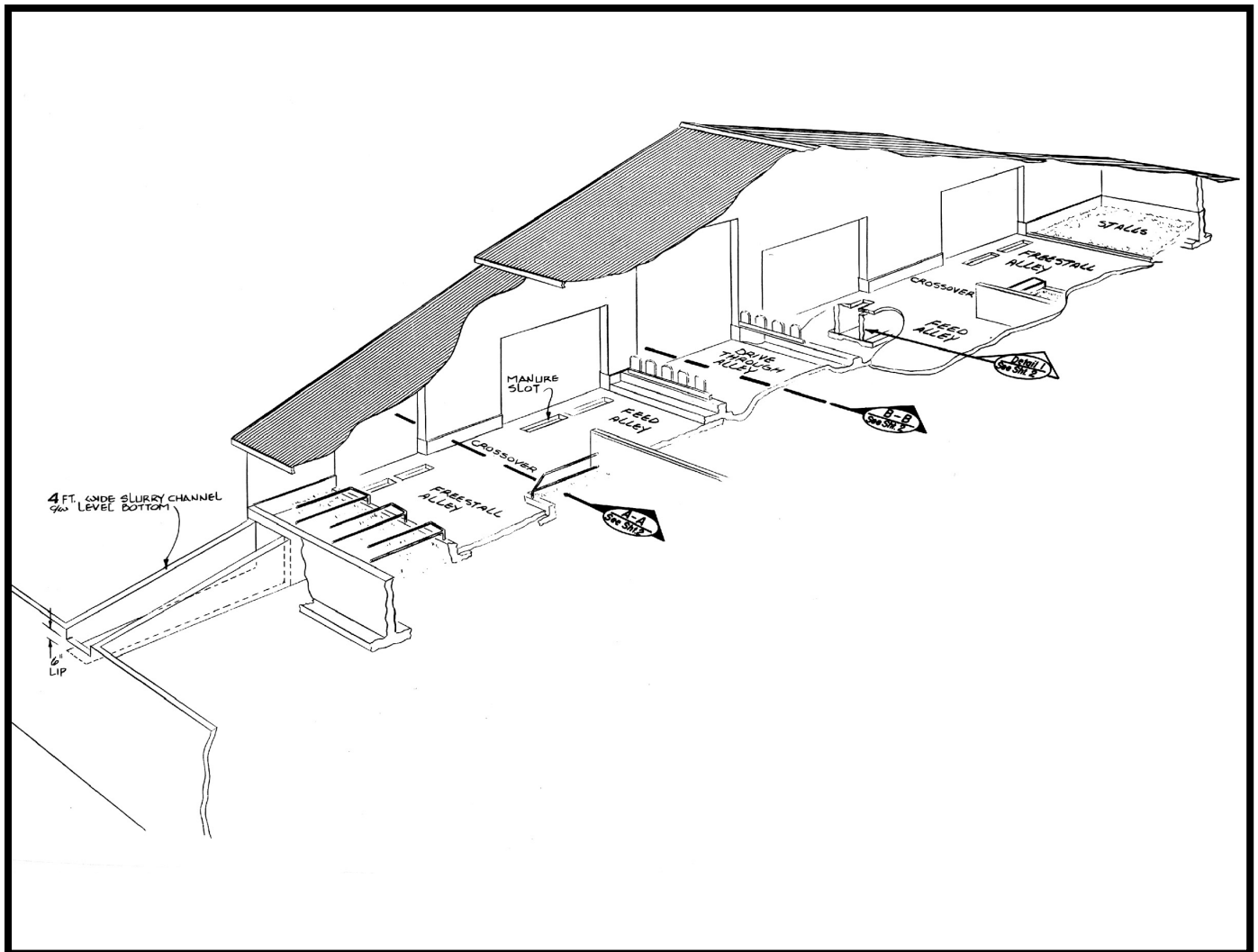




GRAVITY FLOW SLURRY CHANNEL



GRAVITY FLOW SLURRY CHANNEL

This plan provides details for the construction of a gravity flow slurry channel. The slurry channel allows manure to flow under its own weight into either a reception pit, or directly into a manure storage facility. Manure is scraped into the slurry channel through slots in the freestall alleys and/or feed alleys. This slurry channel system is best suited for use in freestall barns where the manure most often has a minimum amount of bedding and flows easily. In some cases, water from parlour washings or other sources may have to be added to ensure proper manure flow. This is necessary when manure is too dry to flow due to the type of cattle feed or excessive drying during warm weather.

The slurry channel requires minimum maintenance and provides a low energy method of transporting manure short distances. Manure in the channel will flow with a surface slope of approximately 3%. This slope can be used to calculate the required channel depth for the channel length being considered.

The 4 ft. depth specified in this plan is minimum recommended for channels up to 100 feet in length. However, for longer channels, a depth of 6 or 8 ft. is recommended. See the notes on Sheet 2 of the Plan for the required reinforcing steel for these deeper walls.