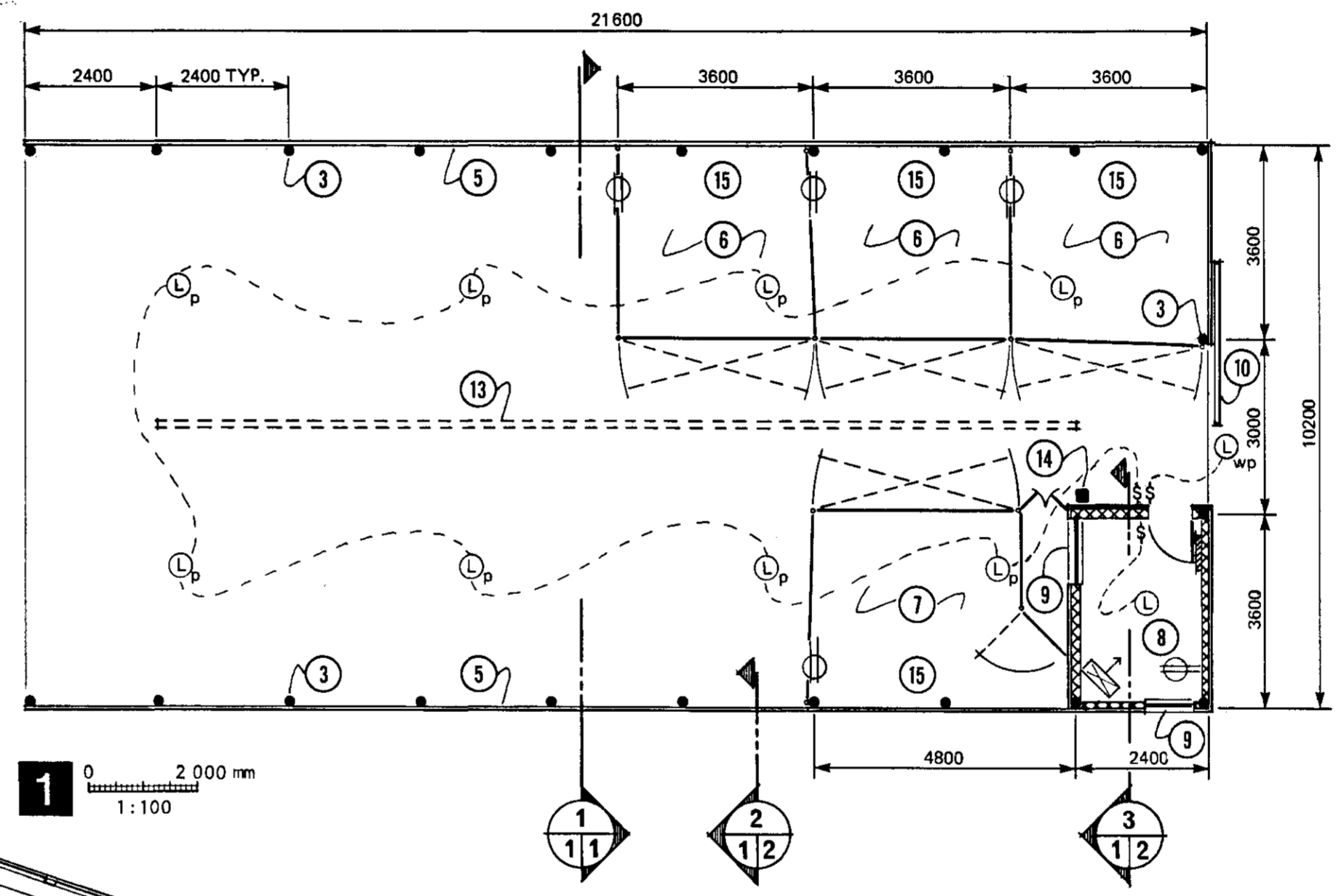
