

IOWA STATE UNIVERSITY

University Extension



Bedded beef confinement

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Bedded Beef Confinement

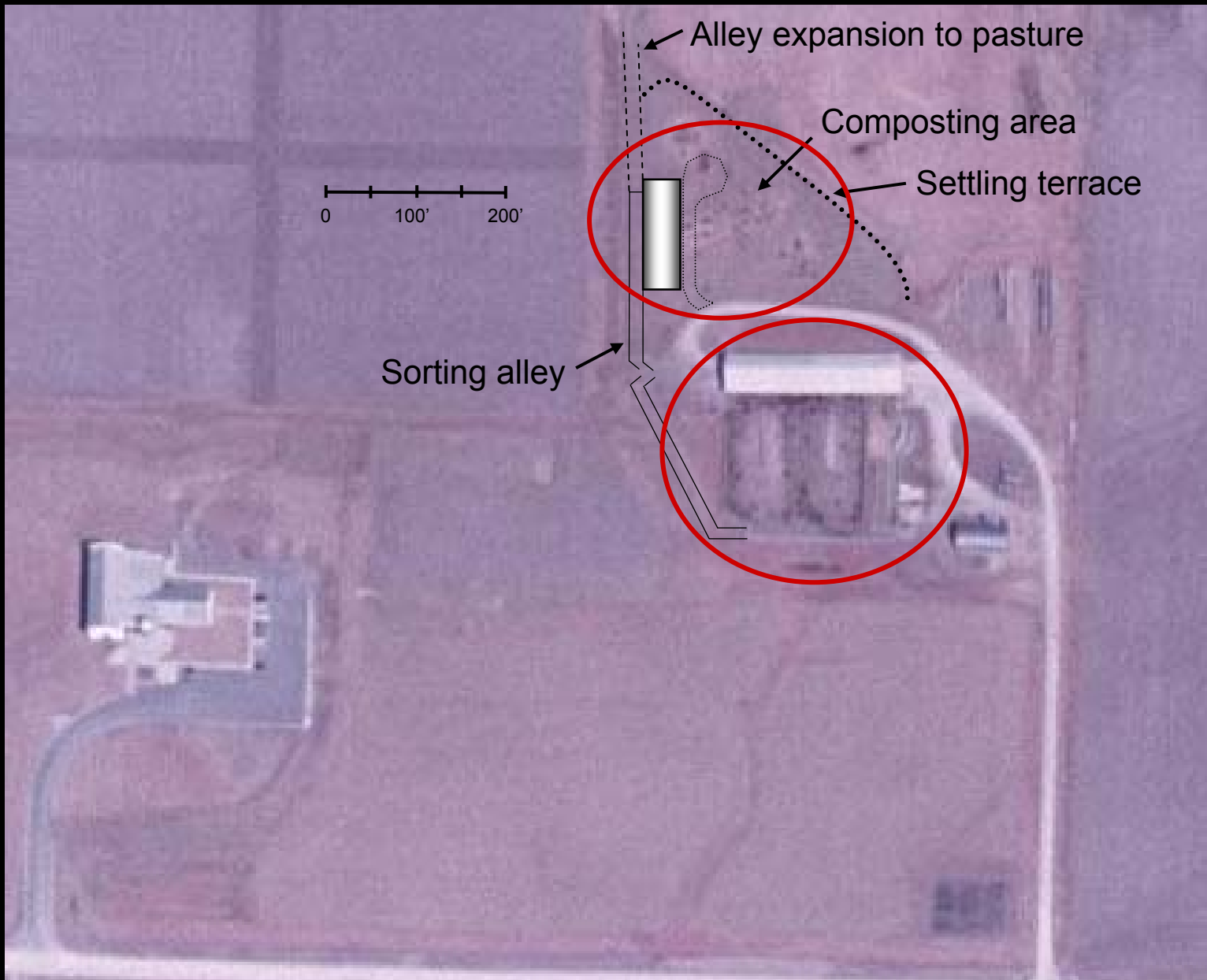
- Why?
 - Beef under roof *can* have higher rate of gain and better feed efficiency
 - Avoiding outside lots eliminates runoff environmental concerns and increases control over manure nutrients
- Why not?
 - More facility cost than outside lots
 - \$500 \$350 \$150
 -  \$200 target

Cost-saving plans

- Use solid floor and bedding
- Use concrete only where necessary
- Use a hoop building over only the pens

