## Appendix E Programming Problem 23

Create a program that will draw a rectangular foundation showing the wall, footer, beam, pilasters and lolly columns. Have an option for wall thickness and adjust the footer width accordingly with the width of the wall. Have an opportunity to place the pilasters and beam at the midpoint of the vertical or horizontal wall or ask the user if they want to enter the measurement themselves. We will be successful even with a simple rectangular foundation detail with a single beam, but the program can be written with as many options as we choose.

Remember to place the different line entities on their own layer such as the hidden line representing the footer on the "footer" layer, the continuous line displaying the wall in the pilaster on the "wall" layer, in the phantom line showing the beam on the "beam" layer.



## **Figure E.1 – Example Foundation Drawing**

\* World Class CAD Challenge 04-23\* - Within two hours, create a new AutoCAD file where you display the foundation wall, footer, pilasters, beam and lolly columns. Open the Visual AutoLISP editor and code the problem using the Construction coding method. Save the code the problem as foundation.lsp.

Send your copy of your code for verification to the authors of these problems to have your name and location posted. See the web site for instructions at: www.worldclasscad.com

## Appendix Programming Problem 24

Create a program that will draw a stairway showing the stringer and steps. Let the left-top of the stairway be the starting point. Ask the user what the run should be (not less than 10 inches). Calculate the rise from 6 to 7.75 inches and present them to the user. After selecting from the list of choices, we will be successful by having the program draw a stairway similar to what is shown in Figure E.2

Remember to place the line entities on their own layer such as a continuous line layer representing the stairway on the "stair" layer.



## Figure E.2 – Stairway Detail

\* World Class CAD Challenge 04-24\* - Within two hours, create a new AutoCAD file where you display the side view of a stairway. Open the Visual AutoLISP editor and code the problem using the Construction coding method. Save the code the problem as stairs.lsp.

Send your copy of your code for verification to the authors of these problems to have your name and location posted. See the web site for instructions at: www.worldclasscad.com

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