

MWPS-72692

Swine Gestation Unit

Open shed with lot. This plan is for a 16' x 40' pole-frame open shed with an outdoor lot. The unit houses about 60 sows. An optional layout shows how the unit can be expanded to provide for breeding and to house boars.

This plan is for the producer who wants to get more of his operation off pasture and out of the mud, but who does not want the high investment of an enclosed building. This unit is suitable for farrowing up to about 8 times per year in a 20-sow farrowing house.

CAUTION!

Additional professional services will be required to tailor this plan to your situation, including but not limited to: assurance of compliance with codes and regulations; review of specifications for materials and equipment; supervision of site selection, bid letting and construction; and provision for utilities, waste management, roads or other access. **Furthermore, any deviation from the given specifications may result in structural failure, property damage, and personal injury including loss of life.**

WARRANTY DISCLAIMER

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Cooperative Extension Work in Agriculture and Home Economics and Agricultural Experiment Stations of North Central Region - USDA Cooperating
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Plan MWPS 72692
SWINE GESTATION UNIT
Open Shed with Lot

This plan is for a 16x40' pole-frame open shed with an outdoor lot. The unit houses about 60 sows. An optional layout shows how the unit can be expanded to provide for breeding and to house boars. This plan is for the producer who wants to get more of his operation off pasture and out of the mud, but who does not want the high investment of an enclosed building. This unit is suitable for farrowing up to about 8 times per year in a 20-sow farrowing house.

Locate the unit where surface drainage can be channeled away. Runoff from the lot must not pollute a waterway—install an approved disposal system, such as a settling basin or an infiltration channel. Some solid fences or into the lot reduce draft. If a longer building is built, extend a partition from floor to roof about every 40'.

Floor Slopes and Building Construction

Slope floors down to the manure alley to remove rainwater and melting snow from the feed floor. Side slope the manure alley to drain toward the manure storage.

Especially if more than the length of building shown is built, the manure alley gets too deep and the step from the feed floor and the manure alley gets too high.

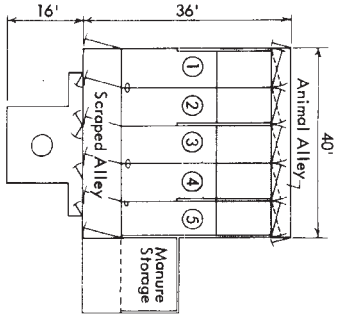
Therefore, this plan recommends a double-slope system:

- The building is level, or horizontal, but the floors slope to one end.
- Slope the entire floor about 1/4" per foot (4"40') toward the low end (from left to right on Floor Plan 1.2).
- Slope the floor sections as labeled (1/4"40' indoors, 1/2"40' feeding area, 3/4"40' manure alley) toward the step between the feeding area and the manure alley (Building Cross Section 1.3).
- Adjust framing below the rear ventilation doors and over concrete partitions so the roof and the vent doors are level.
- Make the partition walls uniform height.
- Back slope the manure storage area so that liquids can be drained off. The runoff can cause pollution; provide for approved disposal.

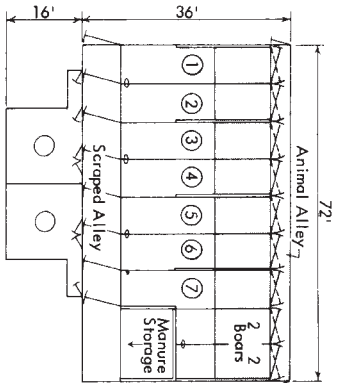
Building space and production cycles.

Although many variations are successful, the following are typical meat hog production systems. Plan building capacity for some extra animals to allow for large litter size or slow growth rate. Farrow during 3 weeks. Some stalls can be used twice.

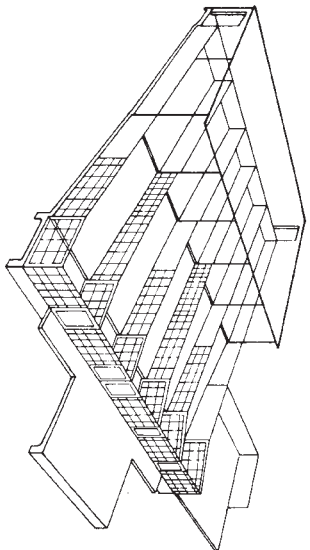
- Either:
- Move sows and litters to sow-pig nursing pens at 1-3 weeks, depending on how soon the farrowing stalls are needed for the next sows.
 - Mean pigs at 3-6 weeks, putting 3-4 litters together.
 - Return sows to breeding and gestation facilities.
- Or:
- Mean pigs at 4-6 weeks (20-25 lb).
 - Move pigs to nursery.
 - Return sows to breeding and gestating facilities.