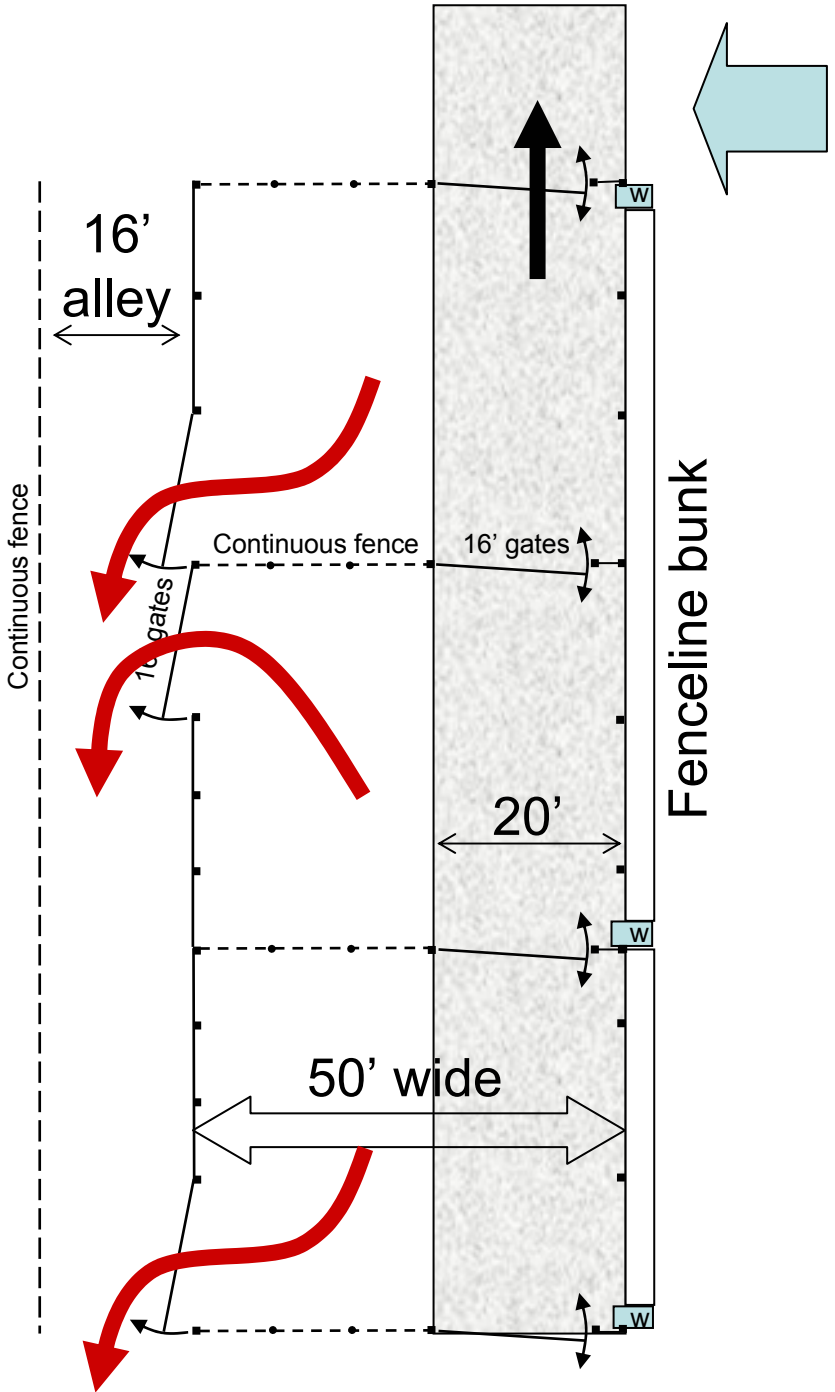
Conditions/requirements

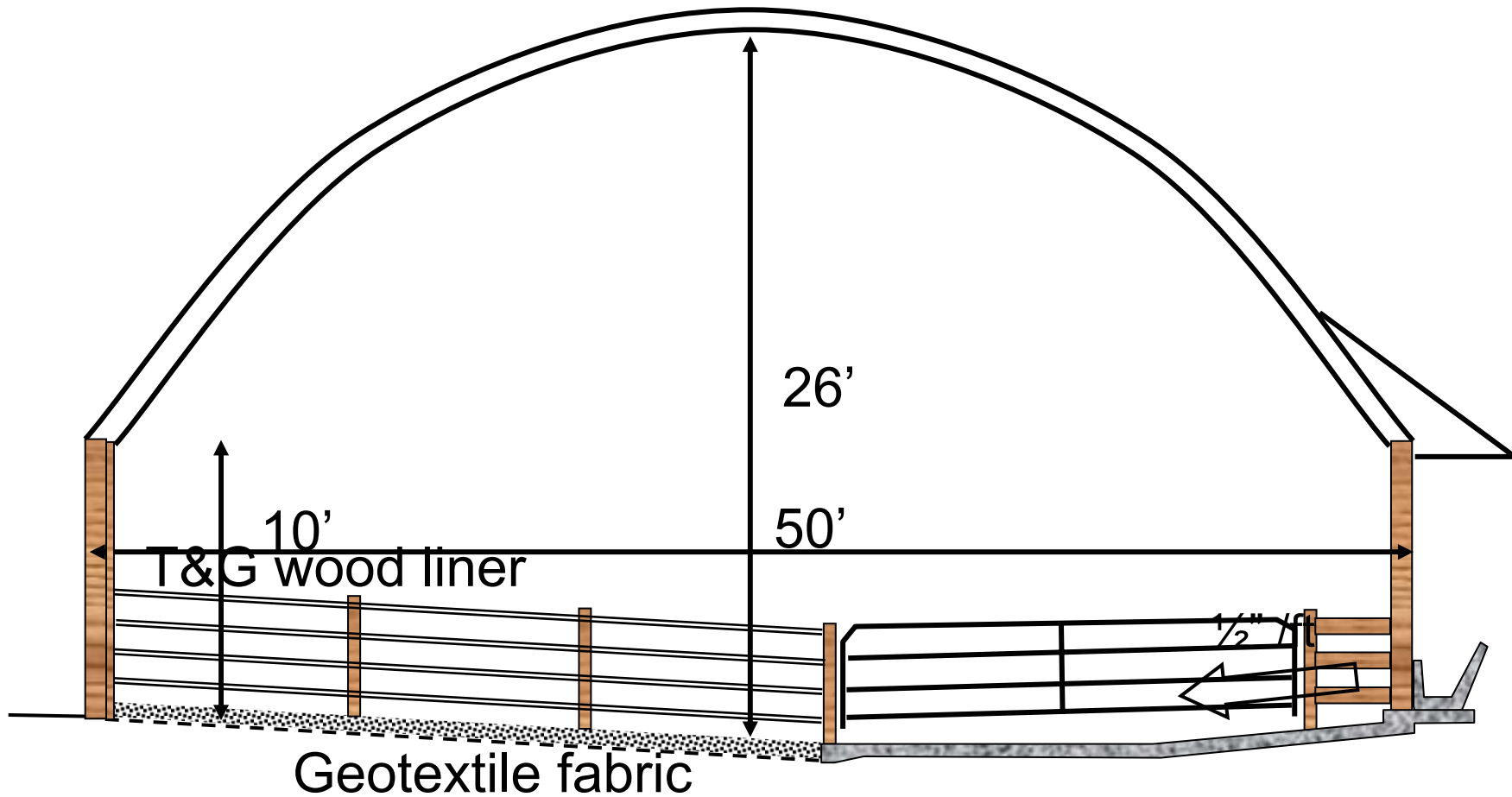
- 3 pens of 40 head each for research comparison with existing facilities
- Monitor inside environment and manure management
- Compost manure/bedding for other uses on the research farm
- Monitor cattle performance and carcass quality





120' long







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Team Approach

Animal Scientists

Ag Engineers

Economists

Extension

Research Farm

Feeder Advisors

Team Support

ISU

Wallace Foundation

Iowa Cattleman's

DNR

Leopold Center

Local cattle feeders

Iowa Beef Center

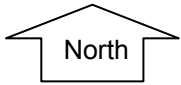
Industry donors

Progress

- Site work done
- Building parts purchased and mostly delivered
- Construction expected in coming weeks
- Cost is already over \$300/hd

