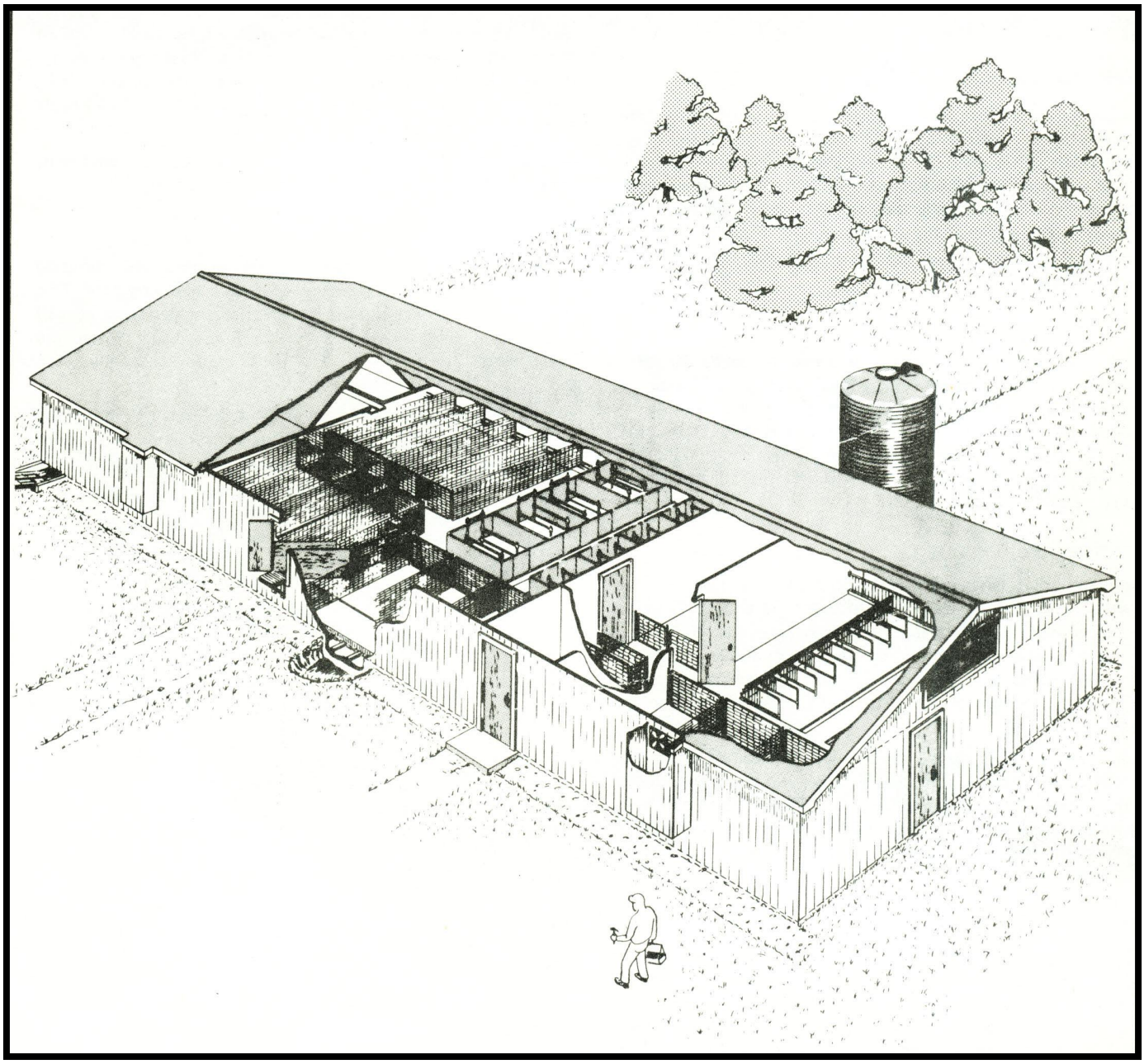
FARROW - TO - FINISH SWINE BARN
30 - SOW UNIT



