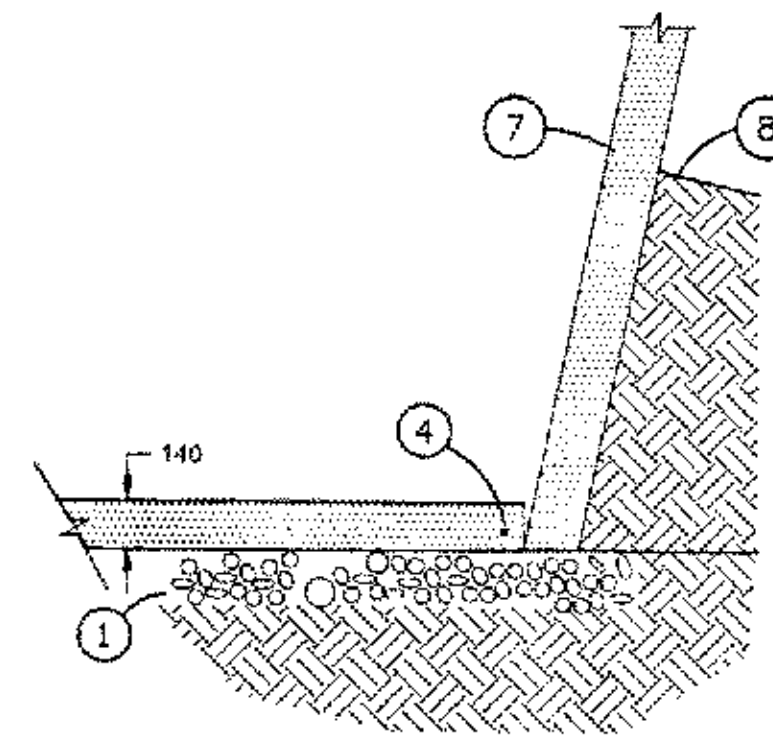
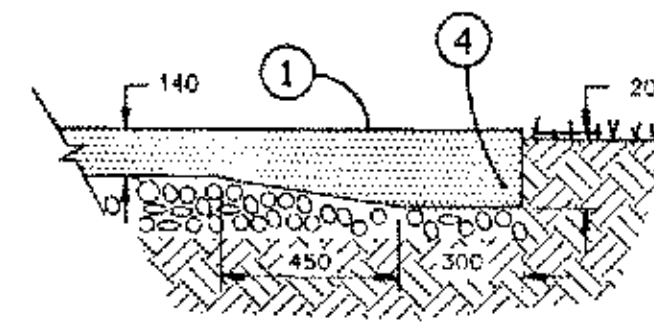


**FLOOR PLAN**  
SCALE: 1 mm = 100 mm



**1 FLOOR EDGE DETAIL**  
SCALE: 1 mm = 20 mm



**2 FLOOR EDGE DETAIL**  
SCALE: 1 mm = 20 mm

ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS OTHERWISE SPECIFIED

- 1 concrete floor slab 140 mm, over 150 to 200 mm gravel base; slope at least 300 mm per 30 m of length (1:100)
- 2 floor slab; width is any multiple of 2400 mm; minimum width is 2 times wall height to allow space for casting wall panels
- 3 crack control joints grooved or sawn 25 mm into floor slab 4800 mm oc both ways
- 4 continuous 15M rebar, stops at ③
- 5 buttress on levelling pads
- 6 buttress footing
- 7 concrete wall panels, tied to top of buttresses
- 8 backfill, minimum 1000 mm deep

**SPECIFICATIONS**

Unless otherwise specified, all cast-in-place concrete is to be at least 30 MPa @ 28 days, 7% air entrained, 100 mm slump, 20 mm max. aggregate size; use sulphate resistant cement with alkali soils

All reinforcing steel to be at least Grade 400 deformed bars; provide 50 mm concrete cover over reinforcing steel.

Concrete to be cured in forms, keeping exposed surfaces continuously damp by frequent sprinkling or covering the surface with wetted burlap; minimum curing times as follows:

average curing temperature	normal portland cement	high early strength cement
above 20°C	5 days	3 days
10° - 20°C	7 days	5 days
below 10°C	(special precautions required)	

All exposed steel to be galvanized or painted to resist corrosion

This plan is designed to meet the requirements of the Canadian Farm Building Code.

**CONCRETE REQUIREMENTS, m<sup>3</sup>**

	WALL HEIGHT			
	6 m	4.8 m	3.6 m	2.4 m
FOOTING	2.3	1.5	1.0	0.9
BUTTRESS	2.1	1.4	0.8	0.4
WALL PANEL	2.0	1.6	1.2	0.8

**ONE SET OF DRAWINGS AND LEAFLETS SHOULD INCLUDE:**

CPS sheet no.	sheet no.	Title
M-7435	-1-	Above ground horizontal silo
M-7435	-2-	Buttress and footing details
M-7435	-3-	Buttress & panel reinforcing details
<b>AND LEAFLET</b>		
M-7435		Above ground horizontal silo

