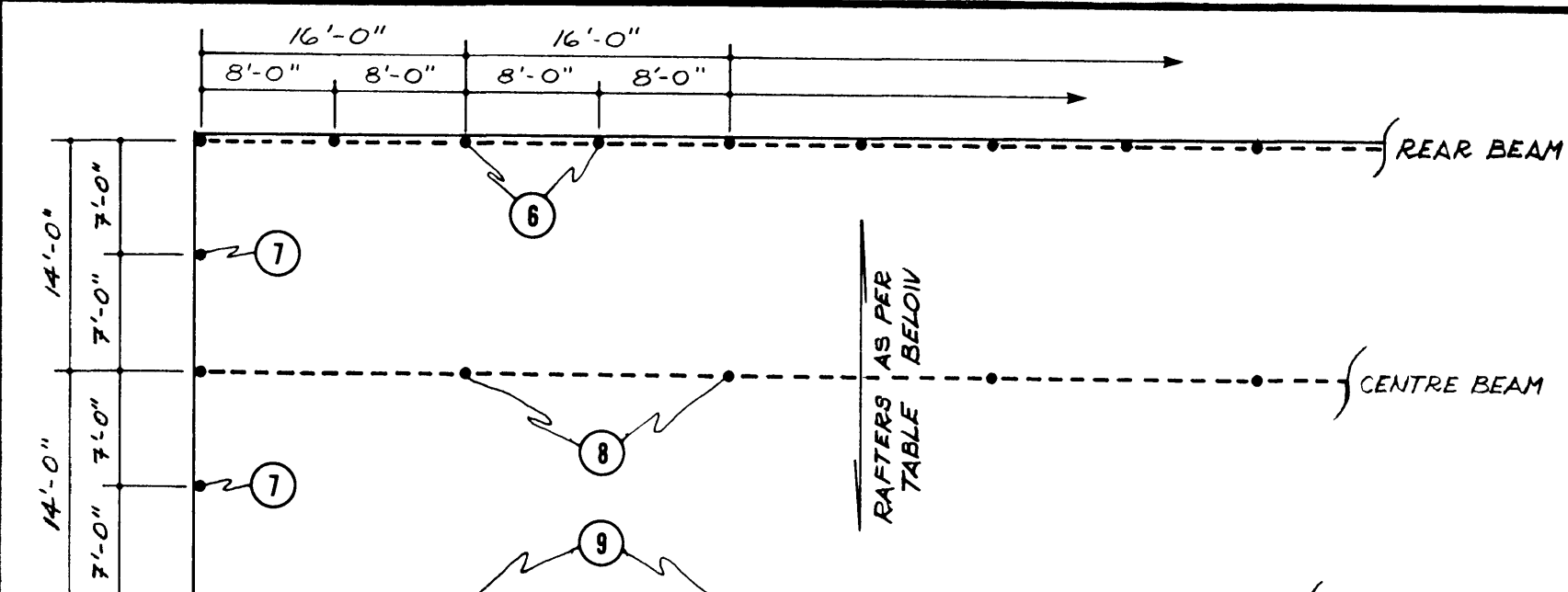


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