CANADA
PLAN SERVICE

# SHEEP DRYLOT UNIT

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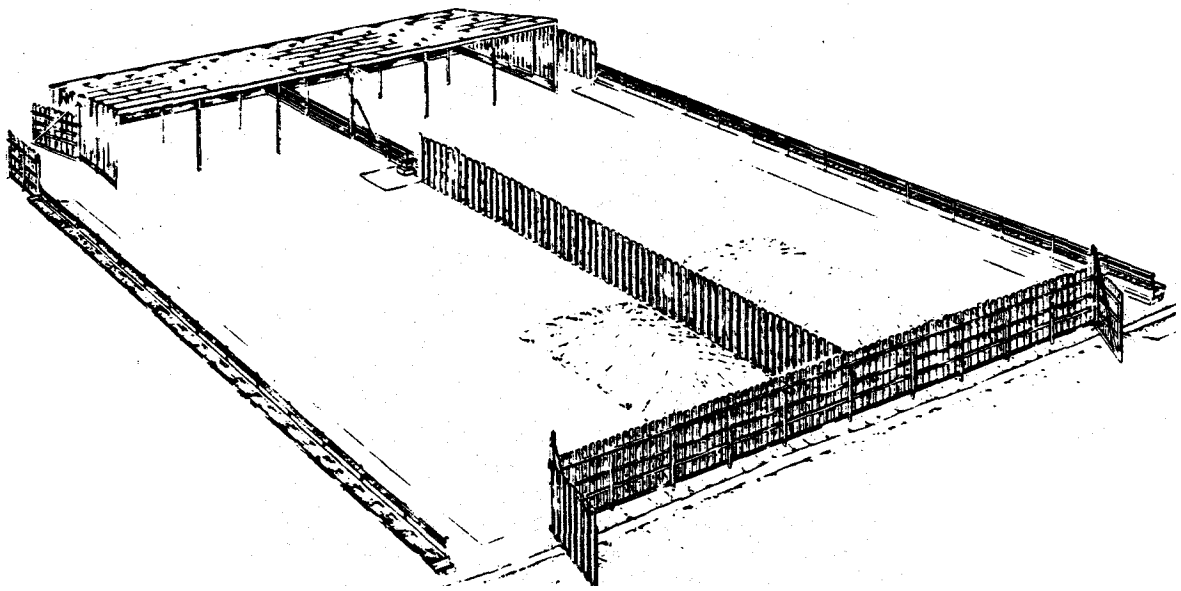


## COMPLETE INSTRUCTIONS

The Canada Plan Service, a Canadian federal/provincial organization, promotes the transfer of technology through factsheets, design aids and construction drawings that show how to plan and build modem farm structures and equipment for Canadian agriculture.

For more information, contact your local provincial agricultural engineer or extension advisor.

WARNING This leaflet gives structural choices you must select to meet local climatic loads (wind, snow), soil-bearing capacity and other local conditions. You must ensure that these requirements are met Consult an engineer if you are not familiar with the details required.

**E. Harder, J.A. Munroe**

This leaflet describes a sheep drylot unit for use in areas of low rainfall (under 500 mm (20 in.) annually). The facility consists of an earth lot with fenceline feed bunks, windbreak fencing and an open-front pole
shed.

The facilities can be used year-round for feeding ewes, ewes with lambs, or finishing lambs. An enclosed facility should be provided for lambing (see Plan 4312).

The facility can be built in stages and in different sizes. Each pen in Fig. 1 will hold 50-100 ewes per pen or 120-240 lambs per pen. The size of pens and shed chosen can vary as long as the minimum space requirements in Table 1 are met.

## SHEEP SHELTER

A pole-type open-front shed (see Plan 8162 or Q-8164) can be located along the north side of the pen. A shed with a single sloped roof does not create a drainage problem in front. A south facing open-front shed will collect the warmth of the winter sun.

Good air flow is required at all times to provide fresh air and remove humidity. Openings under the eaves and along the roof ridge permit natural air flow: The size of openings required will depend on wind exposure. A facia board along the eaves can reduce snow infiltration.

