

SECTION 133 – SLIPWAYS AND LANDING HARDS

2828. Slipways or landing hards may be needed at the sites of heavy ferries. They are preferable to floating ramps, and call for less maintenance, but they require heavy foundations.

2829. **Constructional Method.**

a. By using coffer dams and pumping out, excavation and construction can be done in the dry by normal means.

b. Excavation can be avoided by driving heavy piles to support precast beams and slabs.

c. Graded stone fill can be grouted by the colloidal concrete method (see Section 103). Grouting can be done between tides, with little danger of washing out.

d. Fill can be placed by a tractor fitted with a bulldozer extension, if necessary up to 30ft long. Concrete slabs can be superimposed by a derrick working from a temporary structure. Alternatively, precast slabs of the “chocolate block” type can be linked together to form a mat on top of the graded fill.

2830. **Surfacing.** Mass concrete, cement-grouted stone, concrete slabs or other paving are normally used, but flexible surfacing is essential for tracked vehicles. On slipways which are partially submerged, weed and slime must be cleaned off at intervals, and skid-proofing is desirable. Strong wheel guides or kerbs should be provided.

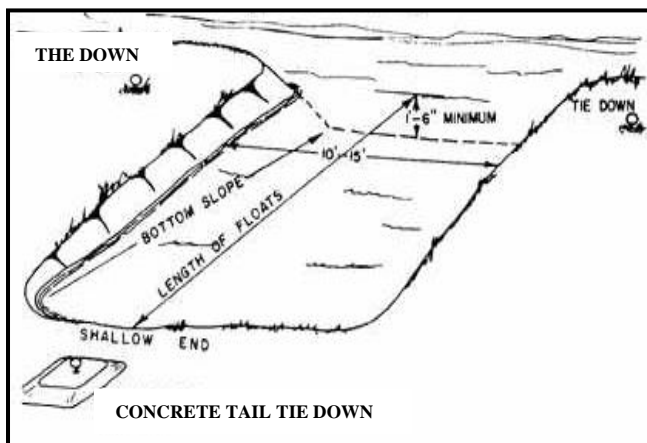


Figure 28-14 (a): Cross section and Dimensions



Figure 28-14 (b): Cross Section and Dimensions