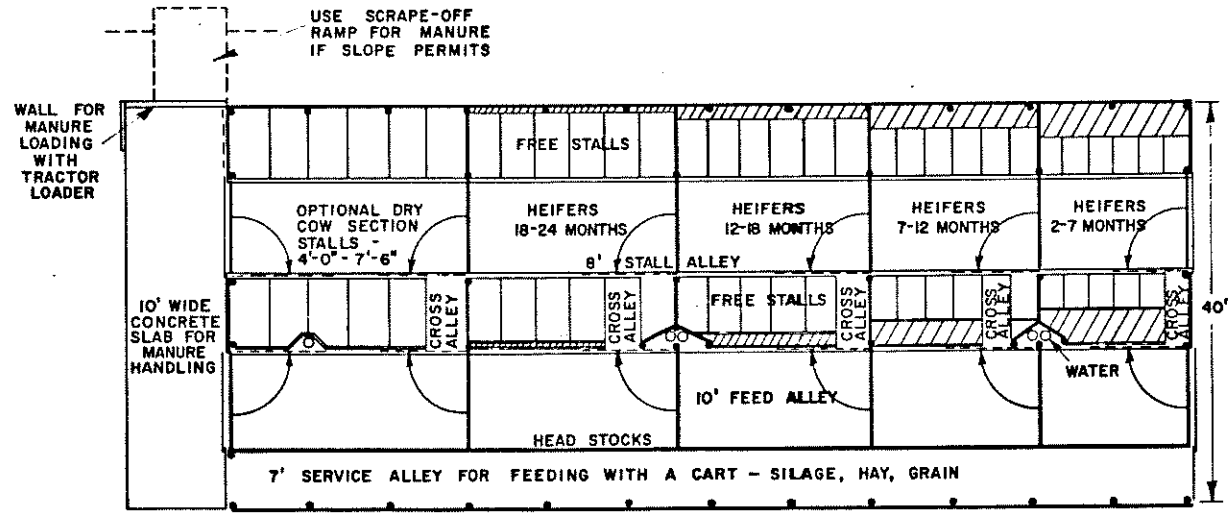


PLAN VIEW - BARN FOR WAGON FEEDING
HEIFERS ONLY - SECTION FOR DRY COWS OPTIONAL

SCALE: 1/4" = 1'-0"



PLAN VIEW - BARN FOR HEIFERS AND DRY COWS
CLOSED SIDES IF DESIRED - USE FOR CART FEEDING

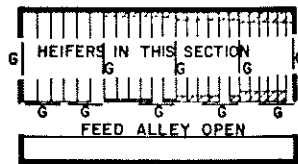
SCALE: 1/4" = 1'-0"

TWO VERSIONS OF THE
FREE STALL BARN ARE
SHOWN, CAN BE OPEN
ON ONE SIDE OR CLOSED
AS A COLD, COVERED
SYSTEM.

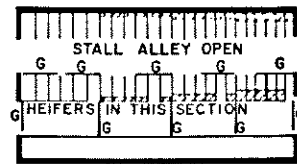
PENN. STATE UNIV. PLAN NO. 723-202

COOPERATIVE EXTENSION WORK IN
AGRICULTURE AND HOME ECONOMICS
STATE OF NORTH DAKOTA
NORTH DAKOTA STATE UNIVERSITY
OF AGRICULTURE AND APPLIED SCIENCE
AND
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