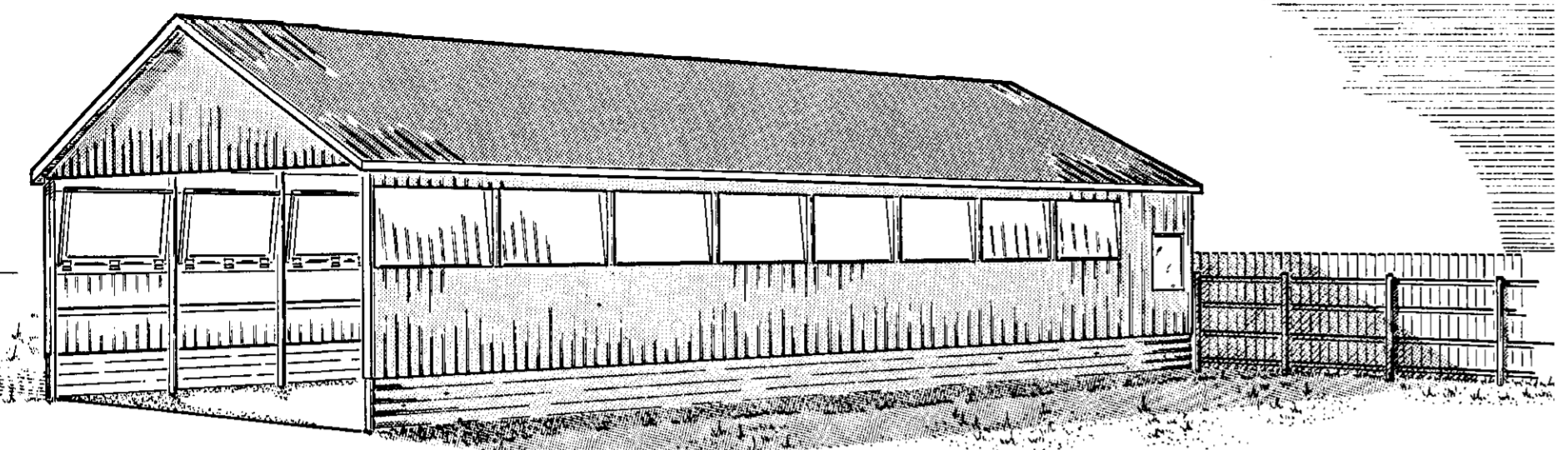


