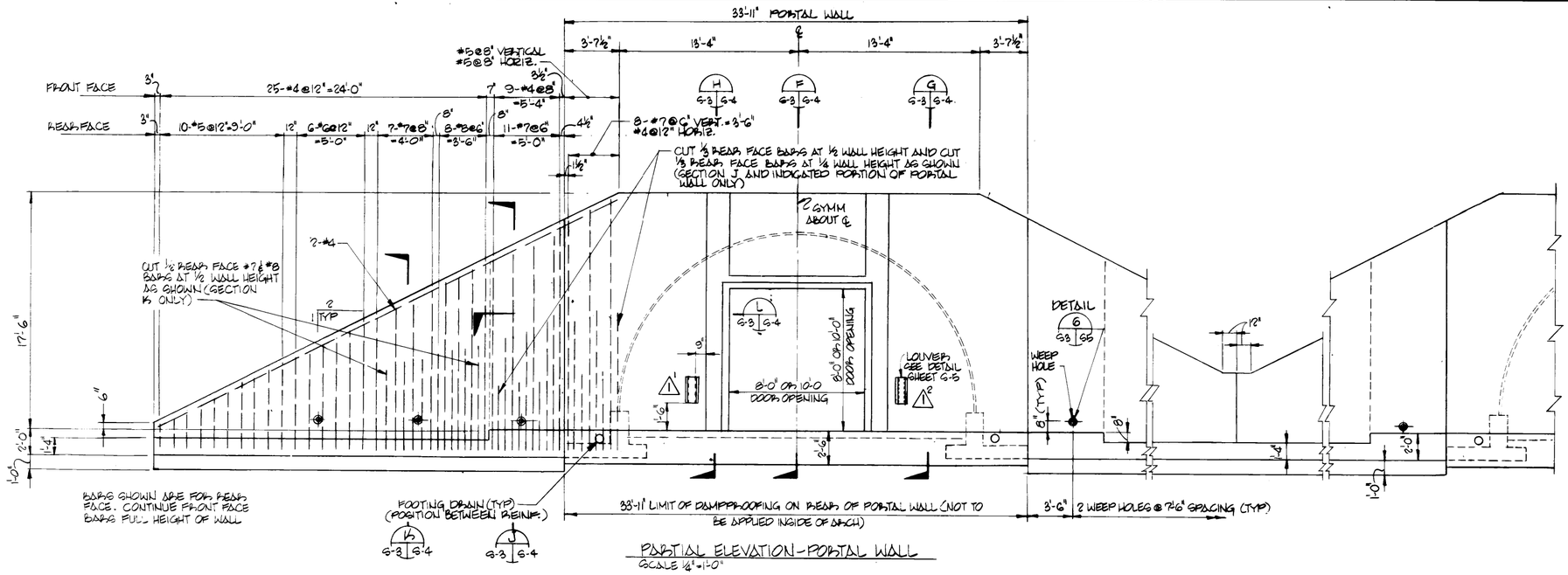
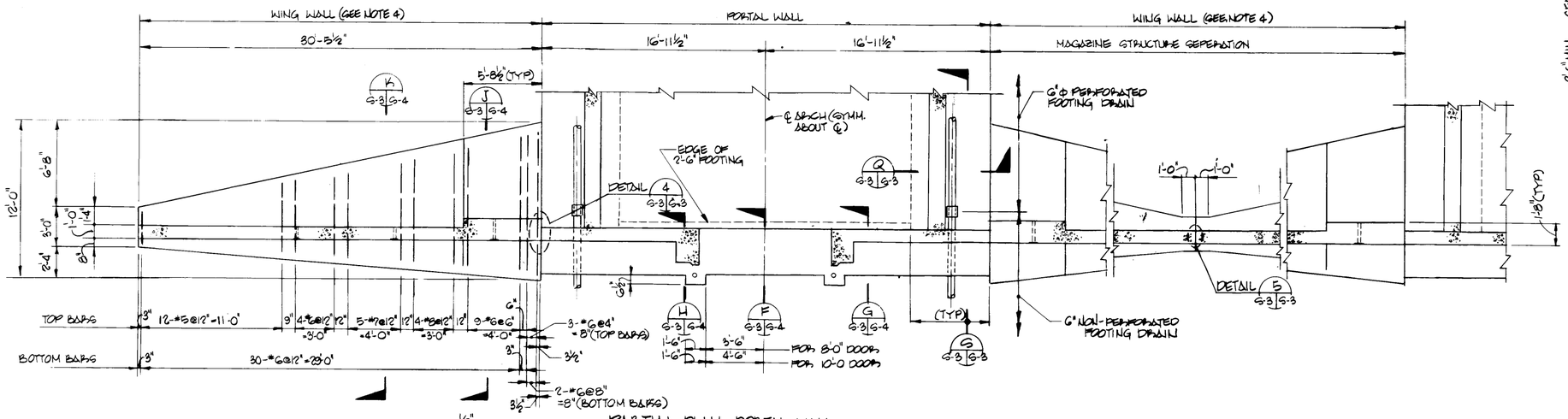


