



## **Ontario Concrete & Drain Contractors Association**

400 Creditstone Road, Unit 6, Concord, Ontario L4K 3Z3

Tel: (905) 660-7676 Fax: (905) 660-7611

### **Best Practice – Extension of Sewer Laterals**

#### Current Situation:

In most municipalities, the common practice is that Storm & Sanitary Sewer and Watermain lines are installed prior to and under the road/boulevard/sidewalk, with lateral extensions taken off each line to provide service to each building in the development. These lateral extensions are typically terminated and capped underground at the property line or lot line.

Main Utility lines, such as natural gas, telephone, hydro, cable television, and fibre optics, are then installed, and will eventually provide service to each building. Their location is typically much closer to the surface than the Sewer and Water lines since they are not adversely affected by frost, and very close to the street side of the property line or lot line. Proximity to the lot line is maintained so as to minimize potential damage to the road and disruption to traffic if the utility lines need to be accessed after the development work is complete.

#### The Problem:

Proximity to the lot line of the Utility Services creates at least two hazards for contractors accessing the Capped Lateral Extensions when time comes to make the connection to the buildings. First, since the Utility Services are virtually directly above the Capped Lateral Extensions, there is a high risk of them being struck during excavation. Damage to Utility Services can be not only financially costly, but can have fatal consequences as well.

Second, this intersection of buried services often results in an excavation with a very steep bank, a situation made even more potentially dangerous by the fact that the soil is previously excavated and therefore not predictably stable. Increasing the excavation slope would, in the vast majority of cases, lead to completely exposing many – if not all – of the Utility Services.



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This Photo illustrates how the capped laterals are positioned almost directly under the utility infrastructure. This close proximity makes it difficult to attain the proper slope and represents the typical and potentially dangerous situation the Machine Operator and Concrete and Drain worker are confronted with on a daily basis when excavating / digging to expose the laterals which were terminated at the Property line.

This is the inherent problem with the Standards that most municipalities provide to the Consulting Engineers and which their design must adhere to. These standards unfortunately are what the Sewer and Watermain Contractors must adhere to who could quite easily extend their scope of work and eradicate the problem as illustrated by the following solution.



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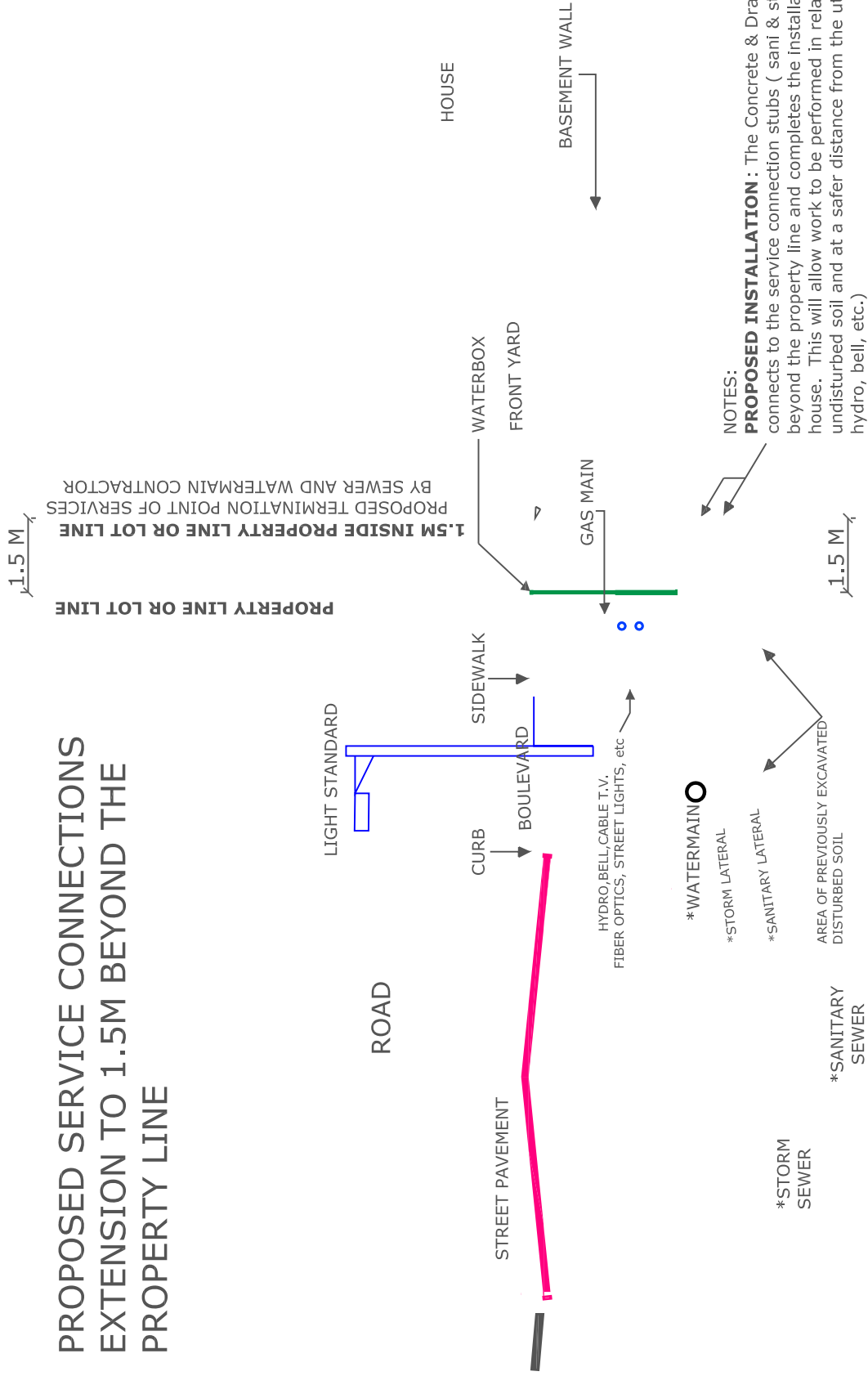
### The Solution:

Extending the laterals for storm and sanitary drains and water supply 1.5m inside the lot line when the Storm & Sanitary Sewer and Watermain lines are installed will greatly reduce hazards when time comes to bring the connection into the building. The Capped Lateral Extensions will be at least 1.5m away from the intersection point with the underground utilities, allowing them to remain undisturbed during excavation, and allowing the banks of the excavation to be cut with sloped sides.



This photo clearly illustrates the safe conditions under which the Machine Operator was able to perform his excavation and the worker was able to dig and expose the capped lateral connections in a properly sloped trench, relatively undisturbed soil and 1.5m away from Utility infrastructure. The OCDCA is committed to providing safe work environments for its workforce and the standardization of this method throughout all Municipalities would achieve this safety goal!

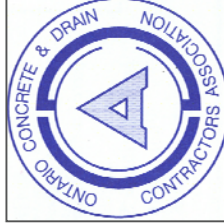
# PROPOSED SERVICE CONNECTIONS EXTENSION TO 1.5M BEYOND THE PROPERTY LINE



**NOTES:**

**TYPICAL INSTALLATION :** The Sewer and Watermain contractor installs the service connections (sani,stm & ws) from the main to the property line. →

**PROPOSED INSTALLATION :** The service connections be extended to 1.5M beyond the property line in new subdivisions by the Sewer and Watermain contractor. →



PROPOSED SERVICE CONNECTIONS EXTENSION TO 1.5M BEYOND THE PROPERTY LINE	
ONTARIO CONCRETE & DRAIN CONTRACTORS ASSOCIATION	
DATE: MAY 1 2007	SCALE : 1:125
DWG No 001	BY: M.R.D.D



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# **Best Practice – Extension of Sewer Laterals**

### Practice Statement:

Sewer laterals should be installed from the main to 1.5m beyond the property line in new subdivisions.

### Practice Description:

For purposes of health and safety, damage prevention and construction efficiency, sewer laterals installed in new subdivisions should be extended from the main to 1.5m beyond the property line and plugged with a water tight plug. This allows workers installing the connections from the stubs to the homes/building, to establish a safe stable work environment and minimizes impact to the existing facility infrastructure.

### Examples of Practices:

To extend the Storm and Sanitary Laterals is a practice throughout the Municipalities within the Regions of Durham and Halton.

### Benefits:

Extending connections 1.5m beyond the property line:

- enables contractors to pick up the connections in more stable soil conditions
- allows for proper trench sloping
- reduces the potential for cave-ins
- provides for safer excavation conditions
- reduces potential damage to existing facility infrastructure.

### References:

Region of Durham S-301

Region of Halton, City of Burlington S-185A & S-185B

Region of Halton, Town of Oakville STD 7-1

Region of Peel STD.DWG.NUMBER 2-4-4