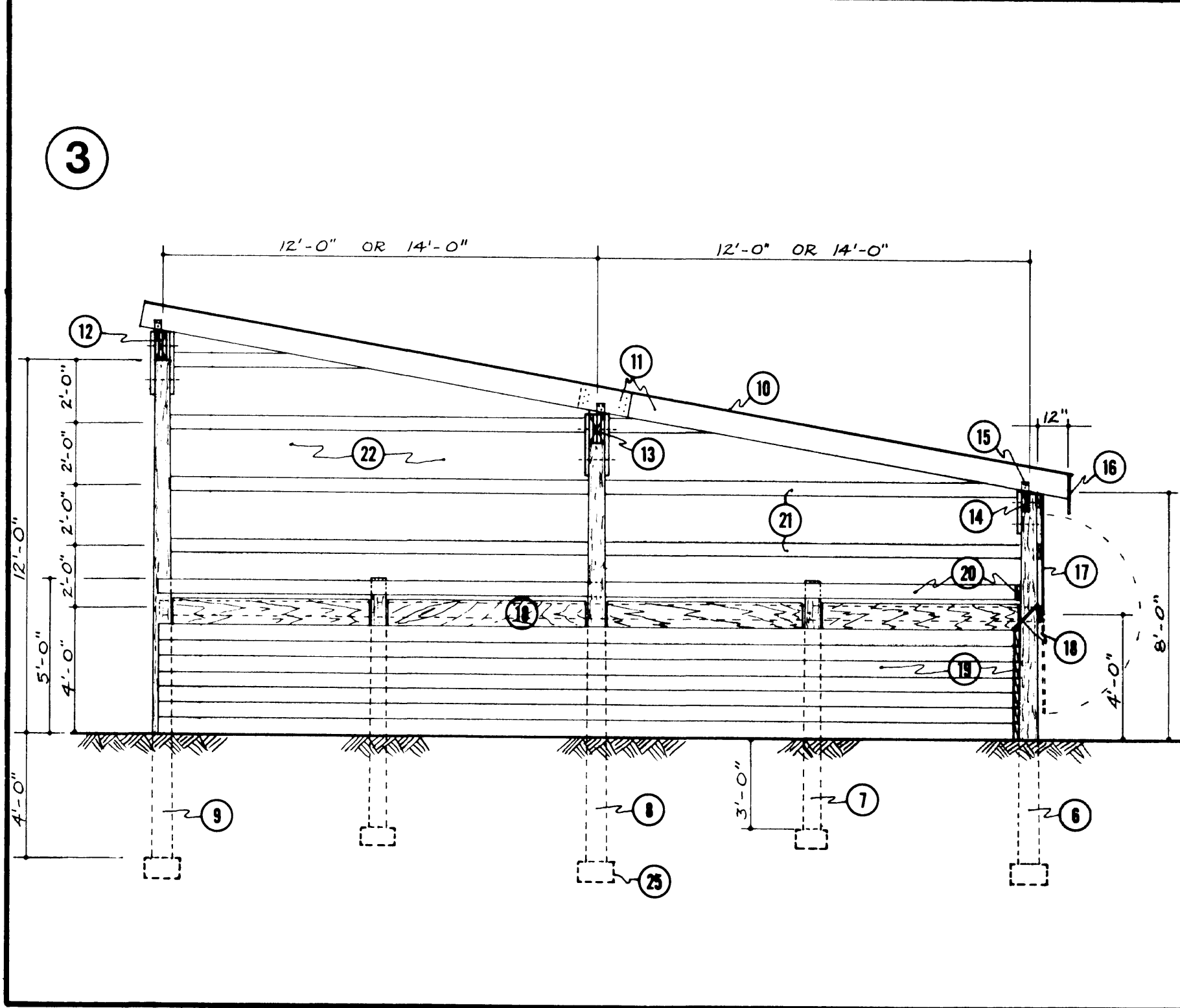