GESTATION UNIT
 Pens 1-4: 12 Sows each
 Pens 5: 12 Gills or extra sows



BREEDING & GESTATION LAYOUT
 During Breeding:
 Pens 1, 2: 12 Sows each
 Pens 3, 4, 5, 6: 6 Sows + Boar each
 Other Times:
 Pens 1, 2, 3, 4: 12 Sows each
 Pens 5, 6, 2 Boars each
 Pen 7: 12 Gills

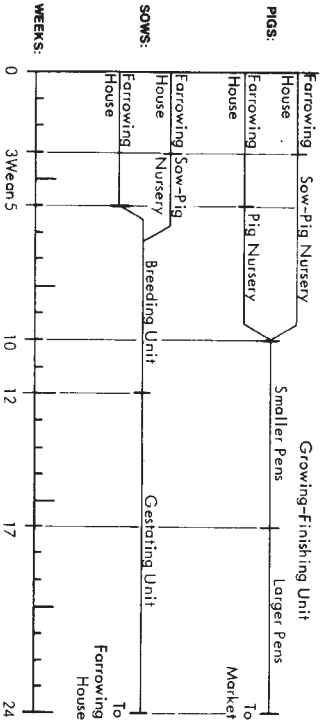


Move pigs to finishing unit at 10 weeks (60 lb). (As farrowing intensifies to more than 6 times per year, pigs may be moved at about 8 weeks.) Put into smaller pens if you have two pen sizes. Put more pigs per pen if you have only one pen size. Move pigs to larger pens, or reduce number of pigs per pen, at about 17 weeks (125 lb).

As they approach market weight, and if the finishing unit is crowded, larger hogs can be marketed early.

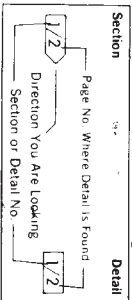
Sows are often rebred during the first or second heat period after weaning, and farrow about 16 weeks later.

