



Corporation of the Township of Norwich

285767 Airport Road
Norwich, Ontario
N0J 1P0

Procedure for Test Pits and Soils Samples
when conducting
Site Evaluation for New or Replacement Sewage Systems

PURPOSE

The following is a procedure outlining the necessary steps to test and inspect soils or existing subsoil and hydro-geological conditions in consideration to construction, alteration, repair, or replacement of a Sewage System designed and constructed under Pt. 8 of the Ontario Building Code. It has been designed with the purpose of prevention of unintentional spoilage or alteration that may affect the test results or information gathered from the sample or test. This procedure will not prevent intentional misrepresentation of sampling or test results.

The act of intentionally tampering or altering a test or a sample for the purposes of manipulating or misrepresenting data may be considered falsification of information provided in an application to permit construction, and is therefore prohibited by the Building Code Act of Ontario.

LIMITATIONS

This procedure is in addendum to the prescribed requirements of the Ontario Building Code Div. B 8.2.1.2. for site evaluations, and may be used to:

- Verify conditions commensurate to the provisions of 8.2.1.4 and as relates to prescribed clearances to identified features described under the tables proximal to a sewage system
- obtain verified samples for determination of the **soil percolation time** as per the **Unified Soil Classification System** via the below procedure for Test Pit,
- determination of subsoil characteristics with respect to **high ground water table** (as defined by OBC Div. A, 1.4.1.2.).
- characterize the suitability of the site for installation of a Class I, II III, IV or V sewage system
- discern the suitability of installation of an **“in-ground” leaching bed**, or a **“raised” (fill based) leaching bed** serving a class IV system.

SITE EVALUATION

The process of Site Evaluation is intended to align with the provisions of OBC Div. B., 8.2.1.2. and the Appendix note to (1) which reads as follows;

The evaluation required in Sentence (1) usually includes at least the following and is required on permit application.

- a) Date the evaluation was done,
- b) Name, address, telephone number, and signature of the persons whom may have prepared the evaluation,
- c) A scaled plan of the site showing
 - i. The legal description of the property, property lines and easements,
 - ii. The location of items in Col. 1 of Tables 8.2.1.6.A and B,

- iii. The location of the sewage systems (proposed and existing if applicable)
- iv. The location of any unsuitable, disturbed or compacted areas, and
- v. The access route for tank maintenance,
- d) Depth to bedrock
- e) Evidence of high ground water,
- f) Soil conditions, permeability and properties (in-situ, as observed, collected or reported via the test pit procedure below),
- g) Utility corridors (private and/or public, if any), and
- h) Potential for flooding in and around the vicinity of the proposed or existing system location.

procedure for conducting a test pit commensurate to the Site Evaluation process - where observation by the Building Department is required - will be as follows;

PROCEDURE FOR TEST PIT/SAMPLE & OBSERVATION by the BUILDING INSPECTOR

1. Obtain appropriate locates from Ontario One Call Service at <https://www.ontarioonecall.ca/portal/> or **1-800-400-2255**
2. A qualified person or the owner may make a request for an inspection of a Test Pit **at least 24 hrs. in advance of the desired inspection time.**

(NOTE: an additional fee may be required if the purpose for the test pit is to comply with the requirement of a site plan control agreement, conditions of subdivision agreement, or conditions of approval by the committee of adjustment)

3. With equipment capable of completing the work within 10 minutes or less, and following related OHS/A regulations and requirements for excavations, safely excavate the test pit as per **Diagram 1-1** – the **min. dimensions should be 6' deep, x 2' wide at the bottom, and 6' - 8' long/wide at the surface and sufficiently sloped back to prevent collapse.**
4. The **Building Inspector** will attend the site at or about the confirmed time, and upon attending the site shall make observations of the site and the relevant soil profiles within the test pit, record them in the form of a **Site Evaluation Report** (see below attached).
5. With the aid and cooperation of **the Qualified On-site Supervisor** and Sewage System Designer (where applicable) **a sample of the soils will be collected by the site supervisor and observed by the inspector** at the depths appropriate in consideration of the anticipated system design, configuration and orientation.
6. The **Test Pit shall be promptly backfilled** and compacted so as to prevent erosion or settlement prior to the supervisor leaving the site.

