
**Basic requirements for a live stock
market**

ICS: 65.120.00

Descriptors: agricultural products, Livestock market definitions, topography, utilities, construction facilities, requirements.

Foreword

This Ethiopian Standard has been prepared under the direction of the Agriculture and food Technical committee and published by the Quality and Standards Authority of Ethiopia (QSAE).

In the preparation this Ethiopian Standard references have been made to the following:

-Indian Standard 4393 –1979, "*Basic requirements for an abattoir*".

-Codex Alimentarius, "*Meat and meat products including soups and Broths*", Vol.10 Second edition 1993

Acknowledgement is made for the use of information from the above publications.

Basic requirements for a livestock market

1 Scope

This Ethiopian Standard covers the typical layout plan, hygienic and sanitary, and basic requirements for a livestock market for carrying out buying and selling of sheep, goats and large animals.

2 Normative references

The following Ethiopian Standard contains provisions, which, through reference in this text, constitute provisions of this Ethiopian Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this Ethiopian Standard are encouraged to investigate the possibility of applying the most recent editions of the Ethiopian Standards indicated below. Registers of currently valid standards are maintained in the Quality and Standards Authority of Ethiopia.

ES 261:2001, *Drinking water - Specification*.

3 Definitions

3.1 auction area

an area in a livestock market where by animals are sold to the person who offers the most amount.

3.2 incinerator

an apparatus used for burning rubbish.

3.3 isolation pan

sheltered area surrounded by fence where sick, suspected or injured animals are kept.

3.4 shoat

sheep and Goats

3.5 potable water

water which shall comply with Ethiopian standards on drinking water, specification, ES 261:2001.

4 Topography and utilities

4.1 Location

From the point of view of healthy exchange; a livestock market shall be constructs:

4.1.1 In the vicinity of a city-town, near-by a slaughterhouse, on the outskirts of a city/town which by animals can easily be converged from different angles of the surrounding into the area or within the city/town where by the master place invests.

ES 1135:2005

4.1.2 If animals are to be transported by a lorry or a truck, the market shall be accessed by all weather road.

4.1.3 The market shall be away from schools, health and religious centers, quarantine areas and animal farms.

4.2 Utilities

4.2.1 Parking area

4.2.1.1 Where appropriate, well paved, if possible tarred parking area sufficient to accommodate expected automobiles and trucks coming to the market place shall be allotted.

4.2.2 Loading and unloading ramp

4.2.2.1 For the purpose of ease working atmosphere, loading and unloading ramp shall be constructed alongside of the peripheral fence of the market.

4.2.2.2 Two ramps for each small and large ruminants section use shall be built respectively

4.2.3 Water supply

4.2.3.1 In case potable water supply system is inadequate or absent deep well shall be bore holed at least 300 meters away from the lagoon.

4.2.4 Energy supply

4.2.4.1 Where appropriate, hydropower, diesel or solar electric power supply shall be available.

5 Construction

The peripheral area shall be fenced. Fencing material shall be of quality that may not cause damage to the skin of the animal and shall not be permissible to predators, stray dogs and theft even.

5.1 The market premises shall be free from big trees that can harbor scavenging birds.

5.2 The height of the fence from the ground shall at least be 2.15 meters.

5.3 Where appropriate, the market shall be well paved and leveled and gravel packed.

5.4 The market shall be divided into three units.

One part for the large ruminant section, the second for the small ruminants and the third for common service.

5.5 Each unit in the market shall be fenced with a height not less than 1.8 meters.

5.6 The market shall have one main entrance gate but, the units for large and small animals shall have their own exit gates.

6 Facilities

6.1 Large ruminants section

6.1.1 Sale and purchase pen

6.1.1.1 Units of pen shall be constructed. Each could be of the same area or differ, but shall be as per the need and requirement of each class of animals, that is 3.5 m² for cattle, 4m² for camel and 3m² for equine respectively.

