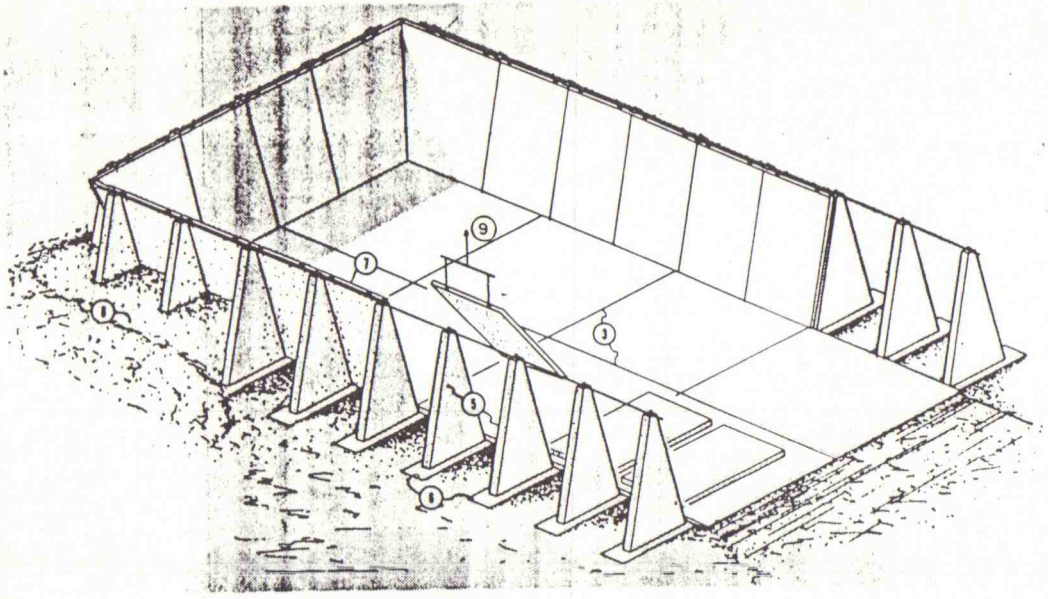
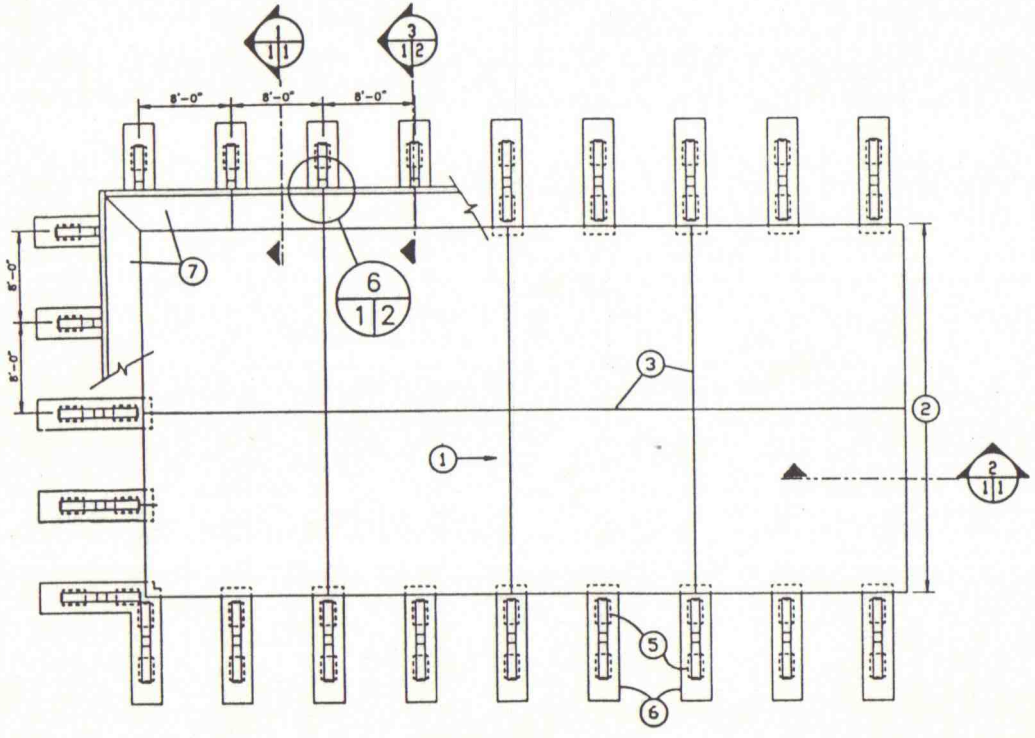
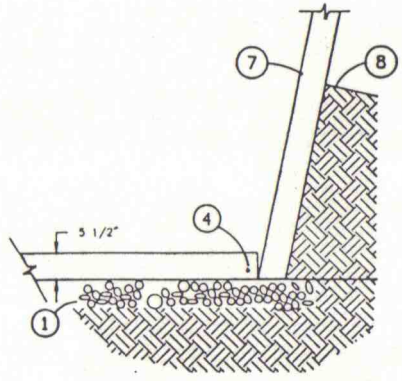
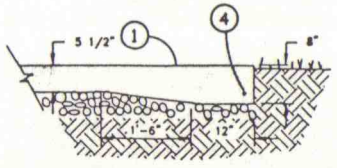




