University of Wisconsin

Cooperative Extension Service

Community Gardening and Urban Agriculture

Milwaukee County

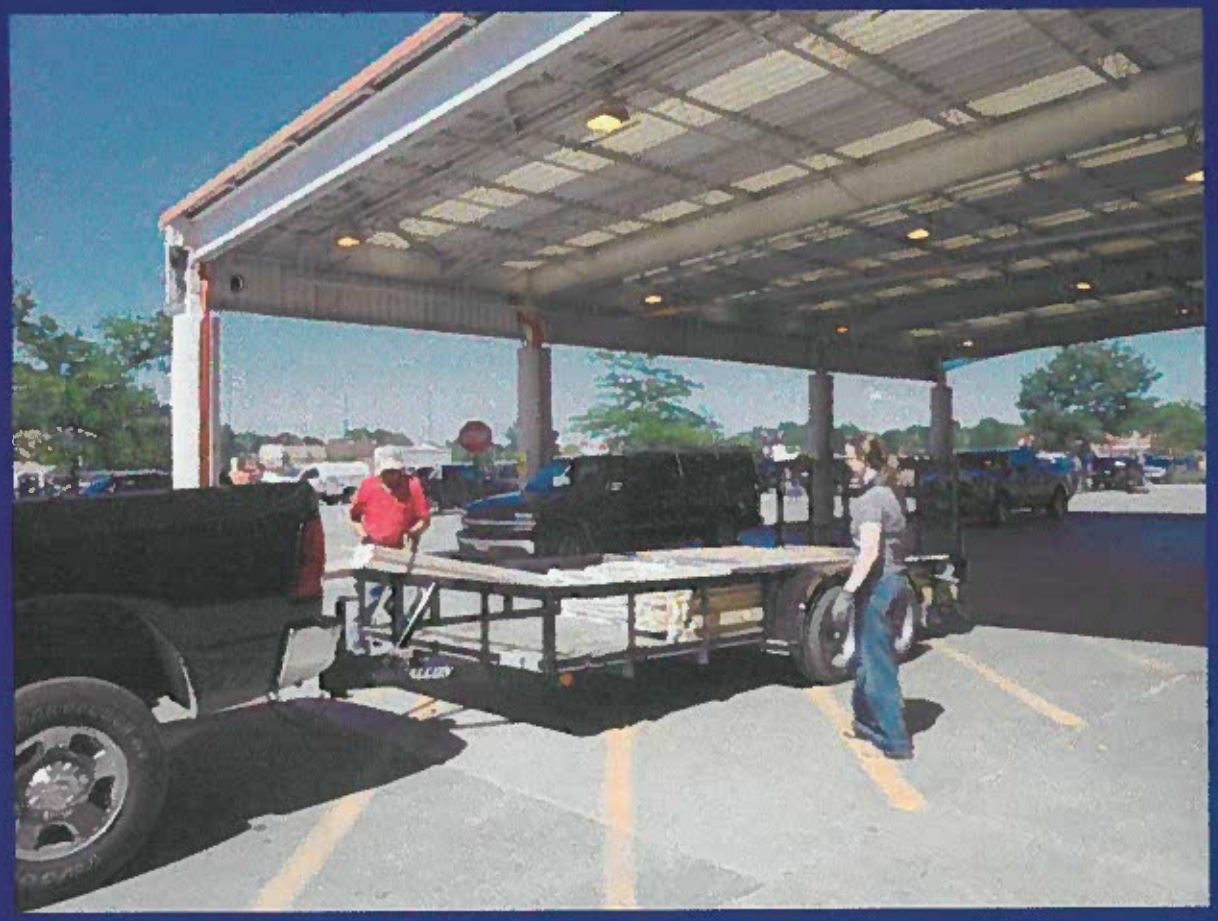
The RainShed

dennis s. lukaszewski
milwaukee county community gardening
program coordinator

Why a RainShed?

