

#### CITY OF TORONTO STANDARD CONSTRUCTION SPECIFICATIONS FOR ROADS

April 2008

# CONSTRUCTION SPECIFICATION FOR EXCAVATION OF TRACK ALLOWANCE

# INDEX

TS 2.20.01	SCOPE
TS 2.20.02	REFERENCES2
TS 2.20.03	DEFINITIONS2
TS 2.20.04	SUBMISSION AND REQUIREMENTS - Not Used2
TS 2.20.05	MATERIALS - Not Used2
TS 2.20.06	EQUIPMENT - Not Used2
TS 2.20.07	CONSTRUCTION2
TS 2.20.08	QUALITY ASSURANCE - Not Used
TS 2.20.09	MEASUREMENT FOR PAYMENT
TS 2.20.09.01	Track Allowance
TS 2.20.10	BASIS OF PAYMENT4
TS 2.20.10.01 TS 2.20.10.02	Track Allowance - Item4 Foundation - Item4

## TS 2.20.01 SCOPE

This specification covers the requirements for the removal and disposal of the track allowance including the foundation slab, if necessary.

### TS 2.20.02 REFERENCES

This specification refers to the following specifications and publications:

#### **City of Toronto Standard Drawing**

-		
T-216.02-10 -	Streetcar Track Allowance Cross-Section	(June 2001)

#### **Ontario Provincial Standard Specifications, Construction**

OPSS 180 – General Specification for the Management and Disposal of Excess Material (January, 1994)

#### TS 2.20.03 DEFINITIONS

For the purpose of this specification, the following definitions apply:

**Excavation:** means the excavation of streetcar rails, ties and other associated materials such as rock, rubble, earth, granite setts, asphalt, pipes, concrete drains, and so on, encased in concrete unless otherwise specified in the tender documents.

**Track Allowance:** means the area bounded by the outermost rails, plus the outer margins (460  $\pm$  mm) as shown in T-216.02-10.

**Foundation:** means the concrete slab (typically 225mm thick) that supports the track pavement and associated rail system.

- TS 2.20.04 SUBMISSION AND DESIGN REQUIREMENTS Not Used
- TS 2.20.05 MATERIALS Not Used
- TS 2.20.06 EQUIPMENT Not Used
- TS 2.20.07 CONSTRUCTION

The work under this specification shall include the excavation and disposal of all materials within the existing track allowance from the existing ground elevation to the bottom of the existing streetcar ties or the top of the concrete slab foundation, if one exists. All material, including the wood ties; which may be creosoted, steel rails and steel ties, shall become the property of the Contractor and be disposed of off the site as per OPSS 180.

The Contractor shall provide the Commissioner with a release form for each disposal site signed by the owner of the site.

Care shall be taken to prevent damage to appurtenances and utilities which may be within the track allowance. The Contractor shall make good, at the direction of the Commissioner, all damage caused during the course of the work, and return the work to its initial condition.

The Contractor shall excavate the existing foundation slab if it is in poor condition, cannot be separated from the upper concrete or if directed by the Commissioner. Where the existing foundation slab is left behind, the Contractor shall sweep it clean and remove any granular material prior to placing the new ties.

The Contractor shall saw cut the existing pavement along the edge of the track allowance margin, but no further away than 150 mm. This is to provide space for the placement of full depth forms. Extreme care shall be taken on curved sections to ensure no over break exceeds 150 mm. In addition, the Contractor may be required to saw cut at other locations for the purpose of excavation. The Contractor shall saw cut track allowance at the excavation limits.

All costs of saw cutting shall be included in the excavation prices. No extra payment will be made for any saw cutting required.

Care shall be taken to protect all the rails that will not be replaced during the current work stage and the pavement adjacent to the construction which is to remain. The Contractor will be held responsible for all consequences of damage caused by his operation.

The Contractor shall note that the Toronto Transit Commission (TTC) crew will cut the rail prior to excavation, however, the Contractor is to supply and remove the required number of medium size oxygen bottles and small size acetylene bottles. All costs of supplying this material shall be included in the excavation prices. No extra payment will be made for this service.

Where the foundation slab is removed, the area shall be excavated up to 700 mm below the design top of rail elevation, to provide for a 225 mm thick foundation slab and required thickness of 16mm crushed aggregate. If the Contractor is required to excavate the track allowance deeper than 700 mm, the additional quantity will be pro-rated.

# TS 2.20.08 QUALITY ASSURANCE – Not Used

# TS 2.20.09 MEASUREMENT FOR PAYMENT

### TS 2.20.09.01 Track Allowance Foundation Slab

Measurement for the excavation of existing track allowance will be made in square metres (m<sup>2</sup>).

Payment shall be based on the surface area of the excavated concrete, in the existing track allowance, with no additional payment for the strip of pavement removed to provide space for the forms.

Any additional removal for a new track allowance that is outside the limits of the existing track allowance shall be paid for under the appropriate tender items such as 'Remove and Dispose of Composite Pavement' and/or 'General Excavation'.

# TS 2.20.10 BASIS OF PAYMENT

### TS 2.20.10.01 Track Allowance - Item

Payment at the contract price for the above item shall be full compensation for all labour, equipment, materials and incidentals to do the work. Payment shall include, but not be limited to, the sweeping of the foundation slab, the supply and removal of oxygen and acetylene bottles, the saw cutting, removal and disposal of the concrete, rail, ties and all other associated materials.

### TS 2.20.10.02 Foundation - Item

Payment at the contract price for the above item shall be full compensation for all labour, equipment, materials and incidentals to do the work. Payment shall include, but not be limited to, the fine grading of the sub grade, the spreading and fine grading of all approved excavated earth material required, the saw cutting of the concrete slab, the removal and disposal of the concrete slab and all excavated material below the slab.