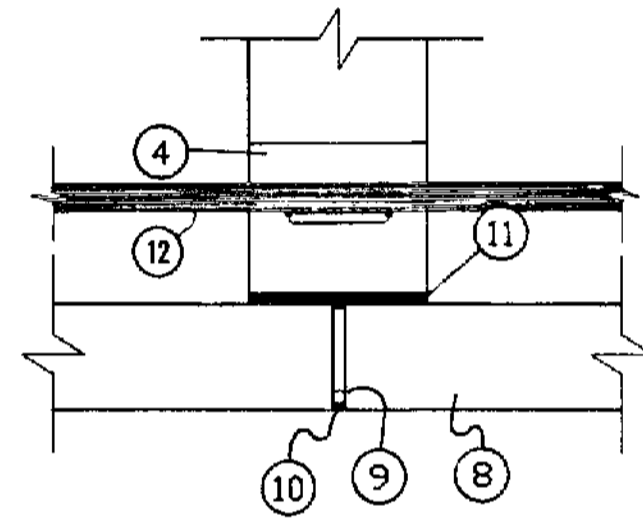
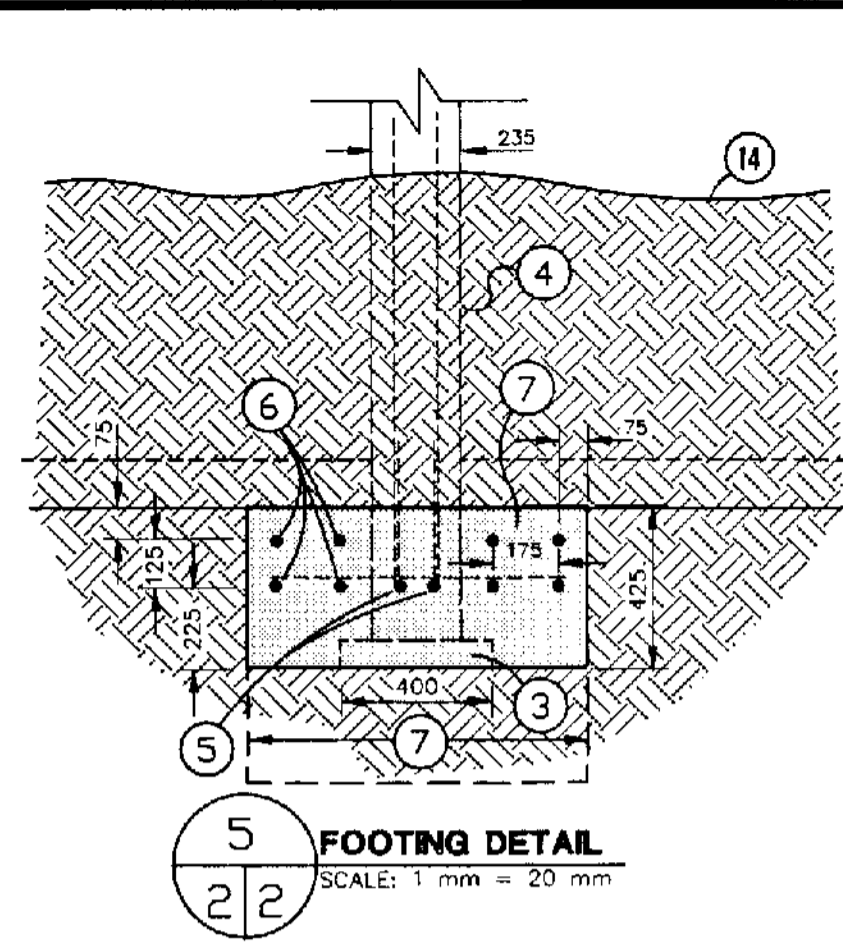
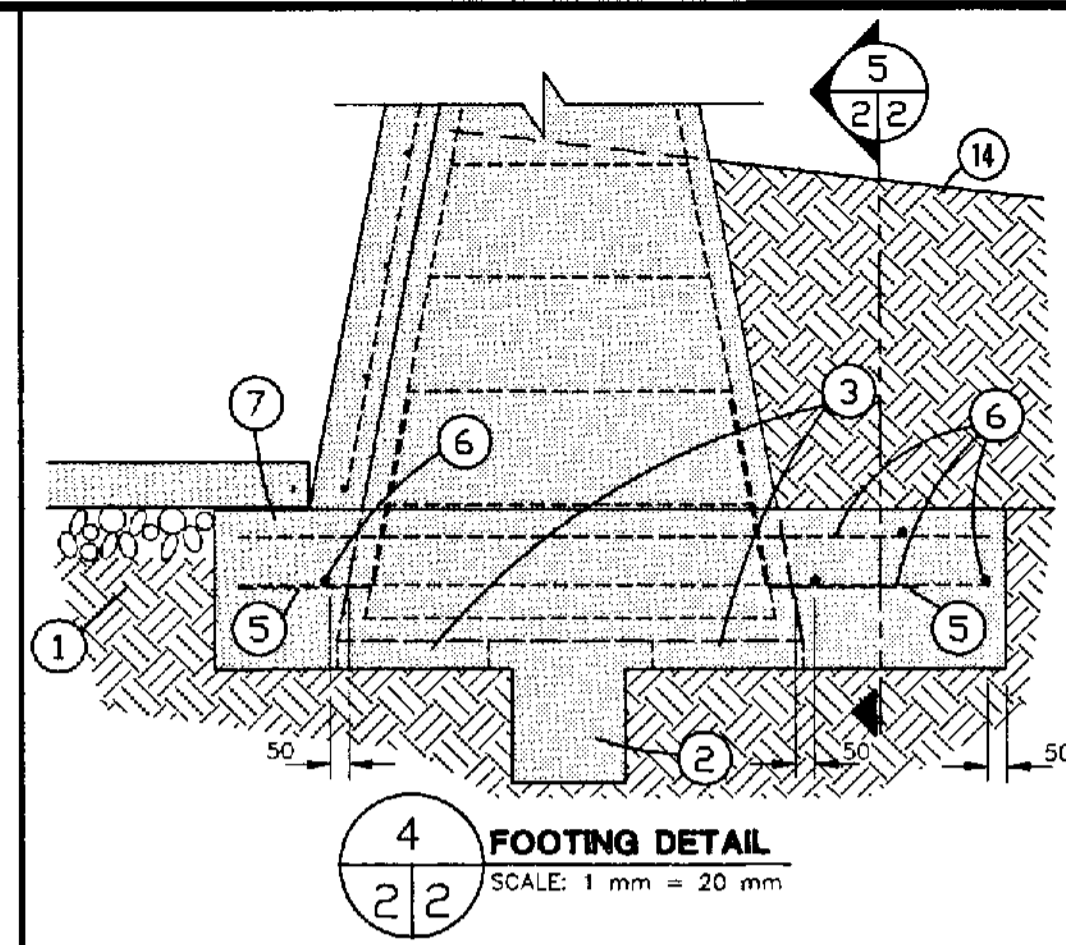
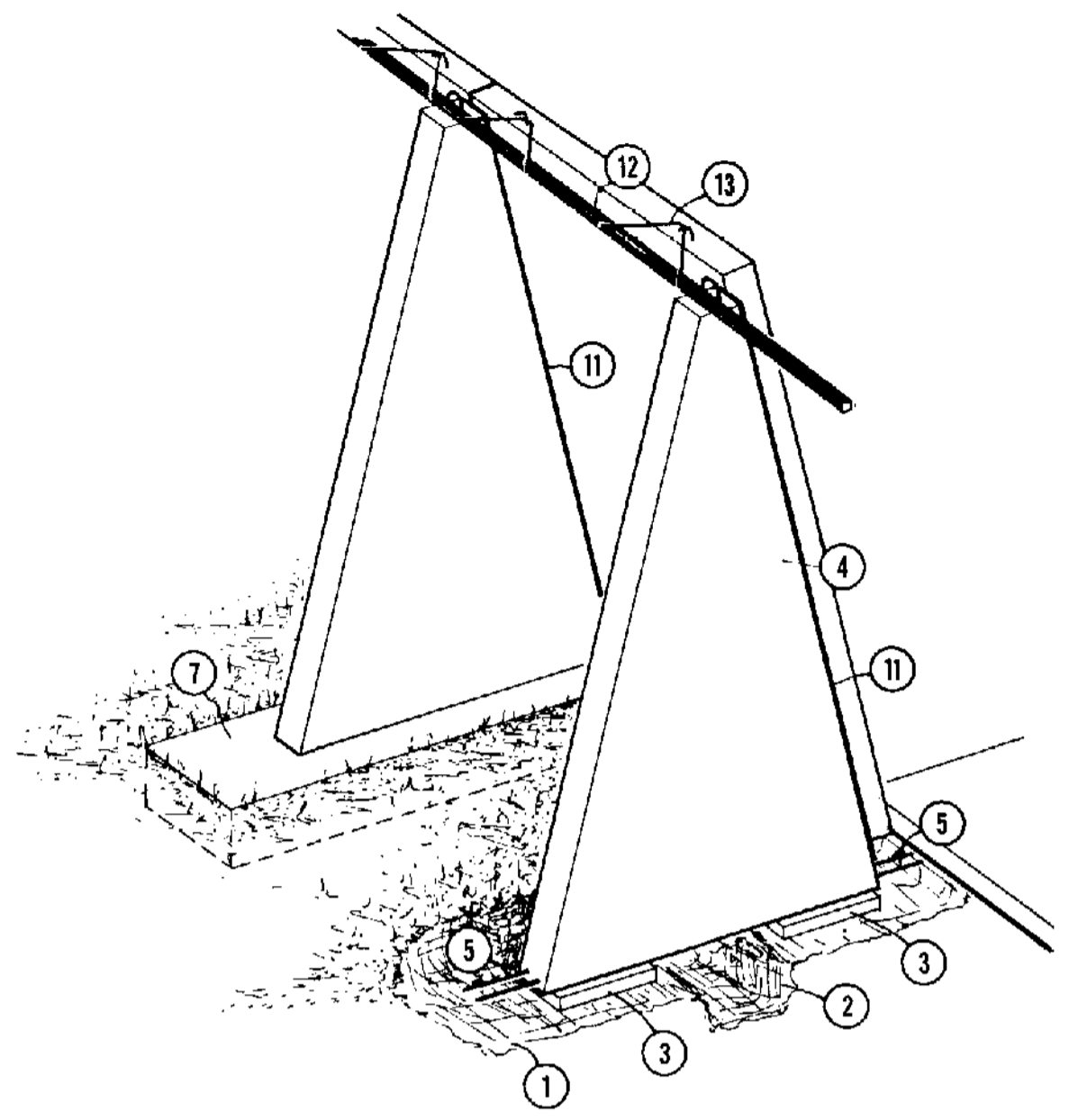
DESIGNED	D.I.M.	DATE	81 - 05	PLAN
DRAWN	D. BROWN	REVISED	88 - 05	<b>M-7435</b>
CHECKED	H.A.J.			SHEET 1 OF 3