6.1.1.2 Each unit of pen shall have its own door of openings.

6.1.1.3 If the fence to divide the three sections and units of pen is made of tubular iron pipe, distance between two poles shall be every 2 meters and the space between each truss shall be 30 centimeters.

6.1.1.4 Each pen shall have concrete water trough.

6.1.1.5 The size of the watering trough shall be of 50 centimeters height, 60 centimeters width and 40 centimeters depth per unit of animal.

6.1.2 Barn or shade

Those animals that may need rest due to long distance of truck or trucking and those animals left to be sold shall be provided with resting shade.

6.1.2.1 The shade shall have watering and feeding trough

6.1.2.2 The size of the watering and feeding trough shall be similar with what indicated in sub article 6.1.1.5

6.1.2.3 The hayrack shall be constructed 60 centimeters above the ground.

6.1.2.4 Space requirement for each class of animals shall be the same as indicated in sub article 6.1.1.1.

6.1.3 Isolation pen

6.1.3.1 Separate isolation pens for different species of market animals shall be provided with watering and feeding arrangements for disease suspected animals.

6.1.3.2 The isolation pen shall be constructed at an appropriate corner away from sales and purchase pens.

6.1.3.3 A space to accommodate about 2% of suspected animals from the expected daily throughput is to be considered.

6.1.3.4 The pen shall be equipped with at least 3 pole crush.

6.1.4 Weighing bridge

6.1.4.1 A weighing bridge with a capacity of up to 1000 kilograms shall be installed. Dial type is the most preferable.

6.1.4.2 The weighing bridge shall have a shade on the top.

6.1.4.3 For ease of management, collection pen and crush shall be constructed in line with the weighing bridge.

6.1.5 Auction area

6.1.5.1 It is an area within the market but separately fenced.

6.1.5.2 It shall be accessible to both markets and be wide enough to accommodate 20-30 large or 67-100 small ruminants (shoats) to stand and a shade of platform for seller, buyers and dealers to stand or sit for auction.

6.1.6 Walking path

6.1.6.1 For ease of management and harmonization of movements within the market; a three meters of walking path is required.

6.2 Small ruminants section

6.2.1 Sale and purchase pen

6.2.2 The pen shall be constructed based on the space requirement of each shoat, that is 0.90m².

6.2.3 Concrete watering trough with a size of 3.5(h) x 50(L) 30(D) centimeters per unit of shoat shall be constructed.

6.2.4 Each pen shall have its own entry/exit with a flying door having 1.3 meters height.

ES 1135:2005

6.2.5 In shoats pen, the space between each trusses shall be 15-20 centimeters.

6.2.6 Barn/Shade

6.2.6.1 Barn/shade shall be constructed for the same purpose as indicated in article 6.1.2.

6.2.6.2 The size and nature of the watering trough is similar as indicated in the purchase pen

6.2.6.3 The hayrack shall be constructed 40 centimeters above the ground.

6.2.7 Isolation pen

6.2.7.1 Isolation pen shall be constructed as indicated in article 6.1.3.1.

6.2.8 Weighing bridge

6.2.8.1 A weighing bridge shall be installed in the same manner as indicated in article 6.1.4.1

6.2.8.2 The capacity of the weighing bridge shall be up to 500 kilograms.

6.2.9 Walking path

5.2.9.1 Same as indicated in article 6.1.6.1

6.3 Common service area

For the purpose of ease management and harmony the following service shall be made available to all market actors/participants for common use.

6.3.1 Notice board

6.3.1.1 To notify any one interested on the price situation of the previous market day on different livestock groups, a notice board is required.

6.3.1.2 The notice board shall be of a standard with a shade to withstand moisture and radiation.

6.3.2 Office and reception

6.3.2.1 For data and tax collectors, there shall be a minimum of 3 room office and a reception corridor for visitors to come.