NOTES:

- if the hole is dug in advance of the inspectors' arrival, ensure that the hole is secured from unauthorized entry by way of fencing, covers, and signage providing information about the hole. **DO NOT** leave the test pit unattended unless secured against unauthorized entry.
- test/observation pits are not permitted to remain open for any period exceeding the parameters of this procedure.

SOIL SAMPLE REQUIREMENTS

7. The person requesting the inspection shall provide a container sufficient to hold the sample and submit to a certified soils test facility for testing
8. The sample is required to be not less than **1 litre of soil** material.

9. The sample shall be delivered to an **accredited soils laboratory** for review and analysis by the person requesting the site evaluation.
10. Any **fees for testing** are **payable by the applicant/owner or qualified person**.
11. The soils testing shall be conducted in conformance with the procedure established by the Unified Soils Classification System in accordance with ASTM D2487
12. A **sieve analysis report is to be completed by a certified soils technician and reviewed by a registered geoscientist or Professional Engineer (P. Eng.) with APGO credentials**, and returned to the applicant requesting the test.
13. **Proof of the accreditation of a soils lab with the APGO** may be required by the Chief Building Official at any time.
14. **A copy of the verified sieve analysis report resulting from following this procedure** may be used and submitted to the Township for review **in support of a septic permit application**. Unqualified reports or tests not collected in accordance with this procedure may not be used.

