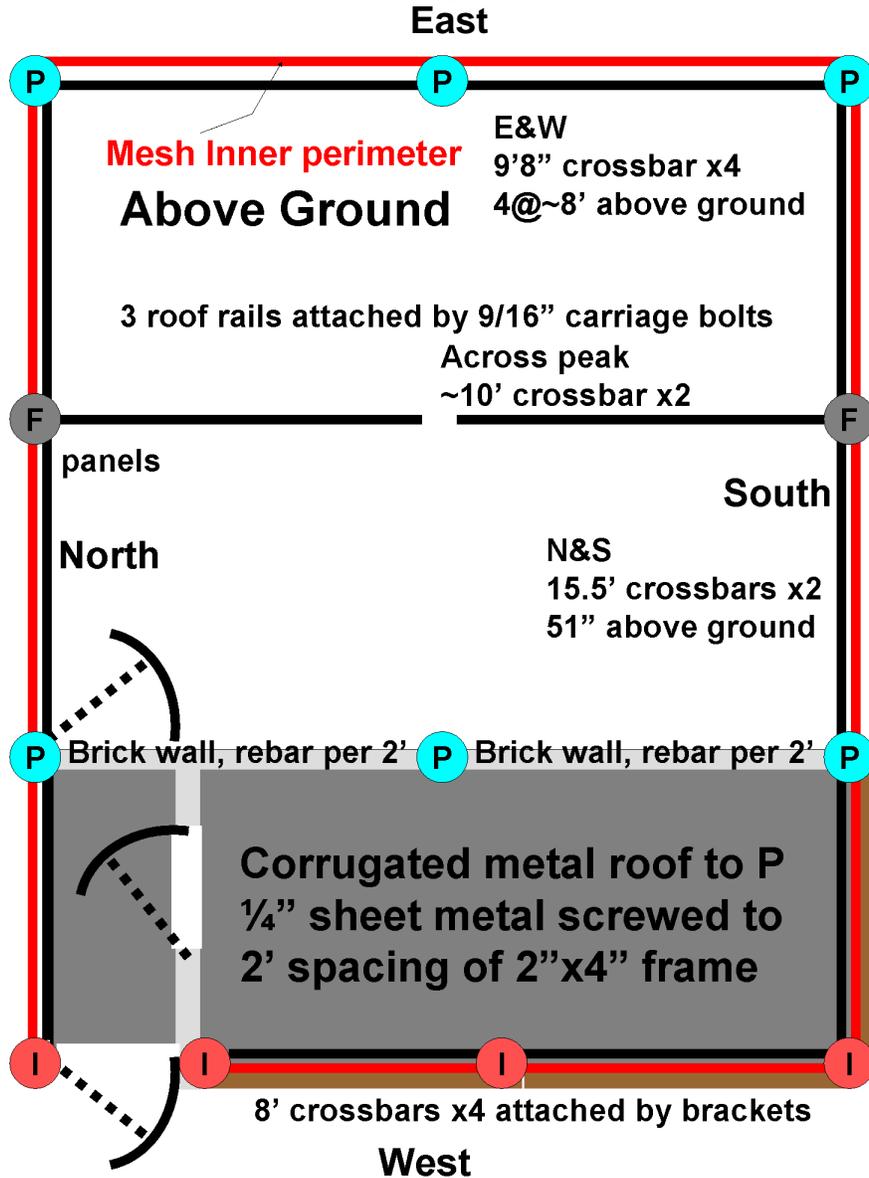
The roof consists of three modular shaped bars as illustrated. These will be connected by two sets of rails along the peak and upper East corner as shown. Each intersection between modular and rail will be connected by one 3" long 9/16" carriage bolt.. Where rails insert one into the other, 1/4" self-drilling screws will be used to prevent them coming loose. 1" welded 16G wire will be affixed using 1/4" self-drilling screws with large washers to the framework in the same direction as the rails are connected.

The exact height cannot be determined until installation and is slightly adjustable. It will be adjusted so the corrugated roof of the hen house attaches to the 11" angled span on one side. The blocks will be cut and drilled as needed to make all the connections.

