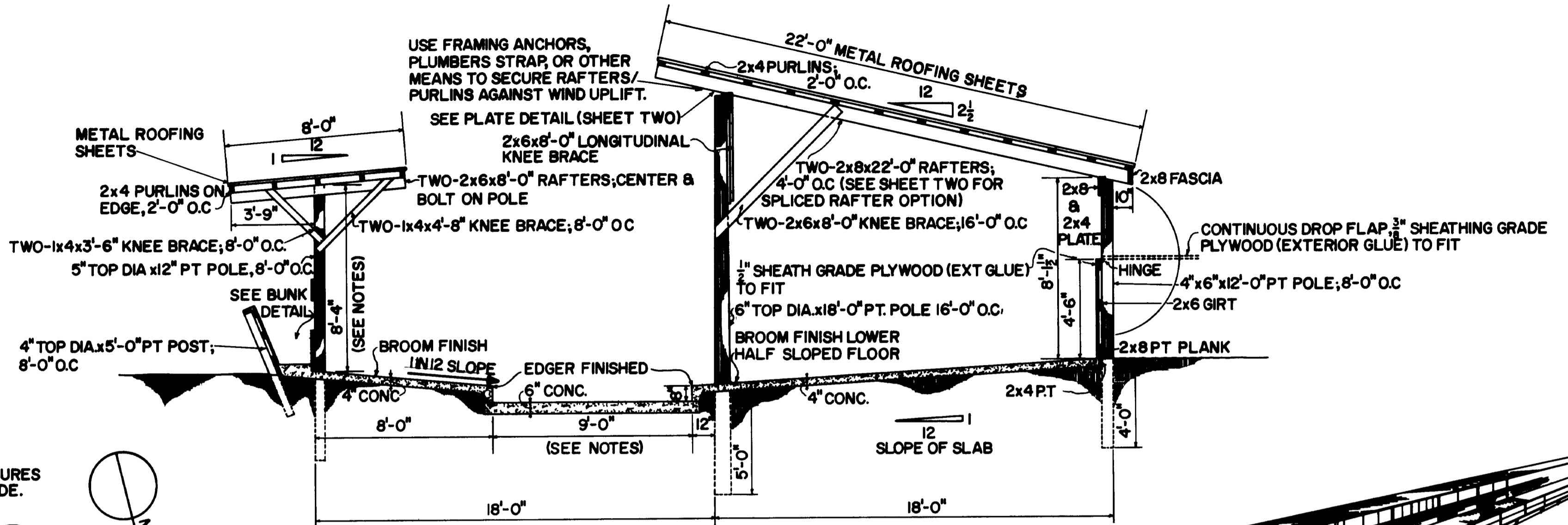


Important: Warranty Disclaimer for Plans

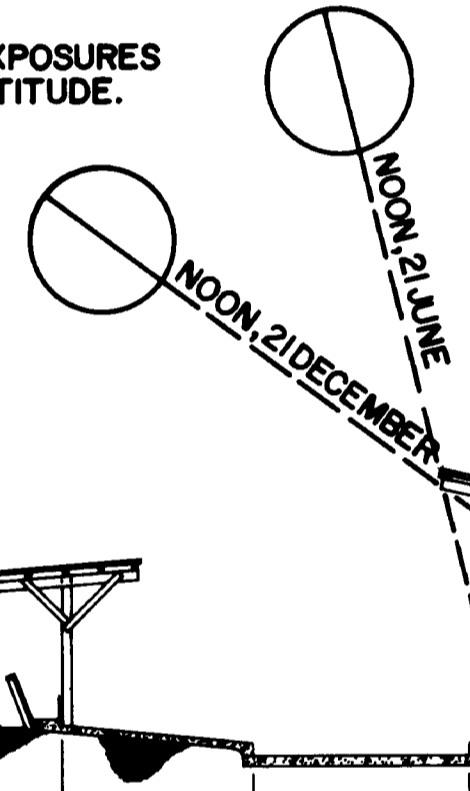
For the convenience of our clientele, this website makes available conceptual plans that can be helpful in planning buildings, facilities, or other structures. They were developed over many years by engineers at Land Grant universities through the former USDA Cooperative Farm Buildings Plan Exchange. *Regardless of the original intent, these are older plans that provide conceptual information only, and are not to be considered or used as construction plans.*