FLOOR PLAN



FLOOR EDGE DETAIL



FLOOR EDGE DETAIL

NOTES

1. CONCRETE FLOOR SLAB 5 1/2", OVER 6" TO 8" GRAVEL BASE; SLOPE AT LEAST 1/8" PER 1'.
2. FLOOR SLAB, WITH IS ANY MULTIPLE OF 8'-0"; MINIMUM WITH IS 2 TIMES WALL HEIGHT TO ALLOW SPACE FOR CASTING WALL PANELS
3. CRACK CONTROL JOINTS GROOVED OR SAWN 1" INTO FLOOR SLAB 16' OC BOTH WAYS.
4. CONTINUOUS #5 REBAR, STOPS AT 3 LOCATE REBAR 2" IN FROM EDGE AND UP FROM BOTTOM OF SLAB.
5. BUTTRESS ON LEVELLING PADS.
6. BUTTRESS FOOTING.
7. CONCRETE WALL PANELS, TIED TO TOP OF BUTTRESSES.
8. BACKFILL, MINIMUM 3'-4" DEEP.
9. LIFT SIDES IN PLACE AS SHOWN.

SPECIFICATIONS

UNLESS OTHERWISE SPECIFIED, ALL CAST-IN-PLACE CONCRETE IS TO BE AT LEAST 4000 PSI @ 28 DAYS, 7% AIR ENTRAINED, 4" SLUMP, 3/4" MAX. AGGREGATE SIZE; USE SULPHATE RESISTANT CEMENT WITH ALKALI SOILS.

ALL REINFORCING STEEL TO BE AT LEAST 60 000 PSI YEILD STRENGTH DEFORMED BARS; PROVIDE 2" CONCRETE COVER REINFORCING STEEL.

CONCRETE TO BE CURED IN FORMS, KEEPING EXPOSED SURFACES CONTINUOUSLY DAMP BY FREQUENT SPRINKLING OR COVER THE SURFACE WITH WETTED BURLAP; MINIMUM CURING TIMES AS FOLLOWS:

AVERAGE CURING TEMPERATURE	NORMAL PORTLAND CEMENT	HIGH EARLY STRENGTH CEMENT
ABOVE 68°F	5 DAYS	3 DAYS
50° - 68°F	7 DAYS	5 DAYS
BELOW 50° F	(SPECIAL PRECAUTIONS REQUIRED)	

ALL EXPOSED STEEL TO BE GALVANIZED OR PAINTED TO RESIST CORROSION.

CONCRETE REQUIREMENTS, ft^3

	WALL HEIGHT			
	20 ft	16 ft	12 ft	8 ft
FOOTING	85.1	58.6	37.5	31.5
BUTTRESS	74.8	49.8	30.5	15.6
WALL PANEL	74.2	60.4	44.5	29.6

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BUTTRESSED CONCRETE HORIZONTAL SILO 8-20 ft. HIGH