The hen house will use four ~10' x 2" OD iron posts buried at least 24" (labeled I). Fence railing bracketed to these posts and locked in place with 1/4" self-drilling screws will be used to create framing on the N, S, and W walls to aide in attaching fencing. Wood fence panels will be attached to vertical and horizontal poles/rails using U-bolts and fencing brackets with 9/16" carriage bolts. The roof frame will be secured to the wood panels by 1-1/2" wood screws, to the metal framing by U-bolts.

Perimeter and Roof

The inner perimeters and inside of the open aviary roof shall consist of galvanized welded wire mesh, 16 gauge with 1" apertures. Mesh will be secured to itself by overlapping and weaving 16 gauge wire, and collectively affixes to rails, modulars, and sheet metal by 1/4" self-drilling screws with large washers. They are further U-bolted at 2 foot increments to posts. Each screw hole will also have a dab of silicon to prevent loosening and water infesting the structure.



The original plan called for wood panels on the North and South of the open-air aviary. We remain undecided about whether to do this at all. If we do, then we will weld brackets to the exterior of the vertical pole (P) framing. We would then set the panels on hinges to open and close with a wheel on one end for additional support, locking in either position.

Four 2"OD heavy iron posts will be used for the West posts of the hen house. Three additional standard fence posts will satisfy the remaining vertical structural need. The roof frame will be attached to the 2"x4" members of the wood fence in standard 2' increments to which the corrugated roof can then be attached using 1/4" x 1/2" long sheet metal screws. Additional wood and metal framing will be added as needed.

