

## Engineering & Construction Services Division Standard Drawings for Road Works

**Revision No. 9** 

November 2014

Superseded/Ca (Remove		Revised/ (Inser		Drawings for Road Works
T No.	Revision	T No.	Revision	Remarks
All T- drawings				New title block for each drawing is now standardized.
				<ul> <li>Revision numbers now added to title block as follows:</li> <li>Revision No. 0 means original release.</li> <li>Revision No. 1 means first revision.</li> <li>Revision No. 2 means second revision Revision No. 3 means third revision and so on.</li> <li>Note to users: If only the title block changed, the previous version will not be stored in the</li> </ul>
				on-line archives.  Adopted OPSD List (T4) no longer maintained. Removed from web page.
T-216.02-1 Nov 2009	1	T-216.02-1 Nov 2014	2	Composite Pavement Construction for Local and Collector Roads  Notes added:  Note on contraction joint according to T-216.02-4.  Pavement structural design matrix table for composite pavements for local roads.  New title block.  Revised title.
T-216.02-2 Nov 2009	1	T-216.02-2 Nov 2014	2	<ul> <li>Composite Pavement Construction for Major and Minor Arterial Roads</li> <li>Notes added: <ol> <li>Pavement structural design matrix table for composite pavements major/minor arterial roads.</li> <li>Note on subdrain according to T-216.02-8.</li> <li>Note on concrete crub and gutter according to T-600.05-1.</li> </ol> </li> <li>New title block.</li> </ul>
T-216.02-3 Dec 2003	0	T-216.02-3 Nov 2014	1	Location and Detail of Joints for Rigid Pavements     Asphalt joint sealer appears to be in wrong location shown on cross section of construction joint. Move joint sealer next to joint.     New title block.

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T No.	Revision	T No.	Revision	Remarks
T-216.02-4 Dec 2003	0	T-216.02-4 Nov 2014	1	<ul> <li>Location and Detail of Joints for Composite Pavements</li> <li>Asphalt joint sealer appeara to be in wrong location as shown on x-section of construction joint.</li> <li>HL-1 and HL-8 asphalt depths revised.</li> <li>New title block.</li> </ul>
T-216.02-5 Jun 2001	0	T-216.02-5 Nov 2014	1	<ul><li>Utility Isolation in Composite Pavement</li><li>New title block.</li><li>CB pattern updated to herring bone pattern.</li></ul>
T-216.02-6 Nov 2009	1	T-216.02-6 Nov 2014	2	<ul> <li>Flexible Pavement for All Road</li> <li>Classifications</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-216.02-8 Nov 2009	2	T-216.02-8 Nov 2014	3	<ul> <li>Roadway Subdrains</li> <li>New title block.</li> <li>Crushed aggregate base renamed to Granular A base.</li> <li>Note 2 rewritten.</li> </ul>
T-216.02-9 Dec 2003	0	T-216.02-9 Nov 2014	1	Cross-section Limits for General Excavation (Payment Purposes Only)  • New title block.
T-216.02-10 Jun 2001	0	T-216.02-10 Nov 2014	1	<ul> <li>Streetcar Track Allowance Cross-Section</li> <li>New title block.</li> <li>Drawing updated to current TTC x-section standard.</li> </ul>
T-216.02-11 Jun 2001	0	T-216.02-11 Nov 2014	1	Concrete Pavement in TTC Track Allowance Detail  New title block.  Drawing updated to current TTC track standard.
T-216.02-12 Jun 2001	0	T-216.02-12 Nov 2014	1	<ul> <li>Crowd Control Barrier</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-216.02-13 Jun 2001	0			Construction Ahead Use Caution  Drawing cancelled.  Use TC-1 from Ontario Traffic Manual – Book 7.
T-216.02-14 Jun 2001	0			<ul> <li>Use Caution</li> <li>Drawing cancelled.</li> <li>If project specific wording is necessary use TC-19t specifications from Ontario Traffic Manual – Book 7.</li> </ul>
T-216.02-15 Jun 2001	0			Narrow Lanes Ahead  Drawing cancelled.  Use TC-11 from Ontario Traffic Manual – Book 7.