- Water bill at Firefly Ridge Community Garden - over 10 K
- Water cost in city gardens increased dramatically
- Access to city water other than hydrant: 5K plus yearly fee
- Provides storage space for garden tools
- Removes water from storm sewers
- Provides link to University students
- Increases food security in the city

Airport officials wanted us to clean-up the garden to reduce interference of animals with airplanes



Prices may vary at lumber yards, check prices before purchasing products

Precut and mark the wood for easy assembly in the field

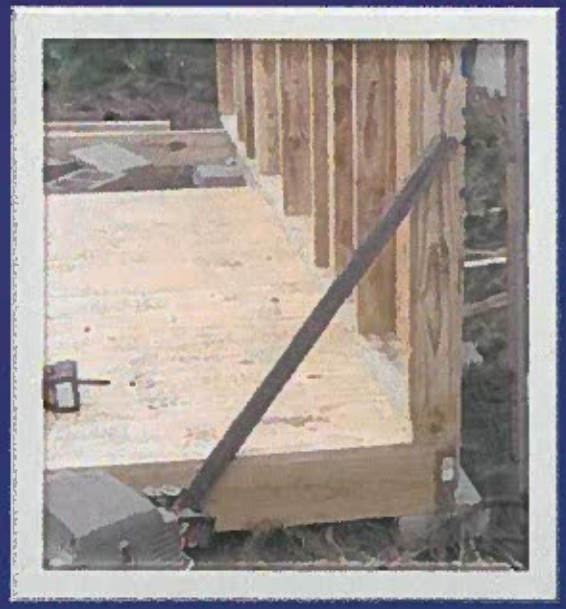
Double check all materials before heading to the field

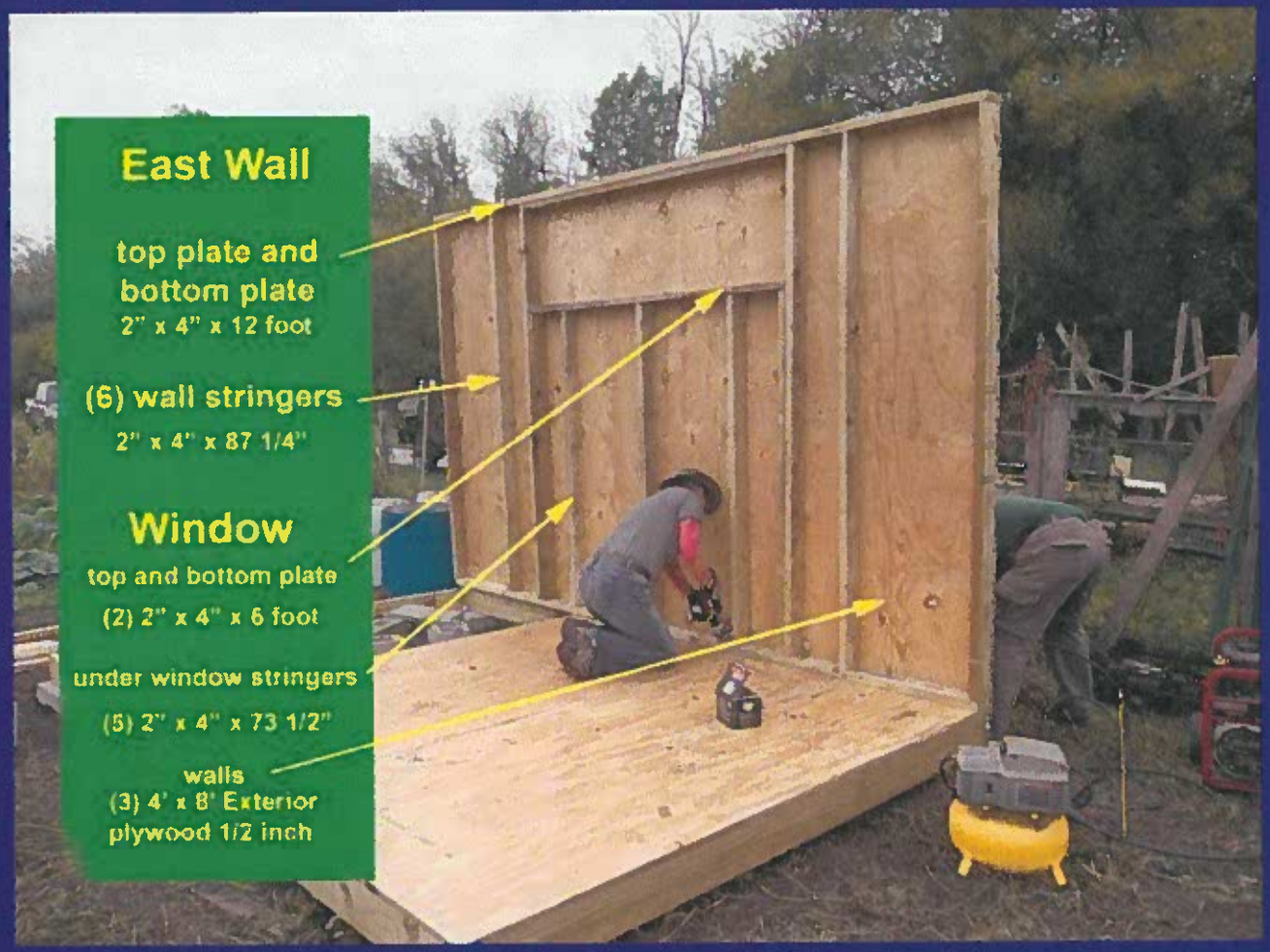
Use solid cement blocks to level the base boards