These plans do not claim to represent the most current technology or the most recent construction techniques, standards, or codes. For example, over the years there have been changes in the National Design Specifications for Wood Construction, changes in the strengths and types of building materials, and changes in fasteners, among other things. Those changes, along with variations in climate, building codes, and other factors, make it imperative that professional services be utilized for your specific project. Suggested services include, but are not limited to, structural design, assurance of compliance with codes and regulations, site selection, construction supervision, and provision for utilities, waste management, and access. *These plans do not replace the need for competent design assistance in developing safe, legal, and well-functioning agricultural buildings and systems.*

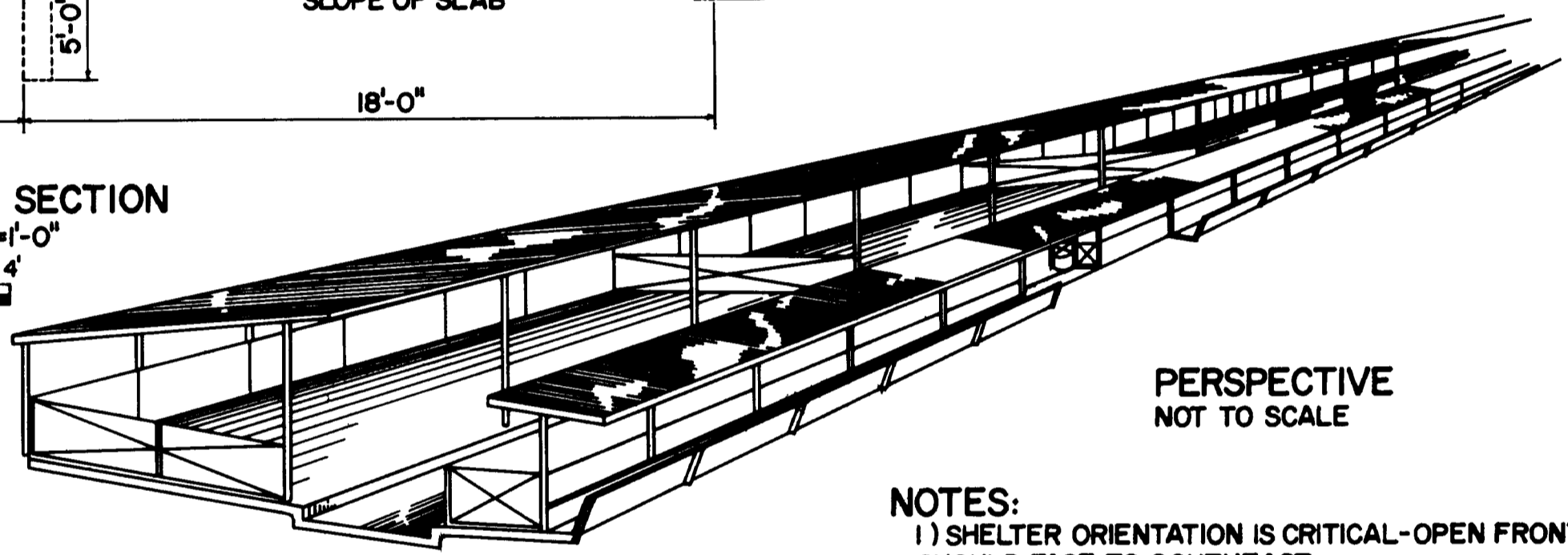
Neither the University of Kentucky, the Midwest Plan Service, the United States Department of Agriculture, nor any of the cooperating Land Grant universities, warranty these plans. They are for conceptual use only and are not for use as construction plans.



SEASONAL SUN EXPOSURES AT 40° NORTH LATITUDE.