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T-216.02-16 Jun 2001	0			<ul> <li>Rough Surface Ahead</li> <li>Drawing cancelled.</li> <li>If project specific wording is necessary use TC-11 specifications from Ontario Traffic Manual – Book 7.</li> </ul>
T-216.02-17 Jun 2001	0			<ul> <li>Raised Maintenance Hole Covers</li> <li>Drawing cancelled.</li> <li>If project specific wording is necessary use TC-19t specifications from Ontario Traffic Manual – Book 7.</li> </ul>
T-216.02-18 Jun 2001	0			<ul> <li>Steel Plate Ahead</li> <li>Drawing cancelled.</li> <li>If project specific wording is necessary use TC-11 specifications from Ontario Traffic Manual – Book 7.</li> </ul>
T-216.02-19 Jun 2001	0			<ul> <li>Timber Decking Ahead</li> <li>Drawing cancelled.</li> <li>If project specific wording is necessary use TC-11 specifications from Ontario Traffic Manual – Book 7.</li> </ul>
T-216.02-20 Jun 2001	0			<ul> <li>Use Walkway</li> <li>Drawing cancelled.</li> <li>Use TC-40 from Ontario Traffic Manual – Book 7.</li> </ul>
T-216.02-21 Jun 2001	0			<ul> <li>Bicycle Lane Ends</li> <li>Drawing cancelled.</li> <li>This sign should not be used through a construction zone as they are regulatory from Ontario Traffic Manual – Book 7.</li> </ul>
T-216.02-22 Jun 2001	0			<ul> <li>Bicycle Detour</li> <li>Drawing cancelled.</li> <li>Should only be used if establishing a bike lane detour. Removal is recommended as there are other signs to use from Ontario Traffic Manual – Book 7.</li> </ul>
T-216.02-23 Jun 2001	0			<ul> <li>Warning – Hot Asphalt</li> <li>Drawing cancelled.</li> <li>If project specific wording is necessary use TC-19t specifications from Ontario Traffic Manual – Book 7.</li> </ul>
T-216.02-24 May 2007	1	T.040.00.05		<ul> <li>Capital Construction / Improvement Sign</li> <li>Drawing cancelled.</li> <li>Standard for sign can be found at <a href="http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=98fcf609cc717410VgnVCM10">http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=98fcf609cc717410VgnVCM10</a></li></ul>
		T-216.02-25 Nov 2014	0	Catchbasin Indicator Arrow Marking  • New drawing.

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T-216.03 May 2004	0	T-216.03 Nov 2014	1	<ul> <li>Structures &amp; Expressways Bronze Identification Plaque</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-218.01 Jun 2001	0			<ul> <li>Sodding of Side Slopes</li> <li>Drawing cancelled.</li> <li>Equivalent drawing OPSD 218.01 was cancelled in Nov 2001.</li> </ul>
T-219.130-1 Jun 2001	0	T-219.130-1 Nov 2014	1	<ul><li>Sediment Control Fence</li><li>New title block.</li><li>Drawing notes added for clarification.</li></ul>
T-220.01 Jun 2001	0			<ul> <li>Tree Protection During Construction</li> <li>Drawing cancelled.</li> <li>Use document entitled "Tree Protection Policy and Specifications for Construction Near Trees" from Urban Forestry.</li> </ul>
		T-221.01 Nov 2014	0	Asphalt Paving for Multi-Use Pathway  • New drawing.
T-310.010-1 Jun 2001	0	T-310.010-1 Nov 2014	1	<ul> <li>Location and Detail of Joints for Sidewalk</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-310.010-2 Nov 2006	1	T-310.010-2 Nov 2014	2	<ul> <li>Concrete Sidewalk with Boulevard</li> <li>Updated drawing includes the following:</li> <li>1. Granular layer and thickness.</li> <li>2. Concrete layer thickness needs to be consistent with specification for the type of application (e.g. industrial, commercial)</li> <li>3. Note on joint details.</li> <li>New title block.</li> </ul>
T-310.010-3 Dec 2003	0	T-310.010-3 Nov 2014	1	<ul> <li>Concrete Sidewalk with Retaining Curb</li> <li>Updated drawing includes the following:</li> <li>1. Granular layer and thickness.</li> <li>2. Concrete layer thickness needs to be specified by designer and be consistent with specification for the type of application (e.g. industrial, commercial)</li> <li>3. Note on joint details.</li> <li>New title block.</li> </ul>
T-310.010-4 Nov 2006	1	T-310.010-4 Nov 2014	2	<ul> <li>Combined Concrete Curb and Sidewalk</li> <li>Updated drawing includes the following:</li> <li>1. Granular layer and thickness.</li> <li>2. Concrete layer thickness needs to be specified and consistent with specification for the type of application (e.g. industrial, commercial)</li> <li>3. Note on joint details.</li> <li>New title block.</li> </ul>