2" x 6"
7 foot 9 inches
floor joists
2" x 6"
12 foot sides
Foundation Block
4" x 16"x 8"

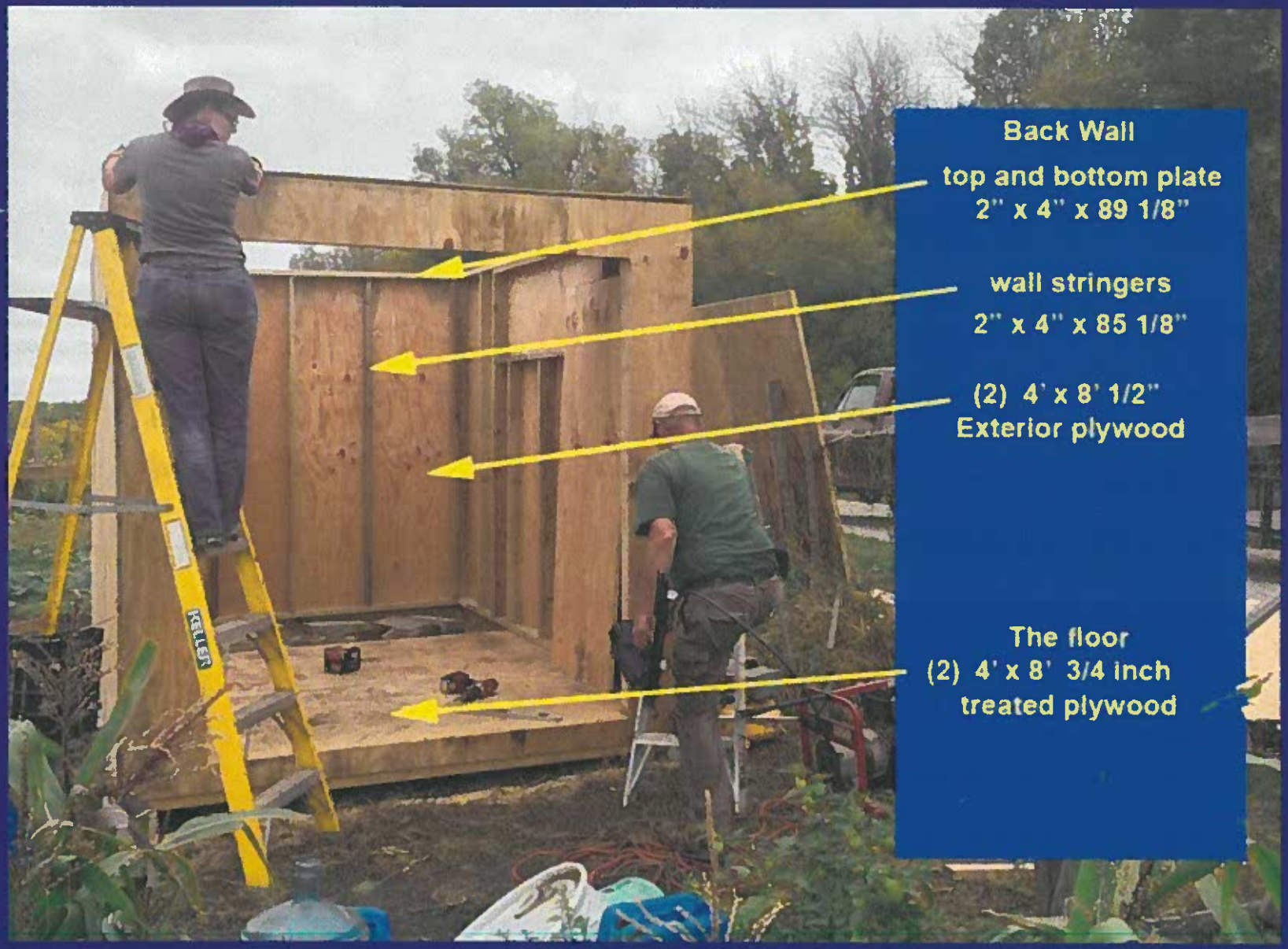
The floor becomes a nice clean work surface

