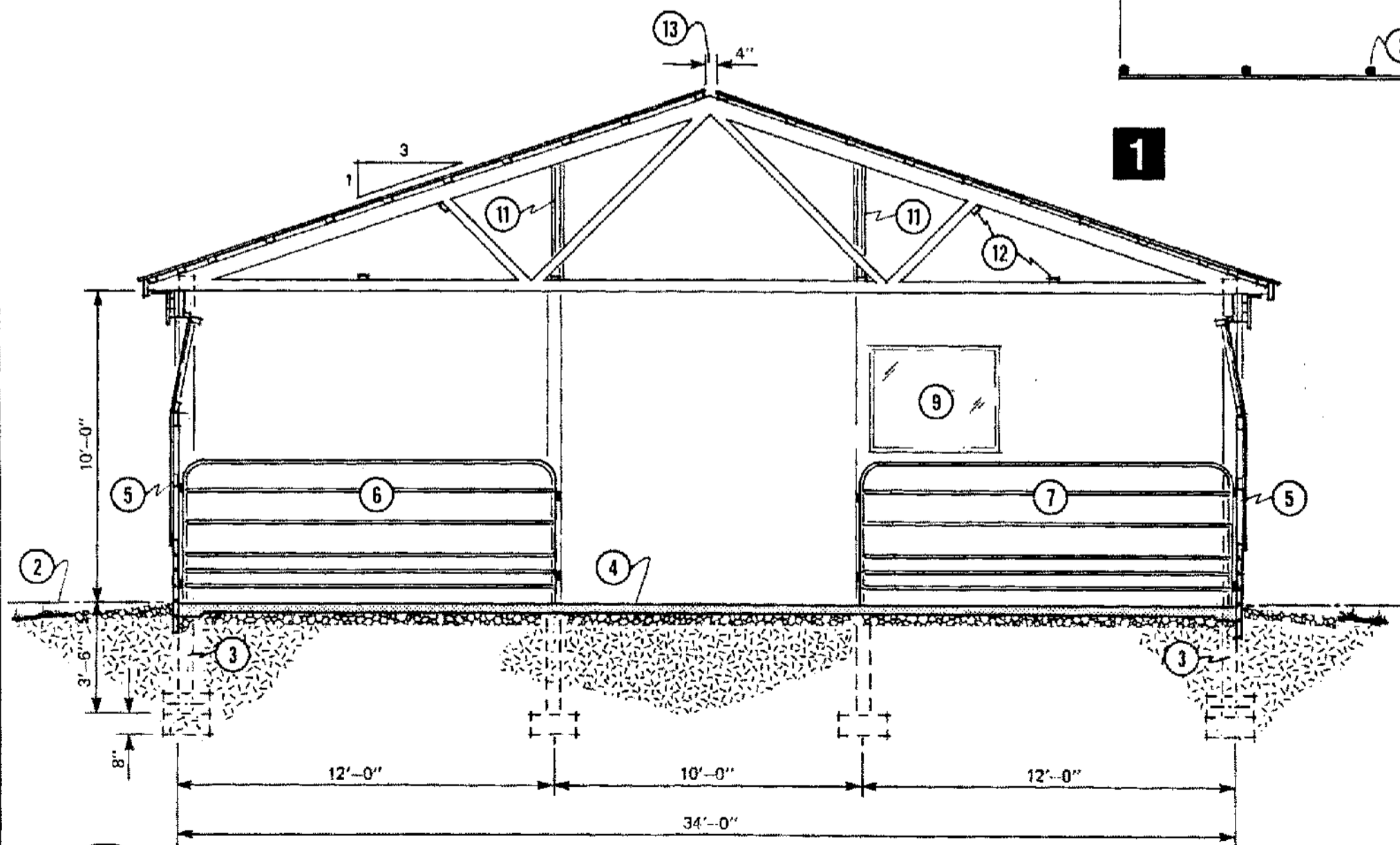