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T No.	Revision	T No.	Revision	Remarks
T-310.010-5 Jun 2001	0	T-310.010-5 Nov 2014	1	<ul> <li>Joints at Sidewalk Openings</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-310.010-6 Nov 2009	1	T-310.010-6 Nov 2014	2	Sidewalk Stamp Location for New Sidewalk Installation  New title block. Revised title. Drawing reaffirmed. No change to technical information.
T-310.010-7 Nov 2009	1	T-310.010-7 Nov 2014	2	<ul> <li>Detail of Sidewalk Stamp</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-310.010-8 Nov 2010	1	T-310.010-8 Nov 2014	2	<ul> <li>Bus Stop Landing for Standard and Articulated Buses</li> <li>Title rewritten.</li> <li>Type A and Type B revised to 16 m long landing from 12 m along with wider platforms to accommodate new articuldated TTC buses.</li> <li>New Type C added.</li> <li>Section A-A updated showing granular layer.</li> <li>New title block.</li> </ul>
T-310.020 Nov 2006	1			Curb Cut and Sidewalk Ramp at Intersections  Drawing cancelled. Using tactile walking surface indicators now.
T-310.020-1 Dec 2003	0	T-310.020-1 Nov 2014	1	Detail of Joints in Sidewalk with Unit Pavers  Revised title.  The following errors corrected:  The thickness of bituminous fibre is incorrect, should be 12mm.  Sand setting bed revised to 20-30 mm.  New title block.
T-310.020-2 Nov 2010	1	T-310.020-2 Nov 2014	2	Sidewalk Paved With Unit Paver Band at Curb  Updated drawing includes the following:  Granular layer and thickness.  The thickness of concrete sidewalk should be consistent with other types of application.  New title block.
T-310.030-1 Jun 2001	0			Pedestrian Ramps Drawing cancelled. Using tactile walking surface indicators now.

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T No.	Revision	T No.	Revision	Remarks
T-310.030-2 Jun 2001	0			Pedestrian Ramps - Groove Detail Drawing cancelled. Using tactile walking surface indicators now.
T-310.030-4 Dec 2003	0			<ul> <li>Typical Detail of Concrete Cross-Walk</li> <li>Drawing cancelled.</li> <li>Policy decision in 2006 by Transportation Services division to stop using concrete crosswalks. Zebra pavement markings now used.</li> </ul>
T-310.030-5 Apr 2008	2	T-310.020-5 Nov 2014	3	Zebra Pavement Marking Detail At Signalized Intersections  New title block.  Avoid overlapping.
T-310.030-6 Jan 2007	1	T-310.020-6 Nov 2014	2	Pavement Markings for Pedestrian Crossover Standard Conditions  Title revised.  New title block.  Drawing reaffirmed. No change to technical information.
T-310.040-1T1 Mar 2002	0			<ul> <li>Detail of THES Sidewalk Handwell</li> <li>Drawing cancelled.</li> <li>Use Toronto Hydro standard drawing 31-3140 for polymer concrete handwell.</li> </ul>
T-310.050-1 Nov 2010	2	T-310.050-1 Nov 2014	3	Vehicle Entrance In Combined Curb and Sidewalk  • Drawing Section A-A now includes the minimum granular layer thickness.  • New title block.
T-310.050-2 Nov 2010	2	T-310.050-2 Nov 2014	3	Vehicular Crossing of Sidewalk With Unit Paver Installation  Drawing Section A-A now includes the minimum granular layer thickness.  New title block.
T-310.050-3 Dec 2003	0			<ul> <li>Detail of Tree Opening</li> <li>Drawing cancelled.</li> <li>Refer and use "Tree Planting Solutions in Hard Boulevard Surfaces" Best Practices Manual from Urban Forestry.</li> </ul>
T-310.050-5 (1 of 4) Jun 2001	0			Material Specification Sheet for Street Lighting Projects Riser Fittings  • Drawing cancelled as it is obsolete.
T-310.050-5 (2 of 4) Jun 2001	0			Duct and Fittings – Material Specification – Street Lighting Projects  • Drawing cancelled as it is obsolete.
T-310.050-5 (3 of 4) Jun 2001	0			Pipe and Fittings – Material Specification – Street Lighting Projects  • Drawing cancelled as it is obsolete.
T-310.050-5 (4 of 4) Jun 2001	0			Material Specification for Street Lighting Projects  • Drawing cancelled as it is obsolete.