TYPICAL HOUSING CYCLES



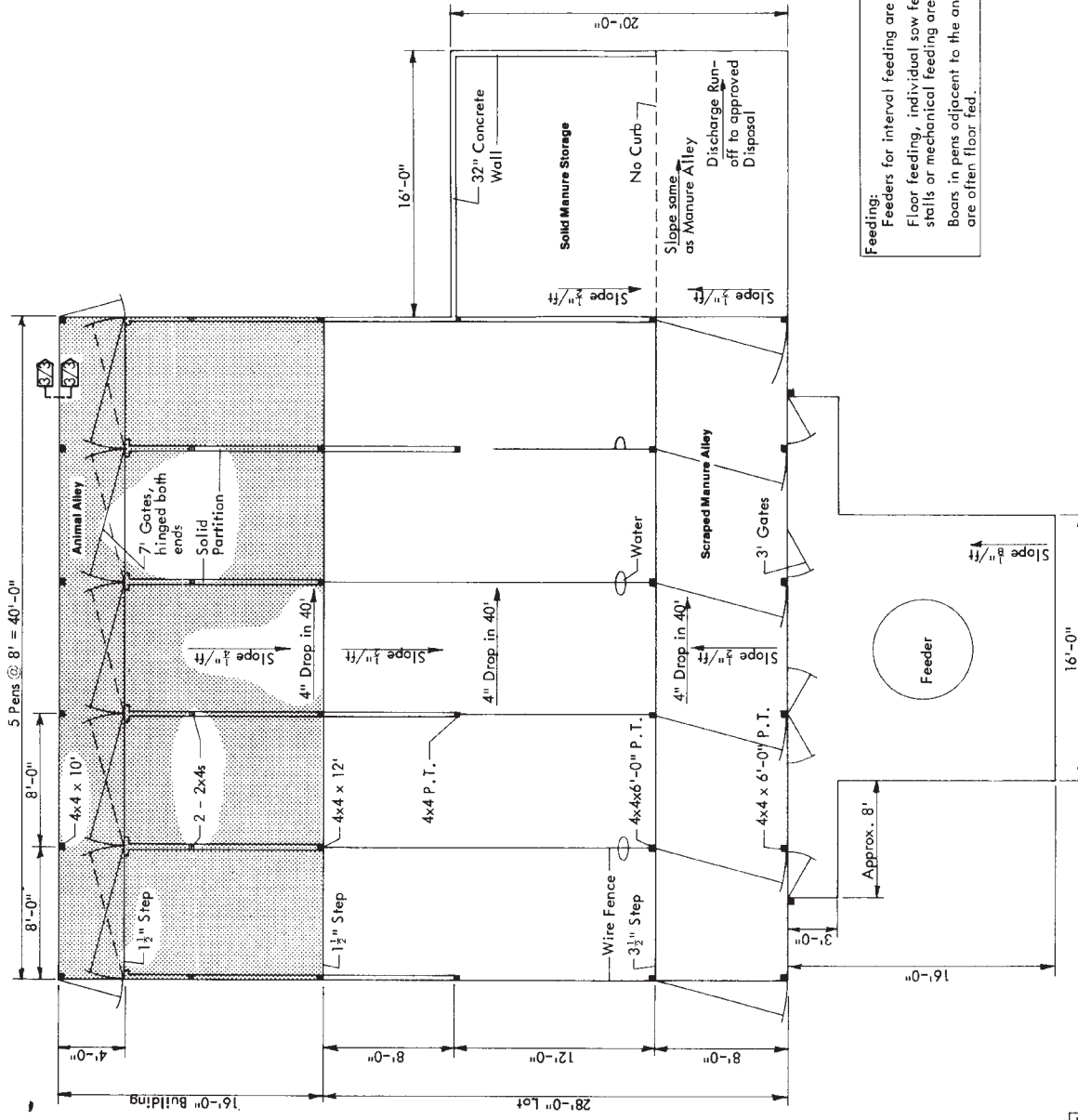
LUMBER SPECIFICATIONS

- 2x4 Construction Grade (Doug Fir or Spruce-Pine-Fir)
- 2x6 No. 2 (Doug Fir or Southern Pine)
- Trusses and rafters No. 2 and 3 (Doug Fir or Southern Pine)
- Posts and Sillboards Pressure Preservative Treated (Southern Pine or equivalent) -Creosote—10 pcf. Penite—0.50 pcf. ACA or CCA (Type A or B)—0.40 pcf.
- P. T. means lumber pressure preservative treated against insect and fungus attack.



Section & Detail Indicator

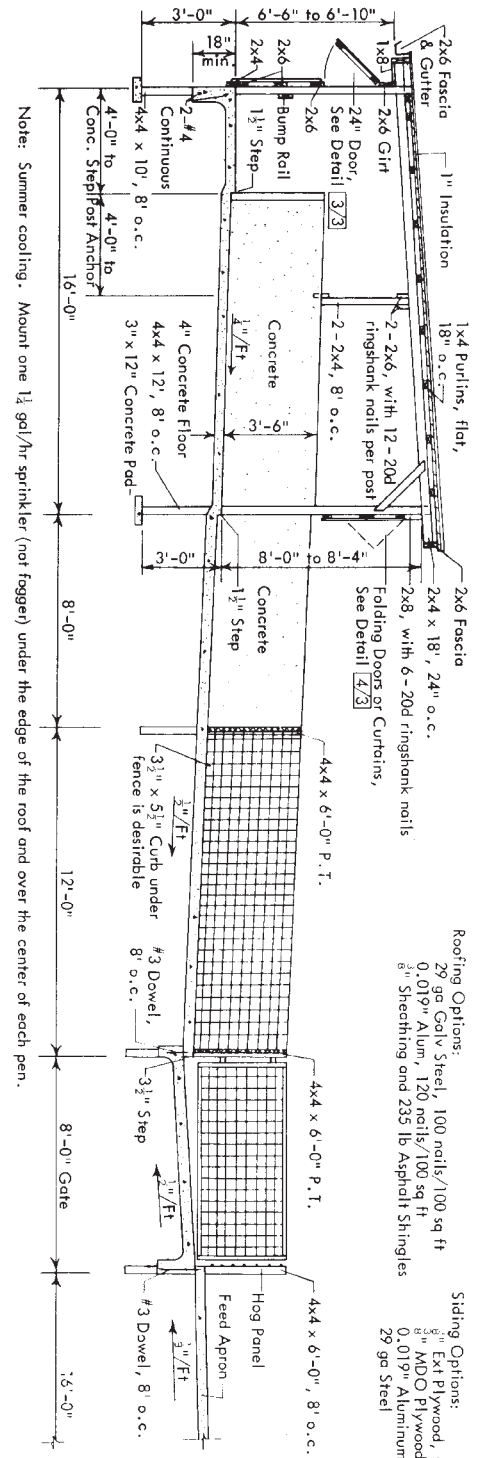
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Feeding:
 Feeders for interval feeding are shown.
 Floor feeding, individual sow feeding stalls or mechanical feeding are possible.
 Boars in pens adjacent to the animal alley are often floor fed.

