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Arrangement of Barn Floor Plans

Plan No. 723-C-11

Dairy Barn Plan—Stock Face Out

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It is often economically advisable to build a separate dairy barn on the larger dairy farms. Such a barn can be planned to care for the dairy stock more efficiently and the milk produced is usually of a higher quality.

A plan which is adapted to the large dairy barn is shown in figure 1, and some of the factors which make it convenient and economical are listed.

1. Economy of floor space.

There is practically no unused floor space. Only one cross alley which reduces the length of the barn is shown yet the one cross alley is sufficient in a barn of these dimensions. The corner pens further utilize available floor space and reduce construction costs, since it is necessary to build only two sides of each pen.

2. Ease in handling litter.

Where the herd is so large that a load of litter is removed daily, it is an excellent plan to face the cows out in a 36-foot barn. This leaves an 8-foot driveway for the spreader to pass between gutters. Where the litter is taken directly to the fields, no manure pit is required.

3. Convenient grouping of feed bins and silo.

The feed bins are located close to the silo so that any mixing or weighing of feed may be done at one place. The bins are outside of the main barn where they take up less valuable floor space. The silo is convenient for filling and for feeding.

4. Correct size of silo.

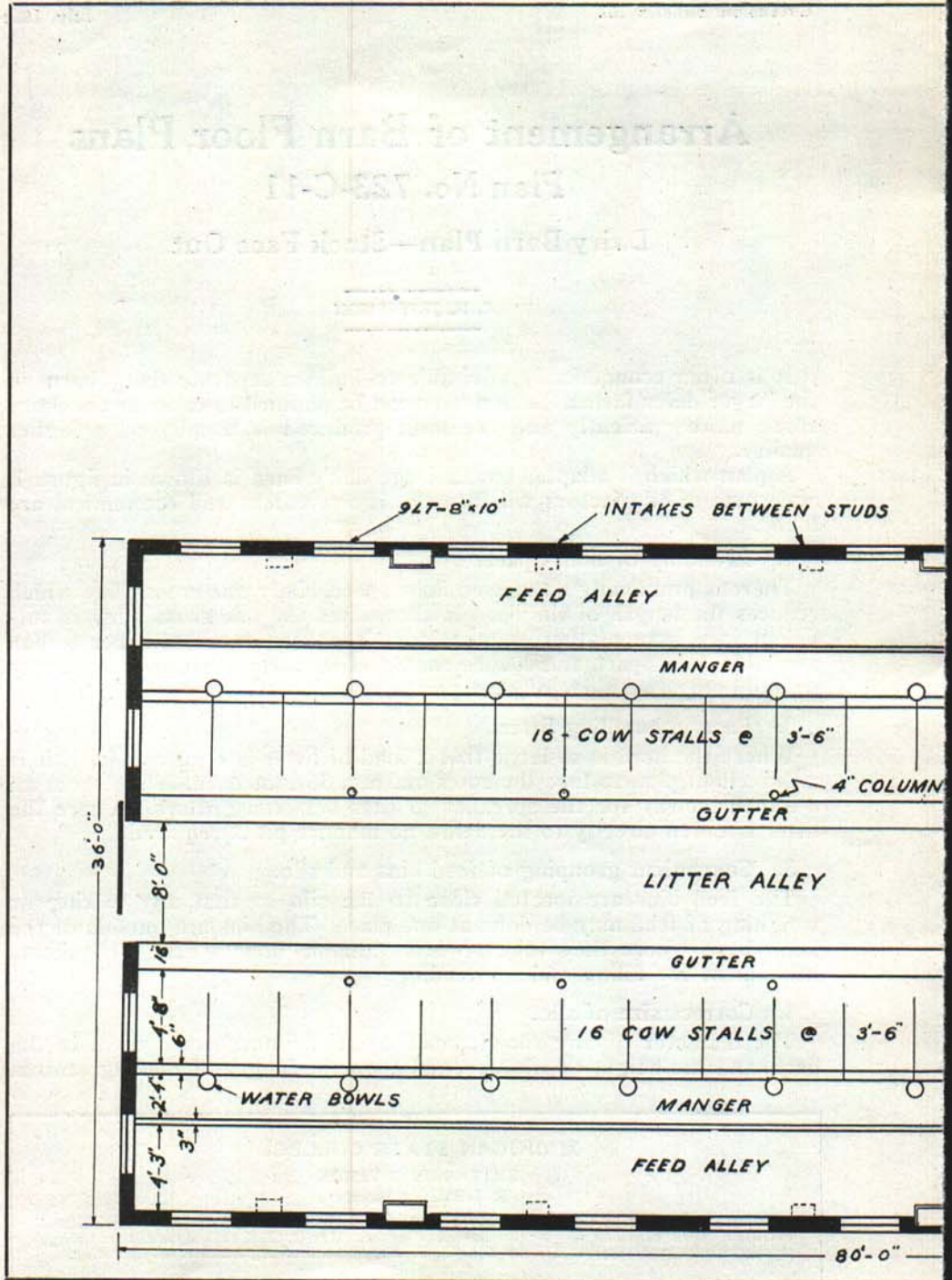
The diameter of any silo depends upon the number of cows in the herd, and the height of silo depends upon the length of feeding season.