For additional protection in winter, the open-front shed can be closed with removable panels. The bottom 1.2 m (4 ft) panel can be made of plywood on a 38 x 140 mm (2 x 6 in.) frame. One or more sections can be made to slide aside, or hinged to flip up to allow the sheep to go in and out. The panels above this height can be made with clear reinforced polyethylene plastic fastened to a 38 x 89 mm (2 x 4 in.) frame. One or more sections can be hinged to flip up for better air movement during good weather.

In summer, opening doors in the back wall of the building improves air circulation.

An open front shed may be optional in areas of low precipitation where the sheep are on a good ration and protected from the wind. A well-drained manure pack is essential.

A 2.4 m (8 ft) high 20% porosity windbreak fence is recommended between pens to reduce the effect of the winter wind. A 6.0 m (20 ft) swirl corner at each end of the shed controls wind turbulence and drifting snow in front of the shed. If the shed is over 24 m (80 ft) long, it should be divided in the middle with a windbreak fence to reduce drafts.

## FEEDING

Feed can be distributed directly into fenceline feedbunks (Plan 4616) with a self-unloading feed wagon or portable mill. If baled fodder is fed separately, it can be stored along the feed alley and moved across-to the feed bunk.

In smaller operations, grain can be fed by hand with pails from a feed bin located near the feed bunk. As the operation grows, it may warrant switching to feeding with a portable feed wagon.

If a complete ration is fed, self-feeders (Plan 4628) located along the fenceline can be filled directly from a mixing wagon.

When large round bales are being fed, portable bale feeders can be located in the pen or along the fenceline and filled with a tractor and front-end loader.

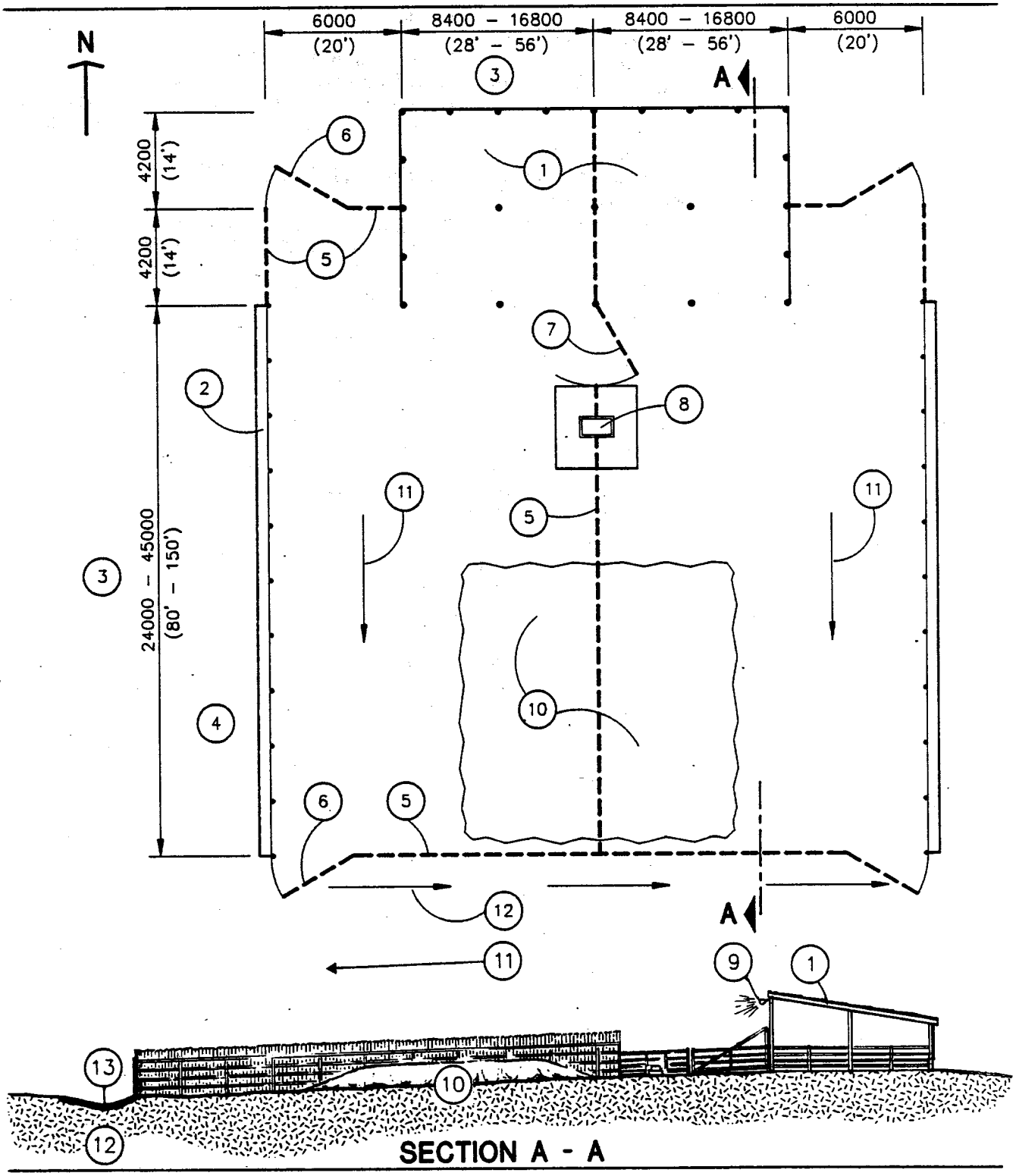
A lamb creep feeder (Plan 4623) can be set up in the shed to feed nursing lambs. When lambs are weaned, the ewes can be moved to pasture or another pen. The lambs can remain in the pen and be self-fed until they reach market weight.