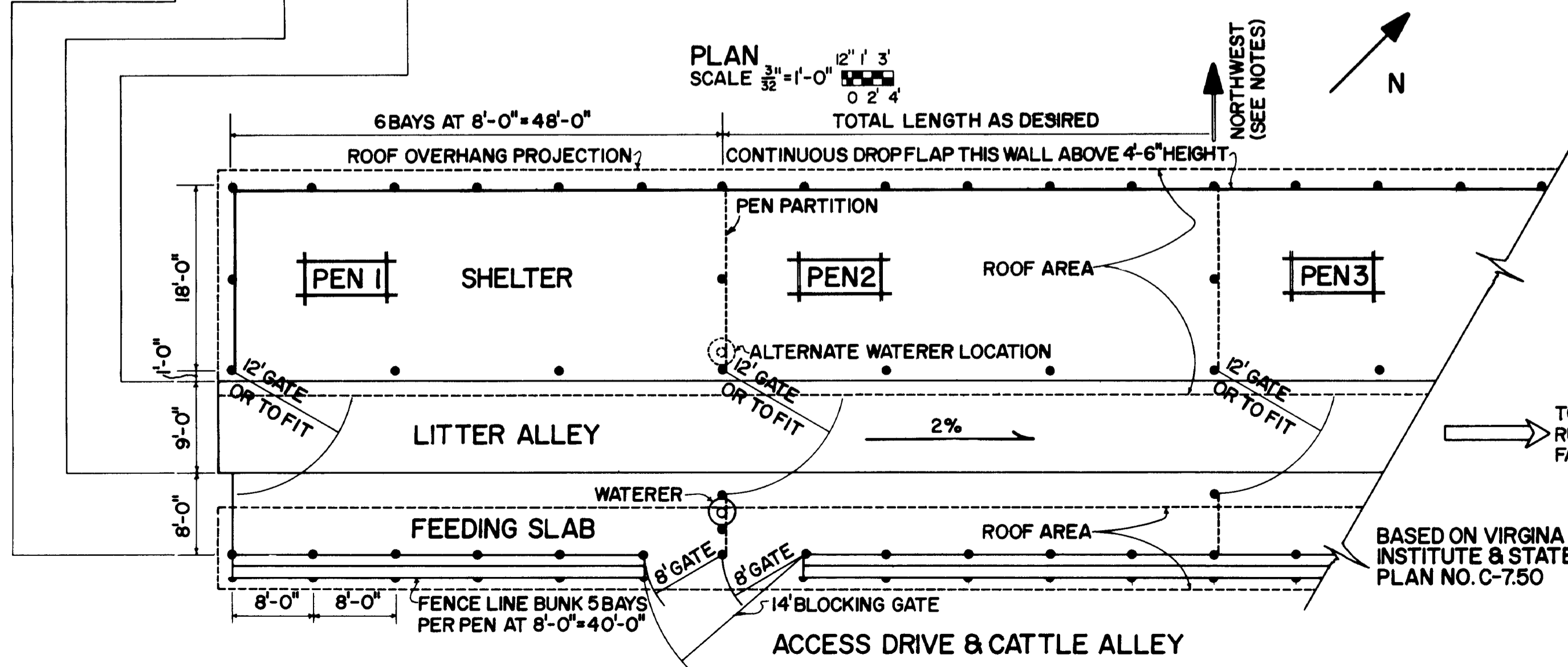


CROSS SECTION
SCALE: 1/4" = 1'-0"
12' 0' 1' 2' 3' 4' 6'