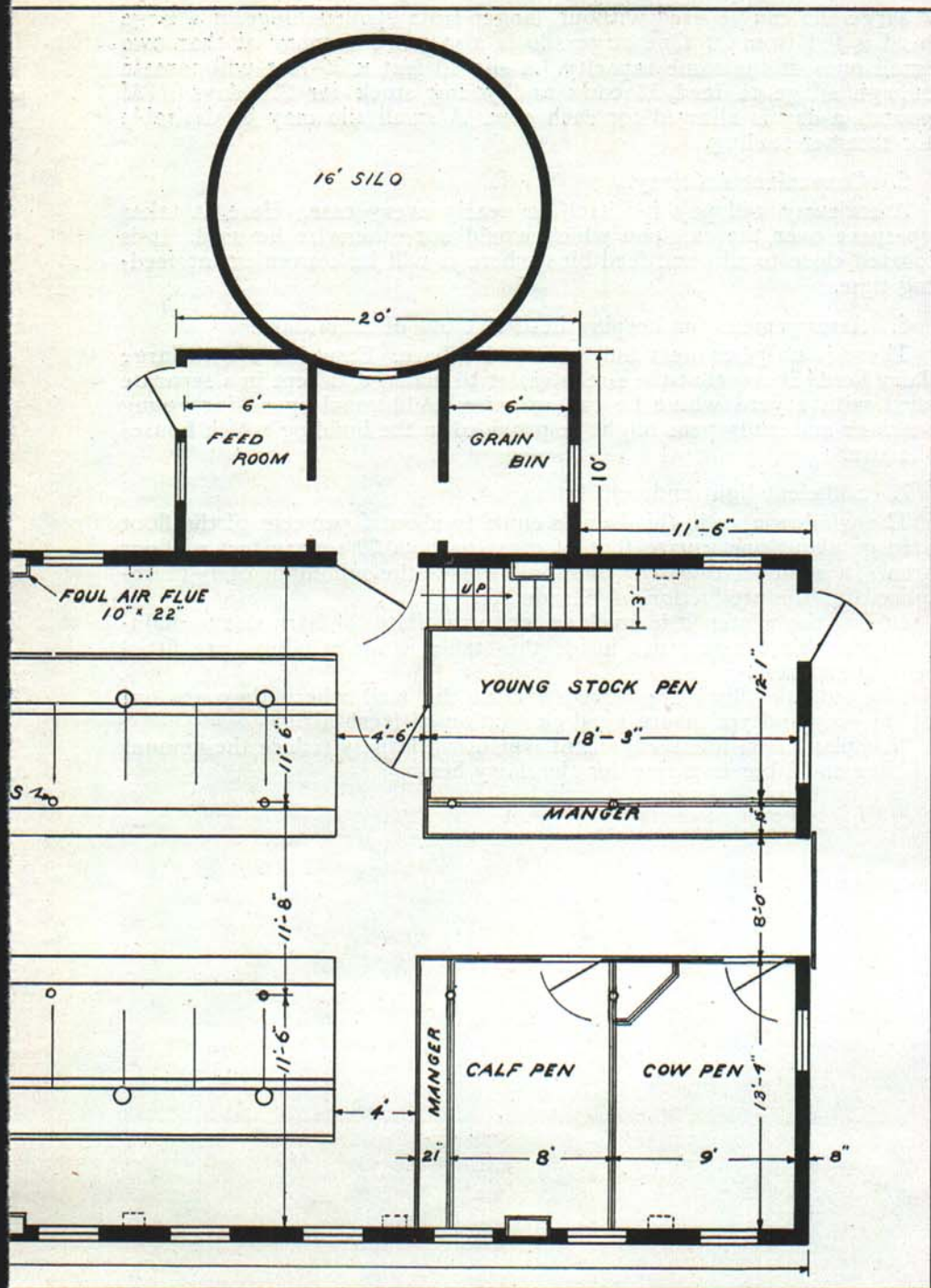
MICHIGAN STATE COLLEGE

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A large silo can be used without danger from spoiled silage, if a large herd is fed from it. One large silo is also more economical than two small ones of the same capacity. A silo 16 feet x 36 feet will contain enough silage to feed 32 cows and young stock for 200 days if 35 pounds a day is allowed for each cow. A small silo may be desirable for summer feeding.

5. Convenient stairway.

A stairway will pay for itself in nearly every case. Here, it takes up space over the calf pen which would not otherwise be used. It is located close to silo and feed bins where it will be convenient at feeding time.

6. Arrangement for keeping herd sire out of main barn.

There is no permanent bull pen in this barn. Experience with large dairy herds shows that the sire is easier to manage, if kept in a separate shed with a yard where he can exercise. Additional space for young stock or maternity pens might be provided in the building which houses the sire.

7. Sufficient light and ventilation.

The window area in this barn is equal to about 5 per cent of the floor area or about one square foot of glass to each 20 square feet of floor area. In some of the dairy sections, this is the minimum of light required for the production of "Grade A" milk.

During the winter, it is much easier to ventilate the barn and to maintain desirable temperature inside the stable if the windows are fitted with storm sash.

The out-take flues are placed against the wall where they are out of the way and yet insure good circulation of fresh air.

This plan offers an arrangement which will largely reduce the amount of time and labor in caring for the dairy herd.