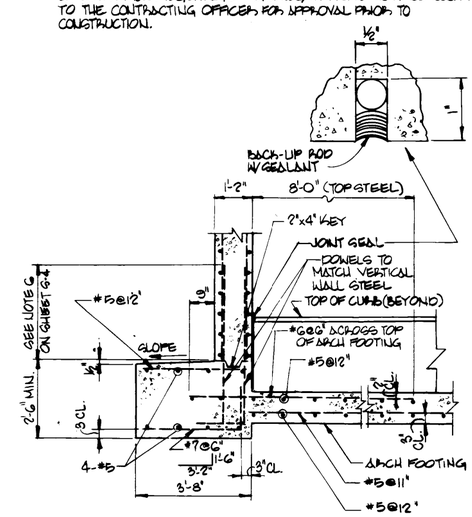
PORTAL ELEVATION-PORTAL WALL
SCALE ¼"=1'-0"



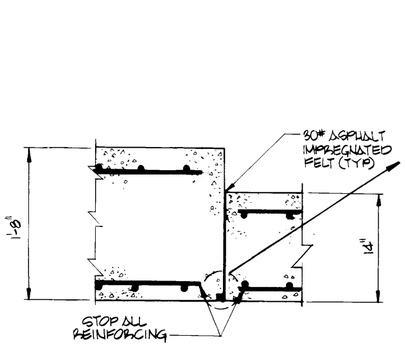
PORTAL PLAN-PORTAL WALL
SCALE ¼"=1'-0"

NOTES:

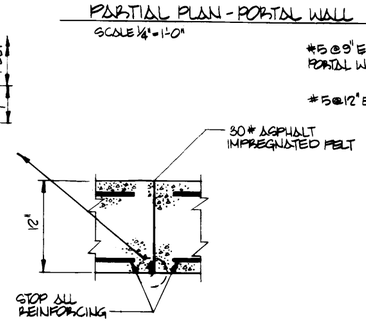
1. IN FROST AREAS PROVIDE NONFROST SUSCEPTIBLE MATERIAL UNDER HEADWALL FOOTING TO FULL DEPTH OF FROST PENETRATION, OR LOCATE BOTTOM OF FOOTING BELOW FROST PENETRATION DEPTH.
2. IF, AS A RESULT OF THE FOUNDATION INVESTIGATION OR LOCAL FROST CONDITIONS, IT IS DETERMINED THAT ANY OR ALL WALL FOOTINGS MUST BE LOWERED, THE APPROPRIATE WALL AND FOOTING DESIGNS MUST BE CHECKED AND ADJUSTED AS REQUIRED TO SUIT THESE CONDITIONS.
3. FOOTINGS ARE SIZED FOR A SOIL BEARING VALUE OF 3000 PSF. FOOTINGS MUST BE REDESIGNED IF THE SOILS INVESTIGATION DOES NOT CONFIRM THIS MINIMUM BEARING CAPACITY.
4. ALTERNATE MATERIALS AND/OR SYSTEMS MAY BE SUBMITTED FOR ACCEPTANCE AS A SUBSTITUTE FOR POURED-IN-PLACE WING WALLS, PROVIDED THEY ARE SHOWN TO BE STRUCTURALLY ADEQUATE AND COST EFFECTIVE. ANY ALTERNATE MATERIAL/SYSTEMS MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL PRIOR TO CONSTRUCTION.



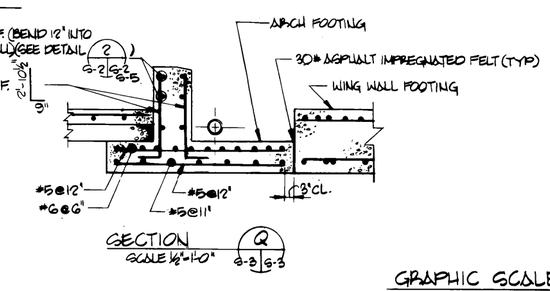
SECTION G
SCALE ½"=1'-0"



DETAIL 4
SCALE 1½"=1'-0"



DETAIL 5
SCALE 1½"=1'-0"



SECTION Q
SCALE 1½"=1'-0"

GRAPHIC SCALES
¼"=1'-0"
1½"=1'-0"

Symbol	Description	Date	Approved
1	GENERAL REVISIONS	20 JUN 80	

Revisions

U.S. ARMY ENGINEER DIVISION, HUNTSVILLE
CORPS OF ENGINEERS
HUNTSVILLE, ALABAMA

Site adapt A/E :

US Army Corps of Engineers

MAGAZINE, STEEL SEMICIRCULAR-ARCH, EARTH-COVERED

PORTAL WALL-PLAN, ELEVATION & SECTIONS

Dwn. by :	Ckd. by :	Reviewed by :	Date :	Sheet reference number :	Design file no. :
RDP	CMB	Paul H. Williams		S-3	30088

Approved by : Russell R. Eyer

Drawing code : STD 421-80-01

Rev.

Sheet 4 of 11