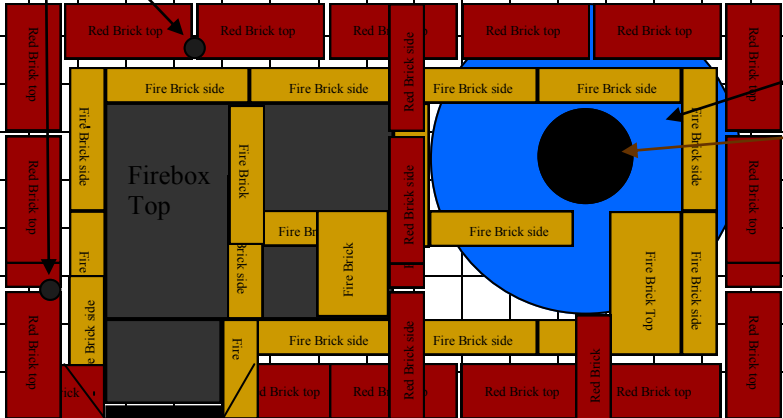
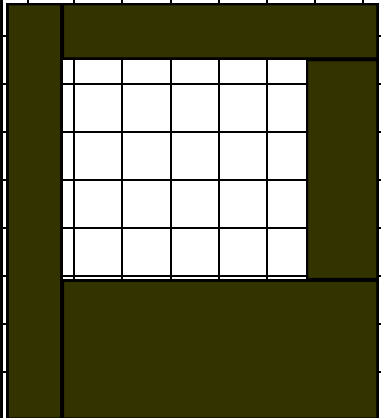
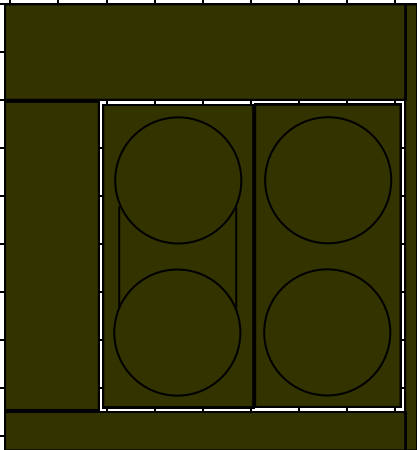
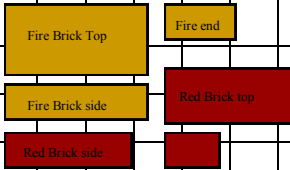


Wall

Air vents, they go down,
then turn into firebox.



Note: Not everything
will be as pictured.



Steel cook surface
and
stove top. It sits on top of
the Red brick stove fac-
ing.

1 line = 3 inches

Top View

Counter Top

Ceiling

Side View

Tub

Refrigerator

Damper

Water heater tank

Steel stove top with gaskets where necessary.

Glass door with ash clean out and air supply for bottom of firebox.

Washing Machine

door

Copper water pipes

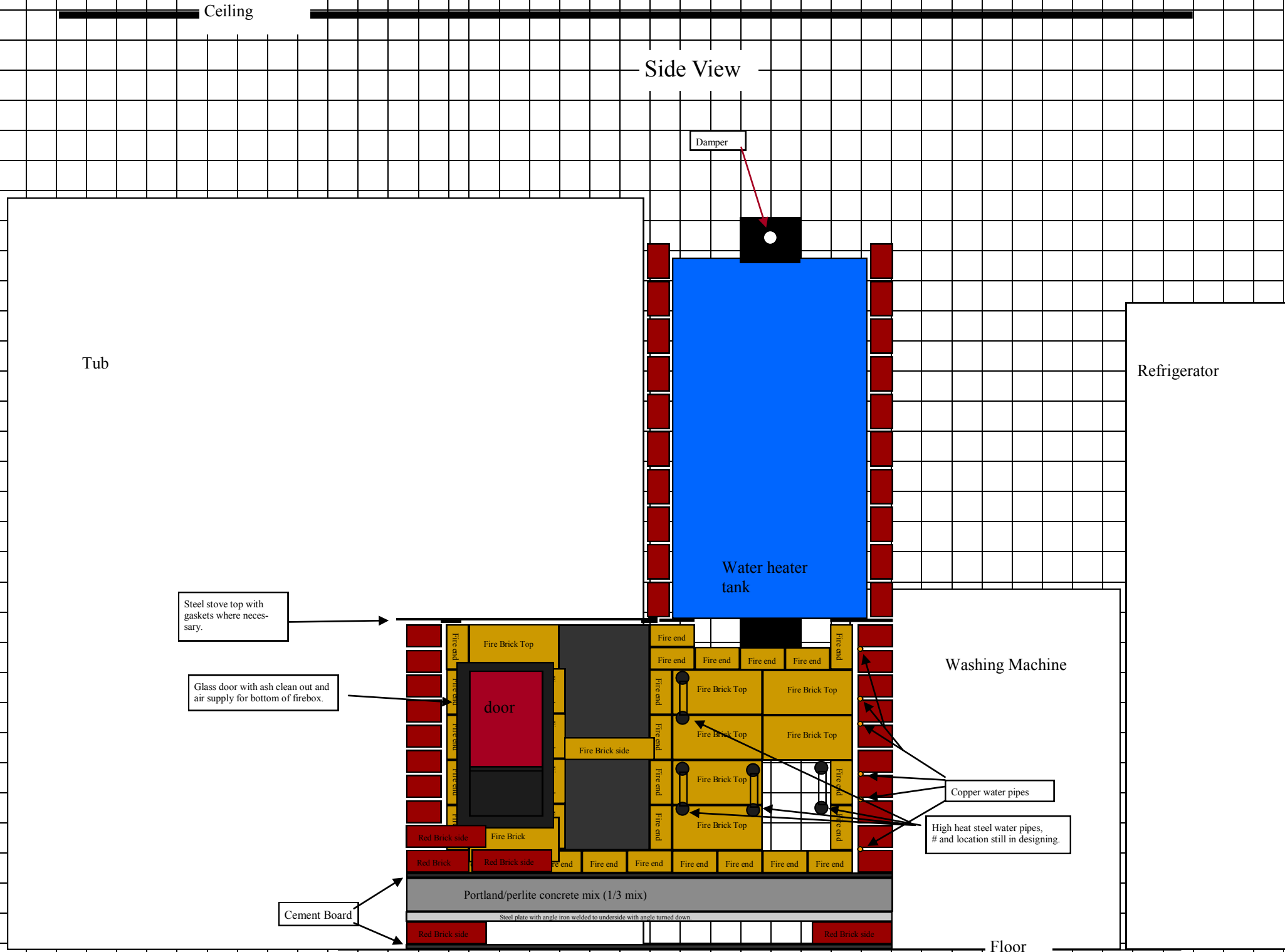
High heat steel water pipes, # and location still in designing.

