

- D. The Contractor shall submit 3 hard copies to the Engineer's approval the below listed drawings. One copy shall be returned to the Contractor stamped "APPROVED" and/or marked up with any necessary alteration. Where any modification or revision is required, the Contractor shall make the amendments and resubmit the drawing as specified. After the drawing has been approved, the Contractor shall submit to the Engineer 6 hard copies and one digital copy.
- E. The Contractor shall submit:
- 1 Layouts showing actual distances, offsets etc. of manholes, chambers, road crossings, sections where works shall be carried out in the NDM method
  - 2 Civil work drawings including structural analysis, formwork drawings, bar bending schedules, supports, openings through walls and slabs, conduits etc.
  - 3 Detailed layout of site installations, including those for NDM works
  - 4 Detailed drawings and calculations for trench supports.
  - 5 Any other drawings and calculations required for the proper execution of the works and required by the Engineer.
- F. Structural Drawings shall be accompanied by the consent of the appropriate Authorities (if so required under the regulations in force) and it shall be the Contractor's responsibility to obtain such permits.
- G. Structural analysis shall be submitted to the Engineer after obtaining the approval of the Municipality's Structural Engineer.

### **11.1.11 Shop Drawings**

- A. Each shop drawing submittal shall be complete with respect to dimensions, design criteria, materials, connections, bases, foundations, anchors, and the like, and shall be accompanied by technical and performance data as necessary to fully illustrate the information in the shop drawings.
- B. Shop Drawings:
- 1 Formwork
  - 2 Structural steel and miscellaneous iron work