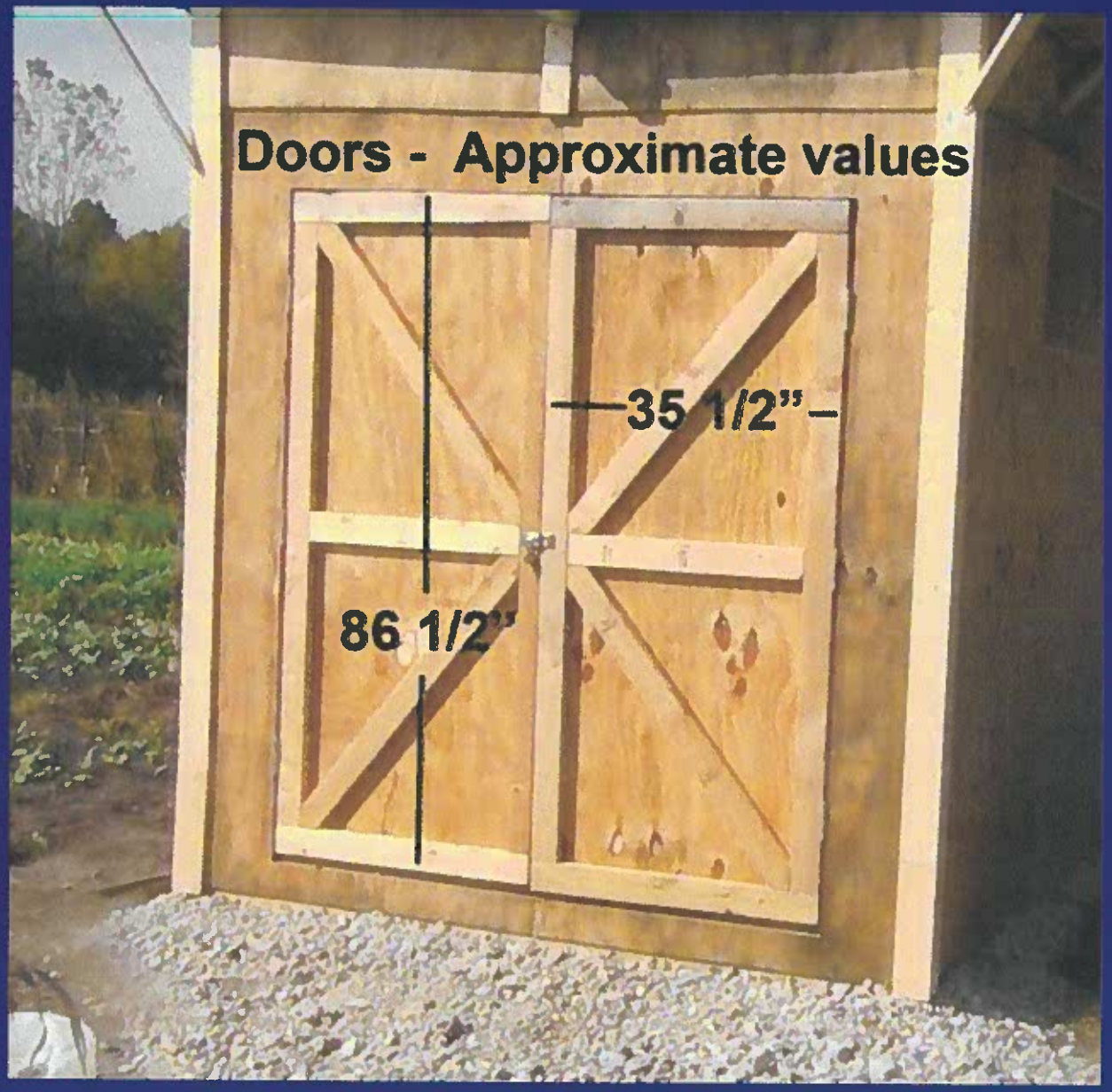
Notice overlap in wall detail on left





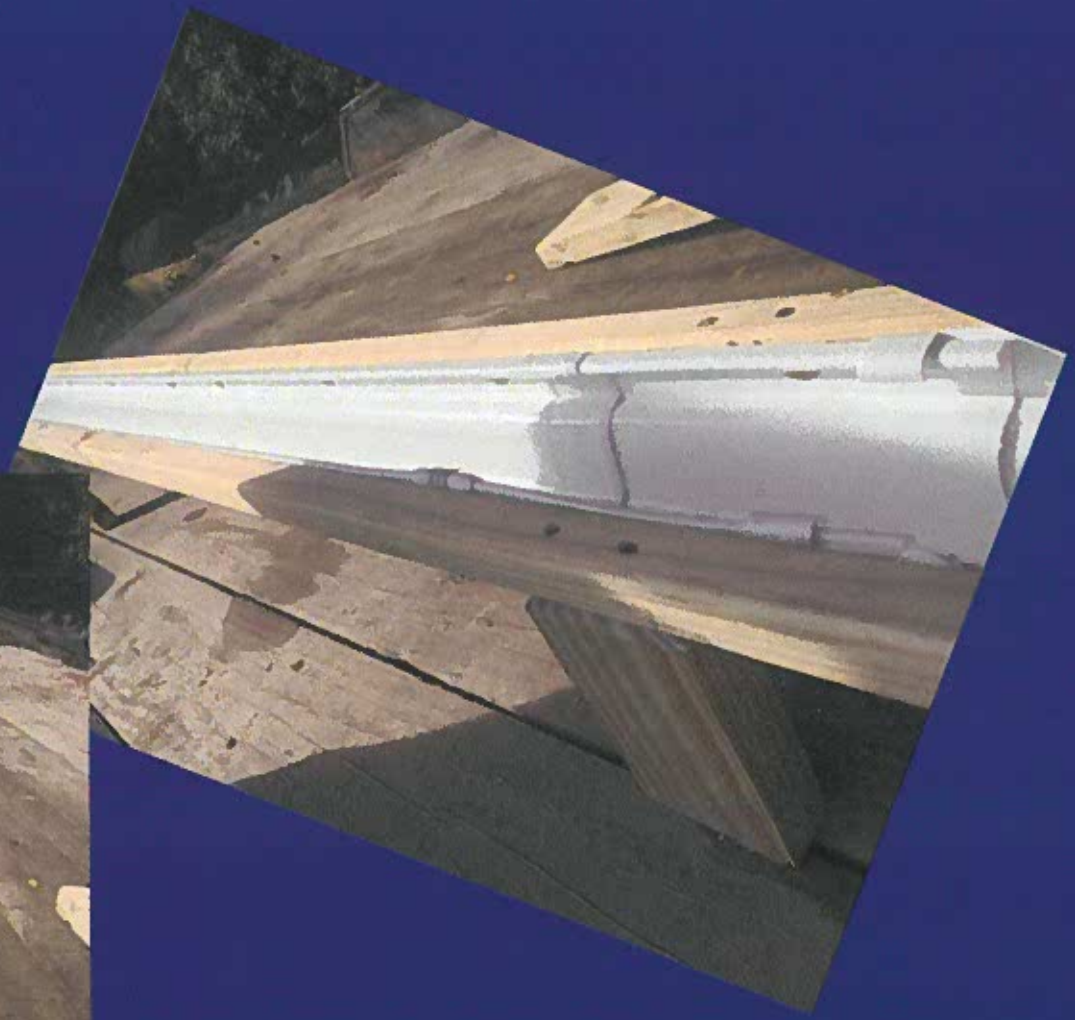
The same measurements for the West Wall

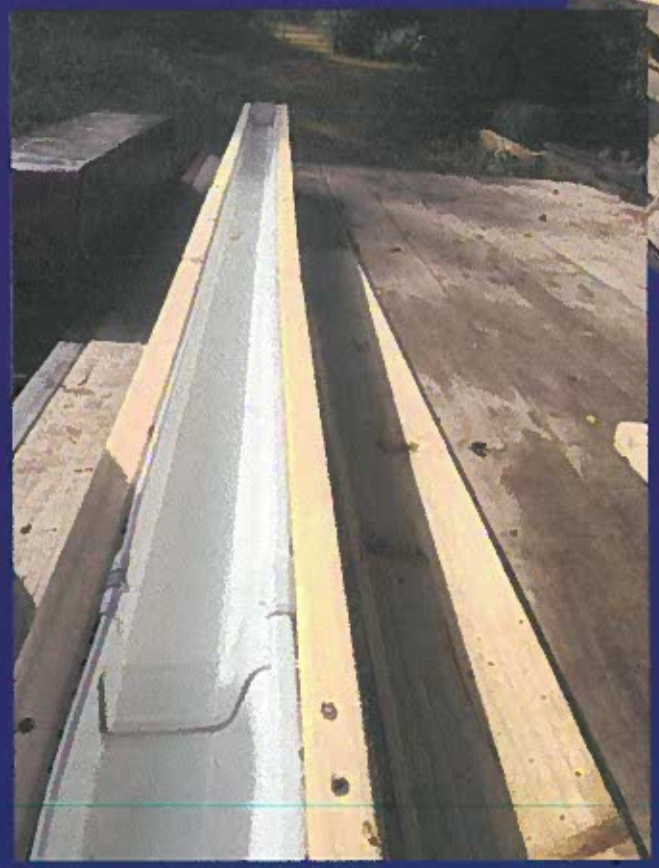

Back Wall
top and bottom plate
2" x 4" x 89 1/8"
wall stringers
2" x 4" x 85 1/8"
(2) 4' x 8' 1/2"
Exterior plywood
The floor
(2) 4' x 8' 3/4 inch
treated plywood
KELLER


Doors - Approximate values
35 1/2"
86 1/2"