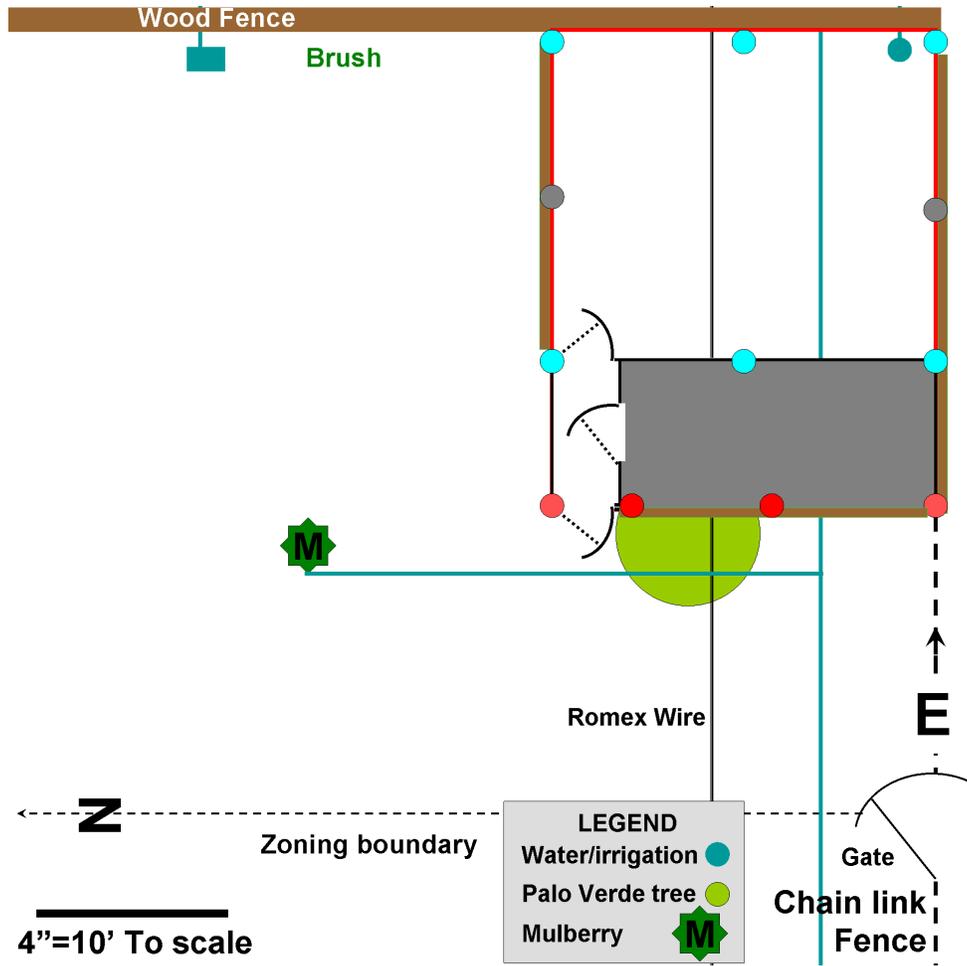
Supplies/Costs

Units	Price	~Cost	Description
2	\$220.00 +S&H	\$600	16G galvanized welded mesh 1/2" aperture. 48"/100' rolls. Source: Global Wire Cloth Corp.
63'	\$130.00	\$141	1-1/2" ID plumber's pipe (1-7/8" OD). Will call. Source: Central AZ Supply 800-416-6490.
30	\$3.55	\$144	80 lb Concrete (Home Depot free delivery)
8	\$7.50	\$65	Type M mortar (ACE)
10	\$4.56	\$50	2x4x12 lumber (Home Depot)
		\$100	Additional hardware
8	\$70.00	\$607	Wood fencing panels
		\$200	Other (e.g. window(s))
		\$100	Margin of error

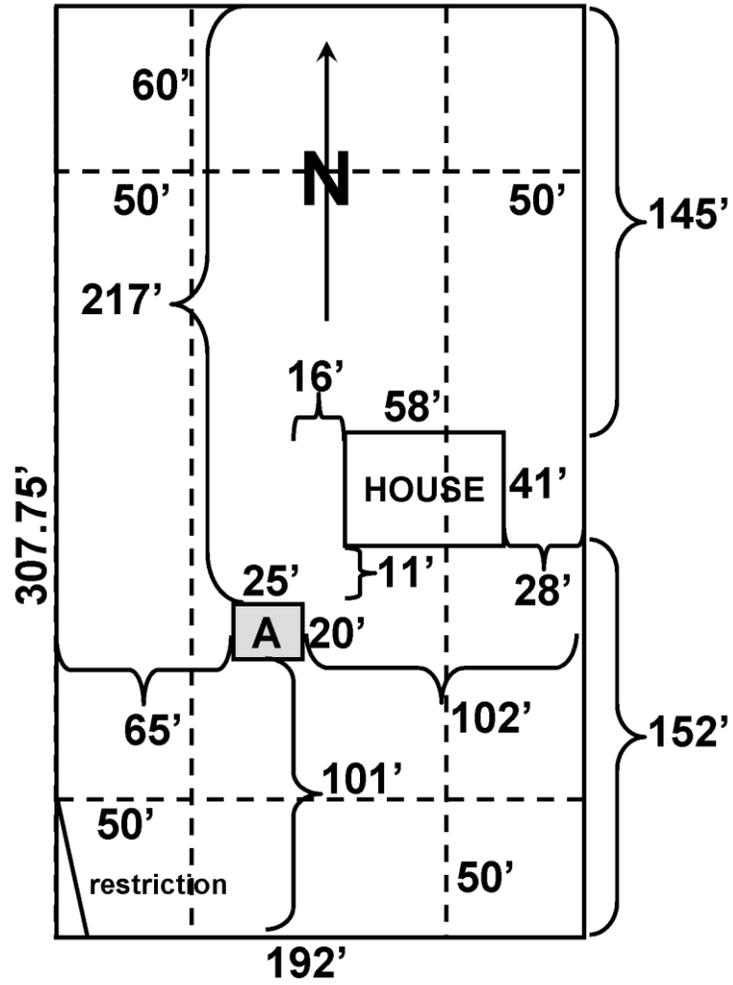
\$2000

Location

17985 West Hopi Drive, Casa Grande (Pinal County), AZ 85122.







West side reflects 8' easement.

A=25'x20' proposed aviary