

**AMENDMENTS TO OPSS 902 (DEC 83) –  
CONSTRUCTION SPECIFICATION FOR EXCAVATING  
AND BACKFILLING – STRUCTURES <sup>1</sup>**

**OPSS 902.02** is amended by the addition of “TS 510 - Removal”.

**OPSS 902.05.02** is amended by the addition of the following:

Granular backfill shall be Granular ‘A’ as per TS 1010 or an equivalent approved by the Commissioner.

**OPSS 902.07.02** is amended by the addition of the following clauses:

**902.07.02.01 Excavation**

This shall consist of removing, as required, all materials encountered including stones, boulders, broken concrete, lean mix concrete (less than 5 MPa) and abandoned utilities.

**902.07.02.06 Removals**

Removal of pavement, curb and gutter, and sidewalks shall conform to TS 510.

**OPSS 902.07.04.01** The third paragraph is amended by the addition of the following:

Granular backfill shall be placed in even layers not exceeding 150 mm in thickness and each layer shall be compacted to 100 percent of the maximum dry density in  $\text{kg/m}^3$  as determined by TS 501.08 by approved mechanical rolling, tamping, or vibrating equipment.

Backfilling with clean approved material at piers and at the front of abutment walls or other places designated by the Commissioner, shall be done in layers not exceeding 150 mm in thickness and shall be compacted to 95% of the maximum dry density in  $\text{kg/m}^3$  as determined by TS 501.08 by approved mechanical rolling, tamping or vibrating equipment.

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**1. All references to OPS specifications that have been amended (as noted in LIST T1) are superseded by references to the replacement City of Toronto specifications (as given in LIST T1).**

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**OPSS 902.09.01** is amended by deleting the first five paragraphs and replacing them with the following:

‘Earth Excavation for Structure’ and ‘Rock Excavation for Structure’ applies to the specific structure(s) designated, i.e., Bridge, Retaining Wall or Concrete Culvert, and is measured in cubic metres below the designated payment surface.

The above measurement also includes, where applicable, the excavation quantities, below the designated payment surface, for placing granular backfill and for placing the granular frost tapers.

For open footing culverts, the above measurement also includes the excavation quantities below the designated payment surface but between the plan areas of the footings and above the stream bed or the top of the footings, whichever is higher.

Where the structure excavation overlaps excavation required for other work, deductions will not be made to the structure excavation measurement.

**OPSS 902.09.02** is deleted and amended by the addition of the following:

**902.09.02.01 Excavation for Structure**

The quantity of structural excavation for which payment will be made will be the volume in place within the vertical planes of neat lines as calculated below the designated payment surface within the limits shown in the drawings in m<sup>3</sup>.

**902.09.02.02 Granular Backfill**

Measurement for payment of Granular Backfill for structures will be made only of those materials acceptable for use under this specification.

The method of measurement will be by mass, in Mg, measured after the material has been acceptably placed and consolidated within the pay lines shown on the drawings. The weighing of granular material shall conform to the requirements of OPSS 502.