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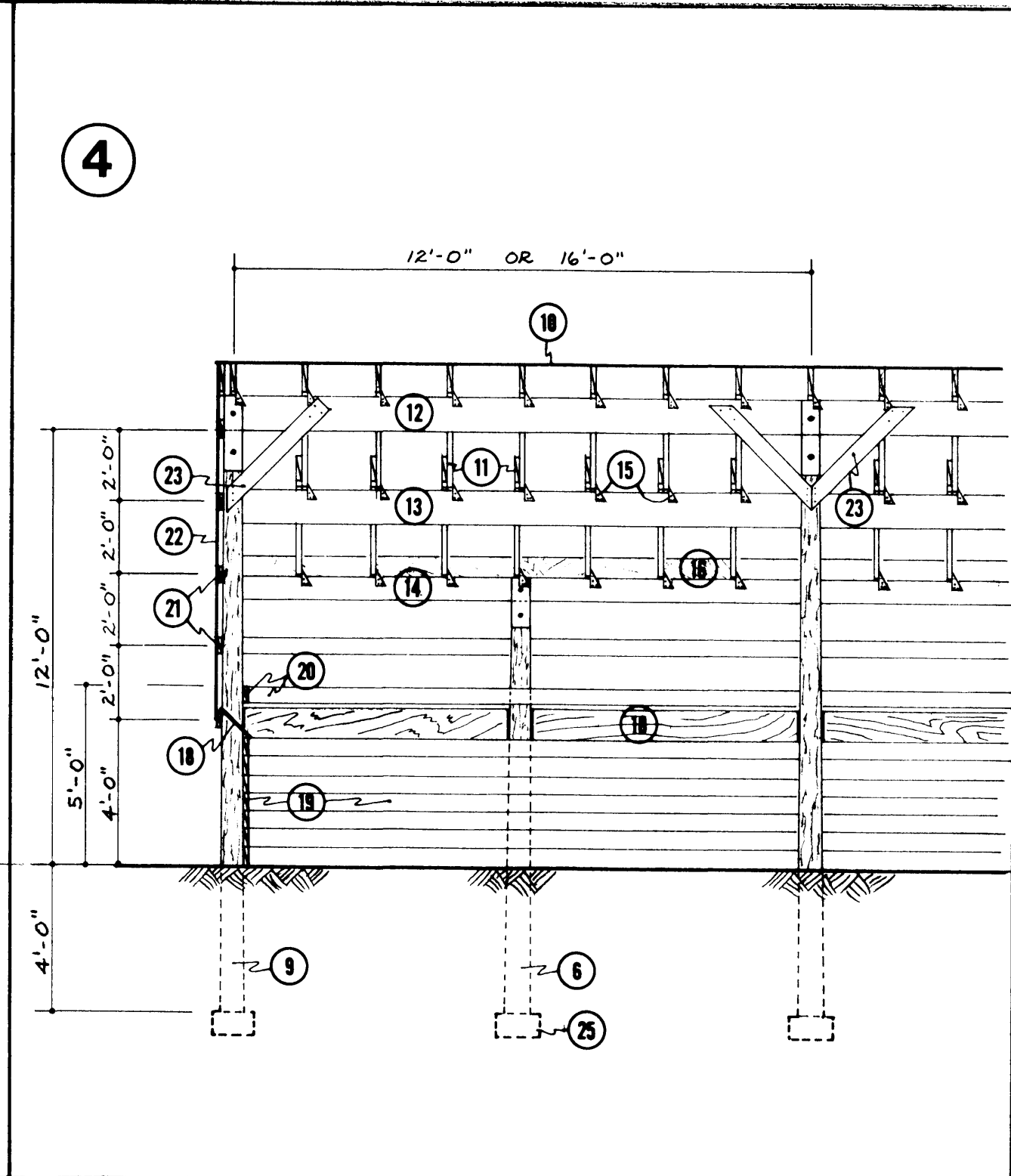
S - #2 SPRUCE F - #2 DOUGLAS FIR	ROOF LOAD - P.S.F. (SNOW LOAD PLUS DEAD LOAD) SEE CHART PAGE 2					
	20	25	30	35	40	45
REAR BEAM S	1-2x6	1-2x6	1-2x6	1-2x6	1-2x6	1-2x6
REAR BEAM F	1-2x6	1-2x6	1-2x6	1-2x6	1-2x6	1-2x6
CENTER BEAM S	2-2x10	3-2x10	3-2x10	3-2x10	3-2x12	3-2x12
CENTER BEAM F	2-2x8	2-2x10	2-2x10	2-2x10	2-2x12	2-2x12
FRONT BEAM S	2-2x8	2-2x8	2-2x10	2-2x10	2-2x10	2-2x10
FRONT BEAM F	2-2x6	2-2x8	2-2x8	2-2x8	2-2x8	2-2x10
RAFTERS 24" O.C. S	2x6	2x6	2x8	2x8	2x8	2x10
RAFTERS 24" O.C. F	2x6	2x6	2x6	2x6	2x8	2x8
RAFTERS 16" O.C. S	2x6	2x6	2x6	2x8	2x8	2x8
RAFTERS 16" O.C. F	2x6	2x6	2x6	2x6	2x6	2x6

S - #2 SPRUCE F - #2 DOUGLAS FIR	ROOF LOAD - P.S.F. (SNOW LOAD PLUS DEAD LOAD) SEE CHART PAGE 2					
	20	25	30	35	40	45
REAR BEAM S	2-2x6	2-2x6	2-2x6	2-2x8	2-2x8	2-2x8
REAR BEAM F	1-2x6	2-2x6	2-2x6	2-2x6	2-2x6	2-2x6
CENTER BEAM S	3-2x12	3-2x12	4-2x12	—	—	—
CENTER BEAM F	2-2x12	3-2x12	3-2x12	3-2x12	4-2x12	4-2x12
FRONT BEAM S	2-2x10	2-2x12	2-2x12	3-2x10	3-2x12	3-2x12
FRONT BEAM F	2-2x8	2-2x10	2-2x10	2-2x10	2-2x12	2-2x12
RAFTERS 24" O.C. S	2x8	2x8	2x8	2x10	2x10	2x10
RAFTERS 24" O.C. F	2x6	2x6	2x8	2x8	2x8	2x8
RAFTERS 16" O.C. S	2x6	2x8	2x8	2x8	2x8	2x10
RAFTERS 16" O.C. F	2x6	2x6	2x6	2x6	2x8	2x8