PERSPECTIVE
NOT TO SCALE

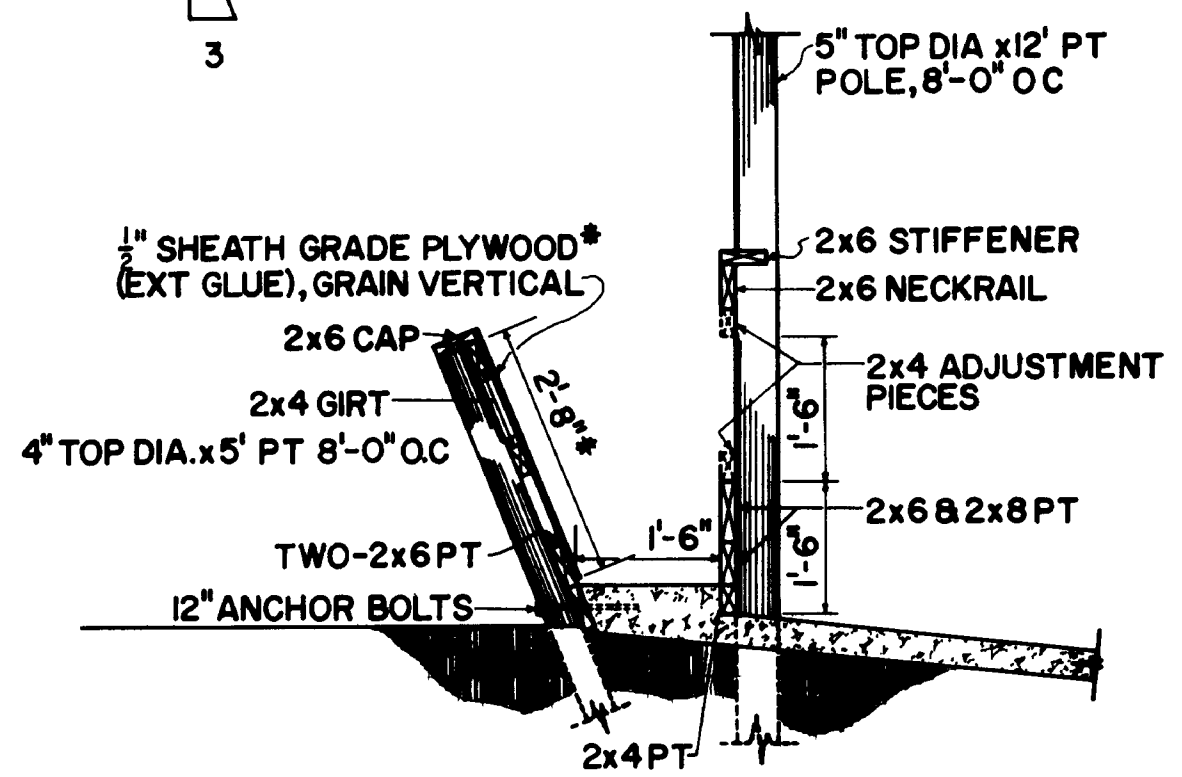
- NOTES:
- 1) SHELTER ORIENTATION IS CRITICAL-OPEN FRONT SHOULD FACE TO SOUTHEAST
 - 2) SLOPED FLOOR AREAS ARE SELF-CLEANING NO BEDDING IS REQUIRED
 - 3) IT MAYBE NECESSARY TO INCREASE BUNK ROOF CLEARANCE FOR FEED WAGON PASSAGE-MEASURE EQUIPMENT TO BE USED
 - 4) LITTER ALLEY WIDTH VARIABLE, DEPENDING ON MANURE HANDLING EQUIPMENT SELF-LOADING MANURE SPREADERS REQUIRE GREATER WIDTH WITH FLOATATION TIRES
 - 5) LITTER ALLEY CAN BE SCRAPED BY TRACTOR OR AUTOMATIC ALLEY CLEANERS, ALLEY FLUSHING MAYBE POSSIBLE IN WARM CLIMATE ELECTRIC DRIVETHRU GATES ARE SUGGESTED ALONG LITTER ALLEY TO FACILITATE MANURE-SCRAPING TRACTOR MOVEMENT



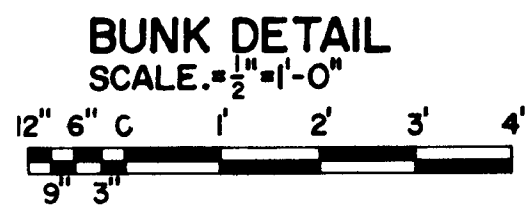
TO MANURE & RUNOFF HANDLING FACILITIES

BASED ON VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY PLAN NO. C-7.50

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS			
AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING			
BEEF FEEDING PENS COUNTER-SLOPED			
VA	'78	6297	SHEET 1 OF 2