6.3.2.2 Each office shall be equipped with working materials such as tables, chairs, shelves, etc and guest seats for the reception.

6.3.3 Generator house

6.3.3.1 There must be a house at an appropriate corner for the generator to be kept.

6.3.4 Water tanker

6.3.4.1 Water Tanker with a minimum capacity that can hold the minimum market day need shall be erected and constructed

6.3.5 Latrine

For ease of facilitation a toilet is required in a market.

6.3.5.1 The toilet could be dry or wet.

6.3.5.2 If it is a wet one, a septic tank has to be constructed in link with the latrine.

6.3.5.3 If it is a dry latrine, the size/volume of the pit shall have six meter length, six meters with and four meters depth.

6.3.6 Guard house

6.3.6.1 Three guardhouses shall be constructed on strategic sites. One at the main entry, two at each exit.

6.3.6.2 It shall be high enough to watch and control the surrounding.

6.3.7 Blowlamp/Incandescent

Blowlamps at each corner must be fixed to assist guarding and patrol the surrounding at the time of dark.

7 Waste disposal

There shall be waste treatment system subject to environmental protection principles.

7.1 Incinerator

7.1.1 A concrete made dry pit for burning any left over/rubbish, like plastic or paper bags having an area of six m² and a depth of 75 centimeters.

7.1.2 The incinerator to be constructed shall be at the corner around the latrine area.

7.1.3 The floor of the pit shall be slant and attached to a drain line tube to dispose off any possible liquid drop over it.

