



 <b>Englobe</b> Soils Materials Environment			<b>PROPOSED WHARF DEVELOPMENT MARGAREE HARBOUR, NOVA SCOTIA</b>				<b><i>BOREHOLE LOCATION PLAN</i></b>																
DATE		JUL 28, 2016		DRN BY:		GG		CHK BY:		RH		SCALE:		1:500		PROJECT NO.		B-0015306		FIGURE:		1	

#### SYMBOLS AND TERMS USED ON THE BOREHOLE AND TEST PIT RECORDS

##### SOIL DESCRIPTION

Behavioural properties (i.e. plasticity, permeability) take precedence over particle gradation in describing soils.

Terminology describing soil structure:

Desiccated	- having visible signs of weathering by oxidation of clay minerals, shrinkage cracks etc.
Fissured	- having cracks, and hence a blocky structure
Varved	- composed of regular alternating layers of silt and clay
Stratified	- composed of alternating layers or different soil types, e.g. silt and sand or silt and clay
Well Graded	- having wide range in grain sizes and substantial amounts of all intermediate particle sizes
Uniformly Graded	- predominantly of one grain size.

Terminology used for describing soil strata based upon the proportion of individual particle size present:

Trace, or occasional	Less than 10%
Some	10-20%
Adjective (e.g. silty or sandy)	20-35%
And (e.g. silt and sand)	35-50%

The standard terminology to describe cohesionless soils includes the relative density, as determined by laboratory test or by the Standard Penetration Test 'N' - value: the number of blows of 140 pound (64 kg) hammer falling 30 inches (760 mm), required to drive a 2 inch (50.8 mm) O.D. split spoon sampler one foot (305 mm) into the soil.

Relative Density	'N' Value	Relative Density %
Very loose	<4	<15
Loose	4-10	15-35
Compact	10-30	35-65
Dense	30-50	65-85
Very Dense	>50	>85

The standard terminology to describe cohesive soils includes the consistency, which is based on undrained shear strength as measured by insitu vane tests, penetrometer tests, unconfined compression test, or occasionally by standard penetration tests.

Consistency	Undrained Shear Strength Kips/sq.ft.	kPa	'N' Value
Very Soft	<0.25	<12.5	<2
Soft	0.25-0.5	12.5-25	2-4
Firm	0.5-1.0	25-50	4-8
Stiff	1.0-2.0	50-100	8-15
Very Stiff	2.0-4.0	100-200	15-30
Hard	>4.0	>200	>30

