

opposite the end of the drafting race so that the crush pens and race can be utilised for loading. This does away with the need for any special loading ramp, which is often a feature of large sets of yards.

Estimates of Quantities and Costs: No. 1 Plan

Fences	ft.
Length of outer fence	186
Length of inner fences	137
Length of all fences (excluding gates)	323

If five 4in. x 1½in. rails are used for fences, a total of 323 x 5 = **1615 lineal feet** of this timber will be required.

Crush and Race

End panels of crush on both sides are close boarded with single-dressed 6in. x 1in.'s = 12ft. 6in. x 6 = **75 lineal feet**.

Sides of race are close boarded with single-dressed 6in. x 1in.'s = 20ft. x 6 = **120 lineal feet**.

* If drafting gates are constructed of double-dressed 6in. x 1in. timber, add **42 lineal feet plus 24 lineal feet of 4in. x 1in.** (dressed) for stiles.

Gates

If common swing gates are constructed, the following timber will be required:—

For 1 x 10ft., 8 x 8ft., 6 x 6ft., 1 x 4ft. 6in., 1 x 3ft., 2 x 2ft. gates a total of **925 lineal feet of 4in. x 1in.** timber for stiles and stays of all gates, and rails of gates under 7ft., plus **370 lineal feet of 4in. x 1½in.** timber for rails of gates 7ft. or wider.

Total timber (lineal feet): 1985 of 4in. x 1½in., 949 of 4in. x 1in., 237 of 6in. x 1in.

Posts

A total of 65 posts will be required and of these at least 18 require to be heavy enough to act as gateposts.

Cost

For ease in calculation the quantities of timber have been given in lineal or running feet, but have been converted to superficial feet for assessing costs. Prices are based on the use of *Pinus radiata*, which is often the only timber available, and 50s. per 100 super ft. represents an average taken over a number of districts. If better-quality timber is used, an adjustment will have to be made. Posts are taken at £38 per 100.

Timber super	At per 100	£ s. d.
ft. in. in.	super ft.	
827 4 x 1½	£2 10 ..	20 13 6
317 4 x 1	£2 10 ..	7 18 6
119 6 x 1	£2 10 ..	2 19 6
65 posts at £38 per 100 ..		24 14 0
Approx. 300 ¾in. x 3½in. to 4½in. black bolts and nuts at average of 15s. per 100 ..		2 5 0
Approx. 300 ¾in. washers at 2s. 9d. per gross ..		6 0
21 pairs hinges and gudgeons at average of 7s. 6d. per pair ..		7 17 6
Estimated cost		£66 14 0

Sundries

No special provision has been made for gate fasteners, as sufficient 4in. x

PLANS OF SHEEP-DRAFTING YARDS

lin. timber has been allowed for slide fasteners. If other types of fasteners are to be used, allowance must be made for these and for such materials as wire, staples, nails, creosote, etc., the cost of which cannot be accurately predicted.

* If drafting gates are constructed on the laminated principle (3 layers) to give a flush, smooth finish, a total of 120ft. of 6in. x 7/16in. finish dressed timber will be required instead of the 42ft. of 6in. x 1in. and 24ft. of 4in. x 1in.

No. 2 Plan

Although slightly smaller than the previous plan, the set of yards shown on No. 2 Plan (small yards to handle 200 to 300 sheep) is considerably more complex and has been designed deliberately to show the full potentialities of a small set of yards. It is only by the inclusion of a fairly large number of gates that maximum ease and convenience of working can be attained. There is no reason why the design should not be simplified to meet individual requirements.

As far as is practicable the sizes of the various pens have been designed on the "multiple" system; that is, the crush pens D and E are designed to hold approximately 50 sheep and the small pens C, G, K, J, and L each hold approximately 50 sheep, which leads to convenience in drafting.