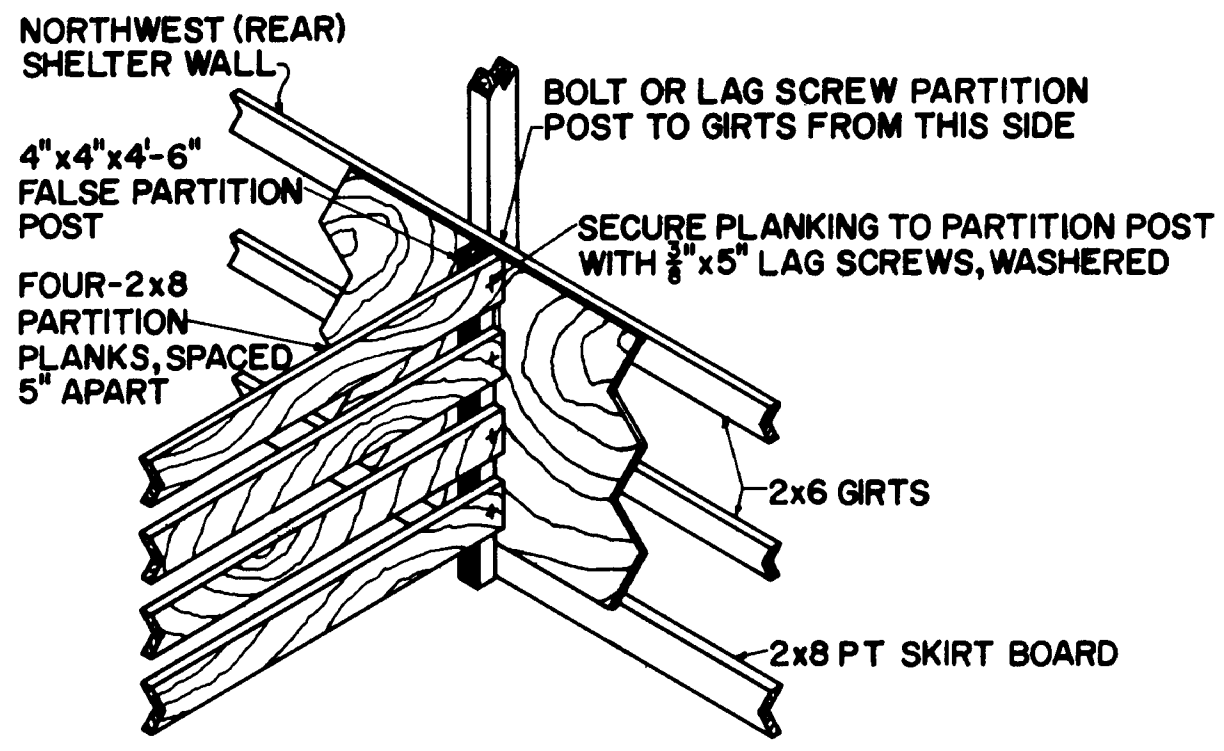


*PLYWOOD BUNK LINER CUT IN 2'-8" LENGTHS FROM STANDARD SHEET (3 PIECES PER SHEET)



AREA OF ANIMAL USE	NUMBER OF HEAD PER 48' PEN	
	50*	63
RESTING SHELTER ¹	17.5	13.9
FEEDING SLAB	7.7	6.1
TOTAL SLOPED FLOOR	25.2	20.0
LITTER ALLEY	8.6	6.8
TOTAL ANIMAL AREA ²	33.8	26.8
	AVAILABLE ANIMAL AREA FT²/HD	
FEED BUNK	8.9	7.0
	AVAILABLE FEEDING SPACE IN/HD	

*50 HD/PEN RECOMMENDED HOT WEATHER PEN POPULATION UNTIL EXPERIENCE IS GAINED IN FACILITY MANAGEMENT
1) DOES NOT INCLUDE FEED BUNK ROOF SHELTER
2) TOTAL ANIMAL AREA IS 68% ROOFED