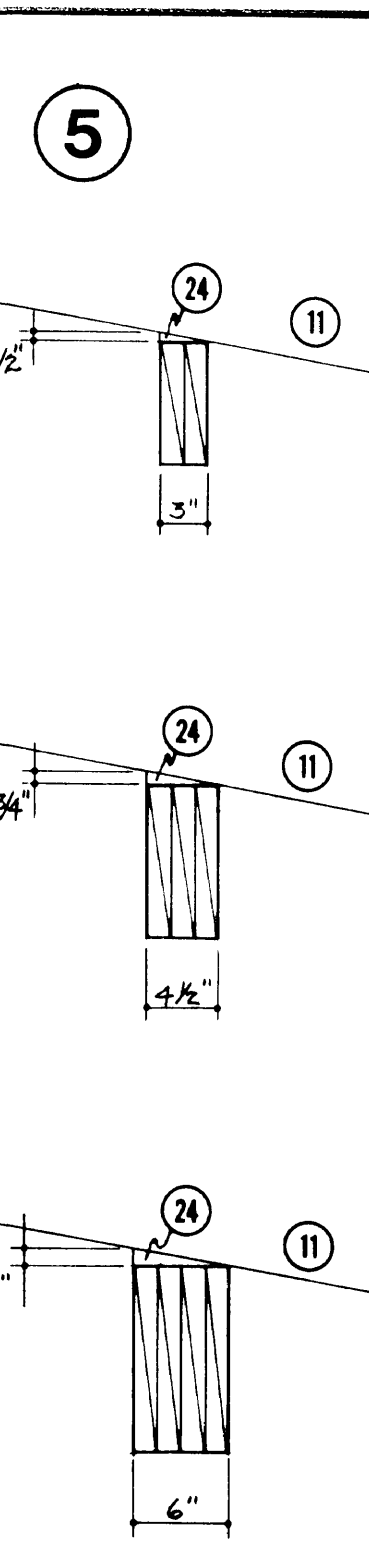
NOTE: WHERE BEAM & RAFTER MATERIALS SPECIFIED ARE NOT AVAILABLE CONTACT REGIONAL FARMSTEAD ENGINEER FOR ALTERNATES



3



4



5

- Plan View of Pole Barn with 12'x12' Pole Spacing, and Beam and Rafter Selection Table
- Plan View of Pole Barn with 14'x16' Pole Spacing, and Beam and Rafter Selection Table
- Typical Cross-Section
- Front View
- Rafter to Beam Connection, Wedge Detail
- 6" top Ø x 12'-0" long pressure-treated poles at rear
- 6" top Ø x 8'-0" long pressure-treated poles at half-way points of side walls only
- 6" top Ø pressure-treated poles at centre, sawn on-site to correct height
- 6" top Ø x 16'-0" long pressure-treated poles at front
- roofing material: 3/8" plywood c/w asphalt shingles; or overlapped plywood; or metal roofing on 2"x4" purlins spaced per manufacturer
- 14' or 16' long rafters, size as per table; overlap over centre beam; use five 4" long nails clinched at each end of overlap
- typical 3-plate beam; see detail 3, page 2, for details; see detail 2 if 2-plate beam is required
- typical 4-plate beam; see detail 4, page 2, for details; see detail 2 if 2-plate beam is required; see detail 3 if 3-plate beam is required
- typical 2-plate beam at rear wall; see detail 1, page 2
- Trip-L-Grip framing anchor or equivalent at each rafter beam connection
- fascia board; extend 6" below rafters; stops snow from entering through eave ventilation opening
- 3/8" plywood or sheet metal back wall; optional latch at top and hinge at bottom to allow panel opening for summer ventilation
- 3/4" thick plywood splash board between poles
- seven 2"x6" pressure-treated rough planks; alternate joints for added strength
- 2"x6" rub board; additional boards may be installed for higher manure packs
- 2"x6" strapping @ 2'-0" o.c.
- 3/8" plywood or sheet metal end wall
- 2"x6"x4'-0" long knee brace at each front pole; nail with three 6" long Ardox nails each end; place at 45° angle
- size of wedge under each rafter for 2, 3 and 4-plate beam; nail to beam before setting rafters
- concrete pad

**WARNING**  
This plan may require structural and other changes to meet local site conditions, climatic loads, user requirements and applicable building regulations (such as the Canadian Farm Building Code). Before construction, the user of this plan is responsible to ensure that all required changes are made.