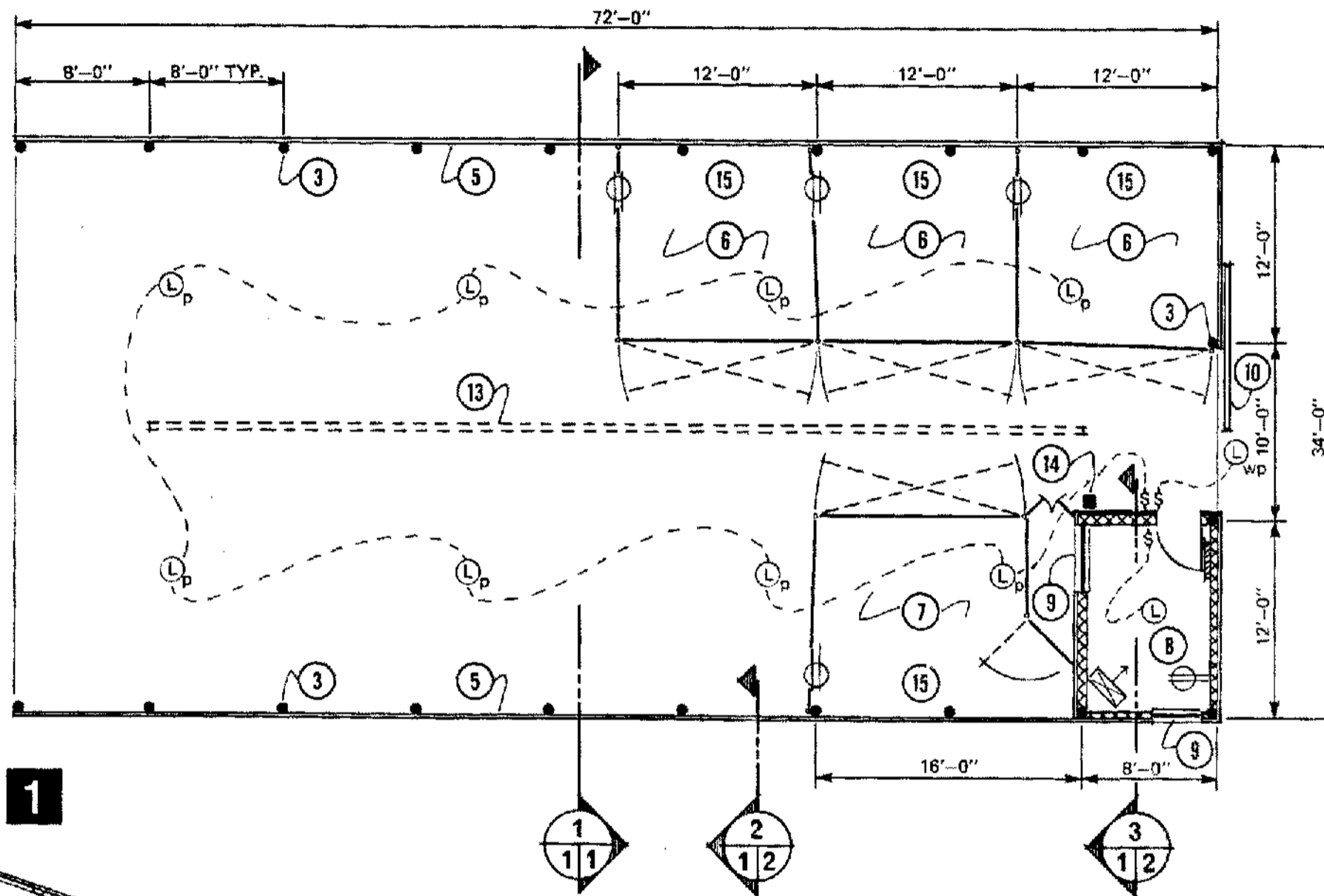