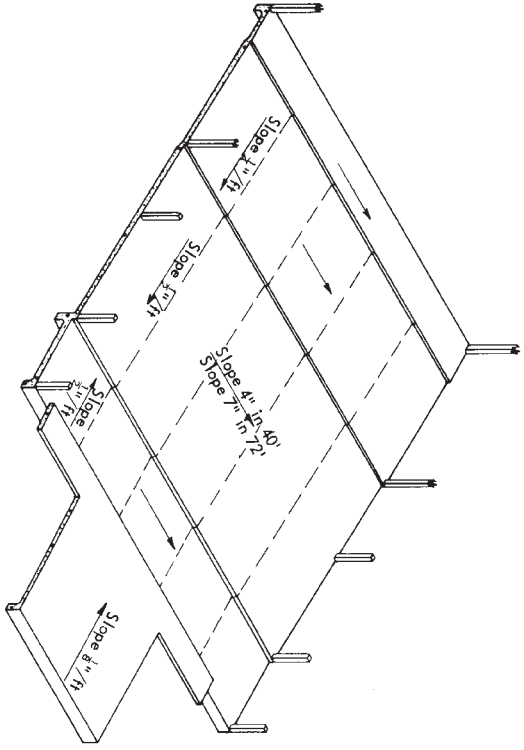
FLOOR PLAN—1/2
 Swine Gestation Unit
 Open Shed with Lot
 Entire floor plan slopes 4" / 40' to the right.

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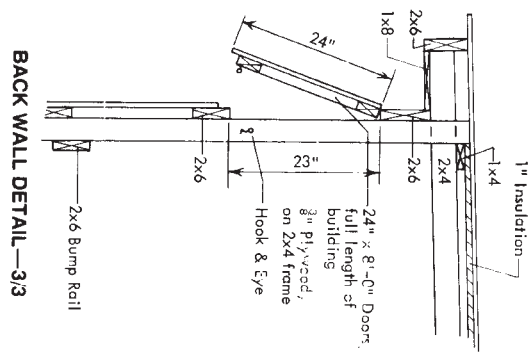


CROSS SECTION—1/3

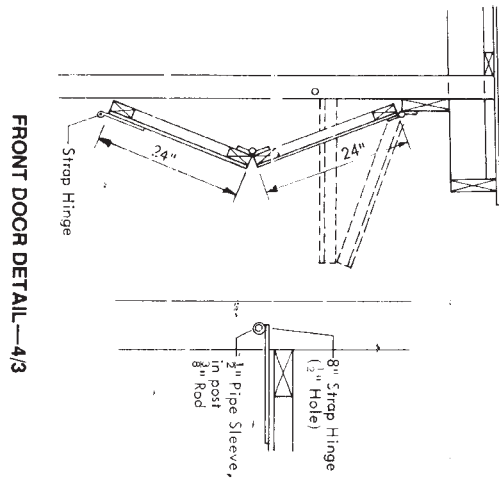
Note: Summer cooling. Mount one 1 1/2 gal/hr sprinkler (not fogger) under the edge of the roof and over the center of each pen.