PEN PARTITION DETAIL
NOT TO SCALE

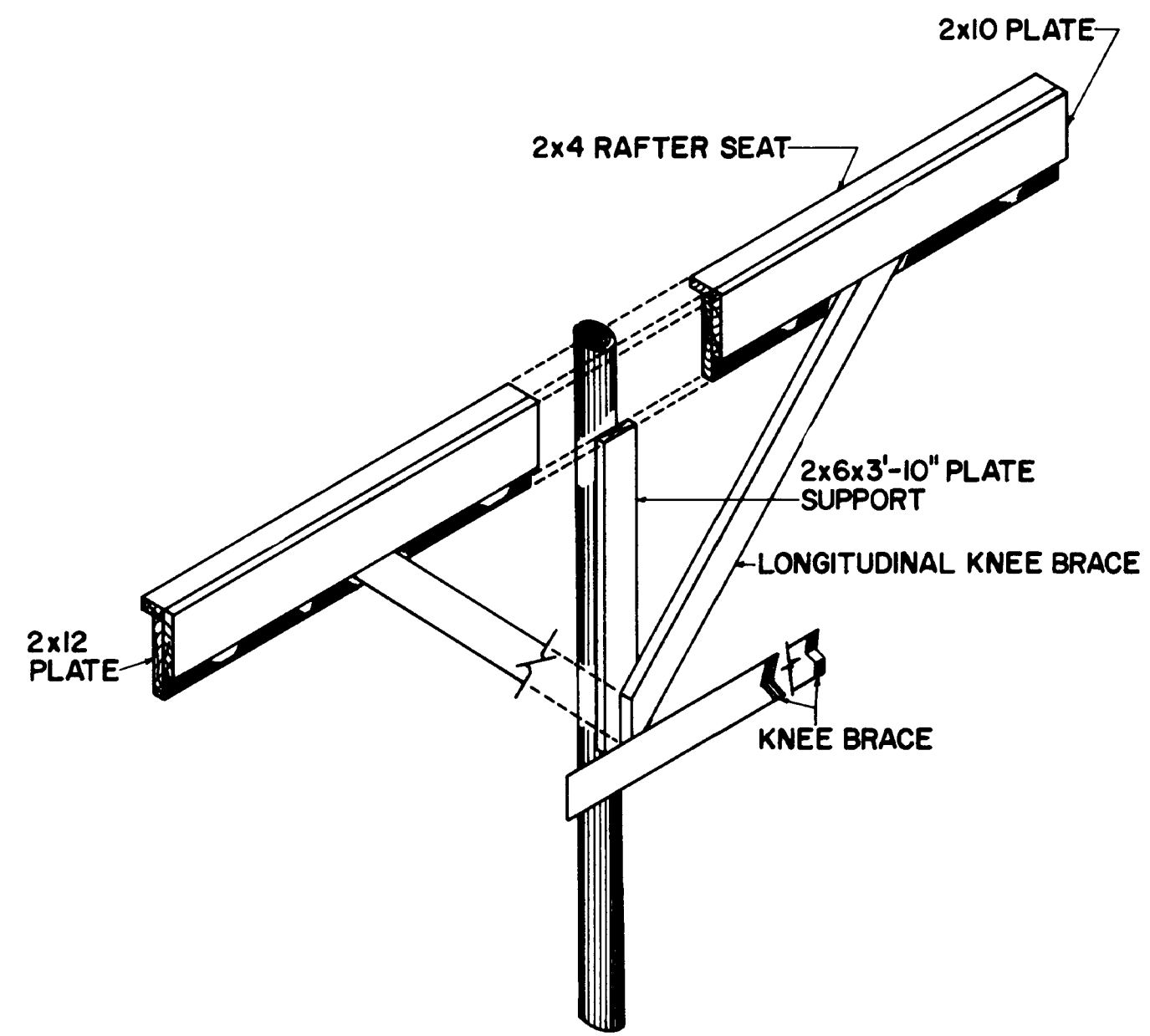