ONE SET OF DRAWINGS AND LEAFLETS SHOULD INCLUDE:

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

- 1 floor plan
- 2 datum line, top of floor
- 3 14'-0" pressure-treated round or rectangular poles (see [4], sheet 2)
- 4 4" 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 10'-0" x 10'-0" sliding door, see M-9341
- 11 cross-bracing, each side of door, both ends of barn; see M-9341 for details
- 12 2 x 4 continuous truss stiffeners, see truss plan for exact locations
- 13 open ridge vent, stops 8'-0" 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



ELECTRICAL

ceiling	wall	
(L)	(L)	Incandescent Lampholder
(L _p)	(L _p)	Incandescent Lampholder, Pigtail Type
(L _{wp})	(L _{wp})	Weatherproof Incandescent Lampholder
(⊖)	(⊖)	Duplex Convenience Outlet
⊙		Single Pole Switch
⊙ ₃		Three Way Switch
⊙ _h		Fan Forced Heater
⊙ _d		Distribution Panel

SPECIFICATIONS

Unless otherwise specified, all cast-in-place concrete is to be min. 4000 psi @ 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 0.4 lb/ft³ (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.

Revised & Re-issued 85-11

SYM	REVISIONS	CHECKED	DATE	APPROVED

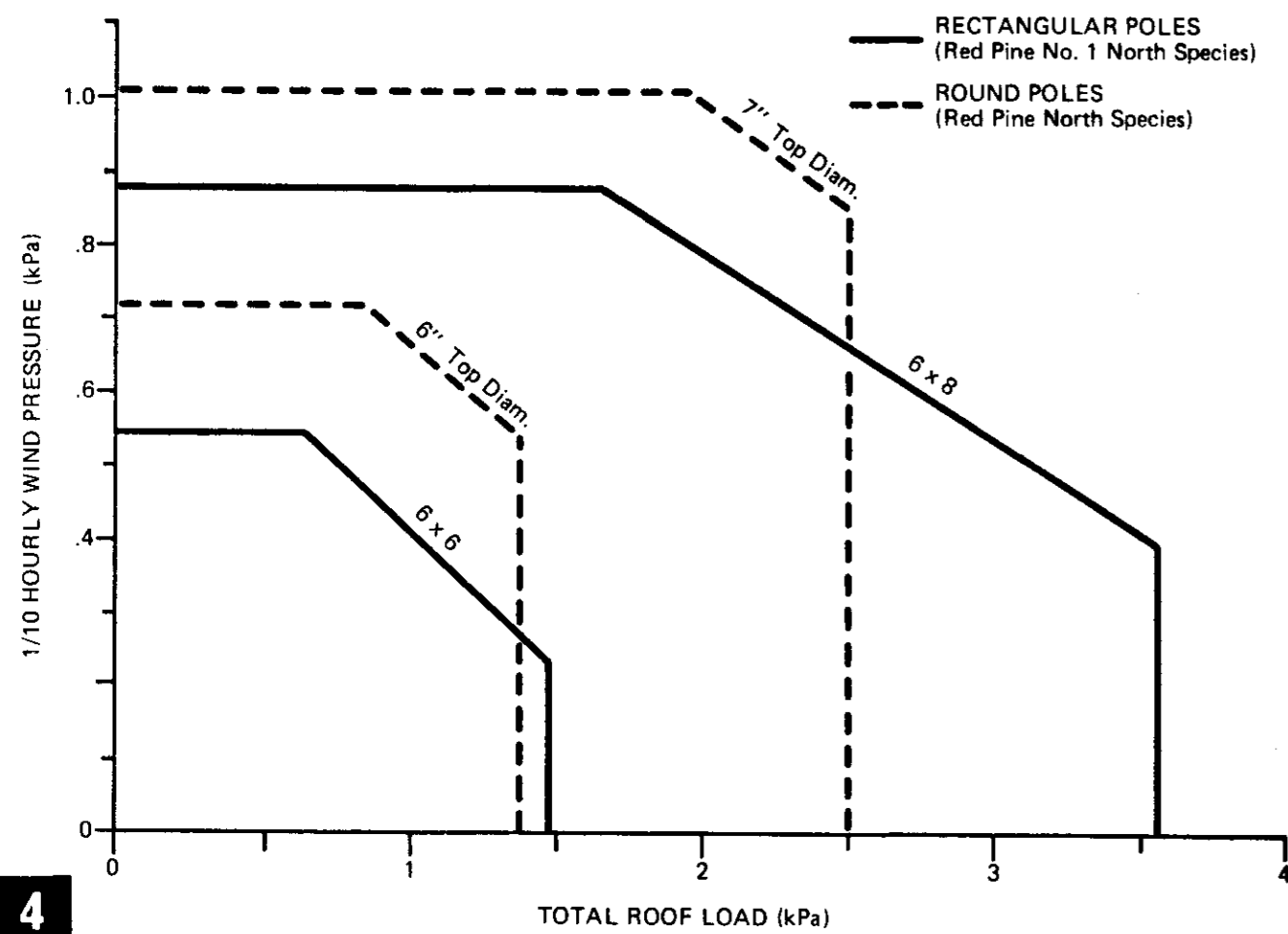
CANADA
PLAN SERVICE

CALVING BARN

(not to scale)