FLOOR SLOPE DETAIL—2/3

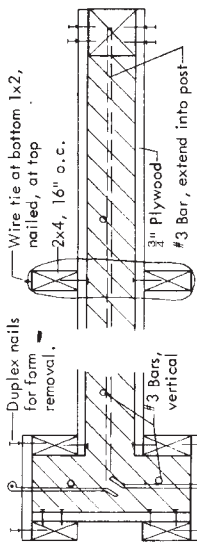


BACK WALL DETAIL—3/3

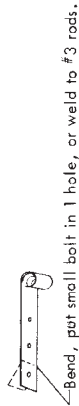


FRONT DOOR DETAIL—4/3

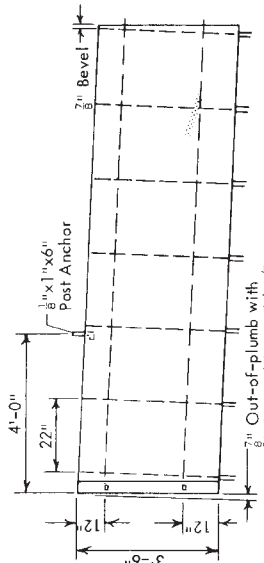
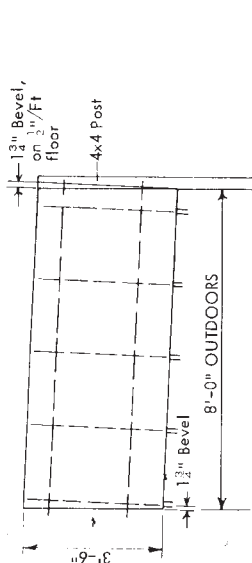
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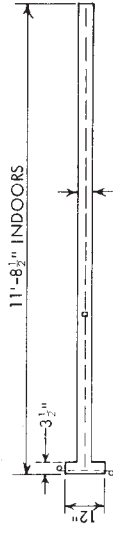
Strap Hinge, 8" long, 3/4" hole
 If welded wire mesh is available in flar sheets (not rolls), it can be used instead of #3 bars.



Bend, put small bolt in 1 hole, or weld to #3 rods.



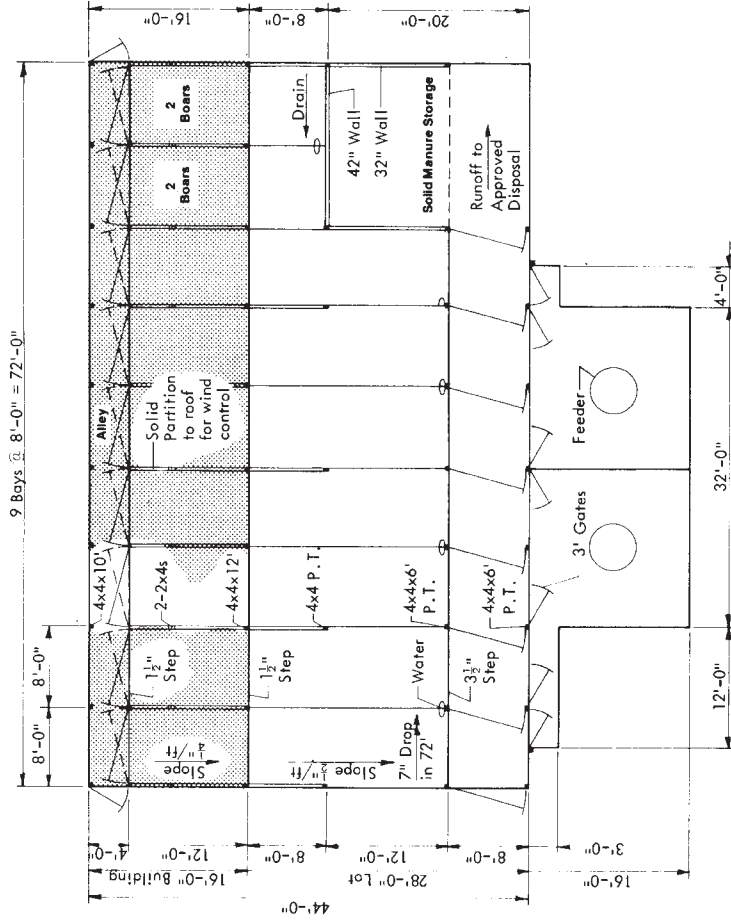
Cast 6" #3 dowels in floor. Wire vertical bars to them.



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CONCRETE PARTITION DETAILS—1/4



BREEDING - GESTATION LAYOUT—2/4