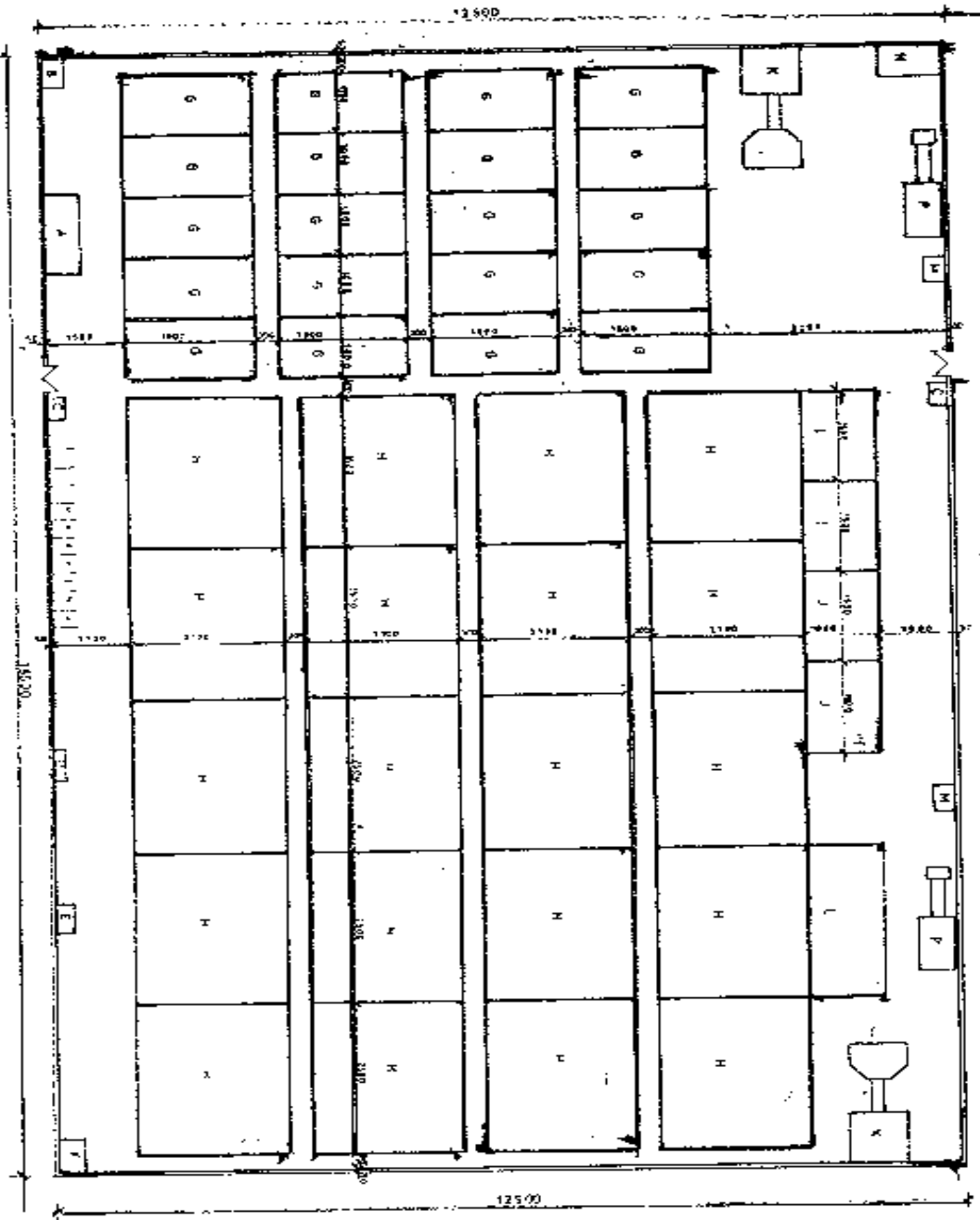
7.2 Lagoon

Any one responsible for the administration of the market shall be obliged to follow the rules and regulations of the environmental protection which disposing off any waste coming out from the market.

7.2.1 If the need for lagoon is unquestionable; it shall be consummated at an appropriate area outside the market.

7.2.2 A drain line shall be well established to link the market with the lagoon.

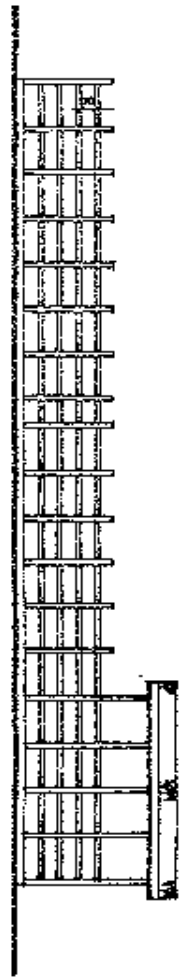
7.2.3 If the main drainage canal is passing near by, the drain line coming out of the market can easily be connected with it and the need for lagoon construction shall not be necessary.