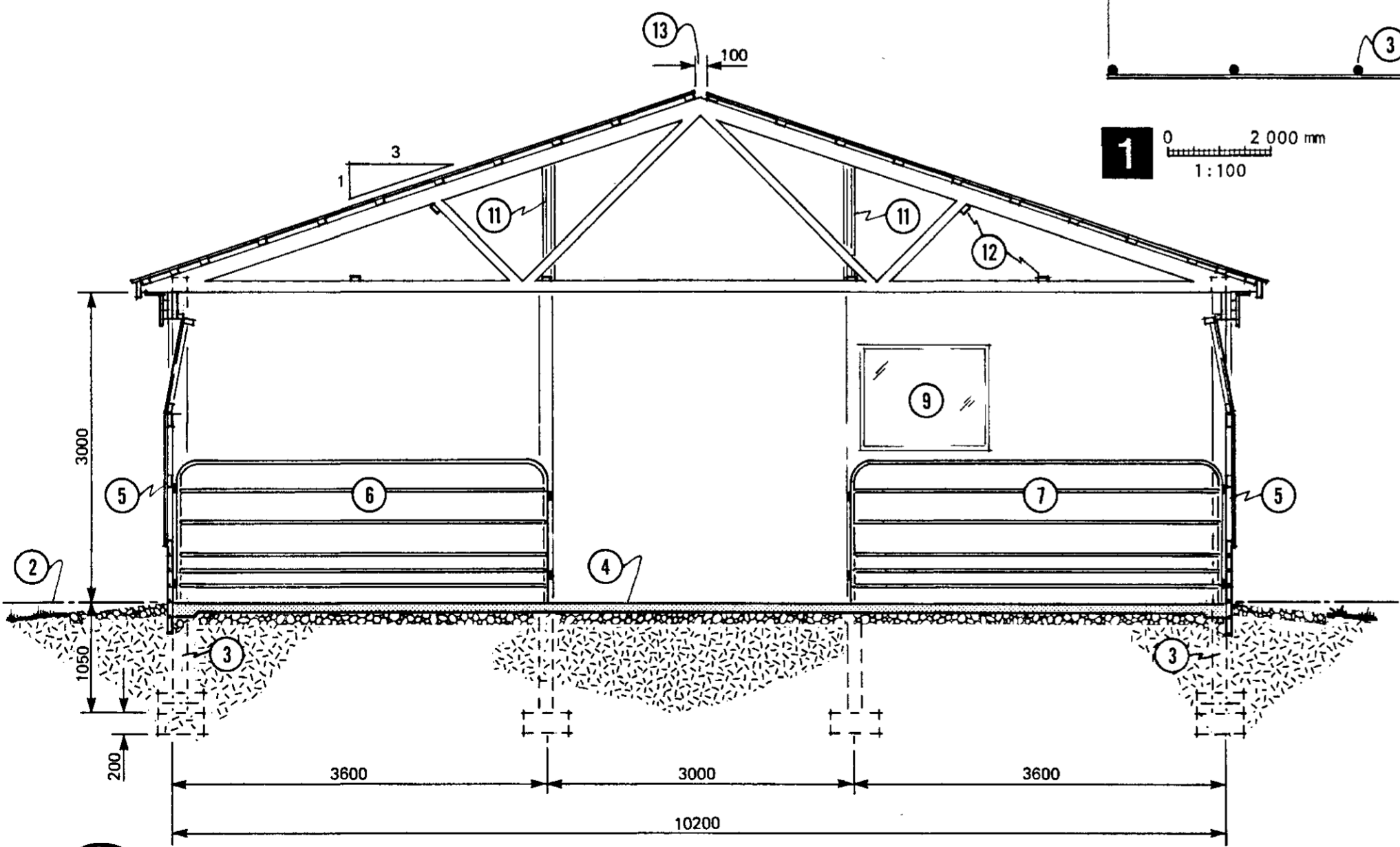
ALL DIMENSIONS ARE IN MILLIMETRES (MM) UNLESS OTHERWISE SPECIFIED

ONE SET OF DRAWINGS AND LEAFLETS SHOULD INCLUDE:

CPS no.	Sheet no.	Leaflet *	Title
M-1303	-1-		Calving barn
M-1303	-2-		Wall sections
AND			
M-1303	- -	*	Calving barn
M-9102	- -	*	Truss erection and bracing
M-9312	- -	*	Pole frame plate beam designs
M-9341	- -	*	Sliding doors



1 0 2 000 mm
1:100



1 0 1 000 mm
1:50

- 1 floor plan
- 2 datum line, top of floor
- 3 4200 mm pressure-treated round or rectangular poles (see [4], sheet 2)
- 4 100 mm conc. floor, optional in bedding area, on compacted gravel fill
- 5 exterior wall construction (see [14] sheet 2)
- 6 pen with removable hinged gates, resting on bedding pack
- 7 maternity pen, with chute and headgate
- 8 insulated office space, with electric heater
- 9 double glazed window; non-opening at interior barn location
- 10 3000 x 3000 mm sliding door, see M-9341
- 11 cross-bracing, each side of door, both ends of barn; see M-9341 for details
- 12 38 x 89 mm continuous truss stiffeners, see truss plan for exact locations
- 13 open ridge vent, stops 2400 mm from each end wall; soak exposed top and lower chord truss joints with wood preservative
- 14 frost free yard hydrant
- 15 for cold weather calving, use 1750W heaters, suspended from trusses

SPECIFICATIONS

Unless otherwise specified, all cast-in-place concrete is to be min. 30 MPa @ 28 days, 6% air-entrained

All exposed steel to be galvanized or painted to resist corrosion from moisture and manure gases

All wood indicated 'pressure-treated' is CCA pressure-treated to a net retention of 6.4 kg/m³ (ground contact specification, CSA-080 Wood Preservation)

All framing lumber is No. 2 (or better), S-P-F species group, unless otherwise specified

This plan conforms to the requirements of the Canadian Farm Building Code. The user of this plan must ensure that the design criteria indicated herein will meet all local design conditions, building regulations and special requirements.

For notes thus marked, engineer to select structural options to meet local climatic loads, soil bearing capacity and other special requirements.