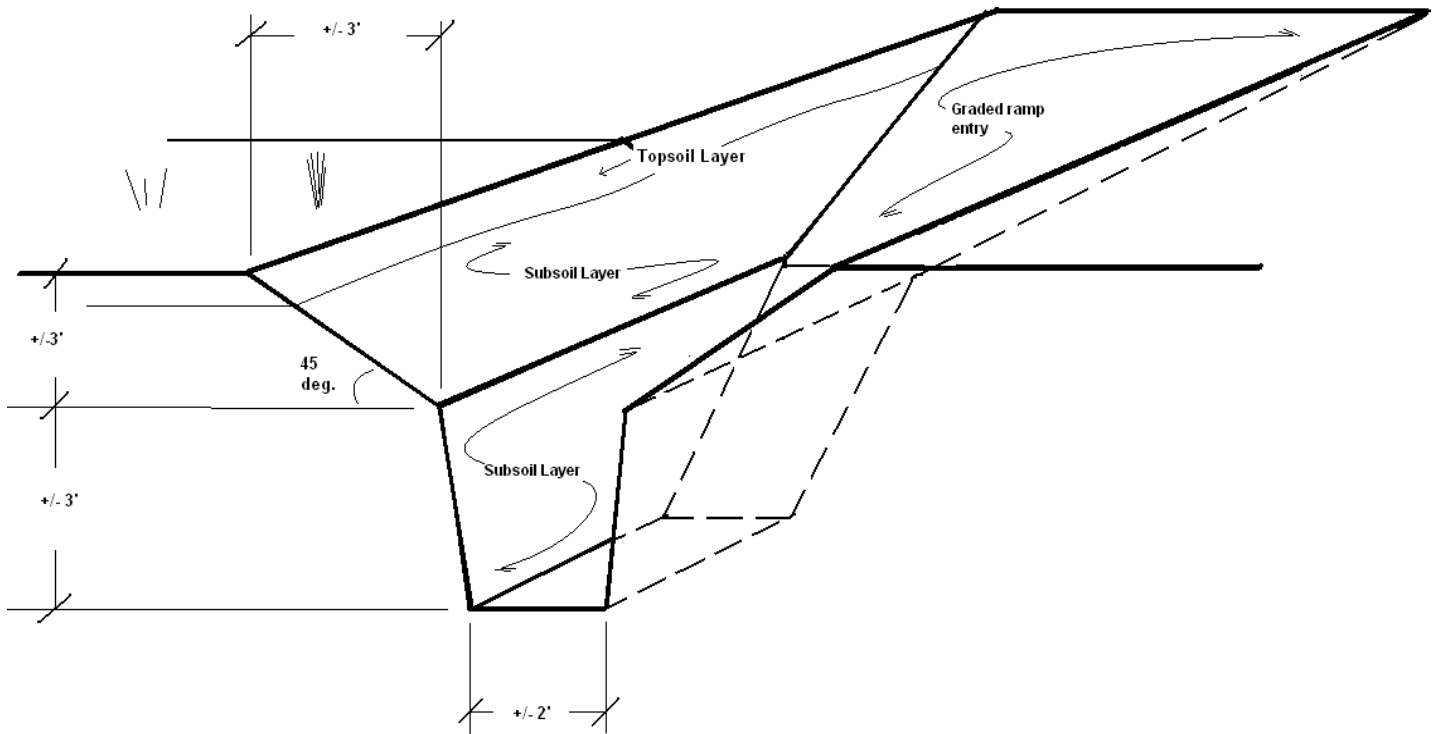


Diagram 1-1



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Site Evaluation and Test Pit Report

Project Information

Property Address: _____ Date: _____

Owners Name: _____ Installer/ Designer: _____

PIN: _____ Roll: _____

Consent Severance Application File #: _____

Site Conditions

General description of Site Topography: _____

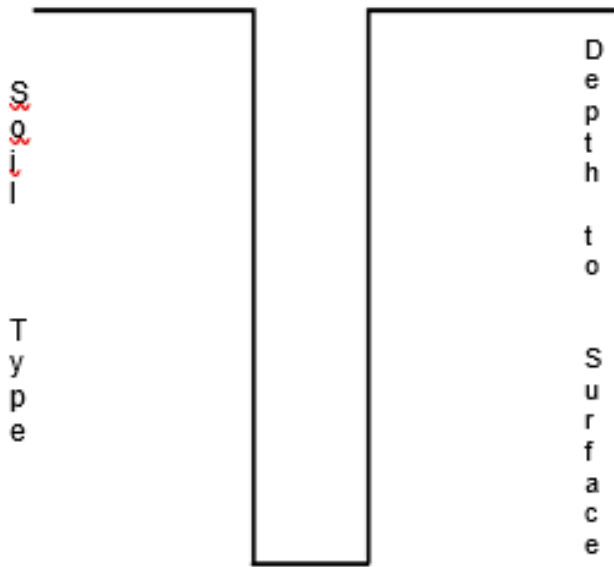
Vegetation or Coverage of <u>Site?</u> : <u>FORESTED</u> // OPEN	Open Water within 30m of <u>Site?</u> : YES // NO	Potential Risk of <u>Flooding?</u> : MINIMAL// MODERATE// SEVERE
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Site Plan of Test Pit Location(s)

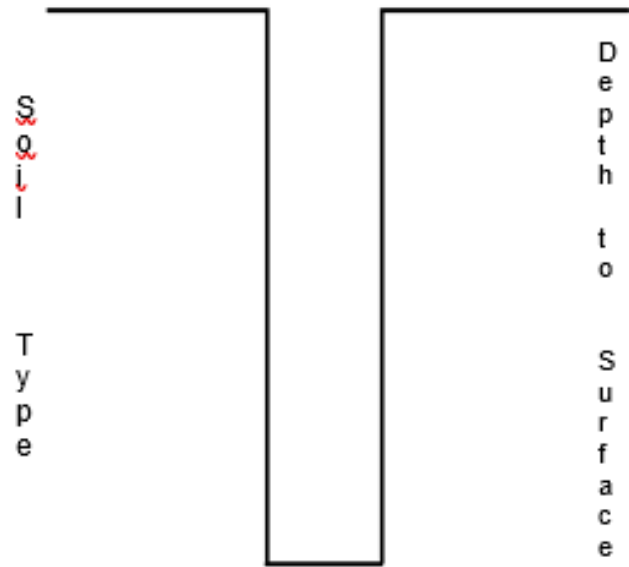


Test Pit Profiles

TP # 1



TP # 2



Depth to Groundwater or evidence of perched water table TP #1: _____ TP #2: _____

Fill Material or deleterious debris in profile? YES // NO
 (if yes, specify depth and type): _____

Potential Class IV Distribution System Configurations:

Conventional, in-ground absorption trenches?	YES // NO
Raised Absorption Trenches?	YES // NO
Filter Bed?	YES // NO
Shallow Buried Trench?	YES // NO
Type A Bed?	YES // NO
Other	Specify _____

Comments: _____

EVALUATOR: _____ DATE: _____

INSPECTOR: _____ DATE: _____