

**Part 1 - General**

**1.01 Description**

- .1 This Section is supplemental to OPSS MUNI 415 and shall supersede conflicting specifications within OPSS MUNI 415.

**1.02 Related Specification**

- .1 Construction Specification Section 01330 - Submittal Procedures
- .2 Construction Specification Section 02240 – Dewatering
- .3 Construction Specification Section 02316 - Rock Excavation
- .4 OPSS MUNI 415 - Construction Specification for Pipeline Installation by Tunnelling

**1.03 Stability of Excavation**

- .1 Employ such construction methods, plant, procedures and precautions necessary to ensure that excavations are stable, free from disturbance and dry.
- .2 Such construction methods may include, but are not limited to:
  - .1 Tight timber, concrete and/or steel primary liner.
  - .2 Ground water control systems employing well points, deep wells, eductors or compressed air.
  - .3 Free water control systems employing drains, pipes and pumps.
  - .4 Soil stabilization methods employing cement grouting, chemical grouting or chemical freezing.
- .3 Employ such construction methods, plant and materials necessary to ensure that migration of soil material into tunnel or shafts from adjacent ground and subsidence shall not take place.

**1.04 Basis of Payment**

- .1 No extra payment shall be made for stockpiling or double handling of excavated materials.

- .2 No extra payment shall be made for primary lining left in place.
- .3 No extra payment shall be made for extra excavation needed on account of soil heaving, subsidence or collapse of material into tunnel or shaft.

**Part 2 - Products**

**2.01 Materials**

- .1 Reference Region of Durham Approved Manufacturers' Products List, on *The Road Authority* website at [www.roadauthority.com](http://www.roadauthority.com).
- .2 All tunnelling materials shall be in accordance with Contract Drawings and Special Provisions.

**Part 3 - Execution** -Not Applicable

END OF SECTION