**CANADA PLAN SERVICE**

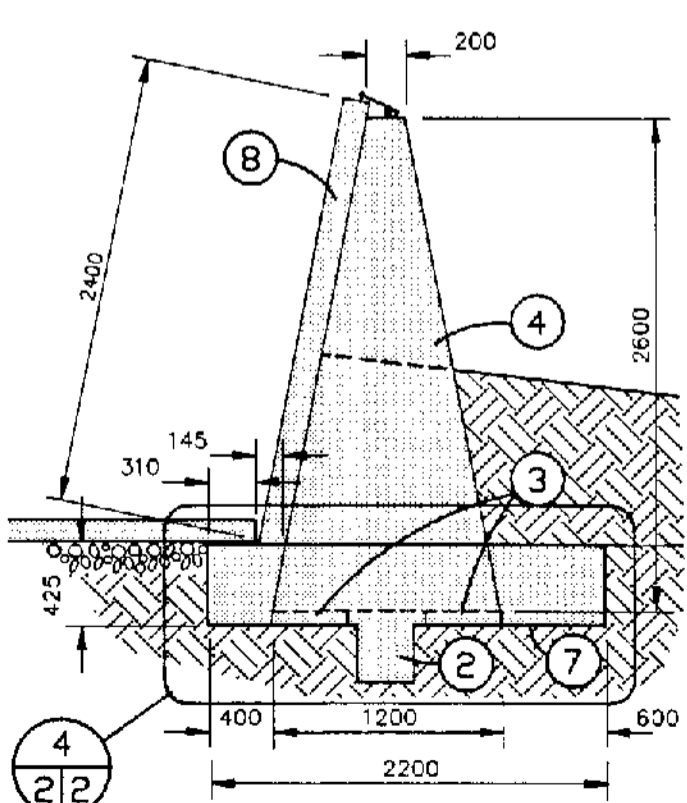
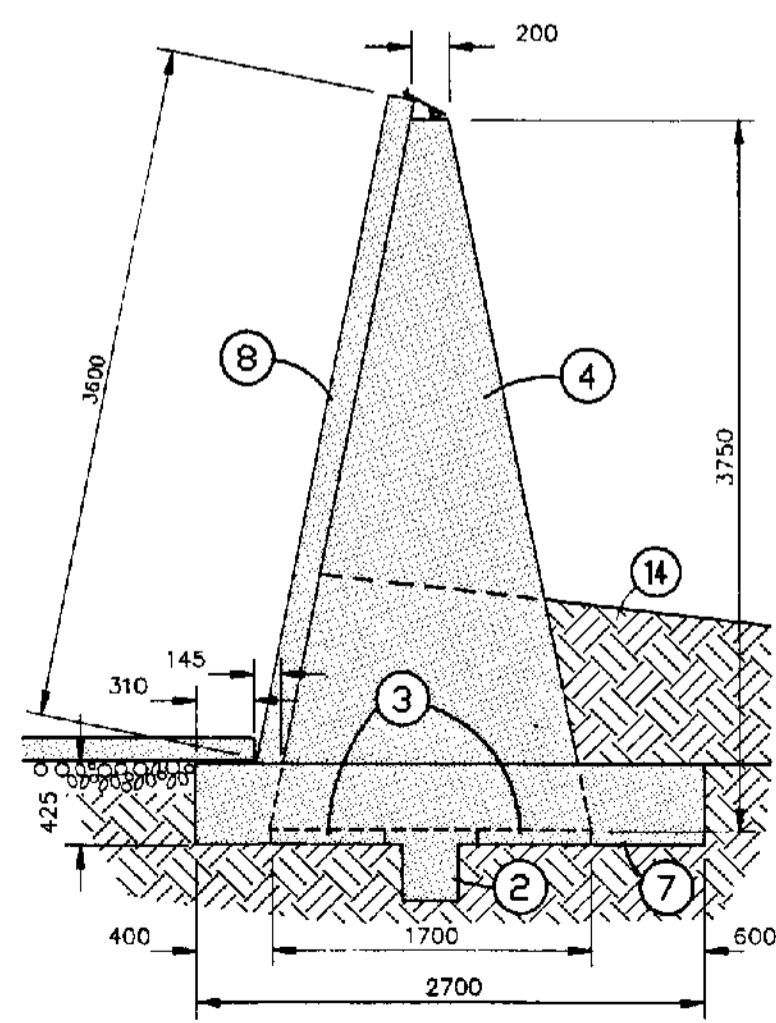
