

## SECTION 701 -- GENERAL REQUIREMENTS

### 701.01 -- Description

This Section describes procedures and equipment that are common to a variety of structures and as described in Division 700.

### 701.02 -- General Procedures

1. The Contractor shall excavate and place shoring as necessary to insure safe access to work areas.
2.
  - a. A copy of the concrete load tickets shall accompany each load to the placement site and be available to the Engineer. Acceptance of the concrete at the placement site will be partially based upon verification that the concrete is of the proper class and has been delivered within the specified time limits.
  - b. Loads which are not accompanied by such tickets, which do not arrive in satisfactory condition, or which do not arrive within the specified time limits shall be rejected.
3. When unsuitable material is encountered, it shall be removed. Excavation will continue until the unsuitable material is removed or until the Engineer halts excavation.
4. When a concrete bottom seal course is required due to unforeseen conditions, the excavation shall be sufficient to allow for placement of the seal under the structure.
5. The Contractor shall not excavate within 1.5 m of any cast-in-place concrete deadman or grade beam tie rod anchor except for the limits of tie rod trenches and granular backfill as shown in the granular backfill details.
6.
  - a. The method used to place concrete shall not allow the concrete materials to segregate or displace reinforcing steel.
  - b. The impact of any free fall must be kept to the lowest levels consistent with efficient placement.
  - c. The maximum free fall placement distance shall be 1.5 m.
7. The Contractor shall backfill bridge abutments, wingwalls, and retaining walls concurrently on all sides.
8. Cofferdams shall be substantially watertight. The interior dimensions of cofferdams shall be such as to give sufficient clearance for the construction of forms and for the inspection of their exteriors.
9.
  - a. Cofferdams shall be constructed so as to protect recently placed concrete from damage from a sudden rising of the stream and to prevent damage to the foundation by erosion.

b. No timber bracing shall be left in cofferdams or cribs and incorporated into the structure's concrete.

10. Cofferdams shall be removed by the Contractor after the completion of the substructure.

11. Any steel bracing left inside a concrete structure and exposed at the structure's surface shall be treated so that the metal is corrosion resistant and will not stain the concrete surface.

12. Water jetting is not authorized for excavating or backfilling around structures.

13. Culvert excavation volumes are computed based on Figure 701.01.

14. The Contractor shall mark all culvert ends with an orange, 100 mm diameter fence post that is provided by the Department. The post shall be set at no additional cost to the Department.

### **701.03 -- Equipment**

1. On bridge decks, jackhammers are restricted to those lighter than the 30 kg class.

2. Jackhammers or chipping tools shall not be operated at angles greater than 45 degrees from the deck surface.

Figure 701.01

# EXCAVATION PAYMENT LIMITS

## EXCAVATION DEPTH

