

29.3.3.3 Pumping and Bypassing of Flow

- A. Pumping shall be carried out using suitable mobile pump sets to the approval of the Engineer.
- B. The pumps shall be controlled by suitable level controls installed to operate at levels to be approved by the Engineer and shall be capable of dealing with the flow in the drainage network and any material likely to be transported in it without being blocked.
- C. The Contractor must provide enough temporary pumps of sufficient pumping capacity or where approved, a temporary sump to avoid surcharging upstream drainage pipeline.
- D. Constant full time attendance shall be provided by the Contractor at each pumping location such that in the event of mechanical breakdown, flooding or blockage, immediate assistance will be summoned.
- E. Discharge of pumped drainage shall be made to a manhole downstream of the drainage link length being surveyed. The open end of the pump discharge pipe shall be laid so as to minimise turbulence of the pumped flow.
- F. The pump discharge pipe shall be of suitable armoured material which in all locations subject to traffic flow shall be suitably protected with steel preformed plates bridging the pipe or by other approved means. Such protection shall be adequate to allow passage of vehicular traffic over the pipe without undue inconvenience.
- G. In the event of failure of pumps and generators the over pumping contractor shall ensure that sufficient standby facilities are available to restrict the residence time of drainage flow in bypass pipes to not more than 10 minutes or as approved by the Engineer.
- H. For main streets, non-disruptive road crossings may be required and the Contractor shall include the cost of constructing such crossings in his rates of rehabilitation works.
- I. On completion of pumping, the Contractor shall carry out drainage pipeline cleaning by jetting, flushing or any other means required to return the drainage pipeline surcharged during pumping operations to a serviceable condition to the satisfaction of the Engineer.

29.3.3.4 Temporary Diversion of Flow

- A. If the Contractor considers it necessary for temporary diversion of drainage network to be carried out to enable him to execute his work then he should notify the Engineer accordingly and submit his proposals for implementation of such diversion.