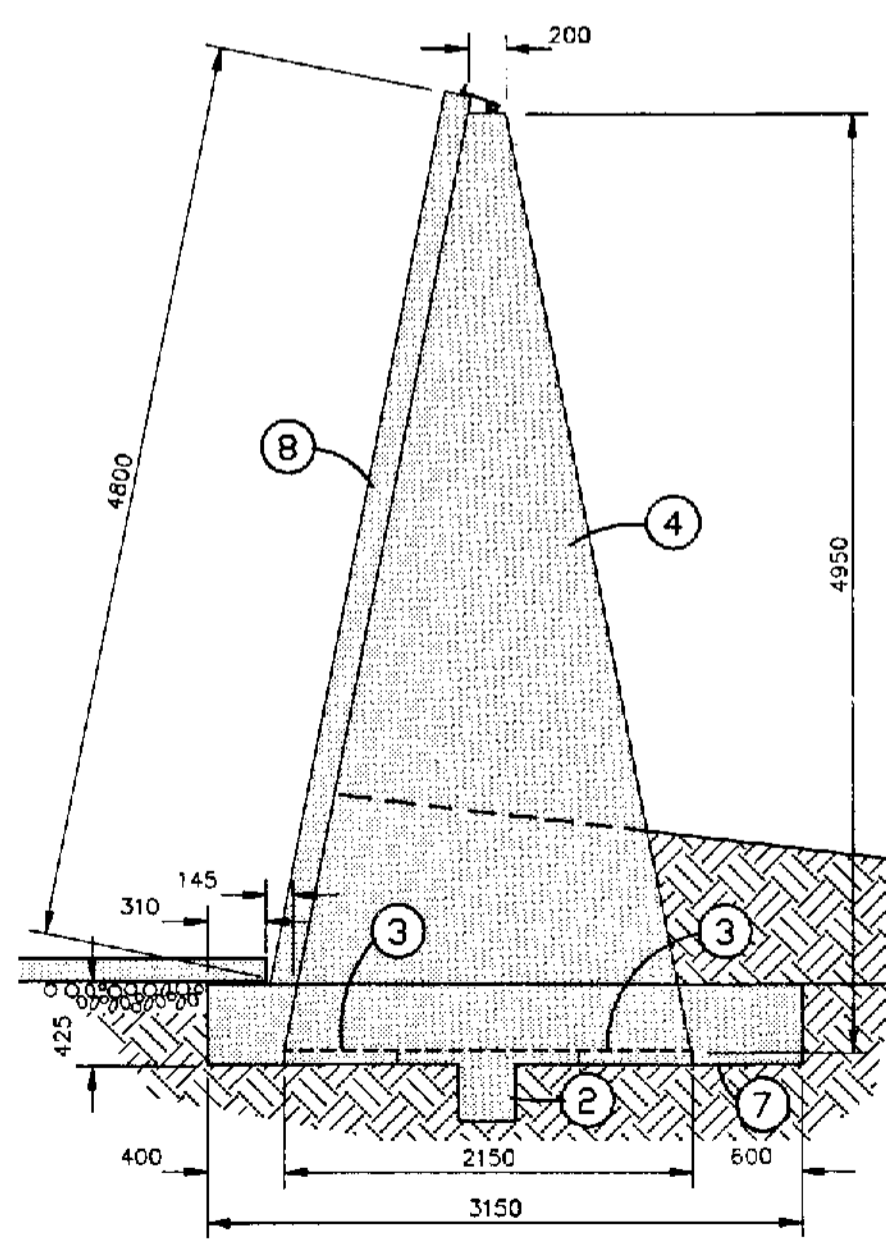
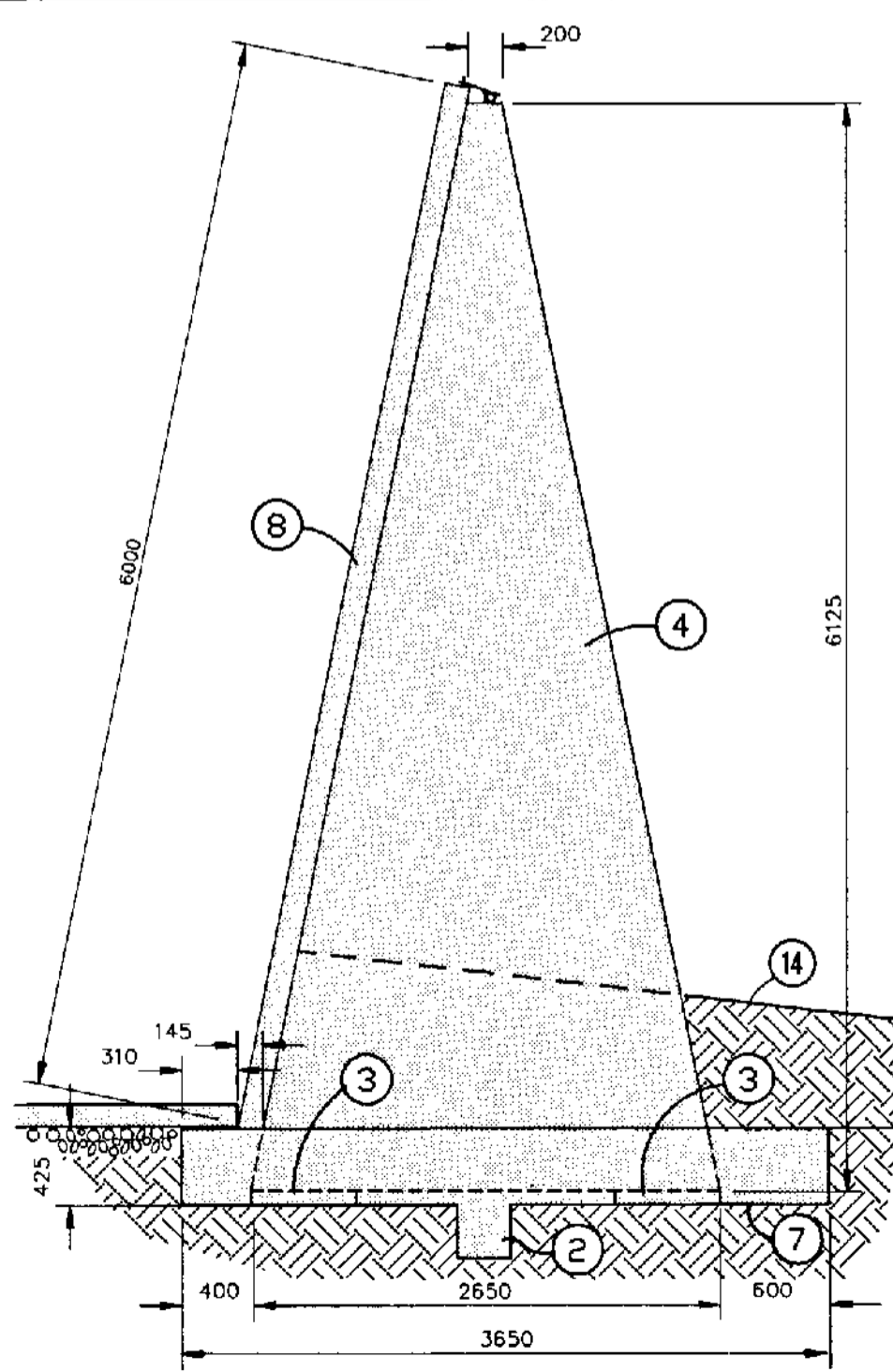
**ABOVE GROUND HORIZONTAL SILO**

