

FOUNDATION PLAN

The foundation plan is a plan view drawing, in section, showing the location and size of footings, piers, columns, foundation walls, and supporting beams.

A foundation plan ordinarily includes the following:

- Footings for foundation walls, piers, and columns (hidden lines)
- Foundation walls
- Piers and Columns
- Dwarf walls (low walls built to retain an excavation or embankment)
- Partial walls, Doors, and Bath fixtures if the house has a basement
- Openings in foundation wall such as windows, doors and vents
- Beams and Pilasters
- Direction, size, and spacing of floor joists or trusses
- Drains and sump (if required)
- Details of foundation and footing construction
- Complete dimensions and notes

The foundation plan is drawn from information presented on the floor plan, plot plan, and elevation plan drawings.

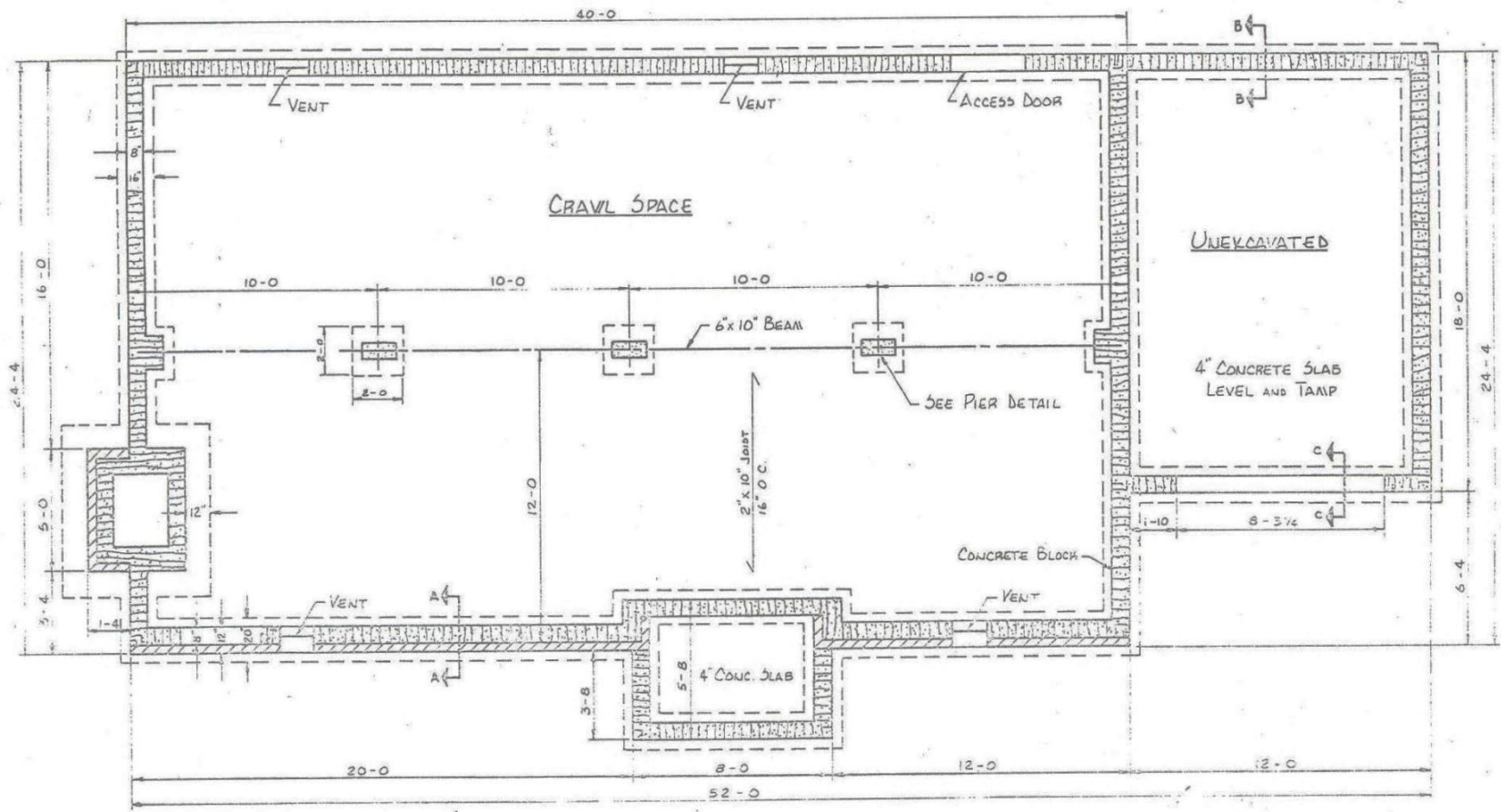
Before drawing the foundation plan, examine the floor plan to determine the type of exterior walls specified. For example, a 4" brick ledge is required for the brick veneer house. This adds 8" to the length and width of the foundation.

The plot plan and elevation plan drawings should also be examined to anticipate the need for stepped footings, retaining walls, and problems related to the grade of the land.