## LAYOUT

Pen layout depends on the feeding system chosen and site characteristics. Ensure good wind protection and pen drainage.

Adequate feedbunk length is important. Feedbunk length determines the pen length required. Determine pen width by using the required pen area per animal. Pen width may be adjusted to accommodate an open front shed at the north end or provide a greater drainage area.

FIGURE 1 SHEEP DRYLOT UNIT WITH TWO PENS




1 pole frame sheep shed, see Plan 8162 or 8184.
2 fenceline feed bunk, see Leaflet 4616; optional 1800 mm (6 ft) wide concrete pad sloped 1:10 (1 in./1 ft) from feeder.
3 length varies, see Table 1.
4 feed alley.
5 windbreak fence, 2400 mm (8 ft) high, 20% porosity; see Leaflet 8368.
6 3600 mm (12 ft) gate to match 5.
7 3600 mm (12 ft) gate.
8 electrically heated waterer on concrete pad.
9 floodlight under eave.
10 bedded earth mound.

## DRAINAGE

Dry, well-drained facilities are essential in any sheep operation. A location with a 2-6% southward slope is preferable. An earth mound in each pen will provide a well-drained area during wet periods.

The pens drain better if manure is periodically scraped together and piled in the pen or an adjacent storage area. Scrape manure into a pile while still partly frozen in the spring. Haul and spread it when the fields are accessible.

All runoff should drain out of the pen and then be diverted into a self-contained holding pond. Liquid that doesn't evaporate can be pumped onto a field for disposal.

To control water pollution, all contaminated runoff should be collected and disposed of in an approved manner. Have your building and site plans approved by proper authorities before beginning construction.


## ACKNOWLEDGEMENTS

The comments and suggestions from other members of the Canada Plan Service Sheep Committee V. Biliski, C. Galliven and G. Gingras, and the artwork of R. Pella are greatly appreciated.


**TABLE 1 SPACE REQUIREMENTS**

| | Ewes | Feeder Lambs |
|---|---|---|
| Earth lot | 6.5 m² (70 ft²) | 2.8 m² (30 ft²) |
| Shed. - dry ewe | 1.0 m² (10 ft²) | 0.6 m² (6 ft²) |
| - pregnant ewe | 1.4 m² (15 ft²) | |
| Feedbunk length (per animal) | | |
| - group feeding | 450 mm (18 in.) | 300 mm (12 in.) |
| - self-feeding | 150 mm (6 in.) | 100 mm (4 in.) |