ELECTRICAL

ceiling	wall	
(L)	(L)	Incandescent Lampholder
(L _p)	(L _p)	Incandescent Lampholder, Pigtail Type
(L _{wp})	(L _{wp})	Weatherproof Incandescent Lampholder
(O)	(O)	Duplex Convenience Outlet
(S)	(S)	Single Pole Switch
(S ₃)	(S ₃)	Three Way Switch
(H)	(H)	Fan Forced Heater
(D)	(D)	Distribution Panel

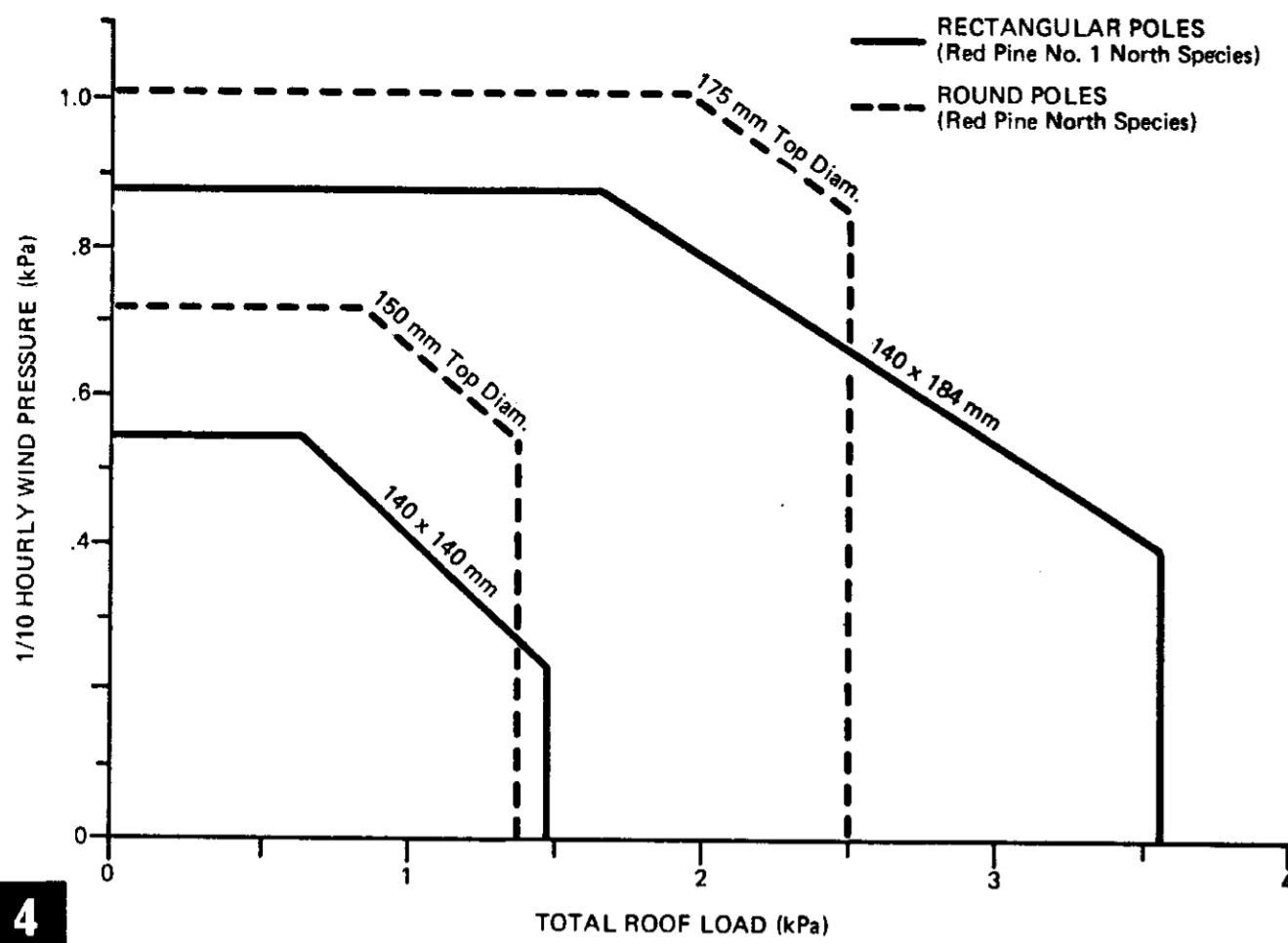
Revised & Re-issued 85-11

SYM	REVISIONS	CHECKED	DATE	APPROVED



CALVING BARN

DESIGNED J.E.T.	DATE 79-07	PLAN M-1303
DRAWN R. PELLA	REVISED 85-11	
TRACED	DETAIL NUMBER A	SHEET 1 OF
CHECKED D.I.M.	ORIGINATES ON SHEET B DRAWN ON SHEET C	