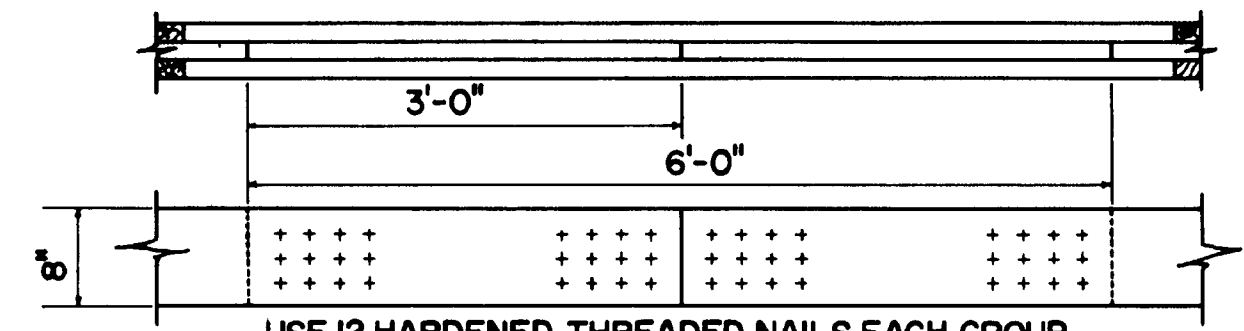
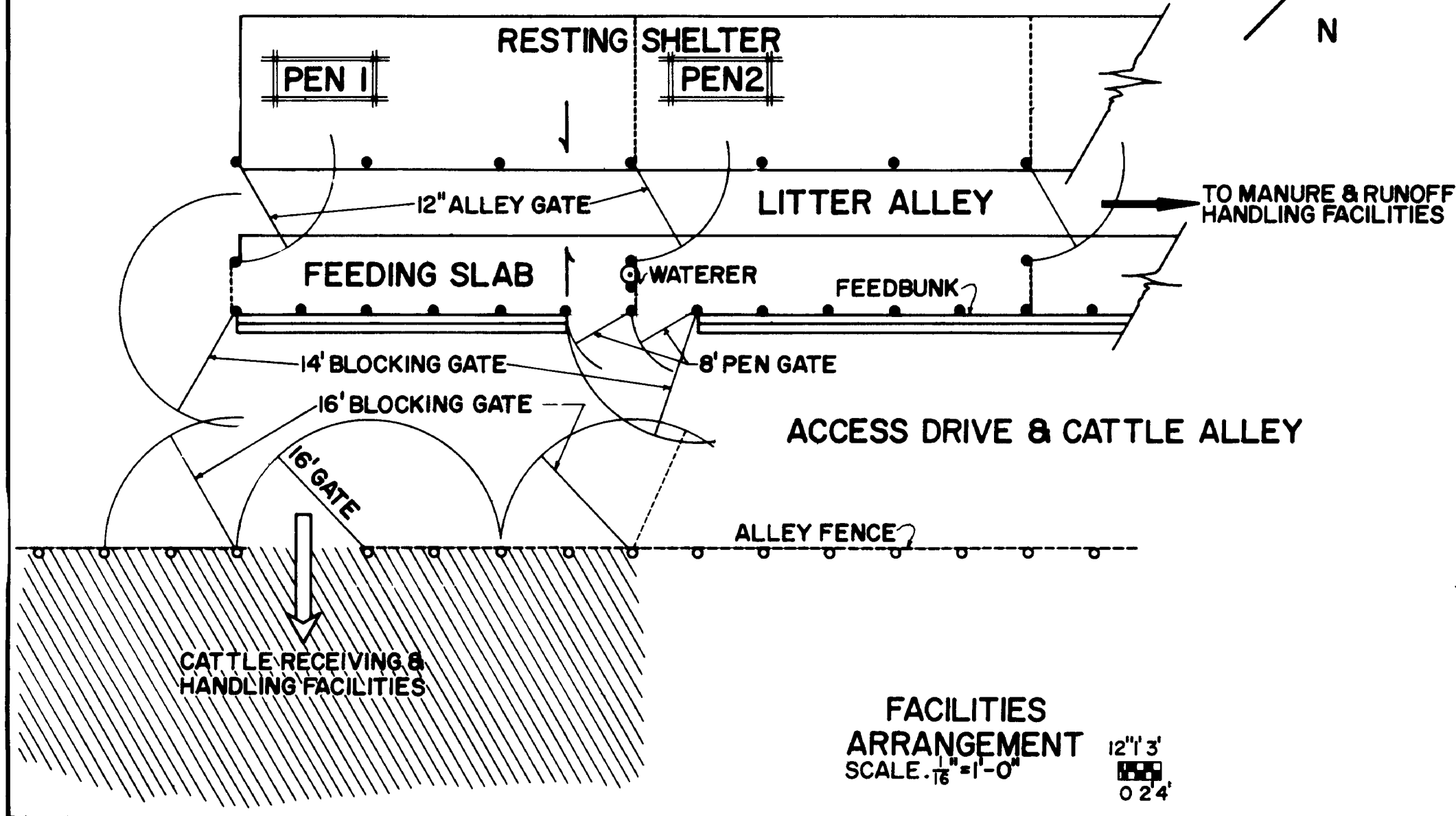