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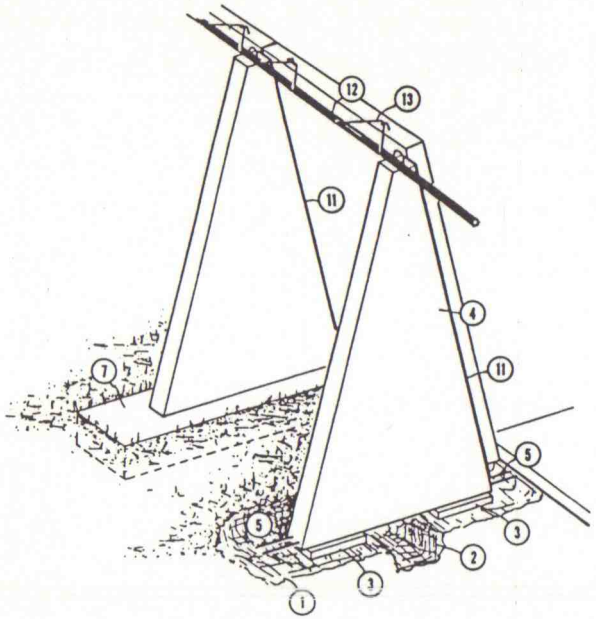
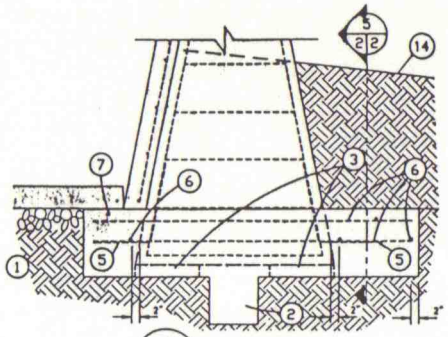




4 / 2 2 FOOTING DETAIL

1 undisturbed soil

2 footing key 12" x 12"

3 buttress levelling pads, 3" thick

4 concrete buttress, see reinforcing on sheet 3

5 #8 x 3'-0" bent rebar from buttress, see sheet 3

6 #5 rebars around buttress (4 sides)

7 concrete footing, level under floor; oil edge of floor before placing concrete; footing width is: 5'-0" for 20' wall
4'-0" for 16' wall
3'-0" for 12' wall
3'-0" for 8' wall

8 wall panel, see reinforcing on sheet 3, tie to buttress

9 1 1/4" foam backing rod

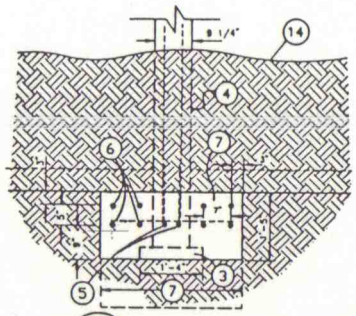
10 1/2" deep caulking bead

11 1/2" ethafoam gasket (2 layers if base is very rough)

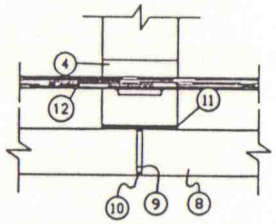
12 1 1/2" galv. steel pipe, weld to buttress lifting loop as soon as each buttress is plumb

13 #4 rebar through wall panel lifting loop and weld to 12

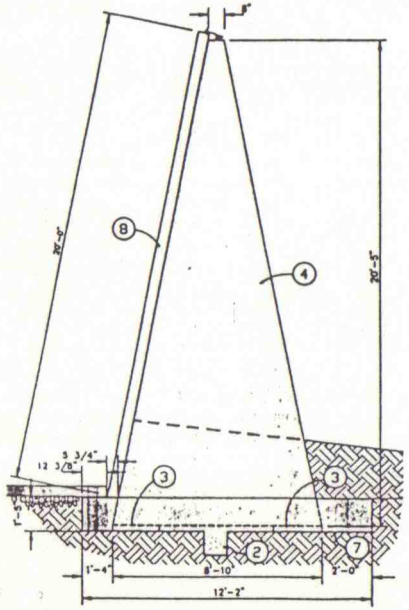
14 backfill, minimum 3'-4"