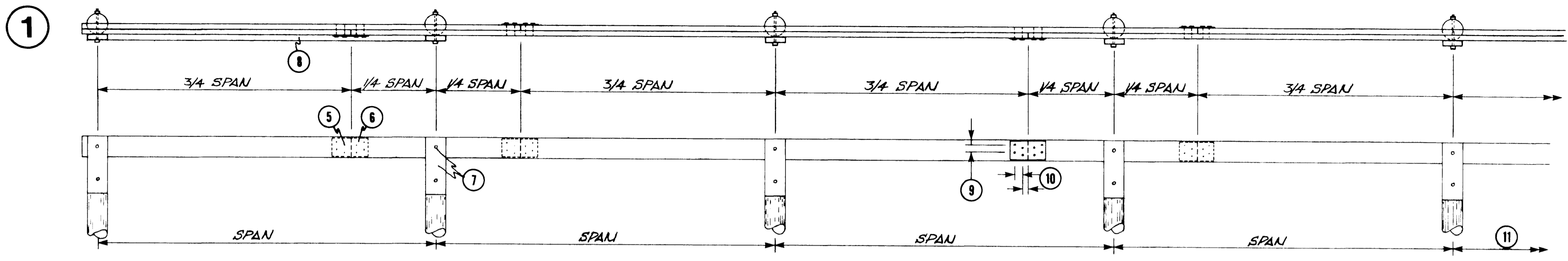
**CANADA** quick release plan  
PLAN SERVICE  
DWG. NO. 0-8164 SHEET 1 OF 2

Symbol	Revisions	Checked	Date	App'd
A	Detail No.			
B	Sheet No. On Which Detail Originates			
C	Sheet No. On Which Detail Is Shown			

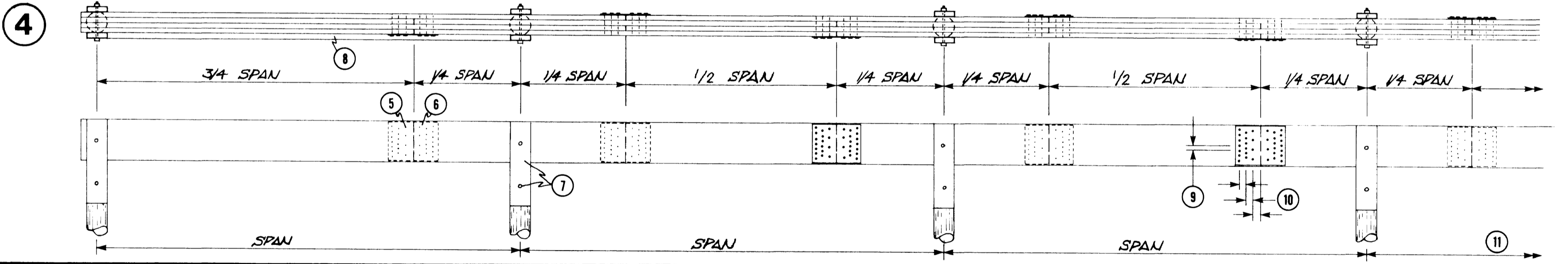
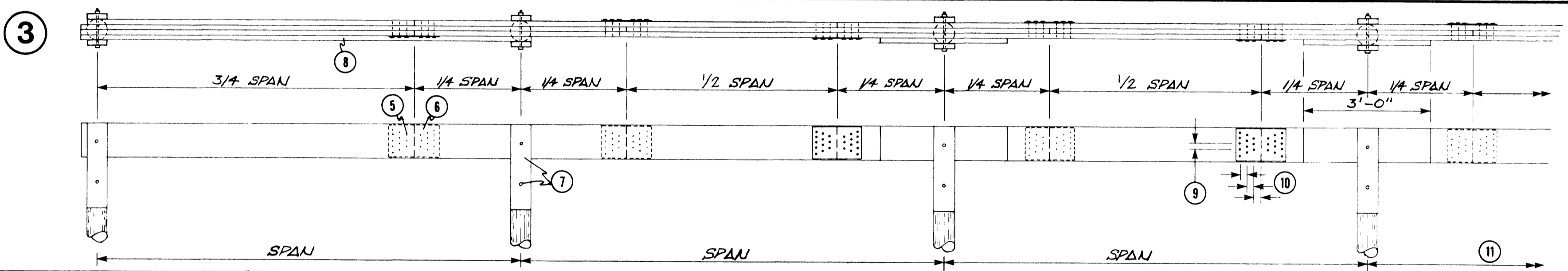
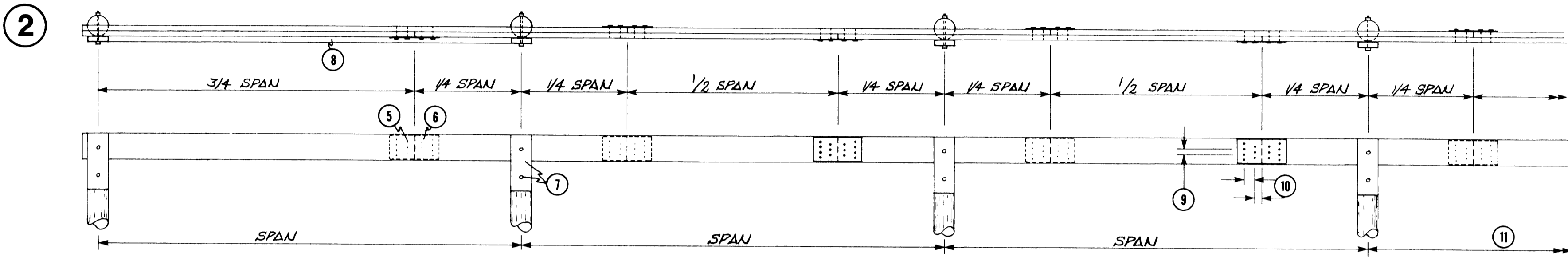
Saskatchewan Agriculture Agricultural Engineering Services Section  
Family Farm Improvement Branch