The Run-through

The run-through which consists of a long, narrow alleyway (H) parallel with the drafting race (I) is a useful adjunct in any set of yards and is a handy short cut between certain pens and also serves as a direct right-of-way to the woolshed when gates 20 and 28 are swung across to meet as shown by the dotted lines and gate 16 (which forms the end of one of the crush pens) is opened back. For best results this gate should swing into a recess so that it lies flush with the wall of the pen, as should 18 and 22, the stop-gates at the ends of the drafting race.

The three gates in the centres of the crush pens (12, 13, and 14), though not essential, are a great convenience, allowing sheep to be by-passed between pens D and E and also subdividing the crush pens into three smaller pens when they are opened. The space at Z can be used for a variety of purposes; for example, as a site for a small shed for storing equipment or as a small pen, in which case it can be fitted with one or more gates.

The two systems of four gates both at the entrance to the yards and at the exit allow sheep to be moved conveniently in a number of different ways as already described in the case of Plan No. 1.

Estimates of Quantities and Costs: No. 2 Plan

Fences	ft.
Length of outer fence	173
Length of internal fences	143
Length of all fences (excluding gates)	316

If five 4in. x 1½in. rails are used for fences, then a total of 316 x 5 = **1580 lineal feet** of this timber will be required.

Crush and Race

End panels of the crush on both sides are close boarded with single-dressed 6in. x 1in.'s = 16ft. x 6 = **96 lineal feet**.

N.B.: One of these panels is hinged as a gate.

Sides of race are close boarded with single-dressed 6in. x 1in.'s = 30ft. x 6 = **180 lineal feet**.

* If drafting gates and race stop-gates are constructed of double-dressed 6in. x 1in. timber, add **60 lineal feet, plus 56 lineal feet of 4in. x 1in.** (dressed) for stiles, and stiles and stays of hinged end panel of crush.

Gates

If common swing gates are constructed, the following timber will be required:—

For 2 x 7ft. 6in., 17 x 6ft., 1 x 5ft., 6 x 4ft. 6in., 1 x 4ft. gates a total of **1597 lineal feet of 4in. x 1in.** timber for stiles and stays of all gates, and rails of gates under 7ft., plus **75 lineal feet of 4in. x 1½in.** timber for rails of gates 7ft. or wider.

Total timber (lineal feet): 1655 of 4in. x 1½in., 1653 of 4in. x 1in., 336 of 6in. x 1in.

Posts

A total of 75 posts will be required and of these at least 27 require to be heavy enough to act as gateposts.

Cost

The same general remarks apply as for No. 1 Plan.

Timber super	At per 100	£ s. d.
ft. in. in.	super ft.	
690 4 x 1½	£2 10 ..	17 5 0
551 4 x 1	£2 10 ..	13 15 6
163 6 x 1	£2 10 ..	4 4 0
75 posts at £38 per 100 ..		28 10 0
Approx. 504 ¾in. x 3½in. to 4½in. black bolts and nuts at average of 15s. per 100 ..		3 15 8
Approx. 504 ¾in. washers at 2s. 9d. per gross ..		9 8
30 pairs hinges and gudgeons at average of 7s. 6d. per pair		11 5 0
Estimated cost		£79 4 10

Sundries

As for No. 1 Plan.

* If drafting gates are constructed on the laminated principle (3 layers) to give a flush, smooth finish, a total of 120ft. of 6in. x 7/16in. finish dressed timber will be required instead of the 42ft. of 6in. x 1in. and 24ft. of 4in. x 1in.

No. 3 Plan

No. 3 Plan (medium yards to handle about 500 sheep) is a fairly straightforward design which can be enlarged if necessary to handle quite large flocks.

If the three small pens F, G, and H are not required, the subdivisions can be left out, making one large pen corresponding to C.

Another feature to note is the provision of four extra gates (9, 10, 12, and 14) in the two crush pens. The three small ones are a convenience for drafting out odd sheep without the necessity of putting them through the race. The communicating gate (12) between the two pens is also valuable.