HEIFER BARN FREE STALL		
PENN. '70	6102	SHEET 1 OF 4



A. HEIFERS IN STALL AREA
SCRAPE FEEDING ALLEY



B. HEIFERS IN FEED ALLEY
SCRAPE STALL ALLEY OR
BED STALLS

FIG. 1 - HOW THE GATE SYSTEM WORKS FOR CLEANING

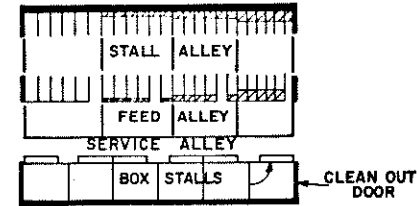


FIG. 2 - BARN 52' WIDE WITH BOX STALLS

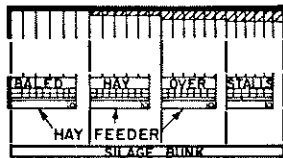


FIG. 3 - BARN WITH HAY FEEDER,
HAY STORAGE OVER STALLS

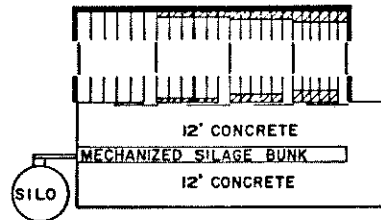


FIG. 4 - BARN WITH SILO AND BUNK,
COWS FEED, HEIFERS SHUT IN STALL ALLEY

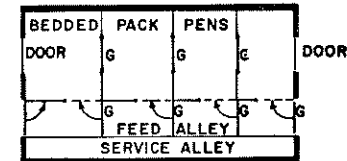


FIG. 5 - BARN FOR BEDDED PENS,
CAN ADD FREE STALLS LATER

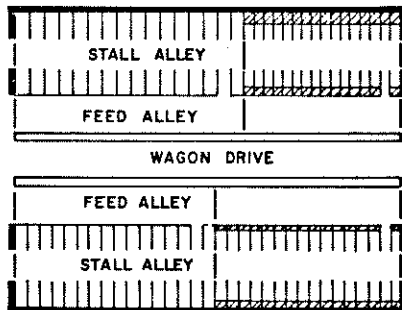


FIG. 6 - DOUBLE BARN FOR LARGE OPERATION

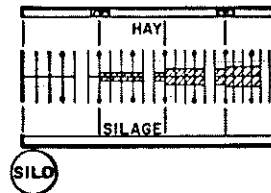


FIG. 7 - REMODELED STALL BARN
FOR GATED FREE STALL HEIFER BARN

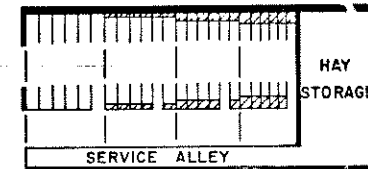
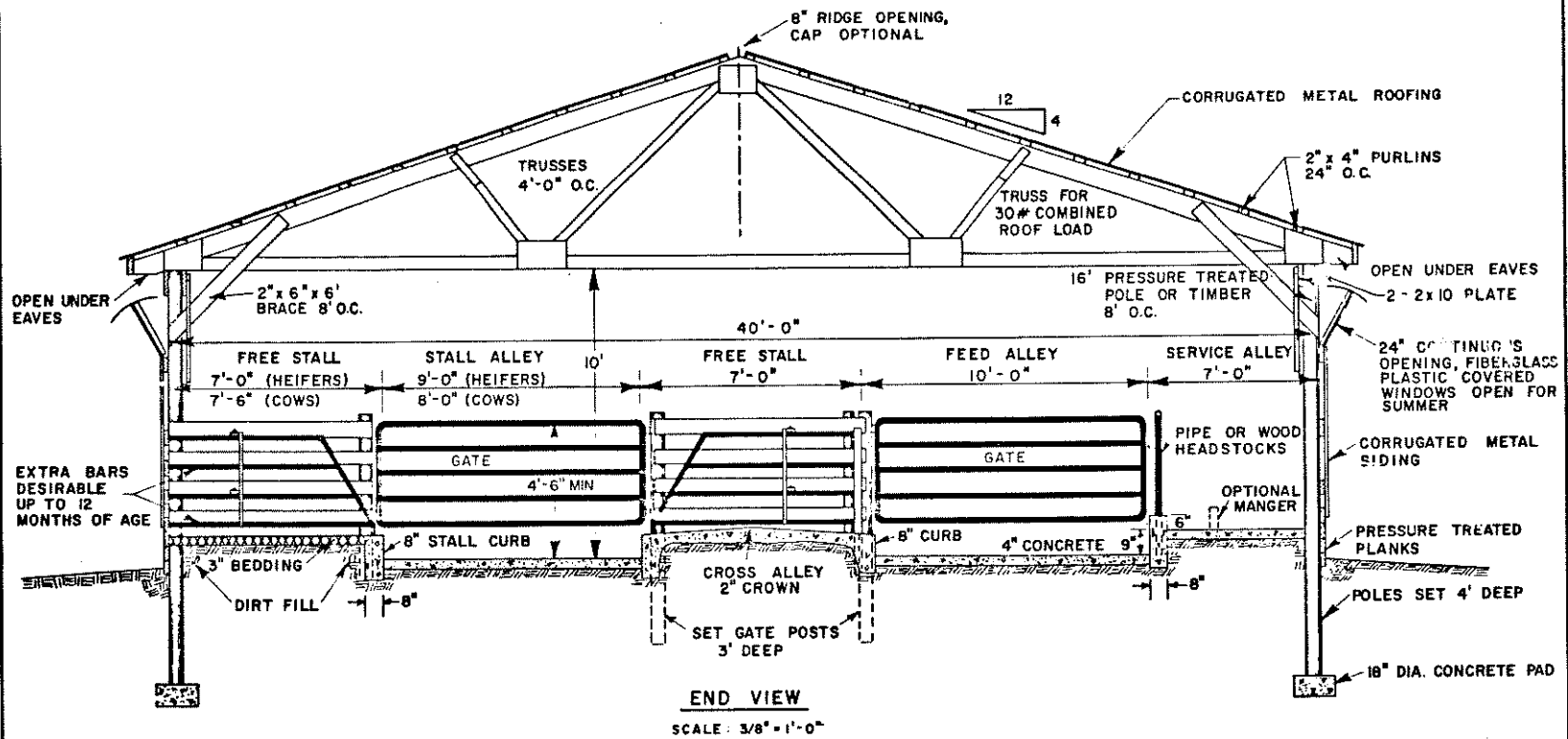