PLATE DETAIL
NOT TO SCALE

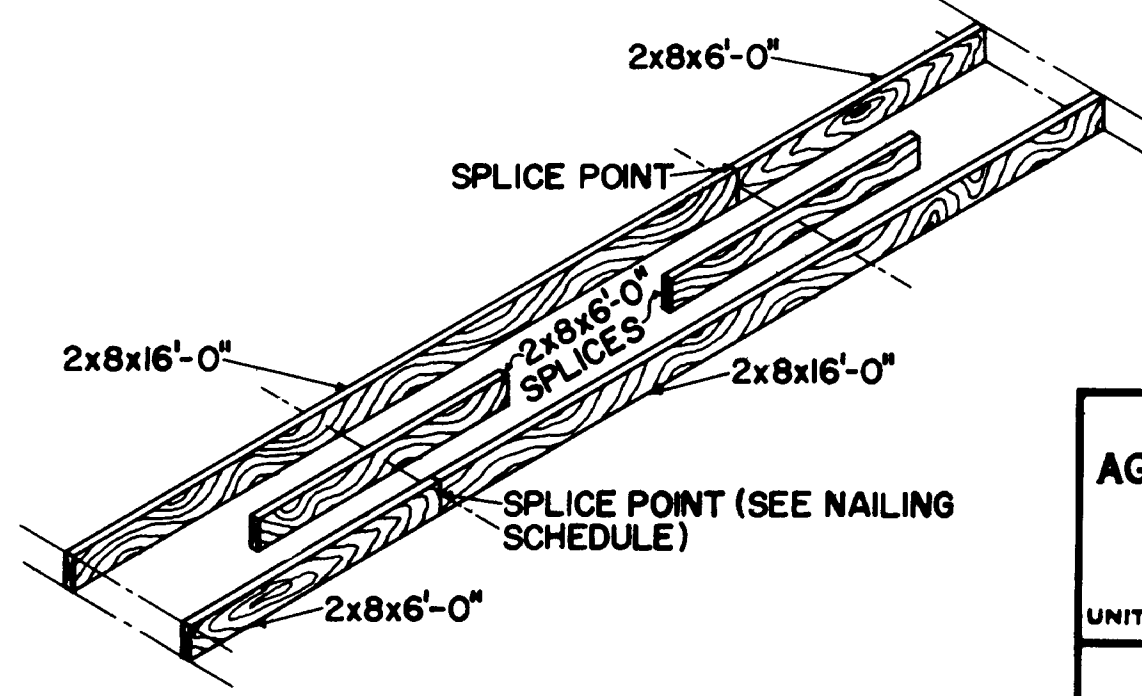


USE 12 HARDENED THREADED NAILS EACH GROUP 20D WITH LUMBER S4S, 50D WITH ROUGH LUMBER

SPliced RAFTER NAILING SCHEDULE
NOT TO SCALE



FACILITIES ARRANGEMENT
SCALE: 1/16" = 1'-0"
12" 3" 0 24"



ALTERNATE RAFTER DESIGN
NOT TO SCALE

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

**BEEF FEEDING PENS
COUNTER-SLOPED**

VA.	'78	6297	SHEET 2 OF 2
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