DESIGNED J.E.T.	DATE 79-07	PLAN 1303									
DRAWN L. P. I. L. A.	REVISED 85-11										
TRACED	<table border="1" style="font-size: small;"> <tr> <td style="text-align: center;">A</td> <td>DETAIL NUMBER</td> <td style="text-align: center;">A</td> </tr> <tr> <td style="text-align: center;">B</td> <td>ORIGINATES ON SHEET</td> <td style="text-align: center;">B</td> </tr> <tr> <td style="text-align: center;">C</td> <td>DRAWN ON SHEET</td> <td style="text-align: center;">C</td> </tr> </table>	A	DETAIL NUMBER	A	B	ORIGINATES ON SHEET	B	C	DRAWN ON SHEET	C	SHEET 1 OF
A	DETAIL NUMBER	A									
B	ORIGINATES ON SHEET	B									
C	DRAWN ON SHEET	C									
CHECKED D.I.M.											

1
1/1



2

soil strength (kPa)	safe total roof loads (kPa) for footing diameters (in.) of		
	16	18	24
200 (hard)	1.8	2.4	4.4
100 (soft)	0.8	1.1	2.1

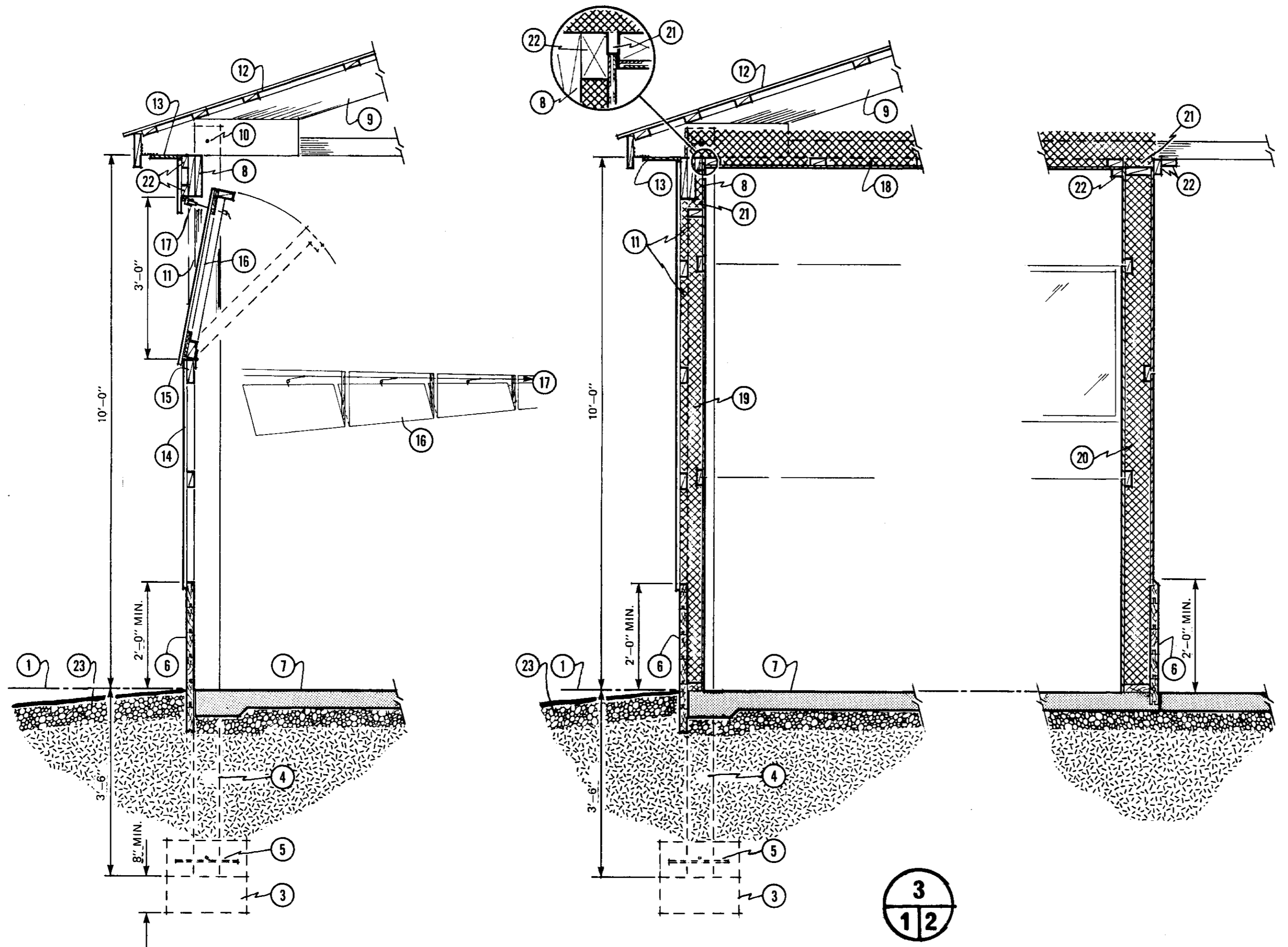
8

Plate beam safe uniform total roof load, kPa

Scab details, (11)

Plate beam No.2 S-P-F	Truss spacing, in. on centre			Min. size	# of 5" spiral nails
	48	32	24		
2 - 2 x 8	1.70	1.43	1.36	2 x 8 x 12"	15
2 - 2 x 10	2.54	2.06	1.86	2 x 10 x 16"	23
2 - 2 x 12	3.24	2.51	2.26	2 x 12 x 21"	29
No.2 D. Fir					
2 - 2 x 8	1.44	1.21	1.16	2 x 6 x 7"	9
2 - 2 x 10	2.15	1.81	1.73	2 x 6 x 8"	13
2 - 2 x 12	2.89	2.44	2.33	2 x 8 x 12"	18

- 1 datum line, top of floor
- 2 footing size selection table
- 3 top of all conc. same dimension below (1)
- 4 14'-0" 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)
- 5 drill pole for 2-#4 x 14" rebar, retreat holes with preservative; or use 8 - 6" spikes, place conc. around pole
- 6 2 x 6 tongue & groove pressure-treated planking; stagger joints 8'-0" @ poles, nail each plank with 2 - 5" hot-dip galv. nails
- 7 4" conc. floor, optional in bedding area, on compacted gravel fill
