- during transport, pumping and placing does not exceed 25mm.
- K. Except where otherwise agreed by the Engineer, concrete shall be deposited in horizontal layers to a compacted depth not exceeding 400mm where internal vibrators are used or 300mm in all other cases.
- L. Unless otherwise agreed by the Engineer, concrete shall not be dropped into place from a height exceeding 2m. When trunking or chutes are used, they shall be kept clean and used in such a way as to avoid segregation. Where steep slopes are required for placing concrete with chutes, the chutes shall be equipped with baffle boards or be in short lengths that reverse the direction of the movement. Chutes and the use of chutes must be approved by the Engineer. All chutes shall be kept clean and free from coating of hardened concrete by thoroughly flushing with water after each run. The water used for flushing shall be discharged clear of the concrete already in place.
- M. Concrete shall not be pumped through aluminium alloy conduits.
- N. No concrete shall be placed in flowing water. Underwater concrete shall be placed in position by tremie or by pipeline from the mixer.
- O. Full details of the method proposed shall be submitted in advance to the Engineer and his approval obtained before placing begins. Where the concrete is placed by the tremie, its size and method of operation shall be in accordance with BS EN 1997. During and after concreting under water, pumping or dewatering operations in the immediate vicinity shall be suspended until the Engineer permits them to be continued.
- P. Approved measures shall be taken to avoid premature stiffening of concrete placed in contact with hot, dry surfaces. Surfaces including reinforcement against which concrete is to be placed shall be shielded against the direct rays of the sun and shall be sprayed with water to prevent excessive absorption by the surfaces of water from the fresh concrete.
- Q. A complete pour record shall be kept of the date, time, temperature and conditions of placing, the concrete in each portion of the work and shall be available for inspection by the Engineer at any time.
- R. No concrete shall be mixed or placed when the light is insufficient, unless an adequate and approved artificial lighting system is operated and such night work is approved by the Engineer.

## 3.3.4 Extent of Pours

A. The limit of individual pours and the height of lifts shall be as approved by the