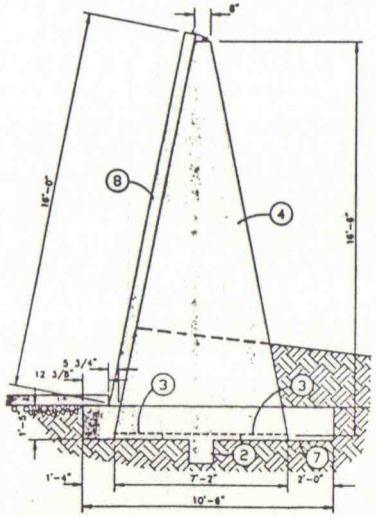
5 / 2 2 FOOTING DETAIL



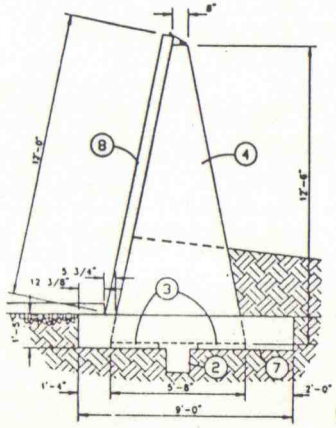
6 / 1 2 PANEL JOINT DETAIL



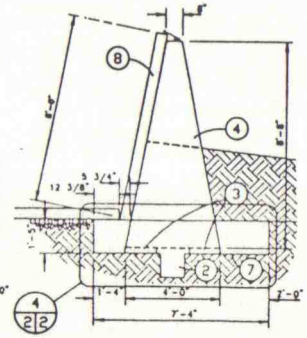
3 / 1 2 SECTION THRU 20' WALL



3 / 1 2 SECTION THRU 16' WALL



3 / 1 2 SECTION THRU 12' WALL



3 / 1 2 SECTION THRU 8' WALL

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BUTTRESSED CONCRETE HORIZONTAL SILO 8-20 ft. HIGH

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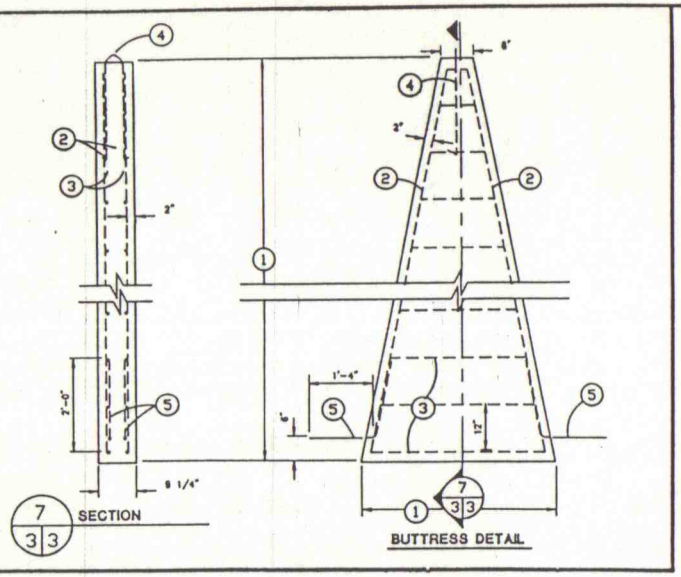
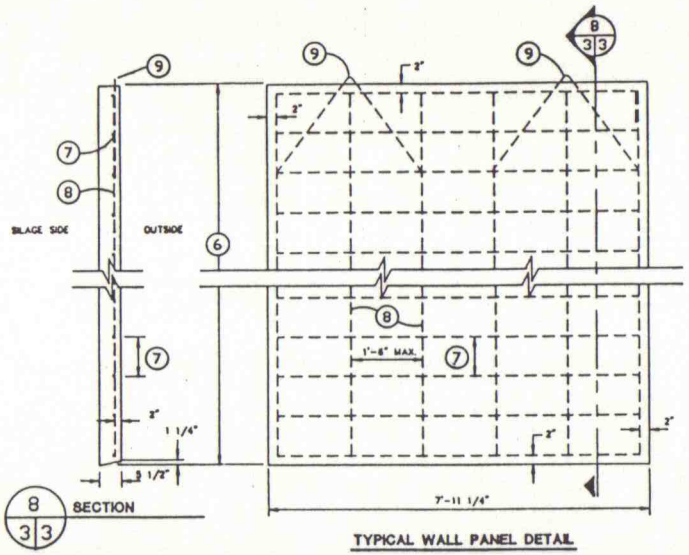




1 concrete buttress height varies, see sheet 2

2 3 - #8 vertical rebars

3 #5 stirrups @ 12" oc

4 #5 x 5'-0" bent rebars

5 #8 x 3'-0" rebar bent and tied to (2)

6 concrete wall panel, height varies: 20', 16', 12', 8'

7 #5 horizontal rebars:
@ 10" oc for 20' wall
@ 12" oc for 16' wall
@ 16" oc for 12' & 8' wall

8 #5 vertical rebars @ 18" oc max.