- 8 2-2 x 10 x 16'-0" plate beam (3 in end spans); joints staggered 8'-0" @ poles; No. 2 Spruce safe to 2.54 kPa total roof load; for truss spacings other than 4'-0" o.c. and/or heavier roof loads, see table (8)
- 9 trusses @ 4'-0" o.c., or to suit local design snow loads; see 9102 for bracing requirements
- 10 1/2" bolt & washers, truss to pole; galv. framing anchors, intermediate trusses to (8)
- 11 scab at poles, see (8) for size
- 12 roofing on 2 x 4 purlins @ 2'-0" o.c.
- 13 1/2" plywood soffit; 2" continuous vent, 12 x 1/2" galv. L-shaped bird screen, staple to rafter ends before adding (11) and soffit
- 14 exterior wall construction: siding (galv. steel, 3/8" exterior plywood, exterior aspen flakeboard, 3/4" vertical boards, etc.) on 2 x 4 girts @ 2'-0" o.c.
- 15 2 x 6 top girt
- 16 tilt-in wall panel made of FRP translucent siding on 2 x 4 frame, hinged to (15); notch panels to fit around scabs
- 17 marine pulley, 1/8" marine cable to boat winch
- 18 2 x 4 @ 4'-0" o.c.; R-20 friction-fit insulation; polyethylene vapour barrier; 3/8" plywood ceiling
- 19 2 x 4 studs @ 2'-0" o.c.; pressure-treated bottom plate anchored to conc.; R-20 friction-fit insulation; vapour barrier; 3/8" plywood both sides, 2 x 4 @ joints
- 20 2 x 6 studs @ 2'-0" o.c.; pressure-treated bottom plate anchored to conc.; R-20 friction-fit insulation; vapour barrier; 3/8" plywood both sides, 2 x 4 @ joints
- 21 2" space allows wall to float if floor heaves with frost (do not nail plywood to (22))
- 22 1 1/2" blocking (between poles at ext. wall, continuous at other locations)
- 23 3'-0" x 4" deep coarse gravel splash pad



2
1/2

3
1/2

REVISED & RE-ISSUED	H.A.J.	88-01	JET
Revised & Re-issued		85-11	
SYM	REVISIONS	CHECKED	DATE APPROVED

CANADA PLAN SERVICE

WALL SECTIONS (not to scale)

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