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362-01

FARROW-TO-FINISH SWINE BARN, 30-SOW UNIT

CPS PLAN 3426 NEW 3:75

This plan gives details for a complete swine production unit with specialized areas for breeding/gestation, farrowing, weanling, and growing-finishing. These areas plus a central service area are fitted into a rectangular building 36 x 100 ft. Each area has about the number of pens required to match a basic sow herd of 30 breeding females and a boar, assuming one or two of the growing-finishing pens could be used to grow replacement gilts prior to breeding. A well-managed 30-sow unit should produce about 400 to 500 market hogs per year.

BREEDING/GESTATION AREA

This is a separate room at one end of the barn with 16 tie stalls for sows and 4 group pens for gilts, boar and sows not comfortable in tie stalls. It is desirable to separate the adult herd as much as possible from the newborn pigs; a service area between the two main pig areas provides this separation and includes a sow wash so that the sows due to farrow can be thoroughly washed and dried before moving to the clean farrowing pens.

SERVICE AREA

In addition to the sow wash stall, this area includes a 20 x 8-ft feed area and a separate room for electrical and heating services. If a furnace is used for heating, this room should be isolated by fire-resistant construction, and accessible only from outdoors as shown in the plan. This is a simple and effective way of keeping the electrical and heating equipment free of hazardous dust and debris.

FARROWING AREA

The plan shows farrowing pens each about 5 x 7½ ft. This provides space for a wide choice of commercial or homemade farrowing stalls with heated side creeps (see plan 3001). An alternate farrowing stall could be used (plan 360.000-2) with baby pig creeps in front of the sows. This pen type requires a space of 5 x 9½ ft, increasing the length of the farrowing-weanling area by about 3 ft.

Weanling pens 6 x 11½ ft are located across from the farrowing pens, since this central area would require more winter supplemental heating. Each 6 x 11½ ft pen can hold 16 to 20 weanlings. A loading chute is fitted into the end of the weanling pen area, for shipping market hogs or unloading purchased stock.

GROWING -FINISHING AREA

This area is divided into versatile 5 x 13-ft pens. This gives a slightly larger pen than the weanling area; for example, moving a group of 18 weanlings from a weanling pen to a growing pen increases floor space from 3.8 sq ft to 4.4 sq ft per pig. When the 18 pigs become crowded in the growing pen or when another pen becomes available, split the pen into 2 groups of 9 pigs each for finishing at 8.8 sq ft. The stage of growth at which the group is split will depend on feeding practice as well as pen space available; the smaller group with more pen space can be finished on a restricted diet for better carcass grades.

VENTILATION AND HEATING

Fresh air is spread along the ceiling of each room by adjustable baffles suspended under openings through the center of the ceiling, and ventilation rate is controlled by sets of three fans with stepped thermostat controls. The size of the fan, the setting of the thermostats and the adjustment of the inlet baffles are extremely important for successful ventilation. Tables on the plan give these adjustments according to weather. CPS Leaflet 8419 gives a method of interlocking the heating with the step 2 ventilation rate to minimize heating energy and to control the temperature within closer limits.

For very cold weather, the minimum ventilation rate (step 1) should be low enough for continuous fan operation. One of these step 1 fans exhausts into a box covering the gutter cleaner opening; this serves the double purpose of protecting the gutter cleaner from freezing and preventing a cold draft from entering the building at floor level.

Special insulated weather-hoods cover the other exhaust fans, for protection against high winds and fan freeze-up.

MANURE REMOVAL

A continuous chain gutter cleaner around the building perimeter serves all pens except 6 of the farrowing pens. This method is the most versatile for a variety of pens and ages of pigs, and it works best if some bedding is used. Where the gutter passes through the back of the pens, a steel grating keeps pigs out of the gutter.

A manure storage such as Plan 2372 or 2376 is recommended to confine the manure stack during winter and wet periods when field spreading is not desirable. *Obtain approval* from local authorities *before starting construction.*