

Chapter 3 - Foundation

Contents

Chapter 3 - Foundation	3-1
Timing and Prerequisites.....	3-2
Materials Needed	3-3
Site Setup.....	3-3
Temp Power Pole (Habitat Support Staff).....	3-3
Foundation (Contractor)	3-3
Utility Taps (Contractor).....	3-3
Interior Drainage (Contractor)	3-3
Perimeter Fencing (Habitat Support Staff)	3-4
Under Slab Insulation (Volunteers).....	3-4
Basement Slab (Contractor)	3-4
Foundation Backfill (Contractor)	3-4
Basement Slab Sealing (Volunteers).....	3-4

Things to Consider

- During this phase, Contractors and Volunteers will need to coordinate activities.
- Caution: Tie the sump pump switch up off of the floor to keep it from getting wet.

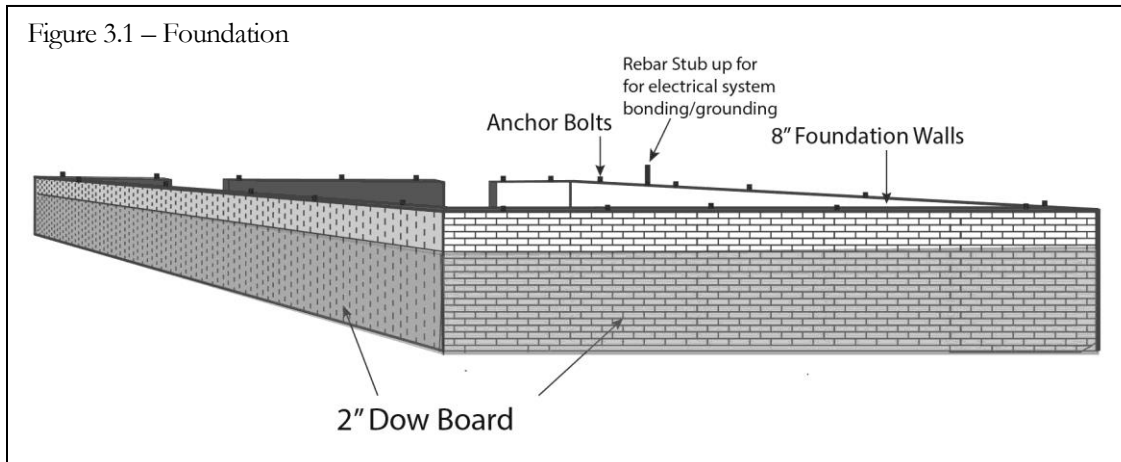
Components

Footers	Foundation Walls	Post pad
Sump Pump	Interior Drainage	Backfill
Temporary Power Pole	Sewer Tap	Water Tap
Gas Tap		

Timing and Prerequisites

- This is the initial phase of the build.
- The Construction Superintendent will work with the contractors to initiate this phase and co-ordinate the timing of Contractor and Volunteer activities throughout the phase.

Figure 3.1 – Foundation



Materials Needed

Temporary Power Pole

5/8"x8' Grounding Rods

Temp Power Pole

2x4 Braces

2 1/2" wood Screws

Site Setup

Temp Power Pole (Habitat Support Staff)

- Using a post-hole digger, dig a 32" deep hole for power pole.
- Set the power pole in the hole. Plumb the pole and pack dirt around the pole.
- Cut and install two (2) stakes. Place one to the side and one to the back of the pole.
- Cut and install power pole braces.
- Drive ONE (1) grounding rods into ground. This rod should be 4' from the pole .
- Attach grounding wire to grounding rod.

Foundation (Contractor)

The cement contractor will:

- Excavate the hole for the house
- Pour the footers and thicken slabs.
- Frame up the basement walls
- Pour the walls
- Clean off the frames
- Install the bituminous asphalt coating
- Install the exterior and interior drainage
- Install the sump pump pit
- Install 4" of gravel over the excavated floor.
- Install the 2" Styrofoam insulation on the exterior foundation walls
 - The Styrofoam insulation will be installed vertically from the footer to the top of grade.

Utility Taps (Contractor)

The contractor will install the water, sewer, and gas taps and lateral lines.

Interior Drainage (Contractor)

1. The foundation contractor will install the sump pump pit and interior drainage.
2. The cement contractor will install 4" of gravel over the interior drainage.
3. After the basement slab is poured, a temporary sump pump will be installed. The permanent pump will be installed during plumbing rough-in. **(KEEP THE PIT CLEAN).**

Perimeter Fencing (Habitat Support Staff)

As soon as possible after the foundation has been installed, the perimeter fencing must be installed.

1. Install “T” stakes or rebar every 8’ around the foundation.
2. Install orange safety caps over the top of the “T” stakes or rebar.
3. Attach plastic orange fencing to the supports with zip ties.
4. Leave one section unsecured to allow access to the site. Hook the fence over the next support.
 - The fencing must remain in place until the first floor decking is installed.
 - Inspect the fencing every work day and re-install missing stakes, fencing and safety caps.

Under Slab Insulation (Volunteers)

Under Slab insulation will no longer be used in Mid-Ohio Habitat homes.

Basement Slab (Contractor)

The cement contractor will pour the basement floor.

After the concrete slab sets up, the cement contractor will return and cut expansion joints into the slab.

Foundation Backfill (Contractor)

Once the slab is poured and the utilities taps are installed, the contractor will backfill the foundation.

Basement Slab Sealing (Volunteers)

1. Apply a large bead of silicone caulk to the outside perimeter of the basement slab and around the sump pump pit. Any cracks or penetrations in the basement slab must be caulked.