**POLE FRAME CATTLE SHED WITH POLES 12'-0" x 12'-0" & 14'-0" x 16'-0" ON CENTER**

Designed	Date	Plan
Drawn	Revised	S-150
Traced	Scale	Sheet 1 of 2
Checked	NOT TO SCALE	



1. Continuous 2-Plate Beam at Rear Wall Only
2. Continuous 2-Plate Beam
3. Continuous 3-Plate Beam
4. Continuous 4-Plate Beam
5. number of 3" concrete nails in 2-member beam (1) or (2); or number of 5" spiral nails in 3-member beam (3) or number of 6" spiral nails in 4-member beam (4); each half of gusset
6. gusset, 24 gauge galvanized steel; size from chart
7. 2"x6" scabs; length from chart; bolt through with 1/2" bolts top and bottom
8. extra beam member, end spans only; to be nailed with two 4" spikes every 2'-0"
9. 1" minimum nail spacing
10. nail spacing; 2" for spruce, 2 1/2" for fir
11. spans to length required



CANADA quick release plan  
 PLAN SERVICE  
 DWG. NO. Q-8164 SHEET 2 OF 2

ROOF DEAD LOADS (LBS./FT.<sup>2</sup>)  
 #2 FIR (2" x 6")  
 RAFTERS: #2 SPRUCE (2" x 8") = 1.0  
 3/8" PLYWOOD SHEATHING = 1.25  
 ASPHALT SHINGLES = 3.0  
 STEEL ROOFING = 1.0

PLATE COMBINATION				No. 2 SPRUCE		No. 2 FIR		SCAB LENGTH
1	2	3	4	5	6	5	6	7
2-2" x 6"	—	—	—	4	10" x 5"	4	12" x 5"	16"
2-2" x 8"	—	—	—	7	14" x 7"	7	16" x 7"	16"
2-2" x 10"	3-2" x 10"	—	—	12	14" x 9"	12	16" x 9"	24"
2-2" x 12"	3-2" x 12"	4-2" x 12"	—	17	14" x 11"	17	16" x 11"	24"

Symbol	Revisions	Checked	Date	App'd
A	A - Detail No			
B	B - Sheet No. On Which Detail Originates			
C	C - Sheet No. On Which Detail Is Shown			

Saskatchewan Agriculture  
 Family Farm Improvement Branch  
 Agricultural Engineering Services Section

CONTINUOUS PLATE BEAM DETAILS & ROOF LOAD CHART

Designed	6/87	Plan
Drawn	6/87	S-150
Traced	scale	Sheet 2 of 2
Checked	NOT TO SCALE	