9 #5 x 5'-0" bent rebars, tied to (7)

10 dimension varies:
3'-11" for 20' wall
3'-1 1/4" for 16' wall
2'-4 1/4" for 12' wall
1'-6 5/8" for 8' wall

11 #5 horizontal rebars, for corner panels only (same spacing as (7))

12 #5 vertical rebars, for corner panels only (same spacing as (8))

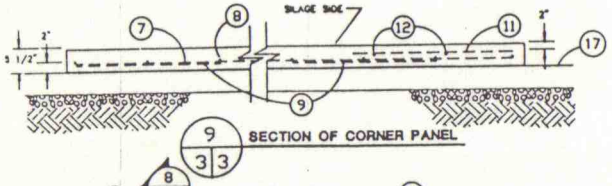
13 end wall corner panel, right side

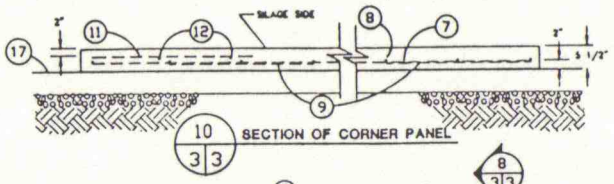
14 end wall corner panel, left side

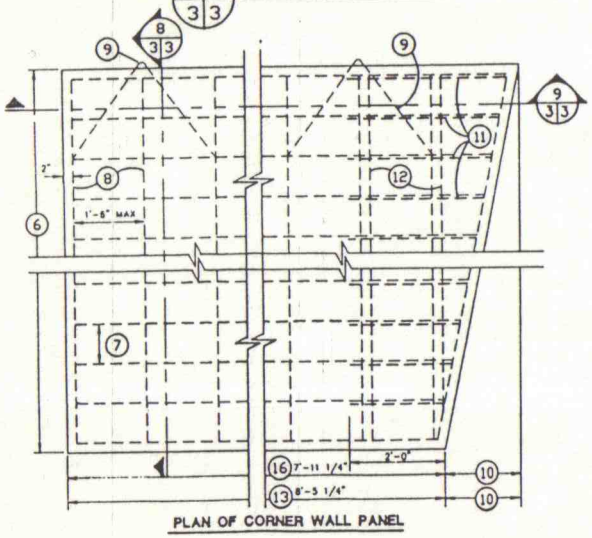
15 side wall corner panel, right side

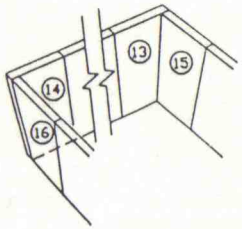
16 side wall corner panel, left side

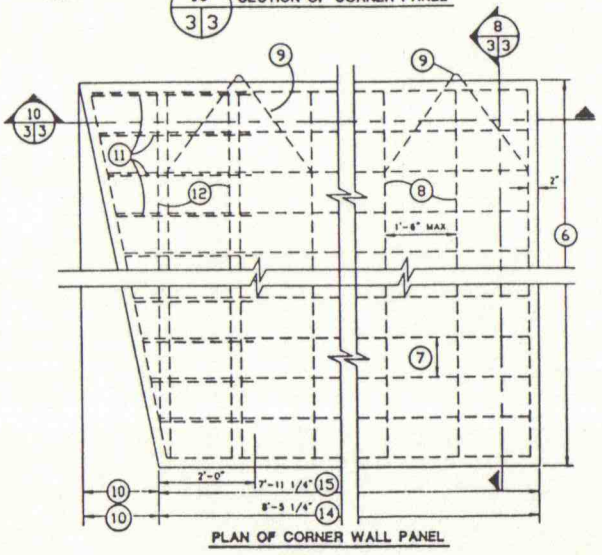
17 silo floor, use for pouring wall panels











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