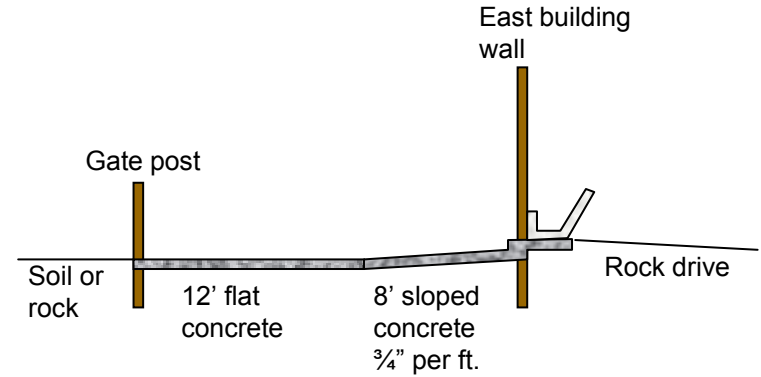
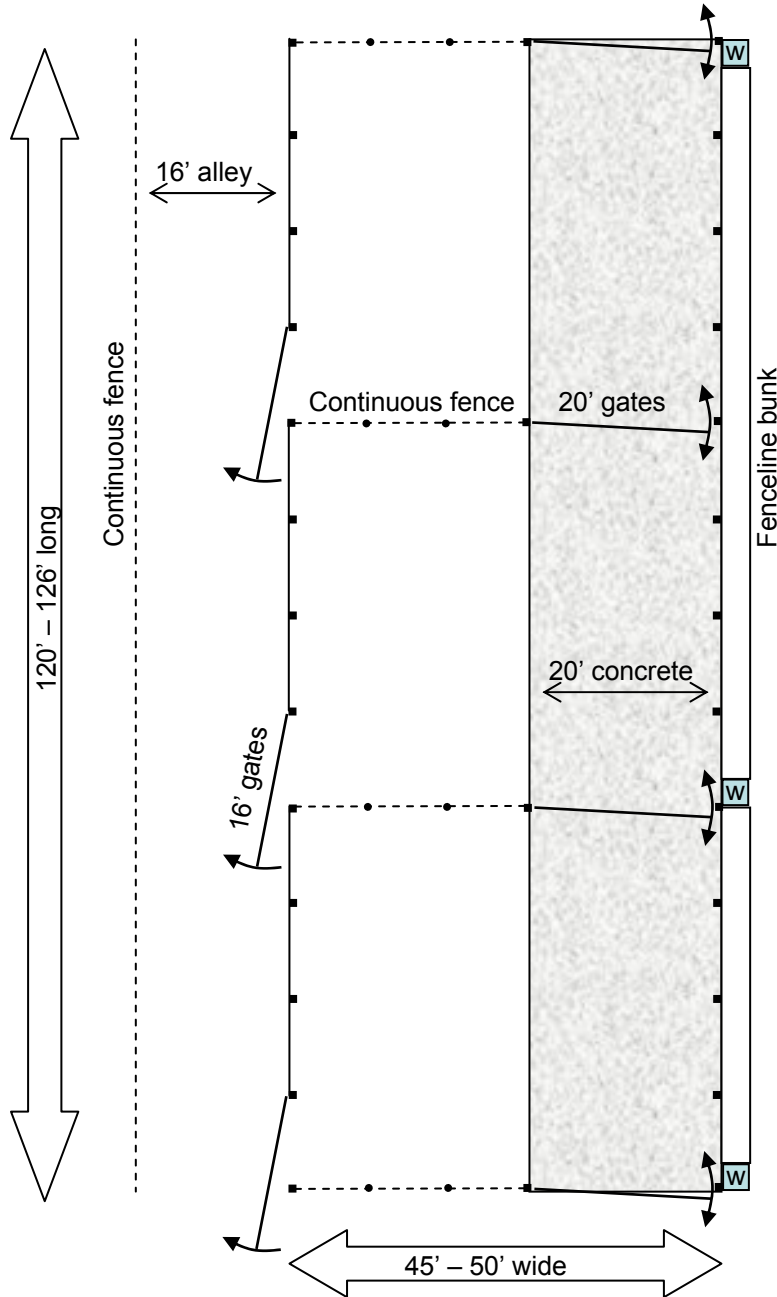
- end





Draft

10-7-03



Roughly half the floor will be concrete (20'). The west half will be compacted soil or crushed rock over geotextile fabric and soil.

The east half of the floor will be concrete. The first 8 feet along the bunk will slope $\frac{3}{4}$ " per foot away from the bunk (6 inches fall in 8 feet). The remaining 12 feet of concrete will be flat.

A 6" by 12" concrete step will be formed along the bunk. The concrete floor will extend beneath the bunk.

Crushed rock will be installed on the feed alley.

The entire building floor shall slope $\frac{1}{8}$ " per foot to the north (12"-16" in 120 feet).

The building sidewall height will be 8 feet minimum, 10 feet maximum.

The gates on the west wall will be covered with a durable wind-resistant material to close the wall as much as possible to unwanted drafts.

The building will be bid with an operable ridge vent as an alternate.

East building posts will be wrapped on the 3 cattle sides with protective metal.

The west wall will have operable vent opening (curtain or vent doors) in the top 2 feet.