DESIGNED	D.I.M.	DATE	81 - 05	<b>PLAN</b>
DRAWN	D. BROWN	REVISED	88 - 05	
CHECKED	H.A.J.			<b>M-7435</b>

SHEET 1 OF 3



- 1 undisturbed soil
- 2 footing key 300 x 300 mm
- 3 buttress levelling pads, 75 mm thick
- 4 concrete buttress, see reinforcing on sheet 3
- 5 25M x 900 mm bent rebar from buttress, see sheet 3
- 6 15M rebars around buttress (4 sides)
- 7 concrete footing, level under floor; oil edge of floor before placing concrete; footing width is:  
1500 mm for 6000 mm wall  
1200 mm for 4800 mm wall  
900 mm for 3600 mm wall  
900 mm for 2400 mm wall
- 8 wall panel, see reinforcing on sheet 3, tie to buttress
- 9 31 mm foam backing rod
- 10 13 mm deep caulking bead
- 11 13 mm 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 10M rebar through wall panel lifting loop and weld to 12
- 14 backfill, minimum 1000 mm

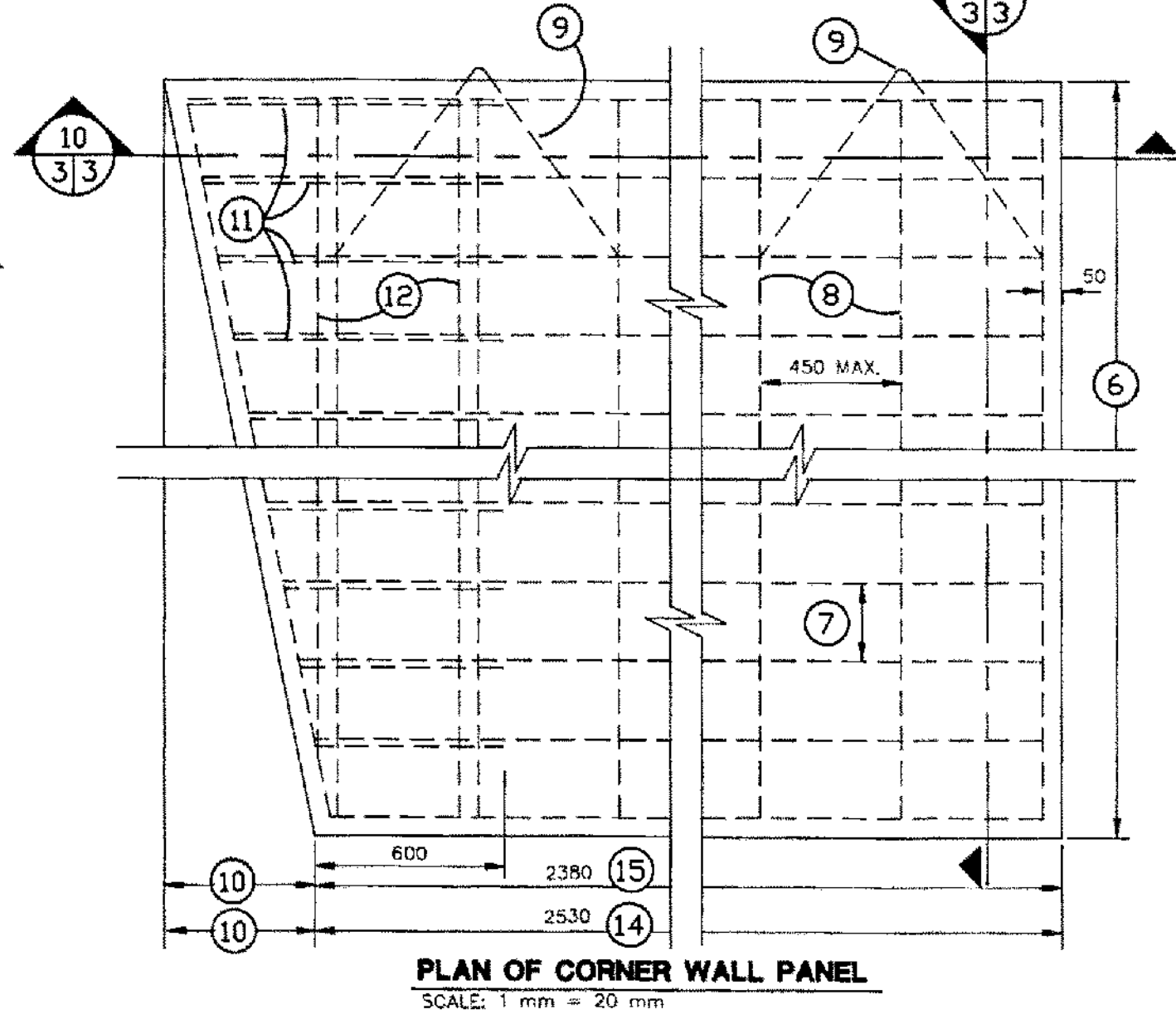
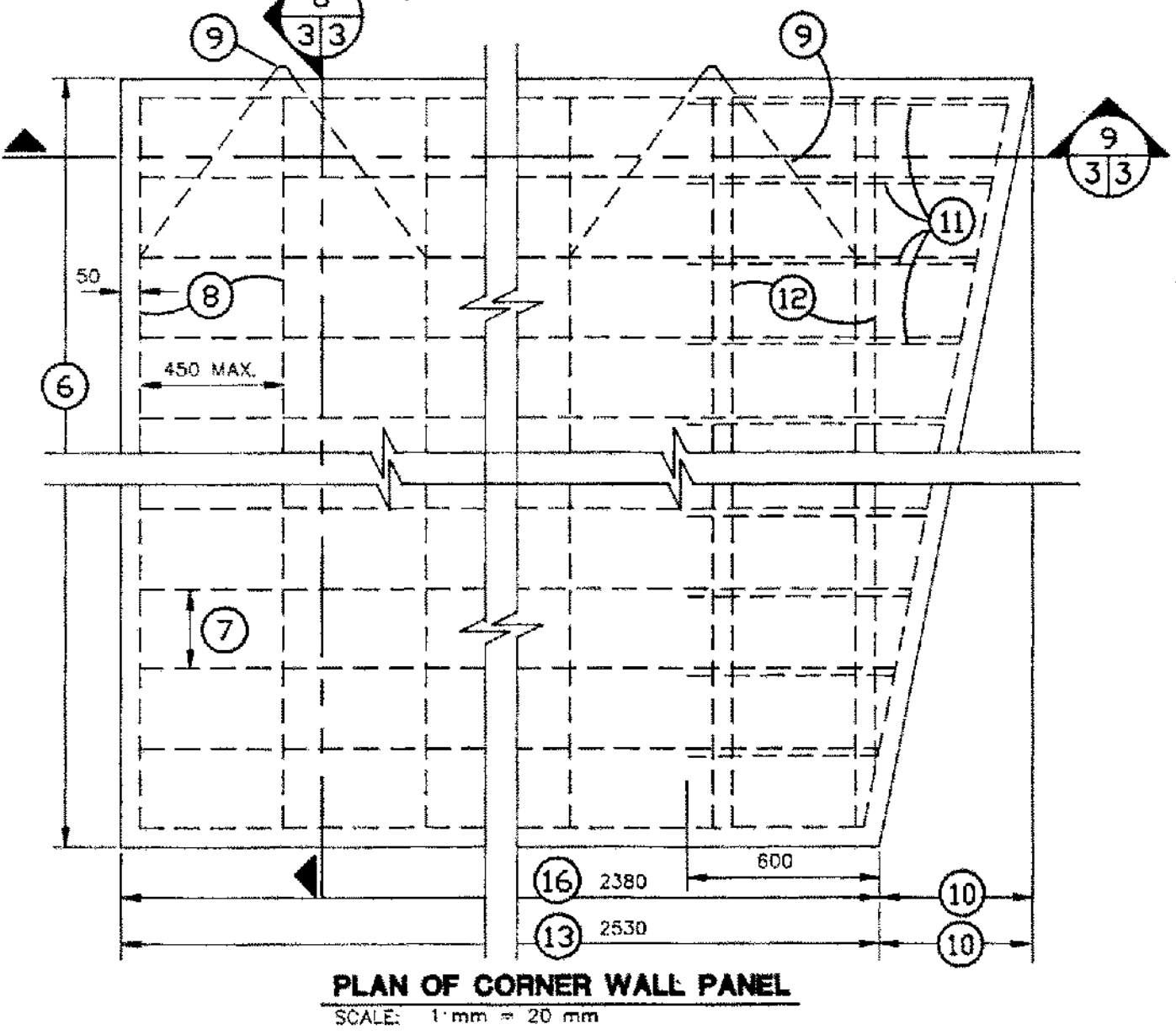
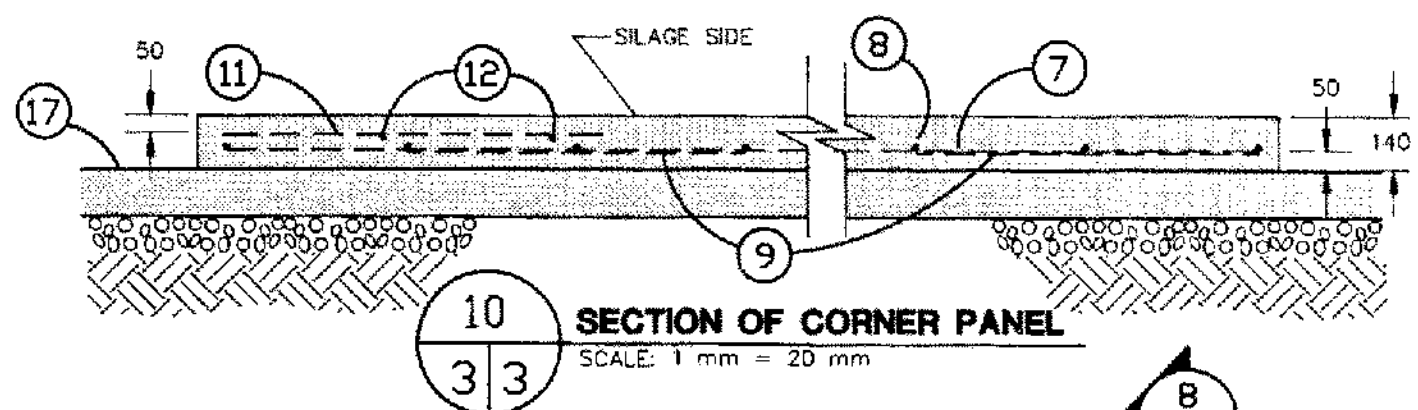
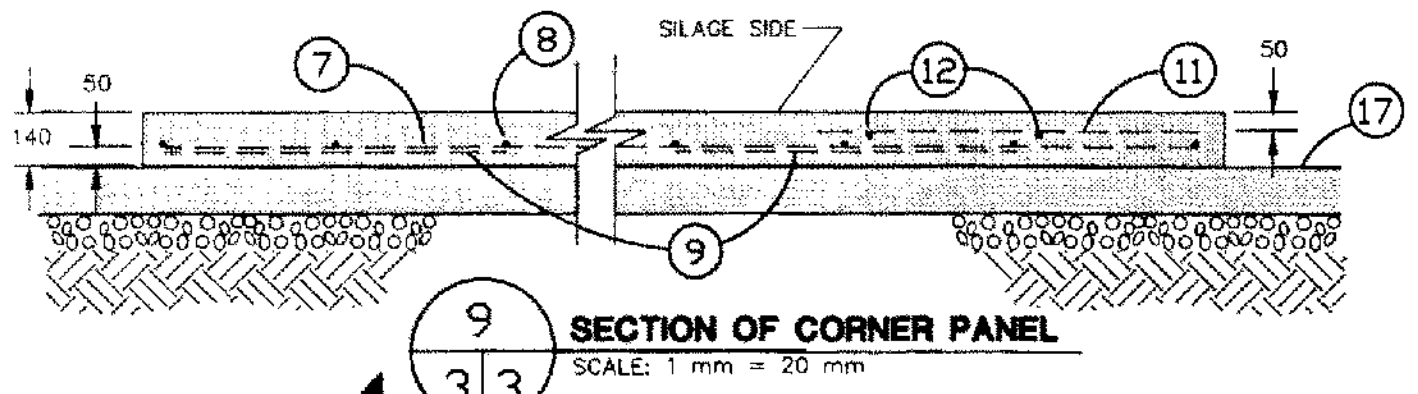
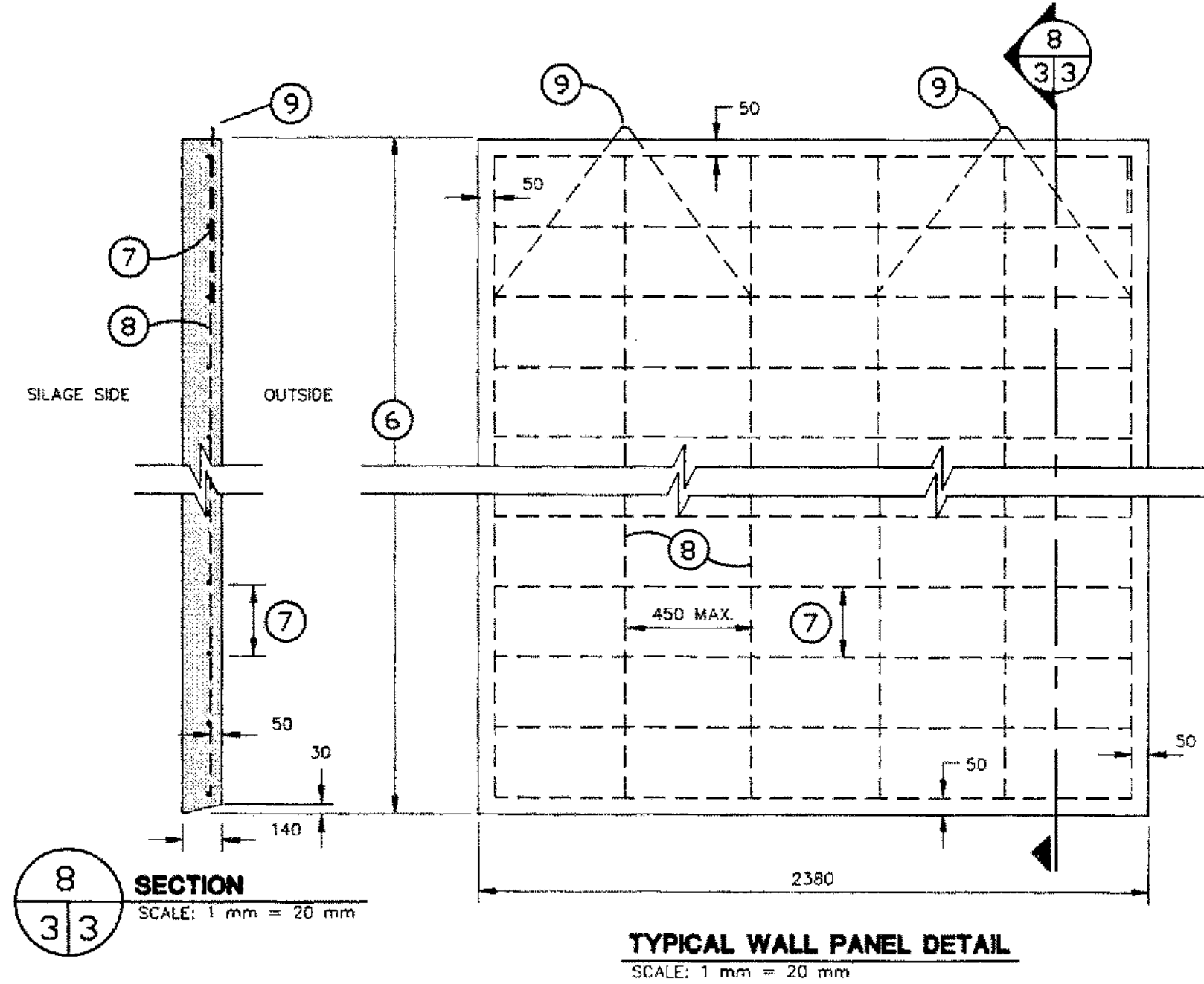
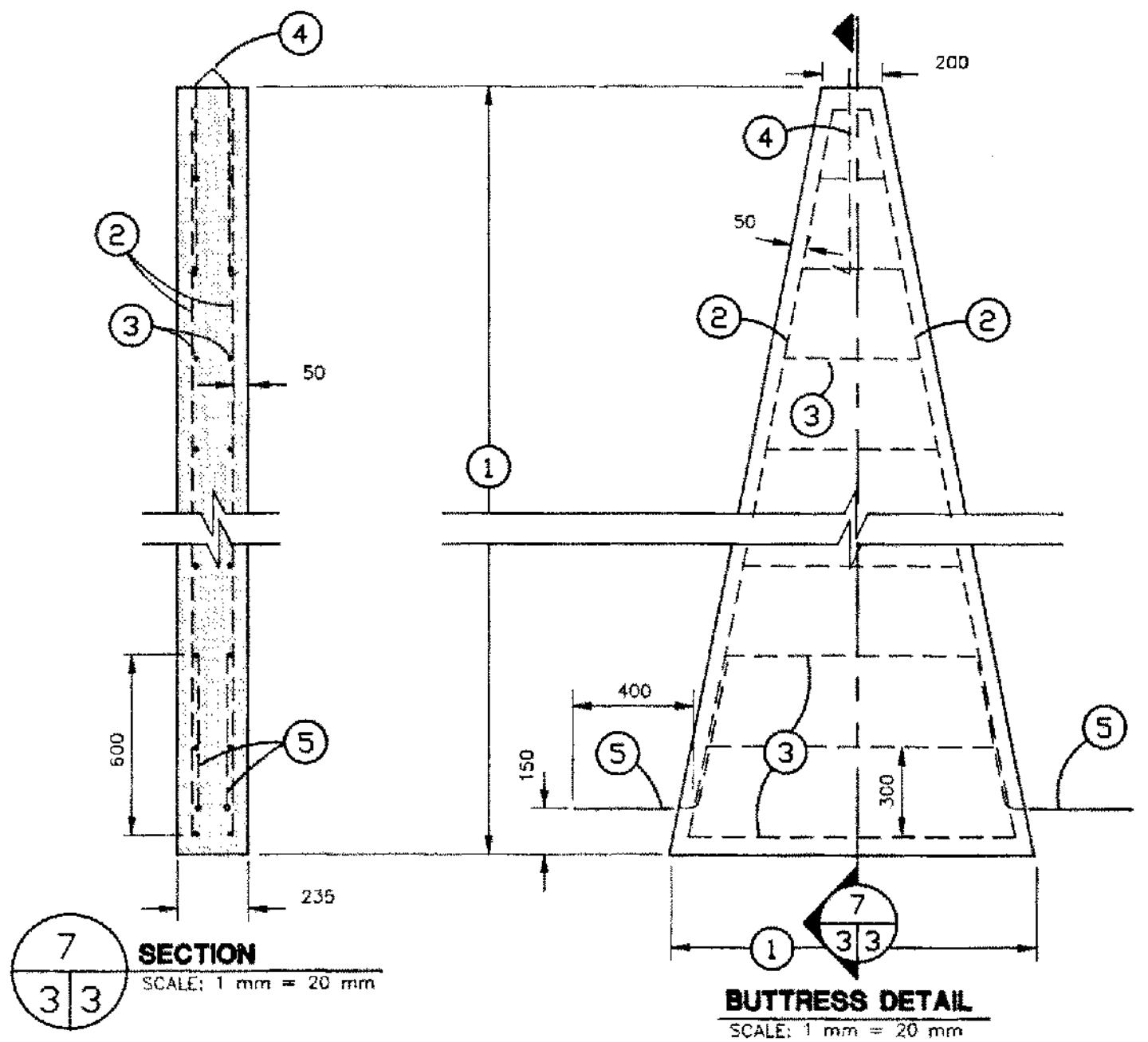


