

## Cotter Residence- Hand Draft Partial Floor Plan & Elevation Project

### Directions:

1. Give Students either 1/8"=1'-0" or 1/4"=1'-0" copy of house front elevation and partial floor plan. (Advanced students get the 1/8", beginning students the 1/4" scale drawing.)
2. Students will hand draft these drawings on a "C-size" sheet of paper. This will allow them to practice their hand drafting skills, measuring with a scale, line weights, organization, lettering, and transferring lines from a floor plan to elevation.
3. Go over with the students what they are to draw so they are familiar with the plan and elevation. Explain the difference of line weights; the elevation grade line is the darkest, major outlines of objects and walls are dark, window & door objects are medium, and hatch lines of fill such as siding/ roofing are lightest. Tell students to keep in mind when working on the elevation, that some parts are "closer" than other areas.
4. Review the (3) different pencil leads given.
  - a. 4H- Hard Lead
  - b. 2H- Medium Lead
  - c. HB-Soft Lead

\*Also be sure students use the proper tools, eraser shields, eraser brushes (not their hands), straight edge, triangles, compass, etc.

\* For areas such as the cedar shake siding or asphalt roofing, students may use a combination of tools and freehand. So these items don't appear flat, students can use the tools as a guide and draw light guidelines to keep the correct proportions of these things but then freehand these items in. Also students are to fill in the areas exactly how it is shown on the drawing.
5. Students will get a C-size sheet of paper. They need to plan how the elevation and floor plan will fit on the page so they are centered and even with a border and title block.
6. To plan correctly for the size of these two parts students need to measure the given drawings and block out the area on their C-size sheet. Advance students are to measure the 1/8" drawing and draw a 1/4" drawing. Beginning students are to measure the 1/4" drawing and



draw a 1/4" drawing. The floor plan and elevation should align, meaning that if you were to strike a vertical line from a first floor window on the elevation it would align with the same first floor window on the floor plan.

7. When students add titles and text to the drawing the sizes should be as follows:
  - a. TITLES: 1/4" Height
  - b. GENERAL NOTES AND DIMENSIONS: 1/8" Height
  - c. ROOM NAMES: 3/16" Height
  - d. UP/DN & DOOR AND WINDOW TAGS: 1/8" Height
8. When drafting walls, tell students to draft the outline of the walls and house first, then when they are completed with their drawings entirely, add wall fill and elevation façade hatch. By doing this, their drawings will stay neater and smudge less without the excess graphite of wall fill on their drawings.
9. Students should use the RETC title block given. The information for the rest is as follows at 3/16" Height U.O.N.:
  - a. Drawn: Your Name
  - b. Checked: Dossin
  - c. Date: Date Finished
  - d. Scale: 1/4" = 1'-0"
  - e. Job No. 002
  - f. Sheet: A-01 of 01 (1/4 Height)

After doing this project students will demonstrate they can:

- Produce elevation drawings (seg 8)
- Produce a floor plan (seg 8)
- Identify basic layout skills and follow directions
- Read and transfer measurements (Seg 2)
- Demonstrate entry level skills (e.g. drafting by hand, working with triangles, and working with a T square)
- Demonstrate basic layout drawing (e.g. borders and information blocks) (Seg 2)
- Use line types and weights (seg 2)
- Use drawings instruments and media