FLOOR AND FOUNDATION PLAN

CROSS WALLS: REINFORCED FOR A PRESSURE OF 10 Pounds per square inch (psi) Acting over a 36 inch (3') Water Table at Bottom of Cell. A wall 4 feet (4') High above Pit Floor Level, Install Galvanized Pipe and Pump to relieve Pressure or check with Engineer for Amount of Additional Reinforcing.

WALL THICKNESS: An 8" thick wall required where stave is more than 4" thick. Wall designed for 8" stave, but wall must be thicker for 4" stave. The difference in the thickness is due to the difficulty of placing steel and concrete in 4" staves.

NOTE: This design is safe for any building. The greatest danger of a wall failure is during backfilling. Braces and Steel should be in place before backfilling. Temporary braces could be used to keep the walls from moving.

BASIS PLAN NO. 307
UNIVERSITIY OF ILLINOIS

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

CONFINEMENT BEEF BARN
REAR DRIVEWAY GABLE ROOF

BIL: 73
CIGO
SHEET 1 OF 3
REINFORCED CONCRETE BEAM & SLAT DETAIL

AUTOMATIC ELECTRICALLY HEATED LIVESTOCK WATERER

WITH GROUND FROM SWITCH BOX
NOTE: THE WATERER MUST BE MECHANICALLY CONNECTED TO THE GROUND WIRE OF THE ELECTRICAL SYSTEM TO AVOID THE POSSIBILITY OF SHOCK

PROVIDE MECHANICAL PROTECTION FOR WATER PIPE AND HEATING TAPE

HEATING TAPE
10" CLAY TILE

SEE DETAIL A

WATER SUPPLY PIPE

2 1/2" RIGID INSULATION
4" O.C.

NO. 4 RE-BARS 16" O.C.
VERTICALLY & HORIZONTALLY

CONCRETE CURB

CONCRETE SLATS

PRESSURE TREATED POST

6X6 PRESSURE TREATED POST

CONCRETE BEAM

6" O.C. TO RECEIVE CONCRETE BEAM

3" No. 6 RE-BAR 10" O.C.
VERTICALLY & HORIZONTALLY

NO. 4 RE-BARS 10" O.C.
VERTICALLY & HORIZONTALLY

SECTION B-B
WATER SUPPLY DETAIL

NO. 3 RE-BAR

NO. 6 RE-BAR

TWO NO. 4 RE-BARS

THREE NO. 6 RE-BARS

2 1/2" O.C. RIGID INSULATION

4" O.C.

SHUT OFF VALVE

FILL INSULATION

NO. 4 RE-BARS 12" O.C.
VERTICALLY & HORIZONTALLY

NO. 4 RE-BAR 30" LONG 16" O.C.

DETAIL A
POST CONNECTION DETAIL

CONCRETE BEAM

PRESSURE TREATED FORM BOARDS

GRADE

1/2" WIDE "T" SHAPE STRAP IRON SET AT LEAST 8" DEEP INTO CONCRETE & BOLTED TO POST WITH TWO 3/8" BOLTS

NO. 4 RE-BARS 16" O.C.
VERTICALLY & HORIZONTALLY

UNITED STATES DEPARTMENT OF AGRICULTURE
AND
CONFINEMENT BEEF BARN
REAR DRIVEWAY GABLE ROOF

CONSUMER EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

ILL. '75 6160 SHEET 3 OF 3