REVISED & RE-ISSUED	H.A.J.	88-05	D.I.M.
REVISIONS	CHECKED	DATE	APPROVED



**BUTRESS AND FOOTING DETAILS**

DESIGNED <i>D.I.M.</i>	DATE 81-06	<b>PLAN</b> <b>M-7435</b>									
DRAWN <i>D. BROWN</i>	REVISED 88-05										
TRACED	<table border="1"> <tr> <td>A</td> <td>DETAIL NUMBER</td> <td>A</td> </tr> <tr> <td>B</td> <td>ORIGINATES ON SHEET</td> <td>B</td> </tr> <tr> <td>C</td> <td>DRAWN ON SHEET</td> <td>C</td> </tr> </table>	A	DETAIL NUMBER	A	B	ORIGINATES ON SHEET	B	C	DRAWN ON SHEET	C	SHEET 2 OF 3
A	DETAIL NUMBER	A									
B	ORIGINATES ON SHEET	B									
C	DRAWN ON SHEET	C									
CHECKED <i>H.A.J.</i>											



- 1 concrete buttress height varies, see sheet 2
- 2 - 25M vertical rebars
- 3 15M stirrups @ 300 mm oc
- 4 15M x 1500 mm bent rebars
- 5 25M x 900 mm rebar bent and tied to ②
- 6 concrete wall panel, height varies: 6000 mm, 4800 mm, 3600 mm, 2400 mm
- 7 15M horizontal rebars:  
 @ 250 mm oc for 6000 mm wall  
 @ 300 mm oc for 4800 mm wall  
 @ 400 mm oc for 3600 & 2400 mm wall
- 8 15M vertical rebars @ 450 mm oc max.
- 9 15M x 1500 mm bent rebars, tied to ⑦
- 10 dimension varies:  
 1175 mm for 6000 mm wall  
 930 mm for 4800 mm wall  
 705 mm for 3600 mm wall  
 465 mm for 2400 mm wall
- 11 15M horizontal rebars, for corner panels only  
 (same spacing as ⑦)
- 12 15M 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

SYW	REVISED & RE-ISSUED	H.A.J.	88-05	D.I.A.
	REVISIONS	CHECKED	DATE	APPROVED

**CANADA PLAN SERVICE**

**BUTTRESS & PANEL REINFORCING DETAILS**

DESIGNED	D.I.A.	DATE	81-06	<b>PLAN M-7435</b>
DRAWN	D. BROWN	REVISED	88-05	
TRACED				
CHECKED	H.A.J.			
DETAIL NUMBER _____ A ORIGINATES ON SHEET _____ B DRAWN ON SHEET _____ C				SHEET 3 OF 3