FIG. 8 - HAY STORAGE AT END

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS		
STATE OF NORTH DAKOTA NORTH DAKOTA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE		
AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING		
HEIFER BARN FREE STALL		
PENN. '70	6102	SHEET 2 OF 4



AGE IN MONTHS	WEIGHT POUNDS	FREE STALL SIZES	NUMBER OF STALLS PER SECTION									
			5+4	6+5	7+6	8+7	9+8	10+9	11+10	12+11	13+12	
2 - 7	to 450	2'-6" x 4'-6"	12'-6"	15'-0"	17'-6"	20'-0"	22'-6"	25'-0"	27'-6"	30'-0"	32'-6"	
7 - 12	to 650	2'-10" x 5'-0"	14'-2"	17'-0"	19'-10"	22'-6"	25'-6"	28'-4"	31'-2"	34'-0"	36'-10"	
12 - 18	to 875	3'-2" x 6'-0"	15'-10"	19'-0"	22'-2"	25'-4"	28'-6"	31'-8"	34'-10"	38'-0"	41'-2"	
18 - 24	to 1150	3'-6" x 7'-0"	17'-6"	21'-0"	24'-6"	28'-0"	31'-6"	35'-0"	38'-6"	42'-0"	45'-6"	
LENGTH OF BARN			60'-0"	72'-0"	84'-0"	96'-0"	108'-0"	120'-0"	132'-0"	144'-0"	156'-0"	
NUMBER OF HEIFERS			36	44	52	60	68	76	84	92	100	