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T-310.050-6 (1 of 2) Dec 2003	0			Concrete Base with Pole Base Insert for Pedestrian Scale Light Pole and for Railway Type Street Light Pole (Regular) with Dry Laid Paver Installation  • Drawing cancelled.  • Use Toronto Hydro standard drawing 30-9860.
T-310.050-6 (2 of 2) Dec 2003	0			Concrete Base with Pole Base Insert for Light Pole with Dry Laid Paver Installation  • Drawing cancelled.  • Use Toronto Hydro standard drawing 30-9860.
T-310.050-7 (1 of 2) Dec 2003	0			Concrete Base with Pole Base Insert for Pedestrian Scale Light Pole and for Railway Type Street Light Pole (Regular) with Dry Laid Paver Installation  • Drawing cancelled.  • Use Toronto Hydro standard drawing 30-9860.
T-310.050-7 (2 of 2) Dec 2003	0			Concrete Base with Pole Base Insert for Light Pole with Dry Laid Paver Installation  • Drawing cancelled.  • Use Toronto Hydro standard drawing 30-9860.
T-310.050-8 Nov 2010	0	T-310.050-8 Nov 2014	1	<ul><li>Driveway Thickness</li><li>Pavement thickness table updated.</li><li>New title block.</li></ul>
T-310.050-8T1 Mar 2002	0			Concrete Base with Pole Base Insert for Railway Type Street Light Pole Base  • Drawing cancelled.  • Use Toronto Hydro standard drawing.
T-310.050-8T2 Mar 2002	0			Concrete Base with Pole Base Insert for Railway Type Street Light Pole Base  • Drawing cancelled.  • Use Toronto Hydro standard drawing.
T-310.050-8T3 Mar 2002	0			Light Pole Base Detail for Harbourfront Type Light Poles  • Drawing cancelled.  • Use Toronto Hydro standard drawing.
T-310.050-8T4 Mar 2002	0			Anchor Bolt Template Detail for Harbourfront Type Light Poles  • Drawing cancelled as it is obsolete.

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T No.	Revision	T No.	Revision	Remarks
T-310.050-8T5 Mar 2002	0			Detail of Lighting Connections to Existing TTC Steel Poles  • Drawing cancelled as it is obsolete.
T-350.01 Jun 2001	0	T-350.01 Nov 2014	1	Urban Entrances  New title block.  Drawing reaffirmed. No change to technical information.
T-502.01 Nov 2009	0	T-502.01 Nov 2014	1	Concrete Pavement for Lanes  New title block.  Drawing reaffirmed. No change to technical information.
T-504.01-1 Dec 2003	0	T-504.01-1 Nov 2014	1	<ul> <li>Raised Median Pavement Treatment</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-504.01-2 Jun 2001	0	T-504.01-2 Nov 2014	1	Raised Median Planting Treatment  New title block.  Drawing revised.
T-504.02 Nov 2010	1	T-504.02 Nov 2014	2	<ul> <li>Speed Humps</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-508.010-1 Jun 2001	0	T-508.010-1 Nov 2014	1	<ul> <li>Anchored Hook Bolt Dowel and Concrete Repair Detail</li> <li>Concrete section shows a slab thickness of 225 mm. Revised to variable 't'.</li> <li>Note 4 added.</li> <li>New title block.</li> </ul>
T-509.010-1 (1 of 2) Jun 2001	0	T-509.010-1 Nov 2014	1	Composite Pavement Patching for Utility Cuts  Revised title.  Drilling hole size revised to 35 mm wide and 450 mm deep.  Note 4 added.  New title block.
T-509.010-1 (2 of 2) Jun 2001	0	T-509.010-1 Nov 2014	1	Flexible Pavement Patching for Utility Cuts  Revised title.  Stress relief tape removed from drawing.  Tack coat not used on granular layers, therefore arrow pointing to granular layers removed.  New title block.
T-560.040 Jun 2001	0			Partial Depth Repairs in Concrete Pavement • Drawing cancelled.
T-560.040-1 Dec 2003	0	T-560.040-1 Nov 2014	1	<ul> <li>Impressed Concrete Feature Strip</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>