IDEAL LOCATION PLAN

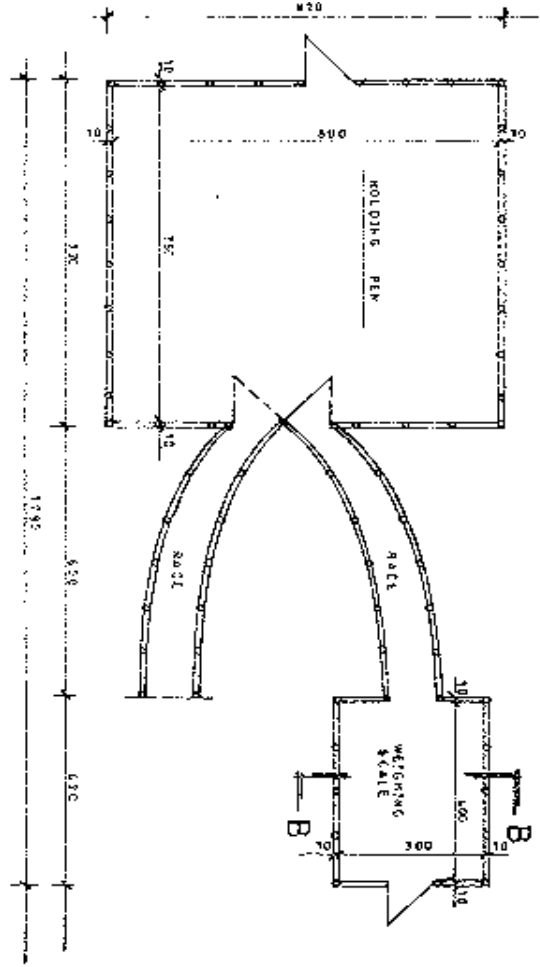
SCALE: 1:500

- LEGEND
- A - OFFICE
 - B - TOILET
 - C - GUARD HOUSE
 - D - WINDMILL/BOARD
 - E - WATER RESERVOIR
 - F - GENERATOR HOUSE
 - G - SHORTS PEN
 - H - CATTLE PEN
 - I - CAMEL PEN
 - J - EQUINE PEN
 - K - ROAD
 - L - AUCTION AREA
 - M - ISOLATION PEN
 - N - INCUBATOR
 - O - LAZARUS (the side from the plan)
 - P - COWS PEN and INCUBATOR SCALE



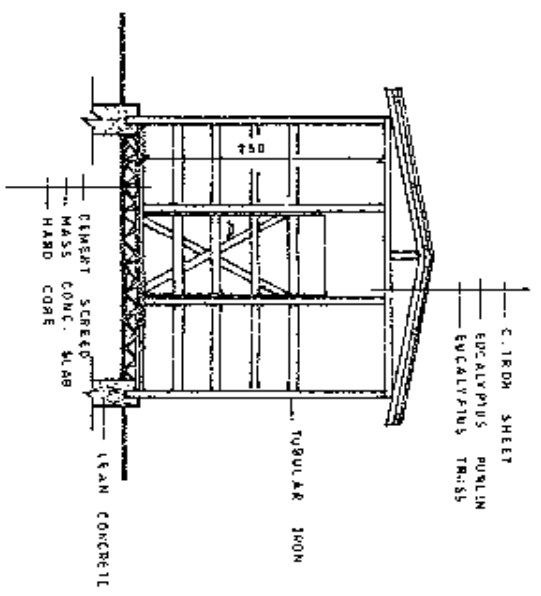
FRONT ELEVATION

SCALE - 1/8" = 1'-0"



FLOOR PLAN

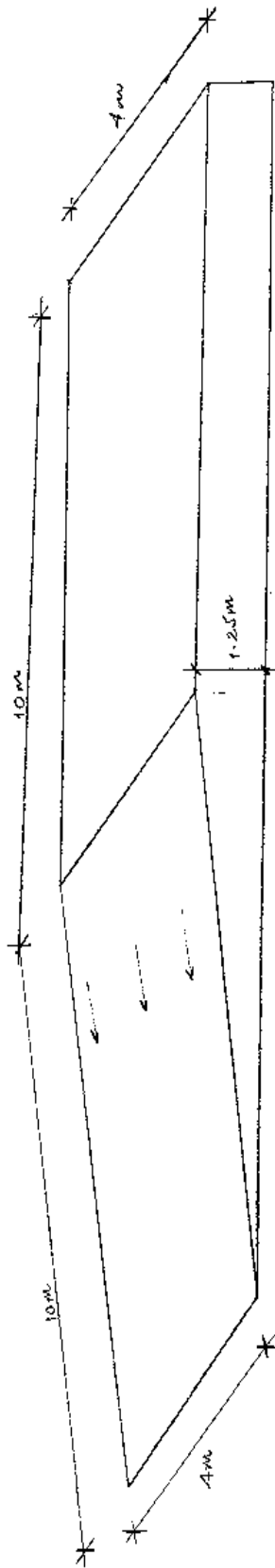
SCALE - 1/8" = 1'-0"



SECTION B-B

SCALE - 1/8" = 1'-0"

LOADING & UNLOADING RUMP.



PLATFORM FOR AUCTION

