

# UNDERGROUND UTILITIES AND MONUMENTATION

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AOLS members are reminded of their legal obligations when either excavating for, or installing survey monumentation near underground utilities.

Surveyors are expected to protect their employees under the *Occupational Health and Safety Act* under the general duty Part III, and by the specific requirement to have "gas, electrical and other services" located and marked prior to excavating by s. 228 of O. Reg. 213/91 under the Act. (Note that "construction" in the Act "includes any work or undertaking in connection with a [construction] project.")

Furthermore, for oil and gas lines specifically, O. Reg. 210/01 under the *Technical Standards and Safety Act* requires that a person "breaking ground" obtain "the location of any pipeline that may be interfered with" in s. 9(1).

Where underground utilities prevent the setting of a prescribed monument, s. 11 of regulation 525/91 now provides for more monumentation alternatives than in the past. A 30-cm long plastic bar with magnet is now included in the list of standard monuments, and a substantially compliant substitute monument may be used, providing the latter is fully described on the new plan of survey. Additionally, a found monument may be retained to mark a boundary provided it is substantial and durable and accurately defines a point.

Where no acceptable monument can be set to mark a point, a witness monument can be used on a line or production of a line, but no closer than one metre from the point.

## **Alternate Locate Agreements May Help**

Alternate Locate Agreements (ALA's) are written contracts that some utility owners may make with individual survey companies to expedite working near utilities *without* the need for on-site attendance by a locating company, provided certain conditions are met. Companies with such ALA's in place are still expected to obtain a ticket number for their work through the Ontario One-Call service (1-800-400-2255 and [www.on1call.com](http://www.on1call.com)) or appropriate utility contact.



Three key safety-related excerpts from the regulations are provided for quick reference:

**Occupational Health and Safety Act – O. Reg. 213/91, Construction Projects**

**228.** (1) Before an excavation is begun,

(a) the employer excavating shall ensure that all gas, electrical and other services in and near the area to be excavated are located and marked;

(b) the employer and worker locating and marking the services described in clause (a) shall ensure that they are accurately located and marked; and

(c) if a service may pose a hazard, the service shall be shut off and disconnected. O. Reg. 443/09, s. 6.

(2) If a service may pose a hazard and it cannot be shut off or disconnected, the owner of the service shall be requested to supervise the uncovering of the service during the excavation. O. Reg. 443/09, s. 6.

**Technical Standards and Safety Act, 2000 – O. Reg. 210/01 Oil and Gas Pipelines**

**Ascertaining pipeline locations**

**9.** (1) No person shall dig, bore, trench, grade, excavate or break ground with mechanical equipment or explosives without first ascertaining from the licence holder the location of any pipeline that may be interfered with. O. Reg. 210/01, s. 9 (1).

(2) The licence holder shall provide as accurate information as possible on the location of any pipeline within a reasonable time in all the circumstances. O. Reg. 210/01, s. 9 (2).

[Note: Similar wording for Fuel Oil is in Reg. 213/01, s. 12]

**Electricity Act, 1998 – O. Reg. 22/04, Electrical Distribution Safety**

**10.** (3) Before digging, boring, trenching, grading, excavating or breaking ground with tools, mechanical equipment or explosives, a contractor, owner or occupant of land, buildings or premises shall, in the interests of safety, ascertain from the distributor responsible for the distribution of electricity to the land, building or premises the location of any underground distribution line that may be interfered with in the course of such activities. O. Reg. 22/04, s. 10 (3).

(4) The distributor shall provide reasonable information with respect to the location of its underground distribution lines and associated plant within a reasonable time. O. Reg. 22/04, s. 10 (4).

**Other References:**

- *Surveys Act*, s. 60, and O. Reg. 525/91 under the *Surveyors Act*
- DIG SAFE Website,  
<http://www.digsafe.ca/SAFETYTIPSbrGUIDELINES/Guidelines/tabid/66/Default.aspx>

This bulletin supersedes bulletin 2007-03.

Approved by the Underground Utilities Committee (UUC).

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