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T-561.030-1 Nov 2010	1	T-561.030-1 Nov 2014	2	Unit Pavers On Concrete Base Non-Vehicular Locations  New title block.  Note 2 added polymeric joint sand.
T-561.030-2 Nov 2010	1	T-561.030-2 Nov 2014	2	Unit Pavers On Granular Base Non-Vehicular Locations  New title block.  Note 2 added polymeric joint sand.
T-561.030-4 Dec 2003	0	T-561.030-4 Nov 2014	1	<ul> <li>Detail of Boulevard Paving</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-600.05-1 Nov 2009	2	T-600.05-1 Nov 2014	3	<ul> <li>Concrete Curb and Gutter</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-600.07-1 Nov 2009	1	T-600.07-1 Nov 2014	2	<ul><li>Two-stage Concrete Curb and Gutter</li><li>New title block.</li><li>Revised CB with herring bone pattern.</li></ul>
T-600.11-1 Nov 2009	1	T-600.11-1 Nov 2014	2	<ul> <li>Concrete Curb</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-601.01-2 Jun 2001	0	T-601.01-2 Nov 2014	1	Oncrete Toe Walls  New title block.  Note 5 rewritten.
T-604.01-1 Jun 2001	0	T-604.01-1 Nov 2014	1	<ul> <li>90 Degree Concrete Curb Outlet</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-605.01-1 Jun 2001	0	T-605.01-1 Nov 2014	1	<ul> <li>45 Degree Concrete Curb Outlet</li> <li>New title block.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-610.020-1 Jun 2001	0	T-610.020-1 Nov 2014	1	<ul> <li>Installation of New Catch Basin Casting</li> <li>New title block.</li> <li>Brick adjustment removed and replaced with concrete (moduluc) adjustment rings.</li> <li>Revised CB with herring bone pattern.</li> </ul>
T-610.020-2 Jun 2001	0			Catch Basin Chamber for TTC Track Drain  • Drawing cancelled.
T-900.01-2 Jun 2001	0	T-900.01-2 Nov 2014	1	<ul> <li>Standard Aluminum Railing for Sidewalks and Walls with Concrete Parapets</li> <li>New title block.</li> <li>Specification for aluminum revised to 6351-T6 or 6061-T6.</li> <li>Specification for stainless steel revised to ASTM F593 and F594.</li> </ul>

Superseded/Cancelled (Remove)		Revised/New (Insert)		Drawings for Road Works
T No.	Revision	T No.	Revision	Remarks
T-900.01-3 Jun 2001	0	T-900.01-3 Nov 2014	1	<ul> <li>Standard Aluminum Railing for Sidewalks and Walls Without Concrete Parapets</li> <li>New title block.</li> <li>Specification for aluminum revised to 6351-T6 or 6061-T6.</li> <li>Specification for stainless steel revised to ASTM F593 and F594.</li> </ul>
T-980.100 Jan 2004	0	T-980.100 Nov 2014	1	<ul> <li>Pedestrian Refuge Island Design</li> <li>New title block.</li> <li>Title revised.</li> <li>Drawing reaffirmed. No change to technical information.</li> </ul>
T-980.101 Sep 2006	0	T-980.101 Nov 2014	1	Standard Railing for Pedestrian Refuge Island  New title block.  Note 2 revised.  Note 5 revised to ASTM A500-C.
T-980.102 Sep 2006	0			Pedestrian Refuge Island Design  • Drawing cancelled.