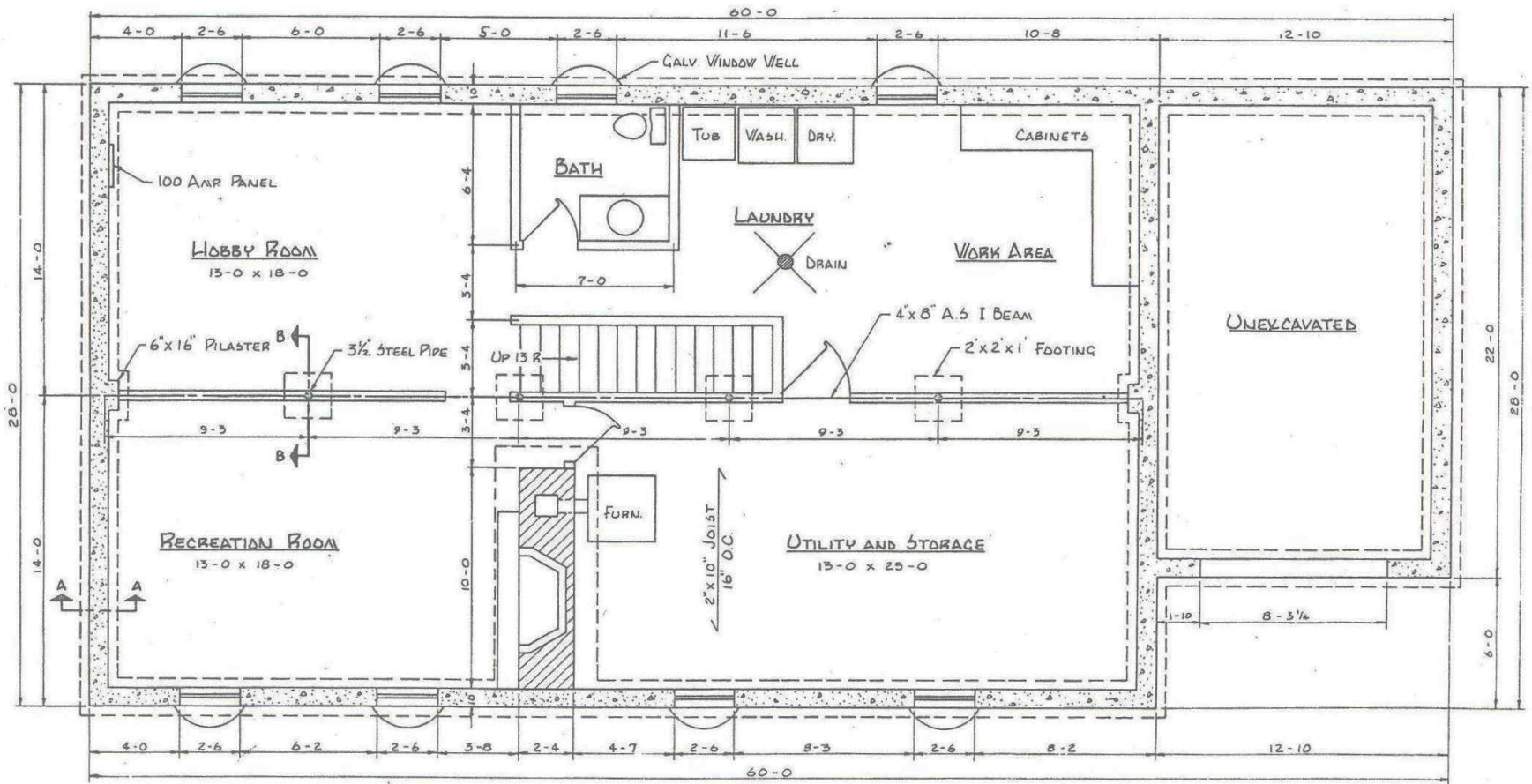
Drawing a foundation plan includes the following steps. All items will not apply to every situation:

1. Select the scale for the drawing.
2. Locate the outline of the foundations walls from the floor plan.
3. Draw the foundation walls, piers and columns and the foundation for a chimney.
4. Indicate breaks in the foundation wall for windows, doors, access holes, and vents.
5. Layout and draw the footings for the foundation walls. Use hidden lines.
6. Draw the footings to be used for the piers and columns.
7. Draw the footings for the fireplace and chimney.
8. Locate the supporting beam if one is required. Draw the beam using a thick centerline symbol.
9. Show the size, spacing, and direction of floor joists or trusses.
10. Identify the location of sections and all other additional information.
11. Draw the necessary sections and dimensions.
12. Determine the location of dimensions needed to show the size of all aspects of the foundation. The length and thickness of all foundation wall segments must be dimensioned. Piers are dimensioned to the center rather than to the edge.
13. Draw dimensions.
14. Letter necessary notes.
15. Shade foundation wall drawings.
16. Check drawing.

Procedures for drawing a Basement Plan are the same as for a Foundation Plan except for the addition of the needed features (doors, bathroom fixtures, etc...).



SCALE: 1/4" = 1'-0"



SCALE: 1/4" = 1'-0"

Works Cited

Kicklighter, Clois E., Ronald J. Baird, and Joan C. Kicklighter. *Architecture: Residential Drawing and Design*. South Holland, IL: Goodheart-Willcox, 1995. Print.