Assembling the roof

-original design-



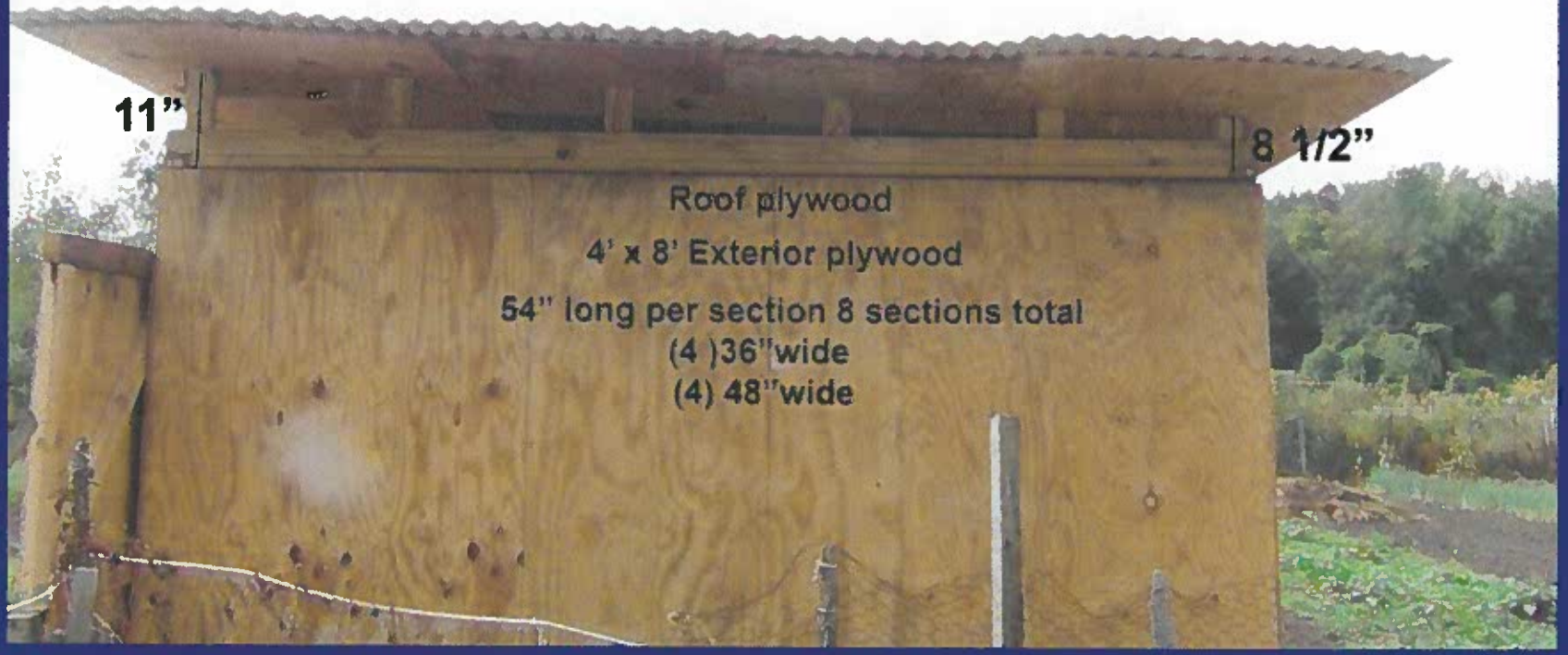


Assembling the rain gutter

Roof - original design

Corrigated plastic roofing

Same size as roof . slightly bigger



Rain water collection design

Close-up of water collection tank.

First flush apparatus is on the left of the tank

Original design of the
RainShed roof

Adding support for roof and closing sides to keep out the snow in winter

First RainShed
completed
October of 2015

Plans for 2016

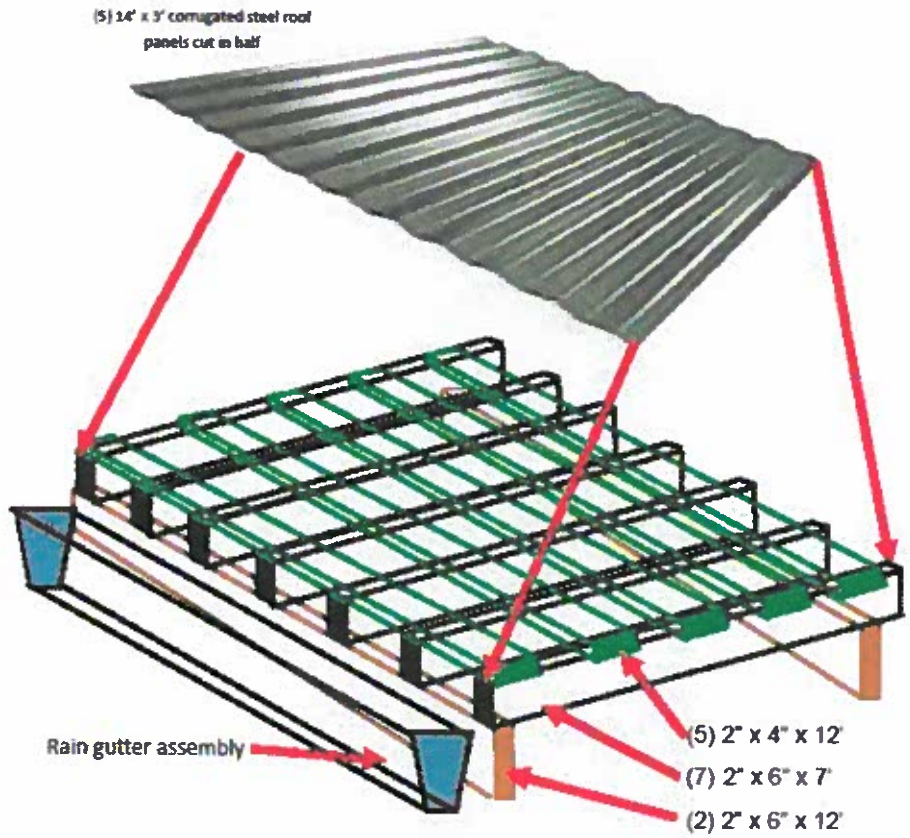
We have funding for two more RainSheds

One will be constructed in our Garden of Innovation and Wonder at Kohl Farm Community Garden

The other will be aiding our Wisconsin Emerging Farmers Initiative at Forest Hill

Design Changes:

- Redesign of roof to eliminate inner roof and provide more wind stability.
- Less tilt of the rain gutter to eliminate extra braces.
- Metal roof instead of plastic on plywood.
- Winter valve on rain gutter to let water escape before freezing.
- An easy to use valve for first flush system.

The Right Half of the new RainShed Roof Design

*** Not to scale ***