Cement Board

Portland/perlite concrete mix (1/3 mix)

Steel plate with angle iron welded to underside with angle turned down.

Floor



Brink counts:

Firebricks layer 1=21, L2 =17, L3=17, L4=19, L5=19, L6=22. 115 bricks total plus mistakes plus shop stove plus extra for future replacements plus changes in plans. 115-150 total

Red bricks = 16X 10=160, 10x10=100, total 260

Brick Weights:

Firebricks 130X7.30#= 949#
Red bricks 260 X3.50#= 910#
1859# plus mortar, steel, tanks, etc.

Features:

Hot Water
House Heater
Positive House air circulation
Bake Oven
Cook Stove
Efficient, safe, convenient.
Only need to light a fire infrequently.
Built out of mostly inexpensive or free components.

Construction Notes:

Off set joints as normal.
Fill any hollow bricks with mortar.
Use metal to masonry gaskets/mineral wool.
Use two tops off old cook stove for cook top.
Make cast refractory stove top and a perlite insulated stove top cover for when not using the steel cooking plates, and perhaps a masonry insulated bake oven for on the refractory stove top.
Make a twist style damper at the top of the firebox for direct smoke path.
Make bricks removable between the firebox and under the water tank for ashes clean out under water tank and water coil maintenance.
Make perlite/Portland/fiber board panels for insulating the sides of the stove.
Use refractory cement between firebricks with very thin mortar joints.
Thin cement with water until a firebrick will sink in 1/2 way.
Use Type N Portland mortar for Red bricks with about 1/4 inch mortar joint. (1 Portland, 1 lime, 6 sand).

There will be a gap on the front side of the water tank. Make a brick wall in the center of the gap to make two channels. Leave 2 bricks high (7") opening at the bottom of the wall to connect the two channels. Put some perlite/Portland insulation at bottom of channel away from the firebox. Hook outside air to insulated channel. Insulated channel should be cool and the channel toward the fire box should be hot from the firebox and the hot steel underneath. And it should create a positive pressure in the house.

Can lay some fire bricks flat at bottom of firebox??
Run air supply pipes in brick walls.
Start perlite base 34.5 inches from north wall (actual wall, not base board).
We need something for above the door.
Pre-make/dry-stack firebrick core ahead of time and make sure everything will work.
Hearth extension must be 20" out in front of the door and 12" sideways from the door.
Make sure there is a 2" air gap underneath the stove.
Make sure there is 36" from firebox to combustible materials, sideways or up. 12" from inside of flues to combustible materials. 48" in front of stove door. These dimensions change depending on various factors.
Standard masonry break-in: Air dry with low heat sources. Build first fire with 1/10th the normal amount of wood, increasing fire size until using full amount of wood after 10 fires. Space fires 8 hrs or more apart.
Firebox/core must not touch facing.

Materials list:

Water tank with baffles torched out, pipe welded on bottom, tank base/stove top steel welded to bottom.
3 high heat steel pipes with fittings welded to the ends.
3 soft copper pipes bent to the right spacing for bricks.
Two tops off old cook stove for cook top.
Mineral wool/stove cord.
Perlite, Portland, Sand, Refractory cement.
Wet clay/sand mix (1/1).
Red bricks
24 Red bricks pre-cut for copper pipe.
Fire bricks
Water tank steel: 4.5X13.8/ 3.5X19.75/ 8.75X19.75/ 3.5X26
Stove top surround steel: 6X25.13/ 6X19.37/ 2.5X25.13/ .88X28/
Lip steel: 1" or more wide X 20/19/20/22 or 81" linear.
Masonry sawzall and angle grinder. Tile saw.
Heavy wires for tying bricks together at weak points and for using in castable refractory parts.
Vise.
(2) high heat tubes for drafts, with pipe plugs for draft control, make 4" from exit to far side of elbow, and about 4" down from stove top of bottom of elbow.
Cement board and tile for hearth extension.
6" stove pipe and elbows.
Roxul (mineral wool).
Wrap masking tape and gasket material around copper pipe for mortar space.
Water temp gauge.
Put aluminum foil under cement board under firebrick.
1/2 inch cement board 48.5X26 inches for under fire bricks.
Base form, 26"X48.5"X7.5" ID made of wood.
4 posts downstairs.
Twist style damper 2.25X6.
Masonry drill bit big enough for drilling holes for damper control rod.
Cardboard (1/4")