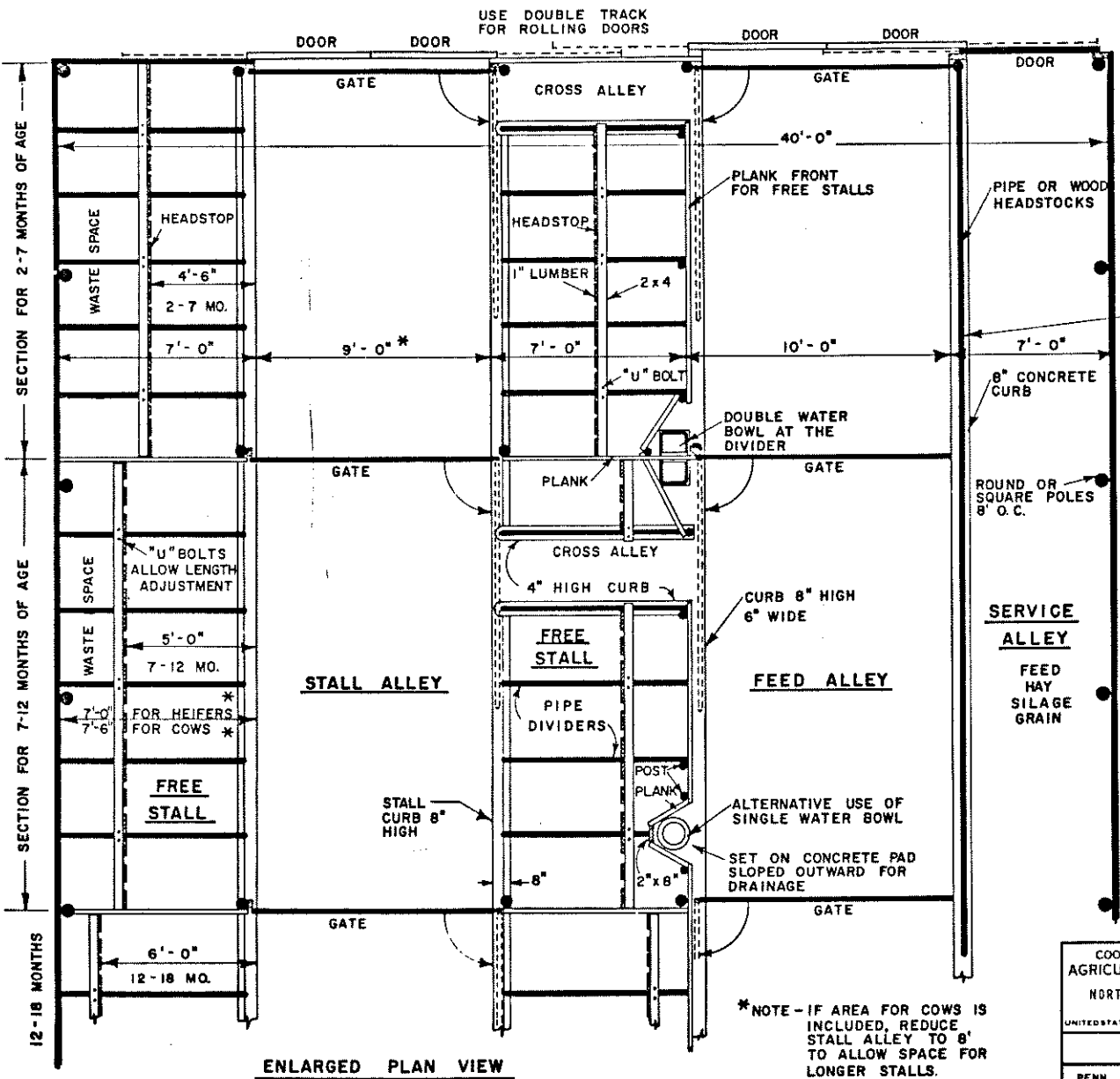
LENGTH NEEDED FOR VARIOUS NUMBERS OF HEIFERS - IF DRY COWS ARE INCLUDED, USE MULTIPLES OF 4 FEET (STALLS 4'-0" x 7'-6")

COOPERATIVE EXTENSION WORK IN
 AGRICULTURE AND HOME ECONOMICS
 STATE OF NORTH DAKOTA
 NORTH DAKOTA STATE UNIVERSITY
 DEPARTMENT OF AGRICULTURE AND APPLIED SCIENCES
 AND
 UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

**HEIFER BARN
 FREE STALL**

PENN. '70 6102 SHEET 3 OF 4

SEE SHEET 3 FOR LENGTHS OF HEIFER SECTIONS



HEADSTOCK OPENINGS
 2-7 MONTHS - 7"
 7-12 MONTHS - 8 1/2"
 12-18 MONTHS - 10"
 18-24 MONTHS - 11"
 COWS - 12"

LEVER OPERATED STANCHIONS MAY BE USED IF DESIRED

SERVICE ALLEY
 FEED HAY
 SILAGE
 GRAIN

ENLARGED PLAN VIEW
 SCALE: 1/4" = 1'-0"

*NOTE - IF AREA FOR COWS IS INCLUDED, REDUCE STALL ALLEY TO 8' TO ALLOW SPACE FOR LONGER STALLS.

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS
 STATE OF NORTH DAKOTA
 NORTH DAKOTA STATE UNIVERSITY
 OF AGRICULTURE AND MECHANICAL ARTS
 AND
 UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

**HEIFER BARN
 FREE STALL**

PENN. '70	6102	SHEET 4 OF 4
-----------	------	--------------