2

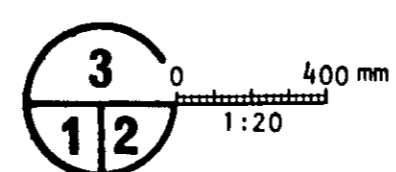
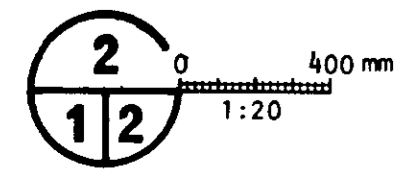
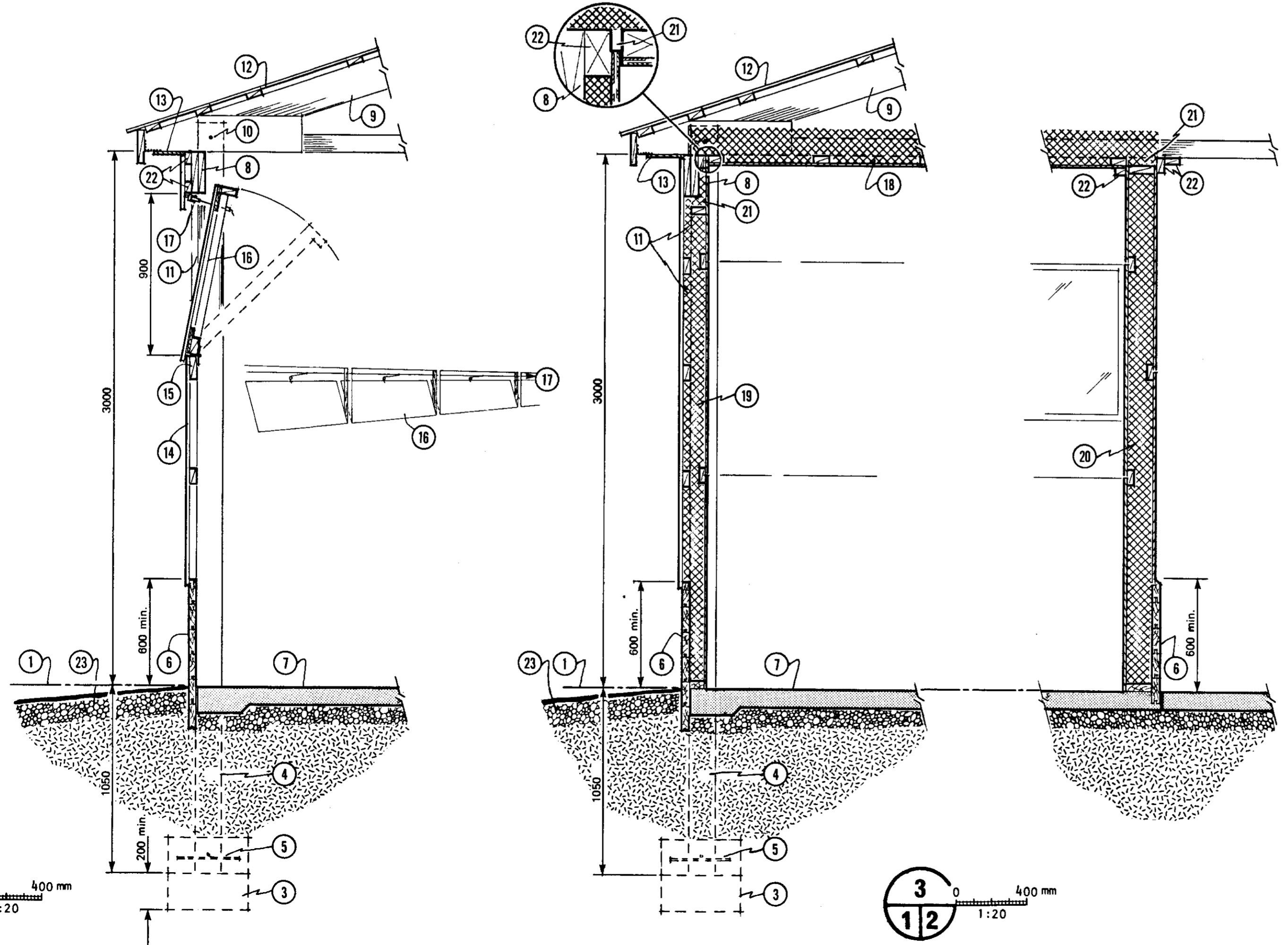
soil strength (kPa)	safe total roof loads (kPa) for footing diameters (mm) of		
	400	450	600
200 (hard)	1.8	2.4	4.4
100 (soft)	0.8	1.1	2.1

8

Plate beam safe uniform total roof load, kPa

Plate beam No.2 S-P-F	Truss spacing, mm on centre			Scab details, (11)	
	1200	800	600	Min. size	# of 5" spiral nails
2 - 38 x 184	1.70	1.43	1.36	38 x 184 x 300	15
2 - 38 x 235	2.54	2.06	1.86	38 x 235 x 400	23
2 - 38 x 286	3.24	2.51	2.26	38 x 286 x 525	29
No.2 D. Fir					
2 - 38 x 184	1.44	1.21	1.16	38 x 140 x 175	9
2 - 38 x 235	2.15	1.81	1.73	38 x 140 x 200	13
2 - 38 x 286	2.89	2.44	2.33	38 x 184 x 300	18

- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS OTHERWISE SPECIFIED
- datum line, top of floor
 - footing size selection table
 - top of all conc. same dimension below (1)
 - 4200 mm long pressure-treated poles; see chart 4 for size (sawn poles based on #1 Red Pine, allowable stresses $f_b = 5.3$ and $E = 7000$ MPa) (round poles Select Structural Red Pine, allowable stresses 80% of $f_b = 7.6$ and $E = 7700$ MPa)
 - drill pole for 2-10M x 350 mm rebars, retreat holes with preservative; or use 8-150 mm spikes, place conc. around pole
 - 38 x 140 mm tongue & groove pressure-treated planking; stagger joints 2400 mm @ poles, nail each plank with 2-125 mm hot-dip galv. nails
 - 100 mm conc. floor, optional in bedding area, on compacted gravel fill
 - 2-38 x 235 x 4800 mm plate beam (3 in end spans); joints staggered 2400 mm @ poles; No. 2 Spruce safe to 2.54 kPa total roof load; for truss spacings other than 1200 mm o.c. and/or heavier roof loads, see table (8)
 - trusses @ 1200 mm o.c. or to suit local design snow loads; see M-9102 for bracing requirements
 - M12 bolt & washers, truss to pole; galv. framing anchors, intermediate trusses to (8)
 - scab at poles, see (8) for size
 - roofing on 38 x 89 mm purlins @ 600 mm o.c.
 - 12.5 mm plywood soffit; 50 mm continuous vent, 12 x 12 mm galv. L-shaped bird screen, staple to rafter ends before adding (11) and soffit
 - exterior wall construction: siding (galv. steel, 9.5 mm exterior plywood, exterior aspen flakeboard, 19 mm vertical boards, etc.) on 38 x 89 mm girts @ 600 mm o.c.
 - 38 x 140 mm top girt
 - tilt-in wall panel made of FRP translucent siding on 38 x 89 mm frame, hinged to (15); notch panels to fit around scabs
 - marine pulley, 3 mm marine cable to boat winch
 - 38 x 89 mm @ 1200 mm o.c.; RSI-3.5 friction-fit insulation; polyethylene vapour barrier; 9.5 mm plywood ceiling
 - 38 x 89 mm studs @ 600 mm o.c.; pressure-treated bottom plate anchored to conc.; RSI-3.5 friction-fit insulation; vapour barrier; 9.5 mm plywood both sides, 38 x 89 mm @ joints
 - 38 x 140 mm studs @ 600 mm o.c.; pressure-treated bottom plate anchored to conc.; RSI-3.5 friction-fit insulation; vapour barrier; 9.5 mm plywood both sides, 38 x 89 mm @ joints
 - 50 mm space allows wall to float if floor heaves with frost (do not nail plywood to (22))
 - 38 mm blocking (between poles at ext. wall, continuous at other locations)
 - 900 x 100 mm deep coarse gravel splash pad



DESIGNED	JET	DATE	79-07	PLAN
DRAWN	R. FELLA	REVISED	85-11	M-1303
TRACED		DETAIL NUMBER	A	SHEET 2 OF
CHECKED	D.I.M.	ORIGINATES ON SHEET	B	
		DRAWN ON SHEET	C	

REVISIONS CHECKED DATE APPROVED

REVISOR: H.A.J. 88-01 ✓
 Revised & Re-issued 85-11 ✓

WALL SECTIONS

CANADA PLAN SERVICE